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San Antonio Creek Valley Groundwater Basin Groundwater Sustainability Plan Water Year 2023 Annual Report

February 2024

Prepared for:

San Antonio Basin
Groundwater Sustainability Agency



Prepared by:

GSI Water Solutions, Inc.

800 Quintana Road, Suite 2C, Morro Bay, CA 93442



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San Antonio Creek Valley Groundwater Basin Groundwater Sustainability Plan 2023 Annual Report

This report was prepared by the staff of GSI Water Solutions, Inc., under the supervision of the professionals whose signatures appear below. The findings or professional opinion were prepared in accordance with generally accepted professional engineering and geologic practice.

Michael McAlpin, PG
Managing Hydrogeologist

Dave O'Rourke, PG, CHg, PE
Principal Hydrogeologist

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Contents

Executive Summary (§ 356.2[a]).....	ES-1
ES-1 Introduction	ES-1
ES-2 Groundwater Elevations	ES-3
ES-3 Groundwater Extractions	ES-3
ES-4 Surface Water Use	ES-3
ES-5 Change in Groundwater in Storage.....	ES-4
ES-6 Progress toward Meeting Basin Sustainability.....	ES-8
SECTION 1: Introduction	1
1.1 Setting and Background	1
1.2 Organization of This Report.....	1
SECTION 2: Basin Setting and Monitoring Networks	4
2.1 Introduction	4
2.2 Basin Setting.....	4
2.3 Precipitation and Climatic Periods.....	9
2.4 Groundwater Elevation Monitoring (§ 356.2[b]).....	12
2.4.1 Groundwater Elevation Monitoring Locations.....	12
2.4.2 Water Level Monitoring Data Gaps.....	13
2.5 Groundwater Quality Monitoring	15
2.6 Land Subsidence Monitoring	18
2.7 Interconnected Surface Water Monitoring	18
SECTION 3: Groundwater Elevations (§ 356.2[b][1]).....	22
3.1 Introduction	22
3.2 Seasonal High and Low (Spring and Fall) (§ 356.2[b][1][A])	22
3.2.1 Paso Robles Formation Aquifer Groundwater Elevation Contours.....	22
3.2.2 Careaga Sand Aquifer Groundwater Elevation Contours	26
3.3 Hydrographs (§ 356.2[b][1][B])	29
3.4 2023 Quarterly Groundwater Level Monitoring	30
3.4.1 Data Summary.....	31
3.4.2 Changes to the Monitoring Network, Maintenance, Issues, and Recommendations.....	31
SECTION 4: Groundwater Extractions (§ 356.2[b][2])	35
4.1 Introduction	35
4.2 Municipal Metered Well Production Data.....	35
4.3 Estimate of Agricultural Extraction.....	35
4.4 Rural Domestic Extraction	38
4.5 Total Groundwater Extraction Summary.....	40
SECTION 5: Surface Water Use (§ 356.2[b][3])	42
SECTION 6: Change in Groundwater in Storage (§ 356.2[b][5])	43
6.1 Annual Changes in Groundwater Elevation (§ 356.2[b][5][A])	43
6.2 Annual and Cumulative Change in Groundwater in Storage Calculations (§ 356.2[b][5][B])	46

SECTION 7: Progress toward Basin Sustainability (§ 356.2[c]) 48

7.1 Introduction 48

7.2 Tier 1 Management Actions 48

7.3 Management Action Implementation Approach 48

7.3.1 Groundwater Monitoring Network Expansion 49

7.3.2 Estimation of Agricultural Extraction 49

7.3.3 San Antonio Creek Integrated Model 50

7.3.4 Well Registration and Well Meter Installation/Extraction Measurement Program 50

7.3.5 Well Verification Policy 51

7.3.6 Central Coast Water Quality Preservation, Inc..... 52

7.3.7 Attempts to Acquire Funding..... 52

7.3.8 Santa Barbara County Public Works Department Well Metering Assistance Program 53

7.3.9 Groundwater Sustainability Plan Approval and Priorities for Water Year 2024 53

7.4 Summary of Progress toward Meeting Basin Sustainability 53

7.4.1 Groundwater Quality 54

7.4.2 Land Subsidence 55

7.4.3 Interconnected Surface Water 55

7.4.4 Summary of Changes in Basin Conditions 56

7.4.5 Summary of Impacts of Projects and Management Actions 57

SECTION 8: References 58

8.1 Text References 58

8.2 Figure References 60

Tables

Table ES-1. Total Groundwater Extractions by Water Use Sector	ES-3
Table ES-2. Annual Changes in Groundwater in Storage	ES-5
Table 1. San Antonio Creek Valley Groundwater Basin Water Year Types	11
Table 2. Chronic Lowering of Groundwater Levels Interim Milestones for the Paso Robles Formation and the Careaga Sand	30
Table 3. Municipal Groundwater Extractions.....	35
Table 4. Water Year 2023 Irrigated Acres by Basic Crop Group	37
Table 5. Agricultural Irrigation Groundwater Extractions	38
Table 6. Rural Domestic Demand Factors Based on Lot Size	39
Table 7. Rural Domestic Groundwater Extractions	39
Table 8. Total Groundwater Extractions by Water Use Sector	40
Table 9. Annual Changes in Groundwater in Storage	46

Figures

Figure ES-1. San Antonio Creek Valley Groundwater Basin Plan Area.....	ES-2
Figure ES-2. Paso Robles Formation Annual Change in Groundwater Elevation Fall 2022 to Fall 2023	ES-6
Figure ES-3. Careaga Sand Annual Change in Groundwater Elevation Fall 2022 to Fall 2023	ES-7
Figure 1. San Antonio Creek Valley Groundwater Basin Plan Area	3
Figure 2. Geologic Map of the San Antonio Creek Valley Groundwater Basin.....	5
Figure 3. Geologic Cross Sections, San Antonio Creek Valley Groundwater Basin	6
Figure 4. Conceptualized Surface Water and Groundwater Discharge into Barka Slough.....	7
Figure 5. Los Alamos Fire Station Annual Precipitation and Cumulative Departure from Mean Annual Precipitation.....	10
Figure 6. Wells Included in the San Antonio Creek Valley Groundwater Basin Groundwater Monitoring Network	14
Figure 7. Groundwater Quality Monitoring Network.....	17
Figure 8. InSAR Measured Land Subsidence June 2022 to June 2023.....	20
Figure 9. InSAR Measured Land Subsidence June 2015 to June 2023.....	21
Figure 10. Paso Robles Formation Groundwater Elevation Contours Spring 2023	24
Figure 11. Paso Robles Formation Groundwater Elevation Contours Fall 2023	25
Figure 12. Careaga Sand Groundwater Elevation Contours Spring 2023.....	27
Figure 13. Careaga Sand Groundwater Elevation Contours Fall 2023	28
Figure 14. General Location and Volumes of Groundwater Extractions.....	41

Figure 15. Paso Robles Formation Annual Change in Groundwater Elevation Fall 2022 to Fall 2023 44
Figure 16. Careaga Sand Annual Change in Groundwater Elevation Fall 2022 to Fall 2023..... 45
Figure 17. Cumulative Change in Groundwater in Storage 47

Appendices

Appendix A Sustainable Groundwater Management Act Groundwater Sustainability Plan Regulations for Annual Reports
Appendix B Precipitation Data
Appendix C Representative Monitoring Site Location Map and Hydrographs
Appendix D Principal Aquifer Hydraulic Properties
Appendix E Municipal Pumping Data
Appendix F Land Subsidence Data
Appendix G Casmalia Stream Gage Data

Abbreviations and Acronyms

1Q2023	first quarter of 2023
2Q2023	second quarter of 2023
3Q2023	third quarter of 2023
4Q2023	fourth quarter of 2023
AF	acre-feet
AF/acre	acre-feet per acre
AFY	acre-feet per year
amsl	above mean sea level
ASCE	American Society of Civil Engineers
Basin Plan	<i>Water Quality Control Plan for the Central Coastal Basin (RWQCB, 2019)</i>
Basin	San Antonio Creek Valley Groundwater Basin
BMP	best management practice
CCWQP	Central Coast Water Quality Preservation, Inc.
cfs	cubic feet per second
CGPS	Continuous Global Positioning System
CMP	Cooperative Monitoring Program
COC	constituent of concern
COGG	California Oil, Gas, and Groundwater
DDW	Division of Drinking Water
DEHP	di(2-ethylhexyl)phthalate
DMS	Data Management System
DWR	California Department of Water Resources
EPA	U.S. Environmental Protection Agency
ET	evapotranspiration
FAO	Food and Agriculture Organization
ft	foot or feet
ft/ft	feet per foot
GAMA	Groundwater Ambient Monitoring and Assessment
GAMA-GIS	Groundwater Ambient Monitoring and Assessment Groundwater Information System
GDE	groundwater-dependent ecosystem
GEI	GEI Consultants, Inc.
gpm	gallons per minute
gpm/ft	gallons per minute per foot
GSI	GSI Water Solutions, Inc.
GSP	Groundwater Sustainability Plan
HCM	hydrogeologic conceptual model
HWY	Highway
ILRP	Irrigated Lands Regulatory Program

InSAR	Interferometric Synthetic Aperture Radar
LACSD	Los Alamos Community Services District
MCL	maximum contaminant level
mg/L	milligrams per liter
OSWCR	Online System for Well Completion Reports
RMS	representative monitoring site
RPE	reference point elevation
RWQCB	Central Coast Regional Water Quality Control Board
SABGSA	San Antonio Basin Groundwater Sustainability Agency
SABWD	San Antonio Basin Water District
SBWA	Santa Barbara County Water Authority
SGM	Sustainable Groundwater Management
SGMA	Sustainable Groundwater Management Act
Slough	Barka Slough
SMCL	secondary maximum contaminant level
SWP	State Water Project
SWRCB	State Water Resources Control Board
SYRWD	Santa Ynez River Valley Water District
TDS	total dissolved solids
UNAVCO	University NAVSTAR Consortium
USGS	U.S. Geological Survey
VSFB	Vandenberg Space Force Base
WCR	well completion report
WMAP	Well Metering Assistance Program
WQO	water quality objective

Executive Summary (§ 356.2[a])

ES-1 Introduction

This 2023 Annual Report for the San Antonio Creek Valley Groundwater Basin (Basin; see Figure ES-1) has been prepared in accordance with Sustainable Groundwater Management Act (SGMA) regulations. Pursuant to the SGMA regulations, a Groundwater Sustainability Plan (GSP) Annual Report must be submitted to the California Department of Water Resources (DWR) by April 1 of each year following the adoption of the GSP. Because the reporting period for the Basin GSP included water years 1981 through 2018, the first GSP Annual Report for the Basin documented and updated data from October 1, 2018 through September 30, 2021.¹ Subsequent annual reports convey monitoring and water use data for a single water year.² This Annual Report documents conditions in water year 2023. The purpose of reporting on an annual basis is to gauge performance of the Basin relative to the sustainability goals set forth in the GSP.

This Annual Report includes the following sections:











- **Section 1: Introduction.** A brief background of the formation and activities of the SABGSA and development and submittal of the GSP and subsequent annual reports (water years 2019 through 2022).
- **Section 2: Basin Setting and Monitoring Networks.** A summary of the basin setting, basin monitoring networks, and ways in which data are used for groundwater management.
- **Section 3: Groundwater Elevations (§ 356.2[b][1]).** A description of recent monitoring data with groundwater elevation contour maps of seasonal high and low groundwater elevations and representative hydrographs.
- **Section 4: Groundwater Extractions (§ 356.2[b][2][b][4]).** Compilation of metered and calculated groundwater extractions by land use sector and approximate locations of extraction.
- **Section 5: Surface Water Use (§ 356.2[b][3]).** No surface water use occurs in the Basin and therefore Section § 356.2[b][3] of DWR GSP Emergency Regulations is not applicable to the Basin.
- **Section 6: Change in Groundwater in Storage (§ 356.2[b][5]).** A description of the methodology and presentation of changes in groundwater in storage based on annual groundwater elevation differences.
- **Section 7: Progress toward Basin Sustainability (§ 356.2[c]).** A summary of management actions taken throughout the Basin by the SABGSA and individual entities toward sustainability of the Basin.
- **Section 8: References.**

¹ A water year begins October 1 and ends September 30 of the reporting year (e.g., water year 2023 includes October 1, 2022 through September 30, 2023).

² The required time frame of the Annual Reports, pursuant to the SGMA regulations, is by water year, which is October 1 through September 30 of any water year. However, because of the variability of monitoring schedules for each groundwater monitoring program, in some instances, fall groundwater levels for a particular water year may have been collected after the beginning of the subsequent water year.

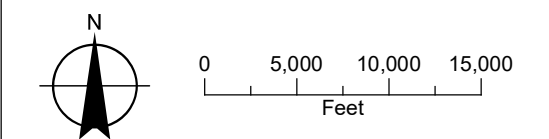
FIGURE ES-1
San Antonio Creek Valley
Groundwater Basin Plan Area
 Groundwater Sustainability Plan
 2023 Annual Report
 San Antonio Creek Valley
 Groundwater Basin

LEGEND

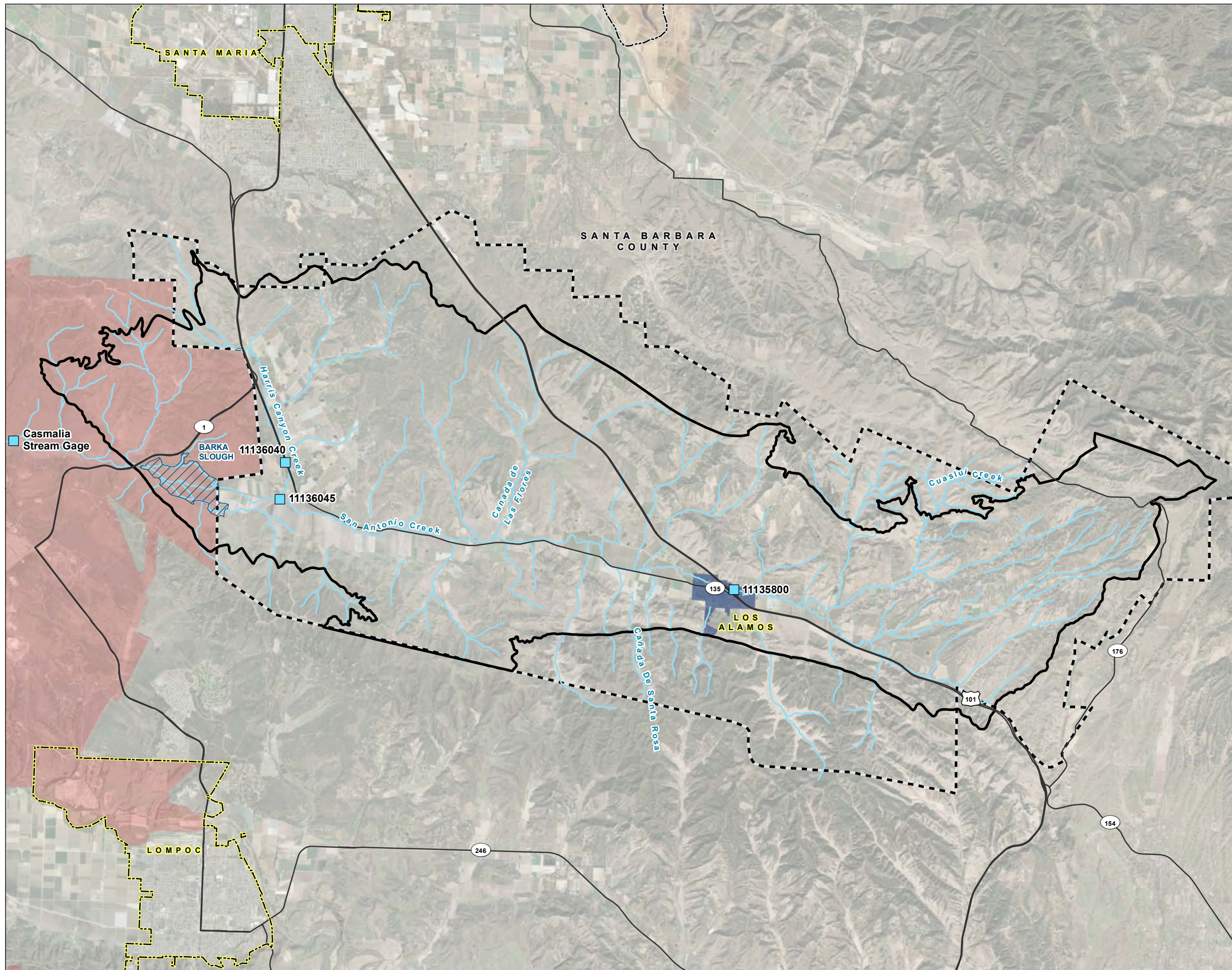
-  Stream Gage
 -  Los Alamos Community Services District
 -  Vandenberg Space Force Base
- All Other Features**
-  San Antonio Creek Valley Groundwater Basin
 -  Barka Slough
 -  San Antonio Basin Water District
 -  County Boundary
 -  City Boundary
 -  Major Road
 -  San Antonio Creek or Adjacent Tributary



NOTE
 Casmalia Stream Gage USGS Site Number: 11136100



Date: February 12, 2024
 Data Sources: USGS (2020a), ESRI,
 DWR (2018), Maxar imagery (2020)



ES-2 Groundwater Elevations

Groundwater elevation trends observed at representative monitoring sites (RMSs) in the Basin during water year 2023 were generally stable with seasonal fluctuations compared to historical groundwater elevations. Groundwater elevations observed in the Paso Robles Formation and Careaga Sand were generally higher during water year 2023 than water year 2022. The higher groundwater elevations are a result of the wet water year type observed during water year 2023, and, consequently, a reduction in groundwater pumping and increase in hydrologic recharge.

ES-3 Groundwater Extractions

The total groundwater extractions in the Basin for water year 2023 were 15,300 acre-feet (AF). Table ES-1 summarizes the groundwater extractions by water use sector for water years 2018 through 2023.

Table ES-1. Total Groundwater Extractions by Water Use Sector

Water Year	LACSD (AF)	VSFB (AF)	Rural Domestic (AF)	Agricultural (AF)	Total (AF)
2018 ¹	280	150	170	21,200	21,800
2019	260	240	170	21,300	22,000
2020	280	280	170	21,900	22,600
2021	290	710	170	21,400	22,600
2022	270	2,600	170	19,200	22,200
2023	260	1,450	180	13,400 ²	15,300
Method of Measure	Metered	Metered	Aerial Photo Survey	Satellite-Based Land Use Survey and ET Calculations	—
Level of Accuracy	High	High	Medium/Low	Medium/High	—

Notes

¹ Water year’s historical water budget agricultural pumping volume was revised based on updated data.

² The identified “Method of Measure” and “Level of Accuracy” for “Agricultural” total groundwater extractions pertain to water year 2023 only.

Gray shading indicates a water year included in the GSP historical water budget.

— = not applicable

AF = acre-feet

ET = evapotranspiration

LACSD = Los Alamos Community Services District

VSFB = Vandenberg Space Force Base

ES-4 Surface Water Use

The Basin does not receive imported water from the California State Water Project (SWP), nor does it receive reservoir releases into streams and rivers that enter the Basin from the surrounding watershed. Consequently, surface water use is not applicable to the Basin.

ES-5 Change in Groundwater in Storage

Annual changes in groundwater elevation in the Paso Robles Formation and Careaga Sand for water year 2023 were derived from comparison of fall groundwater elevation contour maps from water year 2022 to water year 2023. Specifically, the fall 2023 groundwater elevations for the Paso Robles Formation were subtracted from the fall 2022 groundwater elevations for the Paso Robles Formation resulting in a map depicting the changes in groundwater elevations in the Paso Robles Formation that occurred during the 2023 water year (see Figure ES-2). The same was completed for the Careaga Sand.

Paso Robles Formation groundwater elevation contour maps were generated from a well set located primarily along the axis of the valley, between Los Alamos and the Slough. Similarly, Careaga Sand groundwater elevation contours were generated from a well set located sparsely within the northern uplands and more densely in the Slough. Therefore, the degree of uncertainty is proportionate to the data density, as is the calculation of change in groundwater in storage. The SABGSA is working to implement planned management actions (see Section 6 of GSI and GEI, 2021) to address these identified data gaps.

The Paso Robles Formation change in groundwater elevation map for water year 2022 (see Figure ES-2), a wet precipitation year, indicates that groundwater levels generally increased by 0 to 10 ft between Los Alamos, the Slough, and Harris Canyon. Groundwater elevations west-northwest of Los Alamos and in northern Harris Canyon increased up to 20 to 30 ft. Groundwater elevations south of Los Alamos decreased by 0 to 10 ft.

The Careaga Sand change in groundwater elevation map for water year 2023 (see Figure ES-3), a wet precipitation year, indicates that groundwater levels generally increased by 0 to 10 ft from northwest of Los Alamos to the Slough and Harris Canyon. Groundwater elevations in northern Cañada de Las Flores increased up to 30 to 40 ft. In the central uplands, west of Cañada de Las Flores, Harris Canyon, and the western half of the Slough groundwater elevations decreased 0 to 10 feet (ft).

Table ES-2 presents the annual changes of groundwater in storage calculated for water years 2015 through 2023.

Table ES-2. Annual Changes in Groundwater in Storage

Water Year	Paso Robles Formation (AF)	Careaga Sand (AF)	Total Annual Change in Groundwater in Storage ¹ (AF)
2015	—	—	-26,400
2016	—	—	-23,600
2017	—	—	-2,900
2018	—	—	-23,700
2019	-15,400	-370	-15,800
2020	-18,800	-410	-19,200
2021	-20,500	-540	-21,000
2022	-14,900	-200	-15,100
2023	19,600	10	19,600
Cumulative Change in Groundwater in Storage ¹	-50,000	-1,500	-128,100

Notes

¹ As a result of rounding, totals do not correspond to the sum of all figures shown.

Gray shading indicates a water year included in the historical water budget. A total annual change in groundwater in storage was calculated for the Basin during development of the Basin GSP per SGMA regulations.

— = not calculated

AF = acre-feet

SGMA = Sustainable Groundwater Management Act

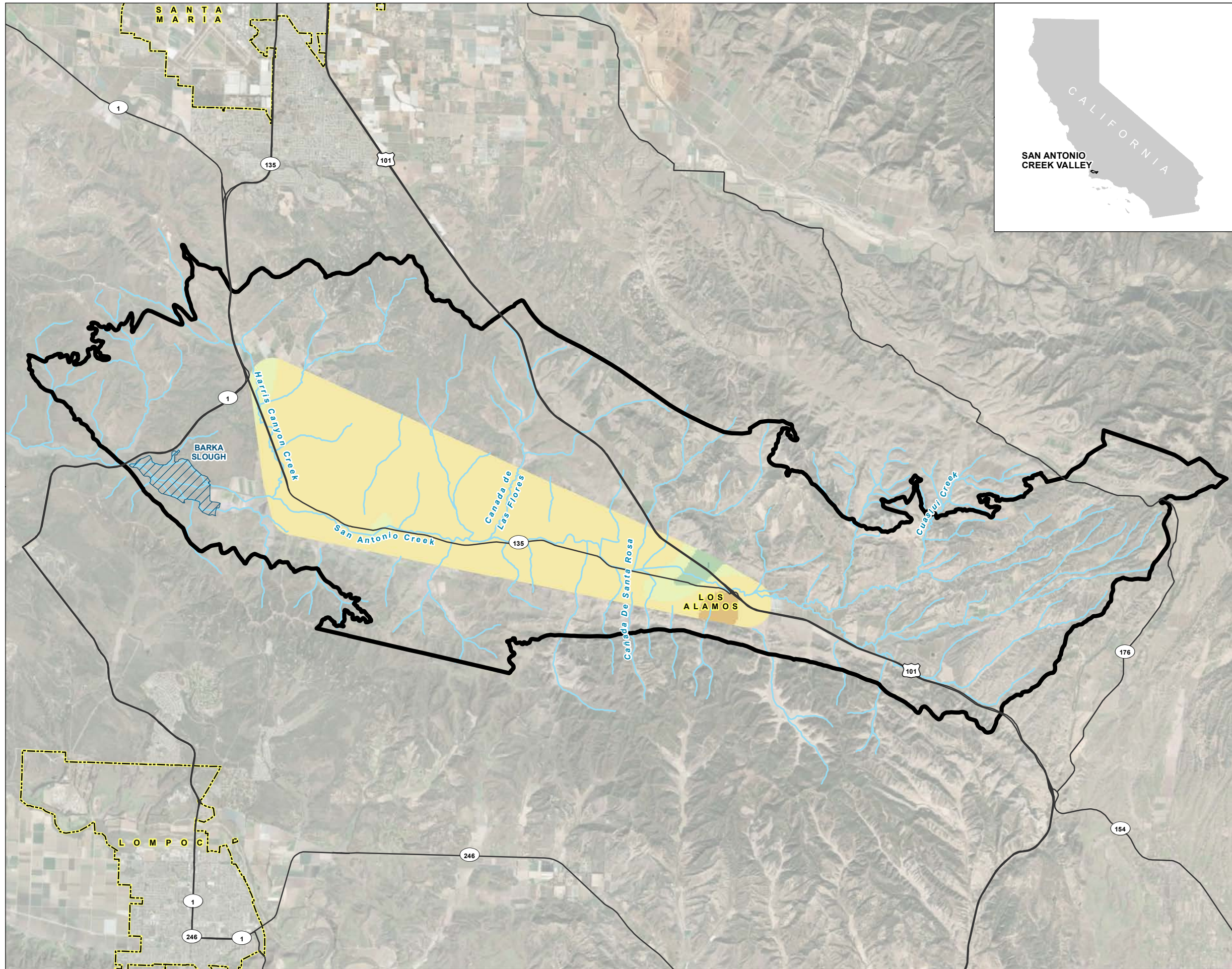


FIGURE ES-2

**Paso Robles Formation
Annual Change in
Groundwater Elevation
Fall 2022 to Fall 2023**

Groundwater Sustainability Plan
2023 Annual Report
San Antonio Creek Valley
Groundwater Basin

LEGEND

Change in Groundwater Elevation (feet NAVD 88)¹

- > 50
- 40 - 50
- 30 - 40
- 20 - 30
- 10 - 20
- 0 - 10
- 10 - 0
- 20 - -10
- 30 - -20
- 30

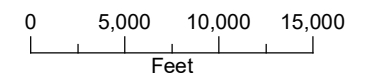
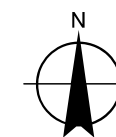
All Other Features

- San Antonio Creek or Tributary
- Major Road
- San Antonio Creek Valley Groundwater Basin²
- Barka Slough
- City Boundary

NOTES

1. The change in groundwater elevation extents are bound by the lateral limits of the subject aquifer (see Figure 2) and available groundwater elevation data.
2. San Antonio Creek Valley Groundwater Basin Boundary as defined in the California Department of Water Resources Bulletin 118.

NAVD 88: North American Vertical Datum of 1988



Date: February 15, 2024
Data Sources: USGS (2020a), ESRI, DWR (2018),
Maxar imagery (2020)



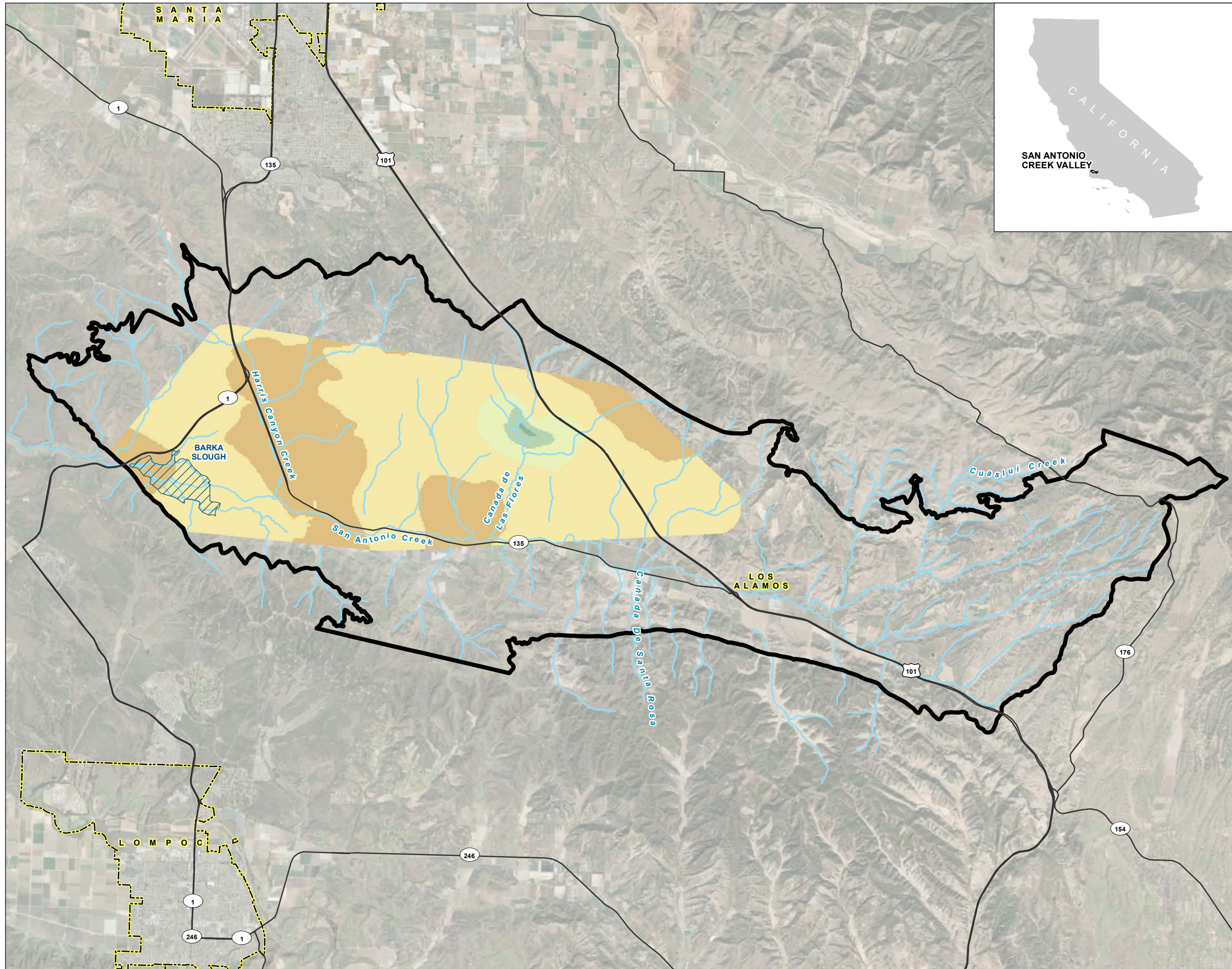


FIGURE ES-3

**Careaga Sand
Annual Change in
Groundwater Elevation
Fall 2022 to Fall 2023**

Groundwater Sustainability Plan
2023 Annual Report
San Antonio Creek Valley
Groundwater Basin

LEGEND

Change in Groundwater Elevation (feet NAVD 88)¹

- > 50
- 40 - 50
- 30 - 40
- 20 - 30
- 10 - 20
- 0 - 10
- 10 - 0
- 20 - -10
- 30 - -20
- 30

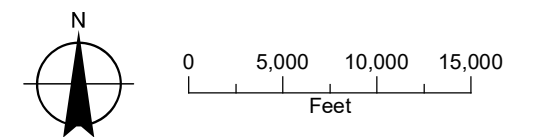
All Other Features

- San Antonio Creek or Tributary
- Major Road
- San Antonio Creek Valley Groundwater Basin²
- Barka Slough
- City Boundary

NOTES

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NAVD 88: North American Vertical Datum of 1988



Date: February 15, 2024
Data Sources: USGS (2020a), ESRI, DWR (2018), Maxar imagery (2020)



ES-6 Progress toward Meeting Basin Sustainability

Tier 1 Management Actions. Tier 1 management actions are described in the GSP (GSI and GEI, 2021) and include:

- Address Data Gaps
 - Expand Monitoring Well Network in the Basin to Increase Spatial Coverage and Well Density
 - Perform Reference Point Elevation and Video Surveys in Representative Wells That Currently Do Not Have Adequate Construction Records to Confirm Well Construction
 - Install Stream Gages and Shallow Piezometers at Barka Slough
 - Los Alamos Community Services District (LACSD) Wellfield Pumping Coordination/Offsite Well Impact Mitigation
 - Review/Update Water Usage Factors and Crop Acreages and Update Water Budget
 - Survey and Investigate Potential Groundwater-Dependent Ecosystems (GDEs) in the Basin
 - Review U.S. Geological Survey (USGS) Groundwater Model/Update hydrogeologic conceptual model (HCM)
- Groundwater Pumping Fee Program
- Well Registration Program and Well Meter Installation Program
- Water Use Efficiency Programs

The SABGSA member agencies committed to initiate work on Tier 1 management actions within 1 year of GSP adoption. These management actions are focused primarily on filling identified data gaps, developing funding for SABGSA operations and future basin monitoring, registering and metering wells, and developing new and expanding existing water use efficiency programs for implementation within the Basin.

The SABGSA member agencies will monitor the effectiveness of these Tier 1 management actions on an annual basis to determine if they will be sufficient to achieve groundwater basin sustainability. The overall effectiveness of individual management actions will also be evaluated annually to determine if continued investment in those actions is warranted or if other actions should be considered.

Groundwater Monitoring Network Expansion. Well access agreements were secured by the SABGSA for three additional wells (22K3, White Hawk 1, and White Hawk 4) in the Basin groundwater level monitoring network during the second quarter of 2023 Basin groundwater level monitoring event (see Section 3.4). Additionally, a new irrigation well (Well 4) was added to the SABGSA monitoring network in the fourth quarter of 2023.

The SABGSA completed a well registration program in 2023 in partnership with Wallace Group Engineering (see Section 7.3.4). The SABGSA plans to review the well registration data to identify existing wells in the Basin that may be incorporated into the Basin Monitoring Network, enabling the SABGSA to fill existing data gaps identified in the Basin GSP.

During development of the GSP, the SABGSA identified two areas within the Basin with a low density of wells in both principal aquifers (see Section 2.4.2). The SABGSA continues to conduct public outreach efforts to contact well owners throughout the Basin (including the two identified low well density areas) to discuss potential enrollment in the Basin groundwater level monitoring network. Expanding the Basin groundwater level monitoring network would improve the HCM and inform sustainable management of the Basin.

Estimation of Agricultural Extraction. The first Basin Annual Report (water years 2019 through 2021; GSI and GEI, 2021) and the Basin Annual Report for water year 2022 (GSI, 2023a) included estimates of groundwater extraction for agricultural irrigation from the crop-specific water use factors. The Basin Annual Report for water year 2022 (GSI, 2023a) also included a satellite-based method (see Section 4.3). The

similarity in results between the methods demonstrated the utility of the satellite-based method. The satellite-based method is considered more accurate because it directly measures actual evapotranspiration (ET) as it varies spatially and temporally throughout the Basin and throughout the year, thereby capturing nuances in crop irrigation practices, such as deficit irrigation. The similarity in results between the methods also indicates the determined crop-specific water use factors are representative of the Basin at a basin scale; however, the accuracy of the agricultural extraction calculation using this method can only be implemented with an accurate land use dataset. The crop-specific water use factors method is a more limited approach that does not capture ET variability in the Basin and does not fully capture the actual climatic variability or nuanced crop irrigation practices that may occur each year. Based on the similarity in results and the stated benefits of the satellite-based method, the SABGSA has adopted the satellite-based method for estimating groundwater extractions for irrigated agriculture.

San Antonio Creek Integrated Model (SACIM). The SABGSA understands that the USGS, in cooperation with the Santa Barbara County Water Authority (SBWA) and Vandenberg Space Force Base, are assessing the effects of future climate scenarios in the Basin on Barka Slough. This assessment will extend the SACIM 3 years from water years 2019 through 2021 and will be updated using available groundwater level, streamflow, climate, land use, and groundwater pumping data. Two 30-year future climate scenarios (water years 2022 through 2051) will be developed to extend and run the SACIM. Results from the future climate scenarios will be evaluated to identify potential climatic effects on streamflow, groundwater flow, recharge, and other hydrologic conditions in Barka Slough, and potential effects on riparian species.

For future reporting and analysis, the SABGSA may consider use of the SACIM for the purpose of modeling proposed Basin project and management actions (e.g., recharge projects, allocation programs, water market, varying climate scenarios), revising the Basin HCM, or calculating change in groundwater in storage for the Basin GSP annual reporting.

Well Registration and Well Meter Installation/Extraction Measurement Program. The SABGSA has begun to develop a Well Registration and Well Meter Installation/Extraction Measurement Program. In February 2022, the SABGSA formed an Ad Hoc Committee—comprised of two members of the SABGSA Board of Directors, two members of the SABGSA Advisory Committee, and the Executive Directors of both the SABGSA and San Antonio Basin Water District—to establish a framework for the Well Registration and Well Meter Installation/Extraction Measurement Program. The program is being developed and implemented in two phases: (1) Well Registration and (2) Well Meter Installation/Extraction Measurement.

Phase 1 (Well Registration) is complete. The initial well registration program framework was reviewed and approved by the SABGSA Board of Directors at the September 20, 2022, Board of Directors' meeting. Following two consecutive public hearings held on October 18, 2022, and November 15, 2022, the SABGSA adopted Ordinance No. 2022-01 requiring all landowners within the Basin to complete a well registration form and file it with the SABGSA no later than March 31, 2023.

As outlined in the Basin GSP, the need for all groundwater production wells, including wells used by “de minimis” pumpers, to be registered with the SABGSA is identified as a Tier 1 Management Action and is a pre-cursor to the implementation of other projects and management actions vital to achieving sustainability. SABGSA's Well Registration program is intended to establish the location and type of each well located within the Basin and help the SABGSA gain an accurate count and a better understanding of the wells in active use. The SABGSA well registration form also queried landowners to identify which wells currently have meters and what type. This information is critical to designing a metering program that helps meet the practical needs of landowners while also facilitating groundwater sustainability.

The development of the initial framework for Phase 2 (Well Meter Installation/Extraction Measurement Program) began in May 2023. Each iteration of the proposed framework and the proposed Flow Meter

Installation Form and Flow Meter Reporting Form are posted on SABGSA’s website and have been discussed in SABGSA Board meetings—on July 18, 2023; August 16, 2023, October 17, 2023 and November 28, 2023—with the opportunity for Basin stakeholders to comment and ask questions. Whenever the SABGSA Board receives recommendations from the Ad Hoc Committee and/or discussed anything pertaining to a potential policy, an email notice is sent to Basin landowners and stakeholders, along with the agenda packet, encouraging their attendance, participation, and input. The SABGSA intends to hold a series of community outreach and stakeholder engagement workshops in spring/summer 2024 after the framework is solidified. It is anticipated that an Ordinance will be considered by the Board of Directors in fall 2024 that would require meters to be installed within one year of adoption.

The final Well Registration and Well Meter Installation/Extraction Measurement Program may include a system for reporting and accounting for water conservation initiatives, voluntary irrigated land fallowing (temporary and permanent), storm water capture projects, or other activities that individual pumpers may elect to implement. The Well Registration and Well Meter Installation/Extraction Measurement Program will aid the SABGSAs effort to identify wells and landowners that could be included in the Basin’s groundwater level monitoring network, particularly in areas with a low-density of wells (see Section 2.4.2). The information collected would be used to account for pumping that would have otherwise occurred, to provide additional information to be used by the SABGSA for analyzing projected basin conditions, updating the HCM, and completing annual reports and 5-year GSP assessment reports as required by the DWR.

Well Verification Policy. On July 19, 2022, the SABGSA adopted its Well Verification Policy established by Resolution No. 22-001. The SABGSA Well Verification Policy was designed to implement the new written verification requirements in Governor Newsom’s Executive Order N-7-22 and the Santa Barbara County Board of Supervisors Urgency Ordinance No. 5158 (County Urgency Ordinance) within the Basin. The SABGSA determined through Resolution No. 22-001 that it cannot issue a Well Verification for a New Well or Alteration of an Existing Well because the Basin GSP documents that the Basin is experiencing chronic lowering of groundwater levels and a reduction in groundwater in storage such that New Wells or Alteration of an Existing Wells would be inconsistent with the GSP. The Basin’s water budget, documented in the Basin GSP, indicates that the annual volume of groundwater extracted from the Basin (by pumping) has historically been greater than the Basin’s sustainable yield (the average annual change in groundwater in storage during the Basin’s historical water budget period [1981–2018] was a decrease of 10,600 AF) as defined in the Basin GSP. Therefore, a New Well or an Alteration of an Existing Well would result in additional groundwater extraction from the Basin above the baseline extraction amounts considered in the Basin GSP and contribute to chronic lowering of groundwater levels and a reduction in groundwater storage in the Basin.

Following a public hearing on August 16, 2022, the SABGSA Board adopted Resolution No. 22-002, which established a Well Verification Request Fee and the supporting scope of work required for SABGSA to process Well Verification Requests and issue Well Verifications consistent with the SABGSA’s Well Verification Policy (Resolution No. 22-001). To date, the SABGSA has not received any requests for Well Verification.

To date, the SABGSA has received and processed one well verification request for a replacement well. The applicant also concurrently sought approval from the County of Santa Barbara’s Environment Health Services Department for the destruction of the existing well on the property. Based on the information provided by the applicant and the Technical Memorandum prepared by GSI Water Solutions, Inc. (GSI, 2023b), the SABGSA verified that: (1) the proposed replacement well would not be inconsistent with any sustainable groundwater management program established in the Groundwater Sustainability Plan (“GSP”) adopted by the SABGSA, and (2) the proposed replacement well would not decrease the likelihood of achieving a sustainability goal for the Basin covered by the GSP. The well verification findings were issued to the applicant on August 31, 2023.

A well permit application for a new domestic de minimis well located within the San Antonio Creek Valley Groundwater Basin was approved by the County of Santa Barbara's Environment Health Services Department on July 25, 2023.

Central Coast Water Quality Preservation, Inc. Central Coast Water Quality Preservation, Inc. (CCWQP) manages a Cooperative Monitoring Program (CMP) and reports to the California Central Coast Regional Water Quality Control Board (RWQCB) on behalf of the California Central Coast grower community.³ To implement the monitoring requirements, CCWQP works with a team of independent contractors selected through a competitive bidding process to perform field sampling, subcontract with analytical laboratories, and perform data validation and reporting services (CCWQP, 2024).

The SABGSA has provided CCWQP with SABGSA well access agreement forms for the CCWQP's consideration in development of their own well access agreement forms. The CCWQP well access agreement forms would be used as part of the CMP. The CMP facilitates collection and analytical reporting of groundwater samples from wells enrolled in the Irrigated Lands Regulatory Program (ILRP).

Attempts to Acquire Funding. On October 18, 2022, the SABGSA Board of Directors passed Resolution 22-003 authorizing an application be made to DWR to obtain a grant under the 2021 Sustainable Groundwater Management (SGM) Grant Program SGMA Implementation Grant pursuant to the California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access For All Act of 2018 (Pub. Resources Code, § 80000, et seq.) and the Budget Acts of 2021 and 2022.

The SABGSA's grant application requested a total of \$2,300,000 in funding and included the following components:

- Monitoring, Maintenance, and Expansion of the Basin Monitoring Networks
- Groundwater Dependent Ecosystem Investigations
- Water Use Efficiency Programs
- Groundwater Pumping Fee Program
- Managed Aquifer Recharge Project Feasibility Study
- Annual Reporting and Data Management System (DMS) Management
- Grant Administration
- Groundwater Base Pumping Allocation Program

The SABGSA's application received a score of 23 points out of 28 possible points. DWR did not award any funding to the SABGSA. The SABGSA will continue to identify possible grant funding sources for implementation of the GSP.

Santa Barbara County Public Works Department Well Metering Assistance Program. Santa Barbara County Public Works Department has implemented a Well Metering Assistance Program (WMAP)⁴ designed to

³ Based on a legislative mandate signed into law in 1999 related to California's Porter-Cologne (Clean Water) Act, the State Water Resources Control Board (SWRCB) was required to review waivers of water quality monitoring for irrigated agriculture and either renew them or adopt Waste Discharge Requirements (WDRs). In 2004, the RWQCB adopted a conditional waiver of WDRs for discharges from irrigated lands within the California Central Coast Region. Given the large geographical range of the region, growers formed a non-profit organization to implement a Cooperative Monitoring Program that would perform the surface water monitoring and reporting requirements for enrolled growers (CCWQP, 2024).

⁴ More information regarding the Santa Barbara County Public Works Department WMAP can be found at: <https://countyofsb.org/pwd/WellMeteringProgram.sbc#:~:text=The%20Well%20Metering%20Assistance%20Program,of%20our%20County's%20groundwater%20resources.>

provide funding to offset up to \$500 of the equipment cost of qualifying water meters. Rules of the WMAP include:

- The groundwater well installation must be located within DWR Bulletin 118 groundwater basin boundary in the following basins:
 - Carpinteria Groundwater Basin
 - Cuyama Valley Groundwater Basin
 - Montecito Groundwater Basin
 - San Antonio River Valley Groundwater Basin
 - Santa Ynez River Valley Groundwater Basin
- Eligibility is limited to 1 meter per applicant
- The program participant must agree to the terms and conditions summarized in the WMAP Application
- The well meter must meet guidelines, if any, established by the Basin's GSA.

Groundwater Sustainability Plan Approval and Priorities for Water Year 2024. DWR approved the Basin GSP on January 18, 2024, and included five recommended corrective actions to be addressed by the SABGSA. The SABGSA intends to meet with DWR staff in early 2024 to review the proposed corrective actions. The SABGSA will discuss and prioritize GSP implementation strategies for fiscal year 2024–2025 in spring 2024 concurrently with the development of SABGSA's operating budget for fiscal year 2024–2025.

Groundwater Quality. The minimum threshold for the degraded groundwater quality sustainability indicator (see Section 4.8 of GSI and GEI, 2021) was not exceeded during this reporting period. No minimum thresholds have been established for contaminants because state regulatory agencies, including the RWQCB and the Department of Toxic Substances Control, have the responsibility and authority to regulate and direct actions that address contamination (see Section 4.8 of GSI and GEI, 2021). The water quality objectives (WQOs) for salt and nutrients are the minimum thresholds for total dissolved solids (TDS), chloride, sulfate, boron, sodium, and nitrate as measured by State Water Resources Control Board (SWRCB) ILRP and Division of Drinking Water (DDW) programs in 20 percent of wells monitored. In cases where the ambient (prior to January 2015) water quality exceeds the WQO, the minimum threshold concentration is 110 percent of the ambient water quality in 20 percent of the wells.

Water quality data for water year 2023 was obtained through the SWRCB GAMA Groundwater Information System (GAMA-GIS).⁵ Average concentrations, by well and constituent of concern (COC), were further categorized as pre-SGMA enactment (2015), post-SGMA (2015 to last measured), and water year 2023. Available water quality data for wells included in the Basin groundwater quality monitoring network for water year 2023 was limited to 4 wells (1 irrigation supply well and 3 municipal wells). Reported constituent concentrations in all 4 wells were below the respective WQO, MCL, and SCML.

Based on data from the SWRCB ILRP, average nitrate concentrations were reported at concentrations exceeding the respective MCL (10 milligrams per liter) in two domestic supply wells since enactment of SGMA. Average concentrations of chloride (in 1 well) and TDS (in 6 wells) exceeding their respective secondary maximum contaminant levels (SMCLs) were reported in wells included in both the SWRCB DDW public water supply well water quality program and SWRCB ILRP since enactment of SGMA. Average concentrations of sodium (in 12 wells), nitrate (in 6 wells), sulfate (in 26 wells), and TDS (in 34 wells) exceeding their respective WQOs were reported in wells included in both the SWRCB DDW public water supply well water quality program and SWRCB ILRP since enactment of SGMA. In comparison to the pre-SGMA period, the number of wells with average concentrations of COCs exceeding the respective WQO

⁵ The GAMA-GIS is available at <https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/>. (Accessed December 4, 2023.)

increased for sodium, sulfate, and TDS. Similarly, the reported average concentration for COCs increased for sulfate and TDS during the post-SGMA period compared to the pre-SGMA period. The GAMA-GIS did not indicate any di(2-ethylhexyl)phthalate (DEHP) groundwater analytical data for the post-SGMA period.

Land Subsidence. Based on data available from the University NAVSTAR Consortium (UNAVCO) Continuous Global Positioning System (CGPS) Station ORES, located in Los Alamos, no land subsidence in the Basin has occurred at rates exceeding the minimum threshold of 0.05 feet per year, described in the GSP, during water year 2022 (see Appendix F for UNAVCO CGPS Station ORES displacement data). InSAR measured land subsidence from June 2022 to June 2023 indicate a vertical displacement of land surface elevation of plus or minus 0.0591 ft.⁶ UNAVCO CGPS Station ORES measured vertical displacement during water year 2023 was -0.034 ft.

Interconnected Surface Water. Interconnected surface water and groundwater within the Paso Robles Formation and Careaga Sand occurs where the groundwater in these units is forced upward by a subsurface bedrock groundwater barrier. The depletion of interconnected surface water sustainability indicator is measured by monitoring streamflow recorded at the Casmalia stream gage (USGS Monitoring Location 11136100; see Figure ES-1). The minimum threshold for the depletion of interconnected surface water sustainability indicator is an average streamflow of 0.15 cubic feet per second (cfs) measured at the Casmalia stream gage over three consecutive months between June to September. This minimum threshold was not reached. The lowest average measured stream flow recorded at the Casmalia stream gage between the months of June to September during water year 2023 was 0.33 cfs (recorded August 23, 2023).⁷ Summaries of stream flow measurements collected from the Casmalia stream gage for water year 2023 are included in Appendix G.

Summary of Changes in Basin Conditions. Many of the Basin groundwater level monitoring network well hydrographs illustrate a condition of declining water levels over the well's respective period of record, although some hydrographs indicate relative water level stability in the last 5 to 10 years. Water levels in several wells rose sharply as a result of the wet water year type. The rise in water levels was generally more rapid and apparent in Paso Robles Formation wells, and more delayed and muted in Careaga Sand wells. Groundwater levels lowered from the seasonal high when dry conditions returned, consistent with the seasonal trends of higher spring groundwater elevations compared with fall. Of the 11 accessible RMSs, water levels in 3 RMSs were measured above the respective measurable objective during the 2023 water year. Likewise, based on fall 2023 groundwater elevations measured in the 11 accessible Basin RMSs, water levels in 5 of the RMSs are above the respective water year 2022 interim milestone. No RMS water levels were measured below the respective minimum threshold during the 2023 water year.

Calculated groundwater in storage in the Basin increased by approximately 19,600 AF from the end of water year 2022 through the end of water year 2023. Groundwater elevations in the Basin were generally higher during water year 2023 than water year 2022. The higher groundwater elevations are a result of the wet water year type observed during water year 2023, and, consequently, a reduction in groundwater pumping (approximately 6,900 AF less groundwater pumping during water year 2023 than water year 2022). Total groundwater pumping for water year 2023 (15,300 AF) remained above the Basin's estimated sustainable yield (8,900 AFY).

Summary of Impacts of Projects and Management Actions. Because of the short duration of time between the adoption of the Basin GSP and the submittal of this Annual Report, additional time is necessary to

⁶ InSAR data accurately models vertical displacement in ground surface elevation to an accuracy tested to be 18 millimeters (0.7086 inches or 0.0591 ft) at 95% confidence (Towill, 2023).

⁷ Casmalia stream gage data is available at <https://waterdata.usgs.gov/monitoring-location/11136100/#parameterCode=00065&period=P7D>. (Accessed January 31, 2024.)

continue to implement projects and managements actions and to evaluate their effectiveness and quantitative impacts. However, it is anticipated that the projects and management actions will enable the Basin to work toward sustainable management of groundwater and achievement of sustainability goals as defined in the Basin GSP.

SECTION 1: Introduction

The 2023 Annual Report for the San Antonio Creek Valley Groundwater Basin (Basin) has been prepared for the San Antonio Basin Groundwater Sustainability Agency (SABGSA) in accordance with the Sustainable Groundwater Management Act (SGMA) regulations (§ 356.2. Annual Reports) (see Appendix A). Pursuant to SGMA regulations, a Groundwater Sustainability Plan (GSP) Annual Report must be submitted to the California Department of Water Resources (DWR) by April 1 of each year following the adoption of the GSP. Because the reporting period for the Basin GSP included water years 1981 through 2018, the first GSP Annual Report for the Basin, documented and updated data from October 1, 2018 through September 30, 2021.⁸ Subsequent annual reports convey monitoring and water use data for a single water year.⁹ This Annual Report conveys monitoring and water use data for water year 2023 (October 1, 2022 through September 30, 2023).

1.1 Setting and Background

The Basin GSP was prepared by GSI Water Solutions, Inc. (GSI) and GEI Consultants, Inc. (GEI) (GSI and GEI, 2021), on behalf of and in cooperation with the SABGSA. The GSP, and subsequent Annual Reports, include the entire Basin (Figure 1). The Basin occupies approximately 130 square miles (DWR, 2003) in western Santa Barbara County. The Basin is bound on the north by the Solomon-Casmalia Hills and the Santa Maria Valley groundwater adjudication boundary and on the east by the San Rafael Mountains and a watershed divide separating the adjoining Santa Ynez River Valley groundwater basin. Average annual precipitation in the Basin is approximately 15.33 inches (County of Santa Barbara Public Works Department, n.d.). There are no natural lakes or water supply reservoirs in the Basin. San Antonio Creek and its tributaries are the major waterbodies. San Antonio Creek discharges into Barka Slough (Slough), an unmanaged 660-acre wetland (Martin, 1985) at the west edge of the Basin. The Basin is bound on the south by the Purisima Hills and on the west by the approximate western boundary of the Slough. The valley is drained by San Antonio Creek (DWR, 2018; see Figure 1). The San Antonio Creek Basin has not been adjudicated. The town of Los Alamos is the largest community in the Basin. U.S. Highway (HWY) 101 is the most significant north-south highway in the Basin, with California State HWY 135 running east-west across the Basin.

1.2 Organization of This Report

The required contents of an Annual Report are provided in the SGMA regulations (§ 356.2) (see Appendix A). Organization of the report is meant to follow the regulations where possible to assist in the review of the document. This Annual Report is organized as follows:

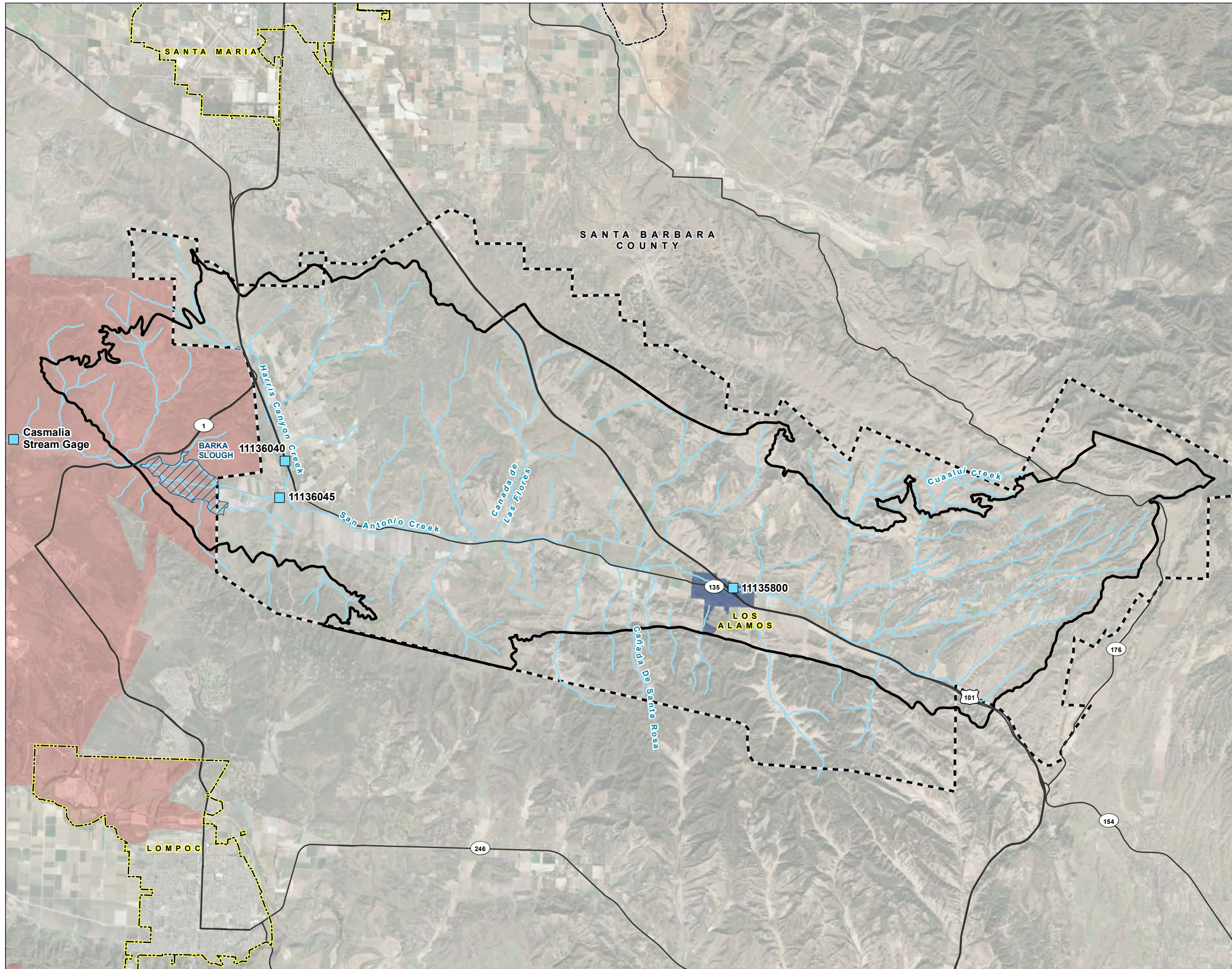
- **Section 1: Introduction.** A brief background of the formation and activities of the SABGSA and development and submittal of the GSP and subsequent annual reports (water years 2019 through 2022).
- **Section 2: Basin Setting and Monitoring Networks.** A summary of the basin setting, basin monitoring networks, and the ways in which data are used for groundwater management.

⁸ A water year begins October 1 and ends September 30 of the reporting year (e.g., water year 2022 includes October 1, 2021 through September 30, 2022).

⁹ The required time frame of the Annual Reports, pursuant to the SGMA regulations, is by water year, which is October 1 through September 30 of any water year. However, because of the variability of monitoring schedules for each groundwater monitoring program, in some instances, fall groundwater levels for a particular water year may have been collected after the beginning of the subsequent water year.

- **Section 3: Groundwater Elevations (§ 356.2[b][1]).** A description of recent monitoring data with groundwater elevation contours for seasonal high and low groundwater elevations and representative hydrographs.
- **Section 4: Groundwater Extractions (§ 356.2[b][2][b][4]).** Compilation of metered and estimated groundwater extractions by land use sector and approximate locations of extraction.
- **Section 5: Surface Water Use (§ 356.2[b][3]).** No surface water use occurs in the Basin and therefore Section § 356.2[b][3] of DWR GSP Emergency Regulations is not applicable to the Basin.
- **Section 6: Change in Groundwater in Storage (§ 356.2[b][5]).** A description of the methodology and presentation of changes in groundwater in storage based on annual groundwater elevation differences.
- **Section 7: Progress toward Basin Sustainability (§ 356.2[c]).** A discussion of applicable outstanding Basin sustainability indicators, a comparison of Basin conditions to the respective sustainability criteria, and summary of management actions taken throughout the Basin by the SABGSA and individual entities toward sustainability of the Basin.
- **Section 8: References.**

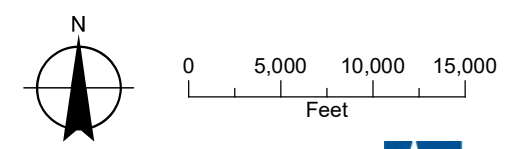
FIGURE 1
San Antonio Creek Valley
Groundwater Basin Plan Area
 Groundwater Sustainability Plan
 2023 Annual Report
 San Antonio Creek Valley
 Groundwater Basin



- LEGEND**
- Stream Gage
 - Los Alamos Community Services District
 - Vandenberg Space Force Base
- All Other Features**
- San Antonio Creek Valley Groundwater Basin
 - Barka Slough
 - San Antonio Basin Water District
 - County Boundary
 - City Boundary
 - Major Road
 - San Antonio Creek or Adjacent Tributary



NOTE
 Casmalia Stream Gage USGS Site Number: 11136100



Date: February 12, 2024
 Data Sources: USGS (2020a), ESRI, DWR (2018), Maxar imagery (2020)



SECTION 2: Basin Setting and Monitoring Networks

2.1 Introduction

This section provides a summary of the Basin setting and the groundwater management monitoring programs described in detail in the GSP, as well as any notable events affecting monitoring activities or the quality of monitoring results in the reported water year 2023. Much of the information in this Annual Report was taken from the GSP prepared by GSI and GEI (2021) and preceding GSP Annual Report (GSI, 2022, 2023a).

2.2 Basin Setting

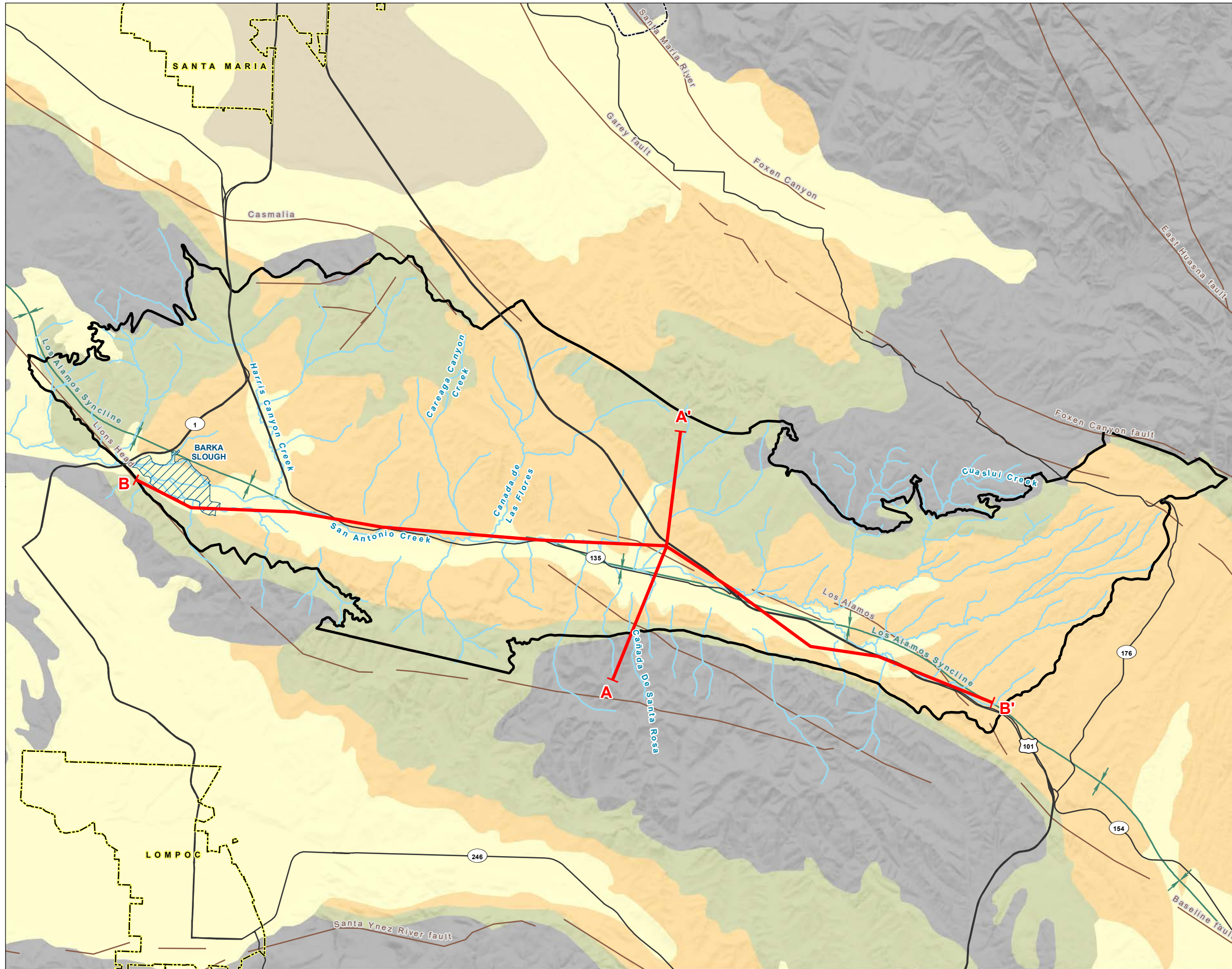
The Basin is long, narrow, and structurally controlled by the underlying Los Alamos Syncline (Hutchinson, 1980). Topographical highs within the Basin occur at an elevation of approximately 1,200 feet (ft) above mean sea level (amsl) along the ridges that define the northern (Casmalia Hills and Solomon Hills) and southern (Purisima Hills and Burton Mesa) Basin boundaries. Topographical lows of the Basin occur along the relatively flat and narrow valley floor, coincident with the axis of the Los Alamos Syncline. Ground surface elevations along the valley floor occur at elevations ranging from approximately 800 ft amsl to the east to 250 ft amsl at the western edge of the Slough. No surface water or groundwater flow into the Basin. San Antonio Creek meanders along the valley floor and is fed by tributaries including Cuaslui Creek, Cañada De Santa Rosa, and Harris Canyon Creek. Groundwater and surface water discharge into the Slough at the western end of the Basin before discharging from the Slough into a leg of San Antonio Creek west of the Basin boundary. There are no natural lakes or water supply reservoirs in the Basin.

Figure 1 shows the lateral boundaries of the Basin as defined by DWR in Bulletin 118. The bottom of the Basin is generally defined as the base of the Pliocene-age Careaga Sand. The Basin bottom is considered a barrier to flow because the geologic units underlying the Careaga Sand are considered impermeable and produce limited quantities of water. In addition, groundwater is generally suspected to be of poor quality (Muir, 1964). Therefore, these units are not considered part of the Basin. Figures 2 and 3 include a geological map with cross section locations and geological cross sections, respectively, that illustrate the vertical boundaries of the Basin and the approximate depth to the bottom of the Careaga Sand.

The Basin lateral boundaries are as follows:

- The western boundary of the Basin is defined by a bedrock ridge underlying the western edge of the Slough. The bedrock ridge forces virtually all groundwater to the surface as base flow in the San Antonio Creek or as vertical flux into the Slough (see Figure 4 for conceptualized surface and groundwater discharge into the Slough).
- The northern boundary of the Basin is defined by the outcropping of the impermeable consolidated bedrock underlying the Careaga Sand in the Casmalia and Solomon Hills.
- The eastern boundary of the Basin is defined by the outcropping of the impermeable consolidated bedrock underlying the Careaga Sand in the San Rafael Mountains.
- The southern boundary is defined by the outcropping of the impermeable consolidated bedrock underlying the Careaga Sand in the Purisima Hills.

FIGURE 2
Geologic Map of the
San Antonio Creek Valley
Groundwater Basin
 Groundwater Sustainability Plan
 2023 Annual Report
 San Antonio Creek Valley
 Groundwater Basin



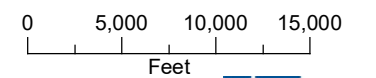
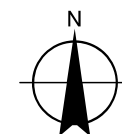
LEGEND

- Cross Section Line
- San Antonio Creek or Adjacent Tributary
- Barka Slough
- B118 San Antonio Creek Valley Groundwater Basin
- Geology**
- Fault
- Syncline
- Channel Alluvium
- Paso Robles Formation
- Lake Deposits
- Careaga Sand
- Bedrock
- All Other Features**
- County Boundary
- City Boundary
- Major Road



NOTES

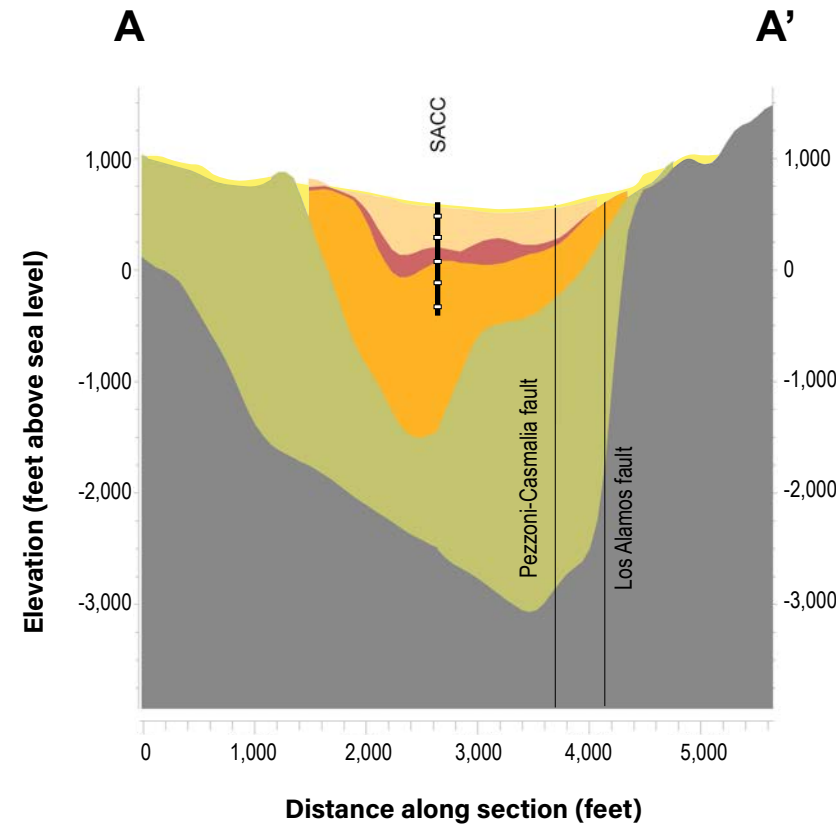
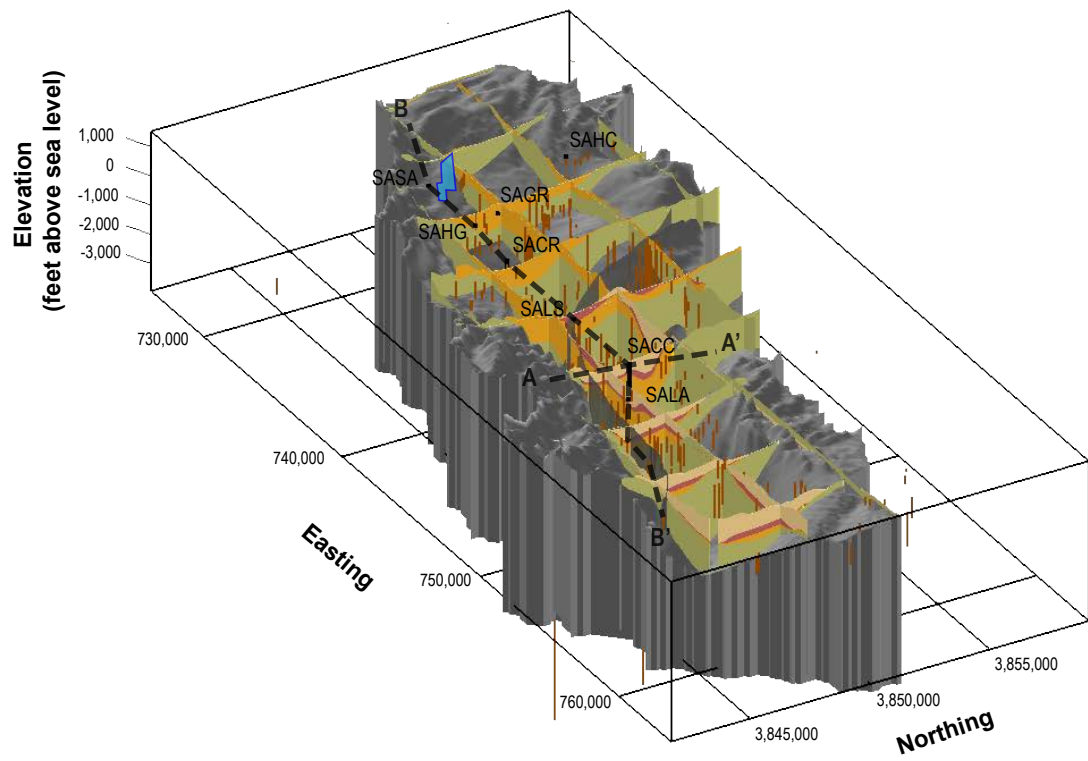
1. San Antonio Creek Valley Groundwater Basin Boundary as defined in the California Department of Water Resources Bulletin 118.
2. Geologic cross sections shown on Figure 3.



Date: January 24, 2024
 Data Sources: USGS (2020b), ESRI, DWR (2018), Diblee & Ehrenspeck (1989, 1993a, 1993b, 1994)



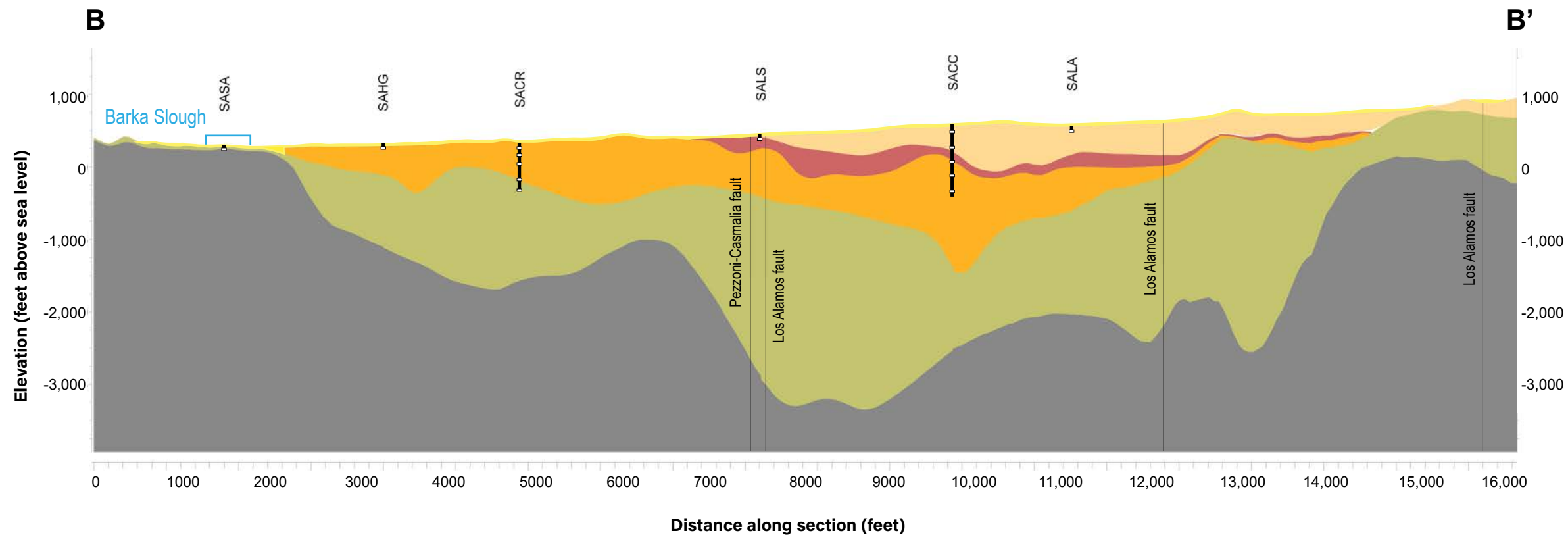
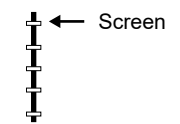
FIGURE 3
Geologic Cross Sections,
San Antonio Creek Valley
Groundwater Basin
 Groundwater Sustainability Plan
 2023 Annual Report
 San Antonio Creek Valley
 Groundwater Basin



LEGEND

- Channel Alluvium
- Upper member - Paso Robles Formation
- Middle member - Paso Robles Formation
- Lower member - Paso Robles Formation
- Careaga Sand
- Consolidated bedrock

WELL LEGEND

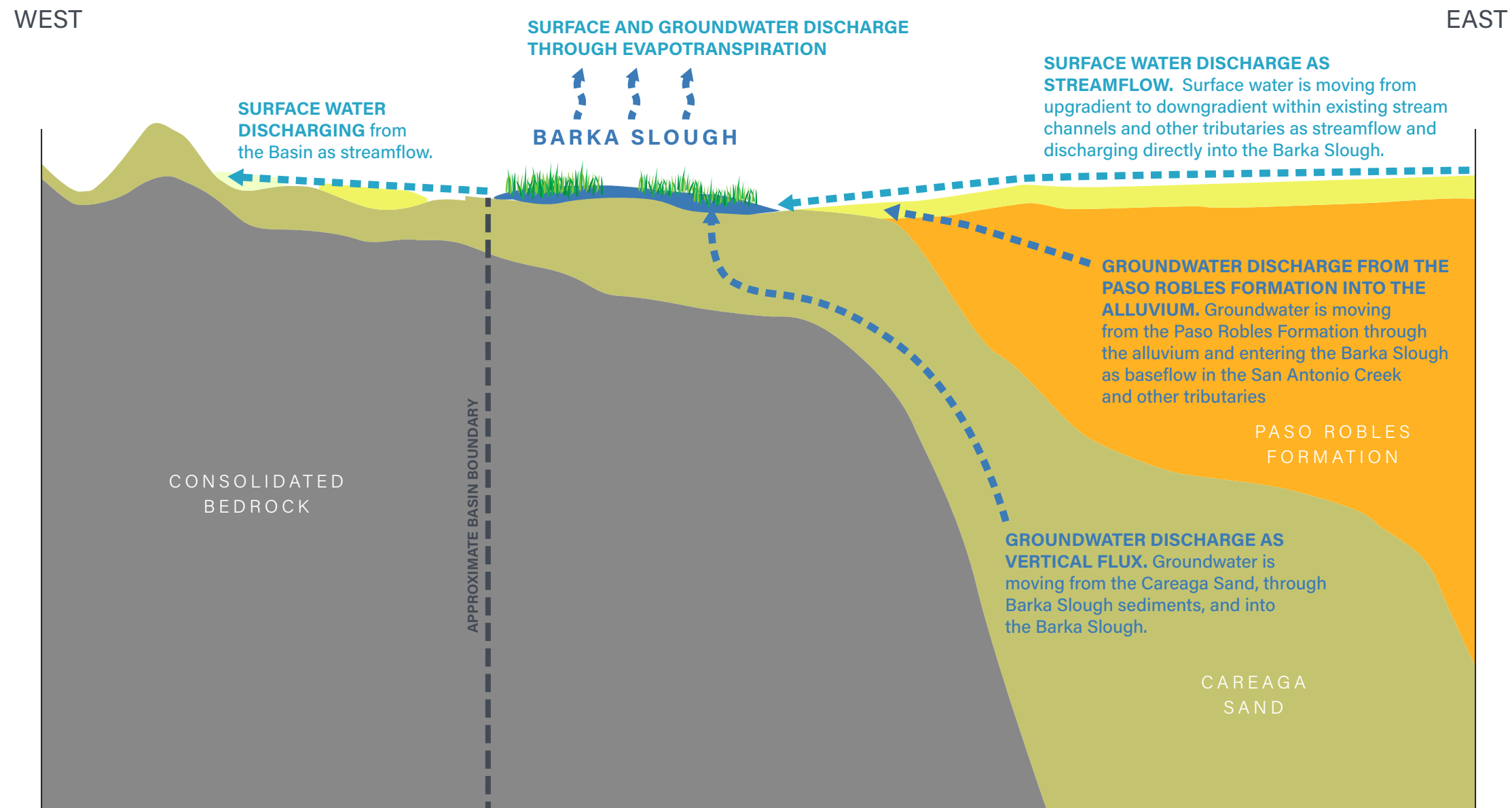


NOTE

Geologic cross section locations shown on Figure 2.
 Date: February 1, 2023
 Data Sources: USGS (2020b)



FIGURE 4
Conceptualized Surface Water and Groundwater Discharge into Barka Slough
 Groundwater Sustainability Plan
 2023 Annual Report
 San Antonio Creek Valley
 Groundwater Basin



LEGEND

- Channel Alluvium
- Paso Robles Formation
- Careaga Sand
- Consolidated Bedrock

NOTE

View looking north
 Date: February 1, 2023
 Data Sources: USGS (2020b)



Two principal aquifers have been identified in the Basin, the Paso Robles Formation and the Careaga Sand. The Paso Robles Formation is approximately 2,000 ft thick and much of it is saturated. Large exposures of the formation north and east of the valley receive direct infiltration of rainfall, particularly in upper elevations. The Paso Robles Formation is likely also recharged by seepage from the alluvium present beneath San Antonio Creek and its tributaries and from upward leakage from the underlying Careaga Sand in some areas of the Basin. Vertical heterogeneity in the water-bearing properties of the Paso Robles Formation is the result of coarse-grained beds that yield water freely to wells alternating with fine-grained beds that do not. Higher well yields are typically attributed to the wells that penetrate several of the coarse-grained lenses. Yields of 500 gallons per minute (gpm) and specific capacities of 5 gpm to 15 gallons per minute per foot (gpm/ft) of drawdown are common (see Appendix D). A storage coefficient of 0.15 was calculated for the Paso Robles Formation (Martin, 1985). Historically, artesian groundwater occurred locally in the Paso Robles Formation (Muir, 1964). Artesian conditions exist presently within the Paso Robles Formation (although, they are less frequently observed than in the past) and were observed in a completed agricultural well as recently as 2020. Artesian conditions within the Basin are due to localized confining layers created by the synclinal structure of the Basin, the presence of overlying fine-grained deposits, and or faults present within the Basin, such as the Los Alamos Fault and the Pezzoni-Casmalia Fault (Carlson, 2019; Cromwell et al., 2022).

As shown on Figure 3, the U.S. Geological Survey (USGS) divided the Paso Robles Formation into three members (unofficial geologic units) during development of the San Antonio Creek integrated model and associated hydrogeologic characterization of the San Antonio Creek Valley Watershed (Cromwell et al., 2022) based on differences in lithologic and hydraulic properties. The middle member of the Paso Robles Formation was identified as a confining layer inhibiting vertical flow of groundwater in the Paso Robles Formation.

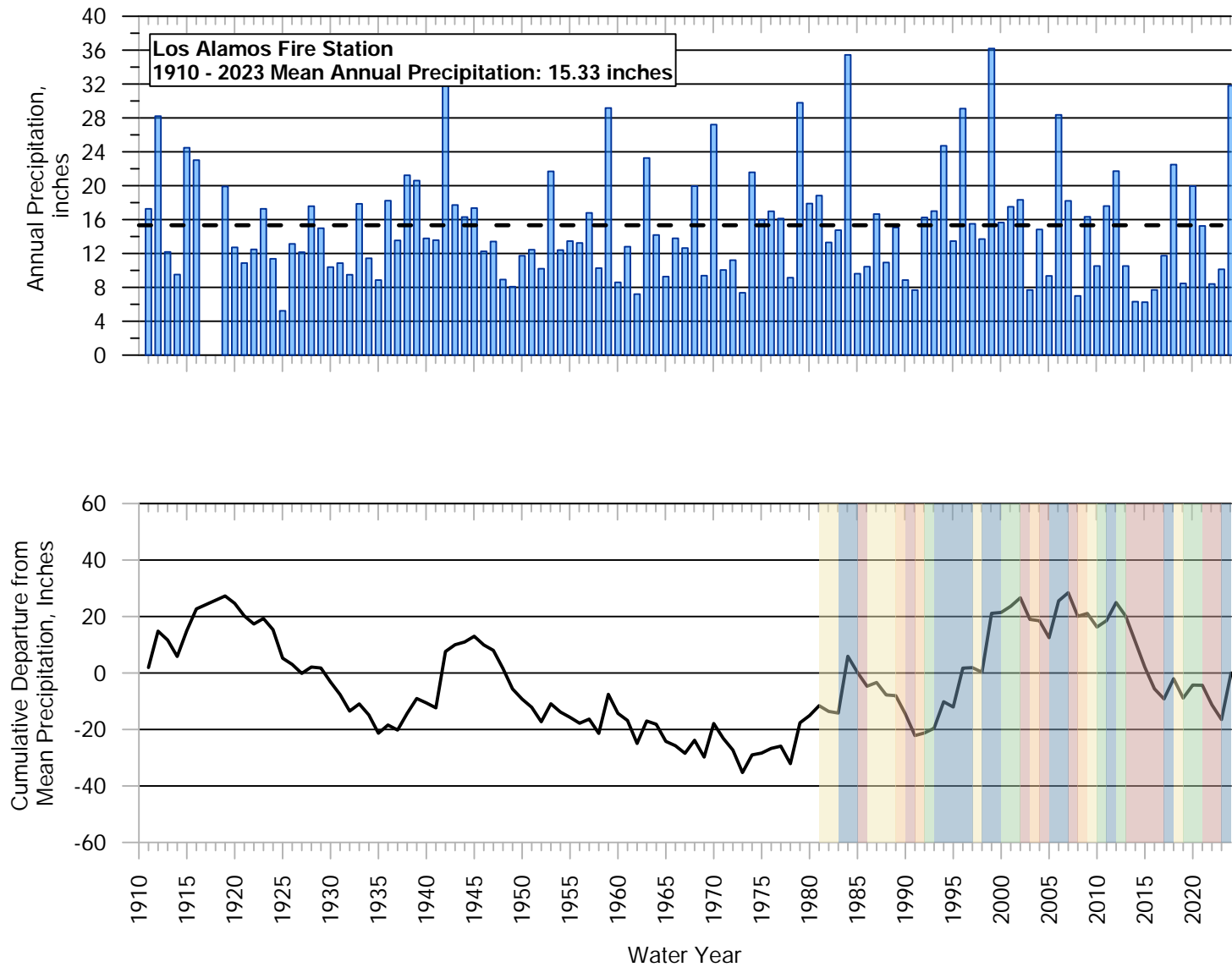
The Careaga Sand is approximately 1,500 ft thick and much of the formation is saturated. There are large exposures of the formation in the Purisima Hills, Solomon Hills, and the Casmalia Hills that receive direct infiltration of rainfall at higher elevations. The formation is present below the valley at a depth of several thousand feet. Two members have been identified in the Careaga Sand: a fine-grained lower member, referred to locally as the Cebada member; and a coarse-grained upper member, referred to locally as the Graciosa member. Geologically, the two members are often mapped together. The Careaga Sand has a large storage capacity and transmits water readily to wells and to the overlying younger formations (Muir, 1964). Yields of less than 100 and exceeding 1,000 gpm and specific capacities of less than 10 to more than 30 gpm/ft of drawdown have been measured in wells completed in the Careaga Sand (see Appendix D). A storage coefficient of 0.001 for the confined portion (the Slough area) of the Careaga Sand was calculated (Martin, 1985).

The primary components of groundwater recharge to the Basin aquifers are mountain front recharge, streamflow percolation, deep percolation of direct precipitation, and agricultural irrigation return flow. Natural groundwater discharge from the Basin aquifers occurs through springs and seeps, evapotranspiration (ET), and discharge to surface water bodies. The most significant component of groundwater discharge is pumping of groundwater from wells. The regional direction of groundwater flow is from east to west. Because of the synclinal structure of the Basin, there is no significant flow of groundwater between the Basin and adjacent groundwater basins. Virtually all natural groundwater discharge in the Basin occurs as discharge to San Antonio Creek (as baseflow where the Paso Robles Formation pinches out) or as vertical flux into the Slough (from the Careaga Sand) due to the bedrock high underlying the western portion of the Slough.

2.3 Precipitation and Climatic Periods

Annual precipitation recorded at the Los Alamos Fire Station precipitation station (Santa Barbara County station 204), cumulative departure from mean annual precipitation, and water year type are presented in Figure 5. The long-term average annual precipitation for the period 1910 through 2023 at the Los Alamos Fire Station is 15.33 inches per water year. Water year types were identified using DWR guidance criteria (DWR, 2021). Water years are categorized according to the following designations: wet, above normal, below normal, dry, and critical (see Table 1). Historical precipitation records are provided in Appendix B.

FIGURE 5
Los Alamos Fire Station
Annual Precipitation and
Cumulative Departure from
Mean Annual Precipitation
 Groundwater Sustainability
 Plan 2023 Annual Report
 San Antonio Creek Valley
 Groundwater Basin



LEGEND

- █ Annual Precipitation
- Mean Annual Precipitation
- Cumulative Departure

Water Year Type

- Wet
- Above Normal
- Below Normal
- Dry
- Critical

Date: January 18, 2024
 Data Sources: County of
 Santa Barbara Public
 Works Department (n.d.)



Table 1. San Antonio Creek Valley Groundwater Basin Water Year Types

Water Year	Sum of Annual Precipitation (inches)	Water Year Index ¹	Water Year Type ¹
1981	13.3	15.51	Below Normal
1982	14.8	14.17	Below Normal
1983	35.4	27.16	Wet
1984	9.6	19.94	Wet
1985	10.4	10.11	Critical
1986	16.7	14.17	Below Normal
1987	10.9	13.22	Below Normal
1988	15.1	13.41	Below Normal
1989	8.9	11.34	Dry
1990	7.7	8.15	Critical
1991	16.3	12.82	Dry
1992	17.0	16.70	Above Normal
1993	24.7	21.63	Wet
1994	13.5	17.96	Wet
1995	29.1	22.84	Wet
1996	15.5	20.94	Wet
1997	13.7	14.42	Below Normal
1998	36.2	27.19	Wet
1999	15.7	23.87	Wet
2000	17.5	16.77	Above Normal
2001	18.3	18.00	Above Normal
2002	7.7	11.95	Critical
2003	14.8	11.97	Dry
2004	9.4	11.54	Critical
2005	28.4	20.76	Wet
2006	18.2	22.27	Wet
2007	7.0	11.48	Critical
2008	16.3	12.59	Dry
2009	10.5	12.84	Below Normal
2010	17.6	14.77	Above Normal
2011	21.7	20.07	Wet
2012	10.5	15.00	Above Normal
2013	6.3	7.99	Critical
2014	6.2	6.27	Critical
2015	7.7	7.12	Critical
2016	11.7	10.12	Critical

Water Year	Sum of Annual Precipitation (inches)	Water Year Index ¹	Water Year Type ¹
2017	22.5	18.19	Wet
2018	8.5	14.07	Below Normal
2019	19.9	15.35	Above Normal
2020	15.2	17.13	Above Normal
2021	8.4	11.14	Critical
2022	10.1	9.44	Critical
2023	31.8	23.14	Wet

Notes

¹ As defined in DWR's SGMA Water Year Type Dataset Development Report (DWR, 2021) using precipitation measured at the Los Alamos Fire Station.

This table includes corrections to the sum of annual precipitation, water year index, and water year type from preceding annual reports because of a discrepancy in the definition of a water year in the data source.

DWR = California Department of Water Resources

GSP = Groundwater Sustainability Plan

2.4 Groundwater Elevation Monitoring (§ 356.2[b])

This section provides a brief description of the groundwater monitoring and management programs and notable events, if any, impacting monitoring activities or the quality of monitoring results.

2.4.1 Groundwater Elevation Monitoring Locations

The GSP provided a summary of existing groundwater monitoring efforts promulgated under various existing local, state, and federal programs. SGMA requires that monitoring networks be developed to provide sufficient data quality, frequency, and spatial distribution to characterize groundwater and surface water in the Basin, and to evaluate changing aquifer conditions in response to GSP implementation. The monitoring network developed in the GSP is intended to support efforts to do the following:

- Monitor changes in groundwater conditions and demonstrate progress toward achieving measurable objectives and minimum thresholds documented in the GSP.
- Quantify annual changes in water use.
- Monitor impacts to the beneficial uses and users of groundwater.

Monitoring networks are developed for each of the five sustainability indicators applicable to the Basin:

- Chronic lowering of groundwater levels
- Reduction of groundwater in storage
- Degraded water quality
- Land subsidence
- Depletion of interconnected surface water

Monitoring for the first two sustainability indicators (chronic lowering of water levels and reduction of groundwater in storage) is implemented using the same representative monitoring sites (RMSs). The GSP identifies an existing network of 15 RMSs (wells) for water level monitoring (GSI and GEI, 2021). Of these 15 wells, 8 wells are screened in the Paso Robles Formation, and 7 wells are screened in the Careaga Sand

(Figure 6). Groundwater elevation hydrographs and associated location map for the 15 RMSs in the Basin groundwater level monitoring network are presented in Appendix C. Hydrographs for non-RMS wells included in the Basin groundwater level monitoring network are also presented in Appendix C.

2.4.2 Water Level Monitoring Data Gaps

Although the existing groundwater level monitoring network satisfies the well density guidance cited in the best management practice (BMP) guidance for monitoring networks developed by DWR (DWR, 2016a and 2016b), there are areas identified within the Basin (see Figure 5-3 in GSI and GEI, 2021) where the addition of monitoring wells would improve the hydrogeologic conceptual model (HCM) discussed in this section. Two areas with a low density of wells in both principal aquifers were identified in the Basin: the eastern uplands and the central to northwestern uplands. The State Water Resources Control Board (SWRCB) Irrigated Lands Regulatory Program (ILRP) indicates that private agricultural supply wells have been identified in the eastern uplands area. An effort is being made during GSP implementation to contact owners of wells in the eastern uplands area to determine whether they can be included in the monitoring program. Including these additional wells in the groundwater level monitoring network would minimize the uncertainty of groundwater elevation trends and benefit sustainable management of the Basin. Two wells in the central to northwestern uplands area, completed in the Careaga Sand, were previously monitored by the USGS or the SABGSA. However, well access has been denied by the well owners. The SABGSA continues to negotiate access to these wells.

The SABGSA applied for grant funding through DWR's SGMA Round 2 Grant Program in December 2022 (see Section 7.3.6). Included in the SABGSA's grant application was a proposal to construct up to four groundwater monitoring wells in the Basin data gap areas. The SABGSA was not included in DWR's final list of recipients to be awarded the subject grant funding, announced September 2023.

Well completion reports (WCRs) are available online through DWR's Online System for Well Completion Reports (OSWCR) database; however, the WCR identification numbers are unknown for many of the wells in the groundwater level monitoring network and therefore it is not possible to always identify the associated WCRs. These are data gaps that the SABGSA is working to address to improve the accuracy of the HCM and understanding of groundwater flow in the Basin.

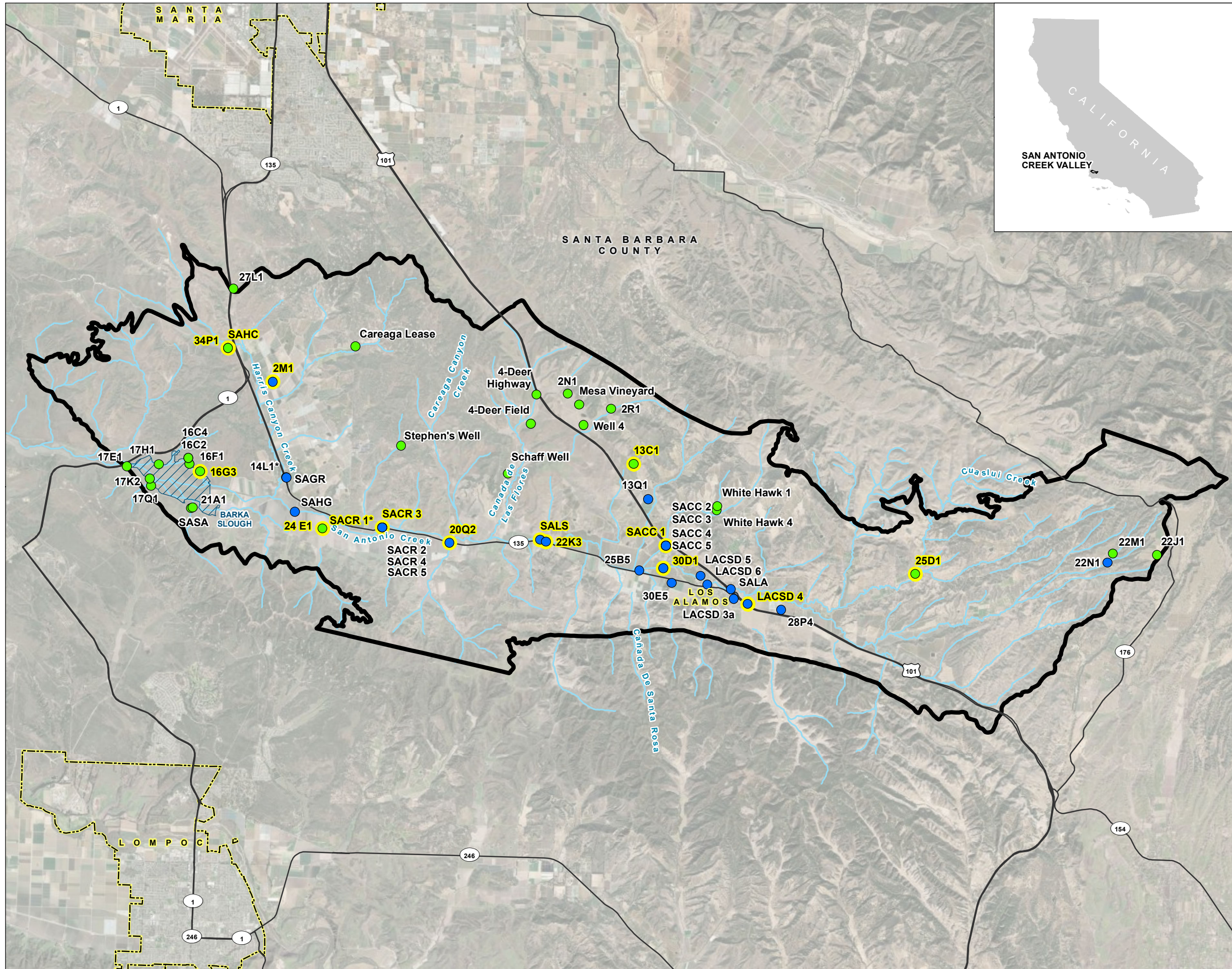


FIGURE 6
Wells Included in the San Antonio Creek Valley Groundwater Basin Groundwater Monitoring Network
 Groundwater Sustainability Plan
 2023 Annual Report
 San Antonio Creek Valley Groundwater Basin

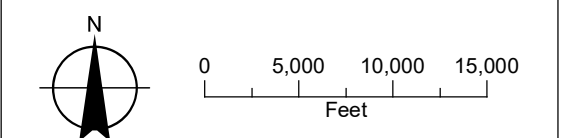
- LEGEND**
- Representative Well
 - Wells (by screened aquifer)**
 - Paso Robles Formation
 - Careaga Sand - All Other Features**
 - ~ San Antonio Creek or Tributary
 - Major Road
 - San Antonio Creek Valley Groundwater Basin
 - Barka Slough
 - City Boundary

NOTES

*SACR 1 and 14L1 are screened in the Careaga Sand.

Well 4 was added to the San Antonio Creek Valley Groundwater Basin Monitoring Network in December 2023.

San Antonio Creek Valley Groundwater Basin Boundary as defined in the California Department of Water Resources Bulletin 118.



2.5 Groundwater Quality Monitoring

The minimum threshold for the degraded groundwater quality sustainability indicator (see Section 4.8 of GSI and GEI, 2021) was not exceeded during this reporting period. No minimum thresholds have been established for contaminants because state regulatory agencies, including the Central Coast Regional Water Quality Control Board (RWQCB) and the Department of Toxic Substances Control, have the responsibility and authority to regulate and direct actions that address contamination (see Section 4.8 of GSI and GEI, 2021). The water quality objectives (WQOs) for salt and nutrients are the minimum thresholds for TDS, chloride, sulfate, boron, sodium, and nitrate as measured by SWRCB ILRP and Division of Drinking Water (DDW) programs in 20 percent of wells monitored. In cases where the ambient (prior to January 2015) water quality exceeds the WQO, the minimum threshold concentration is 110 percent of the ambient water quality in 20 percent of the wells.

Evaluation of the water quality sustainability indicator is achieved through existing groundwater quality monitoring networks, including the SWRCB DDW public supply well water quality program and the SWRCB ILRP. Constituents of concern (COCs) identified in the GSP are based on state and federal regulatory standards (maximum contaminant levels [MCLs] and secondary MCLs [SMCLs]) for drinking water established by the SWRCB DDW and the U.S. Environmental Protection Agency (EPA), respectively.¹⁰ For agricultural uses, COCs are based on basin WQOs presented in the *Water Quality Control Plan for the Central Coastal Basin* (Basin Plan) (RWQCB, 2019). COCs that have the potential to impact suitability of water for public supply or agricultural use include total dissolved solids (TDS), sodium, chloride, sulfate, arsenic, nitrate, boron, and di(2-ethylhexyl)phthalate (DEHP). There are no known point source contaminant plumes in groundwater in the Basin.

The groundwater quality monitoring network includes eight municipal drinking water supply wells. Four of the municipal drinking water supply wells are completed in the Paso Robles Formation, and four are completed in the Careaga Sand. The wells completed in the Paso Robles Formation are owned and operated by the Los Alamos Community Services District (LACSD) and located near Los Alamos. The wells completed in the Careaga Sand are owned and operated by Vandenberg Space Force Base (VSFB) and located on the north side of the Slough.

There are a total of 81 ILRP wells in the groundwater quality monitoring network; 21 wells were determined to be domestic supply wells based on their USGS Groundwater Ambient Monitoring and Assessment (GAMA) program identification number, and 60 wells were determined to be agricultural supply wells. Figure 7 shows wells included in the groundwater quality monitoring network.

In comparison to reported pre-SGMA conditions, the number of wells with average concentrations of COCs exceeding their respective water quality objective increased for sodium (2 wells), sulfate (4 wells), and TDS (11 wells) during the post-SGMA period. Similarly, the reported average concentration for COCs increased for sulfate and TDS from 129.66 to 131.30 milligrams per liter (mg/L) and from 594.35 to 594.94 mg/L, respectively, during the post-SGMA period compared to the pre-SGMA period.¹¹ During the pre-SGMA period, reported concentrations of chloride and TDS exceeded the respective SMCL in 1 and 4 wells, respectively. During the post-SGMA period, reported concentrations of chloride and TDS exceeded the respective SMCL in 1 and 6 wells, respectively. Nitrate is the only COC with reported concentrations exceeding the primary MCL

¹⁰ The list of MCLs and SMCLs is available at https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Chemicalcontaminants.html. (Accessed December 4, 2023.)

¹¹ Based on GAMA water quality data available at <https://gamagroundwater.waterboards.ca.gov/gama/datadownload>. (Accessed December 4, 2023.)

(10 mg/L) in the pre- or post-SGMA period. Reported nitrate concentrations exceeded the MCL in 1 and 2 well during the pre- and post-SGMA period, respectively.

According to the California Department of Conservation, Geologic Energy Management Division online Well Finder, or WellSTAR, tool, nine named oil and gas fields are within or adjacent to the Basin: Cat Canyon, Zaca, Barham Ranch, Los Alamos, Lompoc, Harris Canyon (abandoned), Careaga, Orcutt, and Four Deer (abandoned) (see Figure 3-47 of GSI and GEI, 2021).¹² The USGS, in cooperation with the SWRCB, initiated the California Oil, Gas, and Groundwater (COGG) Program in 2015.¹³ The objective of the COGG Program is to determine where and to what extent groundwater quality may be adversely impacted by proximal oil and gas development activities (Davis et al., 2018).

As part of the COGG Program, a groundwater quality analysis was completed for the area near the Orcutt Oil Field (Anders et al., 2022). The analysis evaluated the occurrence of water and thermogenic gas from oil-bearing formation in groundwater. Anders et al. (2022) determined most groundwater in the area of the Orcutt Oil Field appears to be of good quality with respect to the constituents analyzed because most groundwater samples, as well as available inorganic historical chemistry data, do not indicate the presence of water from oil-bearing formations in groundwater. These results reportedly support previous water-quality studies, which have noted irrigation return flow, natural-occurring water-rock interaction, and lateral seepage from the surrounding outcrops of marine rocks are the predominant processes contributing to the salinity in groundwater in the study area. Of the 15 groundwater wells included in the study, groundwater analytical results in 3 of the wells indicated potential mixing with water and/or hydrocarbon gas from oil-bearing formations. There are no known risk of these gases in drinking water, and regulatory thresholds have not been developed for these gases. The study was unable to conclusively differentiate between occurrences and movements of oil-related (thermogenic) gases mobilized by oil-field operations and natural occurrences and movements of thermogenic gases. The potential sources/pathways for the occurrence of water and thermogenic gas in groundwater near the Orcutt Oil Field included: (1) upward movement from oil-producing formations as a result of, (a) anthropogenic activity such as injection and/or movement along leaky wells/wellbores, or (b) natural migration through formations and/or faults; and (2) non-producing oil-bearing formations overlying and adjacent to the oil field (Anders et al., 2022).

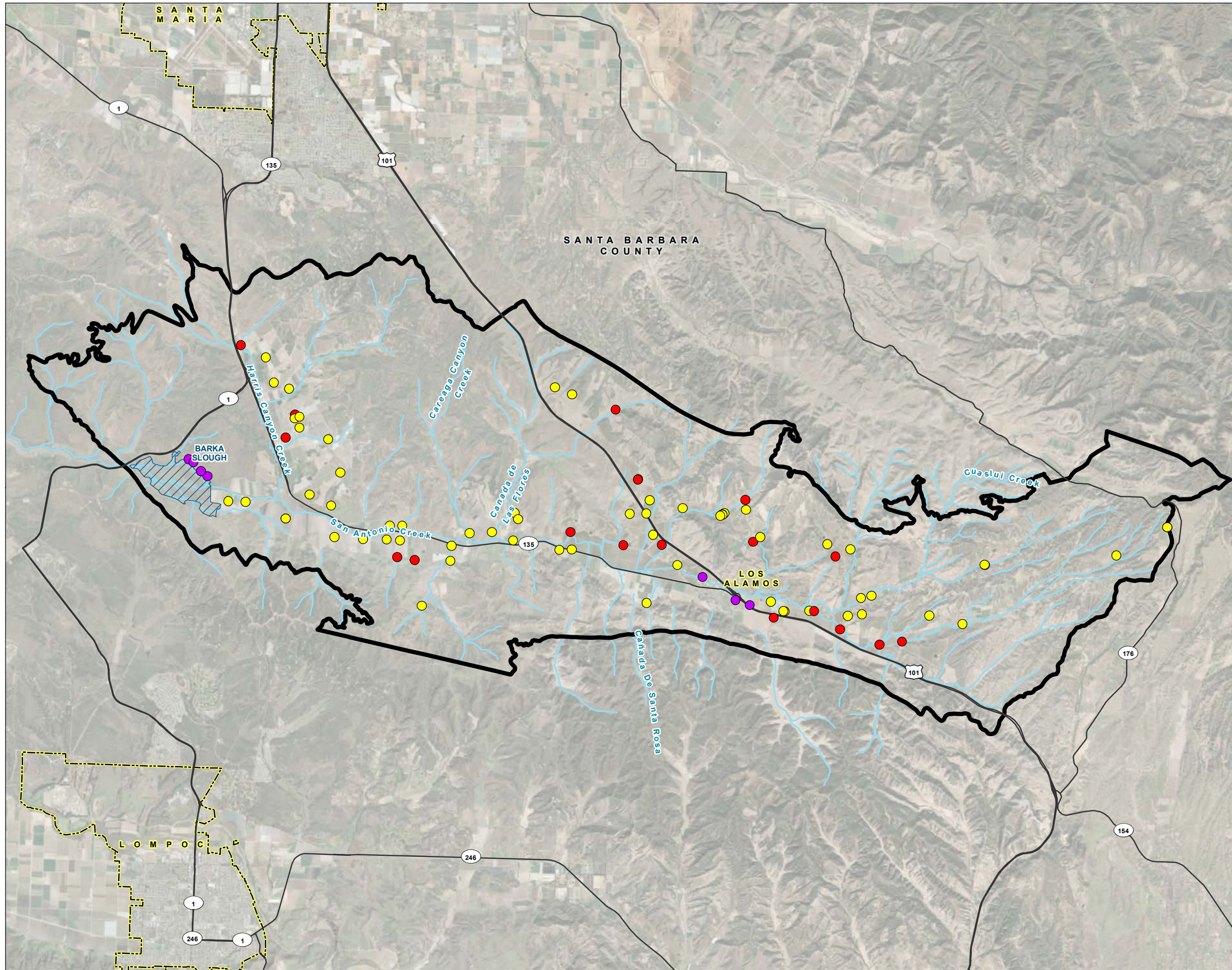
¹² The tool is available at <https://www.conservation.ca.gov/calgem/Pages/WellFinder.aspx>. (Accessed February 8, 2024.)

¹³ Description available at <https://webapps.usgs.gov/cogg/>. (Accessed February 8, 2024.)

FIGURE 7

Groundwater Quality Monitoring Network

Groundwater Sustainability Plan
2023 Annual Report
San Antonio Creek Valley
Groundwater Basin



LEGEND

Well Type

- Agricultural
- Domestic
- Municipal

All Other Features

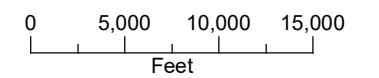
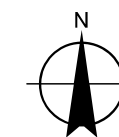
- San Antonio Creek or Tributary
- Major Road
- San Antonio Creek Valley Groundwater Basin
- Barka Slough
- City Boundary



NOTES

*SACR 1 and 14L1 are screened in the Careaga Sand.

San Antonio Creek Valley Groundwater Basin Boundary as defined in the California Department of Water Resources Bulletin 118.



2.6 Land Subsidence Monitoring

Land subsidence in the Basin is monitored at the University NAVSTAR Consortium (UNAVCO) Continuous Global Positioning System (CGPS) Station ORES in the town of Los Alamos, near Los Alamos Park. Land subsidence in the Basin is also measured using interferometric synthetic-aperture radar (InSAR) data collected using microwave satellite imagery provided by DWR. Available data to date indicate (1) land subsidence rates have not exceeded rates observed from 2000 through 2020 at the UNAVCO CGPS ORES (-0.034 ft during water year 2023);¹⁴ and (2) land subsidence has not occurred that causes significant and unreasonable damage to groundwater supply, land uses (including agricultural, residential, rural residential, and town buildings), infrastructure (including LACSD wells, wastewater treatment plant, and associated infrastructure), and property interests. The SABGSA will annually assess subsidence using the UNAVCO CGPS and InSAR data provided by DWR. See Figure 8 for measured land subsidence from June 2022 to June 2023 in the Basin according to DWR InSAR raster data and measured displacement from the UNAVCO CGPS Station ORES during water year 2023. InSAR raster data from June 2022 to June 2023 indicate a vertical displacement of land surface elevation of plus or minus 0.0591 ft.¹⁵ Figure 9 presents InSAR measured land subsidence data and UNAVCO CGPS Station ORES for June 2015 to June 2023 and October 1999 to May 2023 (UNAVCO CGPS Station ORES period of record), respectively.¹⁶ Although less than the Basin's minimum threshold for the land subsidence sustainably indicator, InSAR data presented on Figure 9 indicates areas of greater (negative) vertical displacement east of Los Alamos and south of California State HWY 135 near the Barham Ranch Oil Field, Los Alamos, along San Antonio Creek and California State HWY 135 west of Los Alamos, and in the western uplands between California State HWY 135 and U.S. HWY 101 within the Orcutt Oil Field. Measured vertical displacement in these areas is generally less than 0.12 ft, with the greatest vertical displacement occurring near Los Alamos.

2.7 Interconnected Surface Water Monitoring

The interconnected surface water monitoring network includes monitoring stream flow recorded at the USGS-operated Casmalia stream gage (USGS Monitoring Location 11136100; see Figure 1) located 2.5 miles west of the Slough. Measured surface water flow at the Casmalia stream gage averaged above 0.15 cubic feet per second (cfs) over 3 consecutive months from June to September (Depletion of Interconnected Surface Water Minimum Threshold) during water year 2023 (see Appendix H).¹⁷

The SABGSA understands the USGS, in cooperation with the Santa Barbara County Water Authority (SBWA) and VSFB, are assessing the effects of future climate scenarios in the Basin on the Slough. The scope of work includes the installation of one stream gage along San Antonio Creek (upstream of the Slough at San Antonio Road) and the reactivation of a second stream gage along Harris Canyon Creek. VSFB are reportedly responsible for costs, including installation, maintenance, and monitoring of the stream gages through September 2023. The Harris Canyon and San Antonio Creek (at San Antonio Rd) stream gages were put into service in January and March 2023, respectively.

The SABGSA plans to improve the monitoring network through installation of two surface water gages on San Antonio Creek: one upstream and one downstream of the Slough to measure surface water inflow and

¹⁴ DWR provided InSAR and UNAVCO CGPS subsidence data is available at <https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer#landsub>. (Accessed January 30, 2024.)

¹⁵ InSAR data accurately models vertical displacement in ground surface elevation to an accuracy tested to be 18 millimeters (0.7086 inches or 0.0591 ft) at 95% confidence (Towill, 2023).

¹⁶ InSAR land subsidence presented on Figure 9 is from June 2015 to June 2023, rather than October 2023 (InSAR period of record), for comparison purposes.

¹⁷ Casmalia stream gage data is available at <https://waterdata.usgs.gov/monitoring-location/11136100/#parameterCode=00065&period=P7D>. (Accessed January 31, 2024.)

outflow to the Slough and assess surface water depletion and potential for impacts to the Slough. The SABGSA is working with the USGS and VSFB to continue operation of the San Antonio Creek (at San Antonio Road) and Harris Canyon Creek stream gages following completion of the climate assessment described above. Installation of additional stream gages upstream or downstream of the Slough may not be feasible based on private property access limitations.

The SABGSA also plans to assess the feasibility of installing shallow piezometers within the sediments underlying the Slough. If achievable, the piezometers will provide important data regarding the elevation of the water table relative to the plant rooting depths in the Slough.

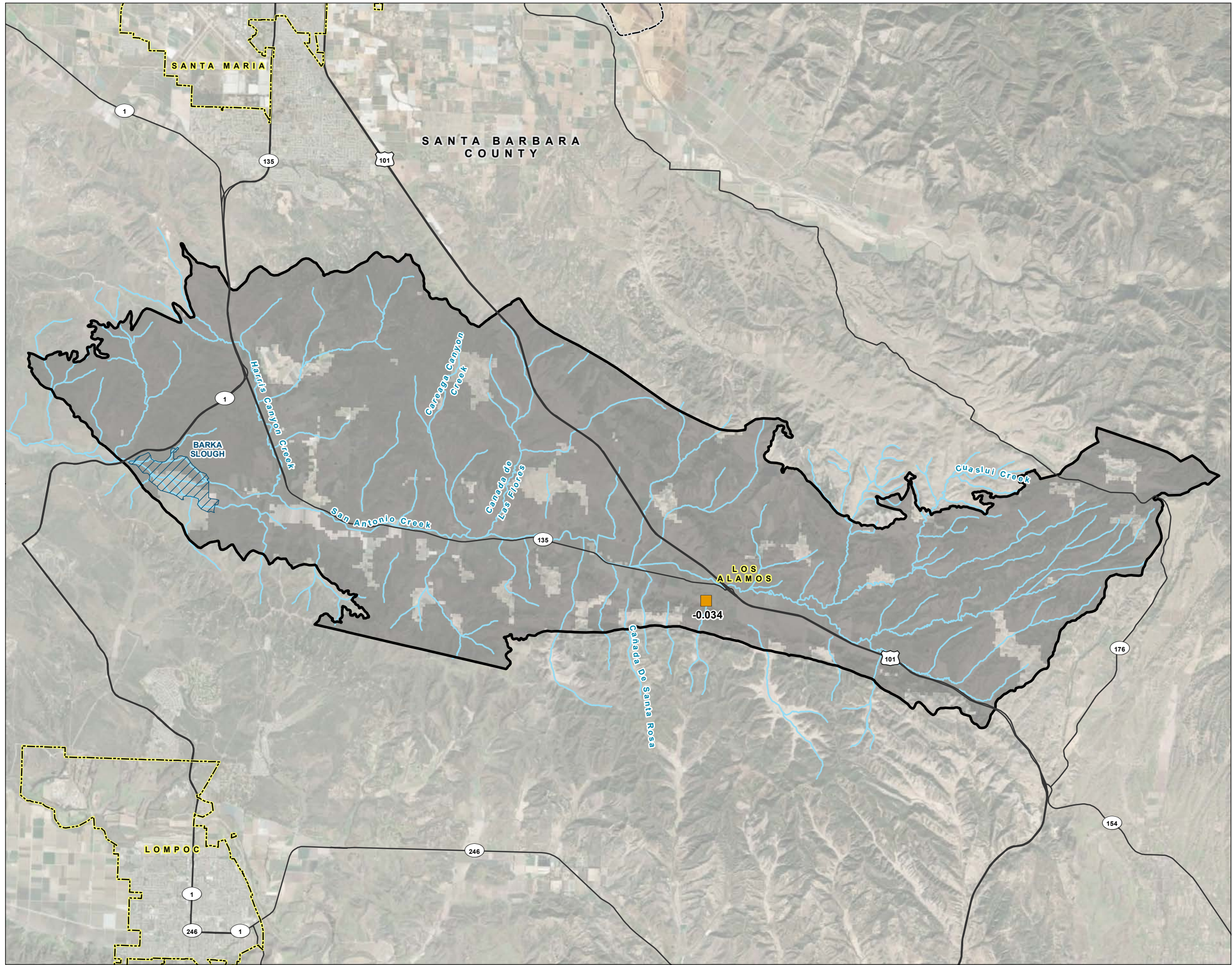


FIGURE 8

**InSAR Measured Land Subsidence
June 2022 to June 2023**

Groundwater Sustainability Plan
2023 Annual Report
San Antonio Creek Valley
Groundwater Basin

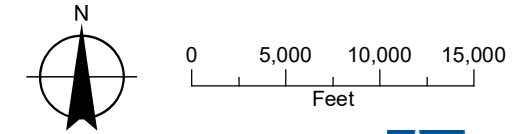
LEGEND

- UNAVCO CGPS Station ORES
- Water Year 2023 Vertical Displacement in Feet
- Land Subsidence**
- Vertical Displacement (InSAR)**
- 0.0591 - 0.0591 feet
- All Other Features**
- San Antonio Creek or Adjacent Tributary
- Barka Slough
- B118 San Antonio Creek Valley Groundwater Basin
- County Boundary
- City Boundary
- Major Road



NOTES

InSAR data accurately models vertical displacement in ground surface elevation to an accuracy tested to be 18 mm (0.7086 inches or 0.0591 feet) at 95% confidence (Towill, 2023).



Date: February 12, 2024
Data Sources: USGS (2020b), ESRI, DWR, 2018, DWR, 2023, Maxar imagery (2020)



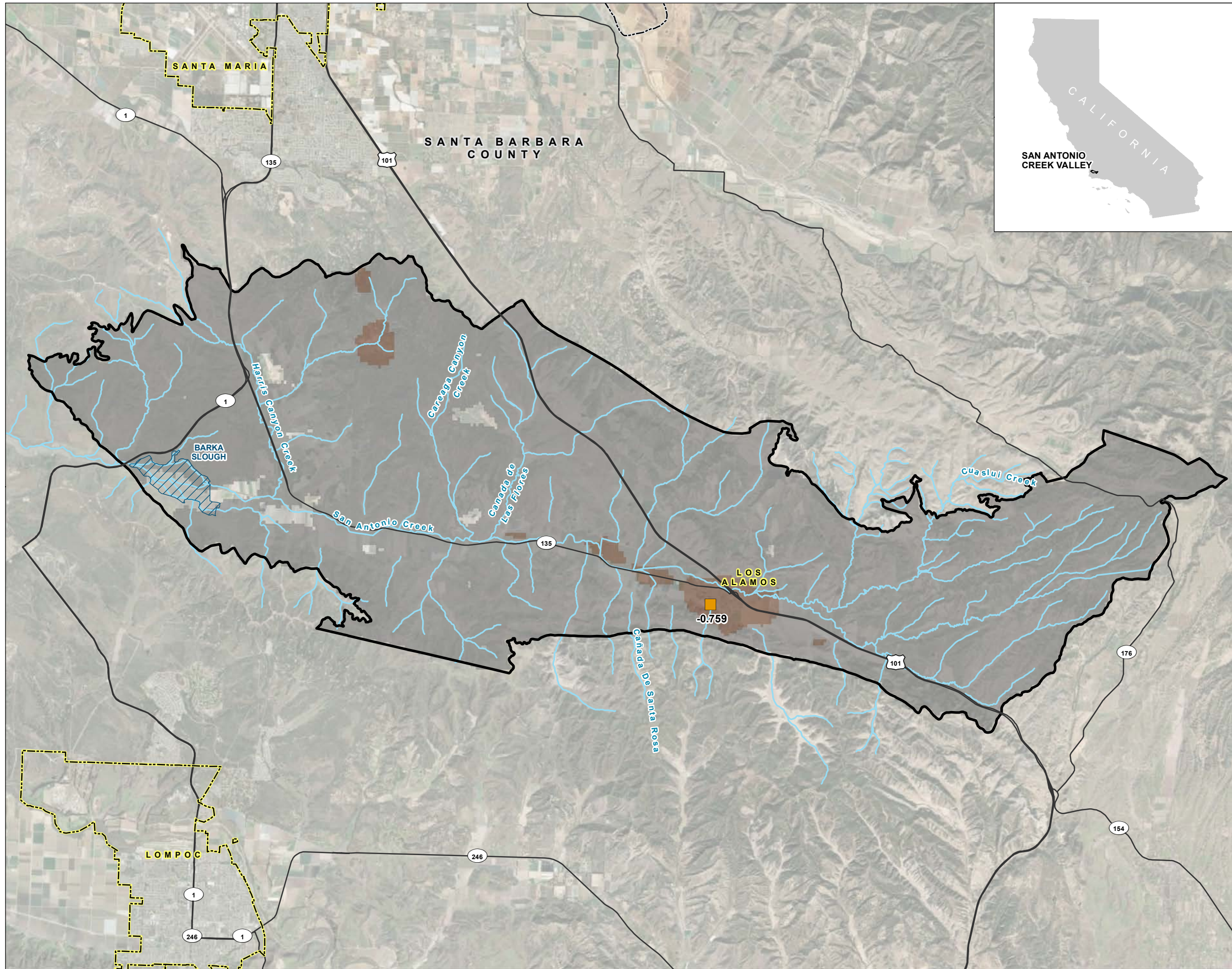


FIGURE 9

**InSAR Measured Land Subsidence
June 2015 to June 2023**

Groundwater Sustainability Plan
2023 Annual Report
San Antonio Creek Valley
Groundwater Basin

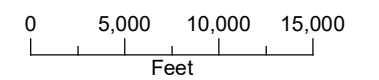
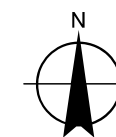
LEGEND

- UNAVCO CGPS Station ORES Vertical Displacement in Feet
- Land Subsidence**
- Vertical Displacement (InSAR)**
- < -0.0591
- -0.0591 - 0.0591 feet
- All Other Features**
- ~ San Antonio Creek or Adjacent Tributary
- ▭ Barka Slough
- B118 San Antonio Creek Valley Groundwater Basin
- County Boundary
- City Boundary
- Major Road

NOTES

InSAR data accurately models vertical displacement in ground surface elevation to an accuracy tested to be 18 mm (0.7086 inches or 0.0591 feet) at 95% confidence (Towill, 2023).

UNAVCO CGPS Station ORES measured vertical displacement from October 1999 to May 2023.



Date: February 15, 2024
Data Sources: USGS (2020b), ESRI, DWR, 2018, DWR, 2023, Maxar imagery (2020)

SECTION 3: Groundwater Elevations (§ 356.2[b][1])

3.1 Introduction

This section provides a description of groundwater elevations in the Basin during water year 2023. This Annual Report presents four groundwater elevation maps—for spring 2023 and fall 2023 for each principal aquifer. These maps present the most up-to-date seasonal conditions in the Basin. The data presented characterizes conditions in the Paso Robles Formation and the Careaga Sand. Monitoring data is reviewed for quality and an appropriate time frame is chosen to provide the highest consistency in the wells used for each reporting period.

Paso Robles Formation groundwater elevation contour maps were generated from a well set located primarily along the axis of the valley, between Los Alamos and the Slough. Similarly, Careaga Sand groundwater elevation contours were generated from a well set located sparsely within the northern uplands and more densely in the Slough. Therefore, the amount of uncertainty is proportionate to the density of data points, as is the calculation of change in groundwater in storage. The SABGSA is working to implement planned management actions (see Section 6 of GSI and GEI, 2021) to address these identified data gaps.

As discussed in Section 2, two principal aquifers have been identified in the Basin. The Paso Robles Formation Aquifer is up to 2,000 ft thick and has been divided into three members (unofficial geologic units). The middle member has been identified by the USGS as a confining layer inhibiting vertical flow of groundwater within the Paso Robles Formation (Cromwell et al., 2022). The Careaga Sand Aquifer is up to 1,500 ft thick, underlies the Paso Robles Formation, and consists of two members as defined by the USGS (Cromwell et al., 2022): a fine-grained lower member, Cebada; and a coarse-grained upper member, Graciosa. Geologically, the two members are often mapped together.

3.2 Seasonal High and Low (Spring and Fall) (§ 356.2[b][1][A])

The assessment of groundwater elevation conditions in the Basin as described in the GSP is largely based on data from the Basin groundwater level monitoring network and the LACSD. To maintain consistency with the GSP and represent conditions that can be easily compared from year to year, this Annual Report attempts to use the same set of wells as was used in the Basin GSP to generate groundwater elevation contours. As described in the Basin GSP, 15 wells included in the Basin have been identified as RMSs for the purpose of monitoring sustainability indicators. As implementation of the Basin GSP progresses, additional wells may be added or existing wells may be replaced based on access, location, well construction data, and representative hydrograph signatures, to the Basin groundwater level monitoring network.

In accordance with the SGMA regulations, the following information is presented based on available data:

- Groundwater elevation contour maps for the seasonal high and seasonal low groundwater conditions for the previous water year (Figures 10 through 13).
- A map depicting the change in groundwater elevation for the preceding water year (Figures 15 and 16).
- Hydrographs for RMS and non-RMS wells included in the Basin groundwater level monitoring network (Appendix C).

3.2.1 Paso Robles Formation Aquifer Groundwater Elevation Contours

Seasonal high and low groundwater elevation data for the Basin for spring 2023 through fall 2023 for the Paso Robles Formation were contoured to assess spatial variations, yearly fluctuations, trends in groundwater conditions, groundwater flow directions, and horizontal groundwater gradients. Change in

groundwater gradients for wells completed above and below the middle Paso Robles Formation confining layer and wells that may reflect more unconfined conditions near the aquifer margins is currently not well understood because of a lack of available information (Cromwell et al., 2022; Woolfenden et al., 2022).¹⁸ Contour maps were prepared for the seasonal high groundwater levels, which typically occur in the spring, and the seasonal low groundwater levels, which typically occur in the fall. In general, the spring groundwater data are collected in March, and the fall groundwater data are collected in September. For consistency with the GSP, best attempts were made to use the same well data sets for contouring.

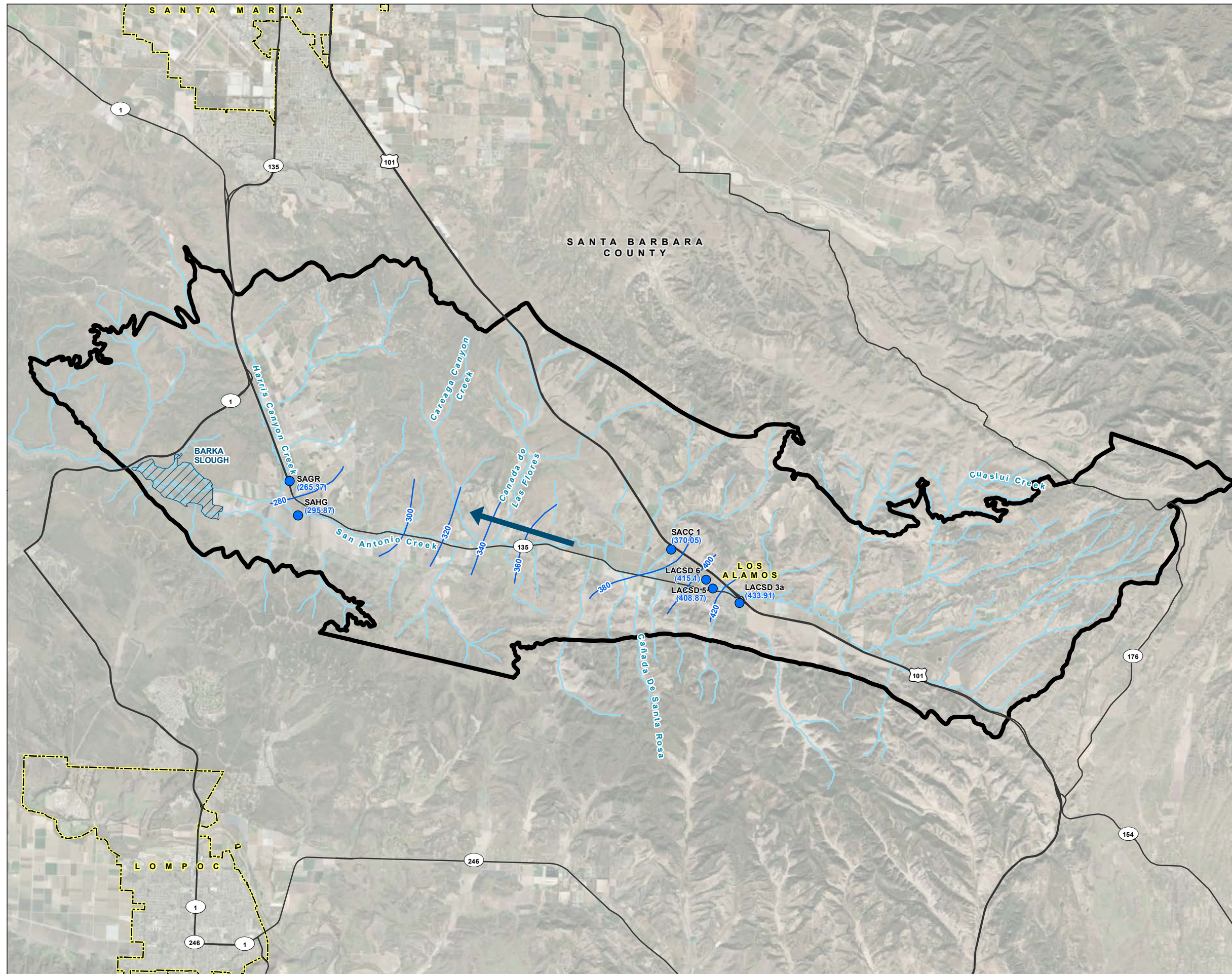
Figures 10 and 11 show contours of groundwater elevations in the Paso Robles Formation for spring 2023 and fall 2023, respectively. Overall, groundwater flow conditions in the Basin in the spring and fall of 2023 were similar, with similar flow directions and hydraulic gradients. Groundwater elevations in the fall were observed to generally be lower than in the spring, a typical seasonal trend for the Basin. Groundwater flow direction in the Basin is generally to the west. Groundwater flow in the Paso Robles Formation tends to converge toward San Antonio Creek, coincident with the axis of the valley and underlying synclinal structure, and ultimately the Slough before discharging from the Basin. Groundwater contours indicate flatter gradients west of Los Alamos (from LACSD 6 to 22K3), east of the Slough (from SACR 2 to SAHG), and in Harris Canyon, and steeper gradients in between Los Alamos and the Slough along California State HWY 135 (from 22K3 to SACR 2). The flatter groundwater gradients are suspected to be a result of groundwater pumping. The flatter groundwater gradient along Harris Canyon could be a result of the Basin's geological structure, groundwater pumping, or a combination of the two. The horizontal groundwater gradient between Los Alamos and the Slough was approximately 0.003 feet per foot (ft/ft) in the spring and fall.

Groundwater elevations observed in the Paso Robles Formation were generally higher during water year 2023 than water year 2022. The higher groundwater elevations are a result of the wet water year type observed during water year 2023, and, consequently, a reduction in groundwater pumping and increase in hydrologic recharge of the aquifer.

¹⁸ The SABGSA plans to continue to analyze factors such as variable groundwater gradients and locations of more unconfined or confined aquifer conditions through implementation of management actions, review of recently available USGS publications for the Basin (Cromwell et al., 2022; Woolfenden et al., 2022), and review and possible implementation of the USGS groundwater numerical model for the Basin.

FIGURE 10
Paso Robles Formation
Groundwater Elevation Contours
Spring 2023

Groundwater Sustainability Plan
 2023 Annual Report
 San Antonio Creek Valley
 Groundwater Basin



LEGEND

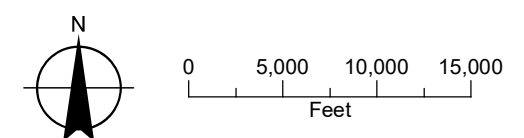
- Paso Robles Formation Well
Groundwater Elevation (NAVD 88)
- ~ Groundwater Elevation Contours, ft NAVD 88
- ➔ Groundwater Flow Direction
- All Other Features**
- ~ San Antonio Creek or Tributary
- Major Road
- San Antonio Creek Valley Groundwater Basin
- Barka Slough
- City Boundary



NOTES

San Antonio Creek Valley Groundwater Basin Boundary as defined in the California Department of Water Resources Bulletin 118.

NAVD 88: North American Vertical Datum of 1988

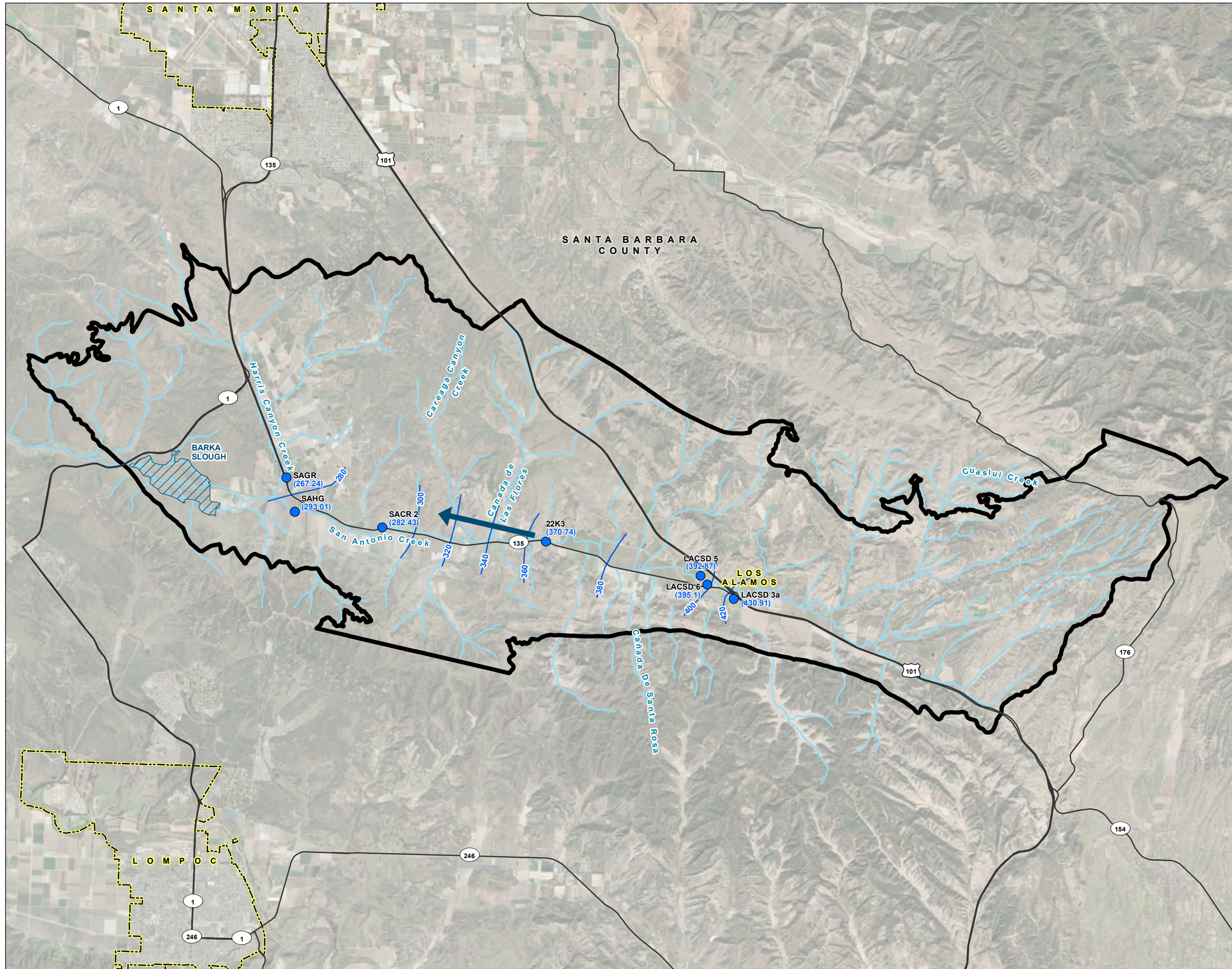


Date: February 15, 2024
 Data Sources: USGS (2020a), ESRI, DWR (2018), Maxar imagery (2020)



FIGURE 11
Paso Robles Formation
Groundwater Elevation Contours
Fall 2023

Groundwater Sustainability Plan
 2023 Annual Report
 San Antonio Creek Valley
 Groundwater Basin



LEGEND

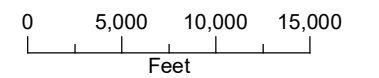
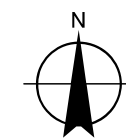
- Paso Robles Formation Well
Groundwater Elevation (NAVD 88)
- Groundwater Elevation Contours, ft NAVD 88
- Groundwater Flow Direction
- All Other Features**
- San Antonio Creek or Tributary
- Major Road
- San Antonio Creek Valley Groundwater Basin
- Barka Slough
- City Boundary



NOTES

San Antonio Creek Valley Groundwater Basin
 Boundary as defined in the California
 Department of Water Resources Bulletin 118.

NAVD 88: North American Vertical Datum of 1988



Date: February 15, 2024
 Data Sources: USGS (2020a), ESRI, DWR (2018),
 Maxar imagery (2020)

3.2.2 Careaga Sand Aquifer Groundwater Elevation Contours

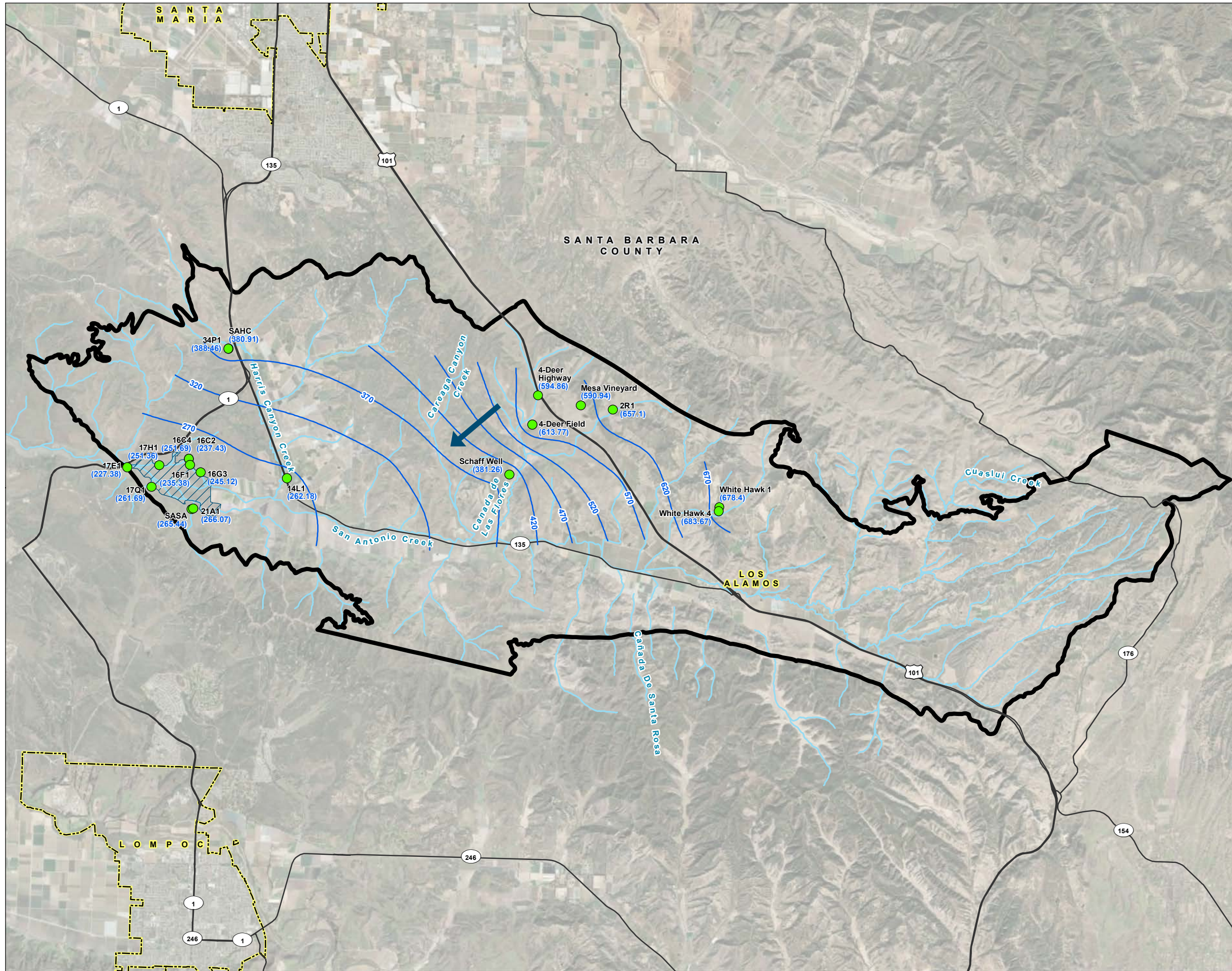
Seasonal high and low groundwater elevation data for the Basin for spring 2023 through fall 2023 for the Careaga Sand were contoured to assess spatial variations, yearly fluctuations, trends in groundwater conditions, groundwater flow directions, and horizontal groundwater gradients. Contour maps were prepared for the seasonal high groundwater levels, which typically occur in the spring, and the seasonal low groundwater levels, which typically occur in the fall. In general, the spring groundwater data are for March and the fall groundwater data are for September. For consistency with the GSP, best attempts were made to use the same well data sets for contouring.

Figures 12 and 13 show contours of groundwater elevations in the Careaga Sand for spring 2023 and fall 2023, respectively. Overall, groundwater flow conditions in the Basin in the spring and fall of 2023 were similar, with similar flow directions and hydraulic gradients. Groundwater elevations in the fall were observed to generally be lower than in the spring, a typical seasonal trend for the Basin. Groundwater flow direction in the Basin is generally to the west. Groundwater flow in the Careaga Sand tends to converge toward San Antonio Creek, coincident with the axis of the valley and underlying synclinal structure, and ultimately the Slough before discharging from the Basin. Groundwater contours indicate steep groundwater gradients within Cañada de Las Flores and flatter groundwater gradients between the Slough, SAHC, and Stephen's Well, and east of U.S. HWY 101. The steep groundwater gradients are suspected to be controlled by the Basin's geological structure. The flatter groundwater gradients may be a result of the Basin's geological structure, groundwater pumping, or a combination of the two. The horizontal groundwater gradient between U.S. HWY 101 northwest of Los Alamos and the Slough was approximately 0.007 ft/ft in the spring and fall.

Groundwater elevations observed in the Careaga Sand were generally higher during water year 2023 than water year 2022. The higher groundwater elevations are a result of the wet water year type observed during water year 2023, and, consequently, a reduction in groundwater pumping and increase in hydrologic recharge of the aquifer.

FIGURE 12
Careaga Sand
Groundwater Elevation Contours
Spring 2023

Groundwater Sustainability Plan
 2023 Annual Report
 San Antonio Creek Valley
 Groundwater Basin



LEGEND

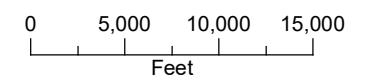
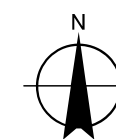
- Careaga Sand Well
— Groundwater Elevation (NAVD 88)
- Groundwater Elevation Contours, ft NAVD 88
- ➔ Groundwater Flow Direction
- All Other Features**
- San Antonio Creek or Tributary
- Major Road
- San Antonio Creek Valley Groundwater Basin
- Barka Slough
- City Boundary



NOTES

San Antonio Creek Valley Groundwater Basin Boundary as defined in the California Department of Water Resources Bulletin 118.

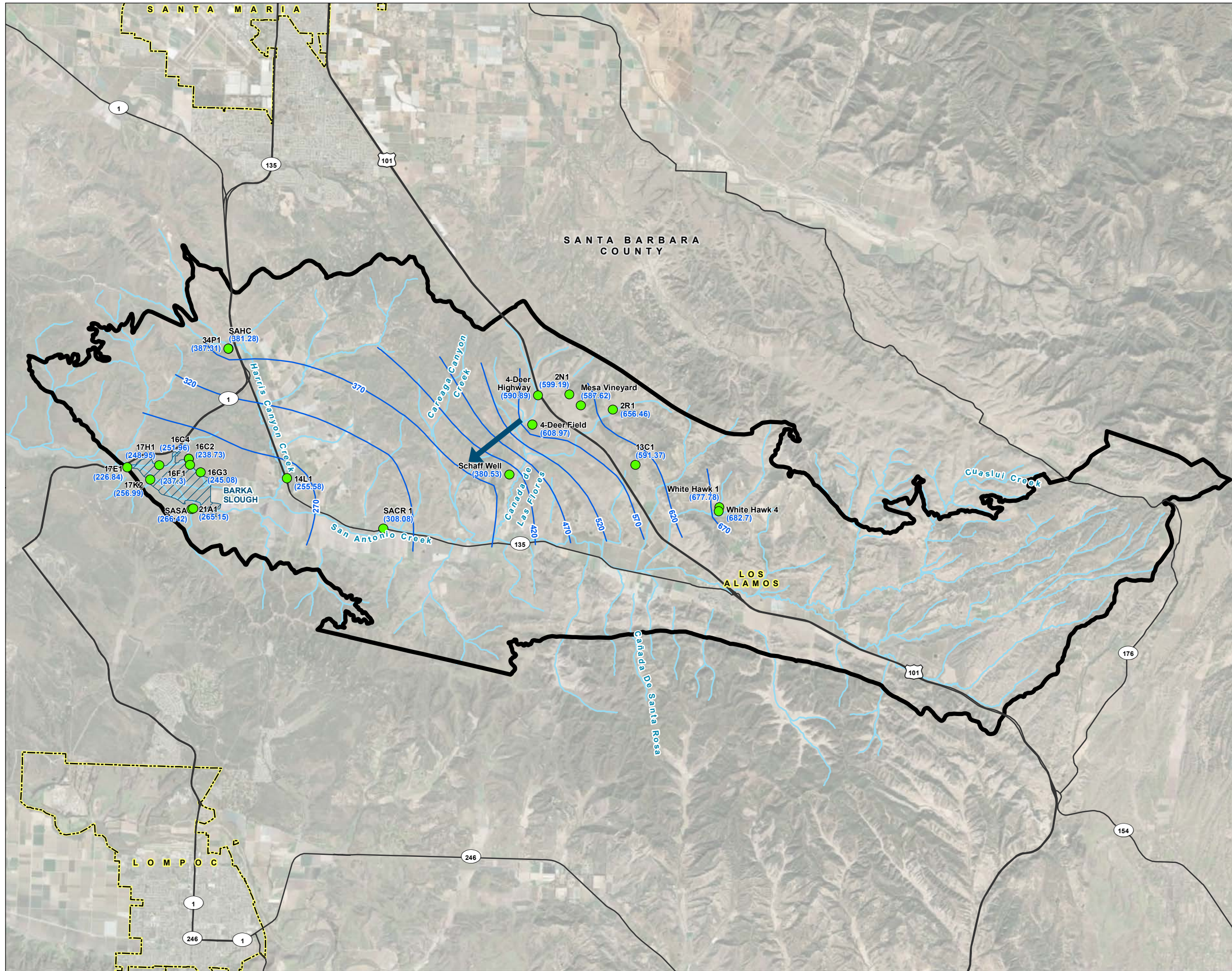
NAVD 88: North American Vertical Datum of 1988



Date: February 15, 2024
 Data Sources: USGS (2020a), ESRI, DWR (2018), Maxar imagery (2020)

FIGURE 13
Careaga Sand
Groundwater Elevation Contours
Fall 2023

Groundwater Sustainability Plan
 2023 Annual Report
 San Antonio Creek Valley
 Groundwater Basin



LEGEND

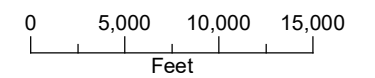
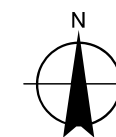
- Careaga Sand Well
Groundwater Elevation (NAVD 88)
- Groundwater Elevation Contours, ft NAVD 88
- ➔ Groundwater Flow Direction
- All Other Features**
- San Antonio Creek or Tributary
- Major Road
- San Antonio Creek Valley Groundwater Basin
- Barka Slough
- City Boundary



NOTES

San Antonio Creek Valley Groundwater Basin Boundary as defined in the California Department of Water Resources Bulletin 118.

NAVD 88: North American Vertical Datum of 1988



Date: February 15, 2024
 Data Sources: USGS (2020a), ESRI, DWR (2018), Maxar imagery (2020)



3.3 Hydrographs (§ 356.2[b][1][B])

Of the 15 RMS hydrographs presented in Appendix C, none of the RMSs exhibit current groundwater elevations at or below the minimum threshold. Hydrographs for non-RMS wells included in the Basin groundwater level monitoring network are also presented in Appendix C.

Groundwater elevation hydrographs are used to evaluate groundwater conditions over time and trends relative to sustainable management criteria.¹⁹ Changes in groundwater elevation in the Basin can result from many influencing factors. Factors can include changing hydrologic trends, seasonal variations in precipitation, varying basin groundwater extractions, changing inflows and outflows, and influence from localized pumping conditions. Climatic variation can be one of the most significant factors affecting groundwater elevations over time. For this reason, the hydrographs also display water year type categorized as wet, above normal, below normal, dry, or critical.

Groundwater elevation hydrographs and associated location map for the 15 RMSs in the Basin groundwater level monitoring network that are constructed in the Paso Robles Formation and Careaga Sand are presented in Appendix C. These hydrographs also include available well construction data, as well as measurable objectives and minimum thresholds for each RMS that were developed during the preparation of the GSP. Many of the hydrographs illustrate a condition of declining water levels over the well's period of record, although some hydrographs indicate relative water level stability in the last 5 to 10 years. Water levels in several wells rose sharply as a result of the wet water year type. The rise in water levels was generally more rapid and apparent in Paso Robles Formation wells, and more delayed and muted in Careaga Sand wells. Groundwater levels lowered from the seasonal high when dry conditions returned, consistent with the seasonal trends of higher spring groundwater elevations compared with fall. Of the 11 accessible RMSs, water levels in three RMSs were measured above the respective measurable objective during the 2023 water year. No RMS water levels were measured below the respective minimum threshold during the 2023 water year.

Interim milestones for Basin groundwater levels were described in Section 4 of the GSP. Interim milestones show how the SABGSA would move from current conditions to meeting the measurable objectives in the 20-year GSP implementation horizon. For the Basin, interim milestones are proposed every 5 years, beginning after the GSP was submitted in 2022 and continuing through 2042 (see Table 2). Based on fall 2023 groundwater elevations measured in the 11 accessible Basin RMSs, water levels in 5 of the RMSs are above the respective water year 2022 interim milestone.

¹⁹ Spring 2015 groundwater levels measured at the RMSs were selected as the measurable objectives, and minimum thresholds are set 25 ft below fall 2018 groundwater levels measured at RMSs (GSI and GEI, 2021).

Table 2. Chronic Lowering of Groundwater Levels Interim Milestones for the Paso Robles Formation and the Careaga Sand

RMS ID ¹	Interim Milestones (feet NAVD 88)					Groundwater Elevation (feet NAVD 88)
	2022	2027	2032	2037	2042 ⁴	Fall 2023
Paso Robles Formation						
LACSD 4	434	435	437	438	440	428
30D1 ²	374	377	381	384	388	–
SACC 1 ³	358	–	–	–	–	352
22K3 ²	362	364	366	368	370	371
SALS ³	420	–	–	–	–	431
20Q2 ²	322	325	328	332	335	–
SACR 3 ³	243	–	–	–	–	244
2M1	268	271	276	281	286	–
Careaga Sand						
25D1	661	661	661	661	661	–
13C1	583	586	589	593	597	591
24E1 ²	252	253	254	255	257	–
SACR 1 ³	314	–	–	–	–	308
34P1 ²	386	386	386	386	386	387
SAHC ³	382	–	–	–	–	381
16G3	249	249	250	250	251	245

Notes

¹ Refer to Figure 6 for representative well locations.

² Production well proposed to be replaced with subsequent observation well.

³ Observation well proposed to replace RMS production well. The well was constructed after spring 2015 (measurable objective water levels) and a measurable objective will be selected during the GSP-implementation period.

⁴ Value is equal to the measurable objective at the RMS for the respective sustainability indicator.

– = Value to be selected during the GSP-implementation period or value not applicable due to well access status.

LACSD = Los Alamos Community Services District

NAVD 88 = North American Vertical Datum of 1988

RMS = representative monitoring site

3.4 2023 Quarterly Groundwater Level Monitoring

Pursuant to the groundwater leveling monitoring program described in the Basin GSP, quarterly monitoring of the Basin groundwater leveling monitoring network was completed during the 2023 calendar year.

Groundwater level measurements were collected manually on a quarterly basis in 39 of the 40 accessible

wells included in the Basin groundwater level monitoring network.²⁰ Water level data was collected at more frequent intervals using existing data-recording pressure transducers (transducers) installed in 10 of the 40 wells. Groundwater level data was downloaded from the transducers and calibrated with manual depth to water readings on a quarterly basis.

Prior to each quarterly monitoring event, well owners are contacted to coordinate access to the wells and request that well owners shut off the well for at least 8 hours before the monitoring event so that a static measurement can be obtained. If access to any of the wells was restricted (e.g., by well owner request, road conditions as a result of weather, or biological concerns), water levels were not measured in affected wells.

At the conclusion of each quarterly monitoring event, a brief technical memorandum (TM) was generated that presented an overview of that quarter's monitoring activities and a table of the results of the groundwater level monitoring. The intent of these reports is to regularly update the SABGSA on the status of the monitoring program. Additionally, the quarterly reports memorialize important changes in the monitoring program that may influence data collection and can be reviewed at a later date. The quarterly TMs were provided to SABGSA within two weeks after each monitoring event and provided the following information:

- Summary tables listing measured depth to groundwater and groundwater elevation in each monitoring well,
- Maps of the well locations in the monitoring network, including access status and updates for the addition or removal of wells from the network,
- Summary of noteworthy observations or differences between monitoring events, including but not limited to well access, changes in reference points, equipment repairs/replacements, and challenges associated with data collection, and
- Recommendations for future monitoring events.

3.4.1 Data Summary

A discussion of groundwater level data is included in preceding Sections 3.2 and 3.3.

3.4.2 Changes to the Monitoring Network, Maintenance, Issues, and Recommendations

A summary of issues encountered, maintenance completed, changes to the Basin groundwater level monitoring network, and recommendations provided during the 2023 calendar year are included below.

Issues

- Wells with active well access agreements that did not have a groundwater level measurement collected during at least one quarterly monitoring event were 13C1, 2M1, 2N1, SACR 1, SACR 2, SACR 3, SACR 4, Stephen's Well, 34P1, Mesa Vineyard, White Hawk 4, and 16C4.
 - Maintenance was being performed on well 13C1 on March 15, 2023. The sounder was lowered below historical water levels without indicating the presence of groundwater and appeared dry and sandy upon retrieval. A second attempt to collect a water level measurement was performed on March 23, 2023, with a similar outcome. The well maintenance operations may have impacted water

²⁰ Groundwater levels in RMS 2M1 have not been measured since first quarter of 2022 because of the risk of the water level sounding device becoming stuck in the well. This has occurred on multiple instances in the past. Groundwater level monitoring at well 2M1 is planned to resume pending the installation of a sounding tube.

levels in the well. Groundwater level monitoring at well 13C1 resumed during the second quarter of 2023 (2Q2023) Basin groundwater level monitoring event.

- The sounder used to manually measure depth to groundwater has become temporarily stuck in well 2M1 on multiple instances in the past. It is advised that the SABGSA install a sounding tube to avoid the sounder becoming stuck in the well during future monitoring events. Currently, well 2M1 is an RMS in the Basin's groundwater level monitoring network. Groundwater levels in well 2M1 have not been measured since the first quarter of 2022 because of the risk of the sounder becoming stuck in the well. Groundwater level monitoring at well 2M1 is planned to resume pending the installation of a sounding tube. If the installation of a sounding tube is not feasible, the SABGSA will evaluate replacing 2M1 as an RMS with a nearby well that is representative of local groundwater conditions.
- An accurate groundwater level measurement could not be collected from well 2N1 during the first quarter of 2023 (1Q2023) Basin groundwater level monitoring event. Well 2N1 and Mesa Vineyard have historically contained rusty material. Consequently, the sounder becomes coated when lowered into the well, blocking the sensor and preventing an accurate water level measurement.
- The SACR nested well series (SACR1 through SACR4) was not monitored in 1Q2023 because of complete submersion of the well vault under floodwater. Groundwater level monitoring at the SACR nested well series resumed during the 2Q2023 Basin groundwater level monitoring event.
- During the 1Q2023 Basin groundwater level monitoring event, Stephen's Well was not monitored because of the well pump being on for at least 8 hours prior to the groundwater level measurement attempt. A property representative was not available to turn off the well pump. Consequently, the water level in the well was at a pumping level, below historical water levels, and unrepresentative of current Basin conditions. During the 2Q2023 Basin groundwater level monitoring event the airline pressure gage at Stephen's Well was broken. The gage was replaced by the ranch manager and an airline pressure was recorded during a revisit. No groundwater level measurement was recorded at well 34P1 during the 2Q2023 Basin groundwater level monitoring event because of observed bee activity at the well. The VSFB beekeeper treated the well on July 7, 2023. Groundwater level monitoring at well 34P1 resumed during the third quarter of 2023 (3Q2023) Basin groundwater level monitoring event.
- No water level measurement was collected from the Mesa Vineyard well during the 2Q2023 Basin groundwater level monitoring event because of a suspected faulty sounder. During a revisit, the sounder became stuck in the well before a water level could be recorded. The sounder was successfully retrieved from the well at a later date.
- The SABGSA received a Well Verification Request for a proposed replacement water well in July 2023. The SABGSA verified the proposed well was consistent with the SABGSA's Well Verification Policy. The well to be replaced was determined to be White Hawk 4. During the fourth quarter of 2023 (4Q2023) Basin groundwater level monitoring event, White Hawk 4 was observed being destroyed as required by the Well Verification Policy, and therefore no water level measurement was able to be collected.
- The continuous data recording pressure transducer (transducer) that is located in well 16C4 did not have data downloaded during the 4Q2023 Basin groundwater level monitoring event because of a malfunctioning cable. The cable will be replaced and 16C4 water level data collected by the transducer since the 3Q2023 Basin groundwater level event will be downloaded during the first quarter of 2024 Basin groundwater level monitoring event.
- The air pressure measured at Stephen's Well during the 3Q and 4Q2023 Basin groundwater level monitoring events has been below historical levels. The 3Q and 4Q2023 calculated water levels are suspected to be pumping water levels. No receipt confirmation was received from the well

owner/property manager in response to the 3Q and 4Q2023 Basin groundwater level monitoring event notifications.

Maintenance

- Vegetation along access trails to monitoring wells included in the Basin's groundwater level monitoring network, specifically on VSFB Property near the Slough, had become overgrown and was trimmed in February 2023. During the 2Q2023 Basin groundwater level monitoring event, the vegetation was observed to have grown back impeding access to Basin groundwater monitoring network wells. Additionally, polyvinyl chloride pipes were attached to Slough area wells to provide improved visibility to the well locations. Vegetation along access trails to nine wells, totaling approximately 3,200 ft of trails was trimmed during the 3Q2023 Basin groundwater level monitoring event.

Changes

- Well access agreements were secured by the SABGSA for three additional wells (22K3, White Hawk 1, and White Hawk 4) in the Basin groundwater level monitoring network during the 2Q2023 Basin groundwater level monitoring event.
- The 13C1 wellhead had been removed prior to the 3Q2023 monitoring event. Consequently, depth to water was measured from a different reference point elevation (RPE; 777.45 ft NAVD 88) than previously reported.
- Well 4 is a new irrigation well that was added to the SABGSA monitoring network in 4Q2023. The well is located north of U.S. HWY 101 in the central uplands of the Basin. Well 4 was proposed as a replacement well for Mesa Vineyard in the Basin Monitoring Network. Mesa Vineyard is not equipped with a sounding tube, increasing the likelihood of a water level reading device becoming caught in the well. Mesa Vineyard and Well 4 are completed to similar depths and are constructed with multiple screened intervals. Water levels from the two wells will continue to be evaluated to determine if water levels in Well 4 are representative of water levels in Mesa Vineyard. Mesa Vineyard has a period of record of reported water levels from November 2019 to present.

Recommendations

- Twenty-five wells in the Basin groundwater level monitoring network have ground surface elevations that do not meet accuracy standards based on DWR best management practices. Acquiring accurate ground surface elevations will benefit the Basin and stakeholders by providing more accurate groundwater elevation data which will result in more accurate groundwater elevation contours and change in storage calculations included in annual reports. The SABGSA has budgeted for this scope of work and was included as a component in the SABGSA's application for DWR SGMA Round 2 grant funding.
- Well construction information (total depth and screened intervals) for 24 wells in the Basin groundwater level monitoring network is unknown.²¹ Performing well video surveys of wells included in the Basin groundwater level monitoring network with outstanding well construction information will benefit the Basin and stakeholders by enabling development of a more accurate Basin HCM.
- Continue public outreach to Basin stakeholders to discuss participation in the Basin's groundwater level monitoring network (including former CASGEM well 13Q1 and White Hawk 4 replacement well).

²¹ WCRs could not be located for these well using DWR's OSWCR database. Available at: <https://water.ca.gov/Programs/Groundwater-Management/Wells/Well-Completion-Reports>.

- Perform ongoing maintenance of the well access trails within Barka Slough. The SABGSA has budgeted for this scope of work and was included as a component in the SABGSA's application for DWR SGMA Round 2 grant funding.
- Consider the purchase and installation of transducers in, at a minimum, all RMSs. The SABGSA included this as a component in the SABGSA's application for DWR SGMA Round 2 grant funding.

SECTION 4: Groundwater Extractions (§ 356.2[b][2])

4.1 Introduction

This section presents the metered and estimated groundwater extractions from the Basin for the 2023 water year. Metered and estimated groundwater extractions from the Basin for the 2018 through 2022 water years are also included for comparison. The types of groundwater extraction described in this section include municipal (Table 3), agricultural (Table 4), and rural domestic (Tables 5 and 6). Each following subsection includes a description of the method of measurement and a qualitative level of accuracy for each estimate. The level of accuracy is rated on a qualitative scale of low, medium, and high. The annual groundwater extraction volumes for all water use sectors are shown in Table 5.

4.2 Municipal Metered Well Production Data

The municipal groundwater extractions documented in this report are metered data. Metered groundwater pumping extraction data are from the LACSD and the VSFB, providing service to the community of Los Alamos and the VSFB, respectively. The data shown in Table 3 reflect metered data reported by the respective agencies. The accuracy level rating of these metered data is high.

Table 3. Municipal Groundwater Extractions

Water Year	LACSD (AF)	VSFB (AF)	Total (AF)
2018	280	150	430
2019	260	240	500
2020	280	280	560
2021	290	710	1,000
2022	270	2,600	2,870
2023	260	1,450	1,710

Notes

Gray shading indicates a water year included in the historical water budget.

AF = acre-feet

LACSD = Los Alamos Community Services District

VSFB = Vandenberg Space Force Base

4.3 Estimate of Agricultural Extraction

Agricultural water use constituted 88 percent of the total groundwater pumping in the Basin in water year 2023. Groundwater extraction for agricultural irrigation was estimated using a combination of two methodologies for water year 2023:

1. Using Santa Ynez River Valley Water District (SYRWD) **crop-specific water use factors** (SYRWCD, 2010; revised by growers in the Basin).
2. Using a **satellite-based method** that measures actual ET at the field level.

Currently, no public annual land use surveys are available for the Basin. A company called Land IQ provides Statewide Crop Mapping for DWR; however, the availability of these data has not been current (as of this

writing, the most recent available land use spatial data set is for water year 2022). Consequently, for water year 2023, Land IQ was contracted to provide this service²² using satellite imagery at a basin scale to improve the accuracy of the agricultural water use estimates and to accurately account for changes in crop categories, distribution, and acreages within the Basin.

Both methods of estimation use a water year 2023-specific land use dataset purchased from Land IQ. The Land IQ dataset encompasses actual planted acreage, and crop types and acreages are verified on the ground. Although not a significant factor in the Basin, the Land IQ dataset also documents multi-cropping that occurs throughout the growing season.

To estimate agricultural groundwater extraction, water year 2023 specific land use data from Land IQ was used in conjunction with the OpenET ensemble model.²³ OpenET provides satellite-based estimates of the total amount of water that is transferred from the land surface to the atmosphere through the process of ET. The OpenET ensemble model uses Landsat satellite data to produce ET data at a spatial resolution of 30 meters by 30 meters (0.22 acres per pixel). Additional inputs include gridded weather variables such as solar radiation, air temperature, humidity, wind speed, and precipitation (OpenET, 2023). OpenET provides estimates of ET for the entire land surface, or in other words, “wall to wall”. To produce an estimate of ET specific to the irrigated crop acreage in the Basin the OpenET ensemble model results are screened by the Land IQ land use data set, thereby removing any potential estimated ET volumes associated with bare ground, non-irrigated crops, or native vegetation.

A total of 19 irrigated crop types were identified in the water year 2023 Land IQ spatial dataset. These 19 crop types have been grouped into seven basic crop groups: vineyard, field crops, truck and berry crops, tree crops, pasture, nursery, and greenhouse (see Figure 14). A summary of acreage by crop type is presented in Table 4. Irrigated agricultural crop types were identified by inspection of monthly ET for each mapped crop type versus monthly ET for fallow ground. Essentially, crop types were considered irrigated if monthly ET remained high throughout the latter part of the growing season as opposed to the diminishing monthly ET following the rainy season on fallow ground. ET resulting from effective precipitation,²⁴ rather than applied irrigation water, were removed from the analysis. Applied irrigation volumes are estimated by scaling up the estimated irrigated crop ET volumes using assumed crop specific irrigation efficiency factors.²⁵ The resulting volumes are summed by water year, which then represent estimated annual agricultural groundwater extraction. Deficit irrigation is captured in the satellite-based method through the measurement of actual ET. Groundwater extractions for frost protection are captured to the extent that the produced water results in

²² Land IQ can classify all agriculture in the Basin within 97 percent accuracy with clean topology and Multi-cropping attributes.

²³ OpenET uses reference ET data calculated using the American Society of Civil Engineers (ASCE) Standardized Penman-Monteith equation for a grass reference surface, and usually notated as ‘ET_o’. For California, OpenET uses Spatial CIMIS meteorological datasets generated by DWR to compute ASCE grass reference ET. OpenET provides ET data from multiple satellite-driven models, and also calculates a single “ensemble value” from those models. The models currently included are ALEXI/DisALEXI, eeMETRIC, geeSEBAL, PT-JPL, SIMS, and SSEBop. More information about these models can be found at: <https://openetdata.org/methodologies/>. All of the models included in the OpenET ensemble have been used by government agencies with responsibility for water use reporting and management in the western U.S., and some models are widely used internationally (OpenET, 2023).

²⁴ Effective precipitation (the portion of rainfall that remains available to crops after runoff, evaporation, and deep percolation are removed) was calculated monthly for each field based on gridded precipitation values from gridMET using analytical formulas presented in the Food and Agriculture Organization (FAO) (1989). gridMET is a public domain dataset of daily high-spatial resolution (~4-km, 1/24th degree) surface meteorological data covering the contiguous United States from 1979-yesterday. The dataset is available through OpenET. The methodology behind gridMET is described in Abatzoglou (2013).

²⁵ Irrigation efficiencies were assigned based on FAO (1989) and Martin (2011). Vineyard, the dominant crop in the Basin was assigned an irrigation efficiency of 90 percent.

increased ET. It is assumed that the remainder of the water produced for frost protection remains within the Basin and percolates back to groundwater.

Table 4. Water Year 2023 Irrigated Acres by Basic Crop Group

Basic Crop Group	Irrigated Acreage
Vineyard	6,010
Field Crops	80
Truck and Berry Crops	4,352
Tree Crops	299
Pasture	195
Nursery	426
Greenhouse	27
Total	11,390

Note

Basic Crop Group and Irrigated Acreage based on Land IQ (2023).

Agricultural groundwater extraction estimates for irrigated acreage categorized as greenhouse in water year 2023 specific land use data from Land IQ was calculated using crop-specific water use factors rather than the satellite-based method described above. The difference in methodology for the greenhouse crop type is because of the increased error of measuring the ET of covered crops. Greenhouse water use was calculated using DWR ET zones (DWR, 2023) and SYRWCD crop-specific water use factors (SYRWCD, 2010; revised by growers in the Basin).²⁶

The Basin Annual Report for water year 2022 (GSI, 2023a) included estimates of groundwater extraction for agricultural irrigation in water year 2022 from the crop-specific water use factors and the satellite-based method. The similarity in results between the methods demonstrated the utility of the satellite-based method. The satellite-based method is considered more accurate because it directly measures actual ET as it varies spatially and temporally throughout the Basin and throughout the year, thereby capturing nuances in crop irrigation practices, such as deficit irrigation. The similarity in results between the methods also indicates the determined crop-specific water use factors are representative of the Basin at a basin scale; however, the accuracy of the agricultural extraction calculation using this method can only be implemented with an accurate land use dataset. The crop-specific water use factors method is a more limited approach that does not capture ET variability in the Basin and does not fully capture the actual climatic variability or nuanced crop irrigation practices that may occur each year. Based on the similarity in results and the stated benefits of the satellite-based method, the SABGSA has adopted the satellite-based method for estimating groundwater extractions for irrigated agriculture. The resulting estimated groundwater extractions for agricultural demands are summarized in Table 4. The accuracy level rating of this satellite-based method estimated volume is medium-high.

In addition to performing the satellite-based method of estimating agricultural irrigation for water year 2023, the satellite-based method was also used to re-evaluate estimated agricultural irrigation for water year 2022. Although satellite-based estimation of agricultural irrigation was already completed for water year

²⁶ Crop-specific water use factors were calculated by evapotranspiration zones 3 and 6 and are according to SYRWCD, 2010 and the basin stakeholders (except for cannabis/hemp, which are from Battany, 2019).

2022 during preparation of the water year 2022 Annual Report (GSI, 2023a), it has been re-evaluated using the FAO (1989) based calculation of effective precipitation. The re-evaluation of water year 2022 estimated agricultural irrigation results in a value approximately 2,000 acre-feet (AF) less than was reported in last year’s annual report. A comparison of the previously reported crop-specific water use factors based results versus the satellite-based method results is presented in Table 5. Total irrigated acreage and water year type for each year are included for reference.

Table 5. Agricultural Irrigation Groundwater Extractions

Water Year	Agricultural Demand (AF)		Irrigated Acres ²	Water Year Type
	Crop Water Duty Factors	Satellite-Based Method ¹		
2018 ³	21,200	—	—	Below Normal
2019	21,300	—	—	Above Normal
2020	21,900	—	—	Above Normal
2021	21,400	—	—	Critical
2022	18,800	19,200	10,947	Critical
2023	—	13,400	11,390	Wet

Notes

¹Satellite-based method using Food and Agriculture Organization (FAO) (1989) based calculation of effective precipitation.

² Irrigated acreage based on water year specific land use data from Land IQ (2023).

³ Water year’s historical water budget agricultural pumping volume was revised based on updated data.

Gray shading indicates a water year included in the historical water budget.

Gray strikethrough text indicates value not used.

— = not calculated

AF = acre-feet

4.4 Rural Domestic Extraction

Rural domestic pumping is all domestic pumping that occurs outside of LACSD. Rural domestic pumping was calculated by conducting an aerial photo survey to identify land parcels with home sites in the area outside the LACSD service area in 2018. The 2018 domestic demand for each of these land parcels was calculated using variable demand factors based on parcel acreage, as specified in Tetra Tech (2010) (see Table 6). The calculated 2018 rural domestic demand was then scaled through time using a compilation of census data for nearby communities.

Table 6. Rural Domestic Demand Factors Based on Lot Size

Lot Size (acres)	Annual Water Use (AFY per lot)
0.16	0.14
0.5	0.52
1	0.82
5	0.98
10	1.15

Notes

Source: Tetra Tech, 2010

AFY = acre-feet per year

Rural domestic demand was estimated based on an aerial photo survey, published estimated water demand based on parcel size, and census data. Consequently, the uncertainty of these calculations is considered medium to low. Calculated rural domestic groundwater demand for water years 2018 to 2023 is included in Table 7.

Table 7. Rural Domestic Groundwater Extractions

Water Year	Rural Domestic (AF)
2018	170
2019	170
2020	170
2021	170
2022	170
2023	180

Notes

Gray shading indicates a water year included in the historical water budget.

AF = acre-feet

4.5 Total Groundwater Extraction Summary

Total groundwater extractions in the Basin for water year 2023 is 15,300 AF. Table 8 summarizes the total water use by sector and indicates the method of measure and associated level of accuracy. Land IQ land use spatial data for water year 2023, OpenET ET data for estimated agricultural groundwater extractions (see Section 4.3), and metered pumping from the LACSD and VSFB were used to represent general location and volume of groundwater extractions across the Basin in terms of AFY by water year (see Figure 14).

Table 8. Total Groundwater Extractions by Water Use Sector

Water Year	LACSD (AF)	VSFB (AF)	Rural Domestic (AF)	Agricultural (AF)	Total (AF)
2018 ¹	280	150	170	21,200	21,800
2019	260	240	170	21,300	22,000
2020	280	280	170	21,900	22,600
2021	290	710	170	21,400	22,600
2022	270	2,600	170	19,200	22,200
2023	260	1,450	180	13,400 ²	15,300
Method of Measure	Metered	Metered	Aerial Photo Survey	Satellite-Based Land Use Survey and ET Calculations	—
Level of Accuracy	High	High	Medium/Low	Medium/High	—

Notes

¹ The 2018 water year’s historical water budget agricultural pumping volume was revised based on updated data.

² The identified “Method of Measure” and “Level of Accuracy” for “Agricultural” total groundwater extractions pertain to water year 2023 only.

Gray shading indicates a water year included in the historical water budget.

— = not applicable

AF = acre-feet

ET = evapotranspiration

LACSD = Los Alamos Community Services District

VSFB = Vandenberg Space Force Base

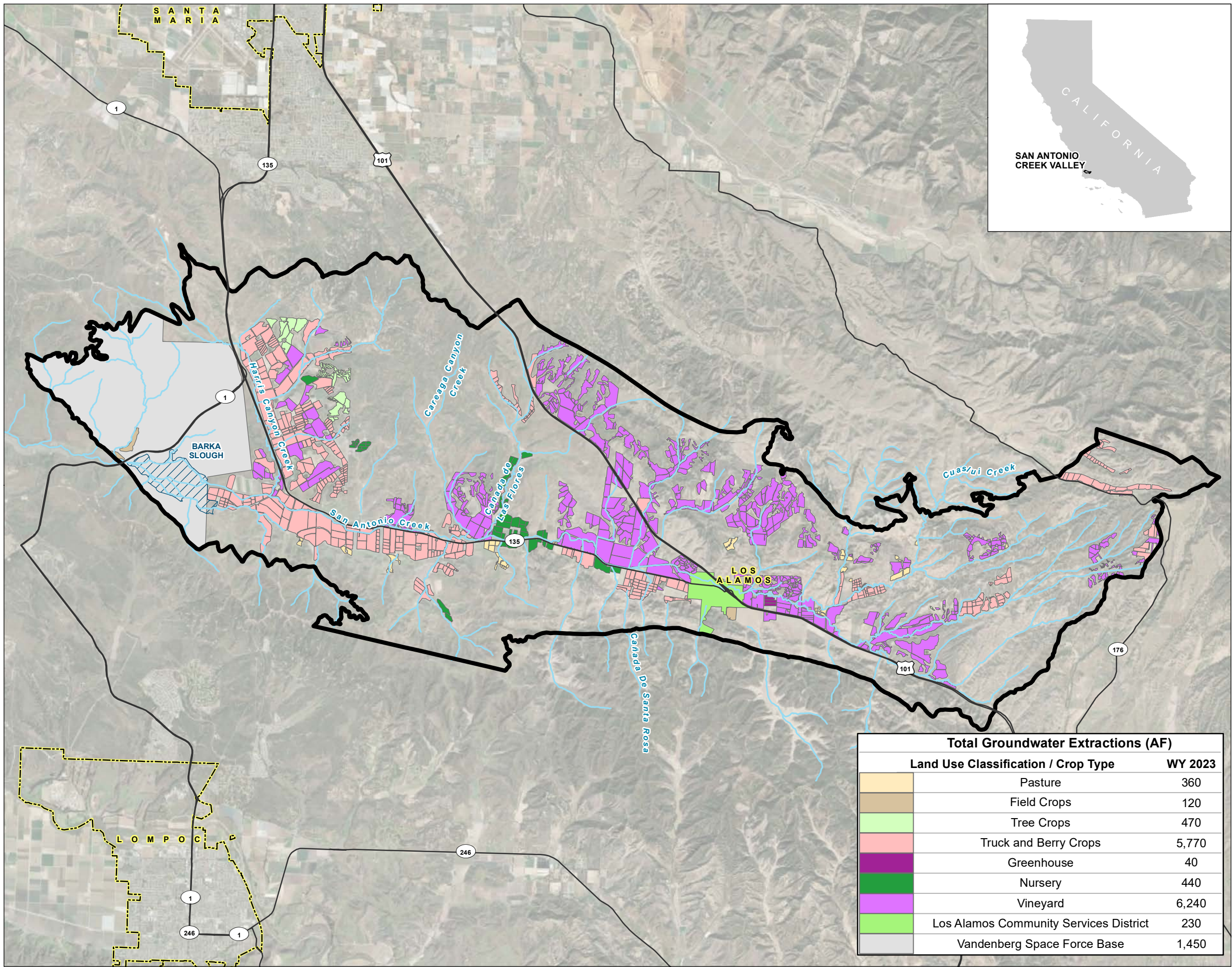


FIGURE 14

General Location and Volumes of Groundwater Extractions
 Groundwater Sustainability Plan
 2023 Annual Report
 San Antonio Creek Valley
 Groundwater Basin

LEGEND

Land Use Classification / Crop Type

- Pasture
- Field Crops
- Tree Crops
- Truck and Berry Crops
- Greenhouse
- Nursery
- Vineyard
- Los Alamos Community Services District
- Vandenberg Space Force Base

All Other Features

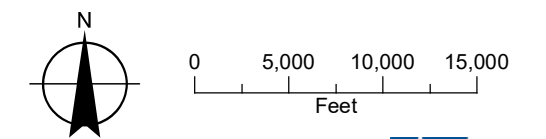
- San Antonio Creek or Tributary
- Major Road
- San Antonio Creek Valley Groundwater Basin
- Barka Slough
- City Boundary

NOTES

San Antonio Creek Valley Groundwater Basin Boundary as defined in the California Department of Water Resources Bulletin 118.

Land Use Classification / Crop Type as defined in Land IQ, 2023 and SYRWCD, 2010.

AFY: Acre-Feet Per Year
 WY: Water Year



Total Groundwater Extractions (AF)	
Land Use Classification / Crop Type	WY 2023
Pasture	360
Field Crops	120
Tree Crops	470
Truck and Berry Crops	5,770
Greenhouse	40
Nursery	440
Vineyard	6,240
Los Alamos Community Services District	230
Vandenberg Space Force Base	1,450

SECTION 5: Surface Water Use (§ 356.2[b][3])

The Basin does not receive imported water from the California State Water Project (SWP), nor does it receive reservoir releases into streams and rivers that enter the Basin from the surrounding watershed. Consequently, surface water use is not applicable to the Basin.

SECTION 6: Change in Groundwater in Storage (§ 356.2[b][5])

6.1 Annual Changes in Groundwater Elevation (§ 356.2[b][5][A])

Annual changes in groundwater elevation in the Paso Robles Formation and Careaga Sand for water year 2023 were derived from comparison of fall groundwater elevation contour maps from water year 2022 to water year 2023. Specifically, the fall 2023 groundwater elevations for the Paso Robles Formation (see Figure 11) were subtracted from the fall 2022 groundwater elevations for the Paso Robles Formation resulting in a map depicting the changes in groundwater elevations in the Paso Robles Formation that occurred during the 2023 water year (see Figure 15). The same was completed for the Careaga Sand.

Paso Robles Formation groundwater elevation contour maps were generated from a well set located primarily along the axis of the valley, between Los Alamos and the Slough. Similarly, Careaga Sand groundwater elevation contours were generated from a well set located sparsely within the northern uplands and more densely in the Slough. Therefore, the degree of uncertainty is proportionate to the data density, as is the calculation of change in groundwater in storage. The SABGSA is working to implement planned management actions (see Section 6 of GSI and GEI, 2021) to address these identified data gaps.

The Paso Robles Formation change in groundwater elevation map for water year 2022 (see Figure 15), a wet precipitation year, indicates that groundwater levels generally increased by 0 to 10 ft between Los Alamos, the Slough, and Harris Canyon. Groundwater elevations west-northwest of Los Alamos and in northern Harris Canyon increased up to 20 to 30 ft. Groundwater elevations south of Los Alamos decreased by 0 to 10 ft.

The Careaga Sand change in groundwater elevation map for water year 2023 (see Figure 16), a wet precipitation year, indicates that groundwater levels generally increased by 0 to 10 ft from northwest of Los Alamos to the Slough and Harris Canyon. Groundwater elevations in northern Cañada de Las Flores increased up to 30 to 40 ft. In the central uplands, west of Cañada de Las Flores, Harris Canyon, and the western half of the Slough groundwater elevations decreased 0 to 10 ft.

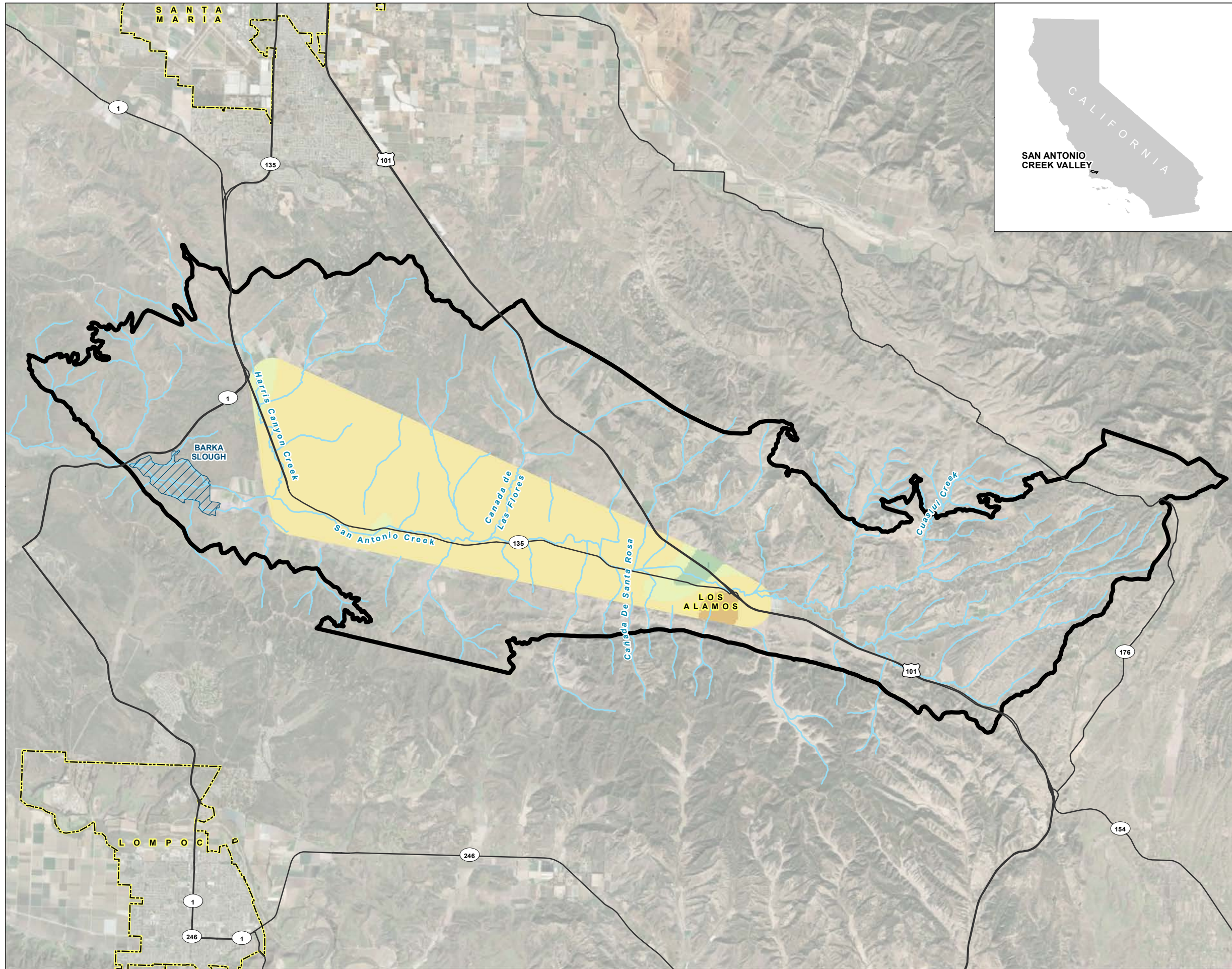


FIGURE 15

**Paso Robles Formation
Annual Change in
Groundwater Elevation
Fall 2022 to Fall 2023**

Groundwater Sustainability Plan
2023 Annual Report
San Antonio Creek Valley
Groundwater Basin

LEGEND

Change in Groundwater Elevation (feet NAVD 88)¹

- > 50
- 40 - 50
- 30 - 40
- 20 - 30
- 10 - 20
- 0 - 10
- 10 - 0
- 20 - -10
- 30 - -20
- 30

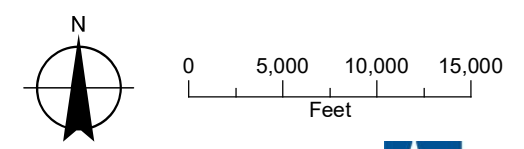
All Other Features

- San Antonio Creek or Tributary
- Major Road
- San Antonio Creek Valley Groundwater Basin²
- Barka Slough
- City Boundary

NOTES

1. The change in groundwater elevation extents are bound by the lateral limits of the subject aquifer (see Figure 2) and available groundwater elevation data.
2. San Antonio Creek Valley Groundwater Basin Boundary as defined in the California Department of Water Resources Bulletin 118.

NAVD 88: North American Vertical Datum of 1988



Date: February 15, 2024
Data Sources: USGS (2020a), ESRI, DWR (2018), Maxar imagery (2020)



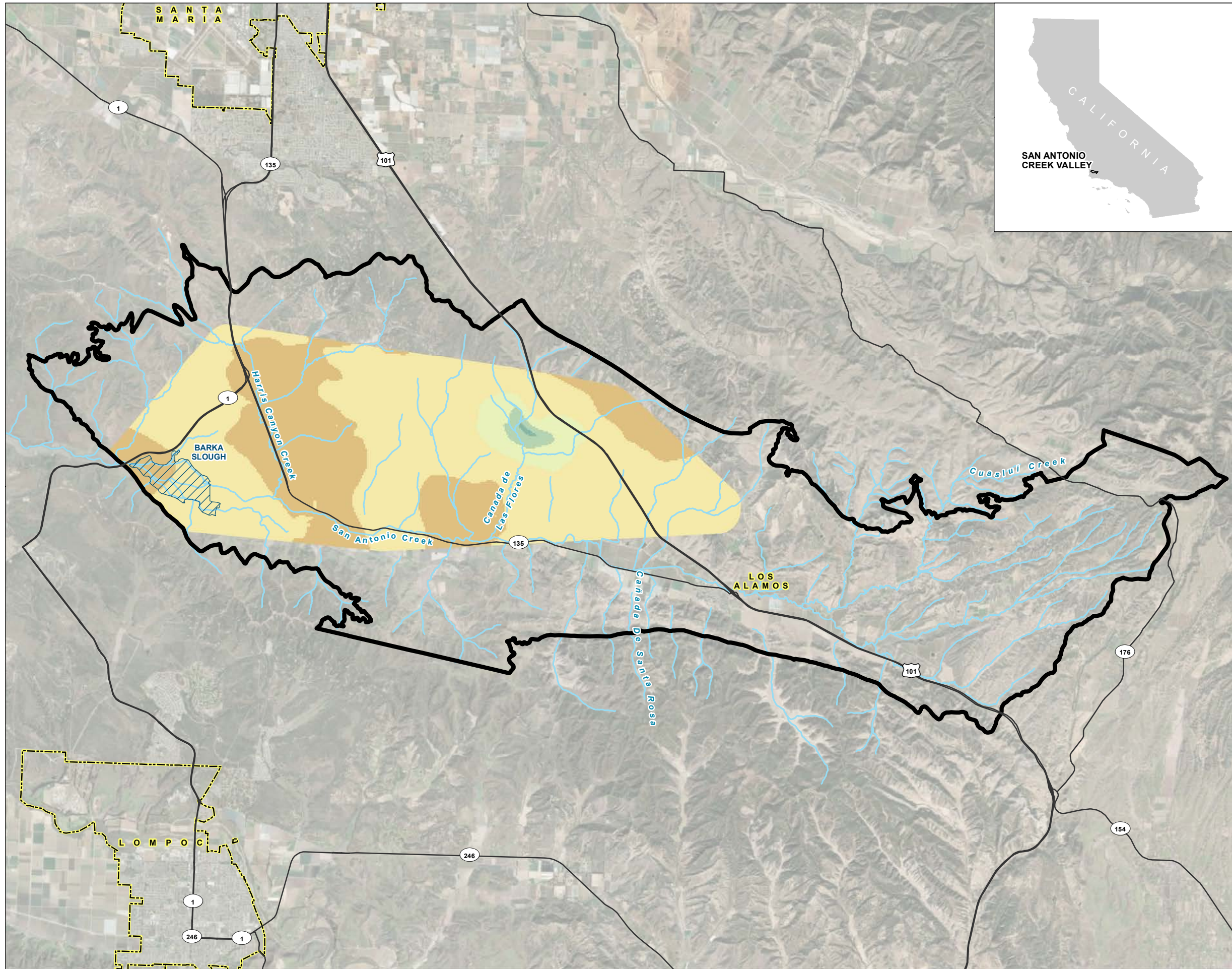


FIGURE 16
Careaga Sand
Annual Change in
Groundwater Elevation
Fall 2022 to Fall 2023
 Groundwater Sustainability Plan
 2023 Annual Report
 San Antonio Creek Valley
 Groundwater Basin

LEGEND

Change in Groundwater Elevation (feet NAVD 88)¹

- > 50
- 40 - 50
- 30 - 40
- 20 - 30
- 10 - 20
- 0 - 10
- 10 - 0
- 20 - -10
- 30 - -20
- 30

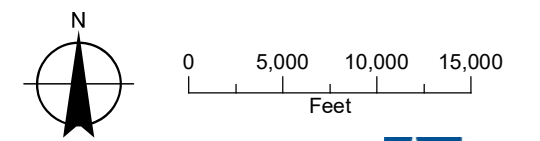
All Other Features

- San Antonio Creek or Tributary
- Major Road
- San Antonio Creek Valley Groundwater Basin²
- Barka Slough
- City Boundary

NOTES

1. The change in groundwater elevation extents are bound by the lateral limits of the subject aquifer (see Figure 2) and available groundwater elevation data.
2. San Antonio Creek Valley Groundwater Basin Boundary as defined in the California Department of Water Resources Bulletin 118.

NAVD 88: North American Vertical Datum of 1988



Date: February 15, 2024
 Data Sources: USGS (2020a), ESRI, DWR (2018), Maxar imagery (2020)



6.2 Annual and Cumulative Change in Groundwater in Storage Calculations (§ 356.2[b][5][B])

The groundwater elevation change maps (Figures 15 and 16) represent a volume change within the Paso Robles Formation and Careaga Sand during water year 2023. The volume change depicted on each map represents a total volume, including the volume of the aquifer material and the volume of groundwater stored within the void space of the aquifer. The portion of void space in the aquifer that can be utilized for groundwater storage is represented by the aquifer storage coefficient (S). Storage coefficient is a unitless factor that is multiplied by the total volume change between water years to derive the change in groundwater in storage. Based on work completed for the GSP (GSI and GEI, 2021) and Martin, 1985, S is estimated to be 0.15 for the Paso Robles Formation and 0.001 for the confined portion (the Slough area) of the Careaga Sand. The annual changes of groundwater in storage calculated for water years 2015 through 2023 are presented in Table 9. Annual and cumulative change in groundwater in storage since 1981 are presented on Figure 17.

Table 9. Annual Changes in Groundwater in Storage

Water Year	Paso Robles Formation (AF)	Careaga Sand (AF)	Total Annual Change in Groundwater in Storage ¹ (AF)
2015	—	—	-26,400
2016	—	—	-23,600
2017	—	—	-2,900
2018	—	—	-23,700
2019	-15,400	-370	-15,800
2020	-18,800	-410	-19,200
2021	-20,500	-540	-21,000
2022	-14,900	-200	-15,100
2023	19,600	10	19,600
Cumulative Change in Groundwater in Storage ¹	-50,000	-1,500	-128,100

Notes

¹ As a result of rounding, totals do not correspond to the sum of all figures shown.

Gray shading indicates a water year included in the historical water budget. A total annual change in groundwater in storage was calculated for the Basin during development of the Basin GSP per SGMA regulations.

— = not calculated

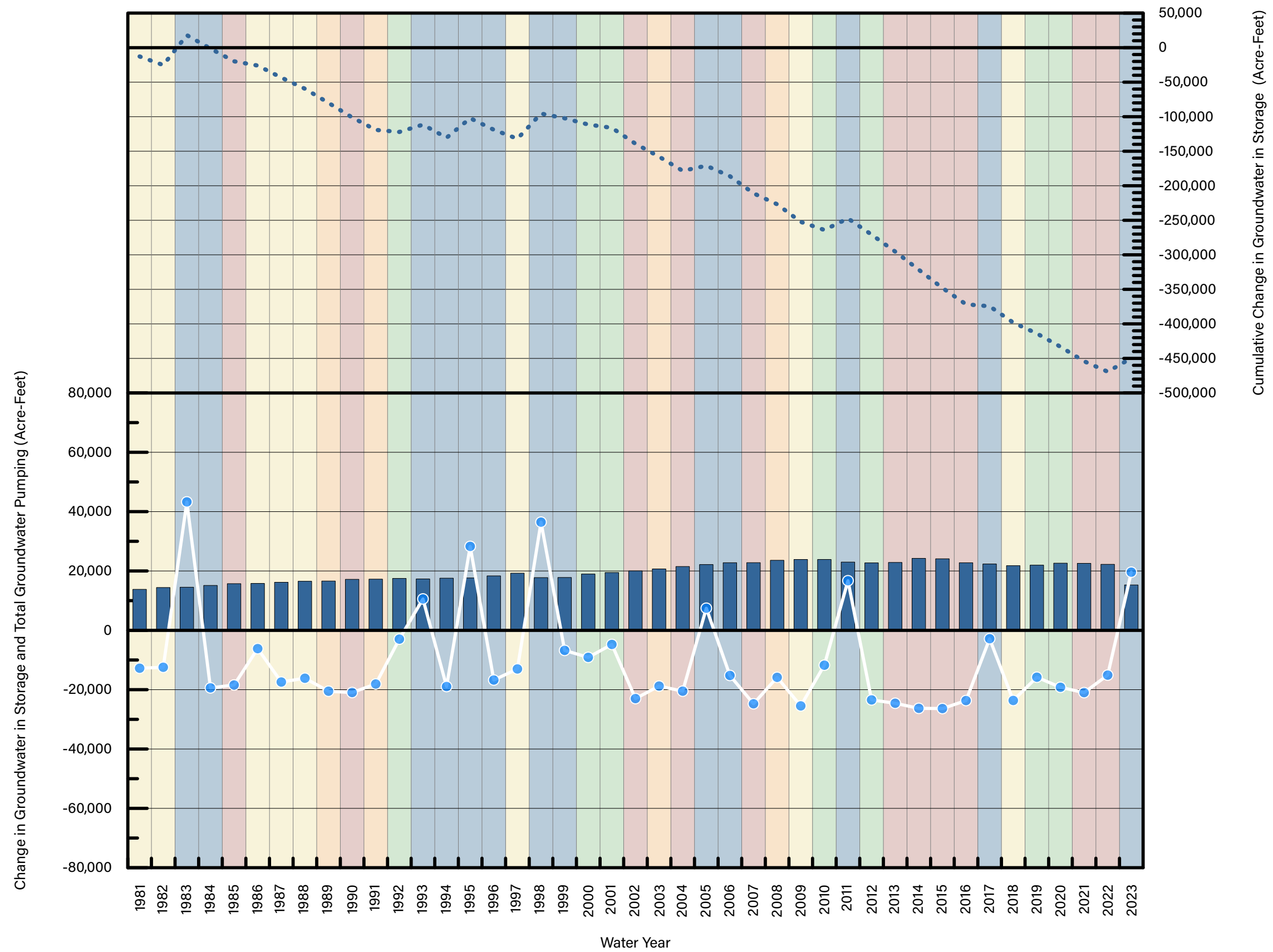
AF = acre-feet

Basin = San Antonio Creek Valley Groundwater Basin

GSP = Groundwater Sustainability Plan

SGMA = Sustainable Groundwater Management Act

FIGURE 17
Cumulative Change in Groundwater in Storage
 Groundwater Sustainability Plan
 2023 Annual Report
 San Antonio Creek Valley
 Groundwater Basin



LEGEND

- Cumulative Change in Groundwater in Storage
- Annual Change in Groundwater in Storage
- Total Annual Groundwater Pumping

Water Year Type

- Wet
- Above Normal
- Below Normal
- Dry
- Critical



SECTION 7: Progress toward Basin Sustainability (§ 356.2[c])

7.1 Introduction

This section summarizes several management actions that are in the process of being implemented in the Basin to avoid undesirable results and to attain sustainability. This section also provides a brief discussion of land subsidence, potential depletion of interconnected surface waters, and groundwater quality trends that have occurred during water year 2023.

7.2 Tier 1 Management Actions

Tier 1 management actions are described in the GSP (GSI and GEI, 2021) and include:

- Address Data Gaps
 - Expand Monitoring Well Network in the Basin to Increase Spatial Coverage and Well Density
 - Perform Reference Point Elevation and Video Surveys in Representative Wells That Currently Do Not Have Adequate Construction Records to Confirm Well Construction
 - Install Stream Gages and Shallow Piezometers at Barka Slough
 - LACSD Wellfield Pumping Coordination/Offsite Well Impact Mitigation
 - Review/Update Water Usage Factors and Crop Acreages and Update Water Budget
 - Survey and Investigate Potential Groundwater-Dependent Ecosystems (GDEs) in the Basin
 - Review USGS Groundwater Model/Update HCM
- Groundwater Pumping Fee Program
- Well Registration Program and Well Meter Installation Program
- Water Use Efficiency Programs

The SABGSA member agencies committed to initiate work on Tier 1 management actions within 1 year of GSP adoption. These management actions are focused primarily on filling identified data gaps, developing funding for SABGSA operations and future basin monitoring, registering and metering wells, and developing new and expanding existing water use efficiency programs for implementation within the Basin.

The SABGSA member agencies will monitor the effectiveness of these Tier 1 management actions on an annual basis to determine if they will be sufficient to achieve groundwater basin sustainability. The overall effectiveness of individual management actions will also be evaluated annually to determine if continued investment in those actions is warranted or if other actions should be considered.

7.3 Management Action Implementation Approach

Using authorities outlined in §§ 10725 to 10726.9 of the California Water Code, the SABGSA will ensure the maximum degree of local control and flexibility consistent with the GSP to commence management actions. The effect of the management actions will be reviewed annually, and additional higher tiered management actions and priority projects will be implemented as necessary to avoid undesirable results.

In general, basin-wide management actions will apply to all areas within the Basin and reflect basic GSP implementation requirements, such as extraction measurement, monitoring, reporting and outreach, necessary studies and early planning work, and filling data gaps, Annual Reports and GSP updates, and implementing an allocation program that includes limitations on groundwater pumping aimed at both keeping groundwater levels stable and avoiding undesirable results. The SABGSA anticipates that new policies, ordinances, and regulations will be required in advance of the implementation of some of the planned management actions. Public meetings and hearings will be held during the process of determining

when and where in the basin management actions and priority projects are to be implemented to maximize benefits to the Basin. Some of these may require California Environmental Quality Act compliance and legal support and guidance. A proportional and equitable approach to funding implementation of the GSP and any optional actions will be developed in accordance with all State laws and applicable public process requirements. During these meetings and hearings, input from the public, interested stakeholders, and groundwater pumpers will be considered and incorporated into the decision-making process. The SABGSA will annually assess the effectiveness that management actions and priority projects have achieved in stabilizing groundwater levels and meeting the basin sustainability goals described in the GSP and will reassess the need for continuing and/or expanding these actions. At a minimum, the reassessment process will be done annually as part of the annual reporting process or as part of the required 5-year review and report to DWR.

7.3.1 Groundwater Monitoring Network Expansion

Well access agreements were secured by the SABGSA for three additional wells (22K3, White Hawk 1, and White Hawk 4) in the Basin groundwater level monitoring network during the 2Q2023 Basin groundwater level monitoring event (see Section 3.4). Additionally, a new irrigation well (Well 4) was added to the SABGSA monitoring network in 4Q2023.

The SABGSA completed a well registration program in 2023 in partnership with Wallace Group Engineering (see Section 7.3.4). The SABGSA plans to review the well registration data to identify existing wells in the Basin that may be incorporated into the Basin Monitoring Network, enabling the SABGSA to fill existing data gaps identified in the Basin GSP.

During development of the GSP, the SABGSA identified two areas within the Basin with a low density of wells in both principal aquifers (see Section 2.4.2). The SABGSA continues to conduct public outreach efforts to contact well owners throughout the Basin (including the two identified low well density areas) to discuss potential enrollment in the Basin groundwater level monitoring network. Expanding the Basin groundwater level monitoring network would improve the HCM and inform sustainable management of the Basin.

7.3.2 Estimation of Agricultural Extraction

The first Basin Annual Report (water years 2019 through 2021; GSI and GEI, 2021) and the Basin Annual Report for water year 2022 (GSI, 2023a) included estimates of groundwater extraction for agricultural irrigation from the crop-specific water use factors. The Basin Annual Report for water year 2022 (GSI, 2023a) also included a satellite-based method (see Section 4.3). The similarity in results between the methods demonstrated the utility of the satellite-based method. The satellite-based method is considered more accurate because it directly measures actual ET as it varies spatially and temporally throughout the Basin and throughout the year, thereby capturing nuances in crop irrigation practices, such as deficit irrigation. The similarity in results between the methods also indicates the determined crop-specific water use factors are representative of the Basin at a basin scale; however, the accuracy of the agricultural extraction calculation using this method can only be implemented with an accurate land use dataset. The crop-specific water use factors method is a more limited approach that does not capture ET variability in the Basin and does not fully capture the actual climatic variability or nuanced crop irrigation practices that may occur each year. Based on the similarity in results and the stated benefits of the satellite-based method, the SABGSA has adopted the satellite-based method for estimating groundwater extractions for irrigated agriculture.

7.3.3 San Antonio Creek Integrated Model

The SABGSA understands that the USGS, in cooperation with the SBWA and VSFB, are assessing the effects of future climate scenarios in the Basin on Barka Slough. This assessment will extend the SACIM 3 years from water years 2019 through 2021 and will be updated using available groundwater level, streamflow, climate, land use, and groundwater pumping data. Two 30-year future climate scenarios (water years 2022 through 2051) will be developed to extend and run the SACIM. Results from the future climate scenarios will be evaluated to identify potential climatic effects on streamflow, groundwater flow, recharge, and other hydrologic conditions in Barka Slough, and potential effects on riparian species.

For future reporting and analysis, the SABGSA may consider use of the SACIM for the purpose of modeling proposed Basin project and management actions (e.g., recharge projects, allocation programs, water market, varying climate scenarios), revising the Basin HCM, or calculating change in groundwater in storage for the Basin GSP annual reporting.

7.3.4 Well Registration and Well Meter Installation/Extraction Measurement Program

The SABGSA has begun to develop a Well Registration and Well Meter Installation/Extraction Measurement Program. In February 2022, the SABGSA formed an Ad Hoc Committee—comprised of two members of the SABGSA Board of Directors, two members of the SABGSA Advisory Committee, and the Executive Directors of both the SABGSA and San Antonio Basin Water District—to establish a framework for the Well Registration and Well Meter Installation/Extraction Measurement Program. The program is being developed and implemented in two phases: (1) Well Registration and (2) Well Meter Installation/Extraction Measurement.

Phase 1 (Well Registration) is complete. The initial well registration program framework was reviewed and approved by the SABGSA Board of Directors at the September 20, 2022, Board of Directors' meeting. Following two consecutive public hearings held on October 18, 2022, and November 15, 2022, the SABGSA adopted Ordinance No. 2022-01 requiring all landowners within the Basin to complete a well registration form and file it with the SABGSA no later than March 31, 2023.

As outlined in the Basin GSP, the need for all groundwater production wells, including wells used by “de minimis” pumpers, to be registered with the SABGSA is identified as a Tier 1 Management Action and is a pre-cursor to the implementation of other projects and management actions vital to achieving sustainability. SABGSA's Well Registration program is intended to establish the location and type of each well located within the Basin and help the SABGSA gain an accurate count and a better understanding of the wells in active use. The SABGSA well registration form also queried landowners to identify which wells currently have meters and what type. This information is critical to designing a metering program that helps meet the practical needs of landowners while also facilitating groundwater sustainability.

The development of the initial framework for Phase 2 (Well Meter Installation/Extraction Measurement Program) began in May 2023. Each iteration of the proposed framework and the proposed Flow Meter Installation Form and Flow Meter Reporting Form are posted on SABGSA's website and have been discussed in SABGSA Board meetings—on July 18, 2023; August 16, 2023, October 17, 2023 and November 28, 2023—with the opportunity for Basin stakeholders to comment and ask questions. Whenever the SABGSA Board receives recommendations from the Ad Hoc Committee and/or discussed anything pertaining to a potential policy, an email notice is sent to Basin landowners and stakeholders, along with the agenda packet, encouraging their attendance, participation, and input. The SABGSA intends to hold a series of community outreach and stakeholder engagement workshops in spring/summer 2024 after the framework is solidified. It is anticipated that an Ordinance will be considered by the Board of Directors in fall 2024 that would require meters to be installed within one year of adoption.

The final Well Registration and Well Meter Installation/Extraction Measurement Program may include a system for reporting and accounting for water conservation initiatives, voluntary irrigated land fallowing (temporary and permanent), storm water capture projects, or other activities that individual pumpers may elect to implement. The Well Registration and Well Meter Installation/Extraction Measurement Program will aid the SABGSAs effort to identify wells and landowners that could be included in the Basin’s groundwater level monitoring network, particularly in areas with a low-density of wells (see Section 2.4.2). The information collected would be used to account for pumping that would have otherwise occurred, to provide additional information to be used by the SABGSA for analyzing projected basin conditions, updating the HCM, and completing annual reports and 5-year GSP assessment reports as required by the DWR.

7.3.5 Well Verification Policy

On July 19, 2022, the SABGSA adopted its Well Verification Policy established by Resolution No. 22-001. The SABGSA Well Verification Policy was designed to implement the new written verification requirements in Governor Newsom’s Executive Order N-7-22 and the Santa Barbara County Board of Supervisors Urgency Ordinance No. 5158 (County Urgency Ordinance) within the Basin. The SABGSA determined through Resolution No. 22-001 that it cannot issue a Well Verification for a New Well or Alteration of an Existing Well because the Basin GSP documents that the Basin is experiencing chronic lowering of groundwater levels and a reduction in groundwater in storage such that New Wells or Alteration of an Existing Wells would be inconsistent with the GSP. The Basin’s water budget, documented in the Basin GSP, indicates that the annual volume of groundwater extracted from the Basin (by pumping) has historically been greater than the Basin’s sustainable yield (the average annual change in groundwater in storage during the Basin’s historical water budget period [1981–2018] was a decrease of 10,600 AF) as defined in the Basin GSP. Therefore, a New Well or an Alteration of an Existing Well would result in additional groundwater extraction from the Basin above the baseline extraction amounts considered in the Basin GSP and contribute to chronic lowering of groundwater levels and a reduction in groundwater storage in the Basin.

Following a public hearing on August 16, 2022, the SABGSA Board adopted Resolution No. 22-002, which established a Well Verification Request Fee and the supporting scope of work required for SABGSA to process Well Verification Requests and issue Well Verifications consistent with the SABGSA’s Well Verification Policy (Resolution No. 22-001). To date, the SABGSA has not received any requests for Well Verification.

To date, the SABGSA has received and processed one well verification request for a replacement well. The applicant also concurrently sought approval from the County of Santa Barbara’s Environment Health Services Department for the destruction of the existing well on the property. Based on the information provided by the applicant and the Technical Memorandum prepared by GSI, the SABGSA verified that: (1) the proposed replacement well would not be inconsistent with any sustainable groundwater management program established in the Groundwater Sustainability Plan (“GSP”) adopted by the SABGSA, and 2) the proposed replacement well would not decrease the likelihood of achieving a sustainability goal for the Basin covered by the GSP. The well verification findings were issued to the applicant on August 31, 2023.

A well permit application for a new domestic de minimis well located within the San Antonio Creek Valley Groundwater Basin was approved by the County of Santa Barbara’s Environment Health Services Department on July 25, 2023.

7.3.6 Central Coast Water Quality Preservation, Inc.

Central Coast Water Quality Preservation, Inc. (CCWQP) manages a Cooperative Monitoring Program (CMP) and reports to the RWQCB on behalf of the California Central Coast grower community.²⁷ To implement the monitoring requirements, CCWQP works with a team of independent contractors selected through a competitive bidding process to perform field sampling, subcontract with analytical laboratories, and perform data validation and reporting services (CCWQP, 2024).

The SABGSA has provided CCWQP with SABGSA well access agreement forms for the CCWQP's consideration in development of their own well access agreement forms. The CCWQP well access agreement forms would be used as part of the CMP. The CMP facilitates collection and analytical reporting of groundwater samples from wells enrolled in the ILRP.

7.3.7 Attempts to Acquire Funding

On October 18, 2022, the SABGSA Board of Directors passed Resolution 22-003 authorizing an application be made to DWR to obtain a grant under the 2021 Sustainable Groundwater Management (SGM) Grant Program SGMA Implementation Grant pursuant to the California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access For All Act of 2018 (Pub. Resources Code, § 80000, et seq.) and the Budget Acts of 2021 and 2022.

The SABGSA's grant application requested a total of \$2,300,000 in funding and included the following components:

- Monitoring, Maintenance, and Expansion of the Basin Monitoring Networks
- Groundwater Dependent Ecosystem Investigations
- Water Use Efficiency Programs
- Groundwater Pumping Fee Program
- Managed Aquifer Recharge Project Feasibility Study
- Annual Reporting and DMS Management
- Grant Administration
- Groundwater Base Pumping Allocation Program

The SABGSA's application received a score of 23 points out of 28 possible points. DWR did not award any funding to the SABGSA. The SABGSA will continue to identify possible grant funding sources for implementation of the GSP.

²⁷ Based on a legislative mandate signed into law in 1999 related to California's Porter-Cologne (Clean Water) Act, the State Water Resources Control Board (SWRCB) was required to review waivers of water quality monitoring for irrigated agriculture and either renew them or adopt Waste Discharge Requirements (WDRs). In 2004, the Central Coast Regional Water Quality Control Board adopted a conditional waiver of WDRs for discharges from irrigated lands within the California Central Coast Region. Given the large geographical range of the region, growers formed a non-profit organization to implement a Cooperative Monitoring Program that would perform the surface water monitoring and reporting requirements for enrolled growers (CCWQP, 2024).

7.3.8 Santa Barbara County Public Works Department Well Metering Assistance Program

Santa Barbara County Public Works Department has implemented a Well Metering Assistance Program (WMA)²⁸ designed to provide funding to offset up to \$500 of the equipment cost of qualifying water meters. Rules of the WMA include:

- The groundwater well installation must be located within DWR Bulletin 118 groundwater basin boundary in the following basins:
 - Carpinteria Groundwater Basin
 - Cuyama Valley Groundwater Basin
 - Montecito Groundwater Basin
 - San Antonio River Valley Groundwater Basin
 - Santa Ynez River Valley Groundwater Basin
- Eligibility is limited to 1 meter per applicant
- The program participant must agree to the terms and conditions summarized in the WMA Application
- The well meter must meet guidelines, if any, established by the Basin's GSA.

7.3.9 Groundwater Sustainability Plan Approval and Priorities for Water Year 2024

DWR approved the Basin GSP on January 18, 2024, and included five recommended corrective actions to be addressed by the SABGSA. The SABGSA intends to meet with DWR staff in early 2024 to review the proposed corrective actions. The SABGSA will discuss and prioritize GSP implementation strategies for fiscal year 2024–2025 in spring 2024 concurrently with the development of SABGSA's operating budget for fiscal year 2024–2025.

7.4 Summary of Progress toward Meeting Basin Sustainability

This 2023 Annual Report indicates that groundwater trends are consistent with historical conditions reported GSP (GSI and GEI, 2021). The first Annual Report (water years 2019 through 2021) and second Annual Report (water year 2022) indicated groundwater elevations decreased or remained the same in all RMSs, resulting in an overall decrease in total groundwater in storage. Water year 2023 data, however, indicate groundwater elevations generally increased across the Basin as a result of the wet water year type observed during water year 2023, and, consequently, a reduction in groundwater pumping.

Current basin conditions, comparison of current and historical groundwater elevation contour maps, and the basin historical water budget presented in the GSP, indicate groundwater pumping in excess of the sustainable yield has created challenging conditions for sustainable management. Tier 1 management actions (as outlined in Section 6 of GSI and GEI, 2021 and summarized in the above bulleted list) are planned to address data gaps through improvement of the monitoring and data-collection networks, as well program implementation for better measurement of groundwater pumping and to promote stakeholder accountability and sustainable groundwater use.

²⁸ More information regarding the Santa Barbara County Public Works Department WMA can be found at: <https://countyofsb.org/pwd/WellMeteringProgram.sbc#:~:text=The%20Well%20Metering%20Assistance%20Program,of%20our%20County's%20groundwater%20resources.>

7.4.1 Groundwater Quality

The minimum threshold for the degraded groundwater quality sustainability indicator (see Section 4.8 of GSI and GEI, 2021) was not exceeded during this reporting period. The sustainability indicator for groundwater quality takes into consideration protection of municipal drinking water supplies, domestic uses, and agricultural uses of groundwater in the Basin. For municipal wells and drinking water supplied by domestic wells, state and federal regulatory standards (MCLs and SMCLs) established by the SWRCB DDW and EPA, respectively, were used to establish thresholds and identify COCs. For agricultural uses, thresholds and COCs were established using WQOs presented in the Basin Plan (RWQCB, 2019). The SABGSA has no responsibility to manage groundwater quality unless it can be shown that water quality degradation is caused by pumping in the Basin, or the SABGSA implements a project that degrades water quality. Potential degradation of groundwater quality caused by groundwater pumping will be monitored as part of the Basin's water quality monitoring network (see Section 5 of GSI and GEI, 2021). Likewise, potential degradation of water quality because of implementation of projects and management actions (see Section 6 of GSI and GEI, 2021) will be evaluated during the planning stage of the respective action and monitored at a minimum as part of the Basin's water quality monitoring network. No minimum thresholds have been established for contaminants because state regulatory agencies, including the RWQCB and the Department of Toxic Substances Control, have the responsibility and authority to regulate and direct actions that address contamination (see Section 4.8 of GSI and GEI, 2021). The WQOs for salt and nutrients are the minimum thresholds for TDS, chloride, sulfate, boron, sodium, and nitrate as measured by SWRCB ILRP and DDW programs in 20 percent of wells monitored. In cases where the ambient (prior to January 2015) water quality exceeds the WQO, the minimum threshold concentration is 110 percent of the ambient water quality in 20 percent of the wells.

Identified COCs that have the potential to impact suitability of water for public supply or agricultural use in the Basin include TDS, sodium, chloride, sulfate, arsenic, nitrate, boron, and DEHP. There are no known point source contaminant plumes in groundwater in the Basin (GSI and GEI, 2021).

Historically, groundwater in the Basin is of widely varying quality and generally decreases in quality from east to west. Concentrations of TDS generally increase from east to west along San Antonio Creek; and are greatest near the Slough, along western San Antonio Creek, and in Harris Canyon. Concentrations of boron, sodium, and chloride are also elevated near the Slough, along western San Antonio Creek, and in Harris Canyon. Historical chloride concentrations exceeding the WQO were collected from wells located in the western portion of the Basin along San Antonio Creek, near the Slough, or in Harris Canyon. Historical boron concentrations exceeding the WQO were collected from wells located in the western portion of the Basin along San Antonio Creek, near the Slough, or in Harris Canyon. Based on available information, the east to west trend of increasing TDS and salts concentrations is consistent between the Paso Robles Formation and the Careaga Sand. Historical analytical results from samples collected from a nested monitoring well (SACR) along San Antonio Creek, in the western portion of the Basin, indicate that concentrations of TDS decreased with depth.

Water quality data for water year 2023 was obtained through the SWRCB GAMA Groundwater Information System (GAMA-GIS).²⁹ Average concentrations, by well and COC, were further categorized as pre-SGMA enactment (2015), post-SGMA (2015 to last measured), and water year 2023. Available water quality data for wells included in the Basin groundwater quality monitoring network for water year 2023 was limited to 4 wells (1 irrigation supply well and 3 municipal wells). Reported constituent concentrations in all 4 wells were below the respective WQO, MCL, and SCML.

²⁹ The GAMA-GIS is available at <https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/>. (Accessed December 4, 2023.)

As summarized in Section 2.5, based on data from the SWRCB ILRP, average nitrate concentrations were reported at concentrations exceeding the respective MCL (10 mg/L) in two domestic supply wells since enactment of SGMA. Average concentrations of chloride (in 1 well) and TDS (in 6 wells) exceeding their respective SMCLs were reported in wells included in both the SWRCB DDW public water supply well water quality program and SWRCB ILRP since enactment of SGMA. Average concentrations of sodium (in 12 wells), nitrate (in 6 wells), sulfate (in 26 wells), and TDS (in 34 wells) exceeding their respective WQOs were reported in wells included in both the SWRCB DDW public water supply well water quality program and SWRCB ILRP since enactment of SGMA. In comparison to pre-SGMA average concentrations of COCs exceeding the respective WQO, the number of wells with average concentrations of sodium, sulfate, and TDS increased. Similarly, the reported average concentration for COCs increased for sulfate and TDS during the post-SGMA period compared to the pre-SGMA period. The GAMA-GIS did not indicate any DEHP groundwater analytical data for the post-SGMA period.

According to the California Department of Conservation, Geologic Energy Management Division online Well Finder, or WellSTAR, tool, nine named oil and gas fields are within or adjacent to the Basin: Cat Canyon, Zaca, Barham Ranch, Los Alamos, Lompoc, Harris Canyon (abandoned), Careaga, Orcutt, and Four Deer (abandoned) (see Figure 3-47 of GSI and GEI, 2021).³⁰ The USGS, in cooperation with the SWRCB, initiated the COGG Program in 2015.³¹ The objective of the COGG Program is to determine where and to what extent groundwater quality may be adversely impacted by proximal oil and gas development activities (Davis, et al., 2018). A discussion of COGG Program findings is included in Section 2.5.

7.4.2 Land Subsidence

Land subsidence is the lowering of the land surface. Land subsidence can be caused by a number of factors, including (1) lowering of groundwater levels as a result of pumping if the subsurface geology is prone to subsidence (i.e., contains substantial clay beds), (2) oil and gas production, and (3) tectonic activity. For subsidence to occur as a result of groundwater extraction, water levels would need to drop below historical levels for extended periods of time.

Based on data available from the UNAVCO CGPS Station ORES, located in Los Alamos, no land subsidence in the Basin has occurred at rates exceeding the minimum threshold of 0.05 feet per year, described in the GSP, during water year 2023 (see Appendix F for UNAVCO CGPS Station ORES displacement data). A discussion of InSAR and UNAVCO CGPS Station ORES measure land subsidence is included in Section 2.6.

7.4.3 Interconnected Surface Water

Lack of stream gauging data and the ephemeral nature of surface water flows in the Basin make it difficult to assess the interconnectivity of surface water and groundwater and to quantify the degree to which surface water depletion has occurred. According to the USGS National Hydrography Dataset, three springs or seeps were identified in the Basin (see Figure 3-9 of GSI and GEI, 2021). Based on location, the three springs or seeps are suspected to be overlying the Paso Robles Formation. Two additional springs or seeps were identified by basin stakeholders and are located northeast of Los Alamos on Price Ranch within a tributary to San Antonio Creek and in the Las Flores watershed, a tributary to San Antonio Creek, in the low-lying grassland areas immediately west of U.S. HWY 101 (CRCD, 2003) (see Figure 3-9 of GSI and GEI, 2021). Based on location, the spring or seep in the Las Flores watershed overlies the Paso Robles Formation and the Price Ranch spring or seep is located near the contact between the Paso Robles Formation and the Careaga Sand. Without additional analysis, it is unknown whether the groundwater source of these springs or seeps is from the underlying principal aquifer or from perched water within the channel alluvium. As

³⁰ The tool is available at <https://www.conservation.ca.gov/calgem/Pages/WellFinder.aspx>. (Accessed February 8, 2024.)

³¹ Description available at <https://webapps.usgs.gov/cogg/>. (Accessed February 8, 2024.)

discussed in Section 3.1.3.1 of GSI and GEI, 2021, artesian conditions exist in the Basin and are due to localized confining layers created by the synclinal structure of the Basin, the presence of overlying fine-grained deposits, and or faults present within the Basin (Carlson, 2019; Cromwell et al., 2022). Planned additional analysis of these areas are described in Section 6 of the Basin GSP.

Interconnected surface water and groundwater within the Paso Robles Formation and Careaga Sand occurs where the groundwater in these units is forced upward by a subsurface bedrock groundwater barrier. See Figure 4 for a conceptual model of groundwater flow as it reaches the Slough. The depletion of interconnected surface water sustainability indicator is measured by monitoring streamflow recorded at the Casmalia stream gage (USGS Monitoring Location 11136100; see Figure 1). The minimum threshold for the depletion of interconnected surface water sustainability indicator is an average streamflow of 0.15 cfs measured at the Casmalia stream gage over three consecutive months between June to September. This minimum threshold was not reached. The lowest average measured stream flow recorded at the Casmalia stream gage between the months of June to September during water year 2023 was 0.33 cfs (recorded August 23, 2023).³² Summaries of stream flow measurements collected from the Casmalia stream gage for water year 2023 are included in Appendix G.

7.4.4 Summary of Changes in Basin Conditions

Many of the Basin groundwater level monitoring network well hydrographs illustrate a condition of declining water levels over the well's respective period of record, although some hydrographs indicate relative water level stability in the last 5 to 10 years. Water levels in several wells rose sharply as a result of the wet water year type. The rise in water levels was generally more rapid and apparent in Paso Robles Formation wells, and more delayed and muted in Careaga Sand wells. Groundwater levels lowered from the seasonal high when dry conditions returned, consistent with the seasonal trends of higher spring groundwater elevations compared with fall. Of the 11 accessible RMSs, water levels in 3 RMSs were measured above the respective measurable objective during the 2023 water year. Likewise, based on fall 2023 groundwater elevations measured in the 11 accessible Basin RMSs, water levels in 5 of the RMSs are above the respective water year 2022 interim milestone. No RMS water levels were measured below the respective minimum threshold during the 2023 water year.

Calculated groundwater in storage in the Basin increased by approximately 19,600 AF from the end of water year 2022 through the end of water year 2023. Groundwater elevations in the Basin were generally higher during water year 2023 than water year 2022. The higher groundwater elevations are a result of the wet water year type observed during water year 2023, and, consequently, a reduction in groundwater pumping (approximately 6,900 AF less groundwater pumping during water year 2023 than water year 2022). Total groundwater pumping for water year 2023 (15,300 AF) remained above the Basin's estimated sustainable yield (8,900 AFY).

³² Casmalia stream gage data is available at <https://waterdata.usgs.gov/monitoring-location/11136100/#parameterCode=00065&period=P7D>. (Accessed January 31, 2024.)

7.4.5 Summary of Impacts of Projects and Management Actions

Because of the short duration of time between the adoption of the Basin GSP and the submittal of this Annual Report, additional time is necessary to continue to implement projects and managements actions and to evaluate their effectiveness and quantitative impacts. However, it is anticipated that the projects and management actions will enable the Basin to work toward sustainable management of groundwater and achievement of sustainability goals as defined in the Basin GSP.

SECTION 8: References

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8.2 Figure References

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APPENDICES

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APPENDIX A

Sustainable Groundwater Management Act Groundwater
Sustainability Plan Regulations for Annual Reports

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§ 356.2. Annual Reports

Each Agency shall submit an annual report to the Department by April 1 of each year following the adoption of the Plan. The annual report shall include the following components for the preceding water year:

(a) General information, including an executive summary and a location map depicting the basin covered by the report.

(b) A detailed description and graphical representation of the following conditions of the basin managed in the Plan:

(1) Groundwater elevation data from monitoring wells identified in the monitoring network shall be analyzed and displayed as follows:

(A) Groundwater elevation contour maps for each principal aquifer in the basin illustrating, at a minimum, the seasonal high and seasonal low groundwater conditions.

(B) Hydrographs of groundwater elevations and water year type using historical data to the greatest extent available, including from January 1, 2015, to current reporting year.

(2) Groundwater extraction for the preceding water year. Data shall be collected using the best available measurement methods and shall be presented in a table that summarizes groundwater extractions by water use sector, and identifies the method of measurement (direct or estimate) and accuracy of measurements, and a map that illustrates the general location and volume of groundwater extractions.

(3) Surface water supply used or available for use, for groundwater recharge or in-lieu use shall be reported based on quantitative data that describes the annual volume and sources for the preceding water year.

(4) Total water use shall be collected using the best available measurement methods and shall be reported in a table that summarizes total water use by water use sector, water source type, and identifies the method of measurement (direct or estimate) and accuracy of measurements. Existing water use data from the most recent Urban Water Management Plans or Agricultural Water Management Plans within the basin may be used, as long as the data are reported by water year.

(5) Change in groundwater in storage shall include the following:

(A) Change in groundwater in storage maps for each principal aquifer in the basin.

(B) A graph depicting water year type, groundwater use, the annual change in groundwater in storage, and the cumulative change in groundwater in storage for the basin based on historical data to the greatest extent available, including from January 1, 2015, to the current reporting year.

(c) A description of progress towards implementing the Plan, including achieving interim milestones, and implementation of projects or management actions since the previous annual report.

Note: Authority cited: Section 10733.2, Water Code.

Reference: Sections 10727.2, 10728, and 10733.2, Water Code.

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APPENDIX B

Precipitation Data

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County of Santa Barbara
 Daily Rainfall Record - through 08-31-2023

#204 - Los Alamos Fire Station
 Lat 34-44-43, Long 120-16-48, Elev 580 ft

Daily Rainfall (in inches) recorded as of 8am for the previous 24 hours (PST)
 Codes: PR = Preliminary data, E = Estimated from nearby gauge

station id	water year	year	month	day	daily rain	code
204	1910	1909	10	3	0.90	
204	1910	1909	10	29	0.05	
204	1910	1909	11	9	0.96	
204	1910	1909	11	11	0.13	
204	1910	1909	11	26	0.17	
204	1910	1909	11	27	0.43	
204	1910	1909	12	5	1.20	
204	1910	1909	12	7	0.37	
204	1910	1909	12	8	0.71	
204	1910	1909	12	9	2.35	
204	1910	1909	12	20	0.66	
204	1910	1909	12	21	0.31	
204	1910	1909	12	22	0.20	
204	1910	1910	1	1	1.47	
204	1910	1910	1	2	0.33	
204	1910	1910	1	12	0.06	
204	1910	1910	1	15	0.19	
204	1910	1910	1	16	1.05	
204	1910	1910	1	23	0.18	
204	1910	1910	1	24	0.30	
204	1910	1910	2	6	0.10	
204	1910	1910	2	19	0.08	
204	1910	1910	2	23	0.05	
204	1910	1910	3	14	0.70	
204	1910	1910	3	17	0.15	
204	1910	1910	3	21	1.03	
204	1910	1910	3	22	0.43	
204	1910	1910	3	23	0.10	
204	1910	1910	3	25	0.22	
204	1910	1910	3	27	1.45	
204	1910	1910	3	28	0.10	
204	1911	1910	9	14	0.14	
204	1911	1910	9	15	0.70	
204	1911	1910	10	11	0.12	
204	1911	1910	11	4	0.18	
204	1911	1910	11	25	0.40	
204	1911	1910	12	3	0.03	
204	1911	1910	12	10	0.10	
204	1911	1910	12	18	0.20	
204	1911	1910	12	19	0.13	
204	1911	1911	1	9	1.00	
204	1911	1911	1	10	0.45	

204	1911	1911	1	11	0.03
204	1911	1911	1	12	0.11
204	1911	1911	1	13	0.15
204	1911	1911	1	14	0.47
204	1911	1911	1	15	0.18
204	1911	1911	1	19	0.15
204	1911	1911	1	24	0.84
204	1911	1911	1	25	0.63
204	1911	1911	1	28	0.60
204	1911	1911	1	29	2.95
204	1911	1911	1	30	1.10
204	1911	1911	1	31	0.87
204	1911	1911	2	3	0.72
204	1911	1911	2	4	0.48
204	1911	1911	2	11	0.84
204	1911	1911	2	12	0.15
204	1911	1911	2	14	0.38
204	1911	1911	2	26	0.06
204	1911	1911	2	27	0.26
204	1911	1911	2	28	0.75
204	1911	1911	3	1	2.66
204	1911	1911	3	2	0.22
204	1911	1911	3	3	0.61
204	1911	1911	3	4	0.95
204	1911	1911	3	5	0.92
204	1911	1911	3	6	1.06
204	1911	1911	3	7	3.10
204	1911	1911	3	8	0.98
204	1911	1911	3	9	1.16
204	1911	1911	3	10	0.55
204	1911	1911	3	21	0.20
204	1911	1911	4	1	0.92
204	1911	1911	4	5	0.23
204	1911	1911	4	6	0.07
204	1911	1911	4	26	0.25
204	1912	1911	12	4	0.42
204	1912	1911	12	6	0.70
204	1912	1911	12	7	0.06
204	1912	1911	12	17	0.15
204	1912	1911	12	28	0.17
204	1912	1911	12	29	0.35
204	1912	1912	1	2	0.55
204	1912	1912	1	10	0.41
204	1912	1912	1	11	0.11
204	1912	1912	1	16	0.22
204	1912	1912	1	26	0.30
204	1912	1912	3	1	0.09
204	1912	1912	3	2	0.11
204	1912	1912	3	3	0.15
204	1912	1912	3	4	0.71
204	1912	1912	3	5	1.11
204	1912	1912	3	6	0.27

204	1912	1912	3	9	0.60
204	1912	1912	3	10	1.00
204	1912	1912	3	12	1.85
204	1912	1912	3	13	0.25
204	1912	1912	3	16	0.05
204	1912	1912	3	21	0.42
204	1912	1912	3	26	0.16
204	1912	1912	4	8	0.12
204	1912	1912	4	9	0.08
204	1912	1912	4	10	0.11
204	1912	1912	4	11	0.42
204	1912	1912	4	29	0.12
204	1912	1912	5	6	0.10
204	1912	1912	5	7	0.17
204	1912	1912	5	8	0.17
204	1912	1912	5	25	0.68
204	1913	1912	11	10	0.30
204	1913	1912	12	15	0.16
204	1913	1913	1	9	0.62
204	1913	1913	1	10	0.30
204	1913	1913	1	14	0.03
204	1913	1913	1	15	1.44
204	1913	1913	1	16	0.37
204	1913	1913	1	17	0.10
204	1913	1913	1	18	0.02
204	1913	1913	2	8	0.53
204	1913	1913	2	21	0.37
204	1913	1913	2	22	0.27
204	1913	1913	2	23	0.31
204	1913	1913	2	24	1.32
204	1913	1913	2	25	0.42
204	1913	1913	3	18	0.25
204	1913	1913	3	21	0.20
204	1913	1913	3	22	0.05
204	1913	1913	3	23	0.25
204	1913	1913	4	14	0.14
204	1913	1913	4	17	0.19
204	1913	1913	4	18	0.09
204	1913	1913	4	22	0.08
204	1913	1913	5	28	0.15
204	1913	1913	6	26	0.30
204	1913	1913	6	27	0.05
204	1913	1913	8	28	1.20
204	1914	1913	11	1	0.10
204	1914	1913	11	12	0.30
204	1914	1913	11	13	0.95
204	1914	1913	11	14	0.05
204	1914	1913	11	18	0.75
204	1914	1913	11	19	0.20
204	1914	1913	11	29	0.10
204	1914	1913	12	14	0.40
204	1914	1913	12	19	0.07

204	1914	1913	12	23	0.60
204	1914	1913	12	25	1.02
204	1914	1913	12	30	0.85
204	1914	1913	12	31	0.11
204	1914	1914	1	1	0.10
204	1914	1914	1	2	0.10
204	1914	1914	1	15	1.20
204	1914	1914	1	16	0.15
204	1914	1914	1	18	1.25
204	1914	1914	1	19	2.10
204	1914	1914	1	22	0.23
204	1914	1914	1	23	0.04
204	1914	1914	1	24	1.93
204	1914	1914	1	25	2.75
204	1914	1914	1	26	0.35
204	1914	1914	1	27	1.10
204	1914	1914	2	18	2.36
204	1914	1914	2	20	3.50
204	1914	1914	2	21	0.40
204	1914	1914	3	27	0.07
204	1914	1914	3	29	0.90
204	1914	1914	4	4	0.07
204	1914	1914	4	5	0.03
204	1914	1914	4	22	0.35
204	1915	1914	12	1	1.20
204	1915	1914	12	3	0.10
204	1915	1914	12	4	0.13
204	1915	1914	12	5	0.18
204	1915	1914	12	6	0.15
204	1915	1914	12	10	0.74
204	1915	1914	12	11	0.58
204	1915	1914	12	12	0.15
204	1915	1914	12	17	1.27
204	1915	1914	12	18	0.20
204	1915	1914	12	20	0.19
204	1915	1914	12	27	0.23
204	1915	1915	1	4	0.25
204	1915	1915	1	5	0.20
204	1915	1915	1	8	0.38
204	1915	1915	1	14	0.25
204	1915	1915	1	20	0.06
204	1915	1915	1	24	0.22
204	1915	1915	1	27	0.07
204	1915	1915	1	28	0.86
204	1915	1915	1	29	2.15
204	1915	1915	1	30	0.90
204	1915	1915	2	2	1.36
204	1915	1915	2	3	0.46
204	1915	1915	2	8	0.95
204	1915	1915	2	9	2.08
204	1915	1915	2	10	0.84
204	1915	1915	2	11	0.12

204	1915	1915	2	16	0.25
204	1915	1915	2	17	0.48
204	1915	1915	2	19	0.06
204	1915	1915	2	20	0.69
204	1915	1915	2	24	0.51
204	1915	1915	2	28	0.36
204	1915	1915	3	1	0.05
204	1915	1915	3	7	0.16
204	1915	1915	3	28	0.40
204	1915	1915	4	7	0.05
204	1915	1915	4	21	1.25
204	1915	1915	4	22	0.05
204	1915	1915	4	23	0.10
204	1915	1915	4	26	0.25
204	1915	1915	4	28	0.35
204	1915	1915	4	29	0.09
204	1915	1915	5	1	0.14
204	1915	1915	5	2	0.46
204	1915	1915	5	4	0.70
204	1915	1915	5	5	0.03
204	1915	1915	5	12	0.12
204	1915	1915	5	17	0.20
204	1918	1917	12	26	0.04
204	1918	1918	1	13	0.30
204	1918	1918	1	14	0.04
204	1918	1918	1	26	0.07
204	1918	1918	2	6	0.04
204	1918	1918	2	7	0.30
204	1918	1918	2	17	0.83
204	1918	1918	2	18	0.12
204	1918	1918	2	19	0.14
204	1918	1918	2	20	5.81
204	1918	1918	2	21	2.32
204	1918	1918	2	22	1.12
204	1918	1918	2	24	1.10
204	1918	1918	2	26	0.10
204	1918	1918	3	5	0.55
204	1918	1918	3	6	0.39
204	1918	1918	3	7	1.25
204	1918	1918	3	8	0.10
204	1918	1918	3	10	0.26
204	1918	1918	3	11	0.76
204	1918	1918	3	18	0.81
204	1918	1918	3	19	3.01
204	1918	1918	3	27	0.05
204	1918	1918	8	13	0.03
204	1918	1918	8	14	0.05
204	1918	1918	8	27	0.12
204	1919	1918	9	13	0.03
204	1919	1918	9	14	0.05
204	1919	1918	9	27	0.12
204	1919	1918	10	1	0.30

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204	1919	1918	11	5	0.15
204	1919	1918	11	14	0.31
204	1919	1918	11	15	0.18
204	1919	1918	11	18	0.98
204	1919	1918	11	19	0.38
204	1919	1918	11	23	0.77
204	1919	1918	12	7	1.69
204	1919	1918	12	8	0.28
204	1919	1918	12	9	0.30
204	1919	1918	12	20	0.06
204	1919	1918	12	21	0.30
204	1919	1919	1	19	0.46
204	1919	1919	2	1	0.40
204	1919	1919	2	2	0.04
204	1919	1919	2	9	0.10
204	1919	1919	2	10	0.43
204	1919	1919	2	11	1.05
204	1919	1919	2	15	0.04
204	1919	1919	2	22	0.04
204	1919	1919	2	23	0.19
204	1919	1919	2	24	0.04
204	1919	1919	2	26	0.36
204	1919	1919	2	27	0.04
204	1919	1919	2	28	0.02
204	1919	1919	3	1	0.03
204	1919	1919	3	2	0.13
204	1919	1919	3	13	0.97
204	1919	1919	3	14	0.52
204	1919	1919	4	26	0.06
204	1919	1919	5	28	1.11
204	1919	1919	5	29	0.24
204	1920	1919	9	1	0.02
204	1920	1919	9	2	0.56
204	1920	1919	10	24	0.16
204	1920	1919	10	25	0.02
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204	1920	1919	12	2	0.17
204	1920	1919	12	4	0.62
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204	1920	1919	12	11	0.50
204	1920	1920	1	4	0.14
204	1920	1920	1	22	0.07
204	1920	1920	1	23	0.18
204	1920	1920	2	1	0.40
204	1920	1920	2	2	0.54
204	1920	1920	2	9	0.02

204	1920	1920	2	19	0.66
204	1920	1920	2	22	0.84
204	1920	1920	2	23	0.18
204	1920	1920	2	27	0.18
204	1920	1920	2	29	0.15
204	1920	1920	3	1	0.46
204	1920	1920	3	2	0.11
204	1920	1920	3	9	0.06
204	1920	1920	3	10	0.22
204	1920	1920	3	16	0.44
204	1920	1920	3	21	0.93
204	1920	1920	3	22	0.94
204	1920	1920	3	23	0.16
204	1920	1920	3	25	0.06
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204	1920	1920	4	10	0.03
204	1920	1920	4	15	0.36
204	1920	1920	4	16	0.06
204	1921	1920	9	24	0.03
204	1921	1920	10	6	0.04
204	1921	1920	10	9	0.29
204	1921	1920	10	18	0.15
204	1921	1920	10	19	0.10
204	1921	1920	11	7	1.15
204	1921	1920	11	15	0.18
204	1921	1920	12	7	0.45
204	1921	1920	12	8	0.02
204	1921	1920	12	10	0.25
204	1921	1920	12	11	0.06
204	1921	1920	12	19	0.41
204	1921	1920	12	24	0.10
204	1921	1921	1	17	0.07
204	1921	1921	1	18	1.39
204	1921	1921	1	19	0.12
204	1921	1921	1	20	0.71
204	1921	1921	1	21	0.06
204	1921	1921	1	22	0.14
204	1921	1921	1	26	0.12
204	1921	1921	1	27	0.58
204	1921	1921	1	30	0.58
204	1921	1921	2	5	0.07
204	1921	1921	2	14	0.94
204	1921	1921	2	15	0.02
204	1921	1921	2	17	0.70
204	1921	1921	2	21	0.07
204	1921	1921	3	6	0.04
204	1921	1921	3	11	0.07
204	1921	1921	3	12	0.28
204	1921	1921	3	13	0.43
204	1921	1921	3	14	0.17
204	1921	1921	3	22	0.07

204	1921	1921	4	11	0.32
204	1921	1921	4	13	0.02
204	1921	1921	5	5	0.43
204	1921	1921	5	6	0.28
204	1921	1921	5	20	0.31
204	1921	1921	5	21	0.31
204	1921	1921	5	22	0.14
204	1922	1921	9	1	0.16
204	1922	1921	9	17	0.34
204	1922	1921	9	18	0.34
204	1922	1921	10	23	0.32
204	1922	1921	12	18	0.34
204	1922	1921	12	19	0.84
204	1922	1921	12	20	1.40
204	1922	1921	12	21	0.45
204	1922	1921	12	22	1.15
204	1922	1921	12	23	0.17
204	1922	1921	12	24	0.20
204	1922	1921	12	25	0.59
204	1922	1921	12	26	0.21
204	1922	1921	12	27	0.22
204	1922	1921	12	28	0.16
204	1922	1921	12	29	0.04
204	1922	1922	1	1	0.45
204	1922	1922	1	2	0.29
204	1922	1922	1	3	0.06
204	1922	1922	1	4	0.08
204	1922	1922	1	6	0.32
204	1922	1922	1	7	0.13
204	1922	1922	1	29	1.38
204	1922	1922	1	30	1.28
204	1922	1922	1	31	0.36
204	1922	1922	2	8	0.22
204	1922	1922	2	9	0.74
204	1922	1922	2	10	0.21
204	1922	1922	2	11	0.26
204	1922	1922	2	20	1.79
204	1922	1922	2	21	0.04
204	1922	1922	2	22	0.06
204	1922	1922	2	24	0.05
204	1922	1922	2	27	0.23
204	1922	1922	3	11	0.98
204	1922	1922	3	16	1.36
204	1922	1922	3	17	0.04
204	1922	1922	3	23	0.11
204	1922	1922	3	27	0.06
204	1922	1922	3	31	0.03
204	1922	1922	4	5	0.13
204	1922	1922	4	12	0.13
204	1922	1922	5	9	0.39
204	1923	1922	10	27	0.52
204	1923	1922	10	28	0.03

204	1923	1922	11	6	0.02
204	1923	1922	11	7	0.06
204	1923	1922	11	8	0.10
204	1923	1922	11	9	1.08
204	1923	1922	12	1	0.33
204	1923	1922	12	2	0.31
204	1923	1922	12	3	0.12
204	1923	1922	12	6	0.25
204	1923	1922	12	7	0.09
204	1923	1922	12	10	0.25
204	1923	1922	12	12	0.99
204	1923	1922	12	13	0.95
204	1923	1922	12	14	0.24
204	1923	1922	12	15	0.09
204	1923	1922	12	17	0.11
204	1923	1922	12	27	0.42
204	1923	1923	2	1	0.13
204	1923	1923	2	8	0.05
204	1923	1923	2	9	0.13
204	1923	1923	2	11	0.82
204	1923	1923	2	12	0.13
204	1923	1923	3	3	0.35
204	1923	1923	4	1	0.35
204	1923	1923	4	2	0.19
204	1923	1923	4	3	0.07
204	1923	1923	4	4	0.01
204	1923	1923	4	5	0.72
204	1923	1923	4	6	0.92
204	1923	1923	4	10	0.58
204	1923	1923	4	18	0.76
204	1923	1923	6	15	0.05
204	1924	1923	9	25	0.12
204	1924	1923	9	26	0.03
204	1924	1923	10	7	0.05
204	1924	1923	11	8	0.13
204	1924	1923	11	9	0.03
204	1924	1923	11	30	0.02
204	1924	1923	12	14	0.22
204	1924	1923	12	19	0.03
204	1924	1923	12	30	0.02
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204	1924	1924	2	8	0.03
204	1924	1924	2	9	0.16
204	1924	1924	3	2	0.68
204	1924	1924	3	3	0.27
204	1924	1924	3	4	0.05
204	1924	1924	3	17	0.43
204	1924	1924	3	19	0.01

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204	1924	1924	3	23	0.35
204	1924	1924	3	24	0.02
204	1924	1924	3	26	1.28
204	1924	1924	3	28	0.05
204	1924	1924	4	1	0.30
204	1924	1924	4	3	0.03
204	1924	1924	4	4	0.02
204	1924	1924	4	23	0.36
204	1925	1924	10	6	0.38
204	1925	1924	10	10	0.10
204	1925	1924	10	16	0.04
204	1925	1924	10	28	0.06
204	1925	1924	10	29	0.24
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204	1925	1924	11	9	0.56
204	1925	1924	11	10	0.22
204	1925	1924	12	6	0.62
204	1925	1924	12	7	0.07
204	1925	1924	12	8	0.30
204	1925	1924	12	16	0.24
204	1925	1924	12	17	0.10
204	1925	1924	12	22	0.09
204	1925	1924	12	30	0.01
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204	1925	1925	1	25	0.48
204	1925	1925	1	26	0.21
204	1925	1925	2	6	0.22
204	1925	1925	2	8	0.44
204	1925	1925	2	12	0.54
204	1925	1925	2	13	0.04
204	1925	1925	2	19	0.05
204	1925	1925	2	20	0.05
204	1925	1925	2	23	0.41
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204	1925	1925	3	7	0.41
204	1925	1925	3	8	0.04
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204	1925	1925	3	10	0.06
204	1925	1925	3	26	0.06
204	1925	1925	3	27	0.10
204	1925	1925	3	29	1.34
204	1925	1925	3	31	1.08
204	1925	1925	4	1	0.03
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204	1925	1925	4	5	0.26
204	1925	1925	4	20	0.06
204	1925	1925	4	22	0.10
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204	1925	1925	5	13	0.41
204	1925	1925	5	16	0.03

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204	1925	1925	6	3	0.08
204	1926	1925	10	12	0.81
204	1926	1925	10	13	0.01
204	1926	1925	11	3	0.10
204	1926	1925	11	5	0.10
204	1926	1925	11	24	0.05
204	1926	1925	12	1	0.25
204	1926	1925	12	3	0.51
204	1926	1925	12	19	0.86
204	1926	1925	12	29	0.03
204	1926	1926	1	17	0.05
204	1926	1926	1	29	0.86
204	1926	1926	1	31	0.96
204	1926	1926	2	1	0.20
204	1926	1926	2	2	0.90
204	1926	1926	2	3	0.02
204	1926	1926	2	4	0.01
204	1926	1926	2	11	0.06
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204	1926	1926	2	13	0.73
204	1926	1926	2	14	0.19
204	1926	1926	2	15	0.10
204	1926	1926	2	16	0.05
204	1926	1926	3	3	0.04
204	1926	1926	3	4	0.16
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204	1926	1926	3	6	0.02
204	1926	1926	3	18	0.02
204	1926	1926	4	2	0.04
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204	1926	1926	4	9	0.04
204	1926	1926	4	19	0.05
204	1926	1926	4	29	0.12
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204	1927	1926	11	24	2.12
204	1927	1926	11	25	0.16
204	1927	1926	11	26	2.05
204	1927	1926	11	27	0.29
204	1927	1926	12	3	0.40
204	1927	1926	12	6	0.05
204	1927	1926	12	18	0.02
204	1927	1926	12	21	0.20
204	1927	1926	12	22	0.02
204	1927	1926	12	23	0.12
204	1927	1927	1	6	0.38

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204	1927	1927	1	12	0.27
204	1927	1927	1	19	0.05
204	1927	1927	1	20	0.27
204	1927	1927	1	26	0.08
204	1927	1927	2	4	1.06
204	1927	1927	2	13	0.47
204	1927	1927	2	14	1.55
204	1927	1927	2	15	0.86
204	1927	1927	2	16	1.42
204	1927	1927	2	17	0.02
204	1927	1927	2	18	0.40
204	1927	1927	2	21	0.02
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204	1927	1927	2	24	0.16
204	1927	1927	3	3	1.41
204	1927	1927	3	4	0.20
204	1927	1927	3	8	0.03
204	1927	1927	3	9	0.16
204	1927	1927	3	28	0.20
204	1927	1927	3	29	0.07
204	1927	1927	3	30	0.09
204	1927	1927	4	3	0.27
204	1927	1927	4	10	1.08
204	1927	1927	4	16	0.08
204	1927	1927	5	7	0.08
204	1928	1927	10	25	0.08
204	1928	1927	10	26	0.34
204	1928	1927	10	27	1.70
204	1928	1927	10	31	1.29
204	1928	1927	11	5	0.04
204	1928	1927	11	13	0.20
204	1928	1927	11	21	0.03
204	1928	1927	12	9	0.15
204	1928	1927	12	10	0.41
204	1928	1927	12	14	0.25
204	1928	1927	12	21	0.32
204	1928	1927	12	25	2.92
204	1928	1927	12	26	0.11
204	1928	1927	12	29	0.20
204	1928	1927	12	30	0.14
204	1928	1928	1	22	0.06
204	1928	1928	1	23	0.06
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204	1928	1928	2	3	1.29
204	1928	1928	2	4	1.26
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204	1928	1928	3	5	0.01
204	1928	1928	3	6	0.02

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204	1928	1928	3	25	0.09
204	1928	1928	3	27	0.22
204	1928	1928	4	3	0.19
204	1928	1928	4	4	0.04
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204	1928	1928	5	8	0.89
204	1928	1928	5	9	0.02
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204	1929	1928	11	3	0.14
204	1929	1928	11	13	1.16
204	1929	1928	11	14	1.37
204	1929	1928	11	15	0.12
204	1929	1928	12	2	0.14
204	1929	1928	12	3	0.92
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204	1929	1928	12	11	0.12
204	1929	1928	12	12	0.26
204	1929	1928	12	13	0.37
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204	1929	1929	2	3	0.50
204	1929	1929	2	4	0.13
204	1929	1929	2	6	0.03
204	1929	1929	2	7	0.01
204	1929	1929	2	18	0.35
204	1929	1929	3	9	0.04
204	1929	1929	3	10	0.55
204	1929	1929	3	11	0.07
204	1929	1929	3	13	0.10
204	1929	1929	3	18	0.03
204	1929	1929	3	24	0.36
204	1929	1929	3	25	0.01
204	1929	1929	4	4	0.85
204	1929	1929	4	5	0.12
204	1929	1929	4	6	0.12
204	1929	1929	4	9	0.04
204	1929	1929	4	19	0.08
204	1929	1929	6	8	0.03
204	1929	1929	6	16	0.07
204	1930	1929	12	12	0.06
204	1930	1929	12	13	0.03
204	1930	1929	12	14	0.02
204	1930	1930	1	5	0.60
204	1930	1930	1	6	0.56
204	1930	1930	1	9	0.95
204	1930	1930	1	10	0.19
204	1930	1930	1	11	0.68
204	1930	1930	1	12	0.66
204	1930	1930	1	13	0.16

204	1930	1930	1	14	0.28
204	1930	1930	1	15	0.04
204	1930	1930	1	18	0.08
204	1930	1930	1	19	0.02
204	1930	1930	2	20	0.22
204	1930	1930	2	22	0.80
204	1930	1930	2	23	0.12
204	1930	1930	2	26	0.17
204	1930	1930	2	27	0.14
204	1930	1930	3	3	0.03
204	1930	1930	3	4	0.37
204	1930	1930	3	5	0.09
204	1930	1930	3	6	0.22
204	1930	1930	3	14	1.49
204	1930	1930	3	15	0.65
204	1930	1930	3	16	0.11
204	1930	1930	3	17	0.22
204	1930	1930	3	18	0.11
204	1930	1930	3	19	0.02
204	1930	1930	4	13	0.27
204	1930	1930	4	14	0.18
204	1930	1930	4	30	0.14
204	1930	1930	5	1	0.17
204	1930	1930	5	3	0.45
204	1930	1930	5	4	0.13
204	1930	1930	5	5	0.03
204	1930	1930	5	8	0.01
204	1930	1930	5	16	0.10
204	1931	1930	9	30	0.29
204	1931	1930	11	13	0.14
204	1931	1930	11	15	0.09
204	1931	1930	11	16	0.17
204	1931	1930	11	17	0.30
204	1931	1930	11	26	0.75
204	1931	1930	11	27	0.19
204	1931	1931	1	1	0.38
204	1931	1931	1	2	0.73
204	1931	1931	1	5	0.75
204	1931	1931	1	6	0.04
204	1931	1931	1	7	0.72
204	1931	1931	1	8	0.31
204	1931	1931	1	13	0.45
204	1931	1931	1	31	0.54
204	1931	1931	2	3	0.71
204	1931	1931	2	4	0.46
204	1931	1931	2	8	0.10
204	1931	1931	2	10	0.12
204	1931	1931	2	12	0.36
204	1931	1931	2	13	0.11
204	1931	1931	2	14	0.04
204	1931	1931	2	18	0.02
204	1931	1931	3	11	0.12

204	1931	1931	4	23	0.12
204	1931	1931	4	26	0.39
204	1931	1931	4	27	0.12
204	1931	1931	4	28	0.02
204	1931	1931	5	24	0.98
204	1931	1931	5	25	0.12
204	1931	1931	8	13	0.14
204	1932	1931	11	15	0.78
204	1932	1931	11	17	0.02
204	1932	1931	11	27	1.92
204	1932	1931	12	8	0.90
204	1932	1931	12	11	0.35
204	1932	1931	12	12	0.06
204	1932	1931	12	14	1.02
204	1932	1931	12	21	0.43
204	1932	1931	12	22	0.03
204	1932	1931	12	23	0.02
204	1932	1931	12	24	0.44
204	1932	1931	12	25	1.37
204	1932	1931	12	27	0.41
204	1932	1931	12	28	1.98
204	1932	1931	12	31	0.29
204	1932	1932	1	2	0.31
204	1932	1932	1	12	0.14
204	1932	1932	1	13	0.28
204	1932	1932	1	15	1.45
204	1932	1932	1	16	0.02
204	1932	1932	1	26	0.07
204	1932	1932	1	31	0.83
204	1932	1932	2	1	0.33
204	1932	1932	2	2	0.35
204	1932	1932	2	6	0.15
204	1932	1932	2	8	1.41
204	1932	1932	2	9	0.72
204	1932	1932	2	13	0.13
204	1932	1932	2	14	0.06
204	1932	1932	2	16	0.29
204	1932	1932	2	17	0.07
204	1932	1932	3	14	0.06
204	1932	1932	3	15	0.12
204	1932	1932	4	26	0.59
204	1932	1932	4	27	0.17
204	1932	1932	5	5	0.12
204	1933	1932	9	30	0.17
204	1933	1932	10	1	0.04
204	1933	1932	11	1	0.01
204	1933	1932	12	9	0.08
204	1933	1932	12	10	0.22
204	1933	1932	12	11	0.34
204	1933	1932	12	12	0.12
204	1933	1932	12	19	0.22
204	1933	1932	12	20	0.02

204	1933	1932	12	22	0.03
204	1933	1932	12	23	0.35
204	1933	1933	1	16	0.61
204	1933	1933	1	17	0.18
204	1933	1933	1	19	2.12
204	1933	1933	1	20	0.69
204	1933	1933	1	22	0.59
204	1933	1933	1	23	0.54
204	1933	1933	1	24	0.02
204	1933	1933	1	25	0.66
204	1933	1933	1	26	0.10
204	1933	1933	1	28	0.33
204	1933	1933	1	29	0.42
204	1933	1933	1	30	0.69
204	1933	1933	2	12	0.15
204	1933	1933	2	13	0.15
204	1933	1933	3	13	0.07
204	1933	1933	3	17	0.25
204	1933	1933	3	24	0.23
204	1933	1933	4	28	0.66
204	1933	1933	5	2	0.13
204	1933	1933	5	21	0.15
204	1933	1933	6	5	1.26
204	1934	1933	10	31	0.27
204	1934	1933	11	29	0.02
204	1934	1933	12	3	0.13
204	1934	1933	12	4	0.03
204	1934	1933	12	12	0.17
204	1934	1933	12	13	1.45
204	1934	1933	12	14	0.25
204	1934	1933	12	15	0.27
204	1934	1933	12	16	0.07
204	1934	1933	12	30	0.48
204	1934	1933	12	31	0.18
204	1934	1934	1	1	1.53
204	1934	1934	1	2	0.10
204	1934	1934	2	5	0.02
204	1934	1934	2	6	0.03
204	1934	1934	2	15	0.49
204	1934	1934	2	16	0.25
204	1934	1934	2	20	0.36
204	1934	1934	2	23	0.43
204	1934	1934	2	24	1.23
204	1934	1934	2	26	0.13
204	1934	1934	2	27	0.10
204	1934	1934	5	26	0.34
204	1934	1934	6	5	0.40
204	1934	1934	6	6	0.13
204	1935	1934	10	17	0.66
204	1935	1934	10	18	0.76
204	1935	1934	11	1	0.21
204	1935	1934	11	15	0.37

204	1935	1934	11	16	0.38
204	1935	1934	11	17	0.40
204	1935	1934	11	18	1.64
204	1935	1934	12	8	0.05
204	1935	1934	12	9	0.07
204	1935	1934	12	12	0.09
204	1935	1934	12	13	1.03
204	1935	1934	12	28	0.41
204	1935	1934	12	31	0.05
204	1935	1935	1	4	0.27
204	1935	1935	1	5	0.99
204	1935	1935	1	6	0.05
204	1935	1935	1	9	1.03
204	1935	1935	1	10	0.28
204	1935	1935	1	11	0.15
204	1935	1935	1	15	0.98
204	1935	1935	1	16	0.03
204	1935	1935	1	17	0.04
204	1935	1935	1	18	0.06
204	1935	1935	1	19	0.30
204	1935	1935	2	4	0.69
204	1935	1935	2	5	0.45
204	1935	1935	2	6	0.31
204	1935	1935	2	7	0.05
204	1935	1935	2	8	0.05
204	1935	1935	2	14	0.11
204	1935	1935	3	2	0.41
204	1935	1935	3	3	0.56
204	1935	1935	3	4	0.09
204	1935	1935	3	7	0.89
204	1935	1935	3	8	0.32
204	1935	1935	3	9	0.05
204	1935	1935	3	19	0.06
204	1935	1935	3	23	0.05
204	1935	1935	3	24	0.94
204	1935	1935	4	3	0.10
204	1935	1935	4	4	0.57
204	1935	1935	4	7	0.29
204	1935	1935	4	8	0.93
204	1935	1935	4	9	0.17
204	1935	1935	4	14	0.06
204	1935	1935	4	15	0.07
204	1935	1935	4	16	0.13
204	1935	1935	4	29	0.22
204	1935	1935	4	30	0.04
204	1935	1935	5	1	0.17
204	1935	1935	8	26	0.15
204	1936	1935	10	1	0.04
204	1936	1935	10	11	0.07
204	1936	1935	10	15	0.45
204	1936	1935	11	2	0.29
204	1936	1935	11	17	0.88

204	1936	1935	11	18	0.04
204	1936	1935	12	3	0.74
204	1936	1935	12	12	0.14
204	1936	1935	12	27	0.02
204	1936	1935	12	29	0.69
204	1936	1935	12	30	0.07
204	1936	1936	1	10	0.11
204	1936	1936	1	11	0.25
204	1936	1936	1	12	0.15
204	1936	1936	1	28	0.04
204	1936	1936	2	1	0.44
204	1936	1936	2	2	1.47
204	1936	1936	2	11	0.29
204	1936	1936	2	12	0.25
204	1936	1936	2	13	0.90
204	1936	1936	2	14	0.26
204	1936	1936	2	15	0.99
204	1936	1936	2	16	0.76
204	1936	1936	2	18	0.48
204	1936	1936	2	19	0.05
204	1936	1936	2	20	0.04
204	1936	1936	2	23	0.97
204	1936	1936	2	24	0.30
204	1936	1936	3	21	0.09
204	1936	1936	3	24	0.57
204	1936	1936	3	31	0.70
204	1936	1936	4	3	0.22
204	1936	1936	4	4	0.39
204	1936	1936	5	29	0.08
204	1936	1936	6	2	0.05
204	1936	1936	8	9	0.02
204	1936	1936	8	10	0.17
204	1937	1936	9	3	0.03
204	1937	1936	9	4	0.04
204	1937	1936	10	17	0.86
204	1937	1936	10	18	0.94
204	1937	1936	10	19	0.38
204	1937	1936	10	31	0.55
204	1937	1936	12	15	0.43
204	1937	1936	12	16	0.08
204	1937	1936	12	17	0.03
204	1937	1936	12	24	0.34
204	1937	1936	12	27	1.58
204	1937	1936	12	28	0.44
204	1937	1936	12	29	0.25
204	1937	1936	12	30	0.13
204	1937	1936	12	31	1.15
204	1937	1937	1	1	0.19
204	1937	1937	1	6	0.63
204	1937	1937	1	7	0.04
204	1937	1937	1	12	0.80
204	1937	1937	1	13	0.39

204	1937	1937	1	16	0.14
204	1937	1937	1	19	0.04
204	1937	1937	1	28	0.05
204	1937	1937	1	29	0.29
204	1937	1937	1	30	0.35
204	1937	1937	1	31	0.74
204	1937	1937	2	2	0.14
204	1937	1937	2	5	0.54
204	1937	1937	2	6	1.12
204	1937	1937	2	7	0.92
204	1937	1937	2	12	0.28
204	1937	1937	2	13	0.02
204	1937	1937	2	14	1.46
204	1937	1937	2	15	0.07
204	1937	1937	2	25	0.69
204	1937	1937	2	26	0.10
204	1937	1937	3	12	0.65
204	1937	1937	3	13	0.93
204	1937	1937	3	15	0.34
204	1937	1937	3	18	0.28
204	1937	1937	3	22	1.37
204	1937	1937	3	23	0.24
204	1937	1937	3	24	0.14
204	1937	1937	3	25	0.73
204	1937	1937	3	28	0.14
204	1937	1937	4	6	0.07
204	1937	1937	4	27	0.16
204	1937	1937	4	28	0.02
204	1938	1937	10	13	0.06
204	1938	1937	12	10	0.35
204	1938	1937	12	11	0.21
204	1938	1937	12	12	1.39
204	1938	1937	12	23	0.07
204	1938	1937	12	26	0.16
204	1938	1938	1	15	1.52
204	1938	1938	1	17	0.05
204	1938	1938	1	18	0.04
204	1938	1938	1	19	0.37
204	1938	1938	1	20	0.09
204	1938	1938	1	29	0.49
204	1938	1938	2	1	1.78
204	1938	1938	2	2	0.10
204	1938	1938	2	3	0.95
204	1938	1938	2	4	0.35
204	1938	1938	2	5	0.06
204	1938	1938	2	9	0.22
204	1938	1938	2	10	0.21
204	1938	1938	2	11	2.15
204	1938	1938	2	12	1.13
204	1938	1938	2	14	0.27
204	1938	1938	2	15	0.06
204	1938	1938	2	18	0.03

204	1938	1938	2	19	0.19
204	1938	1938	2	28	0.17
204	1938	1938	3	1	1.18
204	1938	1938	3	2	0.52
204	1938	1938	3	3	1.98
204	1938	1938	3	4	0.13
204	1938	1938	3	6	0.05
204	1938	1938	3	7	0.27
204	1938	1938	3	8	0.26
204	1938	1938	3	12	0.79
204	1938	1938	3	13	0.44
204	1938	1938	3	14	0.06
204	1938	1938	3	17	0.05
204	1938	1938	3	24	0.06
204	1938	1938	4	5	0.07
204	1938	1938	4	13	0.14
204	1938	1938	4	25	0.80
204	1938	1938	4	26	0.07
204	1938	1938	4	29	0.10
204	1938	1938	4	30	0.25
204	1938	1938	5	1	0.02
204	1939	1938	9	27	0.56
204	1939	1938	9	28	0.33
204	1939	1938	10	13	0.02
204	1939	1938	10	15	0.03
204	1939	1938	10	31	0.11
204	1939	1938	11	30	0.13
204	1939	1938	12	14	0.05
204	1939	1938	12	15	0.33
204	1939	1938	12	16	0.94
204	1939	1938	12	18	0.08
204	1939	1938	12	19	0.15
204	1939	1938	12	20	1.12
204	1939	1938	12	21	0.87
204	1939	1939	1	3	0.11
204	1939	1939	1	5	0.76
204	1939	1939	1	6	0.39
204	1939	1939	1	21	0.76
204	1939	1939	1	22	0.18
204	1939	1939	1	28	0.03
204	1939	1939	1	30	0.82
204	1939	1939	2	1	0.16
204	1939	1939	2	3	0.52
204	1939	1939	2	4	0.49
204	1939	1939	2	7	0.06
204	1939	1939	2	8	0.22
204	1939	1939	2	9	0.20
204	1939	1939	2	10	0.31
204	1939	1939	3	9	0.35
204	1939	1939	3	10	1.47
204	1939	1939	3	20	0.07
204	1939	1939	3	26	0.63

204	1939	1939	3	27	0.32
204	1939	1939	4	1	0.07
204	1939	1939	4	13	0.03
204	1939	1939	5	11	0.05
204	1940	1939	9	25	1.85
204	1940	1939	9	26	0.10
204	1940	1939	10	1	0.06
204	1940	1939	10	7	0.50
204	1940	1939	11	26	1.05
204	1940	1939	12	11	0.48
204	1940	1939	12	24	0.97
204	1940	1940	1	2	0.25
204	1940	1940	1	3	0.12
204	1940	1940	1	4	0.35
204	1940	1940	1	6	0.15
204	1940	1940	1	7	0.10
204	1940	1940	1	8	0.44
204	1940	1940	1	9	0.22
204	1940	1940	1	10	0.41
204	1940	1940	1	11	1.49
204	1940	1940	1	12	0.35
204	1940	1940	1	23	0.20
204	1940	1940	1	24	0.66
204	1940	1940	1	26	0.03
204	1940	1940	2	1	0.10
204	1940	1940	2	2	0.18
204	1940	1940	2	3	0.10
204	1940	1940	2	4	0.73
204	1940	1940	2	7	0.09
204	1940	1940	2	14	0.54
204	1940	1940	2	15	0.17
204	1940	1940	2	18	0.03
204	1940	1940	2	26	0.56
204	1940	1940	2	29	0.25
204	1940	1940	3	27	0.16
204	1940	1940	3	30	0.03
204	1940	1940	3	31	0.87
204	1940	1940	4	1	0.81
204	1940	1940	4	26	0.41
204	1940	1940	4	27	0.71
204	1941	1940	10	8	0.03
204	1941	1940	10	25	0.40
204	1941	1940	10	26	0.03
204	1941	1940	11	18	0.10
204	1941	1940	12	16	0.64
204	1941	1940	12	17	0.97
204	1941	1940	12	18	0.09
204	1941	1940	12	19	0.29
204	1941	1940	12	22	0.95
204	1941	1940	12	23	1.90
204	1941	1940	12	24	0.25
204	1941	1940	12	25	0.39

204	1941	1940	12	27	0.17
204	1941	1940	12	29	0.25
204	1941	1940	12	30	0.10
204	1941	1940	12	31	0.04
204	1941	1941	1	4	0.10
204	1941	1941	1	5	0.19
204	1941	1941	1	7	0.68
204	1941	1941	1	8	0.53
204	1941	1941	1	9	2.10
204	1941	1941	1	10	0.21
204	1941	1941	1	11	0.03
204	1941	1941	1	14	0.28
204	1941	1941	1	16	0.03
204	1941	1941	1	20	0.33
204	1941	1941	1	22	0.81
204	1941	1941	1	23	0.03
204	1941	1941	1	24	0.57
204	1941	1941	1	26	0.55
204	1941	1941	2	6	1.10
204	1941	1941	2	8	0.55
204	1941	1941	2	9	0.03
204	1941	1941	2	10	0.45
204	1941	1941	2	11	0.72
204	1941	1941	2	12	0.60
204	1941	1941	2	15	0.92
204	1941	1941	2	16	0.06
204	1941	1941	2	17	2.12
204	1941	1941	2	18	0.03
204	1941	1941	2	20	0.12
204	1941	1941	2	21	0.28
204	1941	1941	2	22	0.60
204	1941	1941	2	24	0.52
204	1941	1941	2	25	0.05
204	1941	1941	3	1	1.79
204	1941	1941	3	2	0.38
204	1941	1941	3	3	0.12
204	1941	1941	3	4	1.56
204	1941	1941	3	5	0.63
204	1941	1941	3	12	0.32
204	1941	1941	3	13	2.21
204	1941	1941	3	14	0.35
204	1941	1941	3	15	0.17
204	1941	1941	3	29	1.66
204	1941	1941	3	31	0.94
204	1941	1941	4	1	0.81
204	1941	1941	4	2	0.32
204	1941	1941	4	5	0.92
204	1941	1941	4	10	0.11
204	1941	1941	4	11	1.12
204	1941	1941	4	30	0.55
204	1941	1941	5	12	0.06
204	1941	1941	7	26	0.05

204	1941	1941	8	15	0.03
204	1942	1941	10	20	0.19
204	1942	1941	10	22	0.36
204	1942	1941	10	27	0.50
204	1942	1941	11	30	0.32
204	1942	1941	12	3	0.61
204	1942	1941	12	4	0.22
204	1942	1941	12	9	0.03
204	1942	1941	12	10	0.08
204	1942	1941	12	11	0.75
204	1942	1941	12	13	0.05
204	1942	1941	12	15	0.37
204	1942	1941	12	17	0.15
204	1942	1941	12	21	0.04
204	1942	1941	12	26	0.31
204	1942	1941	12	27	0.02
204	1942	1941	12	28	3.87
204	1942	1941	12	29	0.55
204	1942	1941	12	30	0.35
204	1942	1941	12	31	0.51
204	1942	1942	1	1	0.51
204	1942	1942	1	22	0.74
204	1942	1942	1	23	0.02
204	1942	1942	1	25	0.27
204	1942	1942	1	26	0.07
204	1942	1942	1	28	0.24
204	1942	1942	1	29	0.01
204	1942	1942	2	3	0.10
204	1942	1942	2	7	0.03
204	1942	1942	2	22	0.55
204	1942	1942	2	24	0.02
204	1942	1942	3	11	0.50
204	1942	1942	3	12	0.03
204	1942	1942	3	15	1.42
204	1942	1942	4	4	0.35
204	1942	1942	4	5	0.05
204	1942	1942	4	6	0.55
204	1942	1942	4	10	0.08
204	1942	1942	4	11	0.06
204	1942	1942	4	13	0.03
204	1942	1942	4	14	0.54
204	1942	1942	4	17	0.48
204	1942	1942	4	21	0.06
204	1942	1942	4	22	1.35
204	1942	1942	4	28	0.08
204	1942	1942	5	1	0.07
204	1942	1942	5	11	0.06
204	1942	1942	5	26	0.10
204	1942	1942	8	10	0.07
204	1943	1942	10	28	0.11
204	1943	1942	10	29	0.69
204	1943	1942	11	4	0.01

204	1943	1942	11	15	0.11
204	1943	1942	11	18	0.04
204	1943	1942	11	19	0.48
204	1943	1942	11	20	0.08
204	1943	1942	12	7	0.02
204	1943	1942	12	24	1.53
204	1943	1942	12	25	0.38
204	1943	1943	1	21	0.30
204	1943	1943	1	22	2.83
204	1943	1943	1	23	2.14
204	1943	1943	1	24	0.23
204	1943	1943	1	25	0.10
204	1943	1943	1	26	0.30
204	1943	1943	1	27	0.50
204	1943	1943	1	30	0.12
204	1943	1943	1	31	0.31
204	1943	1943	2	8	0.09
204	1943	1943	2	9	0.15
204	1943	1943	2	17	0.12
204	1943	1943	2	21	0.35
204	1943	1943	2	22	0.97
204	1943	1943	2	23	0.25
204	1943	1943	2	24	0.25
204	1943	1943	3	3	0.14
204	1943	1943	3	4	0.95
204	1943	1943	3	5	0.45
204	1943	1943	3	6	0.03
204	1943	1943	3	7	0.05
204	1943	1943	3	8	0.15
204	1943	1943	3	9	0.35
204	1943	1943	3	10	0.24
204	1943	1943	3	11	0.07
204	1943	1943	3	18	0.30
204	1943	1943	3	30	0.11
204	1943	1943	4	6	0.87
204	1943	1943	4	8	0.12
204	1943	1943	4	15	0.01
204	1944	1943	10	19	0.37
204	1944	1943	10	20	0.07
204	1944	1943	10	21	0.03
204	1944	1943	10	27	0.37
204	1944	1943	10	28	0.09
204	1944	1943	11	18	0.04
204	1944	1943	11	20	0.13
204	1944	1943	12	6	0.74
204	1944	1943	12	10	0.09
204	1944	1943	12	11	0.93
204	1944	1943	12	12	0.03
204	1944	1943	12	18	0.02
204	1944	1943	12	20	0.06
204	1944	1943	12	21	0.58
204	1944	1943	12	28	0.58

204	1944	1943	12	29	0.87
204	1944	1943	12	30	0.32
204	1944	1944	1	2	0.10
204	1944	1944	1	3	0.22
204	1944	1944	1	4	0.04
204	1944	1944	1	6	0.22
204	1944	1944	1	24	0.55
204	1944	1944	1	25	0.03
204	1944	1944	1	27	0.03
204	1944	1944	1	30	0.74
204	1944	1944	2	3	0.13
204	1944	1944	2	4	1.02
204	1944	1944	2	9	0.43
204	1944	1944	2	15	0.15
204	1944	1944	2	17	0.03
204	1944	1944	2	20	1.57
204	1944	1944	2	21	0.91
204	1944	1944	2	22	2.13
204	1944	1944	2	23	0.33
204	1944	1944	2	24	0.12
204	1944	1944	2	26	0.09
204	1944	1944	2	27	0.25
204	1944	1944	2	29	0.20
204	1944	1944	3	1	0.23
204	1944	1944	3	2	0.29
204	1944	1944	3	4	0.14
204	1944	1944	3	5	0.35
204	1944	1944	3	14	0.03
204	1944	1944	4	9	0.03
204	1944	1944	4	12	0.05
204	1944	1944	4	27	1.51
204	1944	1944	4	28	0.06
204	1944	1944	5	15	0.04
204	1944	1944	5	18	0.02
204	1945	1944	11	1	0.17
204	1945	1944	11	5	0.28
204	1945	1944	11	10	0.28
204	1945	1944	11	11	0.74
204	1945	1944	11	12	0.77
204	1945	1944	11	13	0.10
204	1945	1944	11	14	0.48
204	1945	1944	11	15	0.35
204	1945	1944	12	2	0.25
204	1945	1944	12	22	0.22
204	1945	1944	12	23	0.50
204	1945	1944	12	28	0.28
204	1945	1944	12	29	0.30
204	1945	1945	1	31	0.10
204	1945	1945	2	1	1.25
204	1945	1945	2	2	1.75
204	1945	1945	2	3	0.69
204	1945	1945	2	4	0.05

204	1945	1945	2	5	0.02
204	1945	1945	2	15	0.04
204	1945	1945	2	28	0.15
204	1945	1945	3	2	0.31
204	1945	1945	3	4	0.25
204	1945	1945	3	15	0.42
204	1945	1945	3	17	0.95
204	1945	1945	3	21	0.14
204	1945	1945	3	22	0.02
204	1945	1945	3	23	0.69
204	1945	1945	3	26	0.45
204	1945	1945	3	27	0.03
204	1945	1945	4	9	0.09
204	1945	1945	5	13	0.02
204	1945	1945	6	4	0.02
204	1945	1945	8	2	0.09
204	1946	1945	10	15	0.02
204	1946	1945	10	30	0.44
204	1946	1945	10	31	0.06
204	1946	1945	11	6	0.09
204	1946	1945	11	7	0.10
204	1946	1945	11	11	0.14
204	1946	1945	11	15	0.04
204	1946	1945	11	25	0.22
204	1946	1945	11	29	0.31
204	1946	1945	12	5	0.41
204	1946	1945	12	6	0.33
204	1946	1945	12	22	2.02
204	1946	1945	12	23	0.70
204	1946	1945	12	25	0.40
204	1946	1945	12	26	0.02
204	1946	1946	1	3	0.33
204	1946	1946	1	5	0.31
204	1946	1946	2	3	0.85
204	1946	1946	2	4	0.30
204	1946	1946	2	11	0.07
204	1946	1946	2	16	0.15
204	1946	1946	2	20	0.03
204	1946	1946	3	13	0.06
204	1946	1946	3	14	0.12
204	1946	1946	3	19	0.92
204	1946	1946	3	20	0.31
204	1946	1946	3	28	0.32
204	1946	1946	3	29	0.63
204	1946	1946	3	30	2.14
204	1946	1946	3	31	0.27
204	1946	1946	4	1	1.18
204	1946	1946	4	7	0.01
204	1946	1946	5	22	0.03
204	1946	1946	5	26	0.05
204	1946	1946	5	27	0.03
204	1947	1946	10	1	0.08

204	1947	1946	10	16	0.22
204	1947	1946	11	8	0.04
204	1947	1946	11	12	0.70
204	1947	1946	11	13	1.20
204	1947	1946	11	14	0.47
204	1947	1946	11	20	1.73
204	1947	1946	11	21	0.12
204	1947	1946	11	23	0.54
204	1947	1946	11	24	0.04
204	1947	1946	12	5	0.14
204	1947	1946	12	6	0.08
204	1947	1946	12	7	0.15
204	1947	1946	12	24	0.05
204	1947	1946	12	25	0.23
204	1947	1946	12	26	0.34
204	1947	1946	12	27	0.29
204	1947	1946	12	28	0.05
204	1947	1947	1	13	0.01
204	1947	1947	1	28	0.42
204	1947	1947	1	29	0.10
204	1947	1947	2	9	0.13
204	1947	1947	2	10	0.46
204	1947	1947	2	12	0.02
204	1947	1947	2	13	0.02
204	1947	1947	2	17	0.07
204	1947	1947	3	2	0.05
204	1947	1947	3	4	0.35
204	1947	1947	3	20	0.05
204	1947	1947	3	21	0.02
204	1947	1947	3	28	0.39
204	1947	1947	3	29	0.01
204	1947	1947	3	30	0.04
204	1947	1947	4	3	0.04
204	1947	1947	4	4	0.05
204	1947	1947	4	25	0.03
204	1947	1947	5	27	0.11
204	1947	1947	6	7	0.03
204	1947	1947	8	9	0.05
204	1948	1947	10	11	0.14
204	1948	1947	10	17	0.08
204	1948	1947	10	29	0.02
204	1948	1947	10	30	0.10
204	1948	1947	11	2	0.01
204	1948	1947	12	4	0.04
204	1948	1947	12	5	0.14
204	1948	1947	12	6	0.02
204	1948	1947	12	18	0.03
204	1948	1947	12	21	0.33
204	1948	1948	1	3	0.01
204	1948	1948	2	2	0.02
204	1948	1948	2	5	0.70
204	1948	1948	2	6	0.29

204	1948	1948	2	7	0.14
204	1948	1948	2	28	0.20
204	1948	1948	2	29	0.01
204	1948	1948	3	9	0.11
204	1948	1948	3	14	1.10
204	1948	1948	3	15	0.22
204	1948	1948	3	17	0.62
204	1948	1948	3	19	0.05
204	1948	1948	3	20	0.04
204	1948	1948	3	24	0.71
204	1948	1948	3	25	0.34
204	1948	1948	3	29	0.07
204	1948	1948	4	3	0.36
204	1948	1948	4	4	0.02
204	1948	1948	4	6	0.04
204	1948	1948	4	9	0.15
204	1948	1948	4	10	0.26
204	1948	1948	4	11	0.06
204	1948	1948	4	22	0.05
204	1948	1948	4	29	0.78
204	1948	1948	5	19	0.05
204	1948	1948	5	30	0.20
204	1948	1948	5	31	0.51
204	1948	1948	6	4	0.06
204	1949	1948	10	12	0.15
204	1949	1948	12	4	0.25
204	1949	1948	12	6	0.05
204	1949	1948	12	14	0.09
204	1949	1948	12	15	0.09
204	1949	1948	12	17	1.41
204	1949	1948	12	18	0.05
204	1949	1948	12	23	0.05
204	1949	1948	12	25	0.03
204	1949	1948	12	26	0.39
204	1949	1948	12	27	1.05
204	1949	1948	12	28	0.12
204	1949	1949	1	1	0.02
204	1949	1949	1	2	0.11
204	1949	1949	1	12	0.24
204	1949	1949	1	19	0.02
204	1949	1949	1	20	0.34
204	1949	1949	1	22	0.19
204	1949	1949	1	23	0.34
204	1949	1949	1	24	0.02
204	1949	1949	2	3	0.12
204	1949	1949	2	5	0.14
204	1949	1949	2	7	0.37
204	1949	1949	2	8	0.01
204	1949	1949	2	12	0.21
204	1949	1949	2	24	0.22
204	1949	1949	2	25	0.25
204	1949	1949	2	26	0.08

204	1949	1949	2	27	0.21
204	1949	1949	3	2	0.21
204	1949	1949	3	3	0.07
204	1949	1949	3	4	1.19
204	1949	1949	3	5	0.52
204	1949	1949	3	6	0.06
204	1949	1949	3	8	0.06
204	1949	1949	3	10	0.11
204	1949	1949	3	11	0.52
204	1949	1949	3	12	0.20
204	1949	1949	3	16	0.05
204	1949	1949	3	20	0.71
204	1949	1949	3	23	0.34
204	1949	1949	3	24	0.08
204	1949	1949	4	17	0.24
204	1949	1949	5	18	0.16
204	1949	1949	5	19	0.56
204	1949	1949	5	20	0.03
204	1950	1949	10	19	0.02
204	1950	1949	11	8	0.13
204	1950	1949	11	10	1.50
204	1950	1949	12	8	2.33
204	1950	1949	12	9	0.11
204	1950	1949	12	15	0.43
204	1950	1949	12	18	0.21
204	1950	1949	12	19	0.55
204	1950	1950	1	2	0.06
204	1950	1950	1	8	0.10
204	1950	1950	1	9	0.66
204	1950	1950	1	11	0.48
204	1950	1950	1	12	0.15
204	1950	1950	1	14	0.20
204	1950	1950	1	15	0.26
204	1950	1950	1	17	0.15
204	1950	1950	1	24	0.02
204	1950	1950	1	28	0.19
204	1950	1950	1	29	0.25
204	1950	1950	2	5	0.22
204	1950	1950	2	6	0.99
204	1950	1950	2	10	0.23
204	1950	1950	2	11	0.02
204	1950	1950	3	2	0.10
204	1950	1950	3	25	1.39
204	1950	1950	3	26	0.02
204	1950	1950	4	8	0.62
204	1950	1950	5	3	0.15
204	1950	1950	7	10	0.90
204	1951	1950	10	27	0.77
204	1951	1950	10	31	0.09
204	1951	1950	11	13	0.09
204	1951	1950	11	14	0.30
204	1951	1950	11	15	0.05

204	1951	1950	11	17	0.06
204	1951	1950	11	18	0.52
204	1951	1950	11	19	0.25
204	1951	1950	11	20	0.56
204	1951	1950	12	1	0.06
204	1951	1950	12	4	0.40
204	1951	1950	12	7	0.02
204	1951	1950	12	14	0.04
204	1951	1950	12	15	0.13
204	1951	1950	12	26	0.03
204	1951	1951	1	5	0.19
204	1951	1951	1	10	0.50
204	1951	1951	1	11	0.02
204	1951	1951	1	12	0.41
204	1951	1951	1	16	0.16
204	1951	1951	1	18	0.05
204	1951	1951	1	19	0.34
204	1951	1951	1	29	0.42
204	1951	1951	2	5	0.02
204	1951	1951	2	12	0.09
204	1951	1951	2	23	0.10
204	1951	1951	2	25	0.20
204	1951	1951	2	27	1.20
204	1951	1951	3	1	1.14
204	1951	1951	3	2	0.17
204	1951	1951	3	5	0.05
204	1951	1951	3	6	0.06
204	1951	1951	4	4	0.10
204	1951	1951	4	19	0.19
204	1951	1951	4	25	0.65
204	1951	1951	4	26	0.01
204	1951	1951	4	28	0.74
204	1951	1951	5	4	0.02
204	1952	1951	10	25	0.59
204	1952	1951	10	26	0.21
204	1952	1951	11	20	0.95
204	1952	1951	11	21	0.24
204	1952	1951	11	22	0.02
204	1952	1951	12	1	0.05
204	1952	1951	12	2	0.54
204	1952	1951	12	4	0.70
204	1952	1951	12	5	0.83
204	1952	1951	12	12	0.29
204	1952	1951	12	13	0.10
204	1952	1951	12	19	0.43
204	1952	1951	12	29	0.28
204	1952	1951	12	30	0.80
204	1952	1951	12	31	0.29
204	1952	1952	1	7	0.74
204	1952	1952	1	8	0.10
204	1952	1952	1	11	0.05
204	1952	1952	1	12	0.44

204	1952	1952	1	13	0.64
204	1952	1952	1	14	0.05
204	1952	1952	1	15	1.36
204	1952	1952	1	16	1.44
204	1952	1952	1	17	0.30
204	1952	1952	1	18	0.48
204	1952	1952	1	21	0.08
204	1952	1952	1	24	0.04
204	1952	1952	1	27	0.87
204	1952	1952	2	2	0.03
204	1952	1952	2	12	0.18
204	1952	1952	2	17	0.11
204	1952	1952	2	21	0.04
204	1952	1952	3	1	0.47
204	1952	1952	3	2	0.06
204	1952	1952	3	4	0.17
204	1952	1952	3	7	1.97
204	1952	1952	3	8	0.02
204	1952	1952	3	9	0.30
204	1952	1952	3	10	0.07
204	1952	1952	3	11	0.18
204	1952	1952	3	13	0.18
204	1952	1952	3	15	3.58
204	1952	1952	3	16	0.55
204	1952	1952	3	19	0.20
204	1952	1952	3	20	0.03
204	1952	1952	4	7	0.09
204	1952	1952	4	8	0.20
204	1952	1952	4	10	0.19
204	1952	1952	4	11	0.04
204	1952	1952	4	14	0.01
204	1952	1952	4	26	0.04
204	1952	1952	5	12	0.02
204	1952	1952	6	6	0.03
204	1952	1952	7	30	0.02
204	1953	1952	11	14	0.65
204	1953	1952	11	15	1.31
204	1953	1952	11	16	0.66
204	1953	1952	11	23	0.04
204	1953	1952	11	30	0.74
204	1953	1952	12	2	1.13
204	1953	1952	12	6	0.16
204	1953	1952	12	7	0.15
204	1953	1952	12	8	0.15
204	1953	1952	12	20	1.41
204	1953	1952	12	27	0.29
204	1953	1952	12	28	1.01
204	1953	1952	12	31	1.09
204	1953	1953	1	6	0.10
204	1953	1953	1	7	0.07
204	1953	1953	1	8	0.09
204	1953	1953	1	13	0.17

204	1953	1953	1	14	0.75
204	1953	1953	1	15	0.07
204	1953	1953	1	20	0.01
204	1953	1953	3	2	0.39
204	1953	1953	3	10	0.10
204	1953	1953	3	20	0.59
204	1953	1953	4	8	0.03
204	1953	1953	4	20	0.16
204	1953	1953	4	27	0.13
204	1953	1953	4	28	0.95
204	1954	1953	11	5	0.24
204	1954	1953	11	14	2.05
204	1954	1953	11	15	0.07
204	1954	1953	11	20	0.15
204	1954	1953	12	4	0.25
204	1954	1954	1	11	0.43
204	1954	1954	1	12	0.52
204	1954	1954	1	13	0.14
204	1954	1954	1	17	0.02
204	1954	1954	1	18	0.12
204	1954	1954	1	19	0.22
204	1954	1954	1	20	1.24
204	1954	1954	1	23	0.03
204	1954	1954	1	24	0.50
204	1954	1954	1	25	1.42
204	1954	1954	2	13	0.82
204	1954	1954	2	14	0.39
204	1954	1954	2	15	0.05
204	1954	1954	2	17	0.03
204	1954	1954	2	18	0.18
204	1954	1954	3	9	0.15
204	1954	1954	3	10	0.07
204	1954	1954	3	16	0.02
204	1954	1954	3	17	1.39
204	1954	1954	3	18	0.03
204	1954	1954	3	20	1.02
204	1954	1954	3	21	0.34
204	1954	1954	3	24	0.11
204	1954	1954	3	25	0.39
204	1954	1954	3	30	0.79
204	1954	1954	4	28	0.26
204	1954	1954	5	15	0.02
204	1955	1954	11	11	0.31
204	1955	1954	11	12	0.10
204	1955	1954	11	16	0.88
204	1955	1954	12	3	0.32
204	1955	1954	12	4	1.53
204	1955	1954	12	10	0.82
204	1955	1954	12	15	0.01
204	1955	1955	1	1	0.10
204	1955	1955	1	2	0.72
204	1955	1955	1	5	0.02

204	1955	1955	1	10	1.06
204	1955	1955	1	11	0.22
204	1955	1955	1	16	0.62
204	1955	1955	1	17	0.08
204	1955	1955	1	18	1.06
204	1955	1955	1	19	0.47
204	1955	1955	1	20	0.02
204	1955	1955	1	31	0.05
204	1955	1955	2	1	0.01
204	1955	1955	2	17	0.76
204	1955	1955	2	18	0.06
204	1955	1955	2	26	0.12
204	1955	1955	2	27	0.33
204	1955	1955	2	28	0.14
204	1955	1955	3	9	0.01
204	1955	1955	3	10	0.09
204	1955	1955	3	11	0.23
204	1955	1955	4	18	0.06
204	1955	1955	4	21	0.05
204	1955	1955	4	22	1.06
204	1955	1955	4	23	0.02
204	1955	1955	4	26	0.14
204	1955	1955	4	30	0.53
204	1955	1955	5	1	0.10
204	1955	1955	5	2	0.09
204	1955	1955	5	7	0.21
204	1955	1955	5	8	0.79
204	1955	1955	5	30	0.02
204	1955	1955	6	14	0.02
204	1955	1955	8	5	0.01
204	1956	1955	11	14	1.40
204	1956	1955	11	17	0.25
204	1956	1955	11	18	0.11
204	1956	1955	11	21	0.20
204	1956	1955	12	1	0.01
204	1956	1955	12	2	0.13
204	1956	1955	12	4	0.34
204	1956	1955	12	5	0.02
204	1956	1955	12	6	0.12
204	1956	1955	12	7	0.18
204	1956	1955	12	9	0.02
204	1956	1955	12	20	0.04
204	1956	1955	12	23	0.17
204	1956	1955	12	24	1.25
204	1956	1955	12	25	3.15
204	1956	1955	12	26	0.12
204	1956	1955	12	27	0.74
204	1956	1955	12	31	0.18
204	1956	1956	1	2	0.02
204	1956	1956	1	16	0.04
204	1956	1956	1	20	0.02
204	1956	1956	1	21	0.02

204	1956	1956	1	23	0.16
204	1956	1956	1	25	1.17
204	1956	1956	1	26	2.24
204	1956	1956	1	27	0.76
204	1956	1956	1	31	0.27
204	1956	1956	2	18	0.04
204	1956	1956	2	23	0.30
204	1956	1956	2	24	0.18
204	1956	1956	2	26	0.07
204	1956	1956	4	1	0.06
204	1956	1956	4	2	0.02
204	1956	1956	4	11	0.06
204	1956	1956	4	12	0.94
204	1956	1956	4	14	0.04
204	1956	1956	4	15	0.01
204	1956	1956	4	27	0.36
204	1956	1956	4	28	0.39
204	1956	1956	5	4	0.04
204	1956	1956	5	9	0.73
204	1956	1956	5	10	0.42
204	1957	1956	10	2	0.01
204	1957	1956	10	4	0.53
204	1957	1956	10	6	0.04
204	1957	1956	10	7	0.02
204	1957	1956	10	31	0.04
204	1957	1956	12	5	0.06
204	1957	1956	12	6	0.30
204	1957	1957	1	4	0.40
204	1957	1957	1	7	0.04
204	1957	1957	1	12	0.01
204	1957	1957	1	13	1.23
204	1957	1957	1	14	0.02
204	1957	1957	1	20	0.10
204	1957	1957	1	21	0.58
204	1957	1957	1	23	0.03
204	1957	1957	1	24	0.23
204	1957	1957	1	26	0.39
204	1957	1957	1	27	0.01
204	1957	1957	1	29	0.13
204	1957	1957	2	8	0.41
204	1957	1957	2	9	0.47
204	1957	1957	2	10	0.02
204	1957	1957	2	17	0.01
204	1957	1957	2	18	0.03
204	1957	1957	2	20	0.01
204	1957	1957	2	23	0.91
204	1957	1957	2	24	0.04
204	1957	1957	2	28	0.30
204	1957	1957	3	1	0.76
204	1957	1957	3	9	0.05
204	1957	1957	3	10	0.15
204	1957	1957	3	16	0.17

204	1957	1957	3	19	0.11
204	1957	1957	4	14	0.06
204	1957	1957	4	17	0.01
204	1957	1957	4	18	0.97
204	1957	1957	4	20	0.13
204	1957	1957	4	21	0.13
204	1957	1957	5	11	0.02
204	1957	1957	5	12	0.25
204	1957	1957	5	15	0.09
204	1957	1957	5	19	0.60
204	1957	1957	5	20	0.05
204	1957	1957	5	21	0.27
204	1957	1957	6	10	0.08
204	1958	1957	10	11	0.18
204	1958	1957	10	12	0.01
204	1958	1957	10	13	0.06
204	1958	1957	10	14	0.34
204	1958	1957	10	20	0.01
204	1958	1957	10	21	0.22
204	1958	1957	11	3	0.20
204	1958	1957	11	14	0.11
204	1958	1957	11	15	0.09
204	1958	1957	11	17	0.03
204	1958	1957	12	5	1.06
204	1958	1957	12	6	0.54
204	1958	1957	12	15	0.25
204	1958	1957	12	16	0.65
204	1958	1957	12	17	0.91
204	1958	1957	12	18	0.01
204	1958	1957	12	19	0.07
204	1958	1957	12	22	0.02
204	1958	1958	1	2	0.09
204	1958	1958	1	10	0.18
204	1958	1958	1	24	0.01
204	1958	1958	1	25	0.67
204	1958	1958	1	26	1.62
204	1958	1958	1	27	0.29
204	1958	1958	1	30	0.17
204	1958	1958	2	3	1.43
204	1958	1958	2	4	0.79
204	1958	1958	2	5	0.34
204	1958	1958	2	7	0.10
204	1958	1958	2	8	0.26
204	1958	1958	2	13	0.52
204	1958	1958	2	19	1.73
204	1958	1958	2	25	1.84
204	1958	1958	2	26	0.18
204	1958	1958	3	1	0.12
204	1958	1958	3	2	0.01
204	1958	1958	3	6	0.32
204	1958	1958	3	7	0.02
204	1958	1958	3	9	0.02

204	1958	1958	3	11	0.15
204	1958	1958	3	12	0.01
204	1958	1958	3	13	0.11
204	1958	1958	3	14	0.07
204	1958	1958	3	15	0.69
204	1958	1958	3	16	0.81
204	1958	1958	3	17	0.14
204	1958	1958	3	20	0.06
204	1958	1958	3	21	0.63
204	1958	1958	3	22	0.76
204	1958	1958	3	24	0.07
204	1958	1958	3	27	0.97
204	1958	1958	3	28	0.39
204	1958	1958	3	30	0.31
204	1958	1958	3	31	0.19
204	1958	1958	4	1	1.11
204	1958	1958	4	2	0.58
204	1958	1958	4	3	1.61
204	1958	1958	4	4	0.52
204	1958	1958	4	5	1.26
204	1958	1958	4	6	1.31
204	1958	1958	5	1	0.05
204	1958	1958	5	11	0.01
204	1958	1958	5	12	0.02
204	1958	1958	5	22	0.25
204	1959	1958	9	7	0.59
204	1959	1958	9	8	0.32
204	1959	1958	9	23	0.56
204	1959	1958	9	24	0.15
204	1959	1958	11	10	0.10
204	1959	1958	11	11	0.03
204	1959	1958	11	15	0.04
204	1959	1958	12	28	0.10
204	1959	1958	12	29	0.11
204	1959	1959	1	6	2.05
204	1959	1959	1	7	0.07
204	1959	1959	1	10	0.08
204	1959	1959	1	13	0.30
204	1959	1959	2	7	0.02
204	1959	1959	2	8	0.18
204	1959	1959	2	10	0.21
204	1959	1959	2	11	1.57
204	1959	1959	2	12	0.45
204	1959	1959	2	16	0.58
204	1959	1959	2	17	0.34
204	1959	1959	2	18	0.03
204	1959	1959	2	19	0.09
204	1959	1959	2	21	1.32
204	1959	1959	2	22	0.19
204	1959	1959	4	25	0.31
204	1959	1959	4	26	0.19
204	1959	1959	4	27	0.18

204	1960	1959	9	17	0.01
204	1960	1959	9	19	0.04
204	1960	1959	12	10	0.06
204	1960	1959	12	24	0.36
204	1960	1959	12	25	0.47
204	1960	1960	1	1	0.02
204	1960	1960	1	10	2.30
204	1960	1960	1	11	0.12
204	1960	1960	1	12	0.78
204	1960	1960	1	14	0.20
204	1960	1960	1	15	0.53
204	1960	1960	1	23	0.39
204	1960	1960	1	25	0.16
204	1960	1960	2	2	2.02
204	1960	1960	2	3	0.04
204	1960	1960	2	4	0.13
204	1960	1960	2	6	0.13
204	1960	1960	2	9	0.40
204	1960	1960	2	10	0.41
204	1960	1960	2	11	0.05
204	1960	1960	2	19	0.04
204	1960	1960	2	29	0.75
204	1960	1960	3	13	0.29
204	1960	1960	3	23	0.01
204	1960	1960	3	28	0.49
204	1960	1960	4	23	0.17
204	1960	1960	4	24	0.12
204	1960	1960	4	27	1.47
204	1960	1960	4	28	0.89
204	1961	1960	10	6	0.64
204	1961	1960	11	4	0.38
204	1961	1960	11	6	0.67
204	1961	1960	11	12	0.24
204	1961	1960	11	13	0.44
204	1961	1960	11	14	0.08
204	1961	1960	11	26	0.77
204	1961	1960	11	27	0.65
204	1961	1960	12	2	0.95
204	1961	1960	12	11	0.07
204	1961	1961	1	26	0.89
204	1961	1961	1	27	0.01
204	1961	1961	2	1	0.11
204	1961	1961	2	12	0.01
204	1961	1961	3	6	0.08
204	1961	1961	3	15	0.58
204	1961	1961	3	17	0.10
204	1961	1961	3	25	0.09
204	1961	1961	3	27	0.02
204	1961	1961	3	28	0.01
204	1961	1961	4	22	0.25
204	1961	1961	5	7	0.16
204	1962	1961	11	20	2.16

204	1962	1961	11	21	0.47
204	1962	1961	11	25	0.02
204	1962	1961	11	26	0.64
204	1962	1961	11	30	0.06
204	1962	1961	12	2	2.13
204	1962	1961	12	3	0.16
204	1962	1961	12	14	0.04
204	1962	1961	12	15	0.01
204	1962	1961	12	16	0.01
204	1962	1961	12	17	0.01
204	1962	1962	1	13	0.10
204	1962	1962	1	20	2.00
204	1962	1962	1	21	0.34
204	1962	1962	1	22	0.38
204	1962	1962	1	23	0.12
204	1962	1962	2	7	0.32
204	1962	1962	2	8	1.24
204	1962	1962	2	9	0.89
204	1962	1962	2	10	2.61
204	1962	1962	2	11	2.27
204	1962	1962	2	12	0.76
204	1962	1962	2	14	0.17
204	1962	1962	2	15	1.02
204	1962	1962	2	16	0.36
204	1962	1962	2	17	0.04
204	1962	1962	2	19	1.76
204	1962	1962	2	20	0.13
204	1962	1962	2	21	0.40
204	1962	1962	2	24	0.02
204	1962	1962	2	25	0.10
204	1962	1962	2	26	0.42
204	1962	1962	3	2	0.08
204	1962	1962	3	3	0.08
204	1962	1962	3	5	0.05
204	1962	1962	3	6	0.75
204	1962	1962	3	7	0.34
204	1962	1962	3	8	0.02
204	1962	1962	3	15	0.06
204	1962	1962	3	19	0.21
204	1962	1962	3	20	0.02
204	1962	1962	3	21	0.02
204	1962	1962	3	23	0.32
204	1962	1962	3	28	0.02
204	1962	1962	4	28	0.04
204	1962	1962	5	12	0.01
204	1962	1962	5	17	0.08
204	1962	1962	5	27	0.01
204	1963	1962	10	14	0.46
204	1963	1962	11	2	0.01
204	1963	1962	12	16	0.28
204	1963	1962	12	17	0.16
204	1963	1963	1	30	0.06

204	1963	1963	1	31	0.42
204	1963	1963	2	1	0.52
204	1963	1963	2	2	0.32
204	1963	1963	2	9	0.16
204	1963	1963	2	10	2.65
204	1963	1963	2	11	0.86
204	1963	1963	2	13	0.20
204	1963	1963	2	14	0.05
204	1963	1963	3	7	0.02
204	1963	1963	3	9	0.18
204	1963	1963	3	10	0.07
204	1963	1963	3	15	0.16
204	1963	1963	3	16	0.06
204	1963	1963	3	17	1.52
204	1963	1963	3	23	0.46
204	1963	1963	3	28	1.16
204	1963	1963	4	7	0.05
204	1963	1963	4	8	0.12
204	1963	1963	4	9	0.02
204	1963	1963	4	10	0.03
204	1963	1963	4	14	0.68
204	1963	1963	4	15	0.21
204	1963	1963	4	17	0.02
204	1963	1963	4	18	0.02
204	1963	1963	4	19	0.02
204	1963	1963	4	20	0.04
204	1963	1963	4	21	0.43
204	1963	1963	4	26	0.97
204	1963	1963	5	9	0.23
204	1963	1963	5	11	0.01
204	1963	1963	5	25	0.01
204	1963	1963	5	28	0.05
204	1963	1963	6	11	0.14
204	1963	1963	6	12	0.03
204	1963	1963	8	8	0.27
204	1963	1963	8	9	0.04
204	1964	1963	9	5	0.28
204	1964	1963	9	18	0.29
204	1964	1963	9	19	0.44
204	1964	1963	10	10	0.12
204	1964	1963	10	11	0.13
204	1964	1963	10	16	0.89
204	1964	1963	11	3	0.09
204	1964	1963	11	6	0.57
204	1964	1963	11	7	0.04
204	1964	1963	11	15	0.27
204	1964	1963	11	20	0.93
204	1964	1963	11	21	0.05
204	1964	1963	11	24	0.08
204	1964	1963	12	9	0.14
204	1964	1963	12	10	0.02
204	1964	1964	1	18	0.05

204	1964	1964	1	20	0.05
204	1964	1964	1	21	0.68
204	1964	1964	1	22	0.83
204	1964	1964	1	23	0.10
204	1964	1964	1	26	0.10
204	1964	1964	2	16	0.03
204	1964	1964	2	29	0.09
204	1964	1964	3	2	0.17
204	1964	1964	3	8	0.04
204	1964	1964	3	12	0.02
204	1964	1964	3	13	0.12
204	1964	1964	3	22	0.03
204	1964	1964	3	23	1.20
204	1964	1964	3	24	0.30
204	1964	1964	3	25	0.11
204	1964	1964	4	1	1.34
204	1964	1964	4	23	0.02
204	1964	1964	4	24	0.04
204	1964	1964	4	28	0.02
204	1964	1964	4	29	0.07
204	1964	1964	5	5	0.03
204	1964	1964	5	6	0.24
204	1964	1964	5	7	0.14
204	1964	1964	5	17	0.03
204	1964	1964	6	9	0.07
204	1964	1964	7	27	0.02
204	1965	1964	10	27	0.01
204	1965	1964	10	28	0.47
204	1965	1964	10	29	0.98
204	1965	1964	10	30	0.01
204	1965	1964	11	1	0.10
204	1965	1964	11	8	0.16
204	1965	1964	11	9	0.64
204	1965	1964	11	10	0.84
204	1965	1964	11	11	0.06
204	1965	1964	11	12	0.59
204	1965	1964	11	13	0.01
204	1965	1964	11	14	0.01
204	1965	1964	12	18	0.01
204	1965	1964	12	19	0.18
204	1965	1964	12	20	0.18
204	1965	1964	12	21	0.01
204	1965	1964	12	23	0.17
204	1965	1964	12	24	0.11
204	1965	1964	12	27	0.38
204	1965	1964	12	28	0.45
204	1965	1964	12	29	0.03
204	1965	1964	12	30	0.08
204	1965	1964	12	31	0.51
204	1965	1965	1	4	0.14
204	1965	1965	1	5	0.03
204	1965	1965	1	6	0.12

204	1965	1965	1	7	0.23
204	1965	1965	1	24	0.18
204	1965	1965	1	25	0.02
204	1965	1965	2	5	0.40
204	1965	1965	2	6	0.10
204	1965	1965	2	7	0.01
204	1965	1965	3	5	0.50
204	1965	1965	3	6	0.09
204	1965	1965	3	7	0.22
204	1965	1965	3	8	0.21
204	1965	1965	3	9	0.05
204	1965	1965	3	10	0.25
204	1965	1965	3	11	0.02
204	1965	1965	3	31	1.03
204	1965	1965	4	1	0.01
204	1965	1965	4	2	0.19
204	1965	1965	4	3	0.49
204	1965	1965	4	4	0.33
204	1965	1965	4	5	0.07
204	1965	1965	4	6	0.09
204	1965	1965	4	7	0.26
204	1965	1965	4	8	1.43
204	1965	1965	4	9	0.14
204	1965	1965	4	10	1.03
204	1965	1965	4	11	0.12
204	1965	1965	4	12	0.01
204	1965	1965	4	13	0.03
204	1966	1965	10	15	0.01
204	1966	1965	11	13	0.31
204	1966	1965	11	14	0.21
204	1966	1965	11	15	0.63
204	1966	1965	11	16	1.35
204	1966	1965	11	17	0.58
204	1966	1965	11	18	0.03
204	1966	1965	11	22	0.01
204	1966	1965	11	23	0.35
204	1966	1965	11	24	1.98
204	1966	1965	11	25	0.32
204	1966	1965	11	26	0.02
204	1966	1965	12	10	0.02
204	1966	1965	12	12	0.38
204	1966	1965	12	13	0.07
204	1966	1965	12	14	0.13
204	1966	1965	12	25	0.04
204	1966	1965	12	29	1.90
204	1966	1965	12	30	0.49
204	1966	1965	12	31	0.40
204	1966	1966	1	1	0.23
204	1966	1966	1	20	0.12
204	1966	1966	1	26	0.09
204	1966	1966	1	30	1.39
204	1966	1966	1	31	0.20

204	1966	1966	2	2	0.15
204	1966	1966	2	5	0.03
204	1966	1966	2	6	0.59
204	1966	1966	2	8	0.01
204	1966	1966	2	10	0.02
204	1966	1966	2	26	0.07
204	1966	1966	3	2	0.25
204	1966	1966	3	3	0.03
204	1966	1966	4	10	0.09
204	1966	1966	5	5	0.03
204	1966	1966	6	16	0.02
204	1967	1966	9	29	0.09
204	1967	1966	11	7	0.68
204	1967	1966	11	8	0.64
204	1967	1966	11	16	0.03
204	1967	1966	11	20	0.35
204	1967	1966	11	21	0.03
204	1967	1966	11	22	0.09
204	1967	1966	11	29	0.20
204	1967	1967	1	22	1.43
204	1967	1967	1	24	1.05
204	1967	1967	1	25	1.89
204	1967	1967	1	30	0.04
204	1967	1967	1	31	0.26
204	1967	1967	2	25	0.31
204	1967	1967	3	4	0.17
204	1967	1967	3	11	0.12
204	1967	1967	3	12	0.65
204	1967	1967	3	13	0.41
204	1967	1967	3	14	0.23
204	1967	1967	3	17	0.11
204	1967	1967	3	31	0.61
204	1967	1967	4	1	0.21
204	1967	1967	4	2	0.26
204	1967	1967	4	4	0.10
204	1967	1967	4	5	0.40
204	1967	1967	4	7	0.56
204	1967	1967	4	8	0.02
204	1967	1967	4	11	0.84
204	1967	1967	4	12	0.03
204	1967	1967	4	15	0.10
204	1967	1967	4	16	0.10
204	1967	1967	4	18	0.63
204	1967	1967	4	19	0.52
204	1967	1967	4	20	0.21
204	1967	1967	4	21	0.15
204	1967	1967	4	22	0.56
204	1967	1967	4	23	0.01
204	1967	1967	4	24	0.22
204	1967	1967	4	29	0.06
204	1968	1967	9	21	0.05
204	1968	1967	9	28	0.10

204	1968	1967	9	29	0.13	
204	1967	1966	12	3	1.70	E415
204	1967	1966	12	5	0.34	E415
204	1967	1966	12	6	2.00	E415
204	1967	1966	12	7	1.35	E415
204	1968	1967	11	19	0.37	
204	1968	1967	11	20	0.35	
204	1968	1967	11	21	0.44	
204	1968	1967	11	22	0.27	
204	1968	1967	11	27	0.02	
204	1968	1967	11	30	0.61	
204	1968	1967	12	1	0.05	
204	1968	1967	12	4	0.02	
204	1968	1967	12	5	0.05	
204	1968	1967	12	7	0.08	
204	1968	1967	12	19	0.57	
204	1968	1967	12	20	0.23	
204	1968	1967	12	21	0.03	
204	1968	1968	1	10	0.06	
204	1968	1968	1	11	0.18	
204	1968	1968	1	16	0.03	
204	1968	1968	1	27	0.01	
204	1968	1968	1	28	0.82	
204	1968	1968	1	30	0.35	
204	1968	1968	2	13	0.16	
204	1968	1968	2	17	0.62	
204	1968	1968	2	18	0.08	
204	1968	1968	2	21	0.02	
204	1968	1968	3	7	0.09	
204	1968	1968	3	8	1.44	
204	1968	1968	3	9	0.02	
204	1968	1968	3	13	0.91	
204	1968	1968	3	14	0.02	
204	1968	1968	3	17	0.35	
204	1968	1968	4	2	0.97	
204	1968	1968	5	12	0.02	
204	1968	1968	5	13	0.14	
204	1969	1968	10	13	0.20	
204	1969	1968	10	14	1.36	
204	1969	1968	10	30	0.37	
204	1969	1968	11	3	0.16	
204	1969	1968	11	4	0.05	
204	1969	1968	11	15	0.90	
204	1969	1968	11	16	0.05	
204	1969	1968	11	30	0.02	
204	1969	1968	12	10	0.29	
204	1969	1968	12	14	0.14	
204	1969	1968	12	15	0.11	
204	1969	1968	12	16	0.34	
204	1969	1968	12	20	0.10	
204	1969	1968	12	25	0.10	
204	1969	1968	12	26	0.60	

204	1969	1968	12	27	0.01
204	1969	1968	12	29	0.11
204	1969	1969	1	14	0.67
204	1969	1969	1	19	1.19
204	1969	1969	1	20	1.47
204	1969	1969	1	21	1.20
204	1969	1969	1	22	0.36
204	1969	1969	1	24	0.40
204	1969	1969	1	25	2.44
204	1969	1969	1	26	1.07
204	1969	1969	1	27	0.05
204	1969	1969	1	28	0.17
204	1969	1969	1	29	0.35
204	1969	1969	1	31	0.02
204	1969	1969	2	5	0.56
204	1969	1969	2	6	1.00
204	1969	1969	2	7	0.30
204	1969	1969	2	12	0.37
204	1969	1969	2	15	0.37
204	1969	1969	2	16	0.12
204	1969	1969	2	18	0.41
204	1969	1969	2	19	0.50
204	1969	1969	2	20	0.48
204	1969	1969	2	21	0.01
204	1969	1969	2	22	0.80
204	1969	1969	2	23	0.85
204	1969	1969	2	24	0.46
204	1969	1969	2	25	2.46
204	1969	1969	2	26	0.32
204	1969	1969	2	28	0.46
204	1969	1969	3	1	0.58
204	1969	1969	3	10	0.30
204	1969	1969	3	13	0.08
204	1969	1969	3	21	0.17
204	1969	1969	3	22	0.20
204	1969	1969	4	3	0.78
204	1969	1969	4	5	1.08
204	1969	1969	4	6	0.02
204	1969	1969	4	10	0.02
204	1969	1969	5	4	0.10
204	1970	1969	9	6	0.03
204	1970	1969	9	7	0.05
204	1970	1969	9	16	0.03
204	1970	1969	10	16	0.08
204	1970	1969	10	17	0.05
204	1970	1969	11	6	0.86
204	1970	1969	11	7	0.64
204	1970	1969	11	8	0.04
204	1970	1969	12	9	0.15
204	1970	1969	12	20	0.10
204	1970	1969	12	21	0.05
204	1970	1969	12	22	0.08

204	1970	1969	12	25	0.04
204	1970	1969	12	26	0.11
204	1970	1970	1	9	0.11
204	1970	1970	1	10	1.05
204	1970	1970	1	11	0.07
204	1970	1970	1	12	0.14
204	1970	1970	1	15	0.07
204	1970	1970	1	16	1.02
204	1970	1970	1	17	0.40
204	1970	1970	1	20	0.08
204	1970	1970	1	24	0.12
204	1970	1970	2	10	0.10
204	1970	1970	2	11	0.32
204	1970	1970	2	13	0.12
204	1970	1970	2	17	0.06
204	1970	1970	2	28	0.75
204	1970	1970	3	1	1.60
204	1970	1970	3	2	0.50
204	1970	1970	3	5	1.05
204	1970	1970	3	10	0.05
204	1970	1970	3	11	0.05
204	1970	1970	4	14	0.09
204	1970	1970	4	27	0.10
204	1971	1970	10	21	0.03
204	1971	1970	11	4	0.02
204	1971	1970	11	5	0.13
204	1971	1970	11	6	0.14
204	1971	1970	11	7	0.03
204	1971	1970	11	26	1.38
204	1971	1970	11	28	0.15
204	1971	1970	11	29	0.60
204	1971	1970	11	30	0.48
204	1971	1970	12	1	0.04
204	1971	1970	12	2	0.56
204	1971	1970	12	3	0.02
204	1971	1970	12	9	0.11
204	1971	1970	12	14	0.10
204	1971	1970	12	16	0.13
204	1971	1970	12	17	0.51
204	1971	1970	12	18	0.30
204	1971	1970	12	19	1.03
204	1971	1970	12	21	1.03
204	1971	1970	12	22	0.53
204	1971	1970	12	26	0.08
204	1971	1971	1	2	0.23
204	1971	1971	1	12	0.16
204	1971	1971	1	13	0.24
204	1971	1971	1	14	0.16
204	1971	1971	1	20	0.01
204	1971	1971	2	17	0.57
204	1971	1971	2	19	0.05
204	1971	1971	3	13	0.62

204	1971	1971	3	26	0.03
204	1971	1971	3	27	0.01
204	1971	1971	4	14	0.60
204	1971	1971	4	18	0.14
204	1971	1971	5	3	0.05
204	1971	1971	5	6	0.03
204	1971	1971	5	7	0.08
204	1971	1971	5	27	0.10
204	1971	1971	5	28	0.69
204	1972	1971	9	30	0.04
204	1972	1971	10	15	0.09
204	1972	1971	10	16	0.12
204	1972	1971	10	25	0.06
204	1972	1971	11	11	0.01
204	1972	1971	11	12	0.25
204	1972	1971	11	14	0.01
204	1972	1971	11	29	0.09
204	1972	1971	12	3	0.40
204	1972	1971	12	4	0.05
204	1972	1971	12	13	0.23
204	1972	1971	12	22	0.63
204	1972	1971	12	23	0.58
204	1972	1971	12	24	0.26
204	1972	1971	12	25	0.32
204	1972	1971	12	26	0.65
204	1972	1971	12	27	2.75
204	1972	1971	12	28	0.15
204	1972	1972	1	27	0.07
204	1972	1972	1	28	0.02
204	1972	1972	2	5	0.15
204	1972	1972	2	22	0.13
204	1972	1972	4	11	0.10
204	1972	1972	4	12	0.05
204	1972	1972	4	13	0.04
204	1972	1972	5	20	0.10
204	1972	1972	7	30	0.05
204	1973	1972	10	12	0.23
204	1973	1972	10	13	0.08
204	1973	1972	10	15	0.09
204	1973	1972	10	16	0.03
204	1973	1972	10	18	0.10
204	1973	1972	10	19	0.02
204	1973	1972	11	4	0.52
204	1973	1972	11	10	0.34
204	1973	1972	11	11	0.30
204	1973	1972	11	13	0.07
204	1973	1972	11	14	1.07
204	1973	1972	11	15	0.83
204	1973	1972	11	16	0.71
204	1973	1972	12	4	0.53
204	1973	1972	12	5	0.06
204	1973	1972	12	6	0.35

204	1973	1972	12	7	0.25
204	1973	1972	12	8	0.03
204	1973	1973	1	4	0.05
204	1973	1973	1	5	0.14
204	1973	1973	1	8	0.03
204	1973	1973	1	9	0.54
204	1973	1973	1	10	0.35
204	1973	1973	1	16	0.10
204	1973	1973	1	17	1.21
204	1973	1973	1	18	0.17
204	1973	1973	1	19	2.12
204	1973	1973	1	20	0.09
204	1973	1973	1	26	0.02
204	1973	1973	1	29	0.17
204	1973	1973	2	3	0.12
204	1973	1973	2	4	0.67
204	1973	1973	2	5	0.02
204	1973	1973	2	6	0.56
204	1973	1973	2	7	0.61
204	1973	1973	2	8	0.03
204	1973	1973	2	10	0.32
204	1973	1973	2	11	1.94
204	1973	1973	2	12	0.14
204	1973	1973	2	13	0.60
204	1973	1973	2	15	0.13
204	1973	1973	2	24	0.46
204	1973	1973	2	27	0.10
204	1973	1973	2	28	1.51
204	1973	1973	3	4	0.24
204	1973	1973	3	7	0.34
204	1973	1973	3	8	0.35
204	1973	1973	3	9	0.10
204	1973	1973	3	11	0.38
204	1973	1973	3	12	0.17
204	1973	1973	3	13	0.01
204	1973	1973	3	20	1.48
204	1973	1973	3	21	0.03
204	1973	1973	3	22	0.38
204	1973	1973	4	13	0.05
204	1973	1973	5	31	0.19
204	1974	1973	9	5	0.05
204	1974	1973	10	8	0.12
204	1974	1973	10	22	0.05
204	1974	1973	10	23	0.15
204	1974	1973	11	12	0.51
204	1974	1973	11	14	0.04
204	1974	1973	11	17	0.25
204	1974	1973	11	18	0.85
204	1974	1973	11	23	0.74
204	1974	1973	11	26	0.03
204	1974	1973	12	1	1.03
204	1974	1973	12	14	0.07

204	1974	1973	12	22	0.37
204	1974	1973	12	27	0.15
204	1974	1973	12	28	0.61
204	1974	1974	1	1	0.10
204	1974	1974	1	2	0.07
204	1974	1974	1	4	1.51
204	1974	1974	1	5	0.42
204	1974	1974	1	6	0.43
204	1974	1974	1	7	1.38
204	1974	1974	1	8	0.88
204	1974	1974	1	12	0.13
204	1974	1974	1	13	0.02
204	1974	1974	1	17	0.84
204	1974	1974	1	19	0.02
204	1974	1974	1	20	0.03
204	1974	1974	1	21	0.09
204	1974	1974	2	13	0.05
204	1974	1974	2	20	0.08
204	1974	1974	3	1	0.10
204	1974	1974	3	2	0.90
204	1974	1974	3	3	0.27
204	1974	1974	3	4	0.10
204	1974	1974	3	7	0.03
204	1974	1974	3	8	0.98
204	1974	1974	3	26	0.38
204	1974	1974	3	27	0.43
204	1974	1974	3	28	0.06
204	1974	1974	3	29	0.10
204	1974	1974	3	30	0.50
204	1974	1974	3	31	0.15
204	1974	1974	4	2	0.85
204	1974	1974	4	9	0.05
204	1974	1974	4	24	0.06
204	1975	1974	10	8	0.04
204	1975	1974	10	28	0.54
204	1975	1974	10	29	0.43
204	1975	1974	11	1	0.03
204	1975	1974	11	22	0.23
204	1975	1974	12	4	3.14
204	1975	1974	12	28	1.40
204	1975	1974	12	29	0.56
204	1975	1974	12	31	0.02
204	1975	1975	1	7	0.05
204	1975	1975	1	8	0.04
204	1975	1975	1	9	0.07
204	1975	1975	1	31	0.05
204	1975	1975	2	1	0.18
204	1975	1975	2	2	0.65
204	1975	1975	2	3	2.28
204	1975	1975	2	4	0.15
204	1975	1975	2	5	0.45
204	1975	1975	2	9	0.22

204	1975	1975	2	10	0.20
204	1975	1975	2	13	0.05
204	1975	1975	2	14	0.05
204	1975	1975	3	5	0.04
204	1975	1975	3	6	1.35
204	1975	1975	3	7	0.86
204	1975	1975	3	8	1.18
204	1975	1975	3	9	0.03
204	1975	1975	3	10	0.08
204	1975	1975	3	11	0.64
204	1975	1975	3	14	0.40
204	1975	1975	3	16	0.13
204	1975	1975	3	22	0.50
204	1975	1975	3	25	0.06
204	1975	1975	3	26	0.02
204	1975	1975	4	5	0.39
204	1975	1975	4	6	0.35
204	1975	1975	4	25	0.12
204	1976	1975	10	7	0.05
204	1976	1975	10	11	0.50
204	1976	1975	10	27	0.07
204	1976	1975	10	30	0.17
204	1976	1975	10	31	0.05
204	1976	1975	12	12	0.03
204	1976	1975	12	13	0.11
204	1976	1975	12	14	0.03
204	1976	1976	1	11	0.01
204	1976	1976	2	6	0.24
204	1976	1976	2	7	0.53
204	1976	1976	2	8	0.65
204	1976	1976	2	9	1.89
204	1976	1976	2	10	1.05
204	1976	1976	2	11	2.00
204	1976	1976	2	14	0.12
204	1976	1976	2	15	0.03
204	1976	1976	2	19	0.01
204	1976	1976	2	20	0.02
204	1976	1976	2	24	0.14
204	1976	1976	3	2	0.82
204	1976	1976	3	3	0.09
204	1976	1976	3	4	0.76
204	1976	1976	4	5	0.15
204	1976	1976	4	6	0.10
204	1976	1976	4	7	0.03
204	1976	1976	4	9	0.38
204	1976	1976	4	10	0.10
204	1976	1976	4	12	0.08
204	1976	1976	4	14	0.40
204	1976	1976	4	16	0.07
204	1976	1976	5	8	0.03
204	1976	1976	6	11	0.13
204	1976	1976	7	16	0.02

204	1976	1976	8	16	0.07
204	1976	1976	8	19	0.20
204	1976	1976	8	20	0.17
204	1977	1976	9	10	0.14
204	1977	1976	9	11	2.32
204	1977	1976	9	20	0.03
204	1977	1976	9	29	2.18
204	1977	1976	9	30	0.15
204	1977	1976	10	1	0.27
204	1977	1976	10	21	0.06
204	1977	1976	10	23	0.05
204	1977	1976	11	11	0.01
204	1977	1976	11	12	0.26
204	1977	1976	11	13	0.05
204	1977	1976	11	14	0.07
204	1977	1976	12	30	0.48
204	1977	1976	12	31	0.29
204	1977	1977	1	1	0.02
204	1977	1977	1	3	0.84
204	1977	1977	1	5	0.83
204	1977	1977	1	6	0.73
204	1977	1977	1	21	0.08
204	1977	1977	1	28	0.10
204	1977	1977	2	21	0.03
204	1977	1977	2	23	0.05
204	1977	1977	2	24	0.05
204	1977	1977	3	16	1.28
204	1977	1977	3	17	0.09
204	1977	1977	3	25	0.47
204	1977	1977	3	30	0.06
204	1977	1977	3	31	0.12
204	1977	1977	4	9	0.01
204	1977	1977	5	1	0.03
204	1977	1977	5	8	0.66
204	1977	1977	5	9	1.72
204	1977	1977	5	10	0.10
204	1977	1977	5	12	0.07
204	1977	1977	5	13	0.24
204	1977	1977	5	23	0.02
204	1978	1977	11	5	0.14
204	1978	1977	12	15	0.12
204	1978	1977	12	16	0.02
204	1978	1977	12	17	0.03
204	1978	1977	12	18	0.46
204	1978	1977	12	19	0.28
204	1978	1977	12	22	0.19
204	1978	1977	12	23	0.51
204	1978	1977	12	24	0.03
204	1978	1977	12	26	0.12
204	1978	1977	12	27	0.05
204	1978	1977	12	28	1.25
204	1978	1977	12	29	0.04

204	1978	1978	1	3	0.40
204	1978	1978	1	4	0.12
204	1978	1978	1	5	0.52
204	1978	1978	1	6	0.29
204	1978	1978	1	9	0.10
204	1978	1978	1	10	1.01
204	1978	1978	1	11	0.15
204	1978	1978	1	13	0.01
204	1978	1978	1	15	1.23
204	1978	1978	1	16	0.05
204	1978	1978	1	17	1.27
204	1978	1978	1	18	0.13
204	1978	1978	1	19	0.29
204	1978	1978	1	20	0.05
204	1978	1978	2	5	0.10
204	1978	1978	2	6	0.05
204	1978	1978	2	7	0.02
204	1978	1978	2	8	1.18
204	1978	1978	2	9	1.76
204	1978	1978	2	10	3.07
204	1978	1978	2	11	0.45
204	1978	1978	2	13	1.44
204	1978	1978	2	14	0.10
204	1978	1978	2	28	0.05
204	1978	1978	3	1	0.80
204	1978	1978	3	2	0.58
204	1978	1978	3	3	0.33
204	1978	1978	3	4	1.90
204	1978	1978	3	5	1.10
204	1978	1978	3	6	0.07
204	1978	1978	3	9	0.43
204	1978	1978	3	10	0.25
204	1978	1978	3	12	0.26
204	1978	1978	3	22	0.82
204	1978	1978	3	23	0.09
204	1978	1978	3	30	0.04
204	1978	1978	3	31	0.99
204	1978	1978	4	4	0.50
204	1978	1978	4	7	0.49
204	1978	1978	4	8	0.34
204	1978	1978	4	15	0.20
204	1978	1978	4	16	0.95
204	1978	1978	4	17	0.05
204	1978	1978	4	25	0.35
204	1979	1978	9	4	1.89
204	1979	1978	9	5	0.28
204	1979	1978	11	11	0.33
204	1979	1978	11	13	0.60
204	1979	1978	11	14	0.05
204	1979	1978	11	20	0.17
204	1979	1978	11	21	0.47
204	1979	1978	11	22	0.46

204	1979	1978	12	2	0.15
204	1979	1978	12	17	0.70
204	1979	1978	12	18	0.37
204	1979	1978	12	19	0.74
204	1979	1979	1	5	0.27
204	1979	1979	1	6	0.48
204	1979	1979	1	9	0.15
204	1979	1979	1	12	0.04
204	1979	1979	1	14	1.29
204	1979	1979	1	15	0.95
204	1979	1979	1	16	0.18
204	1979	1979	1	17	0.53
204	1979	1979	1	18	0.05
204	1979	1979	1	31	0.65
204	1979	1979	2	1	0.70
204	1979	1979	2	2	0.30
204	1979	1979	2	3	0.29
204	1979	1979	2	14	0.49
204	1979	1979	2	15	0.29
204	1979	1979	2	19	0.09
204	1979	1979	2	21	1.18
204	1979	1979	2	22	0.23
204	1979	1979	2	23	0.20
204	1979	1979	2	25	0.03
204	1979	1979	3	1	0.43
204	1979	1979	3	14	0.04
204	1979	1979	3	16	0.14
204	1979	1979	3	17	0.44
204	1979	1979	3	19	0.45
204	1979	1979	3	20	0.71
204	1979	1979	3	27	1.53
204	1979	1979	3	28	0.79
204	1979	1979	3	29	0.67
204	1979	1979	3	30	0.02
204	1979	1979	5	7	0.04
204	1980	1979	9	29	0.20
204	1980	1979	10	14	0.10
204	1980	1979	10	20	0.63
204	1980	1979	10	26	0.19
204	1980	1979	11	4	0.15
204	1980	1979	11	8	0.52
204	1980	1979	11	26	0.02
204	1980	1979	12	21	0.11
204	1980	1979	12	22	0.03
204	1980	1979	12	24	0.38
204	1980	1979	12	25	1.28
204	1980	1980	1	8	0.08
204	1980	1980	1	9	0.13
204	1980	1980	1	10	1.08
204	1980	1980	1	11	0.53
204	1980	1980	1	12	0.53
204	1980	1980	1	13	0.20

204	1980	1980	1	14	0.80
204	1980	1980	1	15	0.35
204	1980	1980	1	16	0.11
204	1980	1980	1	17	0.14
204	1980	1980	1	18	0.10
204	1980	1980	1	29	0.20
204	1980	1980	2	14	0.05
204	1980	1980	2	15	0.52
204	1980	1980	2	16	1.01
204	1980	1980	2	17	1.84
204	1980	1980	2	18	0.95
204	1980	1980	2	19	0.97
204	1980	1980	2	20	0.83
204	1980	1980	2	21	0.61
204	1980	1980	2	28	0.13
204	1980	1980	3	3	0.45
204	1980	1980	3	5	0.45
204	1980	1980	3	6	1.22
204	1980	1980	3	7	0.05
204	1980	1980	3	22	0.02
204	1980	1980	3	26	0.23
204	1980	1980	4	5	0.01
204	1980	1980	4	6	0.18
204	1980	1980	4	22	0.66
204	1980	1980	4	23	0.35
204	1980	1980	4	24	0.02
204	1980	1980	4	28	0.33
204	1980	1980	5	11	0.27
204	1980	1980	5	20	0.01
204	1980	1980	7	3	0.01
204	1981	1980	12	4	0.70
204	1981	1980	12	5	0.16
204	1981	1981	1	3	0.05
204	1981	1981	1	4	0.02
204	1981	1981	1	23	1.11
204	1981	1981	1	27	0.02
204	1981	1981	1	28	1.08
204	1981	1981	1	29	0.57
204	1981	1981	1	30	0.02
204	1981	1981	2	8	0.04
204	1981	1981	2	9	1.61
204	1981	1981	2	11	0.03
204	1981	1981	2	12	0.02
204	1981	1981	2	13	0.02
204	1981	1981	2	26	1.01
204	1981	1981	2	28	0.02
204	1981	1981	3	1	1.85
204	1981	1981	3	2	0.40
204	1981	1981	3	5	2.45
204	1981	1981	3	14	0.13
204	1981	1981	3	19	0.14
204	1981	1981	3	20	0.54

204	1981	1981	3	21	0.05
204	1981	1981	3	22	0.60
204	1981	1981	3	26	0.08
204	1981	1981	3	27	0.10
204	1981	1981	4	19	0.42
204	1981	1981	4	20	0.06
204	1982	1981	10	1	0.02
204	1982	1981	10	28	0.24
204	1982	1981	10	29	0.31
204	1982	1981	11	14	0.14
204	1982	1981	11	17	0.12
204	1982	1981	11	27	0.41
204	1982	1981	11	28	0.19
204	1982	1981	11	29	0.06
204	1982	1981	12	13	0.01
204	1982	1981	12	21	0.26
204	1982	1981	12	30	0.55
204	1982	1981	12	31	0.04
204	1982	1982	1	1	0.19
204	1982	1982	1	2	0.29
204	1982	1982	1	3	0.08
204	1982	1982	1	5	0.35
204	1982	1982	1	6	0.03
204	1982	1982	1	11	0.02
204	1982	1982	1	19	0.04
204	1982	1982	1	20	0.65
204	1982	1982	1	21	0.96
204	1982	1982	1	27	0.04
204	1982	1982	1	28	0.03
204	1982	1982	1	29	0.22
204	1982	1982	2	8	0.02
204	1982	1982	2	10	0.07
204	1982	1982	2	11	0.33
204	1982	1982	2	14	0.05
204	1982	1982	2	15	0.05
204	1982	1982	2	16	0.27
204	1982	1982	3	1	0.07
204	1982	1982	3	2	0.66
204	1982	1982	3	3	0.04
204	1982	1982	3	11	0.20
204	1982	1982	3	12	0.55
204	1982	1982	3	14	0.14
204	1982	1982	3	15	0.37
204	1982	1982	3	16	0.32
204	1982	1982	3	17	1.14
204	1982	1982	3	18	0.65
204	1982	1982	3	19	0.28
204	1982	1982	3	26	0.35
204	1982	1982	3	29	0.30
204	1982	1982	3	30	0.43
204	1982	1982	4	1	1.30
204	1982	1982	4	2	0.21

204	1982	1982	4	10	0.10
204	1982	1982	4	11	1.01
204	1982	1982	4	12	0.28
204	1983	1982	9	16	0.06
204	1983	1982	9	24	0.04
204	1983	1982	9	26	0.21
204	1983	1982	10	24	0.29
204	1983	1982	10	26	0.34
204	1983	1982	10	29	0.52
204	1983	1982	10	30	0.33
204	1983	1982	11	9	0.73
204	1983	1982	11	10	0.65
204	1983	1982	11	11	0.11
204	1983	1982	11	19	0.68
204	1983	1982	11	23	0.35
204	1983	1982	11	24	0.06
204	1983	1982	11	28	0.13
204	1983	1982	11	29	0.50
204	1983	1982	11	30	1.43
204	1983	1982	12	1	0.59
204	1983	1982	12	2	0.09
204	1983	1982	12	22	0.25
204	1983	1982	12	23	1.53
204	1983	1983	1	19	0.90
204	1983	1983	1	22	0.26
204	1983	1983	1	23	2.35
204	1983	1983	1	24	0.67
204	1983	1983	1	27	2.20
204	1983	1983	1	28	0.38
204	1983	1983	1	29	1.40
204	1983	1983	2	3	0.29
204	1983	1983	2	6	0.54
204	1983	1983	2	7	0.21
204	1983	1983	2	8	1.03
204	1983	1983	2	13	0.75
204	1983	1983	2	24	0.14
204	1983	1983	2	26	1.30
204	1983	1983	2	27	0.77
204	1983	1983	2	28	0.20
204	1983	1983	3	1	2.03
204	1983	1983	3	2	1.40
204	1983	1983	3	3	0.52
204	1983	1983	3	4	0.25
204	1983	1983	3	5	0.40
204	1983	1983	3	6	0.05
204	1983	1983	3	7	0.10
204	1983	1983	3	14	0.45
204	1983	1983	3	17	0.36
204	1983	1983	3	18	0.47
204	1983	1983	3	19	0.19
204	1983	1983	3	21	1.10
204	1983	1983	3	23	0.36

204	1983	1983	3	24	0.79
204	1983	1983	3	25	0.12
204	1983	1983	3	28	0.08
204	1983	1983	4	6	0.02
204	1983	1983	4	12	0.36
204	1983	1983	4	18	1.01
204	1983	1983	4	19	0.63
204	1983	1983	4	20	1.08
204	1983	1983	4	21	0.32
204	1983	1983	4	28	0.28
204	1983	1983	4	29	0.03
204	1983	1983	4	30	0.45
204	1983	1983	5	1	0.15
204	1983	1983	5	2	0.09
204	1983	1983	5	6	0.02
204	1983	1983	8	19	0.31
204	1984	1983	9	30	0.05
204	1984	1983	10	1	1.22
204	1984	1983	11	1	0.22
204	1984	1983	11	2	0.44
204	1984	1983	11	11	0.22
204	1984	1983	11	12	0.29
204	1984	1983	11	13	0.15
204	1984	1983	11	14	0.04
204	1984	1983	11	17	0.07
204	1984	1983	11	18	0.17
204	1984	1983	11	20	0.42
204	1984	1983	11	21	0.36
204	1984	1983	11	25	0.82
204	1984	1983	12	1	0.04
204	1984	1983	12	4	0.86
204	1984	1983	12	9	0.11
204	1984	1983	12	10	0.72
204	1984	1983	12	11	0.01
204	1984	1983	12	12	0.17
204	1984	1983	12	25	1.30
204	1984	1983	12	26	0.25
204	1984	1983	12	27	0.15
204	1984	1984	1	17	0.01
204	1984	1984	2	2	0.08
204	1984	1984	2	10	0.15
204	1984	1984	2	14	0.04
204	1984	1984	2	16	0.14
204	1984	1984	3	14	0.54
204	1984	1984	3	31	0.03
204	1984	1984	4	6	0.35
204	1984	1984	4	19	0.24
204	1985	1984	10	12	0.20
204	1985	1984	10	15	0.50
204	1985	1984	11	8	0.42
204	1985	1984	11	13	1.19
204	1985	1984	11	16	0.62

204	1985	1984	11	17	0.04
204	1985	1984	11	25	0.57
204	1985	1984	11	28	0.30
204	1985	1984	12	3	0.10
204	1985	1984	12	8	0.32
204	1985	1984	12	10	0.33
204	1985	1984	12	16	0.54
204	1985	1984	12	18	0.08
204	1985	1984	12	19	1.44
204	1985	1984	12	20	0.82
204	1985	1985	1	7	0.28
204	1985	1985	1	10	0.12
204	1985	1985	1	29	0.18
204	1985	1985	2	2	0.24
204	1985	1985	2	8	0.03
204	1985	1985	2	9	0.70
204	1985	1985	3	3	0.08
204	1985	1985	3	6	0.20
204	1985	1985	3	7	0.33
204	1985	1985	3	11	0.11
204	1985	1985	3	18	0.04
204	1985	1985	3	19	0.04
204	1985	1985	3	27	0.39
204	1985	1985	3	28	0.21
204	1985	1985	8	17	0.02
204	1986	1985	10	22	0.41
204	1986	1985	11	11	0.80
204	1986	1985	11	12	0.15
204	1986	1985	11	24	0.01
204	1986	1985	11	25	0.70
204	1986	1985	11	26	0.42
204	1986	1985	11	29	0.96
204	1986	1985	11	30	0.45
204	1986	1985	12	2	0.37
204	1986	1985	12	3	0.02
204	1986	1985	12	29	0.03
204	1986	1985	12	30	0.02
204	1986	1986	1	5	0.60
204	1986	1986	1	15	0.02
204	1986	1986	1	30	0.23
204	1986	1986	1	31	0.34
204	1986	1986	2	1	0.25
204	1986	1986	2	3	0.10
204	1986	1986	2	12	0.06
204	1986	1986	2	13	1.33
204	1986	1986	2	14	0.42
204	1986	1986	2	15	1.69
204	1986	1986	2	18	0.47
204	1986	1986	2	19	0.38
204	1986	1986	3	8	0.27
204	1986	1986	3	9	0.80
204	1986	1986	3	10	0.72

204	1986	1986	3	11	0.32
204	1986	1986	3	12	0.27
204	1986	1986	3	13	0.85
204	1986	1986	3	16	1.49
204	1986	1986	3	17	0.65
204	1986	1986	4	6	0.15
204	1986	1986	4	7	0.03
204	1986	1986	4	8	0.09
204	1987	1986	9	24	0.25
204	1987	1986	9	25	0.52
204	1987	1986	9	26	0.01
204	1987	1986	11	18	1.25
204	1987	1986	12	6	0.68
204	1987	1986	12	16	0.30
204	1987	1986	12	20	0.27
204	1987	1987	1	4	0.74
204	1987	1987	1	5	0.10
204	1987	1987	1	7	0.55
204	1987	1987	1	23	0.03
204	1987	1987	1	28	0.12
204	1987	1987	1	30	0.01
204	1987	1987	2	9	0.02
204	1987	1987	2	10	0.08
204	1987	1987	2	12	0.71
204	1987	1987	2	13	0.17
204	1987	1987	2	22	0.38
204	1987	1987	2	24	0.15
204	1987	1987	2	25	0.28
204	1987	1987	2	26	0.05
204	1987	1987	3	5	1.36
204	1987	1987	3	6	1.49
204	1987	1987	3	9	0.40
204	1987	1987	3	13	0.08
204	1987	1987	3	16	0.22
204	1987	1987	3	21	0.41
204	1987	1987	3	22	0.28
204	1987	1987	4	4	0.30
204	1987	1987	6	6	0.50
204	1988	1987	10	23	0.56
204	1988	1987	10	24	0.05
204	1988	1987	10	27	0.28
204	1988	1987	10	28	0.03
204	1988	1987	10	29	0.05
204	1988	1987	10	31	0.35
204	1988	1987	11	1	0.06
204	1988	1987	11	4	0.07
204	1988	1987	11	5	0.65
204	1988	1987	11	14	0.19
204	1988	1987	11	17	0.32
204	1988	1987	11	20	0.09
204	1988	1987	12	5	0.99
204	1988	1987	12	7	0.10

204	1988	1987	12	9	0.05
204	1988	1987	12	16	0.80
204	1988	1987	12	17	0.26
204	1988	1987	12	28	0.30
204	1988	1987	12	29	0.60
204	1988	1987	12	30	0.58
204	1988	1988	1	6	0.82
204	1988	1988	1	9	0.03
204	1988	1988	1	17	0.47
204	1988	1988	1	18	0.62
204	1988	1988	2	27	0.10
204	1988	1988	2	28	0.98
204	1988	1988	2	29	1.34
204	1988	1988	3	1	0.88
204	1988	1988	3	2	0.15
204	1988	1988	4	15	1.40
204	1988	1988	4	20	1.06
204	1988	1988	4	21	0.12
204	1988	1988	4	23	0.41
204	1988	1988	5	6	0.02
204	1988	1988	5	29	0.09
204	1988	1988	6	24	0.19
204	1989	1988	11	14	0.22
204	1989	1988	11	17	0.08
204	1989	1988	11	24	0.25
204	1989	1988	11	25	0.51
204	1989	1988	12	16	0.82
204	1989	1988	12	17	1.23
204	1989	1988	12	18	0.38
204	1989	1988	12	20	0.08
204	1989	1988	12	21	0.65
204	1989	1988	12	23	0.25
204	1989	1988	12	25	0.74
204	1989	1988	12	30	0.12
204	1989	1989	1	5	0.03
204	1989	1989	1	6	0.21
204	1989	1989	1	7	0.09
204	1989	1989	1	24	0.06
204	1989	1989	2	3	0.03
204	1989	1989	2	4	0.28
204	1989	1989	2	5	0.12
204	1989	1989	2	8	0.36
204	1989	1989	2	9	0.32
204	1989	1989	2	20	0.05
204	1989	1989	3	2	0.42
204	1989	1989	3	3	0.10
204	1989	1989	3	11	0.02
204	1989	1989	3	25	0.12
204	1989	1989	3	26	0.04
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204	1989	1989	4	25	0.11
204	1989	1989	4	26	0.04

204	1989	1989	5	8	0.08
204	1989	1989	5	9	0.36
204	1990	1989	9	16	0.16
204	1990	1989	9	17	0.08
204	1990	1989	9	19	0.08
204	1990	1989	9	29	0.30
204	1990	1989	10	22	0.03
204	1990	1989	10	24	0.44
204	1990	1989	10	25	0.01
204	1990	1989	11	27	0.27
204	1990	1990	1	2	0.42
204	1990	1990	1	13	1.30
204	1990	1990	1	14	0.54
204	1990	1990	1	15	0.64
204	1990	1990	1	16	0.01
204	1990	1990	1	17	0.39
204	1990	1990	1	31	0.11
204	1990	1990	2	1	0.07
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204	1990	1990	2	17	1.00
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204	1990	1990	3	12	0.18
204	1990	1990	4	16	0.28
204	1990	1990	4	24	0.13
204	1990	1990	5	24	0.02
204	1990	1990	5	28	0.37
204	1991	1990	9	21	0.02
204	1991	1990	9	22	0.16
204	1991	1990	9	23	0.05
204	1991	1990	11	20	0.09
204	1991	1990	11	26	0.20
204	1991	1990	12	16	0.15
204	1991	1990	12	20	0.39
204	1991	1991	1	3	0.12
204	1991	1991	1	4	0.39
204	1991	1991	1	5	0.08
204	1991	1991	1	9	0.39
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204	1991	1991	2	5	0.15
204	1991	1991	2	28	1.54
204	1991	1991	3	1	1.77
204	1991	1991	3	2	0.25
204	1991	1991	3	5	0.78
204	1991	1991	3	11	0.21
204	1991	1991	3	13	0.32
204	1991	1991	3	14	0.23
204	1991	1991	3	16	0.20
204	1991	1991	3	18	1.86
204	1991	1991	3	19	3.69
204	1991	1991	3	20	0.77
204	1991	1991	3	21	0.17

204	1991	1991	3	25	0.79
204	1991	1991	3	26	0.35
204	1991	1991	3	27	0.94
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204	1991	1991	4	21	0.13
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204	1992	1991	12	30	1.31
204	1992	1992	1	3	0.18
204	1992	1992	1	4	0.07
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204	1992	1992	1	7	0.20
204	1992	1992	1	8	0.14
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204	1992	1992	3	3	0.31
204	1992	1992	3	4	0.05
204	1992	1992	3	6	0.72
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204	1992	1992	3	15	0.02
204	1992	1992	3	20	0.11
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204	1992	1992	7	9	0.04
204	1992	1992	7	13	0.04
204	1993	1992	10	21	0.07
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204	1993	1992	10	27	0.09
204	1993	1992	10	30	0.70
204	1993	1992	10	31	0.19
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204	1993	1992	12	11	0.30
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204	1993	1992	12	18	0.23
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204	1993	1993	1	8	0.27
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204	1993	1993	1	10	0.05
204	1993	1993	1	11	0.45
204	1993	1993	1	13	0.81
204	1993	1993	1	14	1.51
204	1993	1993	1	16	0.14
204	1993	1993	1	17	0.02
204	1993	1993	1	18	1.52
204	1993	1993	1	19	0.12
204	1993	1993	1	22	0.05
204	1993	1993	2	5	0.07
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204	1993	1993	2	9	0.83
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204	1993	1993	2	21	0.05
204	1993	1993	2	23	1.21
204	1993	1993	2	24	0.17
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204	1993	1993	3	1	0.33
204	1993	1993	3	17	0.03
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204	1993	1993	3	25	1.76
204	1993	1993	3	26	1.66
204	1993	1993	3	29	0.85
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204	1993	1993	5	25	0.28
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204	1994	1993	10	18	0.10
204	1994	1993	11	11	0.28
204	1994	1993	11	12	0.05
204	1994	1993	11	13	0.14
204	1994	1993	11	22	0.03
204	1994	1993	11	30	0.52
204	1994	1993	12	12	1.04
204	1994	1993	12	15	0.52
204	1994	1993	12	19	0.01
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204	1994	1994	1	25	1.11

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204	1994	1994	2	8	0.79
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204	1994	1994	2	17	0.94
204	1994	1994	2	18	0.22
204	1994	1994	2	19	0.07
204	1994	1994	2	20	1.04
204	1994	1994	3	6	0.97
204	1994	1994	3	7	0.18
204	1994	1994	3	19	0.23
204	1994	1994	3	25	1.05
204	1994	1994	4	9	0.15
204	1994	1994	4	25	0.07
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204	1994	1994	4	27	0.05
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204	1995	1994	11	16	0.27
204	1995	1994	11	26	0.24
204	1995	1994	12	13	0.28
204	1995	1994	12	14	0.06
204	1995	1994	12	15	0.12
204	1995	1994	12	25	0.73
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204	1995	1995	1	4	0.85
204	1995	1995	1	5	1.65
204	1995	1995	1	6	0.04
204	1995	1995	1	7	0.80
204	1995	1995	1	9	0.55
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204	1995	1995	1	11	1.12
204	1995	1995	1	12	0.34
204	1995	1995	1	13	0.02
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204	1995	1995	1	16	0.48
204	1995	1995	1	17	0.01
204	1995	1995	1	21	0.47
204	1995	1995	1	23	0.24
204	1995	1995	1	24	0.98

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204	1995	1995	1	26	0.92
204	1995	1995	2	8	0.22
204	1995	1995	2	9	0.08
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204	1995	1995	3	10	0.25
204	1995	1995	3	11	2.15
204	1995	1995	3	12	0.58
204	1995	1995	3	21	0.62
204	1995	1995	3	22	0.13
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204	1996	1995	12	13	0.73
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204	1996	1995	12	21	0.02
204	1996	1995	12	23	0.30
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204	1996	1996	1	17	0.57
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204	1996	1996	1	22	0.10
204	1996	1996	1	25	0.47
204	1996	1996	1	28	0.19
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204	1996	1996	2	21	1.13
204	1996	1996	2	22	0.33
204	1996	1996	2	25	0.46
204	1996	1996	2	26	0.27
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204	1996	1996	3	1	0.04

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204	1996	1996	3	6	0.02
204	1996	1996	3	13	0.85
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204	1996	1996	4	17	0.16
204	1996	1996	4	18	0.15
204	1996	1996	5	16	0.20
204	1996	1996	5	17	0.02
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204	1997	1996	10	25	0.03
204	1997	1996	10	26	0.04
204	1997	1996	10	30	2.18
204	1997	1996	11	17	0.07
204	1997	1996	11	18	0.16
204	1997	1996	11	20	0.16
204	1997	1996	11	21	0.65
204	1997	1996	11	22	0.71
204	1997	1996	11	23	0.09
204	1997	1996	12	7	0.33
204	1997	1996	12	10	0.78
204	1997	1996	12	11	1.72
204	1997	1996	12	12	0.35
204	1997	1996	12	13	0.05
204	1997	1996	12	22	0.85
204	1997	1996	12	27	0.26
204	1997	1996	12	30	0.11
204	1997	1996	12	31	0.17
204	1997	1997	1	2	0.72
204	1997	1997	1	3	0.36
204	1997	1997	1	5	0.08
204	1997	1997	1	14	0.52
204	1997	1997	1	15	0.04
204	1997	1997	1	16	0.43
204	1997	1997	1	17	0.12
204	1997	1997	1	20	0.51
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204	1997	1997	1	24	0.01
204	1997	1997	1	25	0.02
204	1997	1997	1	26	0.36
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204	1997	1997	7	23	0.13
204	1998	1997	9	3	0.54
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204	1998	1997	11	11	0.30
204	1998	1997	11	12	0.02

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204	1998	1997	11	26	0.93
204	1998	1997	11	27	0.53
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204	1998	1998	1	13	0.21
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204	1998	1998	1	16	0.82
204	1998	1998	1	19	0.53
204	1998	1998	1	29	0.64
204	1998	1998	1	30	0.20
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204	1998	1998	2	1	0.03
204	1998	1998	2	2	3.22
204	1998	1998	2	3	2.75
204	1998	1998	2	4	0.54
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204	1998	1998	2	11	0.03
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204	1998	1998	2	14	0.41
204	1998	1998	2	15	1.15
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204	1998	1998	2	20	0.62
204	1998	1998	2	22	1.01
204	1998	1998	2	23	0.69
204	1998	1998	2	24	0.64
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204	1998	1998	3	26	0.42
204	1998	1998	3	28	0.46
204	1998	1998	3	29	0.19

204	1998	1998	4	1	1.20
204	1998	1998	4	2	0.30
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204	1998	1998	4	6	0.06
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204	1999	1999	3	25	1.17
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204	2000	2000	2	13	0.23
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204	2000	2000	2	17	0.16
204	2000	2000	2	20	0.45
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204	2000	2000	2	22	1.10
204	2000	2000	2	23	1.33
204	2000	2000	2	24	0.16
204	2000	2000	2	27	0.52
204	2000	2000	2	28	0.32
204	2000	2000	2	29	0.02
204	2000	2000	3	1	0.05
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204	2000	2000	3	4	0.05

204	2000	2000	3	5	0.60	
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204	2001	2000	10	8	0.01	
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204	2001	2000	10	12	0.08	
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204	2001	2001	1	12	0.79	
204	2001	2001	1	13	0.05	
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204	2001	2001	1	25	0.18	
204	2001	2001	1	26	0.60	
204	2001	2001	1	27	0.04	E527
204	2001	2001	2	10	0.76	
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204	2001	2001	2	19	0.24	
204	2001	2001	2	20	0.64	
204	2001	2001	2	21	0.00	
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204	2001	2001	2	25	0.40	
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204	2001	2001	2	27	0.10	
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204	2001	2001	3	4	0.16	
204	2001	2001	3	5	2.20	
204	2001	2001	3	6	1.42	
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204	2002	2001	11	11	0.36
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204	2002	2001	11	24	0.04
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204	2002	2001	12	3	0.01
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204	2002	2001	12	29	0.21
204	2002	2001	12	30	0.04
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204	2002	2002	1	3	0.21
204	2002	2002	1	12	0.01
204	2002	2002	1	27	0.18
204	2002	2002	1	28	0.44
204	2002	2002	1	29	0.09
204	2002	2002	1	30	0.01
204	2002	2002	2	7	0.01
204	2002	2002	2	17	0.25
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204	2002	2002	3	8	0.06
204	2002	2002	3	18	0.10
204	2002	2002	3	23	0.02
204	2002	2002	3	24	0.22
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204	2002	2002	4	26	0.10
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204	2002	2002	5	20	0.00
204	2002	2002	5	21	0.15
204	2002	2002	8	22	0.01
204	2003	2002	9	6	0.00
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204	2003	2002	11	7	0.14
204	2003	2002	11	8	1.31
204	2003	2002	11	9	1.01
204	2003	2002	11	10	0.14
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204	2003	2002	12	5	0.01

204	2003	2002	12	7	0.03
204	2003	2002	12	15	0.35
204	2003	2002	12	17	1.70
204	2003	2002	12	18	0.23
204	2003	2002	12	20	1.43
204	2003	2002	12	21	0.06
204	2003	2002	12	22	0.65
204	2003	2002	12	23	0.01
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204	2003	2003	2	12	0.49
204	2003	2003	2	13	0.48
204	2003	2003	2	14	0.15
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204	2003	2003	2	26	0.03
204	2003	2003	2	27	0.31
204	2003	2003	3	5	0.05
204	2003	2003	3	15	1.45
204	2003	2003	3	16	0.20
204	2003	2003	4	13	0.50
204	2003	2003	4	14	0.93
204	2003	2003	4	15	0.07
204	2003	2003	4	28	0.15
204	2003	2003	4	29	0.02
204	2003	2003	5	3	0.90
204	2003	2003	5	4	0.35
204	2003	2003	5	7	0.05
204	2003	2003	5	8	0.01
204	2003	2003	6	5	0.01
204	2003	2003	6	6	0.01
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204	2004	2003	11	1	0.33
204	2004	2003	11	3	0.15
204	2004	2003	11	4	0.05
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204	2004	2004	2	22	0.27
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204	2004	2004	2	26	1.65
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204	2004	2004	3	2	0.30
204	2004	2004	3	26	0.19
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204	2005	2004	12	29	0.61
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204	2005	2004	12	31	1.51
204	2005	2005	1	1	0.02
204	2005	2005	1	2	0.15
204	2005	2005	1	3	0.79
204	2005	2005	1	4	0.09
204	2005	2005	1	7	0.43
204	2005	2005	1	8	0.80
204	2005	2005	1	9	2.05
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204	2005	2005	1	28	0.04
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204	2005	2005	2	23	0.98
204	2005	2005	2	28	0.28
204	2005	2005	3	3	0.02
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204	2006	2006	3	7	0.48
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204	2006	2006	5	4	0.01
204	2006	2006	5	21	0.02
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204	2007	2006	10	14	0.59
204	2007	2006	10	18	0.01
204	2007	2006	11	14	0.04
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204	2007	2006	12	28	0.10
204	2007	2007	1	5	0.03
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204	2008	2008	1	6	0.41
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204	2008	2008	1	8	0.01
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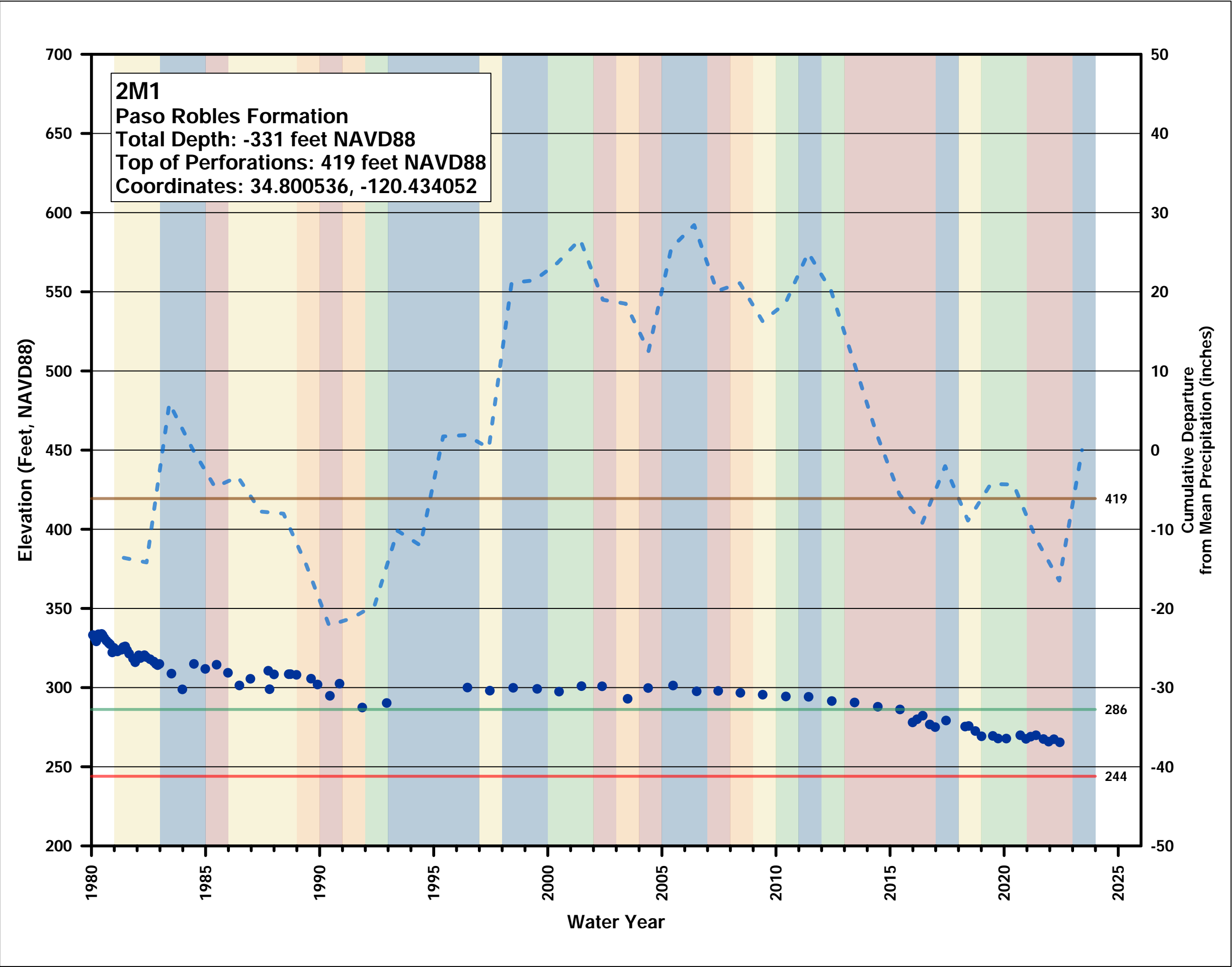
APPENDIX C

Representative Monitoring Site Location Map and Hydrographs

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2M1
Paso Robles Formation
Total Depth: -331 feet NAVD88
Top of Perforations: 419 feet NAVD88
Coordinates: 34.800536, -120.434052



Groundwater Elevation Hydrograph

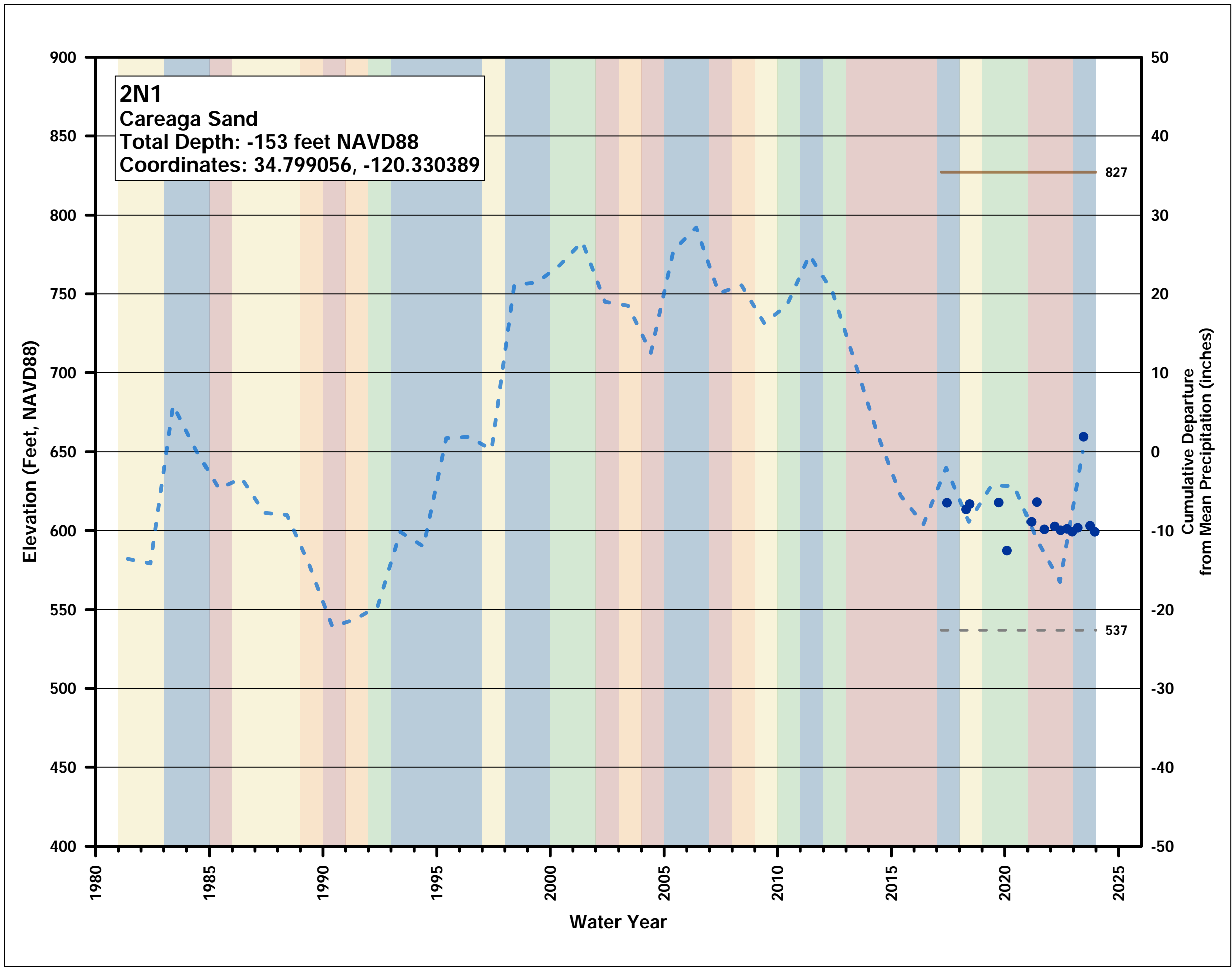
San Antonio Creek Valley Groundwater Basin Groundwater Sustainability Plan 2023 Annual Report

LEGEND

- Groundwater Elevation
- - - Cumulative Departure from Mean Precipitation
- Measureable Objective
- Ground Surface Elevation
- Minimum Threshold

WATER YEAR TYPE

- Wet
- Above Normal
- Below Normal
- Dry
- Critical



Groundwater Elevation Hydrograph


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Groundwater Basin Groundwater
Sustainability Plan 2023 Annual
Report**

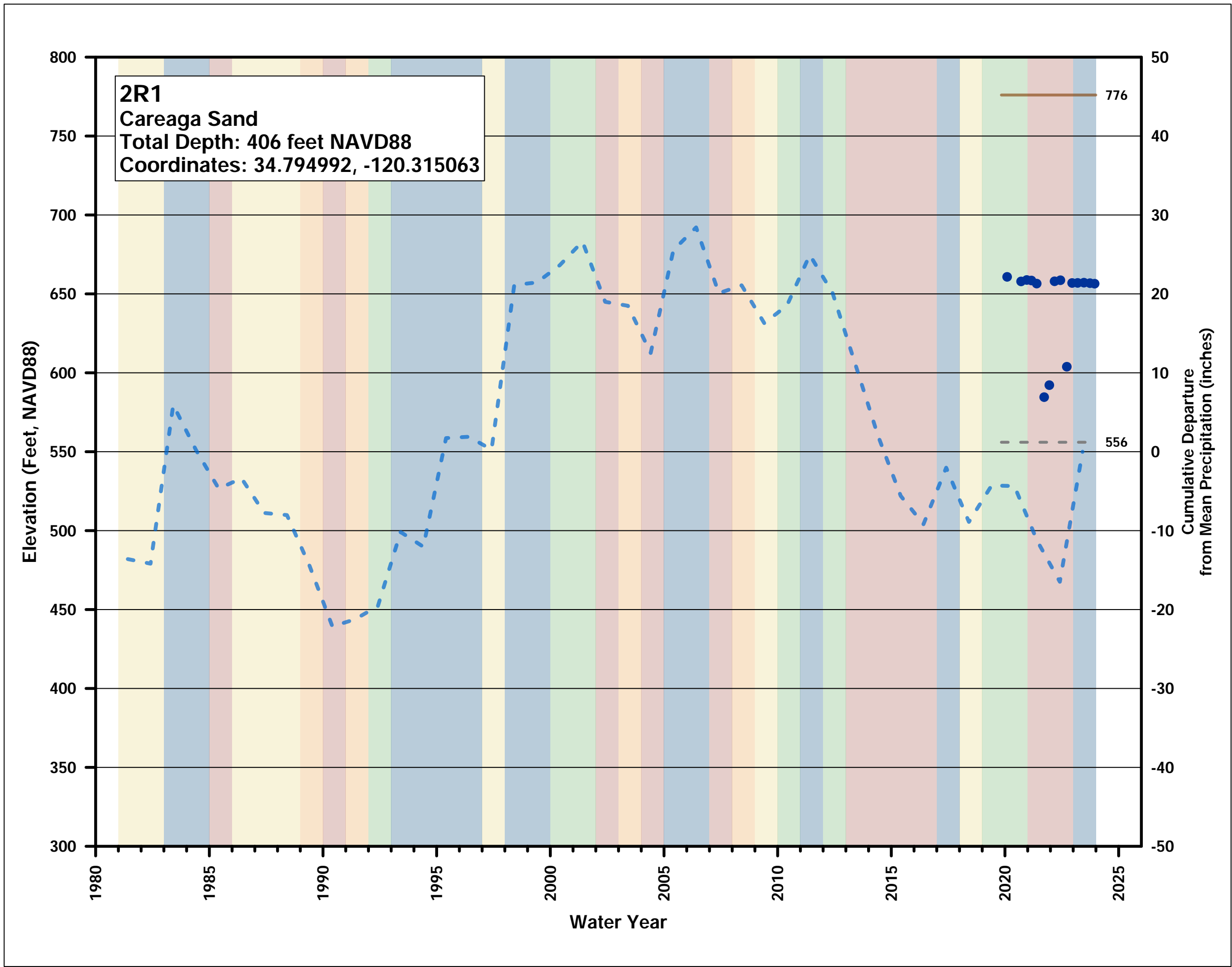
LEGEND

- Groundwater Elevation
- - - Cumulative Departure from Mean Precipitation
- - - Top of Perforated Interval
- Ground Surface Elevation

WATER YEAR TYPE

- Wet
- Above Normal
- Below Normal
- Dry
- Critical





Groundwater Elevation Hydrograph

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Groundwater Basin Groundwater
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LEGEND

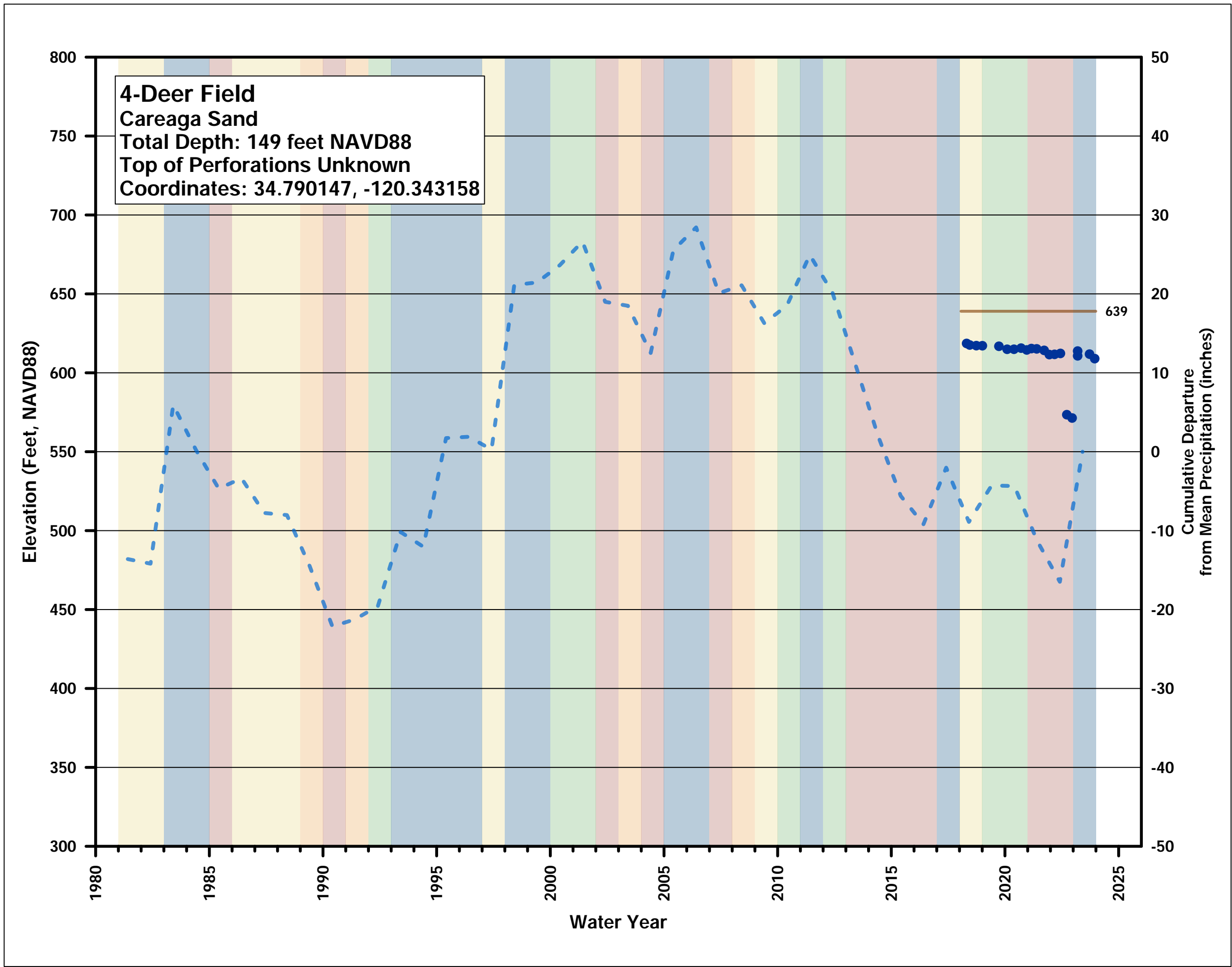
- Groundwater Elevation
- - - Cumulative Departure from Mean Precipitation
- - - Top of Perforated Interval
- Ground Surface Elevation

WATER YEAR TYPE

- Wet
- Above Normal
- Below Normal
- Dry
- Critical

776

556



Groundwater Elevation Hydrograph

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Groundwater Basin Groundwater
Sustainability Plan 2023 Annual
Report**


LEGEND

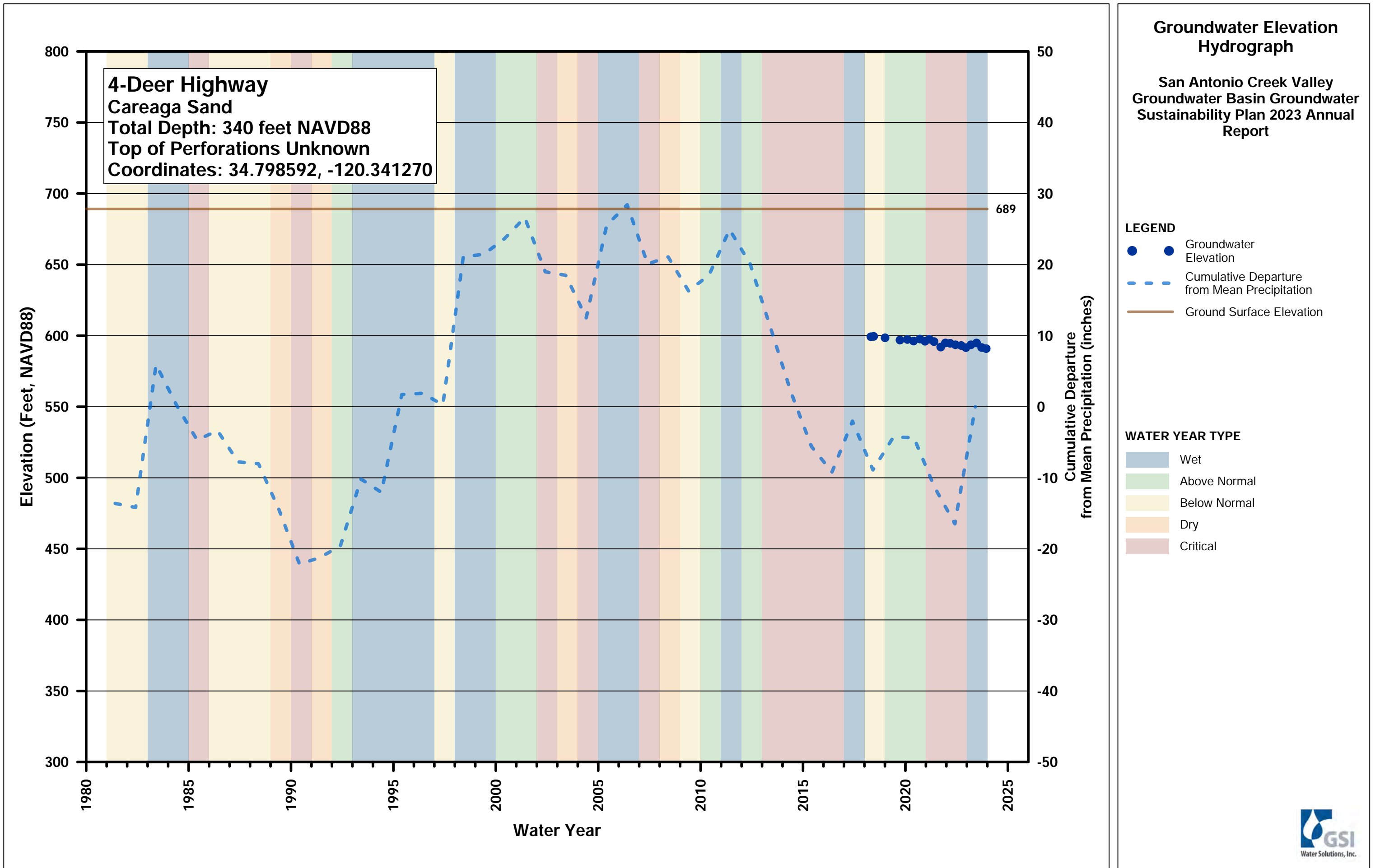
- Groundwater Elevation
- - - Cumulative Departure from Mean Precipitation
- Ground Surface Elevation

WATER YEAR TYPE

- Wet
- Above Normal
- Below Normal
- Dry
- Critical

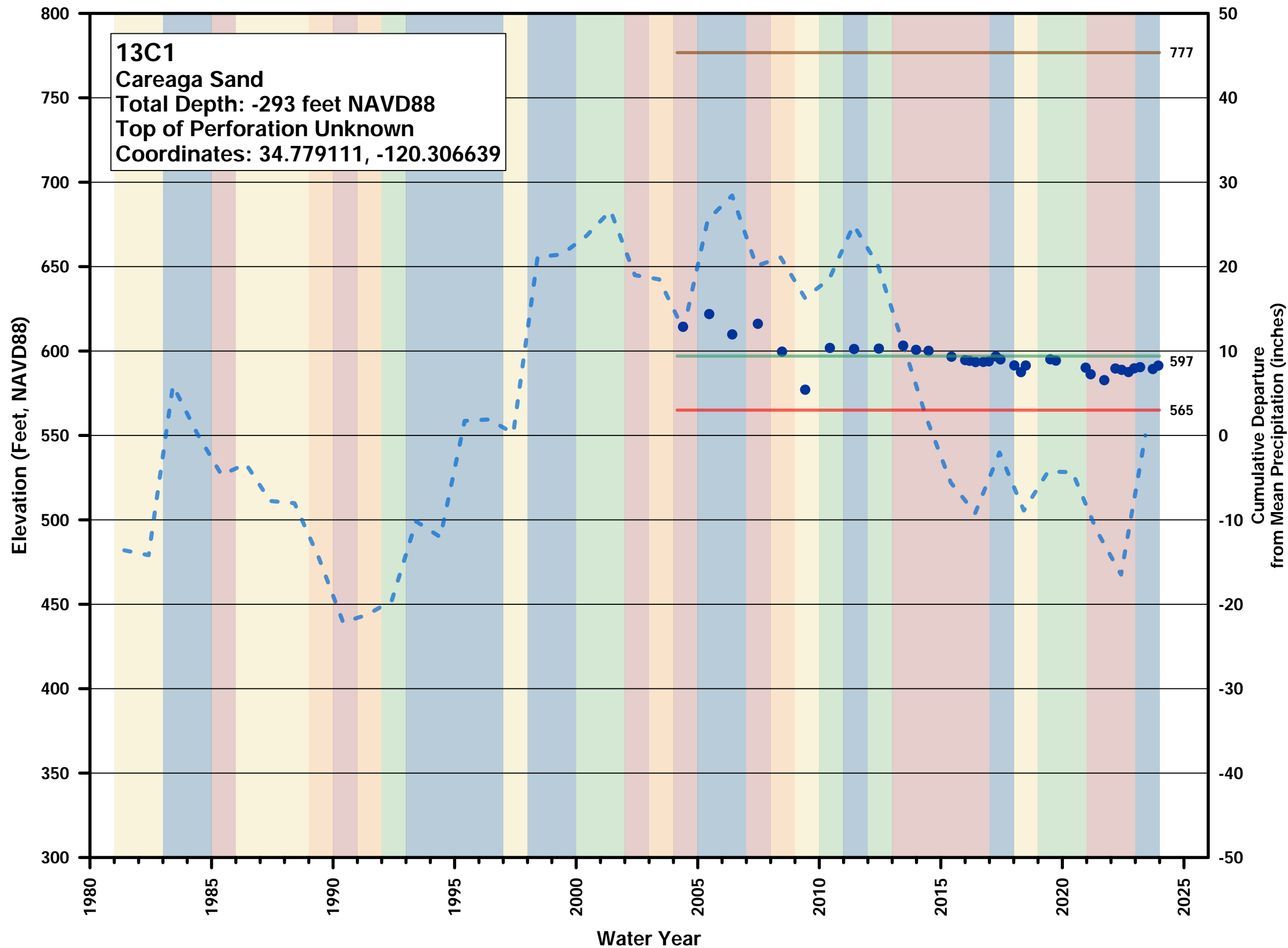
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Groundwater Elevation Hydrograph

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Groundwater Basin Groundwater
Sustainability Plan 2023 Annual
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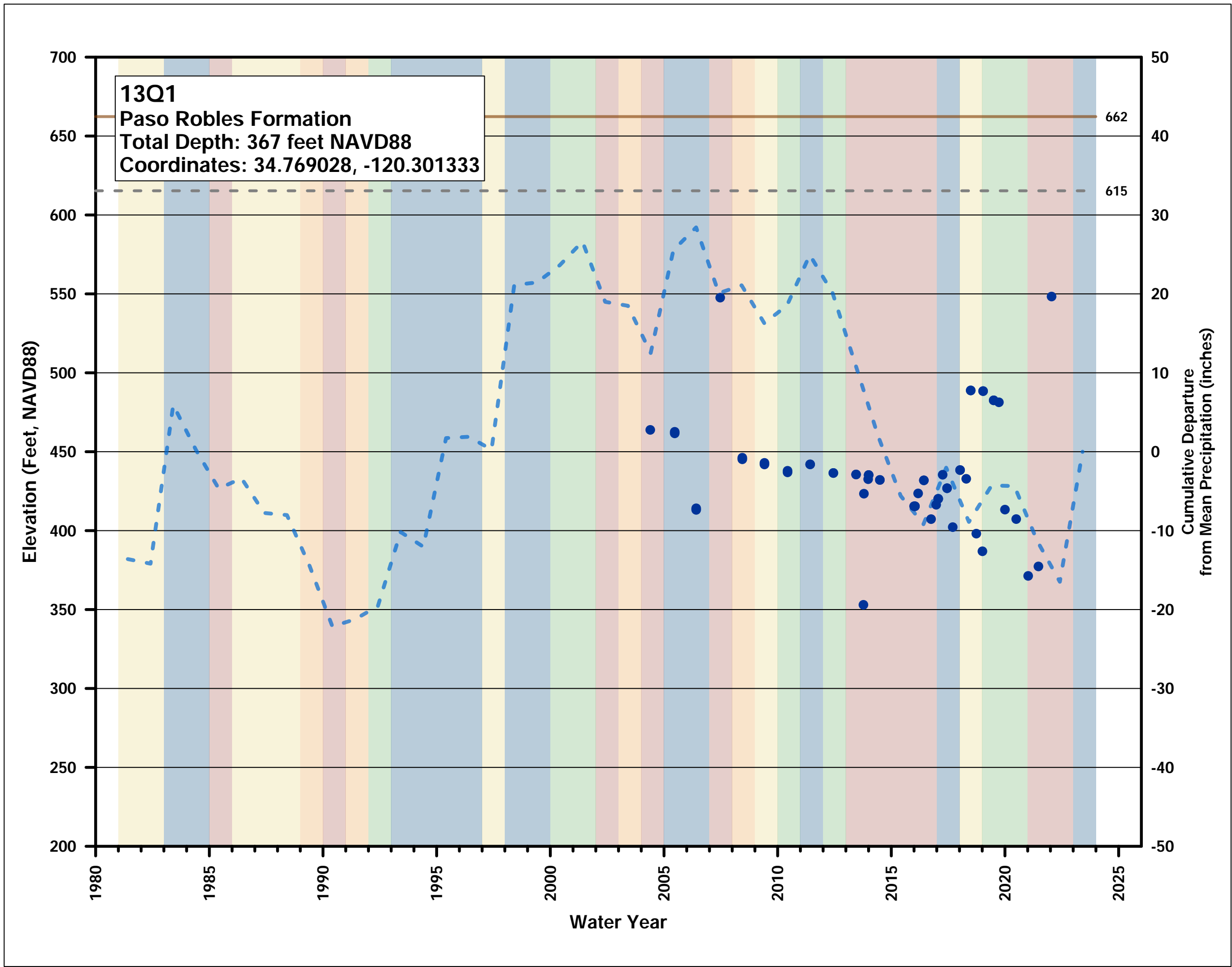
LEGEND

- Groundwater Elevation
- - - Cumulative Departure from Mean Precipitation
- Ground Surface Elevation
- Measureable Objective
- Minimum Threshold

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Groundwater Elevation Hydrograph


**San Antonio Creek Valley
Groundwater Basin Groundwater
Sustainability Plan 2023 Annual
Report**

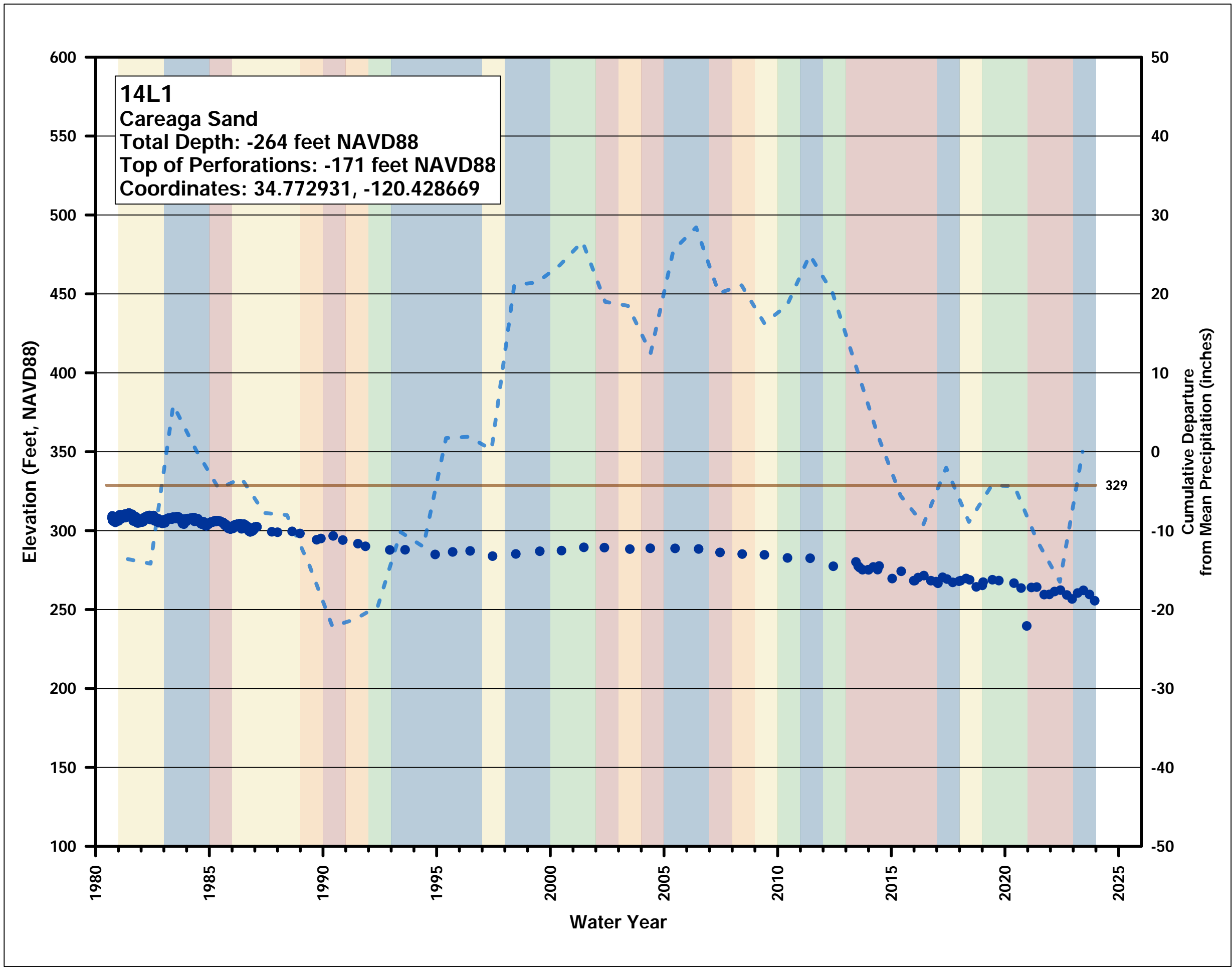
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- Groundwater Elevation
- - - Cumulative Departure from Mean Precipitation
- Ground Surface Elevation
- - - Top of Well Perforated Interval

WATER YEAR TYPE

- Wet
- Above Normal
- Below Normal
- Dry
- Critical





Groundwater Elevation Hydrograph


**San Antonio Creek Valley
Groundwater Basin Groundwater
Sustainability Plan 2023 Annual
Report**

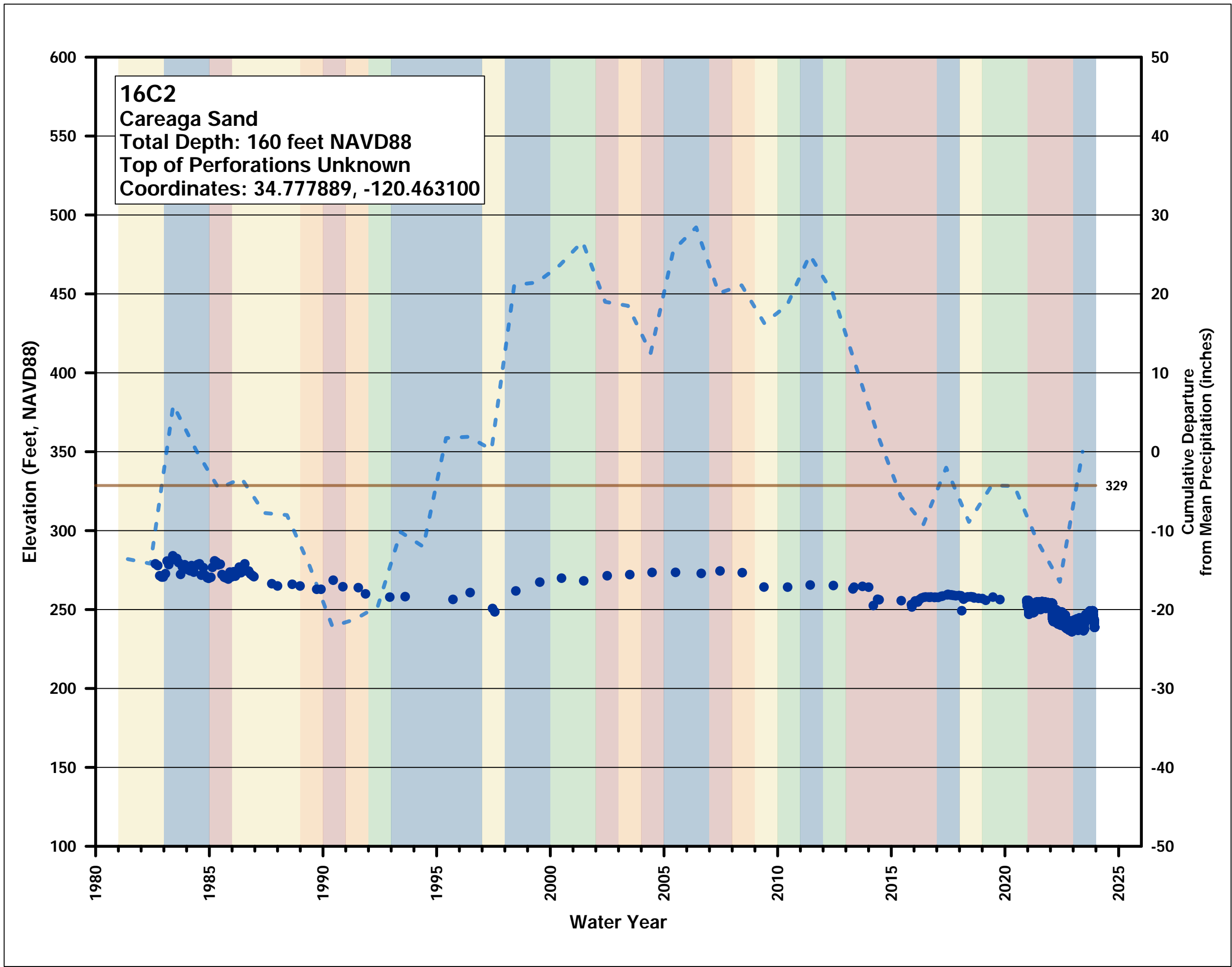
LEGEND

- Groundwater Elevation
- - - Cumulative Departure from Mean Precipitation
- Ground Surface Elevation

WATER YEAR TYPE

- Wet
- Above Normal
- Below Normal
- Dry
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Groundwater Elevation Hydrograph

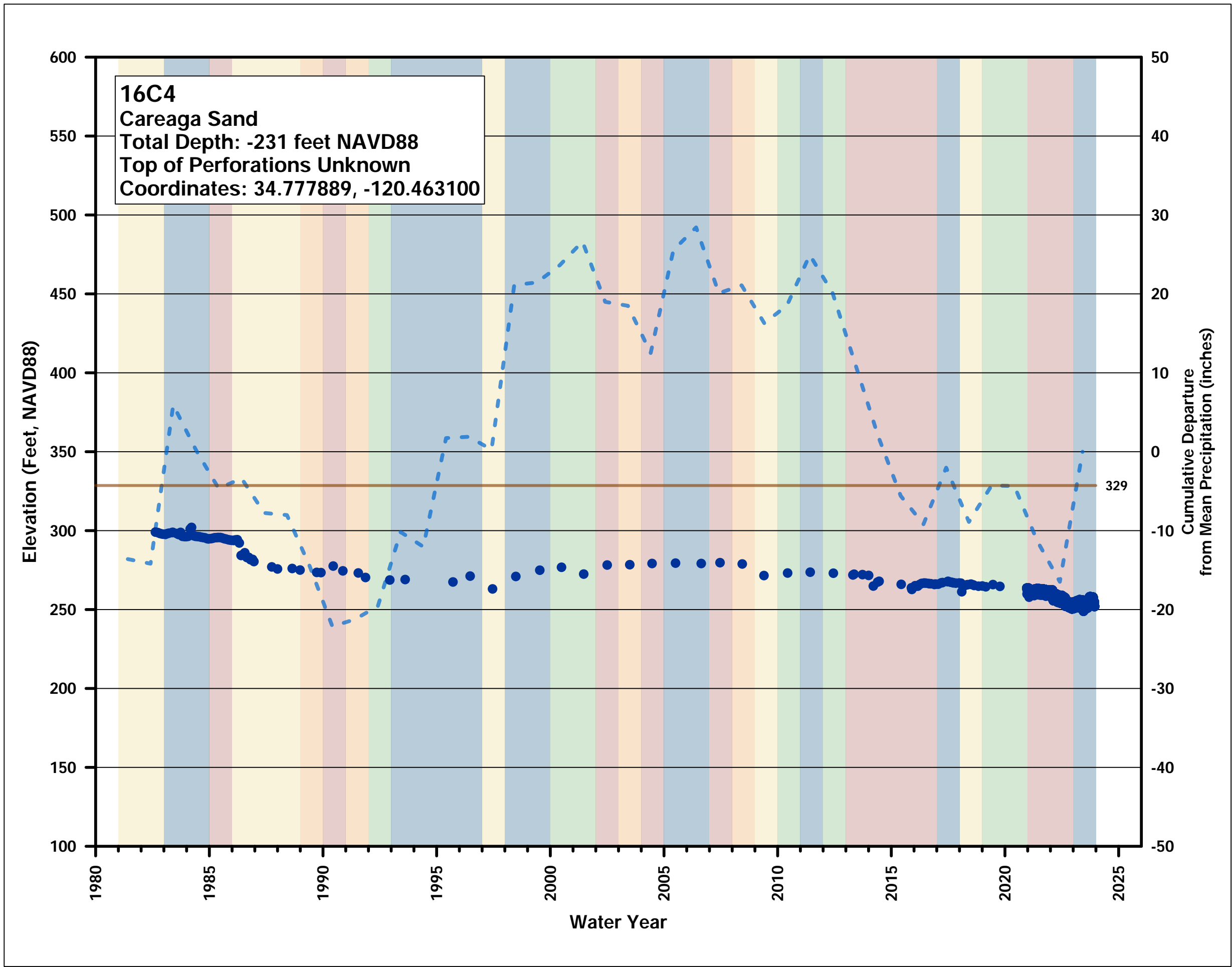
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 Report

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- Groundwater Elevation
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- Ground Surface Elevation

WATER YEAR TYPE

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Groundwater Elevation Hydrograph


San Antonio Creek Valley
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 Sustainability Plan 2023 Annual
 Report

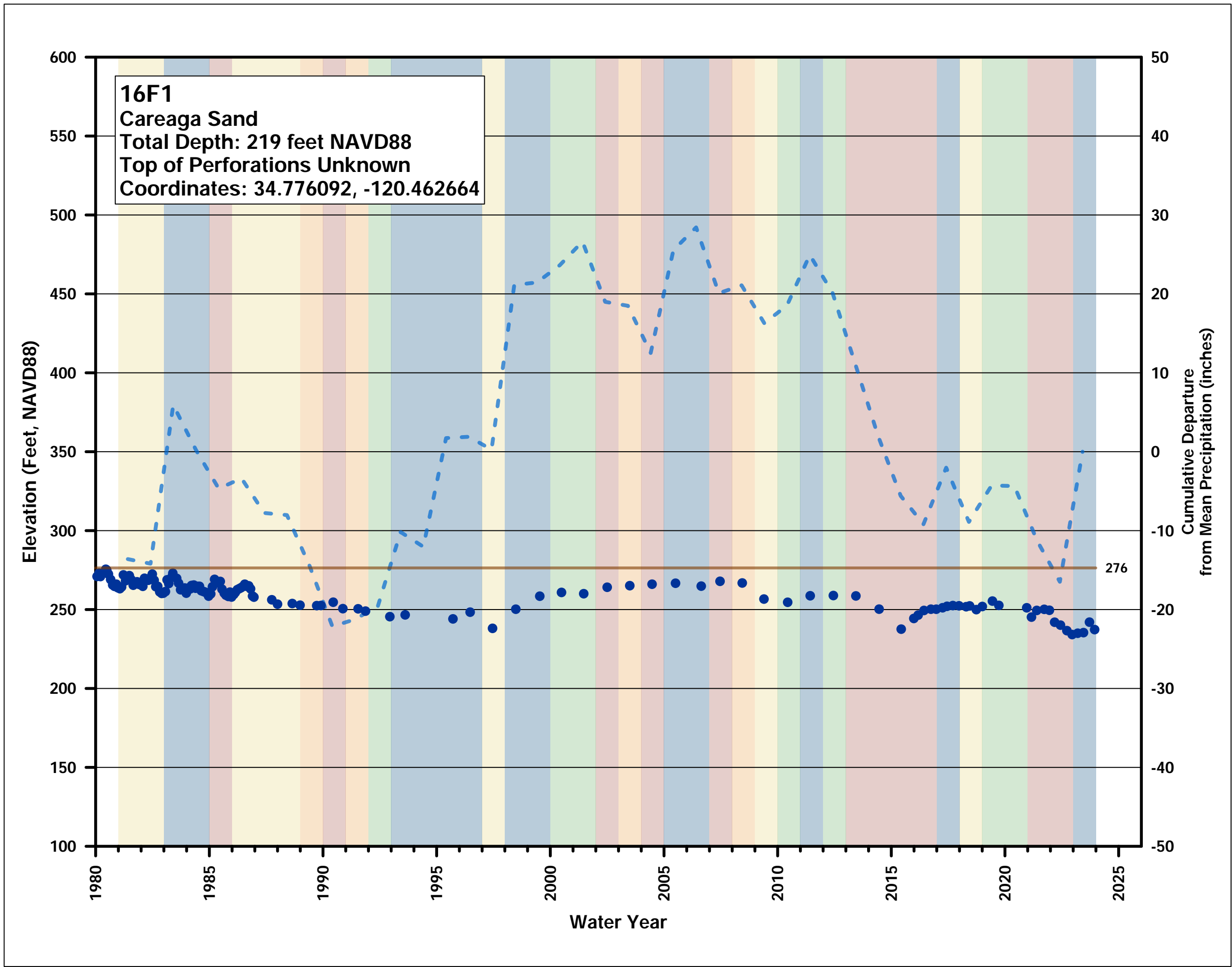
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Groundwater Elevation Hydrograph


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 Sustainability Plan 2023 Annual
 Report**

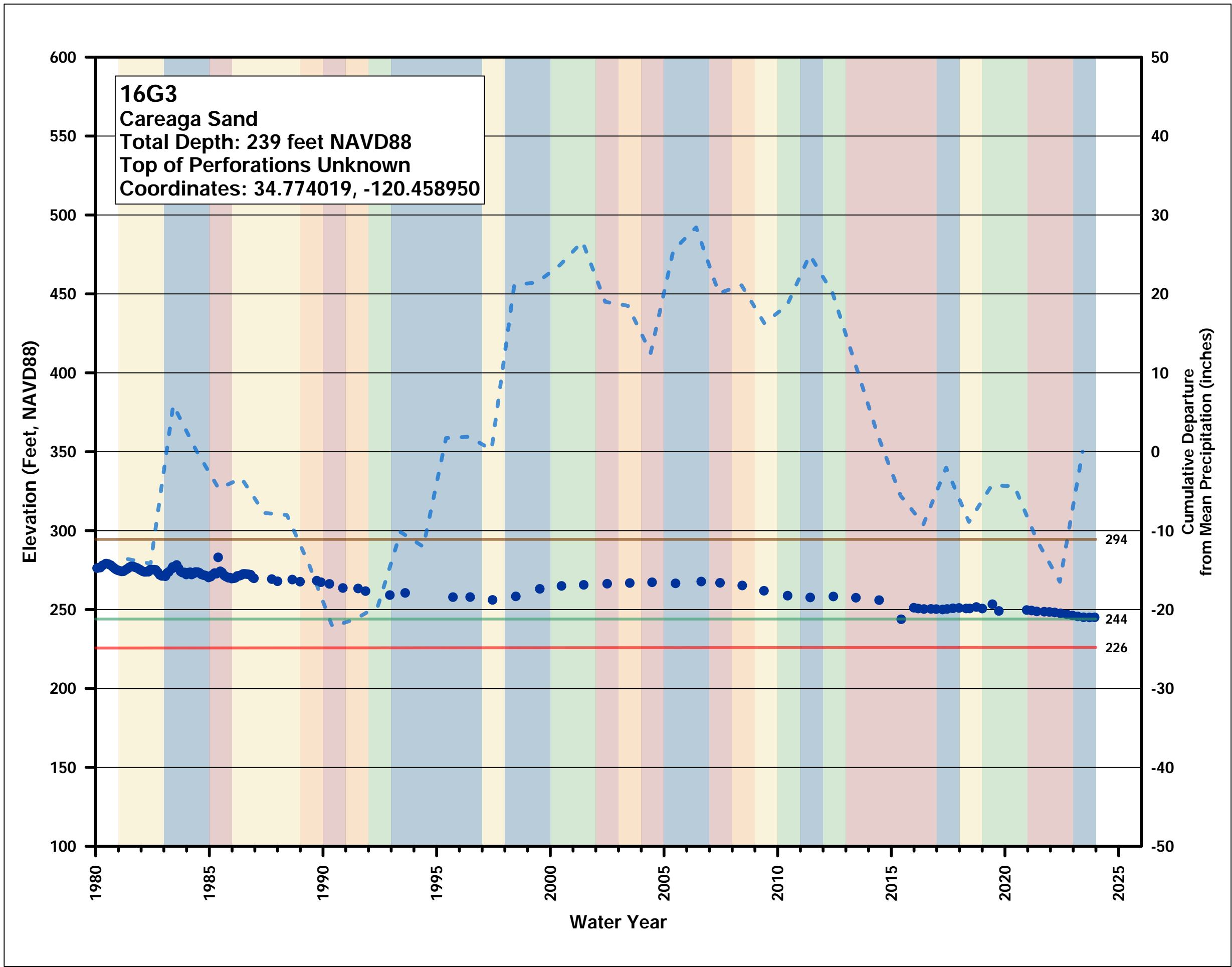
LEGEND

- Groundwater Elevation
- - - Cumulative Departure from Mean Precipitation
- Ground Surface Elevation

WATER YEAR TYPE

- Wet
- Above Normal
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Groundwater Elevation Hydrograph

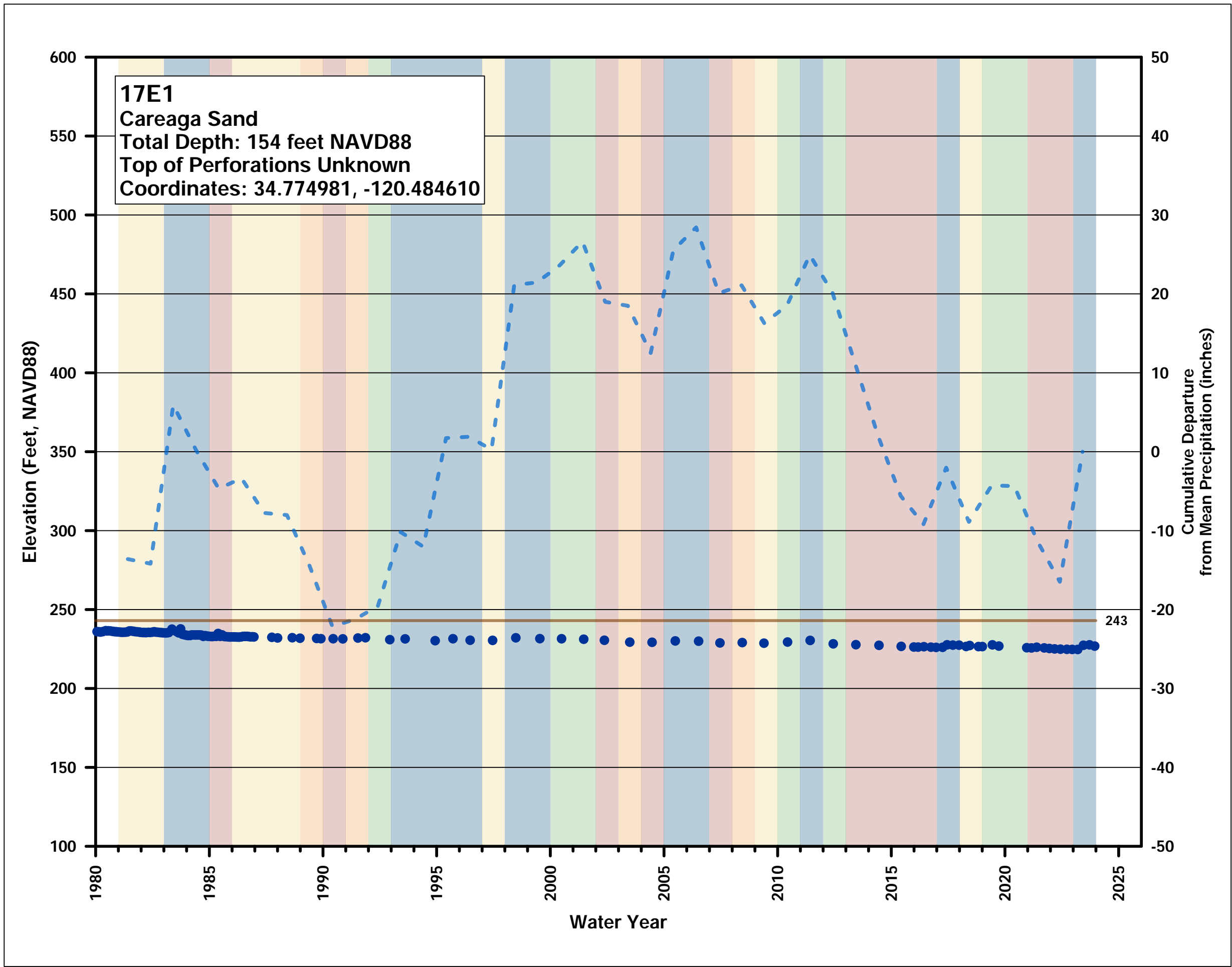
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 Groundwater Basin Groundwater
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- Groundwater Elevation
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Groundwater Elevation Hydrograph


**San Antonio Creek Valley
Groundwater Basin Groundwater
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Report**

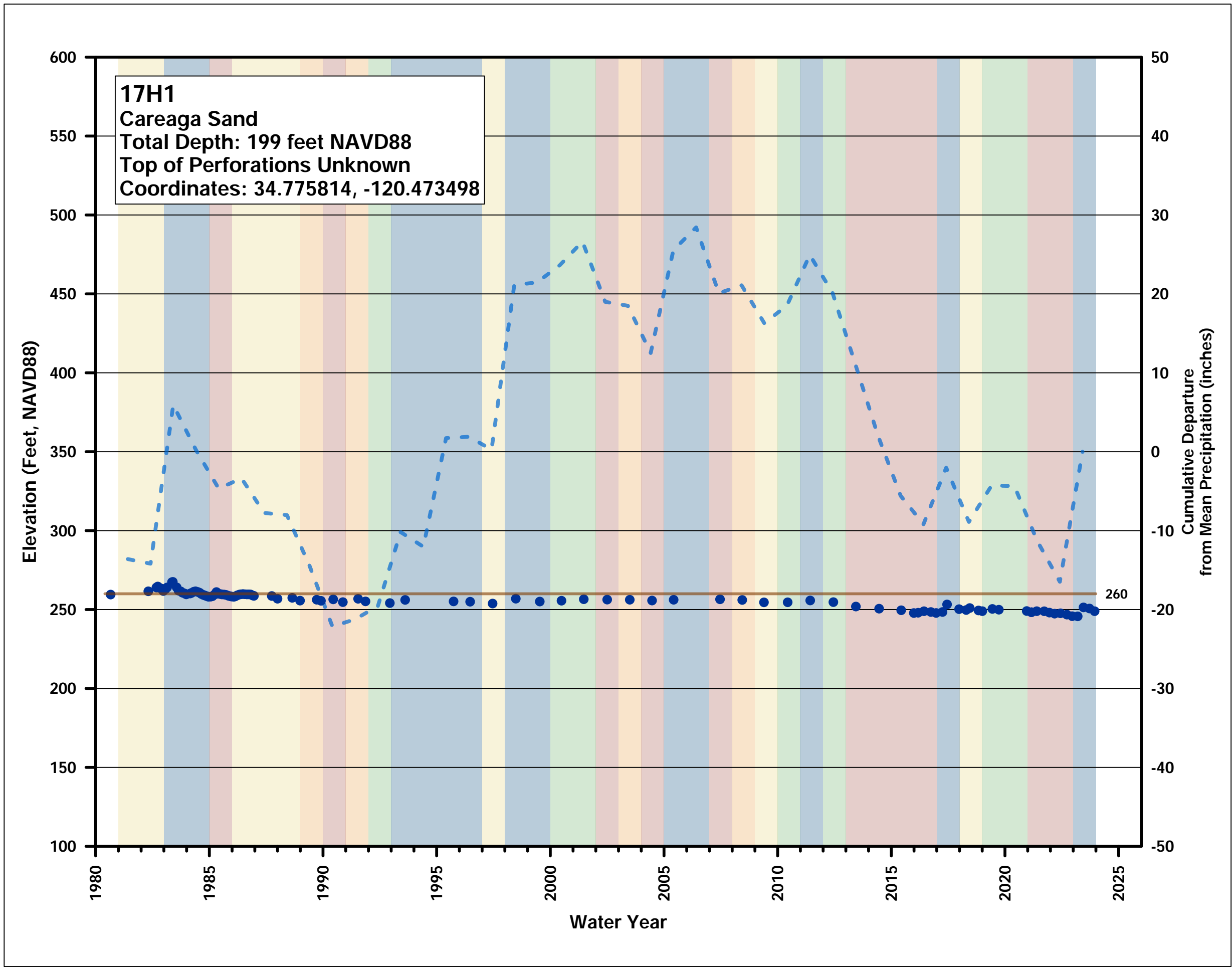
LEGEND

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Groundwater Elevation Hydrograph


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Sustainability Plan 2023 Annual
Report**

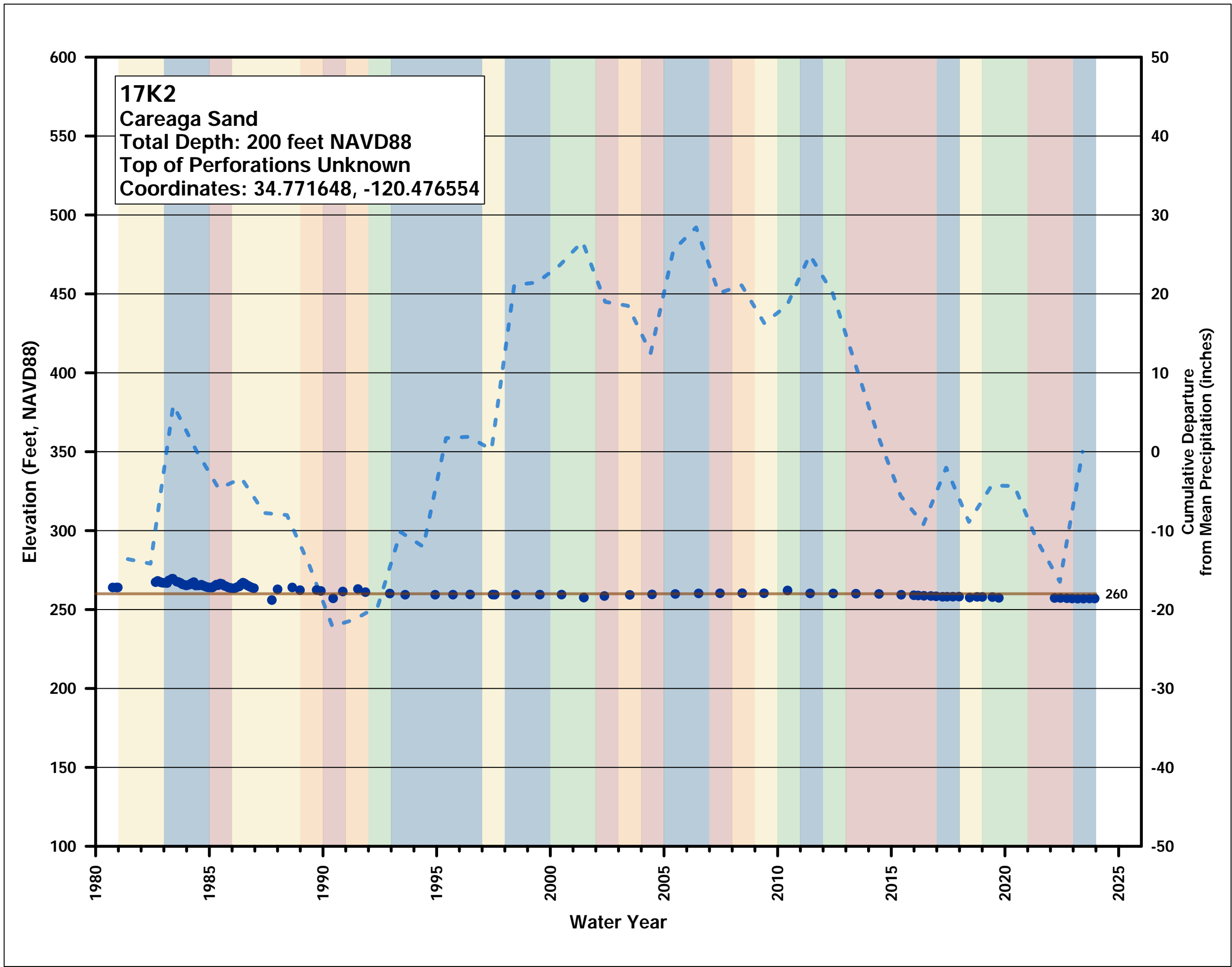
LEGEND

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Groundwater Elevation Hydrograph


**San Antonio Creek Valley
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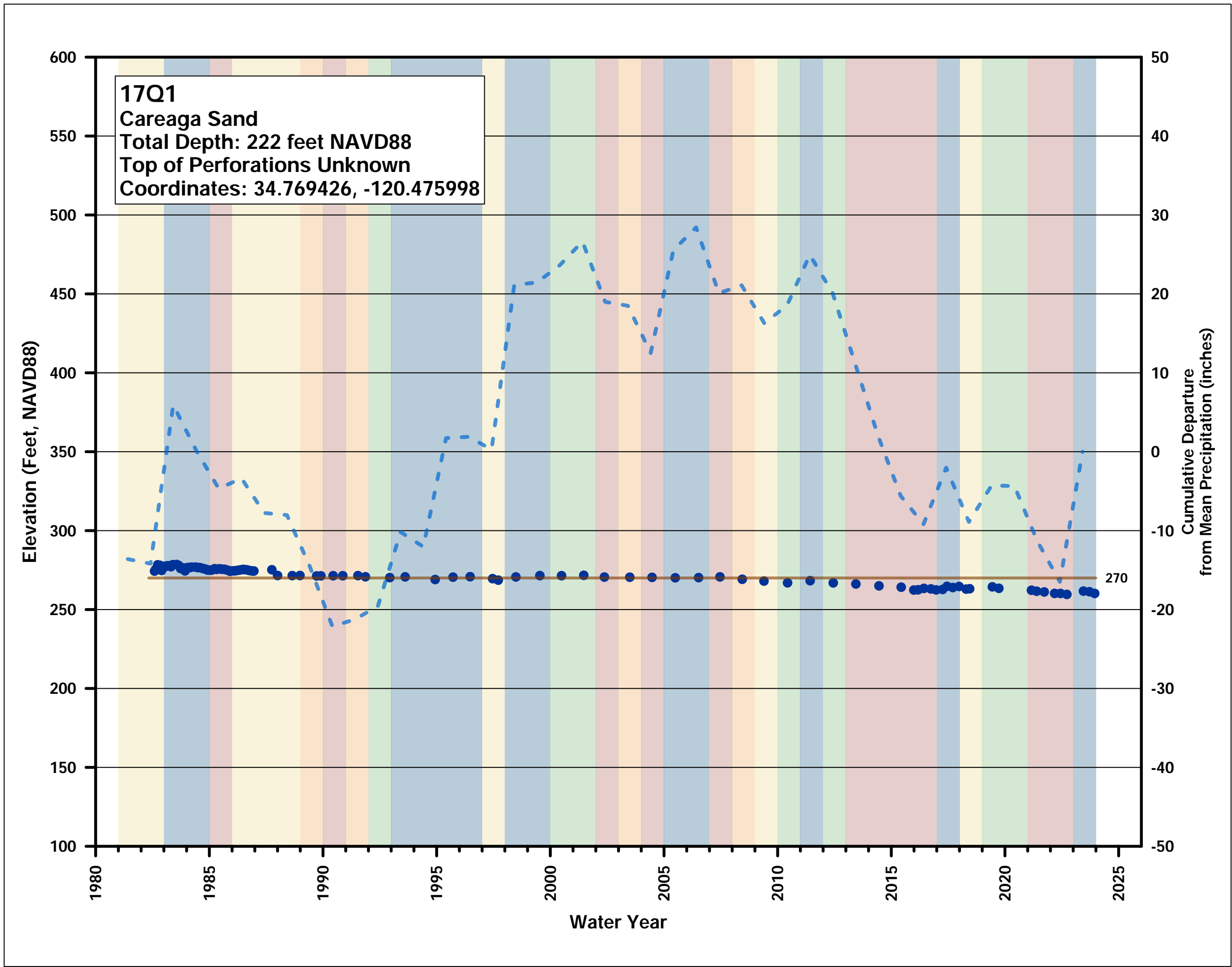
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Groundwater Elevation Hydrograph


**San Antonio Creek Valley
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 Sustainability Plan 2023 Annual
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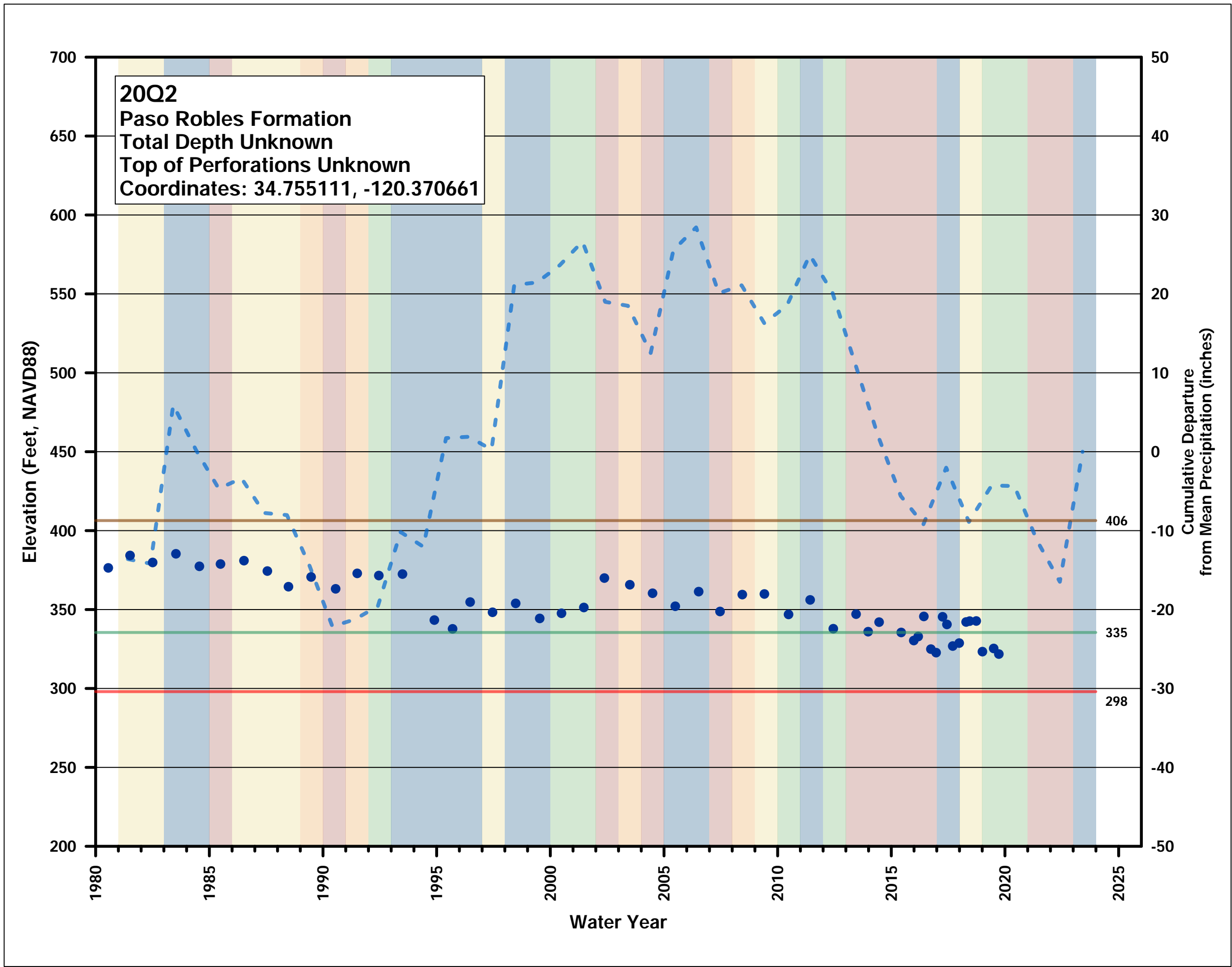
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- Groundwater Elevation
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Groundwater Elevation Hydrograph


**San Antonio Creek Valley
 Groundwater Basin Groundwater
 Sustainability Plan 2023 Annual
 Report**

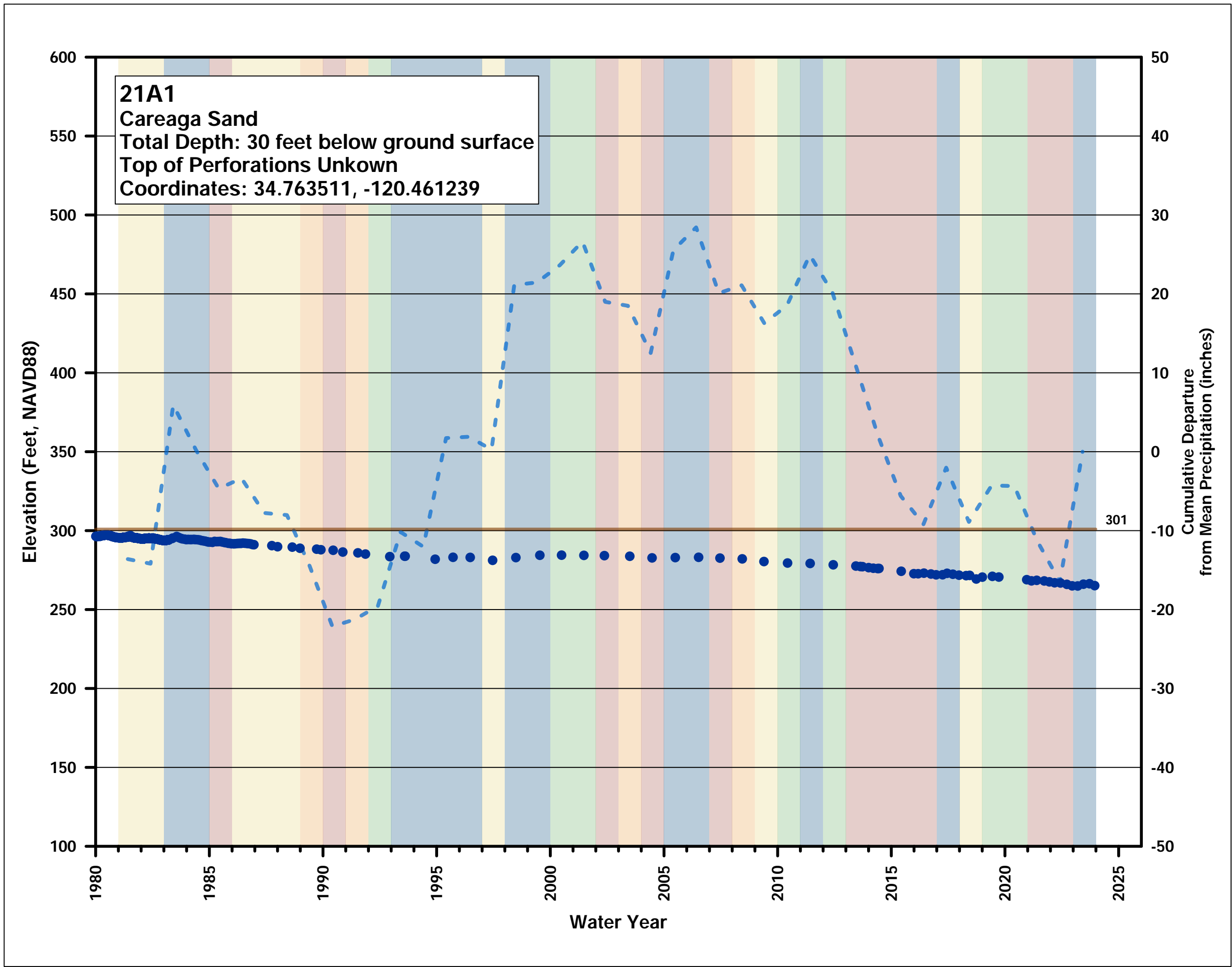
LEGEND

- Groundwater Elevation
- - - Cumulative Departure from Mean Precipitation
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Groundwater Elevation Hydrograph


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Groundwater Basin Groundwater
Sustainability Plan 2023 Annual
Report**

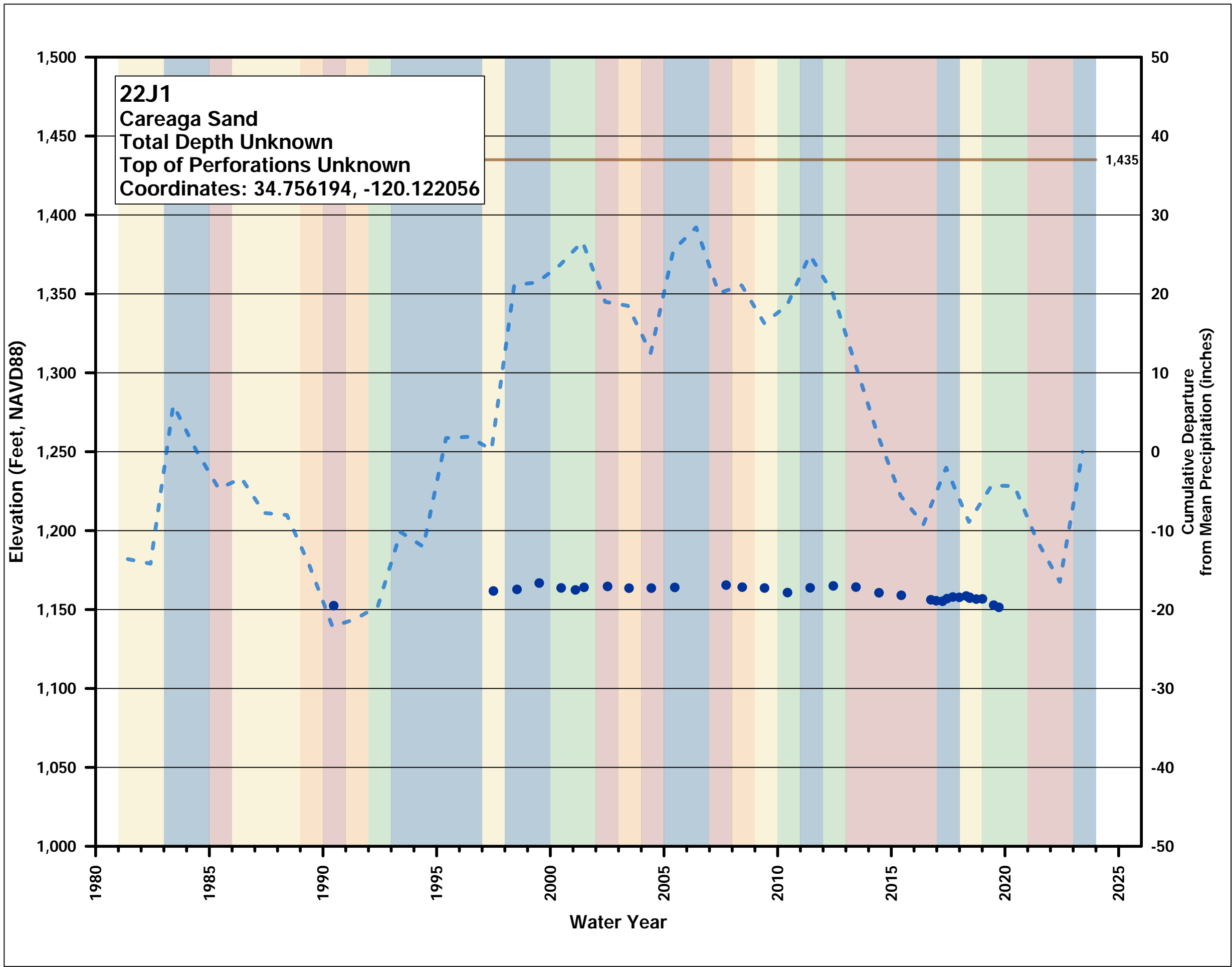
LEGEND

- Groundwater Elevation
- - - Cumulative Departure from Mean Precipitation
- Ground Surface Elevation

WATER YEAR TYPE

- Wet
- Above Normal
- Below Normal
- Dry
- Critical





Groundwater Elevation Hydrograph


San Antonio Creek Valley
 Groundwater Basin Groundwater
 Sustainability Plan 2023 Annual
 Report

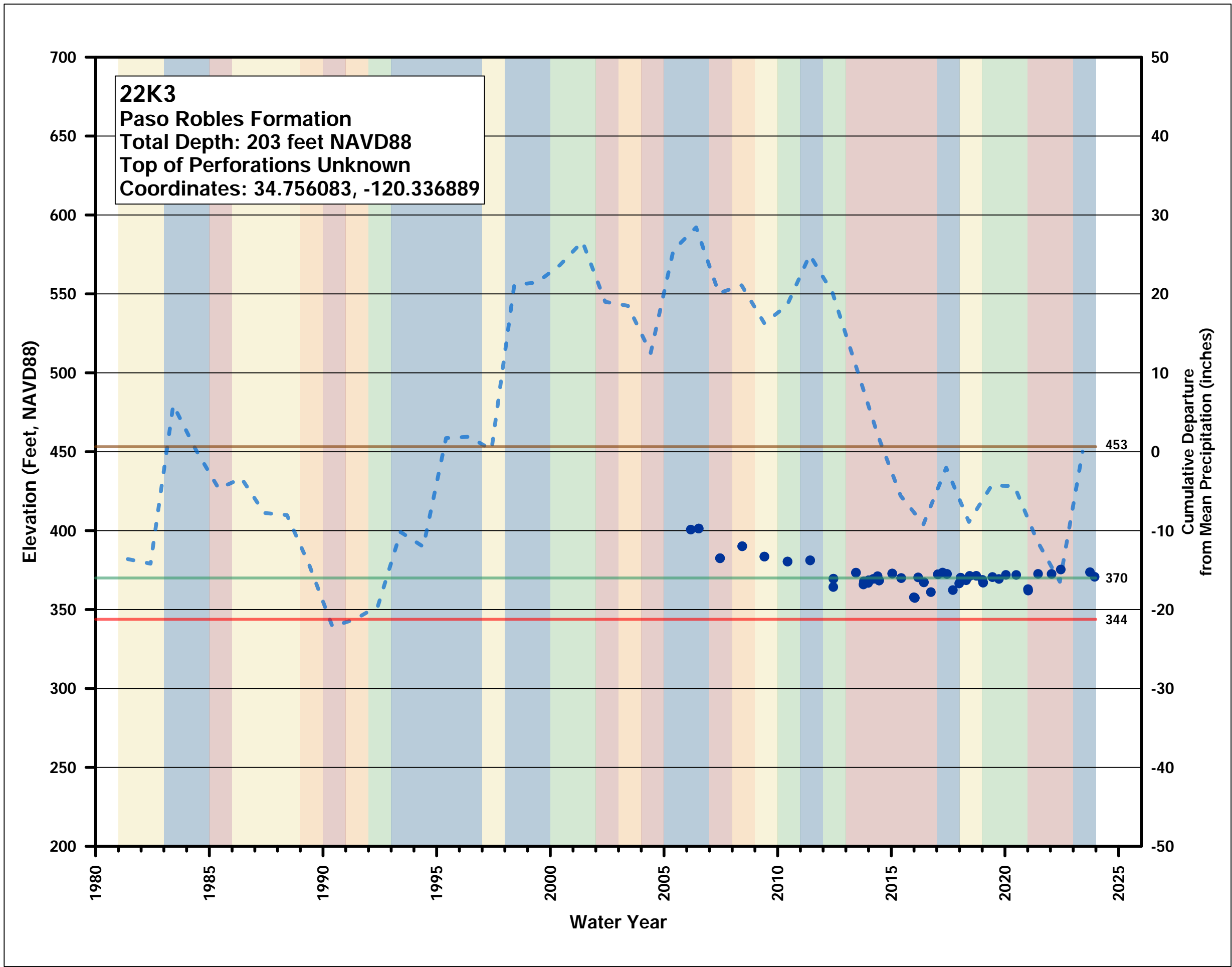
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- Dry
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Groundwater Elevation Hydrograph


**San Antonio Creek Valley
 Groundwater Basin Groundwater
 Sustainability Plan 2023 Annual
 Report**

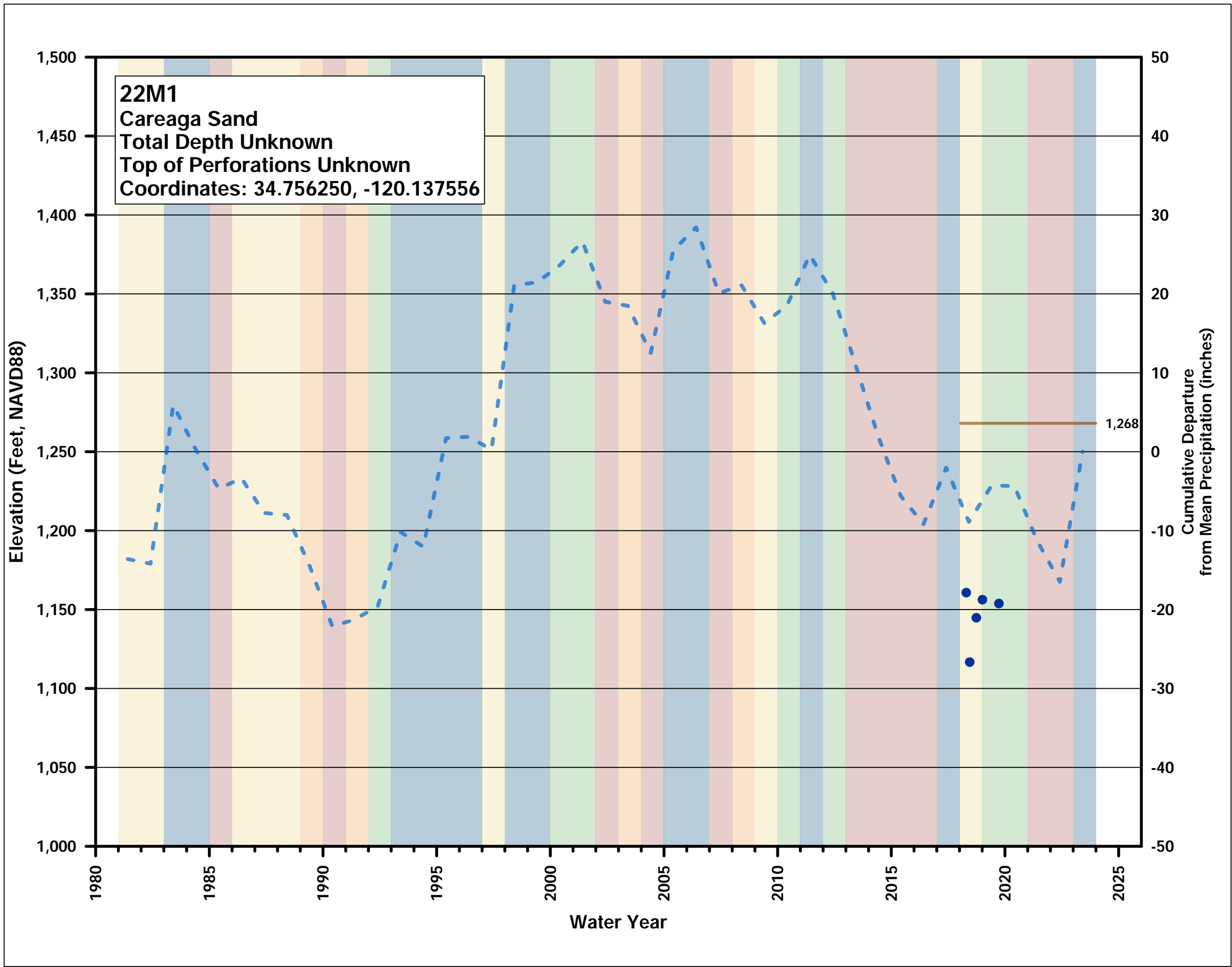
LEGEND

- Groundwater Elevation
- - - Cumulative Departure from Mean Precipitation
- Measureable Objective
- Ground Surface Elevation
- Minimum Threshold

WATER YEAR TYPE

- Wet
- Above Normal
- Below Normal
- Dry
- Critical





Groundwater Elevation Hydrograph


**San Antonio Creek Valley
Groundwater Basin Groundwater
Sustainability Plan 2023 Annual
Report**

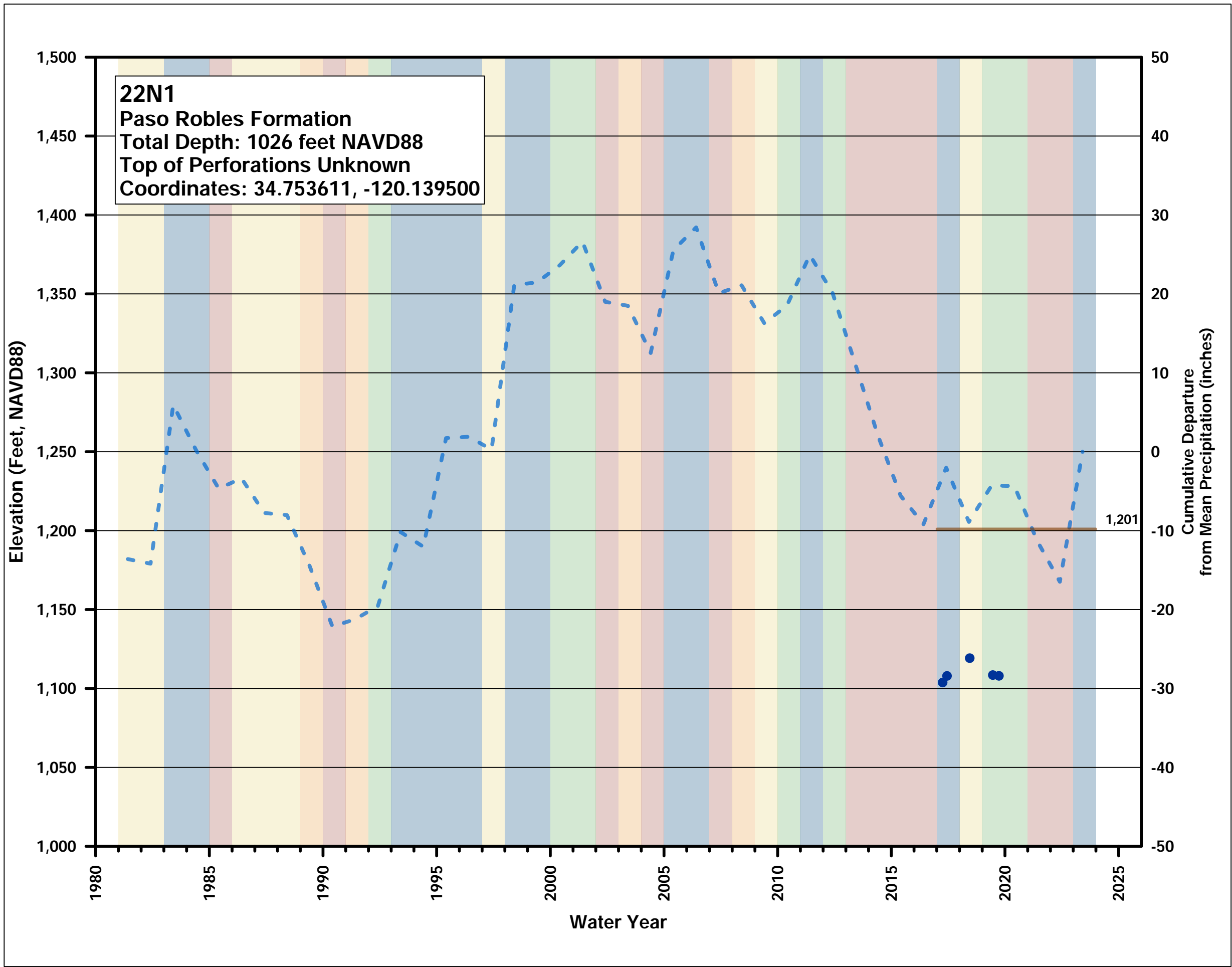
LEGEND

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- Ground Surface Elevation

WATER YEAR TYPE

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Groundwater Elevation Hydrograph


**San Antonio Creek Valley
Groundwater Basin Groundwater
Sustainability Plan 2023 Annual
Report**

LEGEND

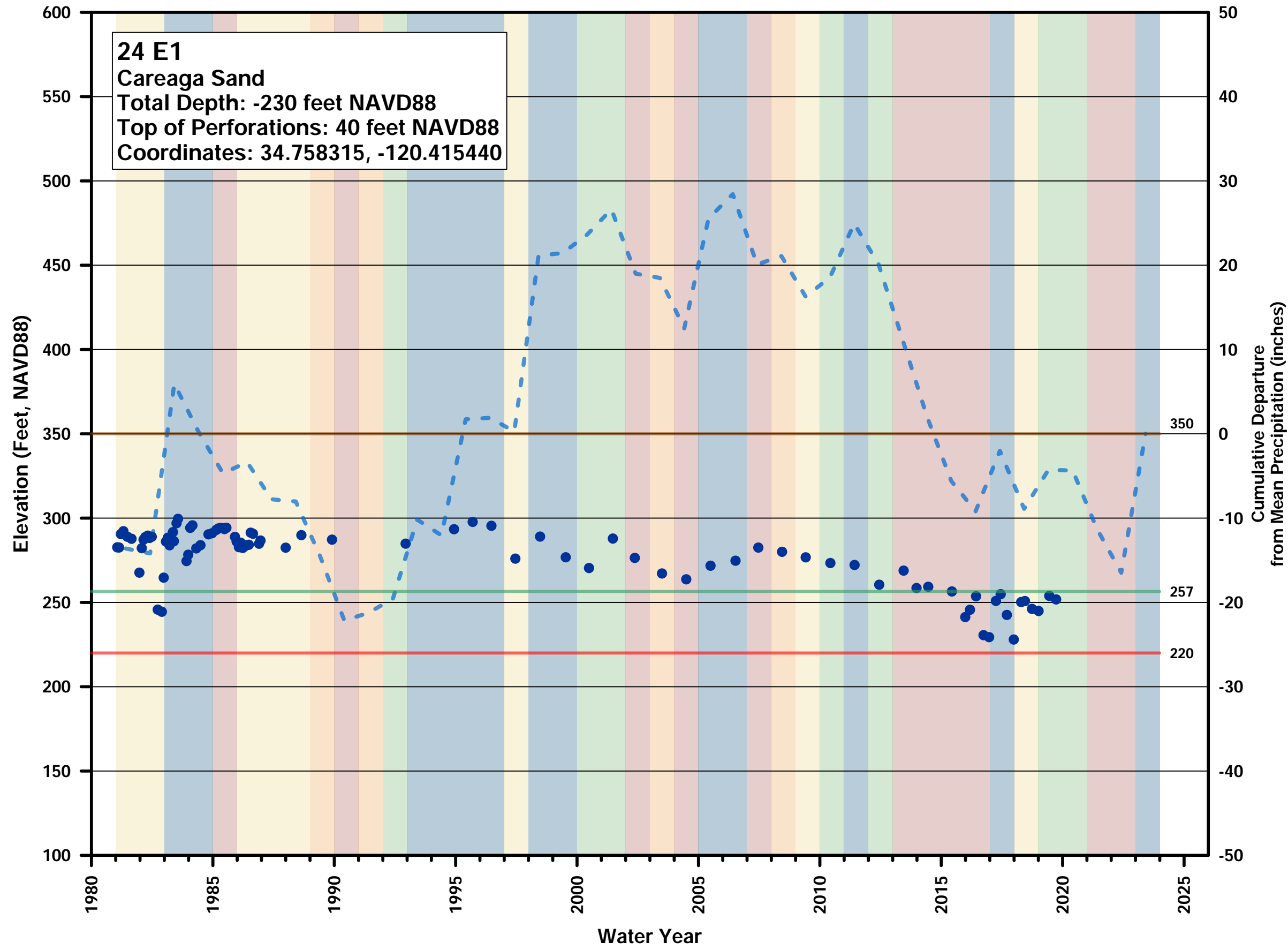
- Groundwater Elevation
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- Ground Surface Elevation

WATER YEAR TYPE

- Wet
- Above Normal
- Below Normal
- Dry
- Critical



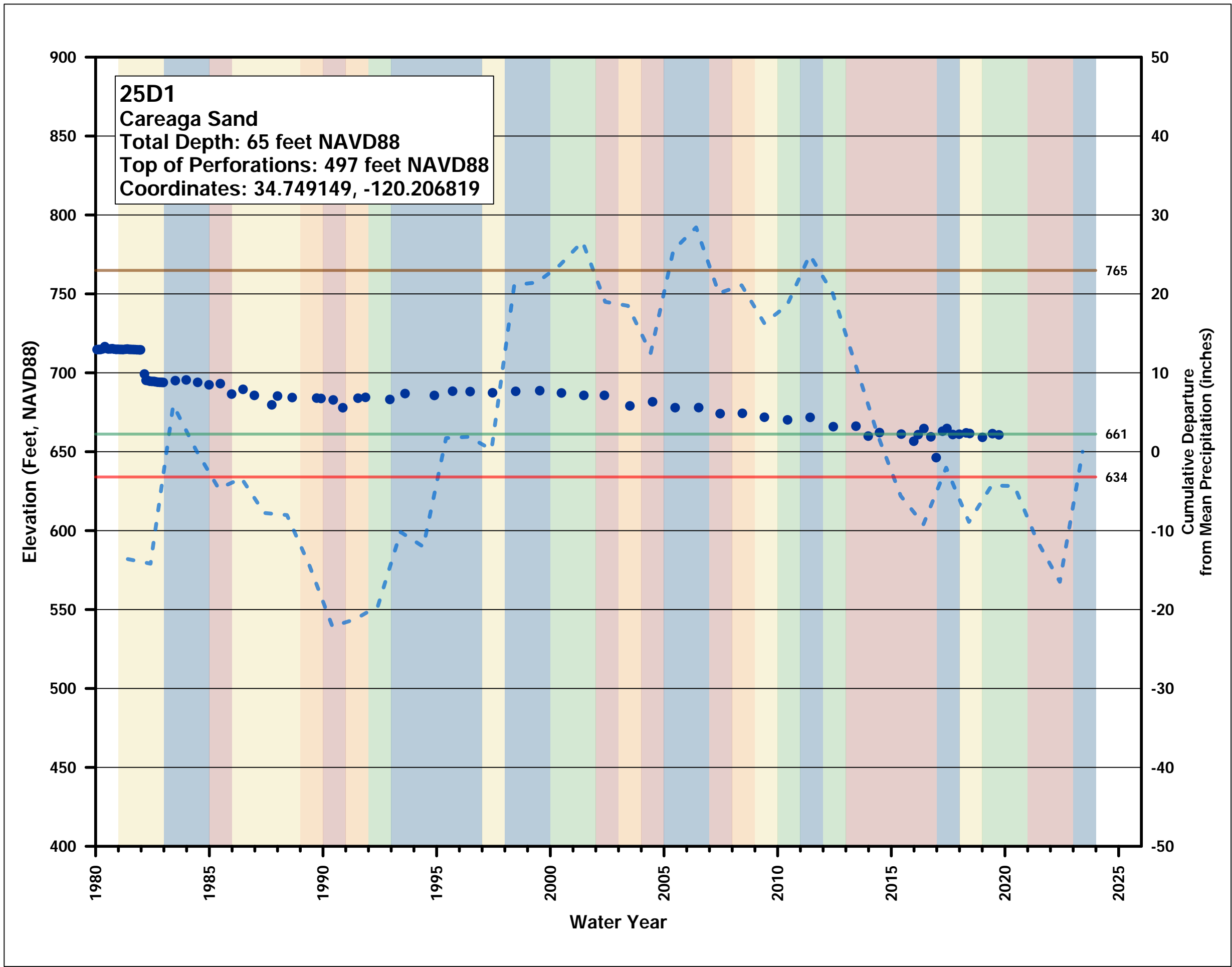
24 E1
Careaga Sand
Total Depth: -230 feet NAVD88
Top of Perforations: 40 feet NAVD88
Coordinates: 34.758315, -120.415440



Groundwater Elevation Hydrograph
San Antonio Creek Valley Groundwater Basin Groundwater Sustainability Plan 2023 Annual Report

- LEGEND**
- Groundwater Elevation
 - - - Cumulative Departure from Mean Precipitation
 - Measureable Objective
 - Ground Surface Elevation
 - Minimum Threshold
- WATER YEAR TYPE**
- Wet
 - Above Normal
 - Below Normal
 - Dry
 - Critical





Groundwater Elevation Hydrograph

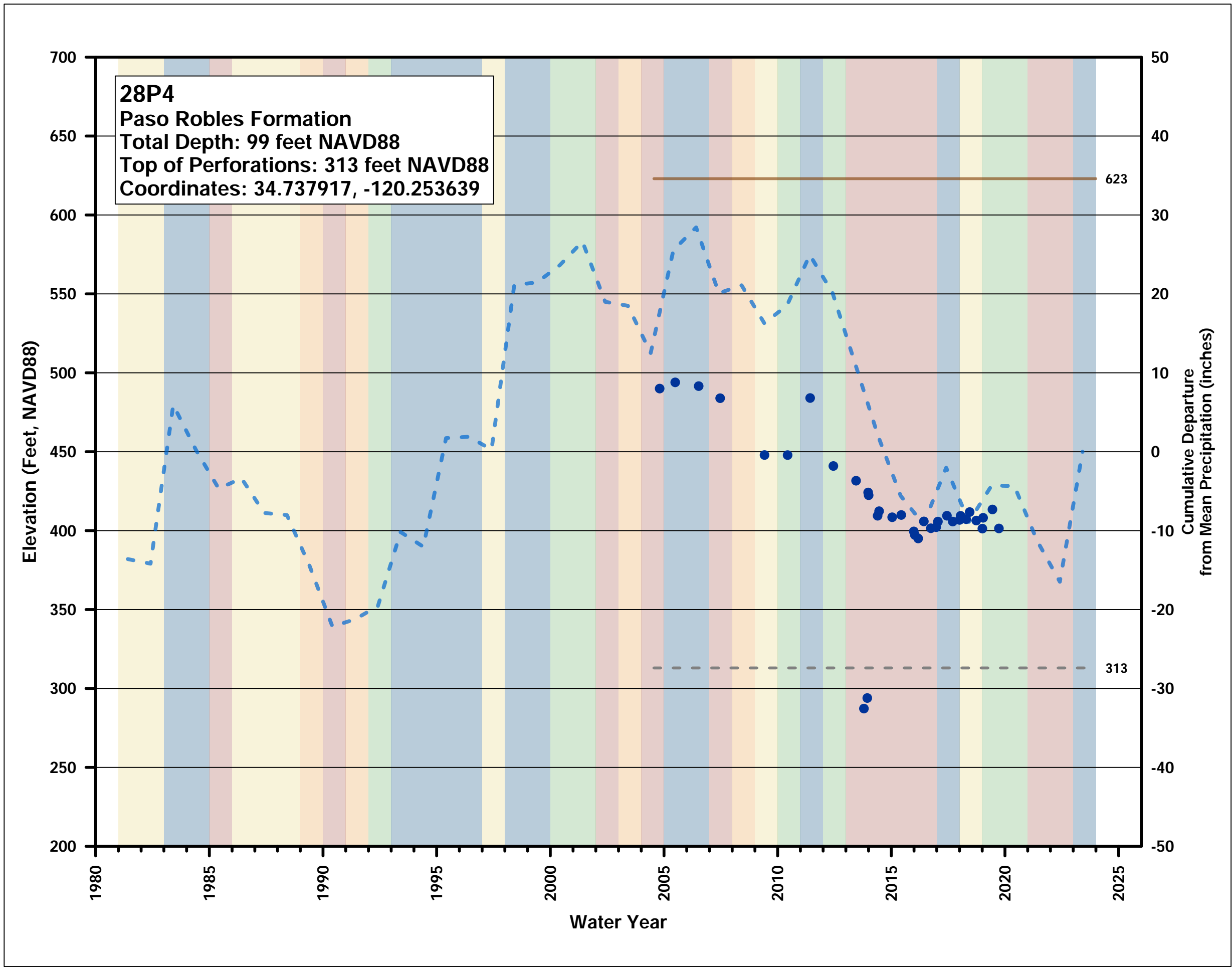
**San Antonio Creek Valley
Groundwater Basin Groundwater
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Groundwater Elevation Hydrograph


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Groundwater Basin Groundwater
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Report**

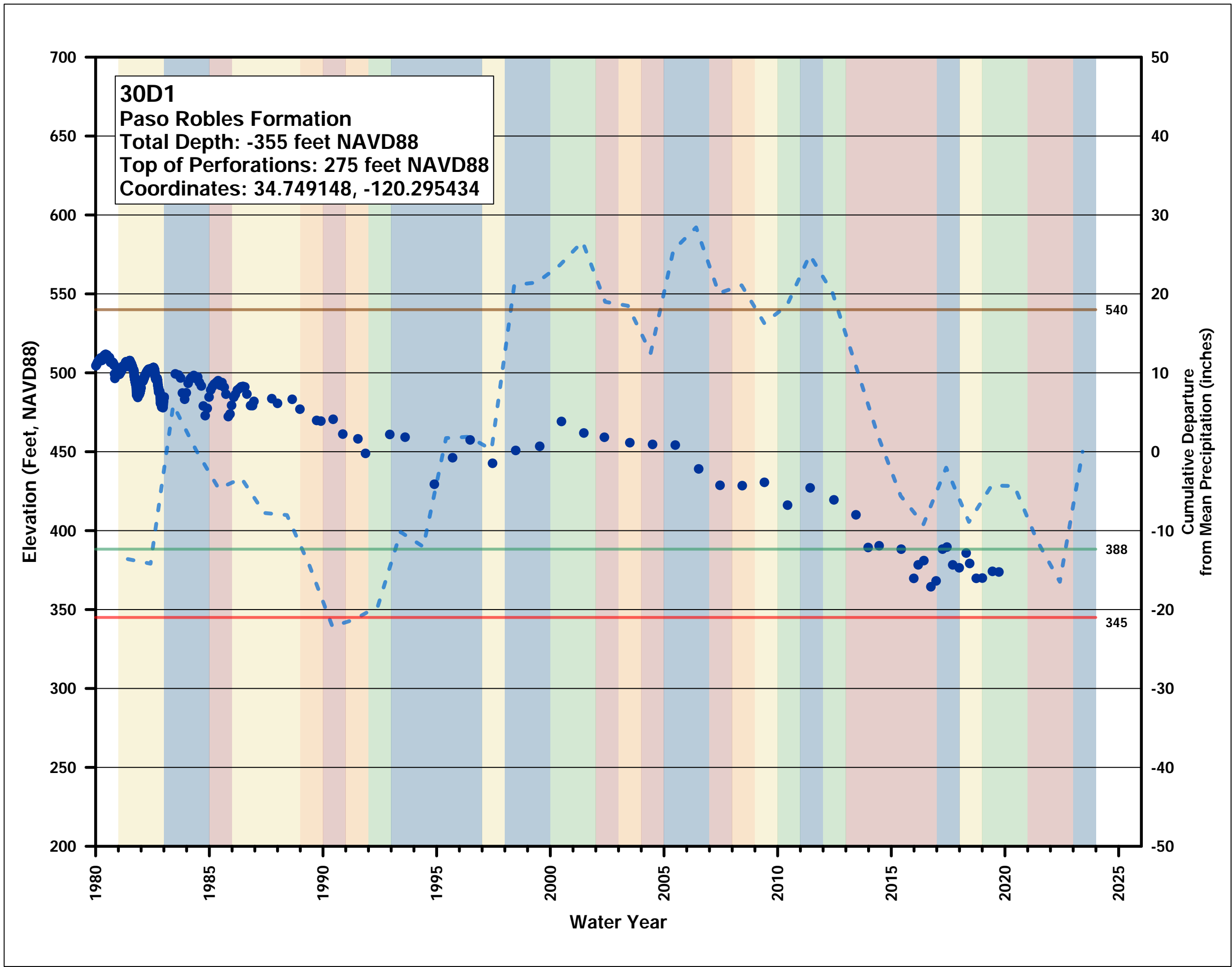
LEGEND

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- Ground Surface Elevation
- - - Top of Perforated Interval

WATER YEAR TYPE

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Groundwater Elevation Hydrograph

**San Antonio Creek Valley
Groundwater Basin Groundwater
Sustainability Plan 2023 Annual
Report**


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- Ground Surface Elevation
- Minimum Threshold

WATER YEAR TYPE

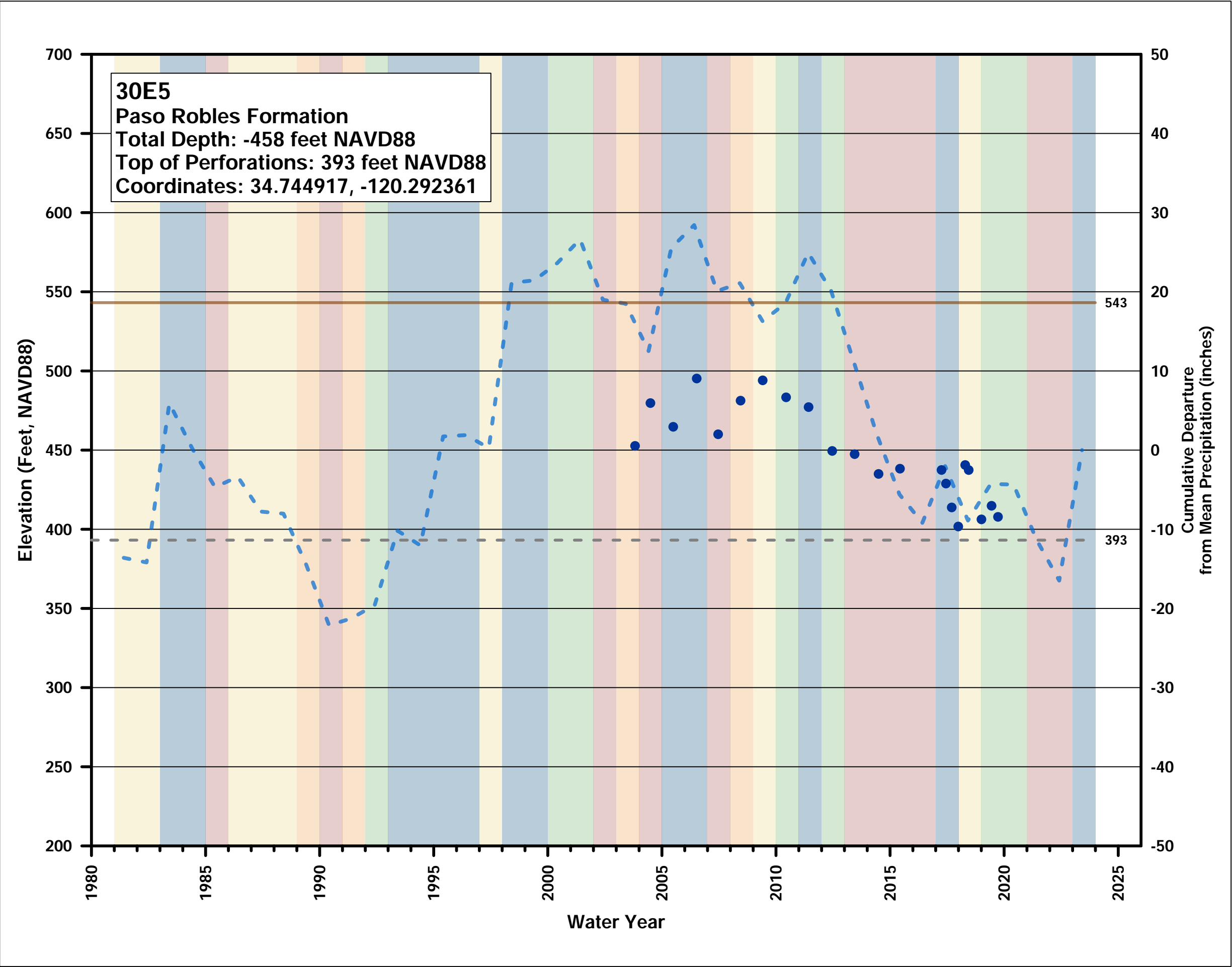
- Wet
- Above Normal
- Below Normal
- Dry
- Critical

540
388
345



30E5
Paso Robles Formation
Total Depth: -458 feet NAVD88
Top of Perforations: 393 feet NAVD88
Coordinates: 34.744917, -120.292361

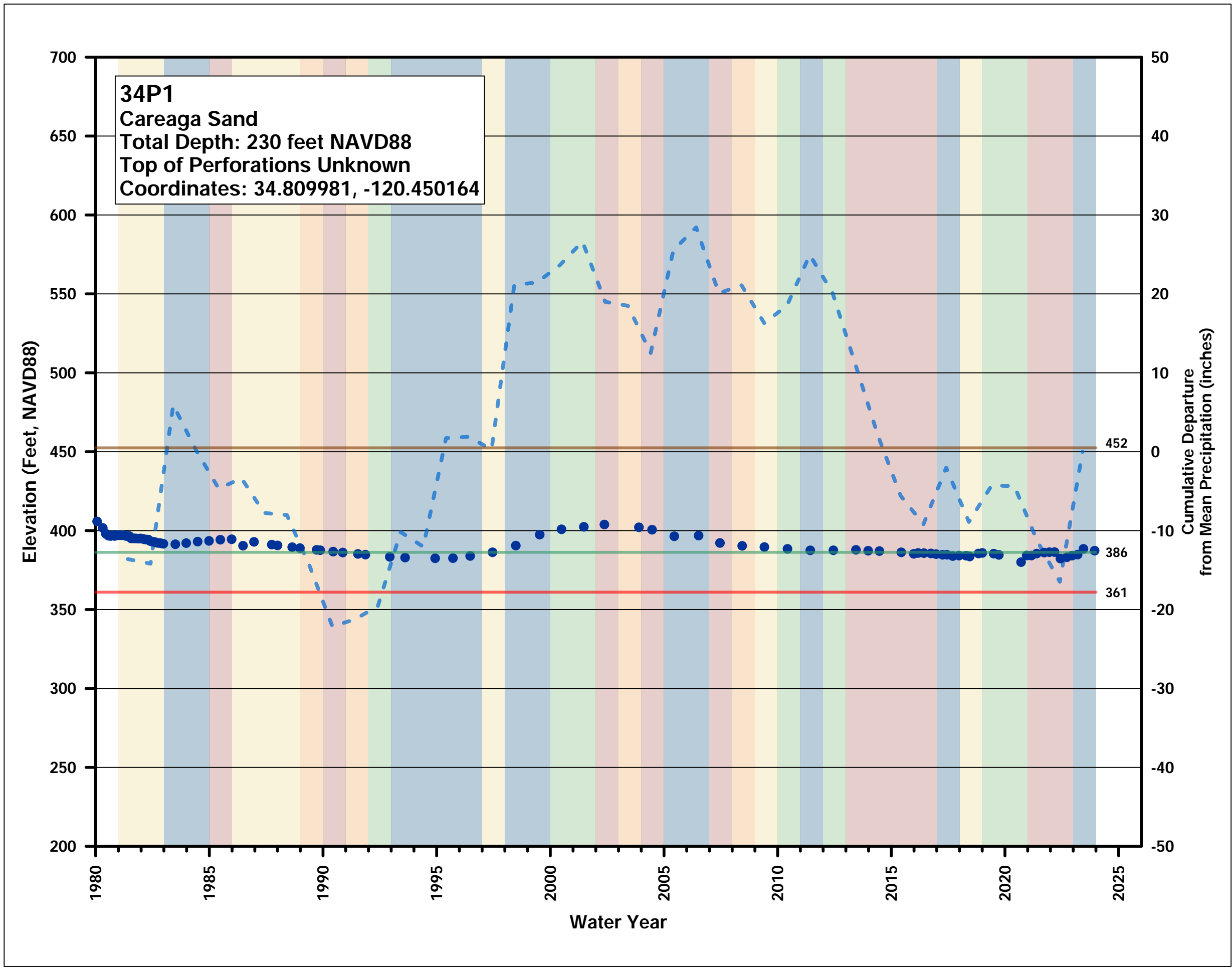
Groundwater Elevation Hydrograph
San Antonio Creek Valley
Groundwater Basin Groundwater
Sustainability Plan 2023 Annual Report



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Groundwater Elevation Hydrograph


**San Antonio Creek Valley
 Groundwater Basin Groundwater
 Sustainability Plan 2023 Annual
 Report**

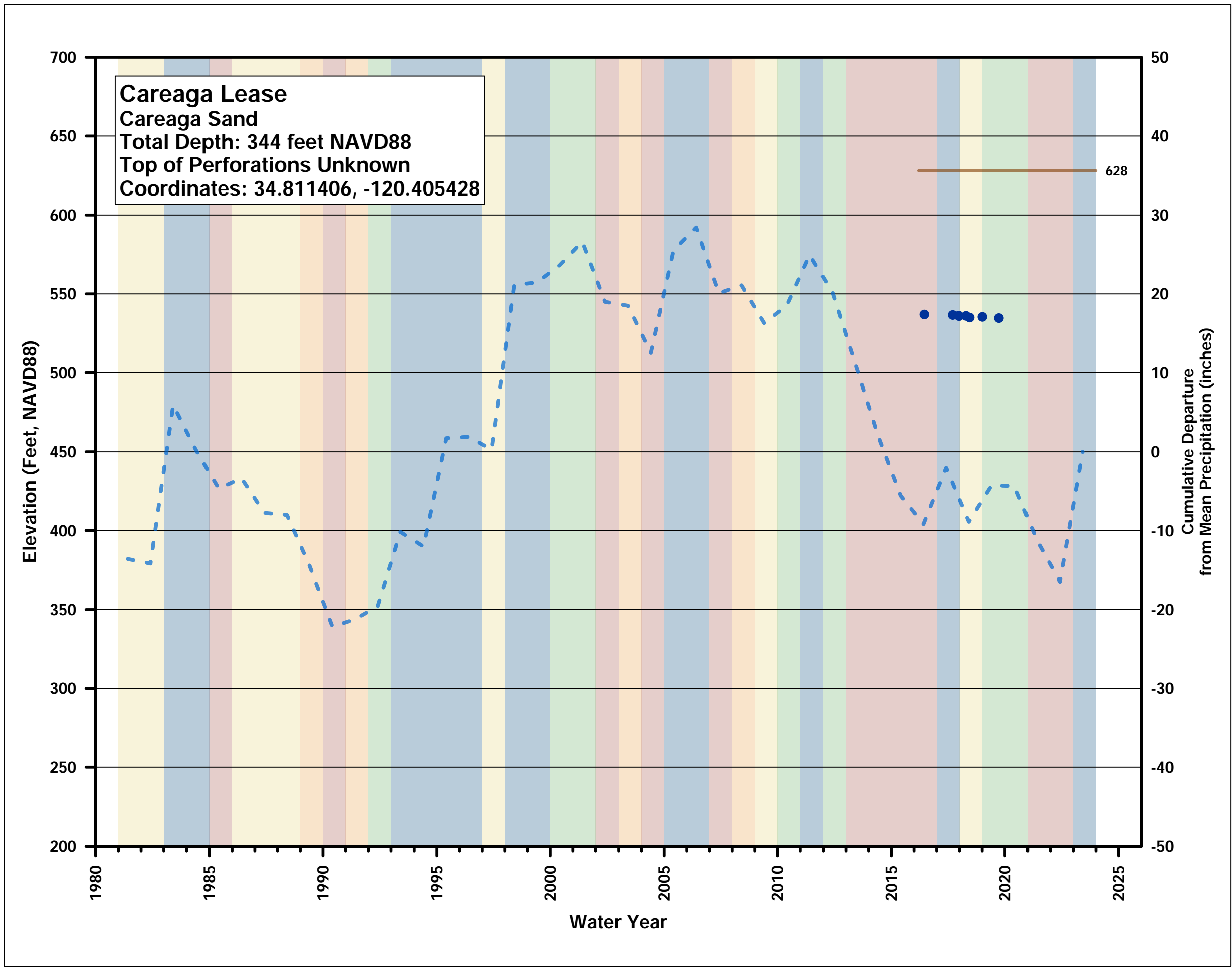
LEGEND

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Groundwater Elevation Hydrograph

San Antonio Creek Valley Groundwater Basin Groundwater Sustainability Plan 2023 Annual Report

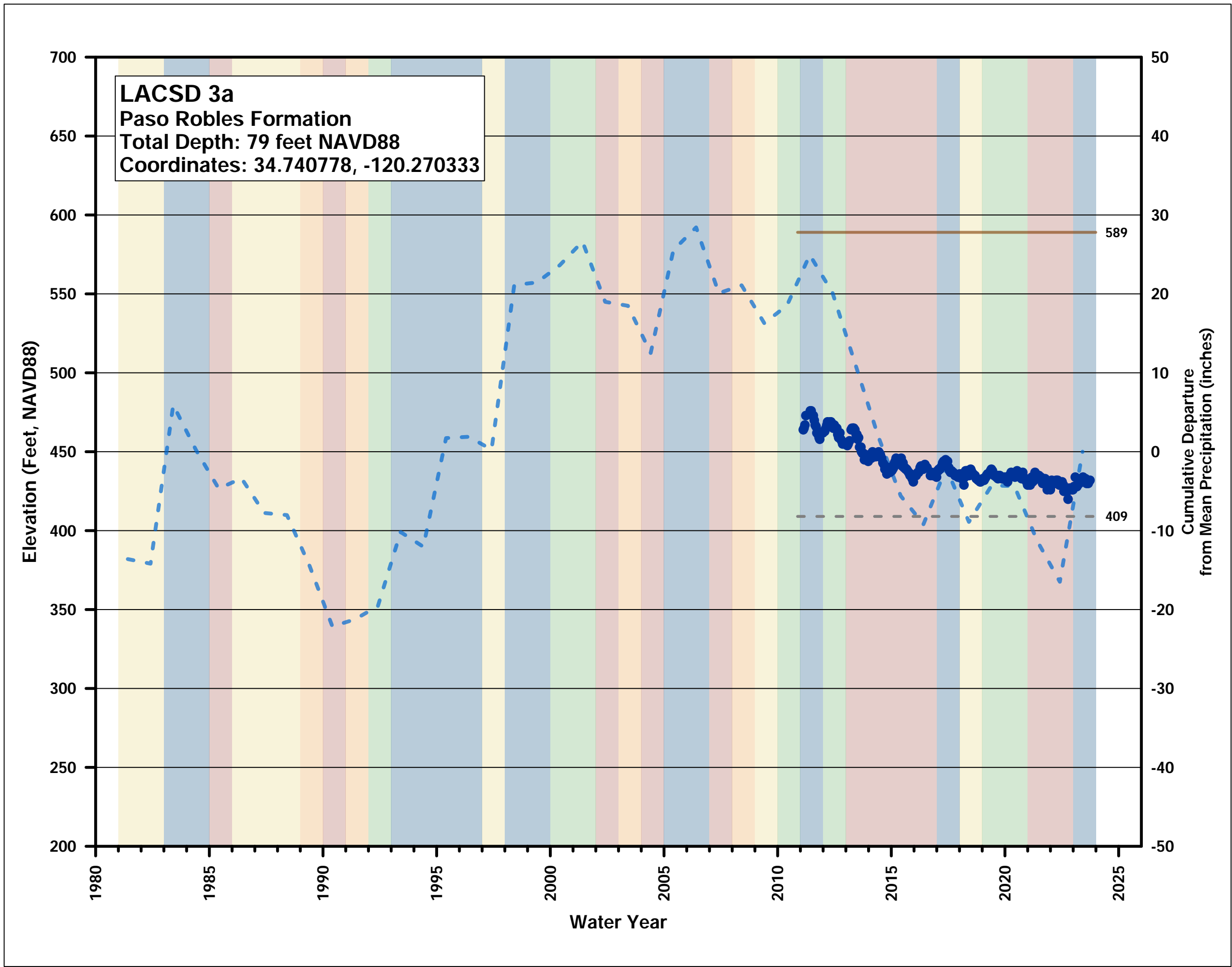
LEGEND

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WATER YEAR TYPE

- Wet
- Above Normal
- Below Normal
- Dry
- Critical

628



Groundwater Elevation Hydrograph

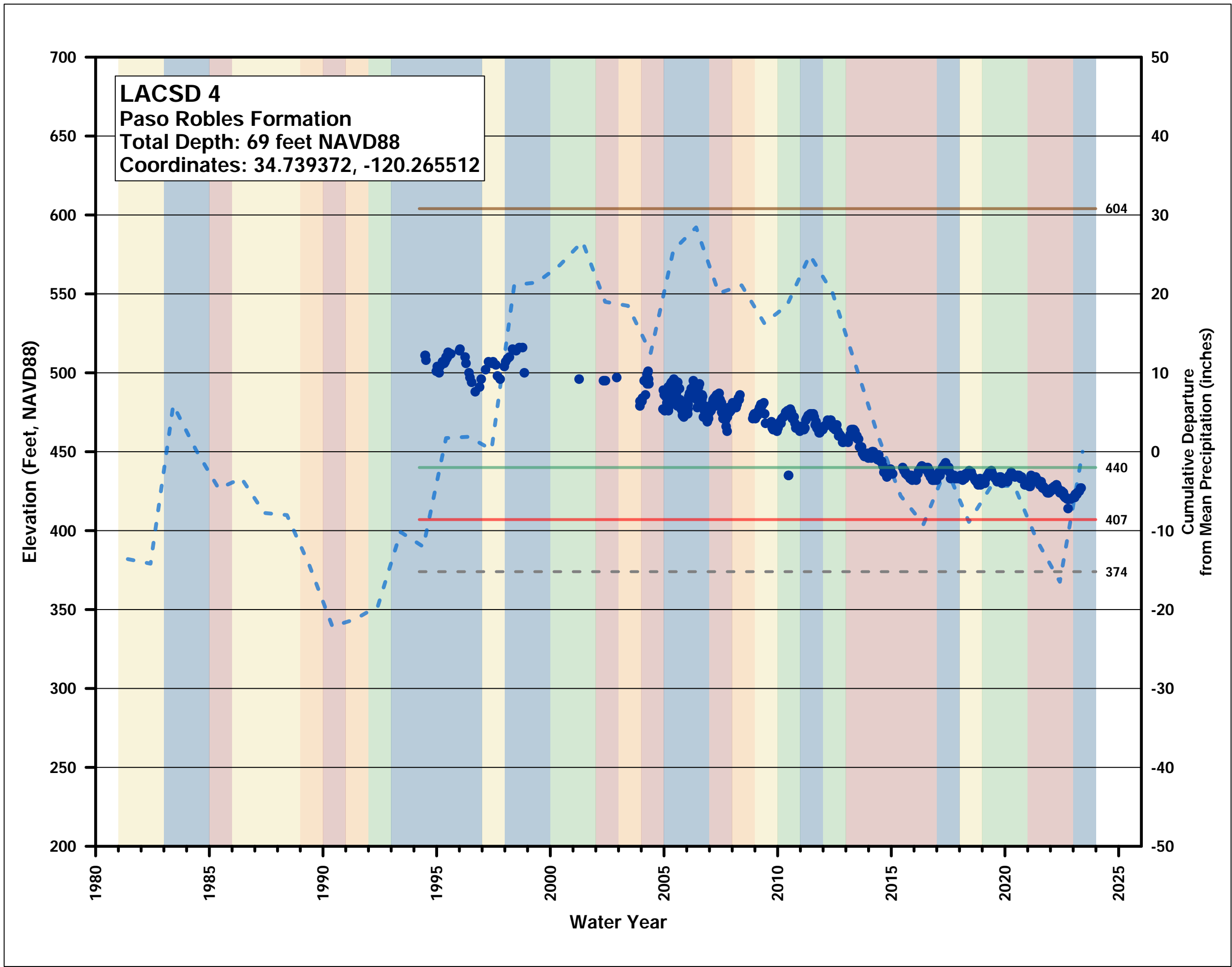
San Antonio Creek Valley
 Groundwater Basin Groundwater
 Sustainability Plan 2023 Annual
 Report

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Groundwater Elevation Hydrograph

**San Antonio Creek Valley
 Groundwater Basin Groundwater
 Sustainability Plan 2023 Annual
 Report**


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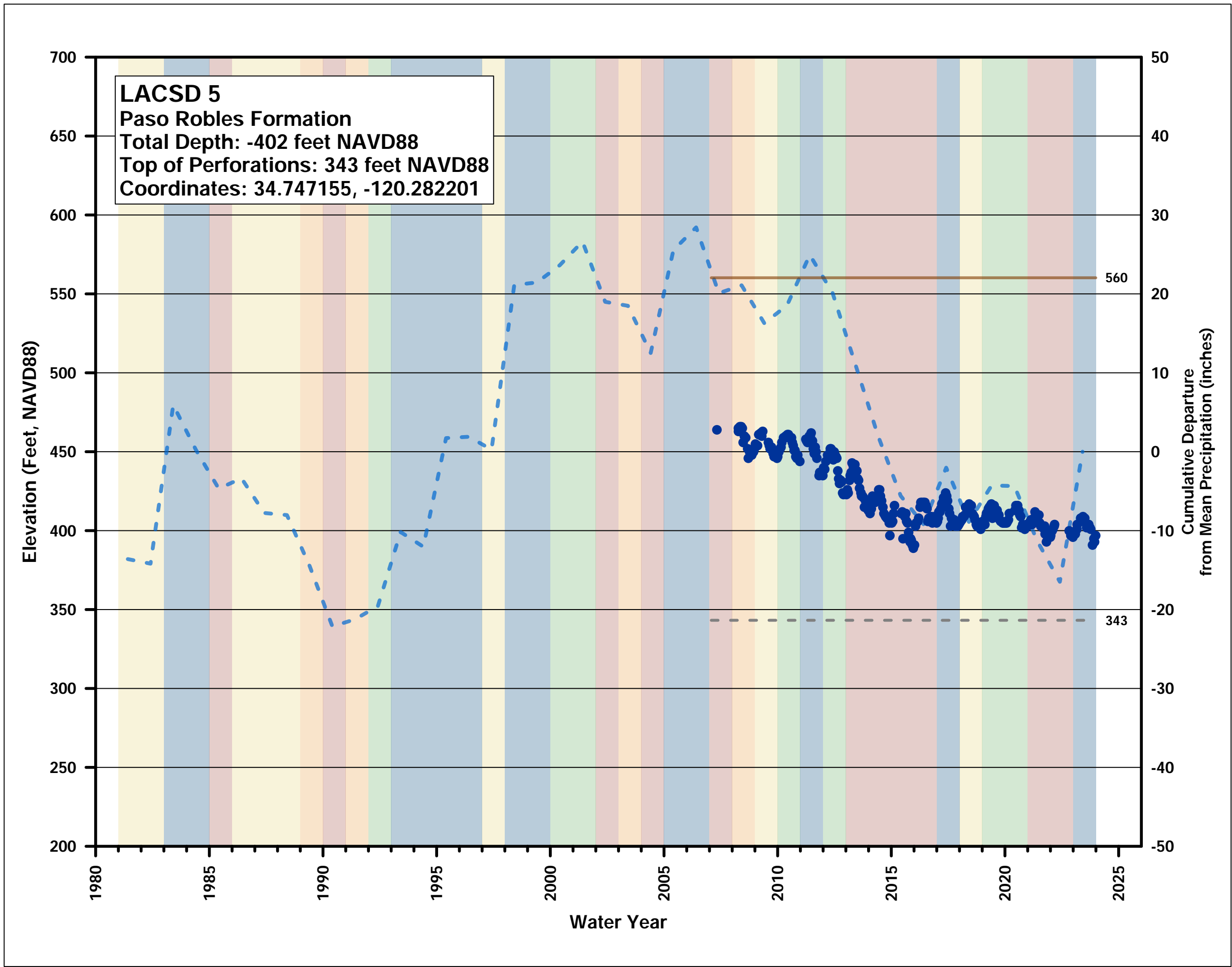
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WATER YEAR TYPE

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- Dry
- Critical

604
 440
 407
 374





Groundwater Elevation Hydrograph


San Antonio Creek Valley
 Groundwater Basin Groundwater
 Sustainability Plan 2023 Annual
 Report

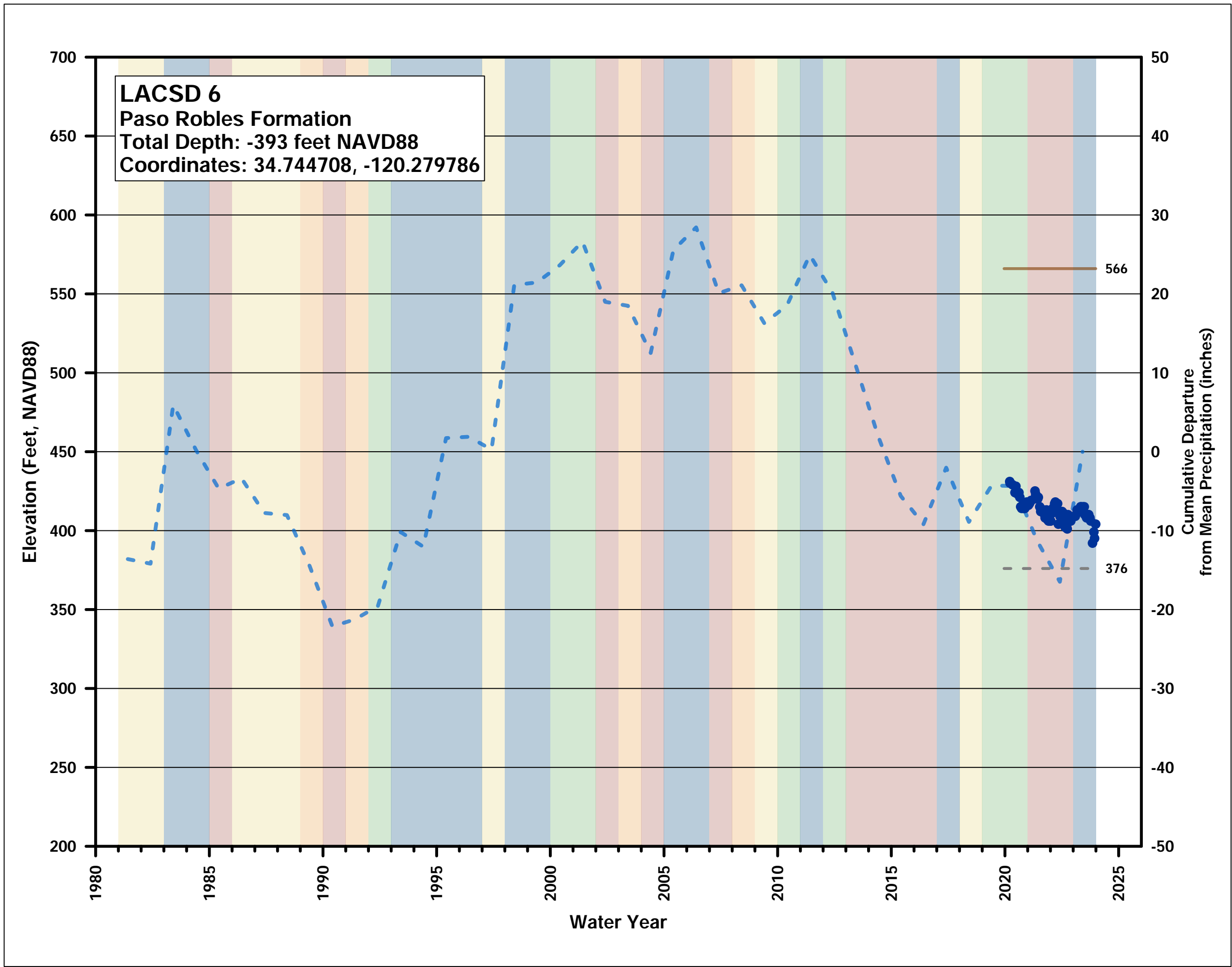
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- Ground Surface Elevation

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Groundwater Elevation Hydrograph


**San Antonio Creek Valley
 Groundwater Basin Groundwater
 Sustainability Plan 2023 Annual
 Report**

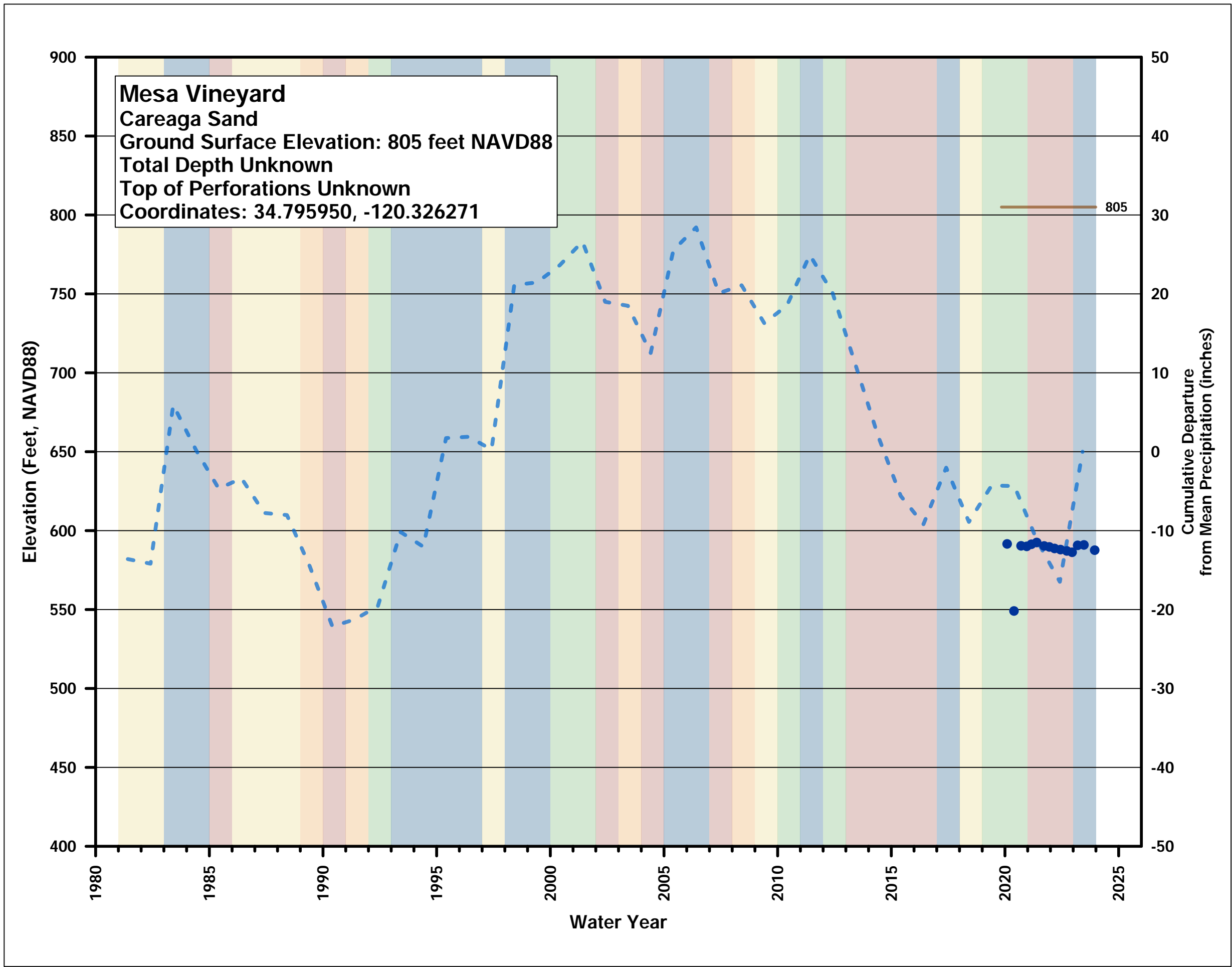
LEGEND

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Groundwater Elevation Hydrograph


San Antonio Creek Valley
 Groundwater Basin Groundwater
 Sustainability Plan 2023 Annual
 Report

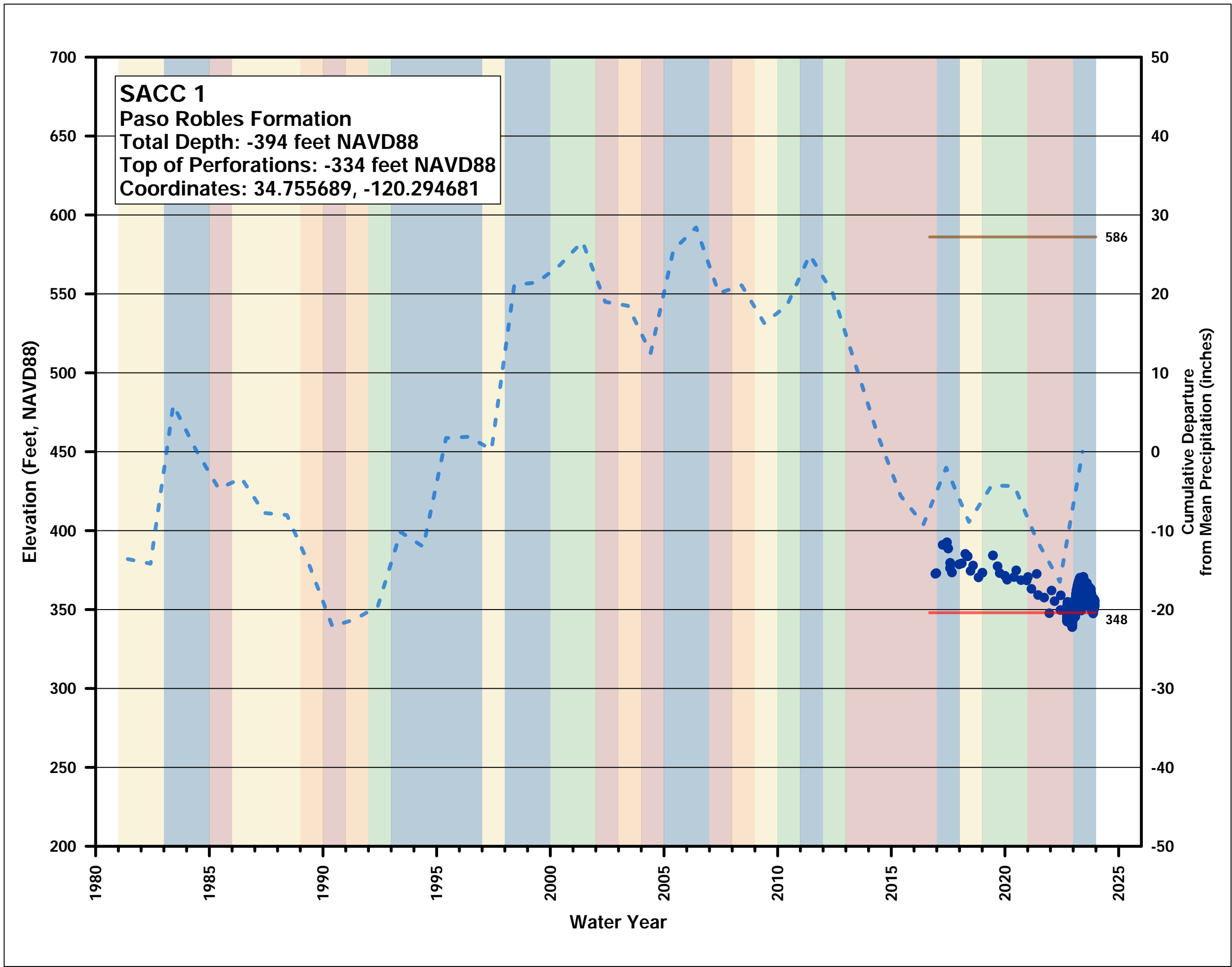
LEGEND

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Groundwater Elevation Hydrograph


San Antonio Creek Valley
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 Sustainability Plan 2023 Annual
 Report

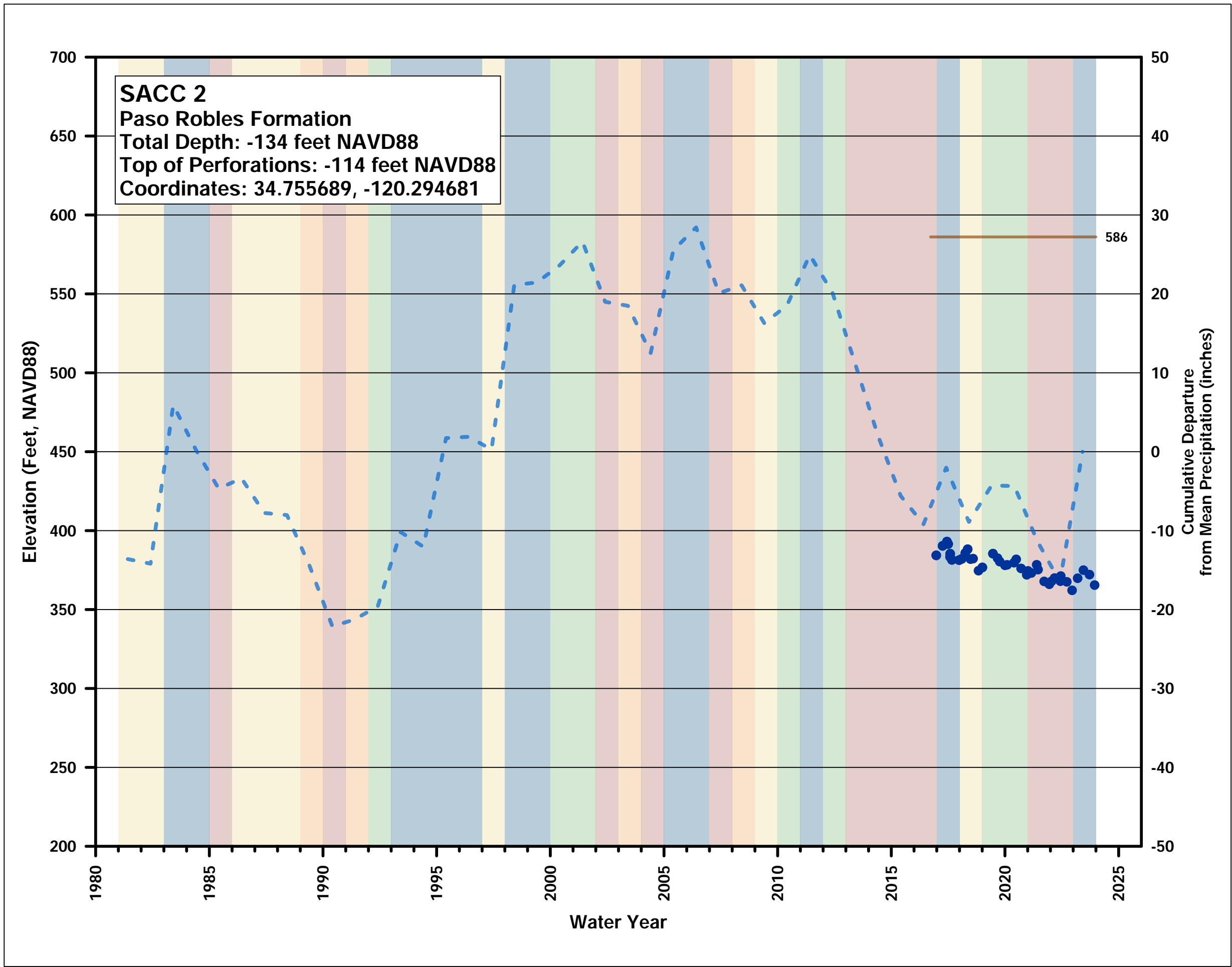
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Groundwater Elevation Hydrograph


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 Groundwater Basin Groundwater
 Sustainability Plan 2023 Annual
 Report

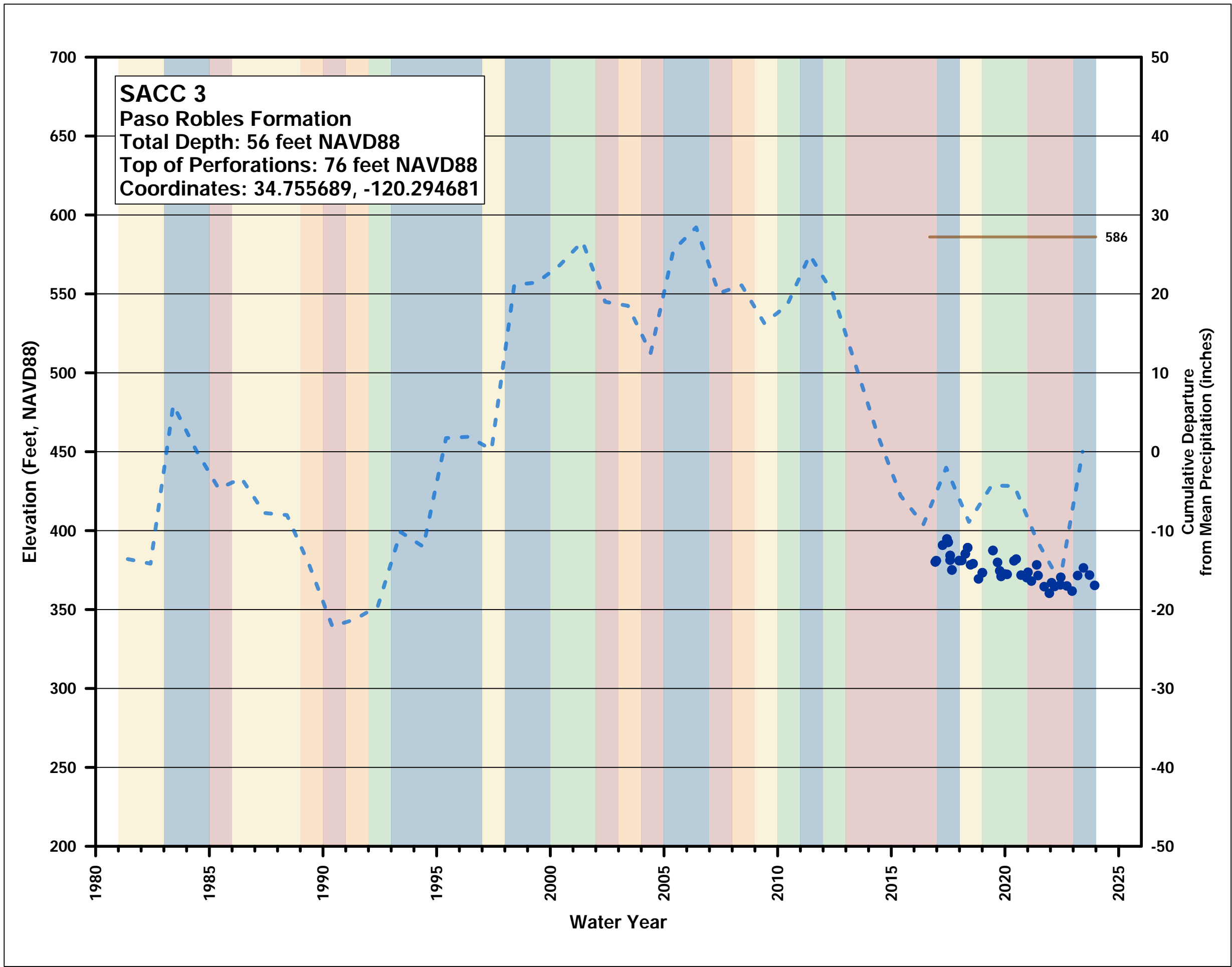
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Groundwater Elevation Hydrograph

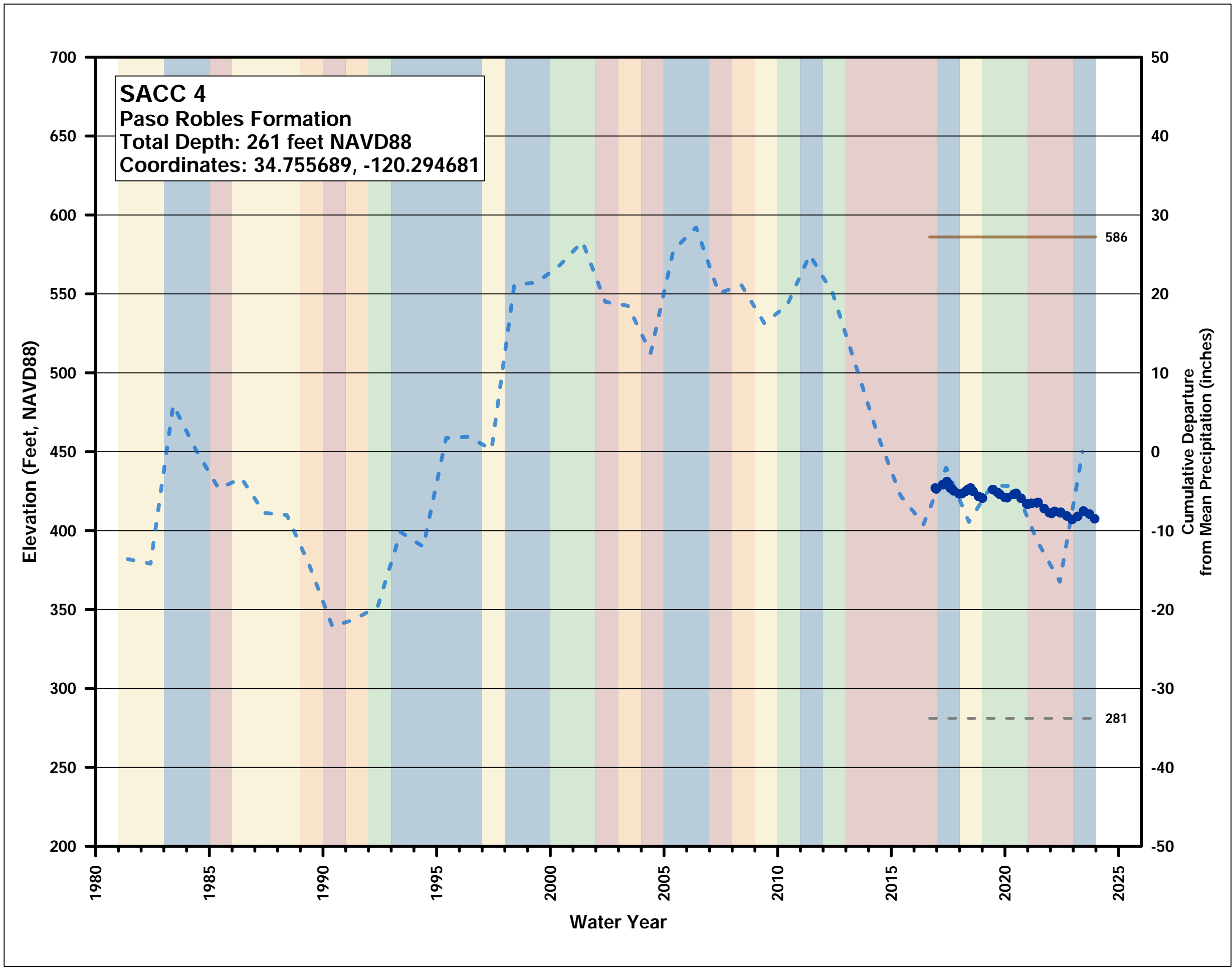
San Antonio Creek Valley
 Groundwater Basin Groundwater
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 Report

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Groundwater Elevation Hydrograph

San Antonio Creek Valley Groundwater Basin Groundwater Sustainability Plan 2023 Annual Report

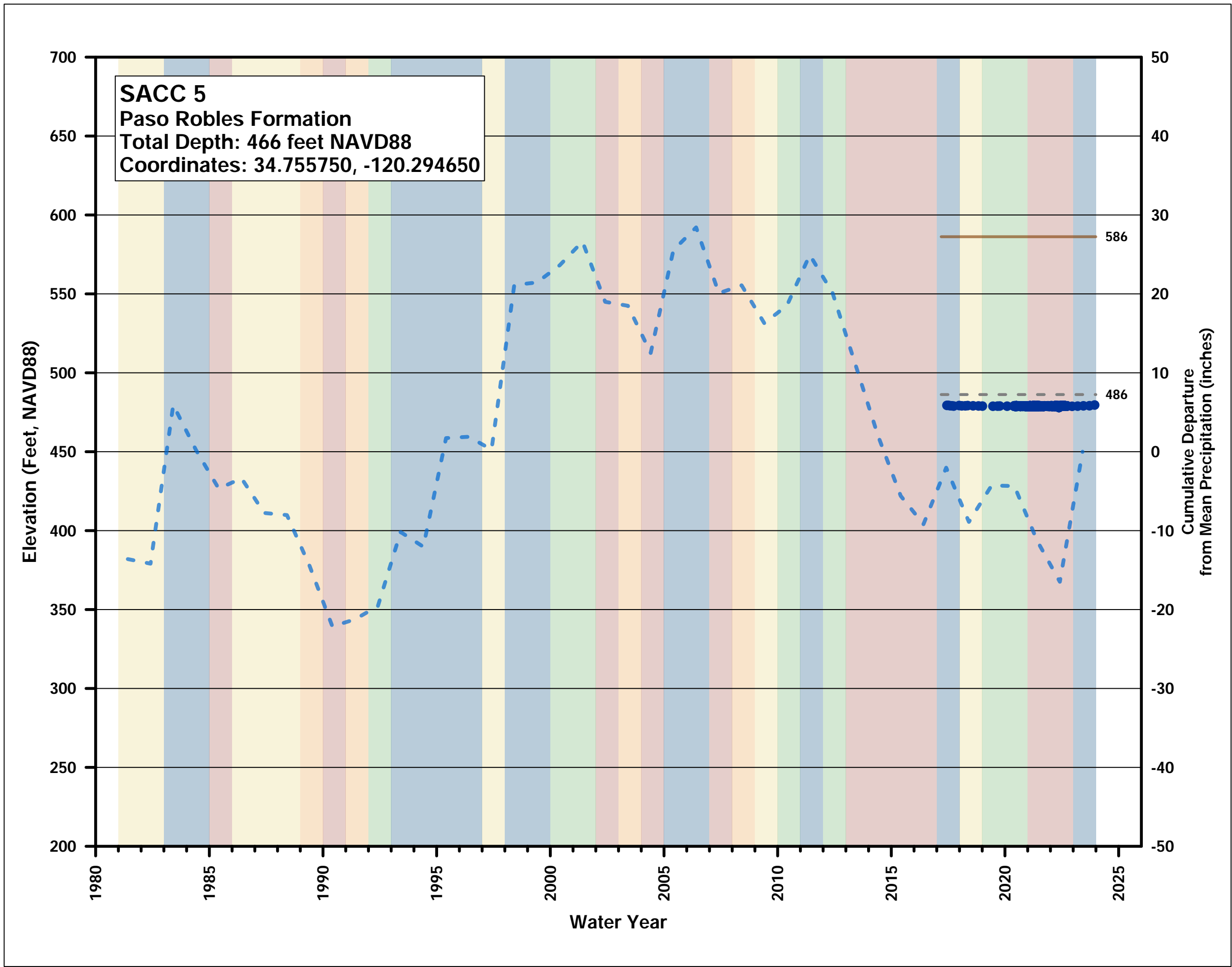
LEGEND

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- Below Normal
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- Critical

GSI
 Water Solutions, Inc.



Groundwater Elevation Hydrograph


**San Antonio Creek Valley
 Groundwater Basin Groundwater
 Sustainability Plan 2023 Annual
 Report**

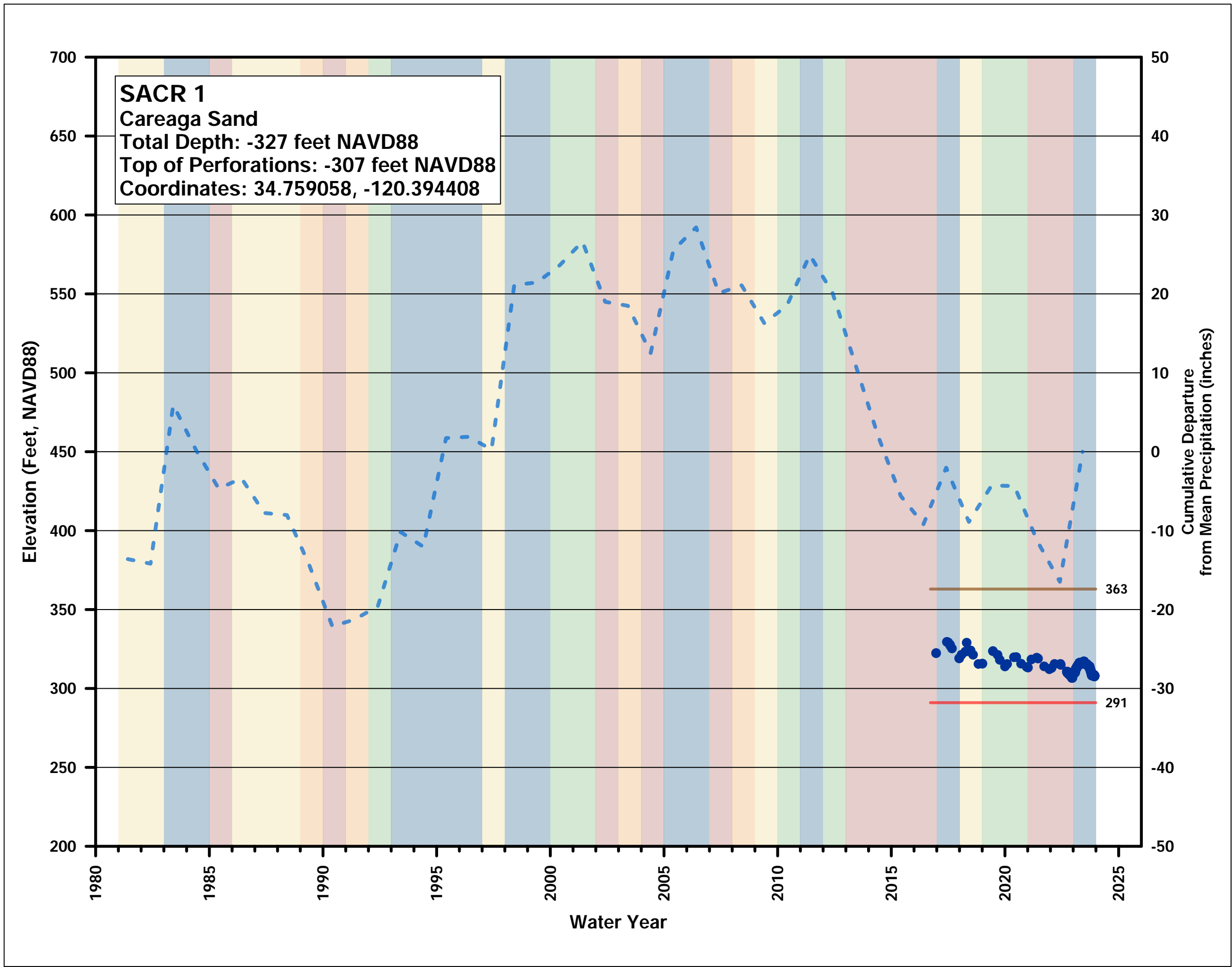
LEGEND

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Groundwater Elevation Hydrograph

San Antonio Creek Valley
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 Report

LEGEND


- Groundwater Elevation
- - - Cumulative Departure from Mean Precipitation
- Ground Surface Elevation
- Minimum Threshold

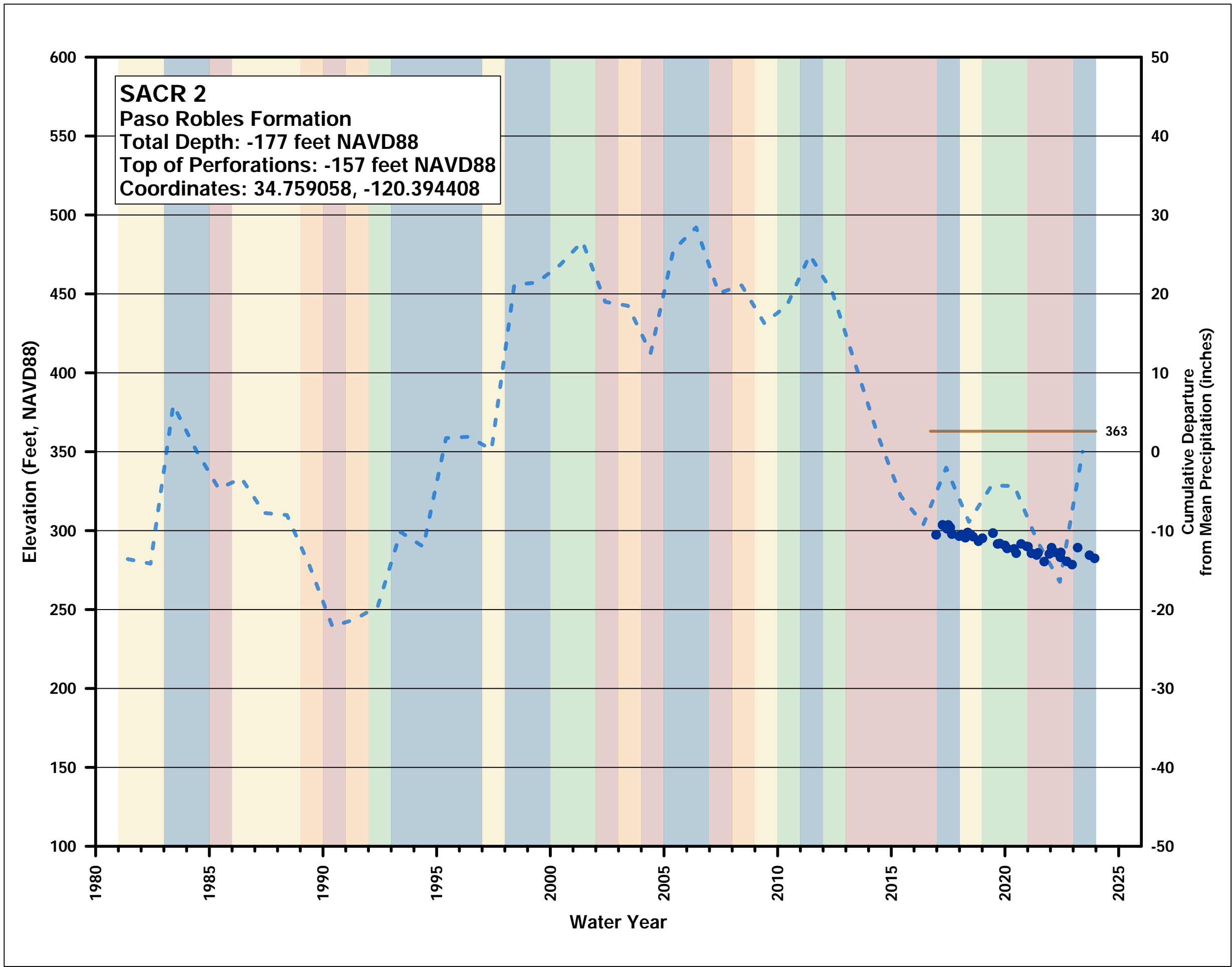
WATER YEAR TYPE

- Wet
- Above Normal
- Below Normal
- Dry
- Critical

363

291





Groundwater Elevation Hydrograph

San Antonio Creek Valley
 Groundwater Basin Groundwater
 Sustainability Plan 2023 Annual
 Report


LEGEND

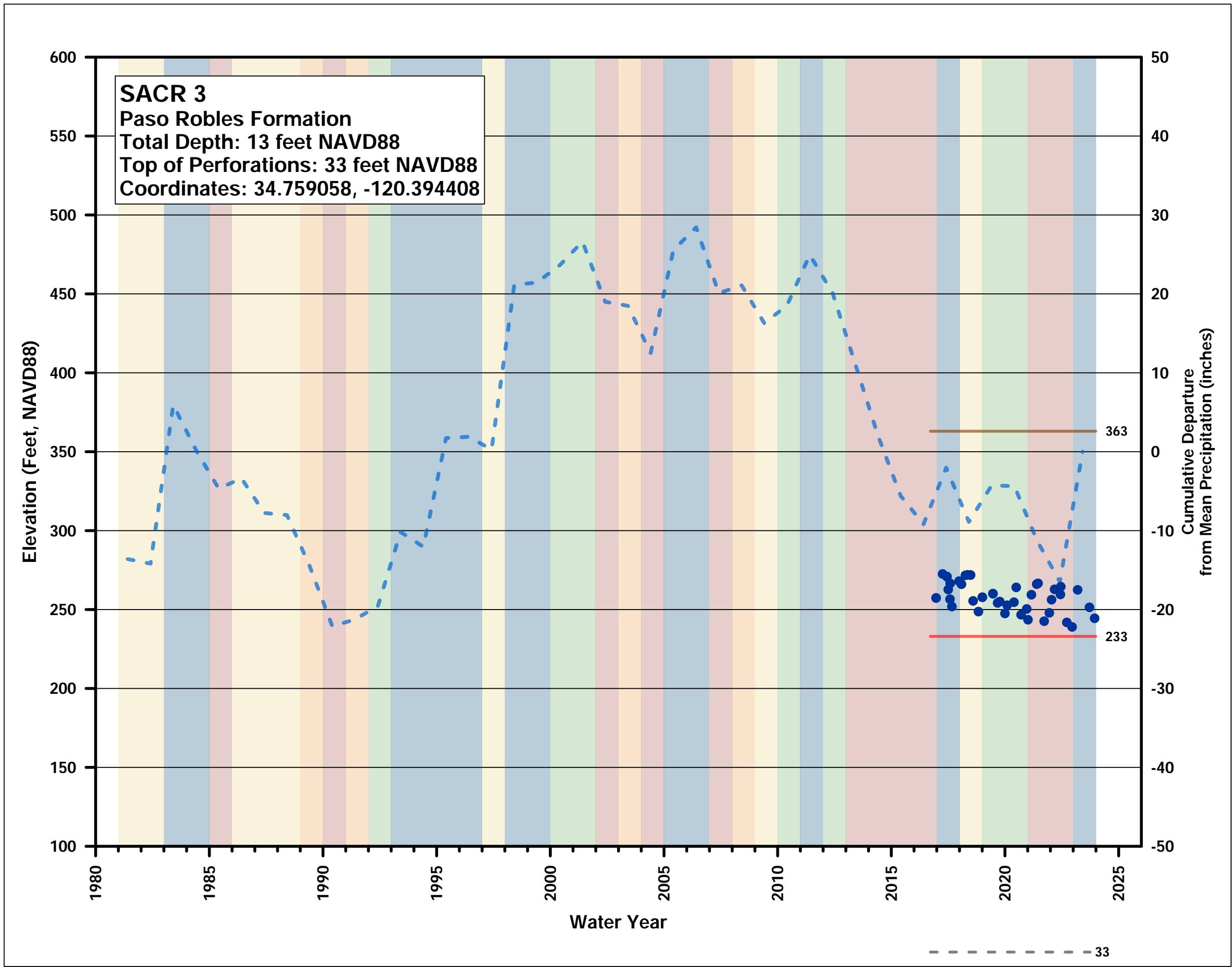
- Groundwater Elevation
- - - Cumulative Departure from Mean Precipitation
- Ground Surface Elevation

WATER YEAR TYPE

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- Above Normal
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- Dry
- Critical

363





Groundwater Elevation Hydrograph


**San Antonio Creek Valley
Groundwater Basin Groundwater
Sustainability Plan 2023 Annual
Report**

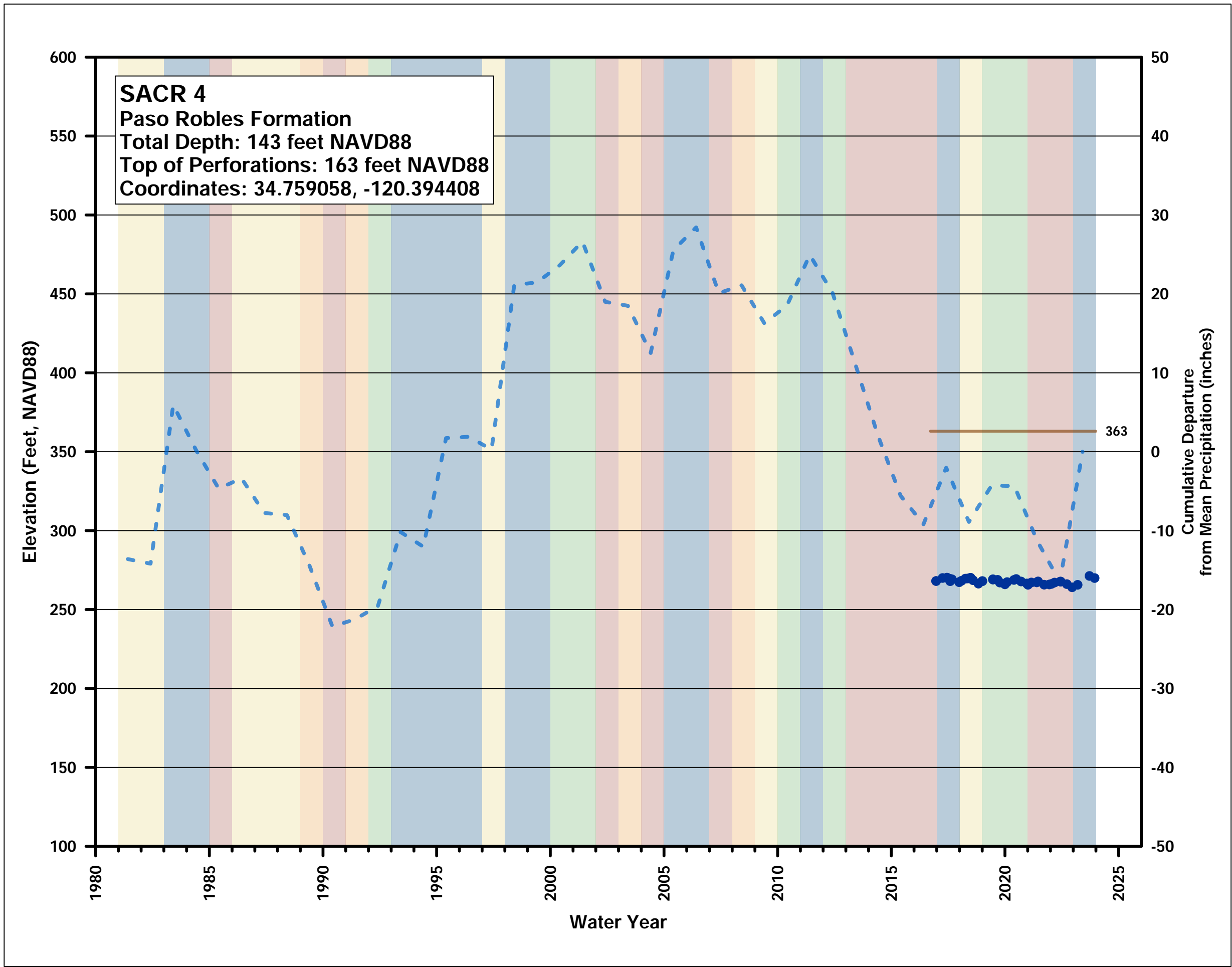
LEGEND

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Groundwater Elevation Hydrograph

San Antonio Creek Valley
Groundwater Basin Groundwater
Sustainability Plan 2023 Annual
Report


LEGEND

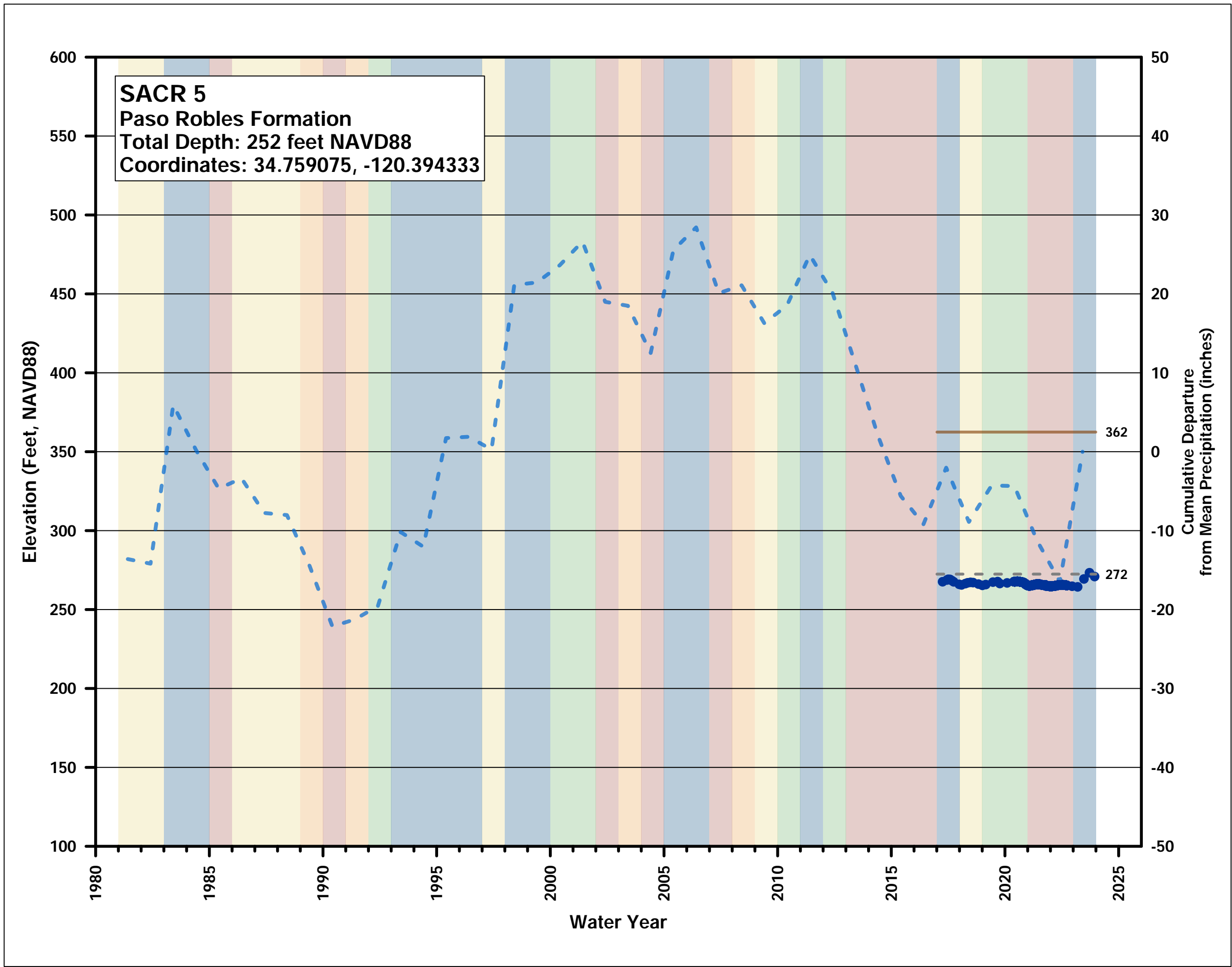
- Groundwater Elevation
- - - Cumulative Departure from Mean Precipitation
- Ground Surface Elevation

WATER YEAR TYPE

- Wet
- Above Normal
- Below Normal
- Dry
- Critical

363





Groundwater Elevation Hydrograph

San Antonio Creek Valley Groundwater Basin Groundwater Sustainability Plan 2023 Annual Report

LEGEND

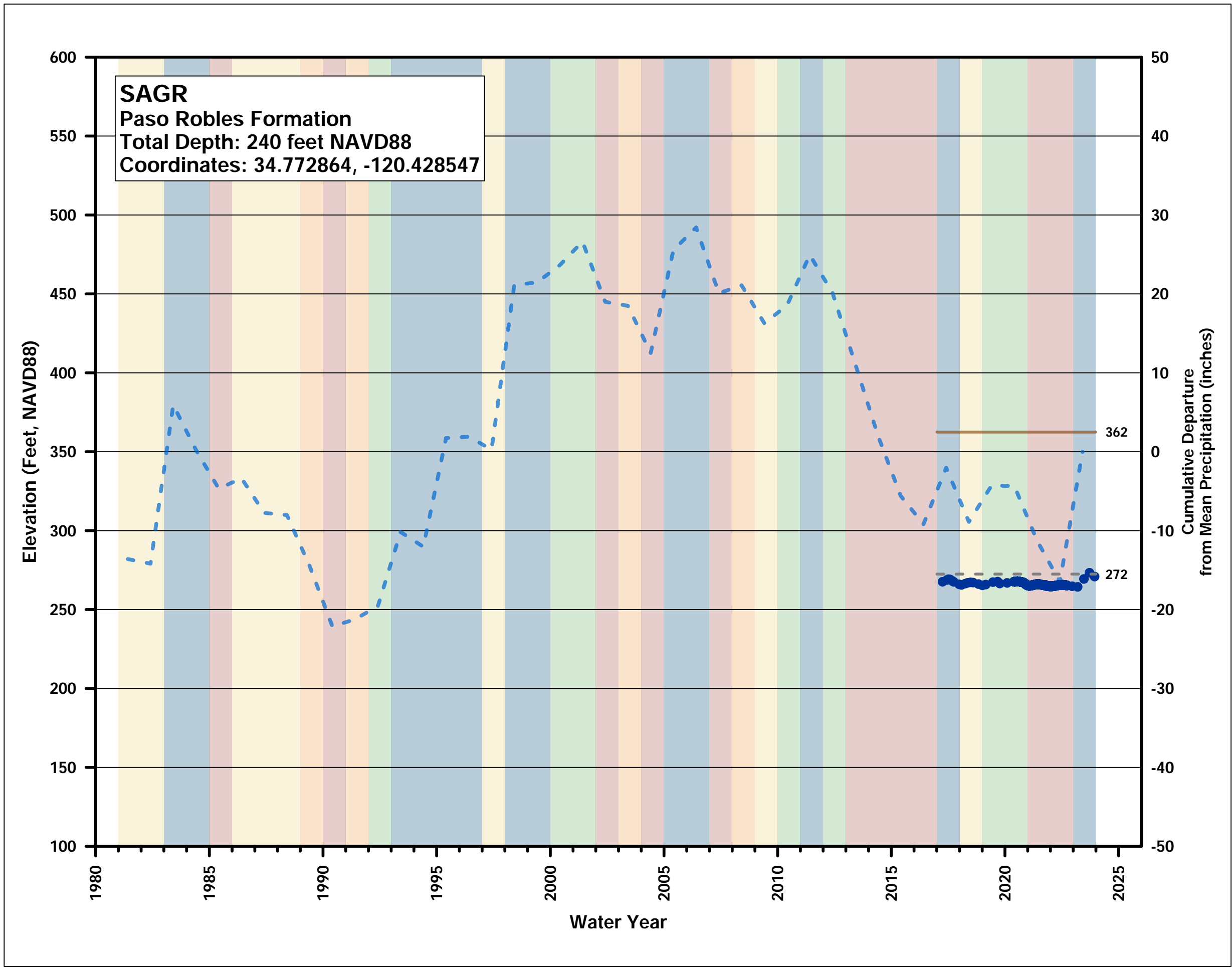
- Groundwater Elevation
- - - Cumulative Departure from Mean Precipitation
- - - Top of Perforated Interval
- Ground Surface Elevation

WATER YEAR TYPE

- Wet
- Above Normal
- Below Normal
- Dry
- Critical

362

272



Groundwater Elevation Hydrograph


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 Groundwater Basin Groundwater
 Sustainability Plan 2023 Annual
 Report**

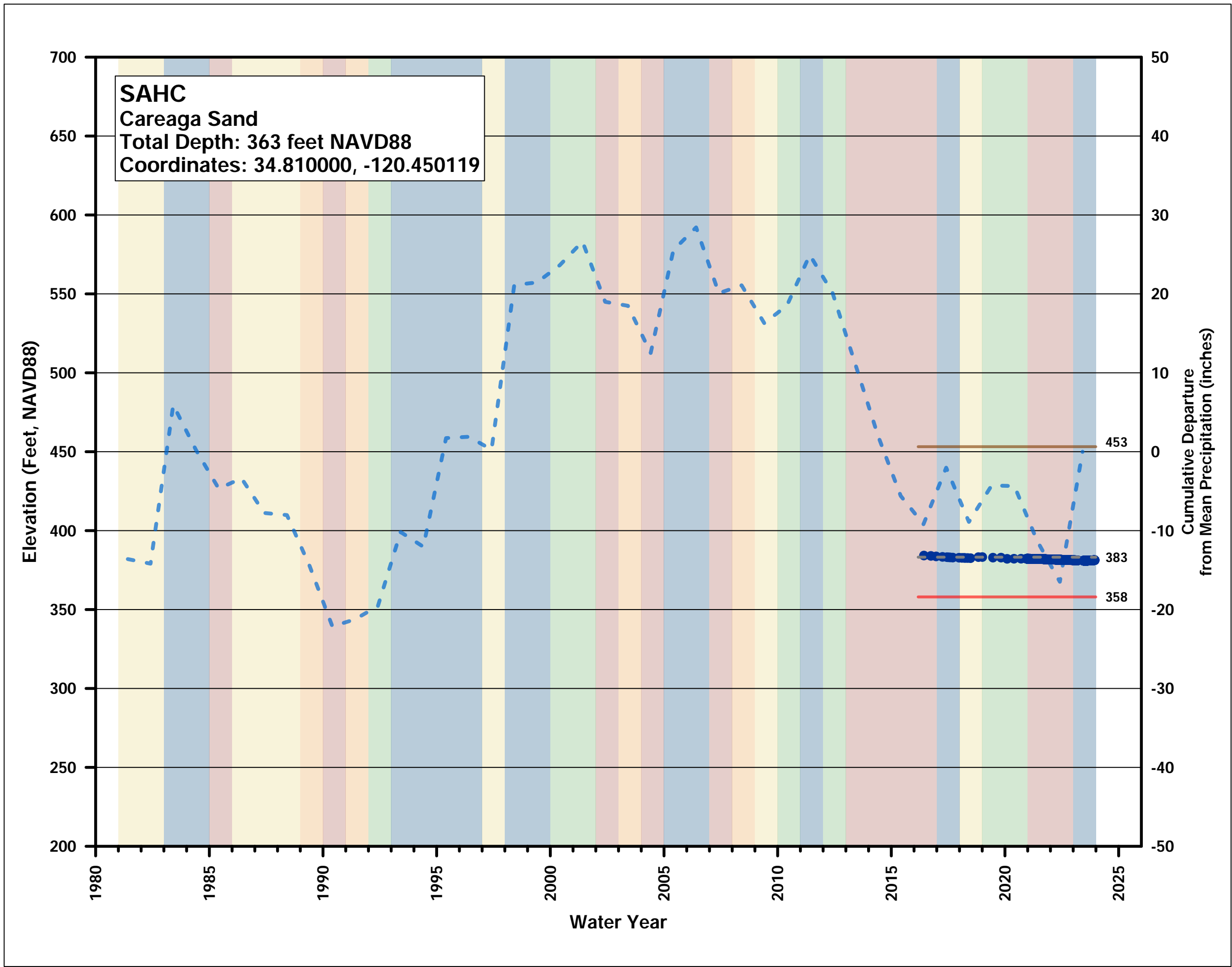
LEGEND

- ● Groundwater Elevation
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WATER YEAR TYPE

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Groundwater Elevation Hydrograph

**San Antonio Creek Valley
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LEGEND

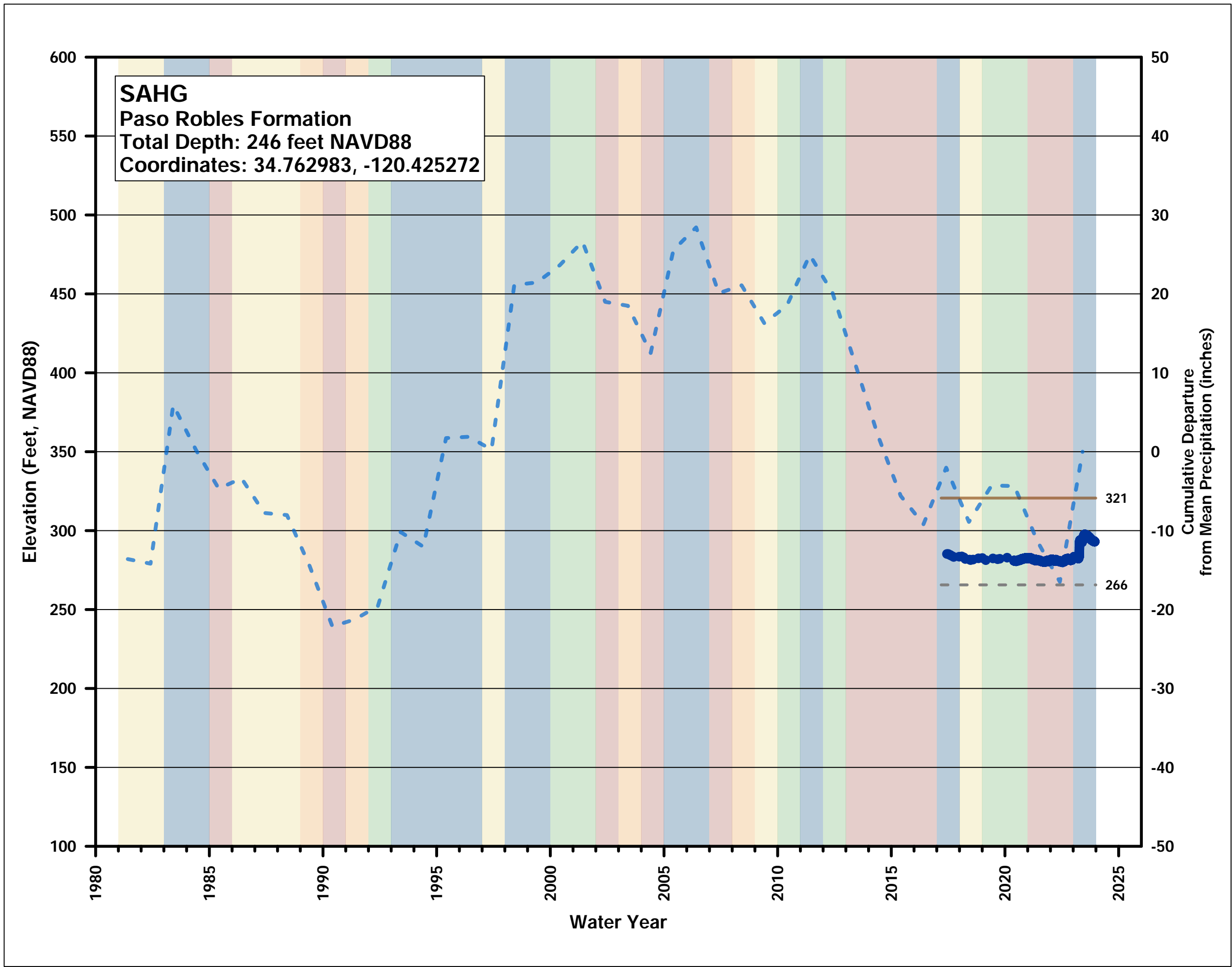
- Groundwater Elevation
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- - - Top of Perforated Interval
- Ground Surface Elevation
- Minimum Threshold

WATER YEAR TYPE

- Wet
- Above Normal
- Below Normal
- Dry
- Critical

453
383
358





Groundwater Elevation Hydrograph


**San Antonio Creek Valley
 Groundwater Basin Groundwater
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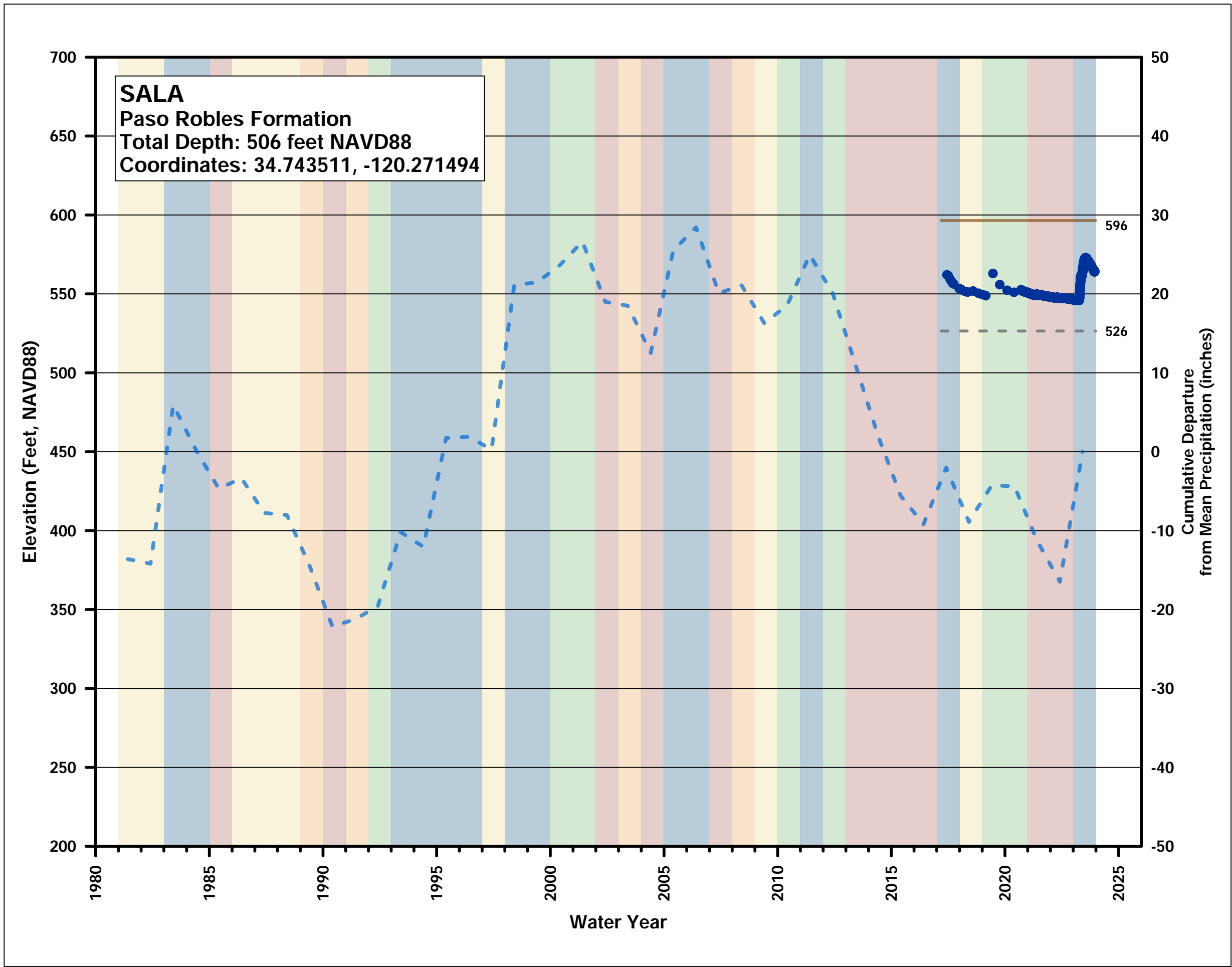
LEGEND

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- - - Cumulative Departure from Mean Precipitation
- - - Top of Perforated Interval
- Ground Surface Elevation

WATER YEAR TYPE

- █ Wet
- █ Above Normal
- █ Below Normal
- █ Dry
- █ Critical





Groundwater Elevation Hydrograph


San Antonio Creek Valley
 Groundwater Basin Groundwater
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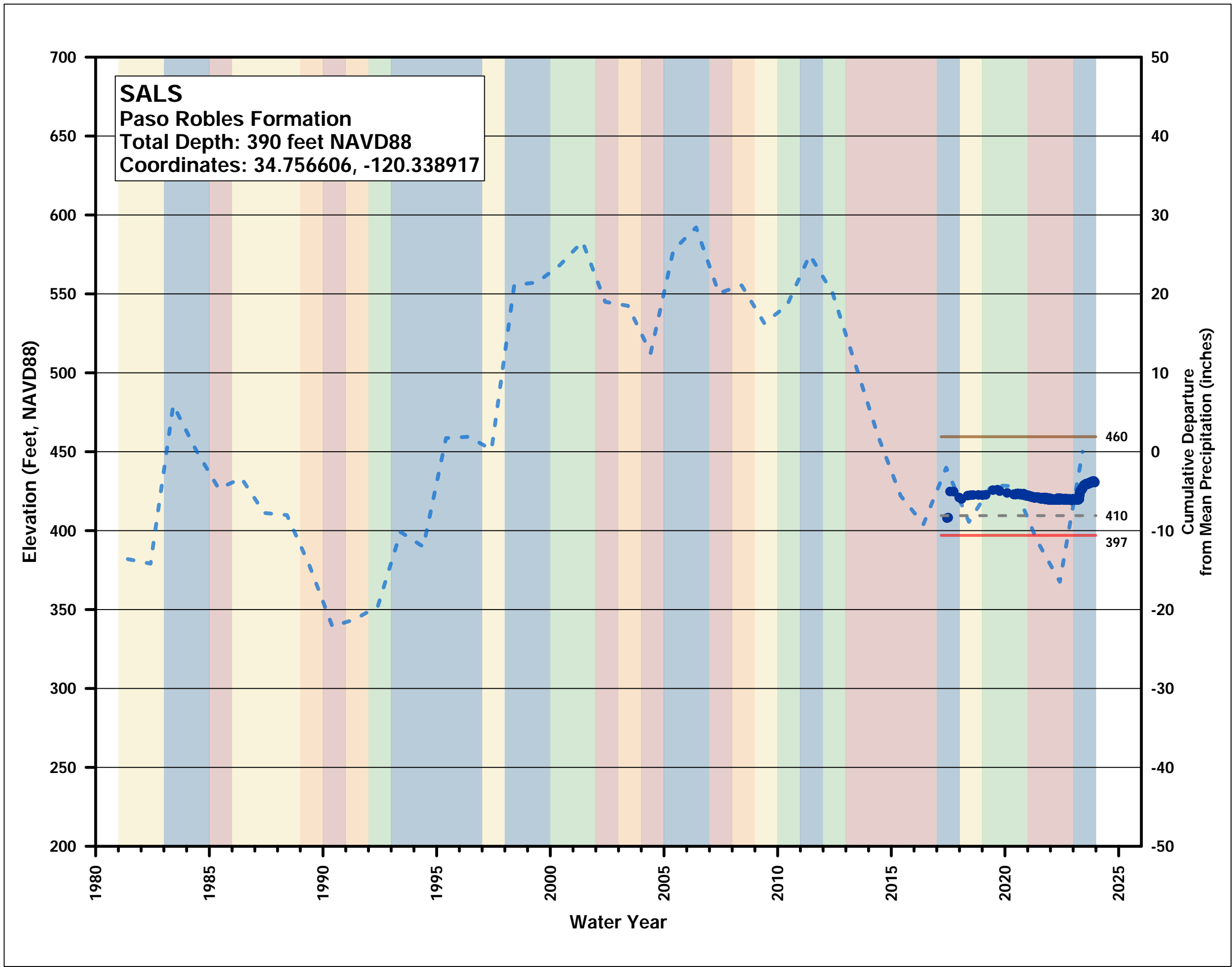
LEGEND

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Groundwater Elevation Hydrograph

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- Ground Surface Elevation
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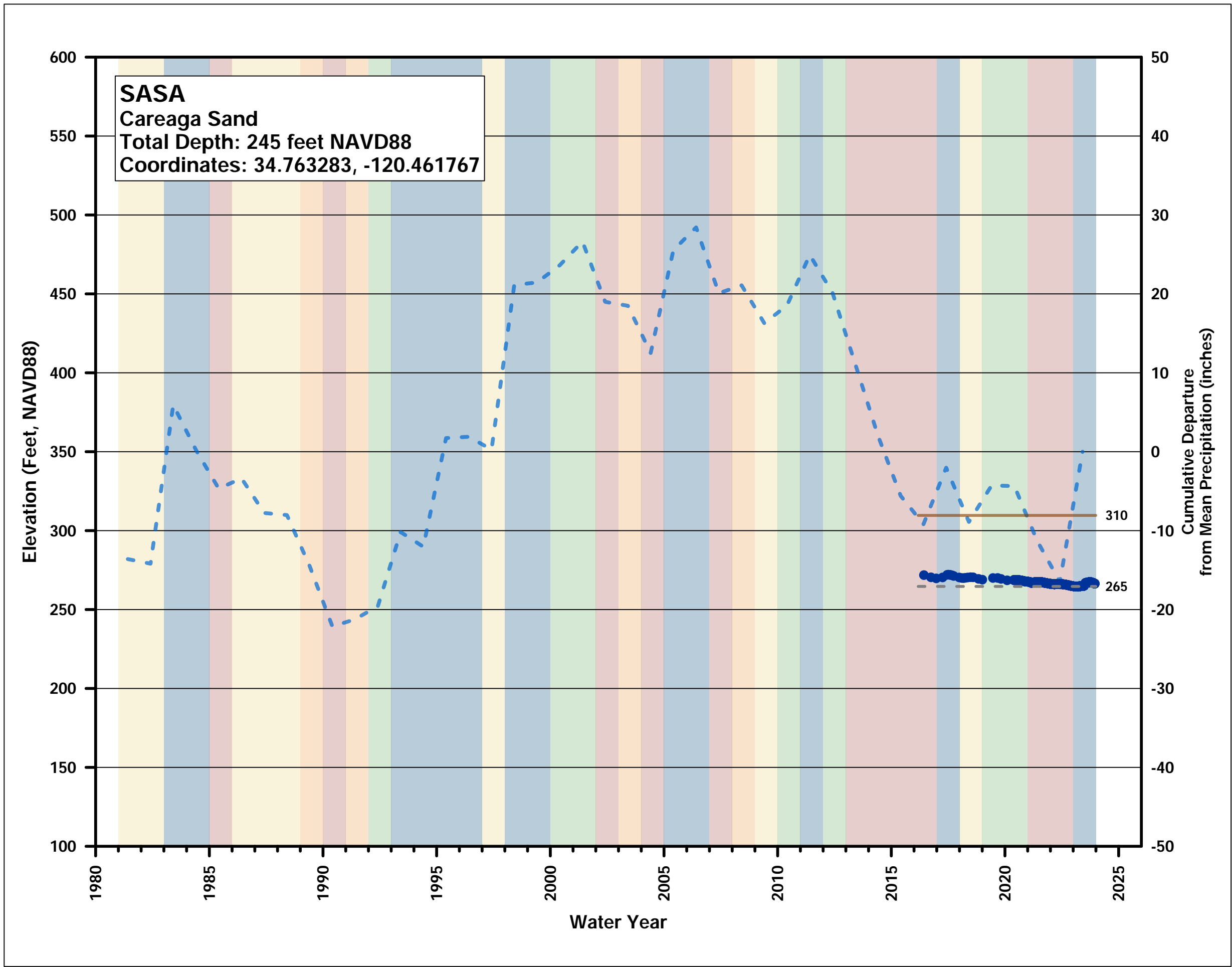
WATER YEAR TYPE

- Wet
- Above Normal
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- Dry
- Critical

460

410

397



Groundwater Elevation Hydrograph

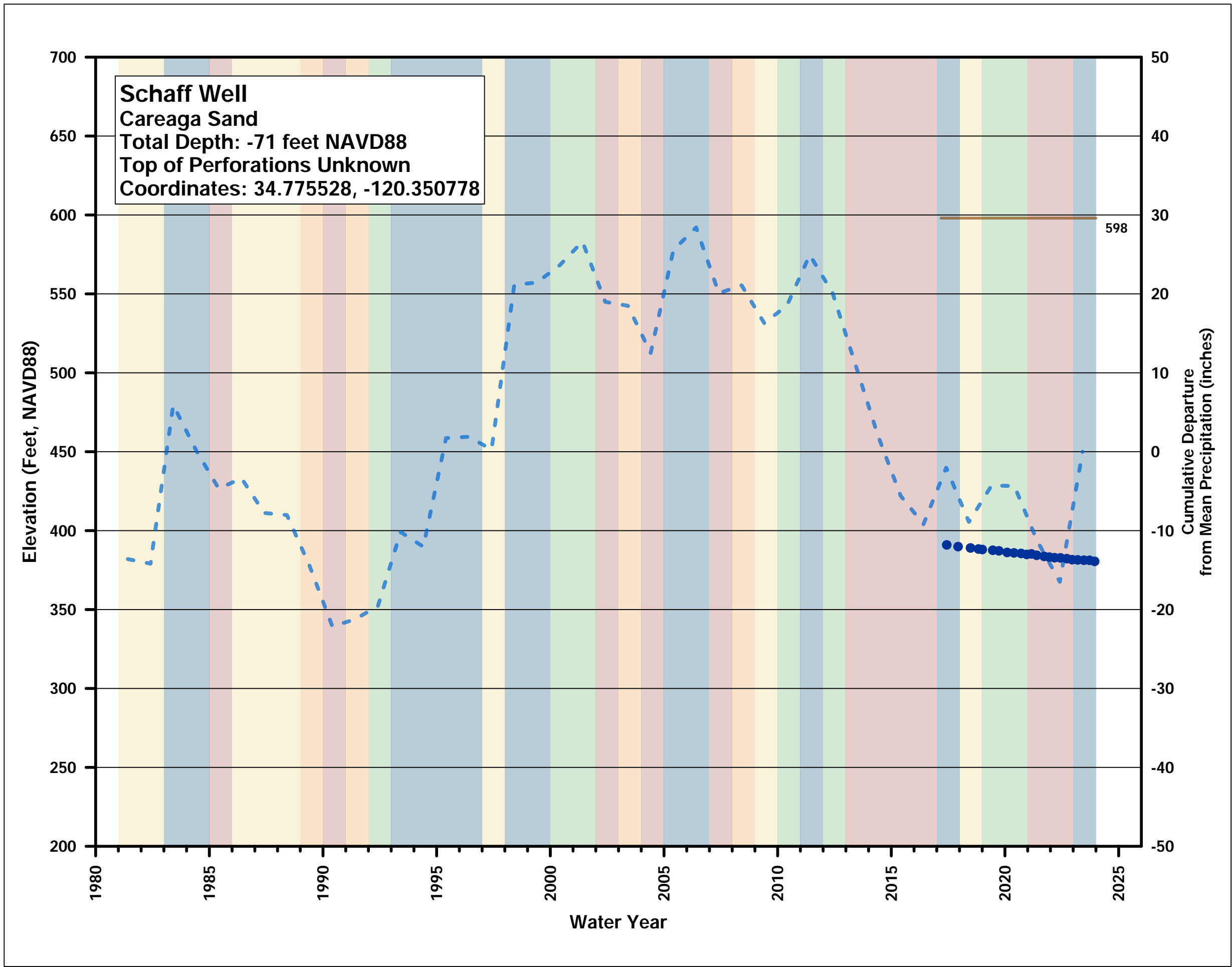
San Antonio Creek Valley
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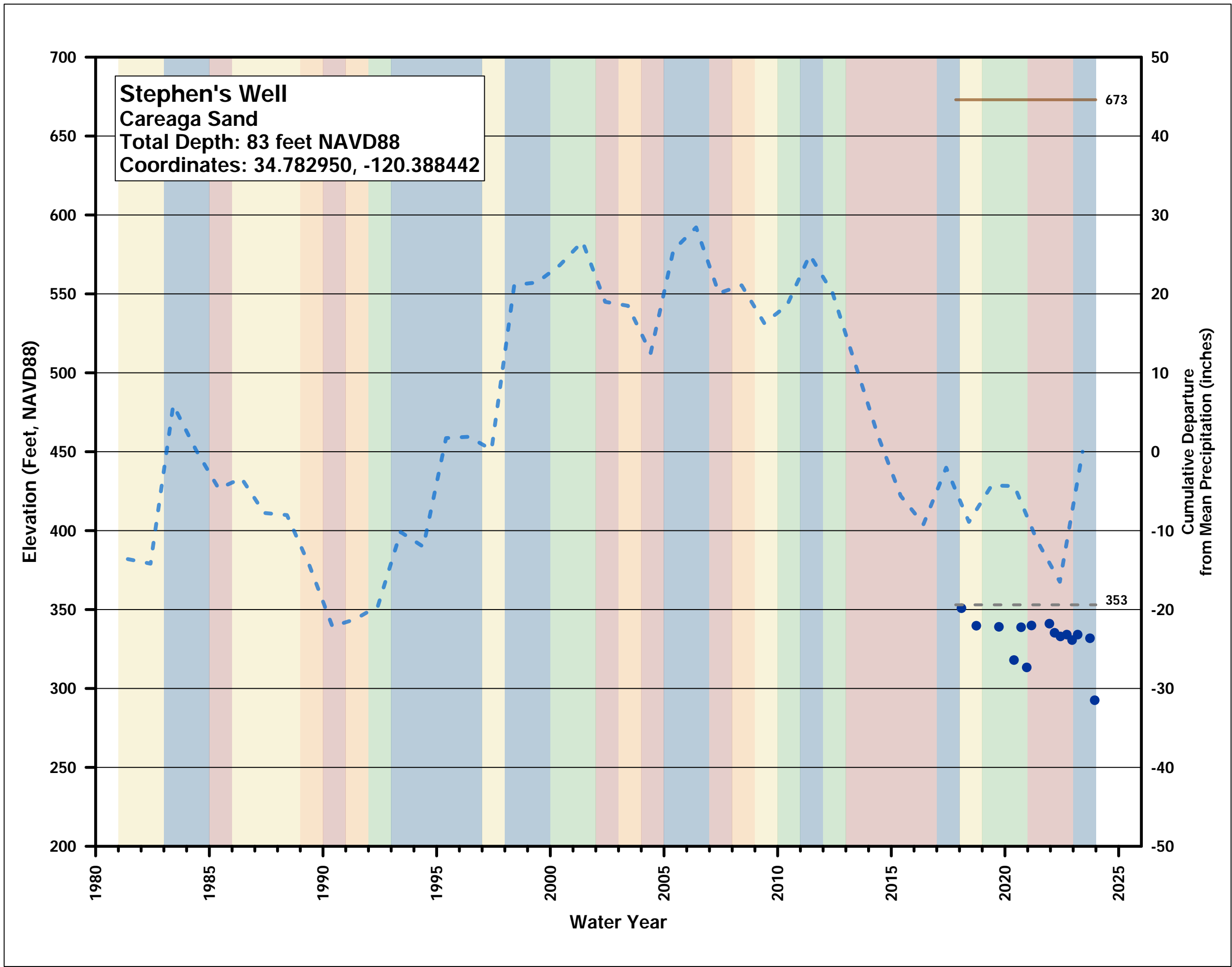
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 Groundwater Basin Groundwater
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- - - Cumulative Departure from Mean Precipitation
- Ground Surface Elevation
- - - Top of Perforated Interval

WATER YEAR TYPE

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- Dry
- Critical

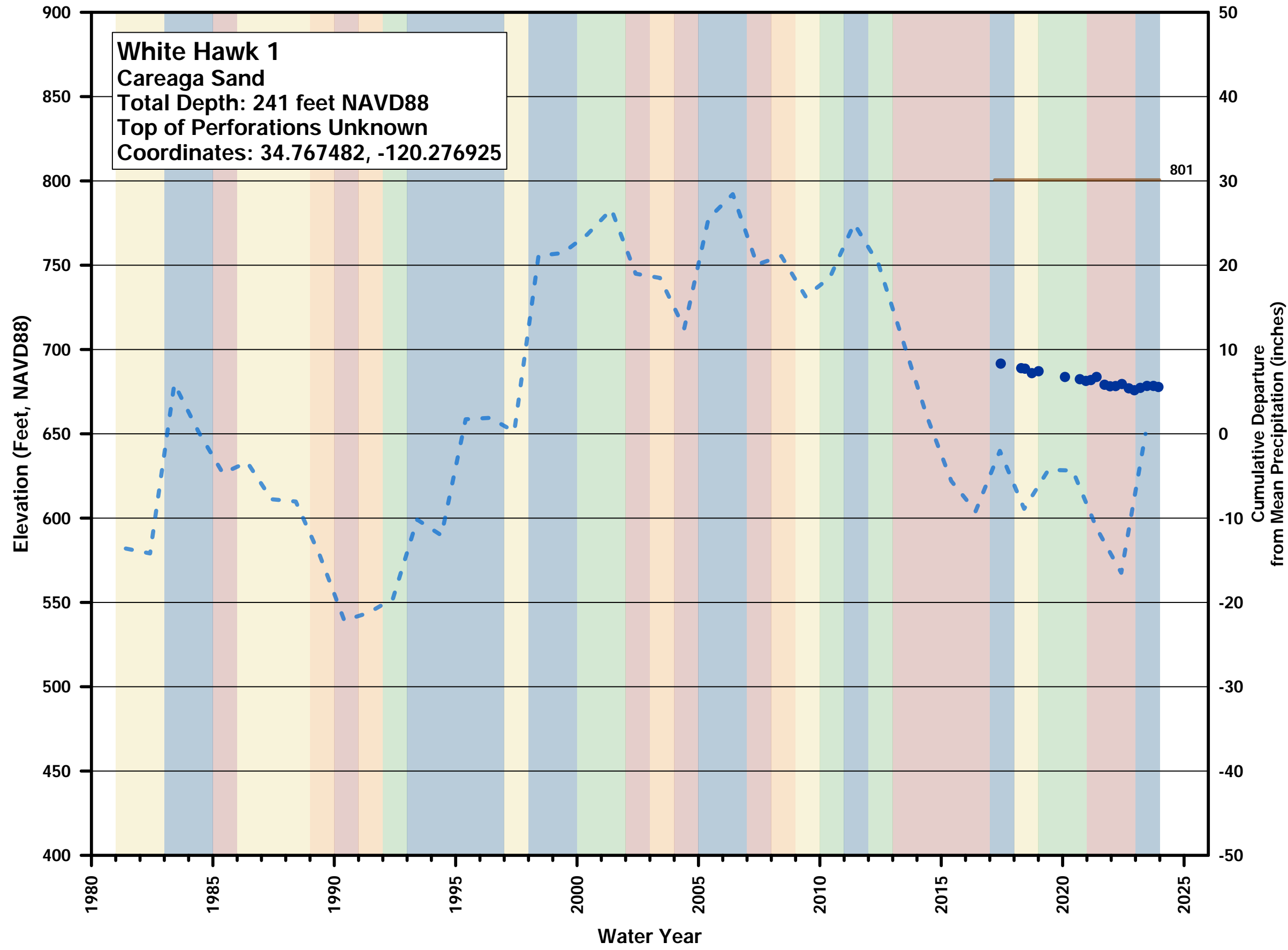
673

353



White Hawk 1
Careaga Sand
Total Depth: 241 feet NAVD88
Top of Perforations Unknown
Coordinates: 34.767482, -120.276925

Groundwater Elevation Hydrograph
San Antonio Creek Valley
Groundwater Basin Groundwater
Sustainability Plan 2023 Annual Report



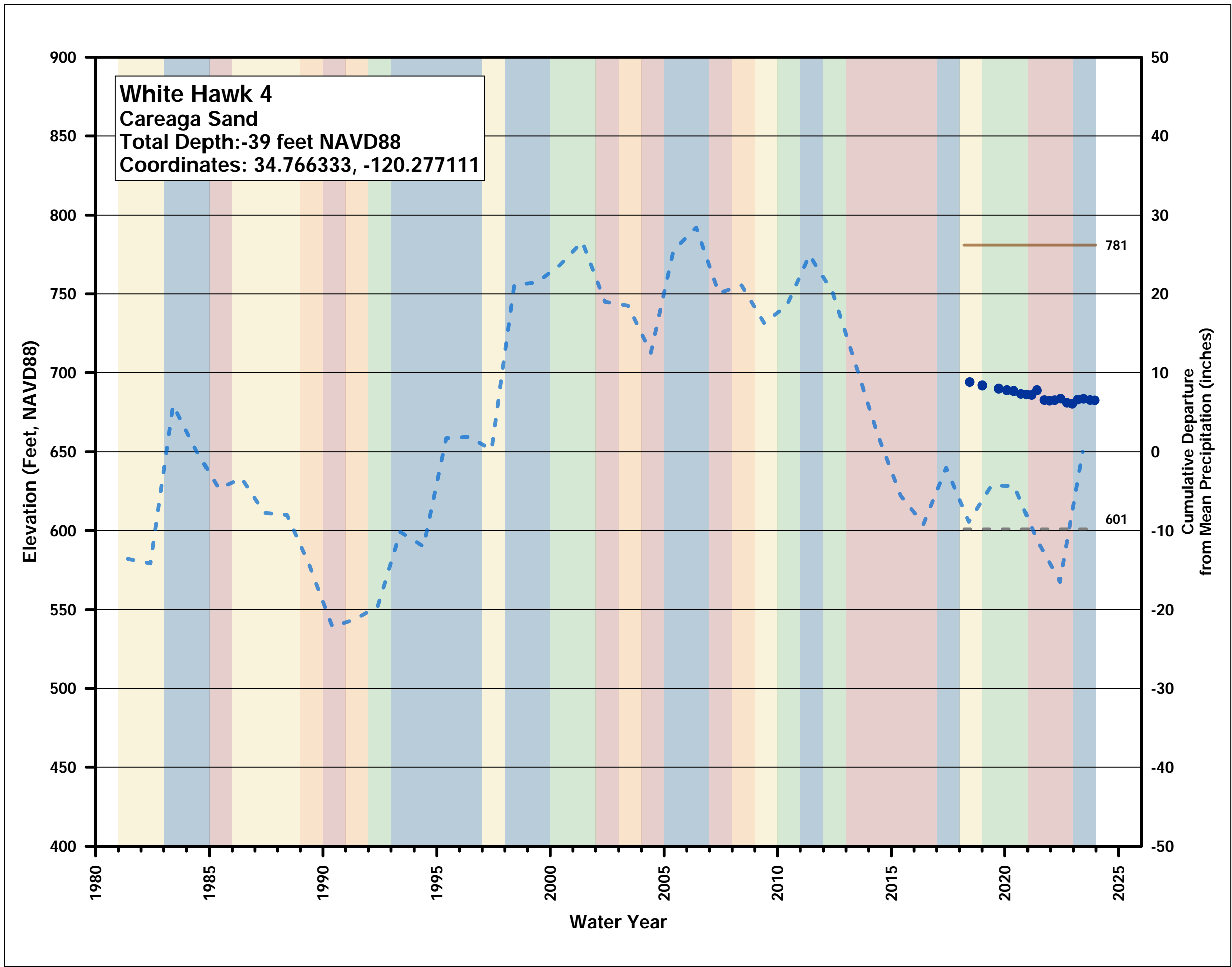
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Groundwater Elevation Hydrograph

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Groundwater Basin Groundwater
Sustainability Plan 2023 Annual
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WATER YEAR TYPE

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781

601

APPENDIX D

Principal Aquifer Hydraulic Properties

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Principal Aquifer Hydraulic Properties

Well Name	Aquifer	Test Duration (hours)	Flow (gpm)	Drawdown (ft)	Well Depth (ft bgs)	Screened Interval (ft bgs)	Total Screened Interval (ft)	Specific Capacity (gpm/ft)	Transmissivity (ft ² /day)	Hydraulic Conductivity (ft/day)
LACSD 3 ^{1,4,5}	Paso Robles Formation	—	330	57	—	—	—	6	1,604	—
LACSD 3a ^{2,3}		24	401	69	510	180–300 320–400 420–510	290	6	1,920	7
LACSD 4 ^{4,5}		—	323	79	535	230–530	300	4	1,093	4
LACSD 5 ^{2,3}		24	785	112	962	217–352 502–702 792–952	395	7	2,706	5
LACSD 6 ^{4,5}		—	624	96	959	196–296 338–700 823–959	598	6	1,738	3
4 - Deer (Ex Ag - 2) ^{5,6}	Careaga Sand	—	100	10	460	220–460	240	10	2,674	11
4 - Deer - (New Ag - 2) ^{5,6}		—	900	32	455	100–450	350	28	7,520	21
4 -Deer - (New Ag 3) ^{5,6}		—	750	46	455	100–480	380	16	4,359	11
4 - Deer Field (New Ag - 4) ^{5,6}		—	900	124	600	100–440	340	7	1,941	6
4 - Deer Highway (Ex Ag - 1) ^{5,6}		—	38	3	460	240–460	220	13	3,387	15
VSFB Well #4 ^{5,7}		2.3	956	54	334	162–219 234– 273 319–334	111	18	4,734	43
VSFB Well #7 ^{5,7}		3	1,200	37.85	410	200–210 220–230 270– 290 300–320 330–340 350– 360 370–390	190	32	8,477	45
VSFB Well #6 ^{5,7}		4	684	33.5	—	210–390	180	20	5,459	30
VSFB Well #5 ^{5,7}		3.1	768	46.5	400	200–390	110	17	4,416	40

Notes

- ¹ LACSD 3 was taken offline in 2010 replaced with LACSD 3A.
- ² Transmissivity and hydraulic conductivity were calculated using the modified Cooper-Jacob Nonequilibrium Equation (Driscoll, 1986)
- ³ Value for flow is an arithmetic mean of pumping rates during pump tests after well construction activities:
 - LACSD 3A: A & A Pump & Well Service, (2010). Constant Run 24hr+.
 - LACSD 5: Cleath & Associates, (2006). Well construction and testing report for St. Joseph Street Well #5, Los Alamos Community Services District, Santa Barbara County, December.
- ⁴ Specific capacity was calculated using mean production and water level data provided by the LACSD.
- ⁵ Hydraulic conductivity was calculated by using the following equation (Driscoll, 1986):

$$K = T / B$$
 - K = Hydraulic conductivity (feet per day)
 - T = Transmissivity (square feet per day)
 - B = Aquifer thickness or screened interval (feet)
 Transmissivity and specific capacity were calculated using the following formula (Driscoll, 1986):

$$T = [(Q/s) \times 2,000] / 7.48$$
 - T = Transmissivity, in gallons per day per foot (gpd/ft)
 - Q/s = Specific Capacity, in gallons per minute per foot (gpm/ft)
 - 2,000 = Constant for confined aquifers
 - 7.48 = Conversion from gallons per day per foot to square feet per day.

⁶ From Katherman Exploration Co., LLC, 2009.

⁷ Christian Mathews, Operations Manager, American Water, for Vandenberg Space Force Base, personal communication, Friday, June 18, 2021.

- = No value on record or uncalculated
- Ag = Agricultural well
- Ex = Existing
- ft = feet
- ft bgs = feet below ground surface
- ft/day = feet per day
- ft²/day = square feet per day
- gpd/ft = gallons per day per foot
- gpm = gallon per minute
- gpm/ft = gallons per minute per foot
- LACSD = Los Alamos Community Services District
- VSFB = Vandenberg Space Force Base

Reference

Driscoll, F. G. *Groundwater and Wells, Second Edition.* (St. Paul, Minnesota; Johnson Screens; 1986).

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APPENDIX E

Municipal Pumping Data

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Los Alamos CSD Water Production In Gallons					
2022	Well #3A	Well #4	Well #5	Well #6	
January	958,000	1,072,000	557,000	2,143,000	4,730,000
February	1,139,000	1,356,000	well off line	3,349,000	5,844,000
March	1,446,000	1,613,000	well off line	3,929,000	6,988,000
April	1,405,000	1,550,000	well off line	3,872,000	6,827,000
May	1,932,000	2,102,000	well off line	4,332,000	8,366,000
June	2,282,000	2,490,000	well off line	4,240,000	9,012,000
July	2,357,000	2,671,000	2,793,000	1,422,000	9,243,000
August	1,544,000	1,761,000	3,146,000	2,730,000	9,181,000
September	1,325,000	1,609,000	2,799,000	2,649,000	8,382,000
October	1,246,000	1,428,000	2,383,000	2,486,000	7,543,000
November	1,451,000	1,617,000	2,855,000	109,000	6,032,000
December	1,291,000	1,428,000	626,000	1,590,000	4,935,000
Total					87,083,000
Los Alamos CSD Water Production In Gallons					
2023	Well #3A	Well #4	Well #5	Well #6	
January	817,000	1,058,000	494,000	2,425,000	4,794,000
February	843,000	834,000	1,094,000	1,889,000	4,660,000
March	1,037,000	48,000	1,274,000	2,346,000	4,705,000
April	1,448,000	well off line	1,683,000	3,334,000	6,465,000
May	1,666,000	well off line	2,248,000	3,813,000	7,727,000
June	1,461,000	well off line	2,505,000	3,498,000	7,464,000
July	2,031,000	well off line	3,414,000	4,501,000	9,946,000
August	1,933,000	well off line	3,530,000	4,792,000	10,255,000
September	1,509,000	well off line	3,152,000	4,207,000	8,868,000
October	1,643,000	well off line	3,247,000	4,559,000	9,449,000
November	1,264,000	756,000	2,339,000	3,004,000	7,363,000
December					
Total					

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Michael McAlpin

From: DOMAKO, KENNETH E CIV USSF SSC 30 CES/CENP [REDACTED]
Sent: Thursday, December 14, 2023 9:07 AM
To: Michael McAlpin
Cc: Sydney Robertson
Subject: RE: VSFB Pumping Data WY 2023

Hi,
I've included 22 plus 2023 well data that Mike sent me. Let me know if you need anything else.

	2022
JAN	217.1
FEB	221.3
MAR	222.3
APR	231.2
MAY	251.6
JUN	250.1
JUL	256.3
AUG	242.7
SEP	204.6
OCT	237.4
NOV	181.0
DEC	172.3
	2,687.8

	2023
JAN	149.3
FEB	155.2
MAR	163.4
APR	0.0
MAY	0.0
JUN	0.0
JUL	0.0
AUG	149.2
SEP	237.6
OCT	237.4
NOV	183.6
DEC	0.0
	1,275.7

Thanks,
Ken

Ken Domako

Chief, Portfolio Optimization

30 CES/CENP

Space Systems Command



APPENDIX F

Land Subsidence Data

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Id	Date	Vertical Displacement (ft)	Vertical Displacement 31-Day Ave (ft)
580803	10/14/1999 0:00	-0.007	null
580804	10/15/1999 0:00	-0.012	null
580805	10/16/1999 0:00	0.012	null
580806	10/17/1999 0:00	0.007	null
580807	10/18/1999 0:00	-0.007	null
580808	10/19/1999 0:00	-0.013	null
580809	10/20/1999 0:00	0.001	null
580810	10/21/1999 0:00	-0.012	null
580811	10/22/1999 0:00	0.003	null
580812	10/23/1999 0:00	-0.032	null
580813	10/24/1999 0:00	-0.016	null
580814	10/25/1999 0:00	-0.012	null
580815	10/26/1999 0:00	0.02	null
580816	10/27/1999 0:00	0.017	null
580817	10/28/1999 0:00	-0.011	null
580818	10/29/1999 0:00	0.019	0
580819	10/30/1999 0:00	-0.02	0.001
580820	10/31/1999 0:00	0.012	0.001
580821	11/1/1999 0:00	0	0.001
580822	11/2/1999 0:00	-0.01	0.002
580823	11/3/1999 0:00	-0.002	0.002
580824	11/4/1999 0:00	0.007	0.004
580825	11/5/1999 0:00	0.007	0.004
580826	11/6/1999 0:00	0.008	0.005
580827	11/7/1999 0:00	0.005	0.006
580828	11/8/1999 0:00	0.015	0.006
580829	11/9/1999 0:00	0.032	0.007
580830	11/10/1999 0:00	-0.005	0.006
580831	11/11/1999 0:00	-0.005	0.006
580832	11/12/1999 0:00	-0.016	0.005
580833	11/13/1999 0:00	0.015	0.005
580834	11/14/1999 0:00	0.014	0.004
580835	11/15/1999 0:00	0.005	0.004
580836	11/16/1999 0:00	-0.003	0.005
580837	11/17/1999 0:00	0.034	0.005
580838	11/18/1999 0:00	0.02	0.006
580839	11/19/1999 0:00	0.025	0.006
580840	11/20/1999 0:00	0.002	0.006
580841	11/21/1999 0:00	0.035	0.005
580842	11/22/1999 0:00	0.015	0.006
580843	11/23/1999 0:00	-0.008	0.005
580844	11/24/1999 0:00	-0.01	0.004
580845	11/25/1999 0:00	-0.019	0.004

580846	11/26/1999 0:00	-0.003	0.004
580847	11/27/1999 0:00	-0.007	0.004
580848	11/28/1999 0:00	-0.013	0.004
580849	11/29/1999 0:00	-0.017	0.004
580850	11/30/1999 0:00	0.004	0.002
580851	12/1/1999 0:00	0.028	0.003
580852	12/2/1999 0:00	0.005	0.003
580853	12/3/1999 0:00	0.03	0.002
580854	12/4/1999 0:00	-0.01	0.001
580855	12/5/1999 0:00	-0.004	0.001
580856	12/6/1999 0:00	-0.011	0.001
580857	12/7/1999 0:00	0.023	-0.001
580858	12/8/1999 0:00	-0.015	-0.002
580859	12/9/1999 0:00	-0.005	-0.003
580860	12/10/1999 0:00	0.013	-0.003
580861	12/11/1999 0:00	-0.014	-0.003
580862	12/12/1999 0:00	-0.003	-0.004
580863	12/13/1999 0:00	-0.008	-0.004
580864	12/14/1999 0:00	0.004	-0.004
580865	12/15/1999 0:00	-0.022	-0.003
580866	12/16/1999 0:00	0.014	-0.003
580867	12/17/1999 0:00	0.002	-0.004
580868	12/18/1999 0:00	0.003	-0.005
580869	12/19/1999 0:00	0.004	-0.006
580870	12/20/1999 0:00	0.006	-0.006
580871	12/21/1999 0:00	-0.001	-0.005
580872	12/22/1999 0:00	-0.02	-0.006
580873	12/23/1999 0:00	-0.018	-0.008
580874	12/24/1999 0:00	-0.022	-0.009
580875	12/25/1999 0:00	-0.019	-0.009
580876	12/26/1999 0:00	-0.023	-0.009
580877	12/27/1999 0:00	-0.035	-0.009
580878	12/28/1999 0:00	-0.003	-0.009
580879	12/29/1999 0:00	-0.006	-0.01
580880	12/30/1999 0:00	0.01	-0.011
580881	12/31/1999 0:00	0.007	-0.01
580882	1/1/2000 0:00	-0.006	-0.011
580883	1/2/2000 0:00	-0.019	-0.012
580884	1/3/2000 0:00	-0.011	-0.013
580885	1/4/2000 0:00	-0.005	-0.013
580886	1/5/2000 0:00	0.014	-0.013
580887	1/6/2000 0:00	-0.033	-0.012
580888	1/7/2000 0:00	-0.044	-0.011
580889	1/8/2000 0:00	-0.036	-0.01

580890	1/9/2000 0:00	-0.003	-0.01
580891	1/10/2000 0:00	0.013	-0.01
580892	1/11/2000 0:00	-0.005	-0.009
580893	1/12/2000 0:00	-0.027	-0.009
580894	1/13/2000 0:00	-0.033	-0.009
580895	1/14/2000 0:00	-0.026	-0.009
580896	1/15/2000 0:00	0.006	-0.011
580897	1/16/2000 0:00	-0.022	-0.01
580898	1/17/2000 0:00	-0.023	-0.012
580899	1/18/2000 0:00	-0.011	-0.013
580900	1/19/2000 0:00	-0.008	-0.013
580901	1/20/2000 0:00	0.005	-0.013
580902	1/21/2000 0:00	0.029	-0.014
580903	1/22/2000 0:00	0.013	-0.013
580904	1/23/2000 0:00	0.003	-0.013
580905	1/24/2000 0:00	-0.006	-0.013
580906	1/25/2000 0:00	-0.013	-0.012
580907	1/26/2000 0:00	0.002	-0.013
580908	1/27/2000 0:00	-0.031	-0.014
580909	1/28/2000 0:00	-0.022	-0.014
580910	1/29/2000 0:00	-0.007	-0.014
580911	1/30/2000 0:00	-0.038	-0.013
580912	1/31/2000 0:00	0.025	-0.014
580913	2/1/2000 0:00	-0.053	-0.014
580914	2/2/2000 0:00	-0.052	-0.014
580915	2/3/2000 0:00	-0.013	-0.015
580916	2/4/2000 0:00	-0.01	-0.015
580917	2/5/2000 0:00	-0.011	-0.016
580918	2/6/2000 0:00	-0.013	-0.018
580919	2/7/2000 0:00	-0.027	-0.019
580920	2/8/2000 0:00	-0.028	-0.021
580921	2/9/2000 0:00	0.002	-0.022
580922	2/10/2000 0:00	-0.022	-0.022
580923	2/11/2000 0:00	-0.013	-0.023
580924	2/12/2000 0:00	-0.041	-0.022
580925	2/13/2000 0:00	-0.014	-0.022
580926	2/14/2000 0:00	0.006	-0.023
580927	2/15/2000 0:00	-0.031	-0.022
580928	2/16/2000 0:00	-0.026	-0.024
580929	2/17/2000 0:00	-0.026	-0.024
580930	2/18/2000 0:00	-0.037	-0.023
580931	2/19/2000 0:00	-0.016	-0.023
580932	2/20/2000 0:00	-0.037	-0.024
580933	2/21/2000 0:00	-0.027	-0.025

580934	2/22/2000 0:00	-0.017	-0.025
580935	2/23/2000 0:00	-0.056	-0.026
580936	2/24/2000 0:00	-0.02	-0.027
580937	2/25/2000 0:00	-0.033	-0.029
580938	2/26/2000 0:00	-0.009	-0.03
580939	2/27/2000 0:00	-0.022	-0.03
580940	2/28/2000 0:00	-0.021	-0.03
580941	2/29/2000 0:00	-0.032	-0.029
580942	3/1/2000 0:00	-0.01	-0.031
580943	3/2/2000 0:00	-0.045	-0.032
580944	3/3/2000 0:00	-0.034	-0.032
580945	3/4/2000 0:00	-0.037	-0.032
580946	3/5/2000 0:00	-0.017	-0.031
580947	3/6/2000 0:00	-0.035	-0.032
580948	3/7/2000 0:00	-0.035	-0.032
580949	3/8/2000 0:00	-0.021	-0.032
580950	3/9/2000 0:00	-0.062	-0.033
580951	3/10/2000 0:00	-0.048	-0.031
580952	3/11/2000 0:00	-0.065	-0.031
580953	3/12/2000 0:00	-0.036	-0.031
580954	3/13/2000 0:00	-0.038	-0.032
580955	3/14/2000 0:00	-0.032	-0.032
580956	3/15/2000 0:00	0.006	-0.032
580957	3/16/2000 0:00	-0.038	-0.032
580958	3/17/2000 0:00	-0.059	-0.032
580959	3/18/2000 0:00	-0.045	-0.032
580960	3/19/2000 0:00	-0.009	-0.032
580961	3/20/2000 0:00	-0.019	-0.031
580962	3/21/2000 0:00	-0.026	-0.031
580963	3/22/2000 0:00	-0.061	-0.03
580964	3/23/2000 0:00	-0.027	-0.029
580965	3/24/2000 0:00	-0.031	-0.03
580966	3/25/2000 0:00	-0.008	-0.028
580967	3/26/2000 0:00	-0.027	-0.027
580968	3/27/2000 0:00	-0.02	-0.026
580969	3/28/2000 0:00	-0.035	-0.026
580970	3/29/2000 0:00	-0.028	-0.025
580971	3/30/2000 0:00	-0.027	-0.025
580972	3/31/2000 0:00	-0.038	-0.026
580973	4/1/2000 0:00	-0.008	-0.025
580974	4/2/2000 0:00	-0.019	-0.022
580975	4/3/2000 0:00	-0.039	-0.022
580976	4/4/2000 0:00	-0.02	-0.022
580977	4/5/2000 0:00	-0.003	-0.022

580978	4/6/2000 0:00	-0.007	-0.022
580979	4/7/2000 0:00	-0.023	-0.021
580980	4/8/2000 0:00	-0.028	-0.019
580981	4/9/2000 0:00	-0.004	-0.019
580982	4/10/2000 0:00	-0.021	-0.02
580983	4/11/2000 0:00	-0.035	-0.02
580984	4/12/2000 0:00	-0.033	-0.021
580985	4/13/2000 0:00	-0.019	-0.019
580986	4/14/2000 0:00	-0.027	-0.018
580987	4/15/2000 0:00	-0.009	-0.019
580988	4/16/2000 0:00	-0.015	-0.019
580989	4/17/2000 0:00	0.017	-0.019
580990	4/18/2000 0:00	-0.019	-0.018
580991	4/19/2000 0:00	-0.019	-0.016
580992	4/20/2000 0:00	-0.035	-0.016
580993	4/21/2000 0:00	-0.02	-0.017
580994	4/22/2000 0:00	-0.012	-0.015
580995	4/23/2000 0:00	0.012	-0.014
580996	4/24/2000 0:00	-0.007	-0.014
580997	4/25/2000 0:00	-0.043	-0.013
580998	4/26/2000 0:00	-0.029	-0.013
580999	4/27/2000 0:00	-0.042	-0.012
581000	4/28/2000 0:00	0.002	-0.011
581001	4/29/2000 0:00	0	-0.011
581002	4/30/2000 0:00	-0.043	-0.01
581003	5/1/2000 0:00	-0.032	-0.01
581004	5/2/2000 0:00	-0.008	-0.009
581005	5/3/2000 0:00	0.003	-0.01
581006	5/4/2000 0:00	0.01	-0.01
581007	5/5/2000 0:00	-0.017	-0.01
581008	5/6/2000 0:00	-0.014	-0.009
581009	5/7/2000 0:00	0.032	-0.008
581010	5/8/2000 0:00	0.014	-0.007
581011	5/10/2000 0:00	-0.008	-0.008
581012	5/11/2000 0:00	0.009	-0.008
581013	5/12/2000 0:00	-0.008	-0.006
581014	5/13/2000 0:00	-0.024	-0.006
581015	5/14/2000 0:00	0.009	-0.005
581016	5/15/2000 0:00	-0.017	-0.006
581017	5/16/2000 0:00	-0.002	-0.007
581018	5/17/2000 0:00	-0.01	-0.006
581019	5/18/2000 0:00	0.006	-0.005
581020	5/19/2000 0:00	-0.002	-0.005
581021	5/20/2000 0:00	-0.008	-0.005

581022	5/21/2000 0:00	-0.018	-0.006
581023	5/22/2000 0:00	-0.002	-0.006
581024	5/23/2000 0:00	-0.005	-0.006
581025	5/24/2000 0:00	0.009	-0.007
581026	5/25/2000 0:00	-0.003	-0.008
581027	5/26/2000 0:00	0.004	-0.008
581028	5/27/2000 0:00	-0.002	-0.008
581029	5/28/2000 0:00	-0.025	-0.008
581030	5/29/2000 0:00	-0.009	-0.007
581031	5/30/2000 0:00	-0.022	-0.007
581032	5/31/2000 0:00	-0.022	-0.006
581033	6/1/2000 0:00	-0.026	-0.006
581034	6/2/2000 0:00	0.001	-0.005
581035	6/3/2000 0:00	-0.009	-0.005
581036	6/4/2000 0:00	-0.01	-0.004
581037	6/5/2000 0:00	0.002	-0.004
581038	6/6/2000 0:00	-0.017	-0.002
581039	6/7/2000 0:00	-0.014	-0.003
581040	6/8/2000 0:00	-0.014	-0.003
581041	6/9/2000 0:00	-0.005	-0.004
581042	6/10/2000 0:00	-0.009	-0.004
581043	6/11/2000 0:00	0.003	-0.004
581044	6/12/2000 0:00	-0.001	-0.003
581045	6/13/2000 0:00	0.001	-0.003
581046	6/14/2000 0:00	0.019	-0.002
581047	6/15/2000 0:00	0.005	-0.001
581048	6/16/2000 0:00	0.009	0
581049	6/17/2000 0:00	0.007	0.001
581050	6/18/2000 0:00	0.001	0.001
581051	6/19/2000 0:00	0.021	0.002
581052	6/20/2000 0:00	0.012	0.002
581053	6/21/2000 0:00	0.024	0.001
581054	6/22/2000 0:00	-0.022	0.002
581055	6/23/2000 0:00	-0.001	0.002
581056	6/24/2000 0:00	-0.011	0.001
581057	6/25/2000 0:00	-0.009	0.001
581058	6/26/2000 0:00	0.006	0.002
581059	6/27/2000 0:00	0.011	0.002
581060	6/28/2000 0:00	-0.007	0.002
581061	6/29/2000 0:00	0.013	0.002
581062	6/30/2000 0:00	0	0.001
581063	7/1/2000 0:00	0.01	0
581064	7/2/2000 0:00	0.018	0
581065	7/3/2000 0:00	0.006	-0.001

581066	7/4/2000 0:00	0.011	-0.001
581067	7/5/2000 0:00	-0.014	-0.002
581068	7/6/2000 0:00	-0.01	-0.002
581069	7/7/2000 0:00	-0.005	-0.003
581070	7/8/2000 0:00	-0.012	-0.002
581071	7/9/2000 0:00	-0.03	-0.002
581072	7/10/2000 0:00	-0.006	-0.002
581073	7/11/2000 0:00	0.018	-0.001
581074	7/12/2000 0:00	0.009	-0.001
581075	7/13/2000 0:00	-0.028	-0.001
581076	7/18/2000 0:00	0.013	-0.001
581077	7/19/2000 0:00	-0.021	-0.002
581078	7/20/2000 0:00	-0.008	-0.002
581079	7/21/2000 0:00	-0.005	-0.002
581080	7/22/2000 0:00	-0.012	-0.002
581081	7/23/2000 0:00	-0.016	-0.002
581082	7/24/2000 0:00	-0.005	-0.003
581083	7/25/2000 0:00	0.012	-0.002
581084	7/26/2000 0:00	-0.003	-0.002
581085	7/27/2000 0:00	0.011	-0.001
581086	7/28/2000 0:00	-0.014	-0.002
581087	7/29/2000 0:00	-0.002	-0.002
581088	7/30/2000 0:00	0.013	-0.001
581089	7/31/2000 0:00	0.02	-0.002
581090	8/1/2000 0:00	0.021	-0.003
581091	8/2/2000 0:00	-0.033	-0.002
581092	8/3/2000 0:00	0.007	-0.004
581093	8/4/2000 0:00	-0.003	-0.004
581094	8/5/2000 0:00	-0.005	-0.003
581095	8/6/2000 0:00	0.022	-0.003
581096	8/7/2000 0:00	-0.005	-0.003
581097	8/8/2000 0:00	-0.009	-0.002
581098	8/9/2000 0:00	0.007	-0.003
581099	8/10/2000 0:00	0.006	-0.003
581100	8/11/2000 0:00	0.008	-0.003
581101	8/12/2000 0:00	-0.028	-0.003
581102	8/13/2000 0:00	-0.025	-0.004
581103	8/14/2000 0:00	0.005	-0.003
581104	8/15/2000 0:00	0	-0.005
581105	8/16/2000 0:00	-0.03	-0.005
581106	8/17/2000 0:00	0	-0.006
581107	8/18/2000 0:00	-0.022	-0.005
581108	8/19/2000 0:00	-0.017	-0.006
581109	8/20/2000 0:00	-0.005	-0.006

581110	8/21/2000 0:00	0.011	-0.006
581111	8/22/2000 0:00	-0.008	-0.006
581112	8/23/2000 0:00	-0.003	-0.008
581113	8/24/2000 0:00	-0.01	-0.008
581114	8/25/2000 0:00	-0.008	-0.008
581115	8/26/2000 0:00	0.002	-0.008
581116	8/27/2000 0:00	0.009	-0.009
581117	8/28/2000 0:00	-0.03	-0.009
581118	8/29/2000 0:00	0.014	-0.008
581119	8/30/2000 0:00	-0.032	-0.009
581120	8/31/2000 0:00	-0.002	-0.009
581121	9/1/2000 0:00	-0.013	-0.007
581122	9/2/2000 0:00	0	-0.007
581123	9/3/2000 0:00	-0.001	-0.006
581124	9/4/2000 0:00	-0.008	-0.006
581125	9/5/2000 0:00	-0.022	-0.006
581126	9/6/2000 0:00	0.017	-0.005
581127	9/7/2000 0:00	-0.038	-0.005
581128	9/8/2000 0:00	-0.007	-0.005
581129	9/9/2000 0:00	-0.009	-0.005
581130	9/10/2000 0:00	0.002	-0.006
581131	9/11/2000 0:00	-0.029	-0.006
581132	9/12/2000 0:00	-0.005	-0.006
581133	9/13/2000 0:00	-0.013	-0.006
581134	9/14/2000 0:00	-0.032	-0.006
581135	9/15/2000 0:00	0.02	-0.005
581136	9/16/2000 0:00	0.01	-0.005
581137	9/17/2000 0:00	-0.001	-0.004
581138	9/18/2000 0:00	0.016	-0.004
581139	9/19/2000 0:00	-0.014	-0.004
581140	9/20/2000 0:00	0.008	-0.004
581141	9/21/2000 0:00	0.035	-0.004
581142	9/22/2000 0:00	-0.01	-0.005
581143	9/23/2000 0:00	-0.009	-0.003
581144	9/24/2000 0:00	-0.018	-0.003
581145	9/25/2000 0:00	-0.018	-0.003
581146	9/26/2000 0:00	-0.007	-0.003
581147	9/27/2000 0:00	0.007	-0.002
581148	9/28/2000 0:00	-0.012	-0.002
581149	9/29/2000 0:00	0.009	-0.001
581150	9/30/2000 0:00	-0.009	0
581151	10/1/2000 0:00	0	-0.001
581152	10/2/2000 0:00	0.013	-0.001
581153	10/3/2000 0:00	-0.013	-0.001

581154	10/4/2000 0:00	-0.001	-0.001
581155	10/5/2000 0:00	0.008	-0.001
581156	10/6/2000 0:00	-0.036	-0.001
581157	10/7/2000 0:00	0.008	-0.002
581158	10/8/2000 0:00	0.002	-0.002
581159	10/9/2000 0:00	-0.012	-0.001
581160	10/10/2000 0:00	-0.009	0
581161	10/11/2000 0:00	0.003	0
581162	10/12/2000 0:00	0.001	0.001
581163	10/13/2000 0:00	0.012	0
581164	10/14/2000 0:00	0.001	0.001
581165	10/15/2000 0:00	0.01	0.002
581166	10/16/2000 0:00	0.008	0.002
581167	10/17/2000 0:00	0.007	0.002
581168	10/18/2000 0:00	-0.013	0.002
581169	10/19/2000 0:00	0.007	0.002
581170	10/20/2000 0:00	-0.013	0.003
581171	10/21/2000 0:00	0.012	0.003
581172	10/22/2000 0:00	0.017	0.004
581173	10/23/2000 0:00	-0.009	0.003
581174	10/24/2000 0:00	0.012	0.003
581175	10/25/2000 0:00	0.003	0.004
581176	10/26/2000 0:00	-0.018	0.004
581177	10/27/2000 0:00	0.019	0.004
581178	10/28/2000 0:00	0.001	0.004
581179	10/29/2000 0:00	0.007	0.004
581180	10/30/2000 0:00	0.034	0.004
581181	10/31/2000 0:00	-0.003	0.004
581182	11/1/2000 0:00	-0.011	0.005
581183	11/2/2000 0:00	0.01	0.005
581184	11/3/2000 0:00	0.001	0.006
581185	11/4/2000 0:00	0.016	0.005
581186	11/5/2000 0:00	0.015	0.006
581187	11/6/2000 0:00	-0.008	0.006
581188	11/7/2000 0:00	0.002	0.006
581189	11/8/2000 0:00	-0.007	0.006
581190	11/9/2000 0:00	0.012	0.006
581191	11/10/2000 0:00	-0.021	0.006
581192	11/11/2000 0:00	0.008	0.006
581193	11/12/2000 0:00	0.017	0.006
581194	11/13/2000 0:00	0.012	0.006
581195	11/14/2000 0:00	0.005	0.006
581196	11/15/2000 0:00	0.013	0.004
581197	11/16/2000 0:00	0.028	0.004

581198	11/17/2000 0:00	-0.003	0.005
581199	11/18/2000 0:00	0.01	0.003
581200	11/19/2000 0:00	0.002	0.003
581201	11/20/2000 0:00	0.006	0.003
581202	11/21/2000 0:00	0.005	0.002
581203	11/22/2000 0:00	0.026	0.001
581204	11/23/2000 0:00	-0.003	0.001
581205	11/24/2000 0:00	0.005	0
581206	11/25/2000 0:00	-0.008	0
581207	11/26/2000 0:00	-0.006	0
581208	11/27/2000 0:00	0.021	0
581209	11/28/2000 0:00	0.009	-0.001
581210	11/29/2000 0:00	-0.004	-0.002
581211	11/30/2000 0:00	-0.032	-0.003
581212	12/1/2000 0:00	0.002	-0.004
581213	12/2/2000 0:00	0.008	-0.005
581214	12/3/2000 0:00	-0.025	-0.006
581215	12/4/2000 0:00	-0.01	-0.007
581216	12/5/2000 0:00	-0.001	-0.007
581217	12/6/2000 0:00	-0.012	-0.007
581218	12/7/2000 0:00	-0.029	-0.008
581219	12/8/2000 0:00	-0.011	-0.01
581220	12/9/2000 0:00	-0.018	-0.01
581221	12/10/2000 0:00	0.001	-0.011
581222	12/11/2000 0:00	-0.005	-0.012
581223	12/12/2000 0:00	-0.005	-0.012
581224	12/13/2000 0:00	-0.014	-0.013
581225	12/14/2000 0:00	-0.023	-0.014
581226	12/15/2000 0:00	-0.008	-0.014
581227	12/16/2000 0:00	-0.029	-0.014
581228	12/17/2000 0:00	-0.013	-0.014
581229	12/18/2000 0:00	-0.025	-0.015
581230	12/19/2000 0:00	-0.013	-0.014
581231	12/20/2000 0:00	-0.015	-0.015
581232	12/21/2000 0:00	0.003	-0.014
581233	12/22/2000 0:00	-0.006	-0.014
581234	12/23/2000 0:00	-0.035	-0.014
581235	12/24/2000 0:00	-0.025	-0.014
581236	12/25/2000 0:00	-0.02	-0.013
581237	12/26/2000 0:00	-0.02	-0.014
581238	12/27/2000 0:00	-0.015	-0.015
581239	12/28/2000 0:00	-0.015	-0.015
581240	12/29/2000 0:00	-0.013	-0.014
581241	12/30/2000 0:00	-0.014	-0.015

581242	12/31/2000 0:00	-0.025	-0.015
581243	1/1/2001 0:00	0	-0.015
581244	1/2/2001 0:00	-0.014	-0.015
581245	1/3/2001 0:00	-0.011	-0.016
581246	1/4/2001 0:00	-0.019	-0.016
581247	1/5/2001 0:00	0.003	-0.016
581248	1/6/2001 0:00	-0.008	-0.017
581249	1/7/2001 0:00	-0.01	-0.018
581250	1/8/2001 0:00	-0.005	-0.018
581251	1/9/2001 0:00	-0.001	-0.019
581252	1/10/2001 0:00	-0.018	-0.02
581253	1/11/2001 0:00	-0.037	-0.021
581254	1/12/2001 0:00	-0.004	-0.021
581255	1/13/2001 0:00	-0.009	-0.021
581256	1/14/2001 0:00	-0.027	-0.022
581257	1/15/2001 0:00	-0.017	-0.022
581258	1/16/2001 0:00	-0.028	-0.023
581259	1/17/2001 0:00	-0.027	-0.024
581260	1/18/2001 0:00	-0.034	-0.025
581261	1/19/2001 0:00	-0.023	-0.026
581262	1/20/2001 0:00	-0.031	-0.026
581263	1/21/2001 0:00	-0.028	-0.028
581264	1/22/2001 0:00	-0.028	-0.029
581265	1/23/2001 0:00	-0.027	-0.031
581266	1/24/2001 0:00	-0.048	-0.032
581267	1/25/2001 0:00	-0.055	-0.033
581268	1/26/2001 0:00	-0.058	-0.033
581269	1/27/2001 0:00	-0.006	-0.033
581270	1/28/2001 0:00	-0.036	-0.034
581271	1/29/2001 0:00	-0.026	-0.034
581272	1/30/2001 0:00	-0.036	-0.034
581273	1/31/2001 0:00	-0.033	-0.035
581274	2/1/2001 0:00	-0.036	-0.036
581275	2/2/2001 0:00	-0.045	-0.036
581276	2/3/2001 0:00	-0.047	-0.036
581277	2/4/2001 0:00	-0.033	-0.036
581278	2/5/2001 0:00	-0.032	-0.037
581279	2/6/2001 0:00	-0.063	-0.037
581280	2/7/2001 0:00	-0.049	-0.038
581281	2/8/2001 0:00	-0.041	-0.037
581282	2/9/2001 0:00	-0.04	-0.037
581283	2/10/2001 0:00	-0.022	-0.037
581284	2/11/2001 0:00	-0.034	-0.036
581285	2/12/2001 0:00	-0.024	-0.037

581286	2/13/2001 0:00	-0.011	-0.036
581287	2/14/2001 0:00	-0.033	-0.035
581288	2/15/2001 0:00	-0.045	-0.035
581289	2/16/2001 0:00	-0.05	-0.034
581290	2/17/2001 0:00	-0.041	-0.033
581291	2/18/2001 0:00	-0.038	-0.033
581292	2/19/2001 0:00	-0.027	-0.035
581293	2/20/2001 0:00	-0.043	-0.034
581294	2/21/2001 0:00	-0.044	-0.034
581295	2/22/2001 0:00	-0.042	-0.032
581296	2/23/2001 0:00	0	-0.031
581297	2/24/2001 0:00	-0.048	-0.03
581298	2/25/2001 0:00	-0.06	-0.029
581299	2/26/2001 0:00	-0.021	-0.029
581300	2/27/2001 0:00	-0.052	-0.029
581301	2/28/2001 0:00	-0.016	-0.028
581302	3/1/2001 0:00	0.014	-0.028
581303	3/2/2001 0:00	-0.024	-0.027
581304	3/3/2001 0:00	0.003	-0.027
581305	3/4/2001 0:00	-0.018	-0.027
581306	3/5/2001 0:00	-0.048	-0.027
581307	3/6/2001 0:00	-0.091	-0.027
581308	3/7/2001 0:00	-0.026	-0.027
581309	3/8/2001 0:00	-0.006	-0.026
581310	3/9/2001 0:00	-0.016	-0.025
581311	3/10/2001 0:00	-0.021	-0.025
581312	3/11/2001 0:00	-0.015	-0.026
581313	3/12/2001 0:00	-0.003	-0.025
581314	3/13/2001 0:00	-0.023	-0.023
581315	3/14/2001 0:00	-0.017	-0.023
581316	3/15/2001 0:00	-0.018	-0.022
581317	3/16/2001 0:00	0.009	-0.022
581318	3/17/2001 0:00	-0.016	-0.024
581319	3/18/2001 0:00	-0.036	-0.023
581320	3/19/2001 0:00	-0.054	-0.024
581321	3/20/2001 0:00	-0.033	-0.024
581322	3/21/2001 0:00	-0.043	-0.023
581323	3/22/2001 0:00	-0.034	-0.02
581324	3/23/2001 0:00	-0.015	-0.019
581325	3/24/2001 0:00	-0.016	-0.02
581326	3/25/2001 0:00	-0.035	-0.019
581327	3/26/2001 0:00	-0.02	-0.019
581328	3/27/2001 0:00	-0.03	-0.021
581329	3/28/2001 0:00	-0.005	-0.022

581330	3/29/2001 0:00	-0.014	-0.022
581331	3/30/2001 0:00	-0.019	-0.023
581332	3/31/2001 0:00	-0.025	-0.023
581333	4/1/2001 0:00	-0.029	-0.024
581334	4/2/2001 0:00	-0.007	-0.024
581335	4/3/2001 0:00	-0.029	-0.024
581336	4/4/2001 0:00	-0.018	-0.022
581337	4/5/2001 0:00	-0.008	-0.021
581338	4/6/2001 0:00	0.016	-0.019
581339	4/7/2001 0:00	-0.015	-0.019
581340	4/8/2001 0:00	-0.018	-0.019
581341	4/9/2001 0:00	-0.008	-0.019
581342	4/10/2001 0:00	-0.025	-0.017
581343	4/11/2001 0:00	-0.046	-0.016
581344	4/12/2001 0:00	-0.036	-0.015
581345	4/13/2001 0:00	-0.031	-0.014
581346	4/14/2001 0:00	-0.04	-0.013
581347	4/15/2001 0:00	-0.025	-0.013
581348	4/16/2001 0:00	-0.017	-0.012
581349	4/17/2001 0:00	-0.033	-0.011
581350	4/18/2001 0:00	-0.029	-0.012
581351	4/19/2001 0:00	0.015	-0.011
581352	4/20/2001 0:00	0	-0.011
581353	4/21/2001 0:00	0.015	-0.011
581354	4/22/2001 0:00	-0.029	-0.011
581355	4/23/2001 0:00	-0.027	-0.011
581356	4/24/2001 0:00	-0.011	-0.011
581357	4/25/2001 0:00	0.032	-0.012
581358	4/26/2001 0:00	-0.002	-0.011
581359	4/27/2001 0:00	0.013	-0.009
581360	4/28/2001 0:00	0.025	-0.009
581361	4/29/2001 0:00	0.008	-0.007
581362	4/30/2001 0:00	-0.012	-0.006
581363	5/1/2001 0:00	-0.014	-0.005
581364	5/2/2001 0:00	0.008	-0.004
581365	5/3/2001 0:00	-0.018	-0.003
581366	5/4/2001 0:00	-0.01	-0.002
581367	5/5/2001 0:00	-0.006	-0.002
581368	5/6/2001 0:00	-0.014	-0.002
581369	5/7/2001 0:00	-0.002	-0.003
581370	5/8/2001 0:00	-0.005	-0.002
581371	5/9/2001 0:00	-0.011	0
581372	5/10/2001 0:00	-0.034	0.001
581373	5/11/2001 0:00	-0.005	0

581374	5/12/2001 0:00	0.001	0.001
581375	5/13/2001 0:00	-0.007	0
581376	5/14/2001 0:00	0.012	0
581377	5/15/2001 0:00	-0.009	0
581378	5/16/2001 0:00	0.015	0
581379	5/17/2001 0:00	0.009	0.001
581380	5/18/2001 0:00	0.014	0.002
581381	5/19/2001 0:00	0.001	0.003
581382	5/20/2001 0:00	0.005	0.003
581383	5/21/2001 0:00	-0.01	0.004
581384	5/22/2001 0:00	-0.004	0.005
581385	5/23/2001 0:00	0.01	0.005
581386	5/24/2001 0:00	0.014	0.005
581387	5/25/2001 0:00	0.016	0.006
581388	5/26/2001 0:00	0.008	0.007
581389	5/27/2001 0:00	0.023	0.007
581390	5/28/2001 0:00	0.002	0.008
581391	5/29/2001 0:00	0.007	0.009
581392	5/30/2001 0:00	0.005	0.009
581393	5/31/2001 0:00	-0.002	0.009
581394	6/1/2001 0:00	0.022	0.008
581395	6/2/2001 0:00	0.026	0.007
581396	6/3/2001 0:00	0.008	0.007
581397	6/4/2001 0:00	0.011	0.007
581398	6/5/2001 0:00	0.01	0.007
581399	6/6/2001 0:00	0.016	0.006
581400	6/7/2001 0:00	0.006	0.005
581401	6/8/2001 0:00	0.007	0.005
581402	6/9/2001 0:00	-0.001	0.005
581403	6/10/2001 0:00	0.011	0.004
581404	6/11/2001 0:00	-0.002	0.002
581405	6/12/2001 0:00	0.018	0
581406	6/13/2001 0:00	0.032	0
581407	6/14/2001 0:00	0.009	0
581408	6/15/2001 0:00	-0.02	-0.001
581409	6/16/2001 0:00	-0.008	-0.002
581410	6/17/2001 0:00	-0.011	-0.003
581411	6/18/2001 0:00	-0.005	-0.003
581412	6/19/2001 0:00	0.006	-0.005
581413	6/20/2001 0:00	-0.001	-0.006
581414	6/21/2001 0:00	-0.025	-0.007
581415	6/22/2001 0:00	-0.022	-0.008
581416	6/23/2001 0:00	-0.01	-0.009
581417	6/24/2001 0:00	0.025	-0.011

581418	6/25/2001 0:00	-0.018	-0.013
581419	6/26/2001 0:00	-0.048	-0.014
581420	6/27/2001 0:00	-0.039	-0.015
581421	6/28/2001 0:00	-0.009	-0.016
581422	6/29/2001 0:00	-0.005	-0.017
581423	6/30/2001 0:00	-0.012	-0.018
581424	7/1/2001 0:00	-0.017	-0.018
581425	7/2/2001 0:00	-0.017	-0.018
581426	7/3/2001 0:00	0.012	-0.019
581427	7/4/2001 0:00	-0.035	-0.019
581428	7/5/2001 0:00	-0.028	-0.02
581429	7/6/2001 0:00	-0.009	-0.021
581430	7/7/2001 0:00	-0.034	-0.021
581431	7/8/2001 0:00	-0.032	-0.021
581432	7/9/2001 0:00	-0.05	-0.022
581433	7/10/2001 0:00	-0.044	-0.023
581434	7/11/2001 0:00	-0.022	-0.024
581435	7/12/2001 0:00	-0.032	-0.023
581436	7/13/2001 0:00	-0.02	-0.023
581437	7/14/2001 0:00	-0.016	-0.024
581438	7/15/2001 0:00	-0.012	-0.024
581439	7/16/2001 0:00	-0.023	-0.023
581440	7/17/2001 0:00	-0.008	-0.024
581441	7/18/2001 0:00	-0.024	-0.024
581442	7/19/2001 0:00	-0.022	-0.025
581443	7/20/2001 0:00	-0.022	-0.024
581444	7/21/2001 0:00	-0.033	-0.024
581445	7/22/2001 0:00	-0.017	-0.024
581446	7/23/2001 0:00	-0.026	-0.024
581447	7/24/2001 0:00	-0.034	-0.024
581448	7/25/2001 0:00	-0.022	-0.023
581449	7/26/2001 0:00	-0.031	-0.022
581450	7/27/2001 0:00	-0.023	-0.022
581451	7/28/2001 0:00	-0.042	-0.023
581452	7/29/2001 0:00	-0.035	-0.024
581453	7/30/2001 0:00	-0.006	-0.024
581454	7/31/2001 0:00	0	-0.025
581455	8/1/2001 0:00	-0.026	-0.025
581456	8/2/2001 0:00	-0.035	-0.026
581457	8/3/2001 0:00	-0.011	-0.027
581458	8/4/2001 0:00	-0.002	-0.027
581459	8/5/2001 0:00	-0.025	-0.027
581460	8/6/2001 0:00	-0.019	-0.028
581461	8/7/2001 0:00	-0.025	-0.028

581462	8/8/2001 0:00	-0.027	-0.028
581463	8/9/2001 0:00	-0.031	-0.027
581464	8/10/2001 0:00	-0.024	-0.027
581465	8/11/2001 0:00	-0.016	-0.027
581466	8/12/2001 0:00	-0.047	-0.027
581467	8/13/2001 0:00	-0.059	-0.027
581468	8/14/2001 0:00	-0.022	-0.027
581469	8/15/2001 0:00	-0.046	-0.028
581470	8/16/2001 0:00	-0.017	-0.028
581471	8/17/2001 0:00	-0.038	-0.027
581472	8/18/2001 0:00	-0.044	-0.026
581473	8/19/2001 0:00	-0.025	-0.026
581474	8/20/2001 0:00	-0.035	-0.027
581475	8/21/2001 0:00	-0.043	-0.027
581476	8/22/2001 0:00	-0.025	-0.026
581477	8/23/2001 0:00	-0.031	-0.026
581478	8/24/2001 0:00	-0.005	-0.026
581479	8/25/2001 0:00	-0.011	-0.026
581480	8/26/2001 0:00	-0.039	-0.027
581481	8/27/2001 0:00	-0.031	-0.027
581482	8/28/2001 0:00	-0.022	-0.026
581483	8/29/2001 0:00	-0.035	-0.024
581484	8/30/2001 0:00	-0.042	-0.024
581485	8/31/2001 0:00	0.001	-0.023
581486	9/1/2001 0:00	-0.016	-0.022
581487	9/2/2001 0:00	-0.006	-0.021
581488	9/3/2001 0:00	-0.011	-0.02
581489	9/4/2001 0:00	-0.035	-0.019
581490	9/5/2001 0:00	-0.002	-0.018
581491	9/6/2001 0:00	-0.001	-0.017
581492	9/7/2001 0:00	-0.033	-0.016
581493	9/8/2001 0:00	-0.018	-0.016
581494	9/9/2001 0:00	-0.028	-0.016
581495	9/10/2001 0:00	-0.043	-0.015
581496	9/11/2001 0:00	-0.028	-0.014
581497	9/12/2001 0:00	-0.004	-0.013
581498	9/13/2001 0:00	-0.011	-0.012
581499	9/14/2001 0:00	-0.02	-0.012
581500	9/15/2001 0:00	-0.013	-0.011
581501	9/16/2001 0:00	0.001	-0.012
581502	9/17/2001 0:00	0.011	-0.011
581503	9/18/2001 0:00	-0.004	-0.011
581504	9/19/2001 0:00	-0.007	-0.011
581505	9/20/2001 0:00	0.002	-0.01

581506	9/21/2001 0:00	-0.012	-0.01
581507	9/22/2001 0:00	-0.013	-0.01
581508	9/23/2001 0:00	-0.006	-0.01
581509	9/24/2001 0:00	-0.007	-0.01
581510	9/25/2001 0:00	0.003	-0.011
581511	9/26/2001 0:00	-0.016	-0.01
581512	9/27/2001 0:00	0.005	-0.01
581513	9/28/2001 0:00	0.003	-0.01
581514	9/29/2001 0:00	-0.009	-0.009
581515	9/30/2001 0:00	-0.021	-0.008
581516	10/1/2001 0:00	-0.024	-0.009
581517	10/2/2001 0:00	-0.007	-0.01
581518	10/3/2001 0:00	0	-0.01
581519	10/4/2001 0:00	-0.01	-0.011
581520	10/5/2001 0:00	0.012	-0.011
581521	10/6/2001 0:00	-0.011	-0.01
581522	10/7/2001 0:00	-0.014	-0.01
581523	10/8/2001 0:00	-0.02	-0.01
581524	10/9/2001 0:00	-0.018	-0.01
581525	10/10/2001 0:00	-0.051	-0.01
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581528	10/13/2001 0:00	0.004	-0.011
581529	10/14/2001 0:00	0.005	-0.011
581530	10/15/2001 0:00	0.008	-0.011
581531	10/16/2001 0:00	-0.024	-0.01
581532	10/17/2001 0:00	-0.033	-0.01
581533	10/18/2001 0:00	-0.003	-0.009
581534	10/19/2001 0:00	-0.024	-0.01
581535	10/20/2001 0:00	0	-0.01
581536	10/21/2001 0:00	0.02	-0.01
581537	10/22/2001 0:00	-0.011	-0.01
581538	10/23/2001 0:00	-0.019	-0.01
581539	10/24/2001 0:00	0.013	-0.01
581540	10/25/2001 0:00	-0.023	-0.011
581541	10/26/2001 0:00	-0.006	-0.01
581542	10/27/2001 0:00	-0.003	-0.008
581543	10/28/2001 0:00	-0.022	-0.007
581544	10/29/2001 0:00	0.01	-0.007
581545	10/30/2001 0:00	-0.02	-0.008
581546	10/31/2001 0:00	-0.003	-0.009
581547	11/1/2001 0:00	-0.001	-0.008
581548	11/2/2001 0:00	0.005	-0.007
581549	11/3/2001 0:00	-0.014	-0.004

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581551	11/5/2001 0:00	0.009	-0.004
581552	11/6/2001 0:00	-0.002	-0.006
581553	11/7/2001 0:00	-0.019	-0.005
581554	11/8/2001 0:00	-0.025	-0.005
581555	11/9/2001 0:00	-0.036	-0.006
581556	11/10/2001 0:00	-0.021	-0.005
581557	11/11/2001 0:00	0.027	-0.007
581558	11/12/2001 0:00	0	-0.007
581559	11/13/2001 0:00	0.009	-0.007
581560	11/14/2001 0:00	-0.021	-0.007
581561	11/15/2001 0:00	-0.024	-0.006
581562	11/16/2001 0:00	-0.006	-0.007
581563	11/17/2001 0:00	0.014	-0.008
581564	11/18/2001 0:00	0.093	-0.009
581565	11/19/2001 0:00	-0.043	-0.009
581566	11/20/2001 0:00	-0.004	-0.01
581567	11/21/2001 0:00	-0.015	-0.011
581568	11/22/2001 0:00	-0.008	-0.013
581569	11/23/2001 0:00	-0.02	-0.014
581570	11/24/2001 0:00	-0.002	-0.013
581571	11/25/2001 0:00	-0.002	-0.011
581572	11/26/2001 0:00	-0.048	-0.011
581573	11/27/2001 0:00	-0.011	-0.012
581574	11/28/2001 0:00	-0.037	-0.013
581575	11/29/2001 0:00	0.018	-0.015
581576	11/30/2001 0:00	0.018	-0.014
581577	12/1/2001 0:00	-0.026	-0.015
581578	12/2/2001 0:00	-0.041	-0.016
581579	12/3/2001 0:00	-0.026	-0.017
581580	12/4/2001 0:00	-0.023	-0.022
581581	12/5/2001 0:00	-0.044	-0.021
581582	12/6/2001 0:00	-0.027	-0.022
581583	12/7/2001 0:00	-0.05	-0.023
581584	12/8/2001 0:00	-0.047	-0.024
581585	12/9/2001 0:00	0.005	-0.026
581586	12/10/2001 0:00	0.011	-0.029
581587	12/11/2001 0:00	-0.009	-0.03
581588	12/12/2001 0:00	-0.015	-0.028
581589	12/13/2001 0:00	-0.035	-0.028
581590	12/14/2001 0:00	-0.029	-0.022
581591	12/15/2001 0:00	-0.002	-0.024
581592	12/16/2001 0:00	-0.046	-0.026
581593	12/17/2001 0:00	-0.042	-0.026

581594	12/18/2001 0:00	-0.021	-0.025
581595	12/19/2001 0:00	-0.045	-0.024
581596	12/20/2001 0:00	-0.038	-0.024
581597	12/21/2001 0:00	-0.035	-0.023
581598	12/22/2001 0:00	-0.023	-0.023
581599	12/23/2001 0:00	-0.058	-0.022
581600	12/24/2001 0:00	-0.079	-0.022
581601	12/25/2001 0:00	-0.081	-0.022
581602	12/26/2001 0:00	-0.033	-0.024
581603	12/27/2001 0:00	0	-0.024
581604	12/28/2001 0:00	-0.003	-0.025
581605	12/29/2001 0:00	0.156	-0.024
581606	1/16/2002 0:00	-0.053	-0.024
581607	1/17/2002 0:00	-0.037	-0.026
581608	1/18/2002 0:00	-0.032	-0.024
581609	1/19/2002 0:00	-0.019	-0.024
581610	1/20/2002 0:00	0.006	-0.024
581611	1/21/2002 0:00	-0.017	-0.024
581612	1/22/2002 0:00	-0.003	-0.022
581613	1/23/2002 0:00	-0.033	-0.021
581614	1/24/2002 0:00	-0.033	-0.02
581615	1/25/2002 0:00	-0.023	-0.018
581616	1/26/2002 0:00	-0.022	-0.018
581617	1/27/2002 0:00	-0.033	-0.017
581618	1/28/2002 0:00	-0.013	-0.016
581619	1/29/2002 0:00	-0.037	-0.017
581620	1/30/2002 0:00	-0.027	-0.018
581621	1/31/2002 0:00	-0.029	-0.022
581622	2/1/2002 0:00	-0.044	-0.021
581623	2/2/2002 0:00	-0.006	-0.02
581624	2/3/2002 0:00	-0.033	-0.02
581625	2/4/2002 0:00	-0.032	-0.019
581626	2/5/2002 0:00	-0.016	-0.02
581627	2/6/2002 0:00	-0.005	-0.02
581628	2/7/2002 0:00	0.016	-0.021
581629	2/8/2002 0:00	0.009	-0.02
581630	2/9/2002 0:00	-0.018	-0.02
581631	2/10/2002 0:00	-0.059	-0.019
581632	2/11/2002 0:00	-0.041	-0.02
581633	2/12/2002 0:00	-0.019	-0.019
581634	2/13/2002 0:00	-0.028	-0.019
581635	2/14/2002 0:00	-0.021	-0.017
581636	2/15/2002 0:00	0.007	-0.016
581637	2/16/2002 0:00	-0.013	-0.017

581638	2/17/2002 0:00	-0.002	-0.016
581639	2/18/2002 0:00	-0.021	-0.016
581640	2/19/2002 0:00	-0.011	-0.017
581641	2/20/2002 0:00	-0.005	-0.016
581642	2/21/2002 0:00	-0.016	-0.017
581643	2/22/2002 0:00	-0.039	-0.018
581644	2/23/2002 0:00	-0.018	-0.02
581645	2/24/2002 0:00	-0.012	-0.021
581646	2/25/2002 0:00	0.004	-0.021
581647	2/26/2002 0:00	-0.048	-0.019
581648	2/27/2002 0:00	0.003	-0.018
581649	2/28/2002 0:00	-0.014	-0.018
581650	3/1/2002 0:00	0.015	-0.017
581651	3/2/2002 0:00	-0.014	-0.018
581652	3/3/2002 0:00	-0.04	-0.018
581653	3/4/2002 0:00	-0.018	-0.018
581654	3/5/2002 0:00	-0.021	-0.019
581655	3/6/2002 0:00	-0.039	-0.02
581656	3/7/2002 0:00	-0.023	-0.021
581657	3/8/2002 0:00	-0.03	-0.021
581658	3/9/2002 0:00	-0.04	-0.022
581659	3/10/2002 0:00	-0.036	-0.022
581660	3/11/2002 0:00	-0.027	-0.023
581661	3/12/2002 0:00	-0.021	-0.024
581662	3/13/2002 0:00	-0.004	-0.024
581663	3/14/2002 0:00	-0.019	-0.024
581664	3/15/2002 0:00	-0.003	-0.026
581665	3/16/2002 0:00	-0.013	-0.025
581666	3/17/2002 0:00	-0.024	-0.026
581667	3/18/2002 0:00	-0.002	-0.027
581668	3/19/2002 0:00	-0.024	-0.025
581669	3/20/2002 0:00	-0.04	-0.026
581670	3/21/2002 0:00	-0.041	-0.027
581671	3/22/2002 0:00	-0.032	-0.026
581672	3/23/2002 0:00	-0.025	-0.025
581673	3/24/2002 0:00	-0.044	-0.024
581674	3/25/2002 0:00	-0.034	-0.024
581675	3/26/2002 0:00	-0.043	-0.024
581676	3/27/2002 0:00	-0.031	-0.024
581677	3/28/2002 0:00	-0.011	-0.024
581678	3/29/2002 0:00	-0.054	-0.025
581679	3/30/2002 0:00	-0.05	-0.024
581680	3/31/2002 0:00	0.007	-0.023
581681	4/1/2002 0:00	-0.019	-0.023

581682	4/2/2002 0:00	-0.02	-0.022
581683	4/3/2002 0:00	-0.005	-0.023
581684	4/4/2002 0:00	-0.03	-0.023
581685	4/5/2002 0:00	-0.048	-0.023
581686	4/6/2002 0:00	-0.016	-0.022
581687	4/7/2002 0:00	0	-0.022
581688	4/8/2002 0:00	-0.002	-0.021
581689	4/9/2002 0:00	-0.03	-0.02
581690	4/10/2002 0:00	-0.047	-0.02
581691	4/11/2002 0:00	-0.025	-0.019
581692	4/12/2002 0:00	-0.003	-0.018
581693	4/13/2002 0:00	-0.032	-0.019
581694	4/14/2002 0:00	0.007	-0.018
581695	4/15/2002 0:00	0.02	-0.017
581696	4/16/2002 0:00	-0.005	-0.019
581697	4/17/2002 0:00	-0.013	-0.019
581698	4/18/2002 0:00	-0.027	-0.018
581699	4/19/2002 0:00	-0.026	-0.018
581700	4/20/2002 0:00	-0.027	-0.018
581701	4/21/2002 0:00	-0.026	-0.017
581702	4/22/2002 0:00	-0.015	-0.017
581703	4/23/2002 0:00	0.01	-0.017
581704	4/24/2002 0:00	-0.031	-0.017
581705	4/25/2002 0:00	-0.019	-0.017
581706	4/26/2002 0:00	-0.02	-0.016
581707	4/27/2002 0:00	-0.012	-0.016
581708	4/28/2002 0:00	-0.017	-0.017
581709	4/29/2002 0:00	-0.03	-0.016
581710	4/30/2002 0:00	-0.033	-0.017
581711	5/1/2002 0:00	-0.037	-0.017
581712	5/2/2002 0:00	-0.022	-0.017
581713	5/3/2002 0:00	0.01	-0.017
581714	5/4/2002 0:00	-0.016	-0.017
581715	5/5/2002 0:00	-0.021	-0.015
581716	5/6/2002 0:00	-0.019	-0.014
581717	5/7/2002 0:00	-0.022	-0.014
581718	5/8/2002 0:00	-0.007	-0.013
581719	5/9/2002 0:00	-0.009	-0.013
581720	5/10/2002 0:00	-0.006	-0.014
581721	5/11/2002 0:00	-0.021	-0.013
581722	5/12/2002 0:00	-0.016	-0.011
581723	5/13/2002 0:00	-0.039	-0.011
581724	5/14/2002 0:00	-0.017	-0.01
581725	5/15/2002 0:00	-0.01	-0.009

581726	5/16/2002 0:00	0.017	-0.007
581727	5/17/2002 0:00	-0.007	-0.005
581728	5/18/2002 0:00	-0.021	-0.003
581729	5/19/2002 0:00	-0.003	-0.003
581730	5/20/2002 0:00	0.02	-0.002
581731	5/21/2002 0:00	-0.005	-0.001
581732	5/22/2002 0:00	-0.021	0
581733	5/23/2002 0:00	0.007	0.001
581734	5/24/2002 0:00	0.01	0.001
581735	5/25/2002 0:00	-0.039	0.002
581736	5/26/2002 0:00	0.013	0.002
581737	5/27/2002 0:00	0.027	0.003
581738	5/28/2002 0:00	-0.007	0.004
581739	5/29/2002 0:00	0	0.005
581740	5/30/2002 0:00	0.024	0.006
581741	5/31/2002 0:00	0.01	0.006
581742	6/1/2002 0:00	0.052	0.006
581743	6/2/2002 0:00	0.03	0.006
581744	6/3/2002 0:00	0.019	0.007
581745	6/4/2002 0:00	-0.001	0.008
581746	6/5/2002 0:00	0.003	0.007
581747	6/6/2002 0:00	0.027	0.006
581748	6/7/2002 0:00	0.012	0.007
581749	6/8/2002 0:00	-0.003	0.007
581750	6/9/2002 0:00	0.01	0.007
581751	6/10/2002 0:00	-0.001	0.009
581752	6/11/2002 0:00	-0.006	0.009
581753	6/12/2002 0:00	0.02	0.008
581754	6/13/2002 0:00	-0.002	0.008
581755	6/14/2002 0:00	0.012	0.009
581756	6/15/2002 0:00	0	0.008
581757	6/16/2002 0:00	-0.001	0.008
581758	6/17/2002 0:00	0.017	0.007
581759	6/18/2002 0:00	-0.002	0.005
581760	6/19/2002 0:00	0.025	0.004
581761	6/20/2002 0:00	-0.001	0.005
581762	6/21/2002 0:00	-0.03	0.004
581763	6/22/2002 0:00	-0.014	0.004
581764	6/23/2002 0:00	0.014	0.003
581765	6/24/2002 0:00	0.015	0.002
581766	6/25/2002 0:00	0.02	0.002
581767	6/26/2002 0:00	0.01	0.001
581768	6/27/2002 0:00	-0.017	0.001
581769	6/28/2002 0:00	0.015	0

581770	6/29/2002 0:00	0.021	0
581771	6/30/2002 0:00	-0.004	0
581772	7/1/2002 0:00	0.015	-0.001
581773	7/2/2002 0:00	0.012	-0.002
581774	7/3/2002 0:00	-0.022	-0.003
581775	7/4/2002 0:00	-0.01	-0.003
581776	7/5/2002 0:00	0.011	-0.005
581777	7/6/2002 0:00	-0.009	-0.006
581778	7/7/2002 0:00	0.011	-0.007
581779	7/8/2002 0:00	-0.012	-0.008
581780	7/9/2002 0:00	-0.018	-0.009
581781	7/10/2002 0:00	-0.013	-0.011
581782	7/11/2002 0:00	-0.023	-0.013
581783	7/12/2002 0:00	0.004	-0.014
581784	7/13/2002 0:00	-0.016	-0.014
581785	7/14/2002 0:00	-0.01	-0.016
581786	7/15/2002 0:00	0.001	-0.018
581787	7/16/2002 0:00	-0.026	-0.02
581788	7/17/2002 0:00	-0.015	-0.022
581789	7/18/2002 0:00	-0.027	-0.023
581790	7/19/2002 0:00	-0.009	-0.024
581791	7/20/2002 0:00	-0.039	-0.025
581792	7/21/2002 0:00	-0.029	-0.027
581793	7/22/2002 0:00	-0.052	-0.028
581794	7/23/2002 0:00	-0.039	-0.03
581795	7/24/2002 0:00	-0.034	-0.031
581796	7/25/2002 0:00	-0.025	-0.032
581797	7/26/2002 0:00	-0.039	-0.033
581798	7/27/2002 0:00	-0.023	-0.033
581799	7/28/2002 0:00	-0.036	-0.034
581800	7/29/2002 0:00	-0.048	-0.035
581801	7/30/2002 0:00	-0.041	-0.036
581802	7/31/2002 0:00	-0.063	-0.038
581803	8/1/2002 0:00	-0.044	-0.038
581804	8/2/2002 0:00	-0.024	-0.038
581805	8/3/2002 0:00	-0.059	-0.038
581806	8/4/2002 0:00	-0.028	-0.038
581807	8/5/2002 0:00	-0.058	-0.038
581808	8/6/2002 0:00	-0.048	-0.039
581809	8/7/2002 0:00	-0.043	-0.038
581810	8/8/2002 0:00	-0.045	-0.039
581811	8/9/2002 0:00	-0.033	-0.039
581812	8/10/2002 0:00	-0.04	-0.039
581813	8/11/2002 0:00	-0.034	-0.039

581814	8/12/2002 0:00	-0.019	-0.039
581815	8/13/2002 0:00	-0.052	-0.039
581816	8/14/2002 0:00	-0.048	-0.039
581817	8/15/2002 0:00	-0.062	-0.038
581818	8/16/2002 0:00	-0.021	-0.038
581819	8/17/2002 0:00	-0.017	-0.037
581820	8/18/2002 0:00	-0.033	-0.038
581821	8/19/2002 0:00	-0.018	-0.037
581822	8/20/2002 0:00	-0.037	-0.037
581823	8/21/2002 0:00	-0.036	-0.036
581824	8/22/2002 0:00	-0.038	-0.035
581825	8/23/2002 0:00	-0.053	-0.035
581826	8/24/2002 0:00	-0.043	-0.034
581827	8/25/2002 0:00	-0.028	-0.033
581828	8/26/2002 0:00	-0.029	-0.032
581829	8/27/2002 0:00	-0.03	-0.031
581830	8/28/2002 0:00	-0.028	-0.031
581831	8/29/2002 0:00	-0.043	-0.03
581832	8/30/2002 0:00	-0.027	-0.029
581833	8/31/2002 0:00	-0.044	-0.027
581834	9/1/2002 0:00	-0.027	-0.027
581835	9/2/2002 0:00	-0.05	-0.027
581836	9/3/2002 0:00	-0.027	-0.025
581837	9/4/2002 0:00	-0.026	-0.025
581838	9/5/2002 0:00	-0.026	-0.024
581839	9/6/2002 0:00	-0.041	-0.024
581840	9/7/2002 0:00	-0.02	-0.023
581841	9/8/2002 0:00	-0.009	-0.022
581842	9/9/2002 0:00	-0.004	-0.021
581843	9/10/2002 0:00	-0.007	-0.021
581844	9/11/2002 0:00	-0.011	-0.02
581845	9/12/2002 0:00	-0.008	-0.019
581846	9/13/2002 0:00	-0.03	-0.018
581847	9/14/2002 0:00	-0.009	-0.017
581848	9/15/2002 0:00	-0.019	-0.017
581849	9/16/2002 0:00	-0.023	-0.017
581850	9/17/2002 0:00	0	-0.017
581851	9/18/2002 0:00	0.009	-0.016
581852	9/19/2002 0:00	0.006	-0.016
581853	9/20/2002 0:00	-0.021	-0.016
581854	9/21/2002 0:00	-0.025	-0.016
581855	9/22/2002 0:00	-0.021	-0.015
581856	9/23/2002 0:00	-0.022	-0.015
581857	9/24/2002 0:00	0.002	-0.016

581858	9/25/2002 0:00	-0.025	-0.016
581859	9/26/2002 0:00	-0.001	-0.017
581860	9/27/2002 0:00	0.002	-0.018
581861	9/28/2002 0:00	-0.02	-0.018
581862	9/29/2002 0:00	-0.003	-0.017
581863	9/30/2002 0:00	-0.028	-0.017
581864	10/1/2002 0:00	-0.045	-0.017
581865	10/2/2002 0:00	-0.02	-0.016
581866	10/3/2002 0:00	-0.033	-0.016
581867	10/4/2002 0:00	-0.004	-0.016
581868	10/5/2002 0:00	-0.025	-0.016
581869	10/6/2002 0:00	-0.027	-0.016
581870	10/7/2002 0:00	-0.017	-0.016
581871	10/8/2002 0:00	-0.036	-0.017
581872	10/9/2002 0:00	-0.031	-0.016
581873	10/10/2002 0:00	-0.008	-0.017
581874	10/11/2002 0:00	-0.036	-0.016
581875	10/12/2002 0:00	-0.036	-0.017
581876	10/13/2002 0:00	-0.007	-0.019
581877	10/14/2002 0:00	-0.017	-0.02
581878	10/15/2002 0:00	-0.008	-0.02
581879	10/16/2002 0:00	0.007	-0.019
581880	10/17/2002 0:00	0.005	-0.017
581881	10/18/2002 0:00	-0.008	-0.018
581882	10/19/2002 0:00	-0.001	-0.017
581883	10/20/2002 0:00	0.007	-0.017
581884	10/21/2002 0:00	-0.002	-0.016
581885	10/22/2002 0:00	-0.047	-0.016
581886	10/23/2002 0:00	-0.027	-0.017
581887	10/24/2002 0:00	-0.02	-0.016
581888	10/25/2002 0:00	0.001	-0.015
581889	10/26/2002 0:00	-0.021	-0.017
581890	10/27/2002 0:00	-0.032	-0.017
581891	10/28/2002 0:00	-0.034	-0.017
581892	10/29/2002 0:00	-0.058	-0.018
581893	10/31/2002 0:00	-0.004	-0.018
581894	11/1/2002 0:00	-0.003	-0.019
581895	11/2/2002 0:00	0	-0.021
581896	11/3/2002 0:00	-0.035	-0.022
581897	11/4/2002 0:00	0.003	-0.024
581898	11/5/2002 0:00	-0.003	-0.026
581899	11/6/2002 0:00	-0.013	-0.026
581900	11/7/2002 0:00	-0.007	-0.027
581901	11/8/2002 0:00	-0.041	-0.026

581902	11/9/2002 0:00	-0.01	-0.026
581903	11/10/2002 0:00	-0.006	-0.026
581904	11/11/2002 0:00	-0.059	-0.028
581905	11/12/2002 0:00	-0.053	-0.027
581906	11/13/2002 0:00	-0.043	-0.027
581907	11/14/2002 0:00	-0.03	-0.026
581908	11/15/2002 0:00	-0.011	-0.025
581909	11/16/2002 0:00	-0.049	-0.026
581910	11/17/2002 0:00	-0.036	-0.028
581911	11/18/2002 0:00	-0.048	-0.029
581912	11/19/2002 0:00	-0.051	-0.03
581913	11/20/2002 0:00	-0.06	-0.032
581914	11/21/2002 0:00	-0.015	-0.032
581915	11/22/2002 0:00	-0.02	-0.034
581916	11/23/2002 0:00	-0.034	-0.035
581917	11/24/2002 0:00	-0.018	-0.034
581918	11/25/2002 0:00	-0.032	-0.035
581919	11/26/2002 0:00	-0.033	-0.035
581920	11/27/2002 0:00	-0.01	-0.034
581921	11/28/2002 0:00	-0.012	-0.034
581922	11/29/2002 0:00	-0.009	-0.034
581923	11/30/2002 0:00	-0.032	-0.033
581924	12/1/2002 0:00	-0.047	-0.033
581925	12/2/2002 0:00	-0.043	-0.033
581926	12/3/2002 0:00	-0.046	-0.033
581927	12/4/2002 0:00	-0.052	-0.033
581928	12/5/2002 0:00	-0.054	-0.032
581929	12/6/2002 0:00	-0.026	-0.031
581930	12/7/2002 0:00	-0.063	-0.033
581931	12/8/2002 0:00	-0.027	-0.033
581932	12/9/2002 0:00	-0.033	-0.033
581933	12/10/2002 0:00	-0.018	-0.034
581934	12/11/2002 0:00	-0.016	-0.035
581935	12/12/2002 0:00	-0.037	-0.035
581936	12/13/2002 0:00	-0.059	-0.036
581937	12/14/2002 0:00	-0.018	-0.037
581938	12/15/2002 0:00	-0.008	-0.038
581939	12/16/2002 0:00	-0.023	-0.037
581940	12/17/2002 0:00	-0.036	-0.038
581941	12/18/2002 0:00	-0.033	-0.038
581942	12/19/2002 0:00	-0.046	-0.039
581943	12/20/2002 0:00	-0.025	-0.039
581944	12/21/2002 0:00	-0.05	-0.039
581945	12/22/2002 0:00	-0.049	-0.04

581946	12/23/2002 0:00	-0.041	-0.04
581947	12/24/2002 0:00	-0.031	-0.041
581948	12/25/2002 0:00	-0.056	-0.041
581949	12/26/2002 0:00	-0.04	-0.042
581950	12/27/2002 0:00	-0.041	-0.042
581951	12/28/2002 0:00	-0.039	-0.043
581952	12/29/2002 0:00	-0.035	-0.042
581953	12/30/2002 0:00	-0.041	-0.043
581954	12/31/2002 0:00	-0.026	-0.045
581955	1/1/2003 0:00	-0.064	-0.045
581956	1/2/2003 0:00	-0.055	-0.046
581957	1/3/2003 0:00	-0.062	-0.045
581958	1/4/2003 0:00	-0.066	-0.044
581959	1/5/2003 0:00	-0.047	-0.044
581960	1/6/2003 0:00	-0.057	-0.044
581961	1/7/2003 0:00	-0.073	-0.043
581962	1/8/2003 0:00	-0.049	-0.042
581963	1/9/2003 0:00	-0.037	-0.042
581964	1/10/2003 0:00	-0.03	-0.041
581965	1/11/2003 0:00	-0.046	-0.04
581966	1/12/2003 0:00	-0.037	-0.04
581967	1/13/2003 0:00	-0.035	-0.039
581968	1/14/2003 0:00	-0.059	-0.038
581969	1/15/2003 0:00	-0.053	-0.037
581970	1/16/2003 0:00	-0.041	-0.037
581971	1/17/2003 0:00	-0.057	-0.035
581972	1/18/2003 0:00	-0.017	-0.033
581973	1/19/2003 0:00	-0.013	-0.033
581974	1/20/2003 0:00	-0.027	-0.03
581975	1/21/2003 0:00	-0.043	-0.029
581976	1/22/2003 0:00	-0.01	-0.028
581977	1/23/2003 0:00	-0.021	-0.025
581978	1/24/2003 0:00	-0.018	-0.023
581979	1/25/2003 0:00	-0.018	-0.023
581980	1/26/2003 0:00	-0.023	-0.022
581981	1/27/2003 0:00	-0.036	-0.02
581982	1/28/2003 0:00	-0.008	-0.019
581983	1/29/2003 0:00	-0.001	-0.018
581984	1/30/2003 0:00	-0.022	-0.017
581985	1/31/2003 0:00	-0.021	-0.016
581986	2/1/2003 0:00	-0.002	-0.014
581987	2/2/2003 0:00	-0.01	-0.013
581988	2/3/2003 0:00	-0.032	-0.013
581989	2/4/2003 0:00	0.007	-0.014

581990	2/5/2003 0:00	-0.025	-0.014
581991	2/6/2003 0:00	-0.001	-0.013
581992	2/7/2003 0:00	0.006	-0.013
581993	2/8/2003 0:00	0.003	-0.013
581994	2/9/2003 0:00	-0.01	-0.013
581995	2/10/2003 0:00	-0.007	-0.014
581996	2/11/2003 0:00	0.007	-0.013
581997	2/12/2003 0:00	-0.005	-0.013
581998	2/13/2003 0:00	-0.016	-0.013
581999	2/14/2003 0:00	-0.015	-0.014
582000	2/15/2003 0:00	-0.016	-0.014
582001	2/16/2003 0:00	0.002	-0.014
582002	2/17/2003 0:00	-0.013	-0.015
582003	2/18/2003 0:00	-0.014	-0.014
582004	2/19/2003 0:00	-0.045	-0.014
582005	2/20/2003 0:00	-0.027	-0.016
582006	2/21/2003 0:00	-0.003	-0.016
582007	2/22/2003 0:00	-0.014	-0.017
582008	2/23/2003 0:00	-0.015	-0.018
582009	2/24/2003 0:00	-0.035	-0.019
582010	2/25/2003 0:00	-0.035	-0.02
582011	2/26/2003 0:00	-0.014	-0.02
582012	2/27/2003 0:00	-0.022	-0.02
582013	2/28/2003 0:00	-0.02	-0.02
582014	3/1/2003 0:00	-0.024	-0.02
582015	3/2/2003 0:00	-0.029	-0.02
582016	3/3/2003 0:00	-0.024	-0.02
582017	3/4/2003 0:00	-0.006	-0.021
582018	3/5/2003 0:00	-0.005	-0.022
582019	3/6/2003 0:00	-0.019	-0.022
582020	3/7/2003 0:00	-0.049	-0.022
582021	3/8/2003 0:00	-0.038	-0.022
582022	3/9/2003 0:00	-0.04	-0.022
582023	3/10/2003 0:00	-0.022	-0.023
582024	3/11/2003 0:00	-0.02	-0.024
582025	3/12/2003 0:00	-0.04	-0.024
582026	3/13/2003 0:00	0.003	-0.024
582027	3/14/2003 0:00	-0.01	-0.025
582028	3/15/2003 0:00	-0.005	-0.026
582029	3/16/2003 0:00	-0.004	-0.025
582030	3/17/2003 0:00	-0.024	-0.025
582031	3/18/2003 0:00	-0.006	-0.025
582032	3/19/2003 0:00	-0.025	-0.024
582033	3/20/2003 0:00	-0.045	-0.025

582034	3/21/2003 0:00	-0.013	-0.026
582035	3/22/2003 0:00	-0.051	-0.026
582036	3/23/2003 0:00	-0.032	-0.025
582037	3/24/2003 0:00	-0.014	-0.026
582038	3/25/2003 0:00	-0.036	-0.025
582039	3/26/2003 0:00	-0.035	-0.025
582040	3/27/2003 0:00	-0.046	-0.025
582041	3/28/2003 0:00	-0.019	-0.024
582042	3/29/2003 0:00	-0.052	-0.025
582043	3/30/2003 0:00	-0.045	-0.026
582044	3/31/2003 0:00	-0.011	-0.026
582045	4/1/2003 0:00	-0.01	-0.026
582046	4/2/2003 0:00	-0.025	-0.027
582047	4/3/2003 0:00	-0.016	-0.026
582048	4/4/2003 0:00	-0.028	-0.026
582049	4/5/2003 0:00	-0.028	-0.026
582050	4/6/2003 0:00	-0.022	-0.026
582051	4/7/2003 0:00	-0.03	-0.025
582052	4/8/2003 0:00	-0.04	-0.025
582053	4/9/2003 0:00	-0.023	-0.025
582054	4/10/2003 0:00	-0.02	-0.024
582055	4/11/2003 0:00	-0.03	-0.024
582056	4/12/2003 0:00	-0.013	-0.023
582057	4/13/2003 0:00	-0.012	-0.023
582058	4/14/2003 0:00	-0.038	-0.022
582059	4/15/2003 0:00	-0.011	-0.021
582060	4/16/2003 0:00	-0.02	-0.022
582061	4/17/2003 0:00	-0.027	-0.022
582062	4/18/2003 0:00	-0.001	-0.021
582063	4/19/2003 0:00	-0.028	-0.022
582064	4/20/2003 0:00	-0.029	-0.021
582065	4/21/2003 0:00	-0.014	-0.02
582066	4/22/2003 0:00	-0.025	-0.02
582067	4/23/2003 0:00	-0.015	-0.019
582068	4/24/2003 0:00	-0.02	-0.018
582069	4/25/2003 0:00	-0.016	-0.018
582070	4/26/2003 0:00	-0.016	-0.017
582071	4/27/2003 0:00	-0.03	-0.017
582072	4/28/2003 0:00	-0.024	-0.017
582073	4/29/2003 0:00	-0.007	-0.017
582074	4/30/2003 0:00	-0.023	-0.017
582075	5/1/2003 0:00	-0.036	-0.016
582076	5/2/2003 0:00	-0.022	-0.016
582077	5/3/2003 0:00	0.012	-0.016

582078	5/4/2003 0:00	-0.031	-0.017
582079	5/5/2003 0:00	-0.002	-0.017
582080	5/6/2003 0:00	-0.007	-0.017
582081	5/7/2003 0:00	-0.013	-0.017
582082	5/8/2003 0:00	0.002	-0.017
582083	5/9/2003 0:00	-0.018	-0.018
582084	5/10/2003 0:00	-0.019	-0.018
582085	5/11/2003 0:00	-0.005	-0.018
582086	5/12/2003 0:00	-0.013	-0.018
582087	5/13/2003 0:00	-0.014	-0.019
582088	5/14/2003 0:00	-0.024	-0.018
582089	5/15/2003 0:00	-0.02	-0.018
582090	5/16/2003 0:00	0.004	-0.018
582091	5/17/2003 0:00	-0.028	-0.018
582092	5/18/2003 0:00	-0.026	-0.019
582093	5/19/2003 0:00	-0.016	-0.02
582094	5/20/2003 0:00	-0.041	-0.019
582095	5/21/2003 0:00	-0.016	-0.019
582096	5/22/2003 0:00	-0.027	-0.019
582097	5/23/2003 0:00	-0.024	-0.019
582098	5/24/2003 0:00	-0.027	-0.02
582099	5/25/2003 0:00	-0.018	-0.02
582100	5/26/2003 0:00	-0.022	-0.02
582101	5/27/2003 0:00	-0.035	-0.02
582102	5/28/2003 0:00	-0.04	-0.02
582103	5/29/2003 0:00	0.011	-0.02
582104	5/30/2003 0:00	-0.021	-0.02
582105	5/31/2003 0:00	-0.033	-0.02
582106	6/1/2003 0:00	-0.03	-0.021
582107	6/2/2003 0:00	-0.039	-0.021
582108	6/3/2003 0:00	-0.012	-0.021
582109	6/4/2003 0:00	-0.01	-0.021
582110	6/5/2003 0:00	-0.001	-0.02
582111	6/6/2003 0:00	-0.015	-0.021
582112	6/7/2003 0:00	-0.026	-0.02
582113	6/8/2003 0:00	-0.029	-0.019
582114	6/9/2003 0:00	-0.015	-0.019
582115	6/10/2003 0:00	0.004	-0.018
582116	6/11/2003 0:00	-0.006	-0.018
582117	6/12/2003 0:00	-0.028	-0.018
582118	6/13/2003 0:00	-0.014	-0.017
582119	6/14/2003 0:00	-0.02	-0.018
582120	6/15/2003 0:00	-0.036	-0.018
582121	6/16/2003 0:00	-0.021	-0.018

582122	6/17/2003 0:00	-0.028	-0.018
582123	6/18/2003 0:00	-0.02	-0.018
582124	6/19/2003 0:00	-0.026	-0.019
582125	6/20/2003 0:00	-0.006	-0.02
582126	6/21/2003 0:00	-0.025	-0.021
582127	6/22/2003 0:00	-0.01	-0.021
582128	6/23/2003 0:00	0.008	-0.022
582129	6/24/2003 0:00	-0.016	-0.022
582130	6/25/2003 0:00	-0.008	-0.023
582131	6/26/2003 0:00	-0.015	-0.024
582132	6/27/2003 0:00	-0.019	-0.024
582133	6/28/2003 0:00	-0.021	-0.025
582134	6/29/2003 0:00	-0.023	-0.025
582135	6/30/2003 0:00	-0.021	-0.026
582136	7/1/2003 0:00	-0.036	-0.026
582137	7/2/2003 0:00	-0.032	-0.026
582138	7/3/2003 0:00	-0.031	-0.027
582139	7/4/2003 0:00	-0.061	-0.028
582140	7/5/2003 0:00	-0.034	-0.029
582141	7/6/2003 0:00	-0.021	-0.031
582142	7/7/2003 0:00	-0.029	-0.032
582143	7/8/2003 0:00	-0.055	-0.032
582144	7/9/2003 0:00	-0.034	-0.034
582145	7/10/2003 0:00	-0.025	-0.034
582146	7/11/2003 0:00	-0.029	-0.035
582147	7/12/2003 0:00	-0.021	-0.036
582148	7/13/2003 0:00	-0.037	-0.037
582149	7/14/2003 0:00	-0.036	-0.037
582150	7/15/2003 0:00	-0.041	-0.037
582151	7/16/2003 0:00	-0.027	-0.038
582152	7/17/2003 0:00	-0.023	-0.037
582153	7/18/2003 0:00	-0.061	-0.037
582154	7/19/2003 0:00	-0.058	-0.037
582155	7/20/2003 0:00	-0.066	-0.036
582156	7/21/2003 0:00	-0.044	-0.037
582157	7/22/2003 0:00	-0.062	-0.037
582158	7/23/2003 0:00	-0.016	-0.038
582159	7/24/2003 0:00	-0.041	-0.038
582160	7/25/2003 0:00	-0.031	-0.039
582161	7/26/2003 0:00	-0.042	-0.039
582162	7/27/2003 0:00	-0.029	-0.04
582163	7/28/2003 0:00	-0.061	-0.04
582164	7/29/2003 0:00	-0.019	-0.04
582165	7/30/2003 0:00	-0.031	-0.041

582166	7/31/2003 0:00	-0.047	-0.041
582167	8/1/2003 0:00	-0.006	-0.042
582168	8/2/2003 0:00	-0.026	-0.042
582169	8/3/2003 0:00	-0.038	-0.042
582170	8/4/2003 0:00	-0.039	-0.041
582171	8/5/2003 0:00	-0.044	-0.041
582172	8/6/2003 0:00	-0.036	-0.041
582173	8/7/2003 0:00	-0.054	-0.04
582174	8/8/2003 0:00	-0.059	-0.042
582175	8/9/2003 0:00	-0.068	-0.043
582176	8/10/2003 0:00	-0.031	-0.043
582177	8/11/2003 0:00	-0.035	-0.043
582178	8/12/2003 0:00	-0.035	-0.043
582179	8/13/2003 0:00	-0.039	-0.043
582180	8/14/2003 0:00	-0.053	-0.045
582181	8/15/2003 0:00	-0.048	-0.045
582182	8/16/2003 0:00	-0.051	-0.045
582183	8/17/2003 0:00	-0.042	-0.046
582184	8/18/2003 0:00	-0.05	-0.047
582185	8/19/2003 0:00	-0.041	-0.048
582186	8/20/2003 0:00	-0.06	-0.048
582187	8/21/2003 0:00	-0.054	-0.048
582188	8/22/2003 0:00	-0.032	-0.049
582189	8/23/2003 0:00	-0.061	-0.049
582190	8/24/2003 0:00	-0.059	-0.049
582191	8/25/2003 0:00	-0.033	-0.048
582192	8/26/2003 0:00	-0.047	-0.048
582193	8/27/2003 0:00	-0.043	-0.048
582194	8/28/2003 0:00	-0.056	-0.047
582195	8/29/2003 0:00	-0.064	-0.048
582196	8/30/2003 0:00	-0.042	-0.048
582197	8/31/2003 0:00	-0.041	-0.048
582198	9/1/2003 0:00	-0.05	-0.048
582199	9/2/2003 0:00	-0.065	-0.048
582200	9/3/2003 0:00	-0.058	-0.047
582201	9/4/2003 0:00	-0.041	-0.047
582202	9/5/2003 0:00	-0.046	-0.047
582203	9/6/2003 0:00	-0.055	-0.046
582204	9/7/2003 0:00	-0.066	-0.047
582205	9/8/2003 0:00	-0.047	-0.047
582206	9/9/2003 0:00	-0.039	-0.046
582207	9/10/2003 0:00	-0.031	-0.047
582208	9/11/2003 0:00	-0.031	-0.046
582209	9/12/2003 0:00	-0.029	-0.046

582210	9/13/2003 0:00	-0.053	-0.045
582211	9/14/2003 0:00	-0.054	-0.044
582212	9/15/2003 0:00	-0.057	-0.044
582213	9/16/2003 0:00	-0.04	-0.045
582214	9/17/2003 0:00	-0.041	-0.045
582215	9/18/2003 0:00	-0.033	-0.043
582216	9/19/2003 0:00	-0.042	-0.042
582217	9/20/2003 0:00	-0.04	-0.042
582218	9/21/2003 0:00	-0.038	-0.042
582219	9/22/2003 0:00	-0.047	-0.041
582220	9/23/2003 0:00	-0.06	-0.04
582221	9/24/2003 0:00	-0.043	-0.039
582222	9/25/2003 0:00	-0.06	-0.039
582223	9/26/2003 0:00	-0.027	-0.039
582224	9/27/2003 0:00	-0.032	-0.039
582225	9/28/2003 0:00	-0.028	-0.039
582226	9/29/2003 0:00	-0.032	-0.038
582227	9/30/2003 0:00	-0.053	-0.037
582228	10/1/2003 0:00	-0.06	-0.036
582229	10/2/2003 0:00	-0.033	-0.037
582230	10/3/2003 0:00	-0.029	-0.037
582231	10/4/2003 0:00	-0.024	-0.037
582232	10/5/2003 0:00	-0.02	-0.038
582233	10/6/2003 0:00	-0.057	-0.039
582234	10/7/2003 0:00	-0.033	-0.039
582235	10/8/2003 0:00	-0.021	-0.039
582236	10/9/2003 0:00	-0.026	-0.038
582237	10/10/2003 0:00	-0.037	-0.039
582238	10/11/2003 0:00	-0.014	-0.04
582239	10/12/2003 0:00	-0.048	-0.04
582240	10/13/2003 0:00	-0.017	-0.041
582241	10/14/2003 0:00	-0.027	-0.041
582242	10/15/2003 0:00	-0.038	-0.042
582243	10/16/2003 0:00	-0.026	-0.042
582244	10/17/2003 0:00	-0.053	-0.042
582245	10/18/2003 0:00	-0.044	-0.042
582246	10/19/2003 0:00	-0.052	-0.042
582247	10/20/2003 0:00	-0.054	-0.043
582248	10/21/2003 0:00	-0.067	-0.045
582249	10/22/2003 0:00	-0.044	-0.045
582250	10/23/2003 0:00	-0.048	-0.045
582251	10/24/2003 0:00	-0.04	-0.047
582252	10/25/2003 0:00	-0.061	-0.048
582253	10/26/2003 0:00	-0.085	-0.048

582254	10/27/2003 0:00	-0.048	-0.05
582255	10/28/2003 0:00	-0.047	-0.05
582256	10/29/2003 0:00	-0.036	-0.051
582257	10/30/2003 0:00	-0.054	-0.052
582258	10/31/2003 0:00	-0.067	-0.052
582259	11/1/2003 0:00	-0.046	-0.053
582260	11/2/2003 0:00	-0.039	-0.053
582261	11/3/2003 0:00	-0.039	-0.054
582262	11/4/2003 0:00	-0.059	-0.053
582263	11/5/2003 0:00	-0.058	-0.053
582264	11/6/2003 0:00	-0.066	-0.052
582265	11/7/2003 0:00	-0.041	-0.052
582266	11/8/2003 0:00	-0.066	-0.053
582267	11/9/2003 0:00	-0.062	-0.053
582268	11/10/2003 0:00	-0.056	-0.051
582269	11/11/2003 0:00	-0.049	-0.05
582270	11/12/2003 0:00	-0.052	-0.05
582271	11/13/2003 0:00	-0.059	-0.051
582272	11/14/2003 0:00	-0.051	-0.05
582273	11/15/2003 0:00	-0.036	-0.05
582274	11/16/2003 0:00	-0.054	-0.049
582275	11/17/2003 0:00	-0.059	-0.049
582276	11/18/2003 0:00	-0.066	-0.049
582277	11/19/2003 0:00	-0.042	-0.05
582278	11/20/2003 0:00	-0.036	-0.049
582279	11/21/2003 0:00	-0.033	-0.048
582280	11/22/2003 0:00	-0.061	-0.046
582281	11/23/2003 0:00	-0.062	-0.046
582282	11/24/2003 0:00	-0.041	-0.045
582283	11/25/2003 0:00	-0.026	-0.044
582284	11/26/2003 0:00	-0.041	-0.044
582285	11/27/2003 0:00	-0.057	-0.044
582286	11/28/2003 0:00	-0.059	-0.043
582287	11/29/2003 0:00	-0.024	-0.043
582288	11/30/2003 0:00	-0.058	-0.044
582289	12/1/2003 0:00	-0.02	-0.044
582290	12/2/2003 0:00	-0.053	-0.044
582291	12/3/2003 0:00	-0.041	-0.043
582292	12/4/2003 0:00	-0.053	-0.043
582293	12/5/2003 0:00	-0.035	-0.043
582294	12/6/2003 0:00	-0.018	-0.043
582295	12/7/2003 0:00	-0.024	-0.044
582296	12/8/2003 0:00	-0.04	-0.043
582297	12/9/2003 0:00	-0.044	-0.043

582298	12/10/2003 0:00	-0.029	-0.043
582299	12/11/2003 0:00	-0.037	-0.043
582300	12/12/2003 0:00	-0.048	-0.044
582301	12/13/2003 0:00	-0.034	-0.044
582302	12/14/2003 0:00	-0.054	-0.043
582303	12/15/2003 0:00	-0.071	-0.044
582304	12/16/2003 0:00	-0.055	-0.043
582305	12/17/2003 0:00	-0.039	-0.043
582306	12/18/2003 0:00	-0.041	-0.044
582307	12/19/2003 0:00	-0.052	-0.043
582308	12/20/2003 0:00	-0.035	-0.044
582309	12/21/2003 0:00	-0.045	-0.045
582310	12/22/2003 0:00	-0.055	-0.046
582311	12/23/2003 0:00	-0.057	-0.047
582312	12/24/2003 0:00	-0.054	-0.048
582313	12/25/2003 0:00	-0.038	-0.049
582314	12/26/2003 0:00	-0.028	-0.05
582315	12/27/2003 0:00	-0.068	-0.051
582316	12/28/2003 0:00	-0.043	-0.052
582317	12/29/2003 0:00	-0.051	-0.054
582318	12/30/2003 0:00	-0.036	-0.055
582319	12/31/2003 0:00	-0.043	-0.055
582320	1/1/2004 0:00	-0.023	-0.055
582321	1/2/2004 0:00	-0.064	-0.056
582322	1/3/2004 0:00	-0.031	-0.056
582323	1/4/2004 0:00	-0.057	-0.056
582324	1/5/2004 0:00	-0.072	-0.058
582325	1/6/2004 0:00	-0.063	-0.059
582326	1/7/2004 0:00	-0.054	-0.06
582327	1/8/2004 0:00	-0.067	-0.061
582328	1/9/2004 0:00	-0.074	-0.061
582329	1/10/2004 0:00	-0.075	-0.061
582330	1/11/2004 0:00	-0.05	-0.061
582331	1/12/2004 0:00	-0.097	-0.062
582332	1/13/2004 0:00	-0.08	-0.062
582333	1/14/2004 0:00	-0.085	-0.061
582334	1/15/2004 0:00	-0.075	-0.061
582335	1/16/2004 0:00	-0.063	-0.06
582336	1/17/2004 0:00	-0.046	-0.062
582337	1/18/2004 0:00	-0.066	-0.062
582338	1/19/2004 0:00	-0.048	-0.062
582339	1/20/2004 0:00	-0.092	-0.061
582340	1/21/2004 0:00	-0.081	-0.06
582341	1/22/2004 0:00	-0.086	-0.058

582342	1/23/2004 0:00	-0.073	-0.059
582343	1/24/2004 0:00	-0.057	-0.059
582344	1/25/2004 0:00	-0.051	-0.058
582345	1/26/2004 0:00	-0.015	-0.057
582346	1/27/2004 0:00	-0.095	-0.056
582347	1/28/2004 0:00	-0.062	-0.056
582348	1/29/2004 0:00	-0.018	-0.054
582349	1/30/2004 0:00	-0.021	-0.054
582350	1/31/2004 0:00	-0.033	-0.053
582351	2/1/2004 0:00	-0.062	-0.052
582352	2/2/2004 0:00	-0.06	-0.054
582353	2/3/2004 0:00	-0.032	-0.055
582354	2/4/2004 0:00	-0.037	-0.056
582355	2/5/2004 0:00	-0.027	-0.054
582356	2/6/2004 0:00	-0.03	-0.053
582357	2/7/2004 0:00	-0.055	-0.05
582358	2/8/2004 0:00	-0.073	-0.05
582359	2/9/2004 0:00	-0.049	-0.05
582360	2/10/2004 0:00	-0.033	-0.049
582361	2/11/2004 0:00	-0.048	-0.05
582362	2/12/2004 0:00	-0.069	-0.048
582363	2/13/2004 0:00	-0.041	-0.048
582364	2/14/2004 0:00	-0.061	-0.05
582365	2/15/2004 0:00	-0.056	-0.052
582366	2/16/2004 0:00	-0.049	-0.052
582367	2/17/2004 0:00	-0.09	-0.053
582368	2/18/2004 0:00	-0.117	-0.053
582369	2/19/2004 0:00	-0.052	-0.053
582370	2/20/2004 0:00	-0.03	-0.055
582371	2/21/2004 0:00	-0.055	-0.056
582372	2/22/2004 0:00	-0.009	-0.058
582373	2/23/2004 0:00	-0.058	-0.058
582374	2/24/2004 0:00	-0.048	-0.058
582375	2/25/2004 0:00	-0.029	-0.059
582376	2/26/2004 0:00	-0.066	-0.06
582377	2/27/2004 0:00	-0.03	-0.06
582378	2/28/2004 0:00	-0.059	-0.061
582379	2/29/2004 0:00	-0.065	-0.061
582380	3/1/2004 0:00	-0.084	-0.062
582381	3/2/2004 0:00	-0.041	-0.062
582382	3/3/2004 0:00	-0.083	-0.062
582383	3/4/2004 0:00	-0.071	-0.06
582384	3/5/2004 0:00	-0.042	-0.059
582385	3/6/2004 0:00	-0.077	-0.06

582386	3/7/2004 0:00	-0.077	-0.061
582387	3/8/2004 0:00	-0.065	-0.06
582388	3/9/2004 0:00	-0.073	-0.061
582389	3/10/2004 0:00	-0.073	-0.06
582390	3/11/2004 0:00	-0.073	-0.061
582391	3/12/2004 0:00	-0.076	-0.061
582392	3/13/2004 0:00	-0.043	-0.061
582393	3/14/2004 0:00	-0.081	-0.062
582394	3/15/2004 0:00	-0.07	-0.061
582395	3/16/2004 0:00	-0.071	-0.061
582396	3/17/2004 0:00	-0.075	-0.061
582397	3/18/2004 0:00	-0.042	-0.06
582398	3/19/2004 0:00	-0.023	-0.06
582399	3/20/2004 0:00	-0.071	-0.059
582400	3/21/2004 0:00	-0.082	-0.06
582401	3/22/2004 0:00	-0.073	-0.059
582402	3/23/2004 0:00	-0.033	-0.059
582403	3/24/2004 0:00	-0.041	-0.059
582404	3/25/2004 0:00	-0.035	-0.058
582405	3/26/2004 0:00	-0.053	-0.058
582406	3/27/2004 0:00	-0.048	-0.057
582407	3/28/2004 0:00	-0.058	-0.057
582408	3/29/2004 0:00	-0.067	-0.057
582409	3/30/2004 0:00	-0.036	-0.057
582410	3/31/2004 0:00	-0.055	-0.056
582411	4/1/2004 0:00	-0.072	-0.056
582412	4/2/2004 0:00	-0.033	-0.056
582413	4/3/2004 0:00	-0.064	-0.055
582414	4/4/2004 0:00	-0.057	-0.056
582415	4/5/2004 0:00	-0.05	-0.056
582416	4/6/2004 0:00	-0.065	-0.054
582417	4/7/2004 0:00	-0.074	-0.054
582418	4/8/2004 0:00	-0.05	-0.054
582419	4/9/2004 0:00	-0.061	-0.055
582420	4/10/2004 0:00	-0.052	-0.055
582421	4/11/2004 0:00	-0.055	-0.056
582422	4/12/2004 0:00	-0.069	-0.055
582423	4/13/2004 0:00	-0.063	-0.054
582424	4/14/2004 0:00	-0.066	-0.053
582425	4/15/2004 0:00	-0.056	-0.054
582426	4/16/2004 0:00	-0.058	-0.054
582427	4/17/2004 0:00	-0.066	-0.053
582428	4/18/2004 0:00	-0.025	-0.054
582429	4/19/2004 0:00	-0.061	-0.054

582430	4/20/2004 0:00	-0.049	-0.053
582431	4/21/2004 0:00	-0.043	-0.053
582432	4/22/2004 0:00	-0.052	-0.052
582433	4/23/2004 0:00	-0.038	-0.051
582434	4/24/2004 0:00	-0.069	-0.05
582435	4/25/2004 0:00	-0.042	-0.049
582436	4/26/2004 0:00	-0.071	-0.048
582437	4/27/2004 0:00	-0.029	-0.047
582438	4/28/2004 0:00	-0.023	-0.046
582439	4/29/2004 0:00	-0.05	-0.045
582440	4/30/2004 0:00	-0.065	-0.045
582441	5/1/2004 0:00	-0.056	-0.044
582442	5/2/2004 0:00	-0.042	-0.044
582443	5/3/2004 0:00	-0.06	-0.044
582444	5/4/2004 0:00	-0.043	-0.045
582445	5/5/2004 0:00	-0.024	-0.045
582446	5/6/2004 0:00	-0.054	-0.045
582447	5/7/2004 0:00	-0.044	-0.045
582448	5/8/2004 0:00	-0.031	-0.045
582449	5/9/2004 0:00	-0.048	-0.045
582450	5/10/2004 0:00	-0.021	-0.044
582451	5/11/2004 0:00	-0.013	-0.045
582452	5/12/2004 0:00	-0.018	-0.044
582453	5/13/2004 0:00	-0.043	-0.045
582454	5/14/2004 0:00	-0.04	-0.046
582455	5/15/2004 0:00	-0.056	-0.046
582456	5/16/2004 0:00	-0.034	-0.045
582457	5/17/2004 0:00	-0.057	-0.044
582458	5/18/2004 0:00	-0.071	-0.045
582459	5/19/2004 0:00	-0.05	-0.045
582460	5/20/2004 0:00	-0.049	-0.046
582461	5/21/2004 0:00	-0.052	-0.047
582462	5/22/2004 0:00	-0.055	-0.047
582463	5/23/2004 0:00	-0.058	-0.047
582464	5/24/2004 0:00	-0.037	-0.047
582465	5/25/2004 0:00	-0.046	-0.047
582466	5/26/2004 0:00	-0.055	-0.048
582467	5/27/2004 0:00	-0.035	-0.049
582468	5/28/2004 0:00	-0.072	-0.05
582469	5/29/2004 0:00	-0.044	-0.05
582470	5/30/2004 0:00	-0.045	-0.051
582471	5/31/2004 0:00	-0.041	-0.051
582472	6/1/2004 0:00	-0.044	-0.052
582473	6/2/2004 0:00	-0.062	-0.052

582474	6/3/2004 0:00	-0.07	-0.052
582475	6/4/2004 0:00	-0.058	-0.053
582476	6/5/2004 0:00	-0.065	-0.053
582477	6/6/2004 0:00	-0.039	-0.054
582478	6/7/2004 0:00	-0.04	-0.053
582479	6/8/2004 0:00	-0.053	-0.053
582480	6/9/2004 0:00	-0.022	-0.054
582481	6/10/2004 0:00	-0.055	-0.055
582482	6/11/2004 0:00	-0.047	-0.055
582483	6/12/2004 0:00	-0.042	-0.055
582484	6/13/2004 0:00	-0.048	-0.055
582485	6/14/2004 0:00	-0.068	-0.056
582486	6/15/2004 0:00	-0.071	-0.057
582487	6/16/2004 0:00	-0.069	-0.057
582488	6/17/2004 0:00	-0.051	-0.058
582489	6/18/2004 0:00	-0.074	-0.059
582490	6/19/2004 0:00	-0.067	-0.059
582491	6/20/2004 0:00	-0.067	-0.059
582492	6/21/2004 0:00	-0.065	-0.059
582493	6/22/2004 0:00	-0.029	-0.059
582494	6/23/2004 0:00	-0.066	-0.06
582495	6/24/2004 0:00	-0.061	-0.06
582496	6/25/2004 0:00	-0.067	-0.062
582497	6/26/2004 0:00	-0.06	-0.062
582498	6/27/2004 0:00	-0.053	-0.062
582499	6/28/2004 0:00	-0.047	-0.063
582500	6/29/2004 0:00	-0.081	-0.064
582501	6/30/2004 0:00	-0.088	-0.063
582502	7/1/2004 0:00	-0.052	-0.063
582503	7/2/2004 0:00	-0.071	-0.063
582504	7/3/2004 0:00	-0.067	-0.064
582505	7/4/2004 0:00	-0.075	-0.063
582506	7/5/2004 0:00	-0.063	-0.063
582507	7/6/2004 0:00	-0.059	-0.063
582508	7/7/2004 0:00	-0.05	-0.063
582509	7/8/2004 0:00	-0.063	-0.064
582510	7/9/2004 0:00	-0.061	-0.064
582511	7/10/2004 0:00	-0.07	-0.065
582512	7/11/2004 0:00	-0.069	-0.065
582513	7/12/2004 0:00	-0.058	-0.066
582514	7/13/2004 0:00	-0.064	-0.066
582515	7/14/2004 0:00	-0.068	-0.067
582516	7/15/2004 0:00	-0.062	-0.066
582517	7/16/2004 0:00	-0.048	-0.066

582518	7/17/2004 0:00	-0.067	-0.067
582519	7/18/2004 0:00	-0.079	-0.067
582520	7/19/2004 0:00	-0.057	-0.067
582521	7/20/2004 0:00	-0.066	-0.066
582522	7/21/2004 0:00	-0.074	-0.066
582523	7/22/2004 0:00	-0.069	-0.067
582524	7/23/2004 0:00	-0.065	-0.068
582525	7/24/2004 0:00	-0.065	-0.068
582526	7/25/2004 0:00	-0.074	-0.068
582527	7/26/2004 0:00	-0.072	-0.069
582528	7/27/2004 0:00	-0.079	-0.069
582529	7/28/2004 0:00	-0.054	-0.069
582530	7/29/2004 0:00	-0.074	-0.07
582531	7/30/2004 0:00	-0.073	-0.07
582532	7/31/2004 0:00	-0.071	-0.071
582533	8/1/2004 0:00	-0.08	-0.072
582534	8/2/2004 0:00	-0.083	-0.073
582535	8/3/2004 0:00	-0.069	-0.072
582536	8/4/2004 0:00	-0.052	-0.073
582537	8/5/2004 0:00	-0.068	-0.074
582538	8/6/2004 0:00	-0.079	-0.074
582539	8/7/2004 0:00	-0.077	-0.074
582540	8/8/2004 0:00	-0.057	-0.075
582541	8/9/2004 0:00	-0.08	-0.076
582542	8/10/2004 0:00	-0.078	-0.076
582543	8/11/2004 0:00	-0.076	-0.076
582544	8/12/2004 0:00	-0.07	-0.076
582545	8/13/2004 0:00	-0.097	-0.077
582546	8/14/2004 0:00	-0.07	-0.078
582547	8/15/2004 0:00	-0.072	-0.078
582548	8/16/2004 0:00	-0.082	-0.079
582549	8/17/2004 0:00	-0.091	-0.079
582550	8/18/2004 0:00	-0.07	-0.08
582551	8/19/2004 0:00	-0.084	-0.08
582552	8/20/2004 0:00	-0.098	-0.081
582553	8/21/2004 0:00	-0.078	-0.081
582554	8/22/2004 0:00	-0.065	-0.081
582555	8/23/2004 0:00	-0.095	-0.081
582556	8/24/2004 0:00	-0.085	-0.082
582557	8/25/2004 0:00	-0.069	-0.082
582558	8/26/2004 0:00	-0.079	-0.082
582559	8/27/2004 0:00	-0.094	-0.082
582560	8/28/2004 0:00	-0.081	-0.082
582561	8/29/2004 0:00	-0.092	-0.082

582562	8/30/2004 0:00	-0.071	-0.082
582563	8/31/2004 0:00	-0.099	-0.082
582564	9/1/2004 0:00	-0.086	-0.081
582565	9/2/2004 0:00	-0.104	-0.081
582566	9/3/2004 0:00	-0.078	-0.082
582567	9/4/2004 0:00	-0.086	-0.081
582568	9/5/2004 0:00	-0.063	-0.08
582569	9/6/2004 0:00	-0.073	-0.08
582570	9/7/2004 0:00	-0.076	-0.081
582571	9/8/2004 0:00	-0.09	-0.081
582572	9/9/2004 0:00	-0.077	-0.081
582573	9/10/2004 0:00	-0.092	-0.081
582574	9/11/2004 0:00	-0.086	-0.082
582575	9/12/2004 0:00	-0.065	-0.081
582576	9/13/2004 0:00	-0.081	-0.082
582577	9/14/2004 0:00	-0.075	-0.082
582578	9/15/2004 0:00	-0.062	-0.083
582579	9/16/2004 0:00	-0.078	-0.083
582580	9/17/2004 0:00	-0.089	-0.083
582581	9/18/2004 0:00	-0.078	-0.082
582582	9/19/2004 0:00	-0.067	-0.083
582583	9/20/2004 0:00	-0.07	-0.083
582584	9/21/2004 0:00	-0.084	-0.084
582585	9/22/2004 0:00	-0.092	-0.085
582586	9/23/2004 0:00	-0.082	-0.085
582587	9/24/2004 0:00	-0.091	-0.085
582588	9/25/2004 0:00	-0.084	-0.085
582589	9/26/2004 0:00	-0.091	-0.084
582590	9/27/2004 0:00	-0.073	-0.083
582591	9/28/2004 0:00	-0.096	-0.083
582592	9/29/2004 0:00	-0.101	-0.084
582593	9/30/2004 0:00	-0.099	-0.084
582594	10/1/2004 0:00	-0.092	-0.086
582595	10/2/2004 0:00	-0.089	-0.085
582596	10/3/2004 0:00	-0.08	-0.086
582597	10/4/2004 0:00	-0.1	-0.086
582598	10/5/2004 0:00	-0.108	-0.086
582599	10/6/2004 0:00	-0.081	-0.087
582600	10/7/2004 0:00	-0.094	-0.087
582601	10/8/2004 0:00	-0.084	-0.087
582602	10/9/2004 0:00	-0.079	-0.087
582603	10/10/2004 0:00	-0.075	-0.086
582604	10/11/2004 0:00	-0.067	-0.087
582605	10/12/2004 0:00	-0.065	-0.087

582606	10/13/2004 0:00	-0.064	-0.087
582607	10/14/2004 0:00	-0.101	-0.087
582608	10/15/2004 0:00	-0.097	-0.087
582609	10/16/2004 0:00	-0.103	-0.087
582610	10/17/2004 0:00	-0.068	-0.087
582611	10/18/2004 0:00	-0.104	-0.088
582612	10/19/2004 0:00	-0.07	-0.088
582613	10/20/2004 0:00	-0.094	-0.087
582614	10/21/2004 0:00	-0.078	-0.087
582615	10/22/2004 0:00	-0.085	-0.087
582616	10/23/2004 0:00	-0.092	-0.088
582617	10/24/2004 0:00	-0.079	-0.087
582618	10/25/2004 0:00	-0.069	-0.087
582619	10/26/2004 0:00	-0.116	-0.087
582620	10/27/2004 0:00	-0.078	-0.088
582621	10/28/2004 0:00	-0.076	-0.088
582622	10/29/2004 0:00	-0.117	-0.089
582623	10/30/2004 0:00	-0.1	-0.09
582624	10/31/2004 0:00	-0.083	-0.09
582625	11/1/2004 0:00	-0.103	-0.091
582626	11/2/2004 0:00	-0.104	-0.092
582627	11/3/2004 0:00	-0.089	-0.092
582628	11/4/2004 0:00	-0.07	-0.093
582629	11/5/2004 0:00	-0.098	-0.093
582630	11/6/2004 0:00	-0.097	-0.092
582631	11/7/2004 0:00	-0.11	-0.093
582632	11/8/2004 0:00	-0.065	-0.092
582633	11/9/2004 0:00	-0.07	-0.092
582634	11/10/2004 0:00	-0.08	-0.092
582635	11/11/2004 0:00	-0.106	-0.09
582636	11/12/2004 0:00	-0.076	-0.09
582637	11/13/2004 0:00	-0.082	-0.09
582638	11/14/2004 0:00	-0.122	-0.09
582639	11/15/2004 0:00	-0.109	-0.09
582640	11/16/2004 0:00	-0.116	-0.09
582641	11/17/2004 0:00	-0.106	-0.089
582642	11/18/2004 0:00	-0.111	-0.089
582643	11/19/2004 0:00	-0.095	-0.089
582644	11/20/2004 0:00	-0.086	-0.091
582645	11/21/2004 0:00	-0.071	-0.09
582646	11/22/2004 0:00	-0.104	-0.089
582647	11/23/2004 0:00	-0.073	-0.089
582648	11/24/2004 0:00	-0.073	-0.09
582649	11/25/2004 0:00	-0.064	-0.091

582650	11/26/2004 0:00	-0.067	-0.092
582651	11/27/2004 0:00	-0.063	-0.092
582652	11/28/2004 0:00	-0.081	-0.092
582653	11/29/2004 0:00	-0.102	-0.093
582654	11/30/2004 0:00	-0.105	-0.093
582655	12/1/2004 0:00	-0.087	-0.093
582656	12/2/2004 0:00	-0.073	-0.093
582657	12/3/2004 0:00	-0.116	-0.092
582658	12/4/2004 0:00	-0.093	-0.092
582659	12/5/2004 0:00	-0.106	-0.092
582660	12/6/2004 0:00	-0.092	-0.092
582661	12/7/2004 0:00	-0.063	-0.093
582662	12/8/2004 0:00	-0.086	-0.093
582663	12/9/2004 0:00	-0.118	-0.094
582664	12/10/2004 0:00	-0.107	-0.094
582665	12/11/2004 0:00	-0.105	-0.095
582666	12/12/2004 0:00	-0.091	-0.095
582667	12/13/2004 0:00	-0.08	-0.096
582668	12/14/2004 0:00	-0.114	-0.096
582669	12/15/2004 0:00	-0.111	-0.096
582670	12/16/2004 0:00	-0.116	-0.095
582671	12/17/2004 0:00	-0.117	-0.096
582672	12/18/2004 0:00	-0.094	-0.096
582673	12/19/2004 0:00	-0.086	-0.097
582674	12/20/2004 0:00	-0.097	-0.098
582675	12/21/2004 0:00	-0.087	-0.098
582676	12/22/2004 0:00	-0.122	-0.098
582677	12/23/2004 0:00	-0.105	-0.099
582678	12/24/2004 0:00	-0.103	-0.1
582679	12/25/2004 0:00	-0.062	-0.101
582680	12/26/2004 0:00	-0.099	-0.102
582681	12/27/2004 0:00	-0.072	-0.101
582682	12/28/2004 0:00	-0.102	-0.102
582683	12/29/2004 0:00	-0.059	-0.102
582684	12/30/2004 0:00	-0.101	-0.103
582685	12/31/2004 0:00	-0.095	-0.103
582686	1/1/2005 0:00	-0.109	-0.103
582687	1/2/2005 0:00	-0.069	-0.103
582688	1/3/2005 0:00	-0.137	-0.104
582689	1/4/2005 0:00	-0.121	-0.104
582690	1/5/2005 0:00	-0.119	-0.105
582691	1/6/2005 0:00	-0.095	-0.105
582692	1/7/2005 0:00	-0.096	-0.105
582693	1/8/2005 0:00	-0.126	-0.105

582694	1/9/2005 0:00	-0.139	-0.105
582695	1/10/2005 0:00	-0.127	-0.106
582696	1/11/2005 0:00	-0.097	-0.106
582697	1/12/2005 0:00	-0.093	-0.106
582698	1/13/2005 0:00	-0.105	-0.106
582699	1/14/2005 0:00	-0.125	-0.107
582700	1/15/2005 0:00	-0.117	-0.108
582701	1/16/2005 0:00	-0.114	-0.109
582702	1/17/2005 0:00	-0.13	-0.108
582703	1/18/2005 0:00	-0.101	-0.11
582704	1/19/2005 0:00	-0.112	-0.109
582705	1/20/2005 0:00	-0.115	-0.108
582706	1/21/2005 0:00	-0.091	-0.108
582707	1/22/2005 0:00	-0.103	-0.107
582708	1/23/2005 0:00	-0.113	-0.107
582709	1/24/2005 0:00	-0.119	-0.107
582710	1/25/2005 0:00	-0.092	-0.105
582711	1/26/2005 0:00	-0.084	-0.104
582712	1/27/2005 0:00	-0.083	-0.103
582713	1/28/2005 0:00	-0.105	-0.103
582714	1/29/2005 0:00	-0.095	-0.102
582715	1/30/2005 0:00	-0.124	-0.101
582716	1/31/2005 0:00	-0.107	-0.099
582717	2/1/2005 0:00	-0.106	-0.099
582718	2/2/2005 0:00	-0.115	-0.097
582719	2/3/2005 0:00	-0.103	-0.096
582720	2/4/2005 0:00	-0.101	-0.097
582721	2/5/2005 0:00	-0.102	-0.096
582722	2/6/2005 0:00	-0.083	-0.097
582723	2/7/2005 0:00	-0.088	-0.098
582724	2/8/2005 0:00	-0.113	-0.097
582725	2/9/2005 0:00	-0.094	-0.096
582726	2/10/2005 0:00	-0.092	-0.096
582727	2/11/2005 0:00	-0.068	-0.096
582728	2/12/2005 0:00	-0.092	-0.096
582729	2/13/2005 0:00	-0.07	-0.096
582730	2/14/2005 0:00	-0.087	-0.097
582731	2/15/2005 0:00	-0.077	-0.097
582732	2/16/2005 0:00	-0.105	-0.097
582733	2/17/2005 0:00	-0.078	-0.096
582734	2/18/2005 0:00	-0.075	-0.096
582735	2/19/2005 0:00	-0.116	-0.096
582736	2/20/2005 0:00	-0.092	-0.097
582737	2/21/2005 0:00	-0.123	-0.097

582738	2/22/2005 0:00	-0.13	-0.097
582739	2/23/2005 0:00	-0.086	-0.097
582740	2/24/2005 0:00	-0.096	-0.096
582741	2/25/2005 0:00	-0.091	-0.096
582742	2/26/2005 0:00	-0.074	-0.096
582743	2/27/2005 0:00	-0.093	-0.097
582744	2/28/2005 0:00	-0.116	-0.098
582745	3/1/2005 0:00	-0.103	-0.099
582746	3/2/2005 0:00	-0.122	-0.099
582747	3/3/2005 0:00	-0.116	-0.099
582748	3/4/2005 0:00	-0.088	-0.098
582749	3/5/2005 0:00	-0.109	-0.098
582750	3/6/2005 0:00	-0.109	-0.099
582751	3/7/2005 0:00	-0.104	-0.099
582752	3/8/2005 0:00	-0.102	-0.098
582753	3/9/2005 0:00	-0.103	-0.097
582754	3/10/2005 0:00	-0.091	-0.095
582755	3/11/2005 0:00	-0.085	-0.095
582756	3/12/2005 0:00	-0.076	-0.095
582757	3/13/2005 0:00	-0.11	-0.093
582758	3/14/2005 0:00	-0.096	-0.093
582759	3/15/2005 0:00	-0.103	-0.092
582760	3/16/2005 0:00	-0.105	-0.091
582761	3/17/2005 0:00	-0.085	-0.091
582762	3/18/2005 0:00	-0.072	-0.089
582763	3/19/2005 0:00	-0.08	-0.087
582764	3/20/2005 0:00	-0.091	-0.086
582765	3/21/2005 0:00	-0.102	-0.086
582766	3/22/2005 0:00	-0.1	-0.085
582767	3/23/2005 0:00	-0.076	-0.084
582768	3/24/2005 0:00	-0.101	-0.082
582769	3/25/2005 0:00	-0.073	-0.08
582770	3/26/2005 0:00	-0.072	-0.079
582771	3/27/2005 0:00	-0.084	-0.078
582772	3/28/2005 0:00	-0.049	-0.078
582773	3/29/2005 0:00	-0.062	-0.076
582774	3/30/2005 0:00	-0.065	-0.074
582775	3/31/2005 0:00	-0.091	-0.073
582776	4/1/2005 0:00	-0.091	-0.072
582777	4/2/2005 0:00	-0.071	-0.072
582778	4/3/2005 0:00	-0.058	-0.072
582779	4/4/2005 0:00	-0.06	-0.072
582780	4/5/2005 0:00	-0.091	-0.072
582781	4/6/2005 0:00	-0.078	-0.071

582782	4/7/2005 0:00	-0.077	-0.07
582783	4/8/2005 0:00	-0.045	-0.07
582784	4/9/2005 0:00	-0.038	-0.069
582785	4/10/2005 0:00	-0.052	-0.069
582786	4/11/2005 0:00	-0.062	-0.07
582787	4/12/2005 0:00	-0.068	-0.07
582788	4/13/2005 0:00	-0.049	-0.072
582789	4/14/2005 0:00	-0.053	-0.072
582790	4/15/2005 0:00	-0.073	-0.073
582791	4/16/2005 0:00	-0.072	-0.072
582792	4/17/2005 0:00	-0.078	-0.071
582793	4/18/2005 0:00	-0.077	-0.071
582794	4/19/2005 0:00	-0.071	-0.072
582795	4/20/2005 0:00	-0.084	-0.072
582796	4/21/2005 0:00	-0.08	-0.071
582797	4/22/2005 0:00	-0.069	-0.071
582798	4/23/2005 0:00	-0.077	-0.072
582799	4/24/2005 0:00	-0.07	-0.073
582800	4/25/2005 0:00	-0.081	-0.074
582801	4/26/2005 0:00	-0.09	-0.074
582802	4/27/2005 0:00	-0.085	-0.075
582803	4/28/2005 0:00	-0.113	-0.076
582804	4/29/2005 0:00	-0.074	-0.077
582805	4/30/2005 0:00	-0.082	-0.078
582806	5/1/2005 0:00	-0.058	-0.078
582807	5/2/2005 0:00	-0.076	-0.079
582808	5/3/2005 0:00	-0.064	-0.078
582809	5/4/2005 0:00	-0.086	-0.078
582810	5/5/2005 0:00	-0.072	-0.078
582811	5/6/2005 0:00	-0.06	-0.078
582812	5/7/2005 0:00	-0.077	-0.078
582813	5/8/2005 0:00	-0.087	-0.079
582814	5/9/2005 0:00	-0.092	-0.079
582815	5/10/2005 0:00	-0.06	-0.079
582816	5/11/2005 0:00	-0.048	-0.079
582817	5/12/2005 0:00	-0.095	-0.079
582818	5/13/2005 0:00	-0.107	-0.079
582819	5/14/2005 0:00	-0.076	-0.078
582820	5/15/2005 0:00	-0.083	-0.078
582821	5/16/2005 0:00	-0.083	-0.077
582822	5/17/2005 0:00	-0.082	-0.077
582823	5/18/2005 0:00	-0.063	-0.077
582824	5/19/2005 0:00	-0.085	-0.078
582825	5/20/2005 0:00	-0.057	-0.077

582826	5/21/2005 0:00	-0.082	-0.076
582827	5/22/2005 0:00	-0.087	-0.077
582828	5/23/2005 0:00	-0.096	-0.077
582829	5/24/2005 0:00	-0.068	-0.076
582830	5/25/2005 0:00	-0.08	-0.075
582831	5/26/2005 0:00	-0.083	-0.077
582832	5/27/2005 0:00	-0.077	-0.077
582833	5/28/2005 0:00	-0.086	-0.076
582834	5/29/2005 0:00	-0.081	-0.075
582835	5/30/2005 0:00	-0.073	-0.075
582836	5/31/2005 0:00	-0.062	-0.075
582837	6/1/2005 0:00	-0.064	-0.075
582838	6/2/2005 0:00	-0.07	-0.075
582839	6/3/2005 0:00	-0.086	-0.075
582840	6/4/2005 0:00	-0.061	-0.074
582841	6/5/2005 0:00	-0.056	-0.075
582842	6/6/2005 0:00	-0.078	-0.075
582843	6/7/2005 0:00	-0.068	-0.076
582844	6/8/2005 0:00	-0.066	-0.075
582845	6/9/2005 0:00	-0.075	-0.076
582846	6/10/2005 0:00	-0.097	-0.075
582847	6/11/2005 0:00	-0.051	-0.075
582848	6/12/2005 0:00	-0.068	-0.076
582849	6/13/2005 0:00	-0.08	-0.075
582850	6/14/2005 0:00	-0.083	-0.076
582851	6/15/2005 0:00	-0.069	-0.075
582852	6/16/2005 0:00	-0.089	-0.076
582853	6/17/2005 0:00	-0.068	-0.076
582854	6/18/2005 0:00	-0.089	-0.076
582855	6/19/2005 0:00	-0.056	-0.075
582856	6/20/2005 0:00	-0.073	-0.076
582857	6/21/2005 0:00	-0.089	-0.077
582858	6/22/2005 0:00	-0.103	-0.078
582859	6/23/2005 0:00	-0.086	-0.078
582860	6/24/2005 0:00	-0.083	-0.078
582861	6/25/2005 0:00	-0.068	-0.078
582862	6/26/2005 0:00	-0.08	-0.078
582863	6/27/2005 0:00	-0.09	-0.08
582864	6/28/2005 0:00	-0.074	-0.08
582865	6/29/2005 0:00	-0.094	-0.08
582866	6/30/2005 0:00	-0.065	-0.079
582867	7/1/2005 0:00	-0.071	-0.079
582868	7/2/2005 0:00	-0.065	-0.079
582869	7/3/2005 0:00	-0.065	-0.08

582870	7/4/2005 0:00	-0.078	-0.08
582871	7/5/2005 0:00	-0.082	-0.081
582872	7/6/2005 0:00	-0.084	-0.08
582873	7/7/2005 0:00	-0.096	-0.08
582874	7/8/2005 0:00	-0.084	-0.08
582875	7/9/2005 0:00	-0.062	-0.08
582876	7/10/2005 0:00	-0.085	-0.08
582877	7/11/2005 0:00	-0.098	-0.08
582878	7/12/2005 0:00	-0.095	-0.08
582879	7/13/2005 0:00	-0.078	-0.08
582880	7/14/2005 0:00	-0.066	-0.081
582881	7/15/2005 0:00	-0.053	-0.081
582882	7/16/2005 0:00	-0.086	-0.082
582883	7/17/2005 0:00	-0.092	-0.083
582884	7/18/2005 0:00	-0.091	-0.083
582885	7/19/2005 0:00	-0.084	-0.084
582886	7/20/2005 0:00	-0.083	-0.085
582887	7/21/2005 0:00	-0.066	-0.086
582888	7/22/2005 0:00	-0.078	-0.086
582889	7/23/2005 0:00	-0.092	-0.086
582890	7/24/2005 0:00	-0.082	-0.086
582891	7/25/2005 0:00	-0.094	-0.088
582892	7/26/2005 0:00	-0.069	-0.088
582893	7/27/2005 0:00	-0.078	-0.088
582894	7/28/2005 0:00	-0.092	-0.087
582895	7/29/2005 0:00	-0.102	-0.088
582896	7/30/2005 0:00	-0.102	-0.089
582897	7/31/2005 0:00	-0.102	-0.091
582898	8/1/2005 0:00	-0.081	-0.09
582899	8/2/2005 0:00	-0.085	-0.09
582900	8/3/2005 0:00	-0.085	-0.091
582901	8/4/2005 0:00	-0.11	-0.091
582902	8/5/2005 0:00	-0.109	-0.091
582903	8/6/2005 0:00	-0.085	-0.092
582904	8/7/2005 0:00	-0.1	-0.092
582905	8/8/2005 0:00	-0.088	-0.092
582906	8/9/2005 0:00	-0.103	-0.093
582907	8/10/2005 0:00	-0.111	-0.093
582908	8/11/2005 0:00	-0.078	-0.093
582909	8/12/2005 0:00	-0.079	-0.094
582910	8/13/2005 0:00	-0.086	-0.095
582911	8/14/2005 0:00	-0.106	-0.095
582912	8/15/2005 0:00	-0.106	-0.095
582913	8/16/2005 0:00	-0.081	-0.095

582914	8/17/2005 0:00	-0.09	-0.095
582915	8/18/2005 0:00	-0.098	-0.095
582916	8/19/2005 0:00	-0.091	-0.096
582917	8/20/2005 0:00	-0.105	-0.096
582918	8/21/2005 0:00	-0.08	-0.096
582919	8/22/2005 0:00	-0.089	-0.097
582920	8/23/2005 0:00	-0.096	-0.097
582921	8/24/2005 0:00	-0.103	-0.097
582922	8/25/2005 0:00	-0.084	-0.097
582923	8/26/2005 0:00	-0.085	-0.097
582924	8/27/2005 0:00	-0.104	-0.098
582925	8/28/2005 0:00	-0.107	-0.098
582926	8/29/2005 0:00	-0.118	-0.098
582927	8/30/2005 0:00	-0.092	-0.098
582928	8/31/2005 0:00	-0.117	-0.099
582929	9/1/2005 0:00	-0.085	-0.1
582930	9/2/2005 0:00	-0.082	-0.1
582931	9/3/2005 0:00	-0.106	-0.1
582932	9/4/2005 0:00	-0.094	-0.101
582933	9/5/2005 0:00	-0.12	-0.101
582934	9/6/2005 0:00	-0.109	-0.102
582935	9/7/2005 0:00	-0.099	-0.103
582936	9/8/2005 0:00	-0.11	-0.103
582937	9/9/2005 0:00	-0.11	-0.103
582938	9/10/2005 0:00	-0.105	-0.103
582939	9/11/2005 0:00	-0.101	-0.102
582940	9/12/2005 0:00	-0.091	-0.102
582941	9/13/2005 0:00	-0.086	-0.101
582942	9/14/2005 0:00	-0.102	-0.1
582943	9/15/2005 0:00	-0.12	-0.099
582944	9/16/2005 0:00	-0.108	-0.098
582945	9/17/2005 0:00	-0.094	-0.098
582946	9/18/2005 0:00	-0.108	-0.099
582947	9/19/2005 0:00	-0.122	-0.098
582948	9/20/2005 0:00	-0.108	-0.099
582949	9/21/2005 0:00	-0.109	-0.098
582950	9/22/2005 0:00	-0.117	-0.098
582951	9/23/2005 0:00	-0.102	-0.096
582952	9/24/2005 0:00	-0.099	-0.095
582953	9/25/2005 0:00	-0.079	-0.094
582954	9/26/2005 0:00	-0.058	-0.094
582955	9/27/2005 0:00	-0.101	-0.093
582956	9/28/2005 0:00	-0.088	-0.094
582957	9/29/2005 0:00	-0.078	-0.093

582958	9/30/2005 0:00	-0.074	-0.092
582959	10/1/2005 0:00	-0.065	-0.092
582960	10/2/2005 0:00	-0.105	-0.089
582961	10/3/2005 0:00	-0.101	-0.089
582962	10/4/2005 0:00	-0.087	-0.089
582963	10/5/2005 0:00	-0.114	-0.088
582964	10/6/2005 0:00	-0.093	-0.087
582965	10/7/2005 0:00	-0.089	-0.087
582966	10/8/2005 0:00	-0.042	-0.086
582967	10/9/2005 0:00	-0.087	-0.086
582968	10/10/2005 0:00	-0.087	-0.086
582969	10/11/2005 0:00	-0.094	-0.086
582970	10/12/2005 0:00	-0.08	-0.086
582971	10/13/2005 0:00	-0.104	-0.087
582972	10/14/2005 0:00	-0.071	-0.087
582973	10/15/2005 0:00	-0.077	-0.088
582974	10/16/2005 0:00	-0.099	-0.09
582975	10/17/2005 0:00	-0.043	-0.09
582976	10/18/2005 0:00	-0.072	-0.09
582977	10/19/2005 0:00	-0.106	-0.091
582978	10/20/2005 0:00	-0.1	-0.091
582979	10/21/2005 0:00	-0.08	-0.091
582980	10/22/2005 0:00	-0.099	-0.091
582981	10/23/2005 0:00	-0.089	-0.091
582982	10/24/2005 0:00	-0.113	-0.093
582983	10/25/2005 0:00	-0.081	-0.094
582984	10/26/2005 0:00	-0.093	-0.096
582985	10/27/2005 0:00	-0.066	-0.096
582986	10/28/2005 0:00	-0.132	-0.096
582987	10/29/2005 0:00	-0.088	-0.097
582988	10/30/2005 0:00	-0.089	-0.097
582989	10/31/2005 0:00	-0.142	-0.099
582990	11/1/2005 0:00	-0.07	-0.099
582991	11/2/2005 0:00	-0.116	-0.102
582992	11/3/2005 0:00	-0.112	-0.103
582993	11/4/2005 0:00	-0.093	-0.104
582994	11/5/2005 0:00	-0.109	-0.105
582995	11/6/2005 0:00	-0.098	-0.105
582996	11/7/2005 0:00	-0.1	-0.106
582997	11/8/2005 0:00	-0.105	-0.106
582998	11/9/2005 0:00	-0.1	-0.105
582999	11/10/2005 0:00	-0.141	-0.106
583000	11/11/2005 0:00	-0.102	-0.107
583001	11/12/2005 0:00	-0.102	-0.107

583002	11/13/2005 0:00	-0.107	-0.107
583003	11/14/2005 0:00	-0.091	-0.108
583004	11/15/2005 0:00	-0.124	-0.109
583005	11/16/2005 0:00	-0.118	-0.108
583006	11/17/2005 0:00	-0.137	-0.11
583007	11/18/2005 0:00	-0.104	-0.11
583008	11/19/2005 0:00	-0.112	-0.11
583009	11/20/2005 0:00	-0.128	-0.112
583010	11/21/2005 0:00	-0.091	-0.112
583011	11/22/2005 0:00	-0.121	-0.112
583012	11/23/2005 0:00	-0.103	-0.112
583013	11/24/2005 0:00	-0.086	-0.113
583014	11/25/2005 0:00	-0.117	-0.113
583015	11/26/2005 0:00	-0.098	-0.112
583016	11/27/2005 0:00	-0.093	-0.112
583017	11/28/2005 0:00	-0.113	-0.111
583018	11/29/2005 0:00	-0.111	-0.112
583019	11/30/2005 0:00	-0.138	-0.113
583020	12/1/2005 0:00	-0.116	-0.112
583021	12/2/2005 0:00	-0.136	-0.111
583022	12/3/2005 0:00	-0.115	-0.11
583023	12/4/2005 0:00	-0.115	-0.11
583024	12/5/2005 0:00	-0.131	-0.11
583025	12/6/2005 0:00	-0.113	-0.109
583026	12/7/2005 0:00	-0.11	-0.11
583027	12/8/2005 0:00	-0.11	-0.109
583028	12/9/2005 0:00	-0.123	-0.109
583029	12/10/2005 0:00	-0.102	-0.11
583030	12/11/2005 0:00	-0.091	-0.108
583031	12/12/2005 0:00	-0.104	-0.109
583032	12/13/2005 0:00	-0.095	-0.109
583033	12/14/2005 0:00	-0.126	-0.109
583034	12/15/2005 0:00	-0.115	-0.108
583035	12/16/2005 0:00	-0.096	-0.106
583036	12/17/2005 0:00	-0.104	-0.105
583037	12/18/2005 0:00	-0.104	-0.104
583038	12/19/2005 0:00	-0.09	-0.103
583039	12/20/2005 0:00	-0.113	-0.104
583040	12/21/2005 0:00	-0.111	-0.104
583041	12/22/2005 0:00	-0.102	-0.104
583042	12/23/2005 0:00	-0.108	-0.103
583043	12/24/2005 0:00	-0.108	-0.102
583044	12/25/2005 0:00	-0.098	-0.102
583045	12/26/2005 0:00	-0.073	-0.102

583046	12/27/2005 0:00	-0.109	-0.103
583047	12/28/2005 0:00	-0.1	-0.103
583048	12/29/2005 0:00	-0.106	-0.103
583049	12/30/2005 0:00	-0.072	-0.103
583050	12/31/2005 0:00	-0.103	-0.102
583051	1/1/2006 0:00	-0.088	-0.102
583052	1/2/2006 0:00	-0.076	-0.102
583053	1/3/2006 0:00	-0.103	-0.101
583054	1/4/2006 0:00	-0.137	-0.101
583055	1/5/2006 0:00	-0.123	-0.101
583056	1/6/2006 0:00	-0.114	-0.101
583057	1/7/2006 0:00	-0.095	-0.101
583058	1/8/2006 0:00	-0.084	-0.101
583059	1/9/2006 0:00	-0.106	-0.101
583060	1/10/2006 0:00	-0.114	-0.1
583061	1/11/2006 0:00	-0.109	-0.102
583062	1/12/2006 0:00	-0.116	-0.101
583063	1/13/2006 0:00	-0.086	-0.102
583064	1/14/2006 0:00	-0.124	-0.102
583065	1/15/2006 0:00	-0.081	-0.103
583066	1/16/2006 0:00	-0.095	-0.102
583067	1/17/2006 0:00	-0.101	-0.101
583068	1/18/2006 0:00	-0.093	-0.101
583069	1/19/2006 0:00	-0.095	-0.1
583070	1/20/2006 0:00	-0.11	-0.099
583071	1/21/2006 0:00	-0.101	-0.097
583072	1/22/2006 0:00	-0.108	-0.097
583073	1/23/2006 0:00	-0.104	-0.098
583074	1/24/2006 0:00	-0.099	-0.099
583075	1/25/2006 0:00	-0.087	-0.099
583076	1/26/2006 0:00	-0.111	-0.099
583077	1/27/2006 0:00	-0.1	-0.1
583078	1/28/2006 0:00	-0.118	-0.101
583079	1/29/2006 0:00	-0.108	-0.102
583080	1/30/2006 0:00	-0.09	-0.101
583081	1/31/2006 0:00	-0.078	-0.101
583082	2/1/2006 0:00	-0.05	-0.101
583083	2/2/2006 0:00	-0.079	-0.101
583084	2/3/2006 0:00	-0.087	-0.101
583085	2/4/2006 0:00	-0.1	-0.101
583086	2/5/2006 0:00	-0.074	-0.101
583087	2/6/2006 0:00	-0.116	-0.1
583088	2/7/2006 0:00	-0.116	-0.099
583089	2/8/2006 0:00	-0.113	-0.099

583090	2/9/2006 0:00	-0.109	-0.099
583091	2/10/2006 0:00	-0.112	-0.099
583092	2/11/2006 0:00	-0.13	-0.099
583093	2/12/2006 0:00	-0.138	-0.098
583094	2/13/2006 0:00	-0.121	-0.098
583095	2/14/2006 0:00	-0.09	-0.098
583096	2/15/2006 0:00	-0.097	-0.098
583097	2/16/2006 0:00	-0.084	-0.1
583098	2/17/2006 0:00	-0.096	-0.101
583099	2/18/2006 0:00	-0.105	-0.102
583100	2/19/2006 0:00	-0.109	-0.103
583101	2/20/2006 0:00	-0.087	-0.103
583102	2/21/2006 0:00	-0.077	-0.104
583103	2/22/2006 0:00	-0.075	-0.103
583104	2/23/2006 0:00	-0.094	-0.101
583105	2/24/2006 0:00	-0.101	-0.1
583106	2/25/2006 0:00	-0.103	-0.1
583107	2/26/2006 0:00	-0.113	-0.1
583108	2/27/2006 0:00	-0.069	-0.098
583109	2/28/2006 0:00	-0.098	-0.097
583110	3/1/2006 0:00	-0.111	-0.097
583111	3/2/2006 0:00	-0.104	-0.097
583112	3/3/2006 0:00	-0.123	-0.098
583113	3/4/2006 0:00	-0.1	-0.098
583114	3/5/2006 0:00	-0.113	-0.099
583115	3/6/2006 0:00	-0.102	-0.098
583116	3/7/2006 0:00	-0.12	-0.099
583117	3/8/2006 0:00	-0.097	-0.1
583118	3/9/2006 0:00	-0.082	-0.101
583119	3/10/2006 0:00	-0.056	-0.103
583120	3/11/2006 0:00	-0.081	-0.102
583121	3/12/2006 0:00	-0.096	-0.102
583122	3/13/2006 0:00	-0.115	-0.102
583123	3/14/2006 0:00	-0.081	-0.101
583124	3/15/2006 0:00	-0.112	-0.104
583125	3/16/2006 0:00	-0.12	-0.104
583126	3/17/2006 0:00	-0.095	-0.103
583127	3/18/2006 0:00	-0.103	-0.104
583128	3/19/2006 0:00	-0.105	-0.103
583129	3/20/2006 0:00	-0.106	-0.103
583130	3/21/2006 0:00	-0.102	-0.103
583131	3/22/2006 0:00	-0.122	-0.103
583132	3/23/2006 0:00	-0.126	-0.102
583133	3/24/2006 0:00	-0.114	-0.103

583134	3/25/2006 0:00	-0.111	-0.104
583135	3/26/2006 0:00	-0.089	-0.105
583136	3/27/2006 0:00	-0.096	-0.106
583137	3/28/2006 0:00	-0.102	-0.107
583138	3/29/2006 0:00	-0.09	-0.107
583139	3/30/2006 0:00	-0.137	-0.107
583140	3/31/2006 0:00	-0.117	-0.107
583141	4/1/2006 0:00	-0.084	-0.106
583142	4/2/2006 0:00	-0.114	-0.106
583143	4/3/2006 0:00	-0.099	-0.106
583144	4/4/2006 0:00	-0.106	-0.106
583145	4/5/2006 0:00	-0.123	-0.105
583146	4/6/2006 0:00	-0.082	-0.105
583147	4/7/2006 0:00	-0.1	-0.104
583148	4/8/2006 0:00	-0.117	-0.103
583149	4/9/2006 0:00	-0.123	-0.103
583150	4/10/2006 0:00	-0.101	-0.103
583151	4/11/2006 0:00	-0.113	-0.103
583152	4/12/2006 0:00	-0.118	-0.103
583153	4/13/2006 0:00	-0.107	-0.103
583154	4/14/2006 0:00	-0.1	-0.104
583155	4/15/2006 0:00	-0.09	-0.103
583156	4/16/2006 0:00	-0.091	-0.102
583157	4/17/2006 0:00	-0.085	-0.103
583158	4/18/2006 0:00	-0.115	-0.103
583159	4/19/2006 0:00	-0.113	-0.102
583160	4/20/2006 0:00	-0.084	-0.102
583161	4/21/2006 0:00	-0.089	-0.101
583162	4/22/2006 0:00	-0.095	-0.102
583163	4/23/2006 0:00	-0.09	-0.102
583164	4/24/2006 0:00	-0.108	-0.102
583165	4/25/2006 0:00	-0.106	-0.101
583166	4/26/2006 0:00	-0.093	-0.101
583167	4/27/2006 0:00	-0.11	-0.1
583168	4/28/2006 0:00	-0.098	-0.099
583169	4/29/2006 0:00	-0.109	-0.1
583170	4/30/2006 0:00	-0.1	-0.101
583171	5/1/2006 0:00	-0.116	-0.101
583172	5/2/2006 0:00	-0.1	-0.1
583173	5/3/2006 0:00	-0.102	-0.1
583174	5/4/2006 0:00	-0.093	-0.099
583175	5/5/2006 0:00	-0.091	-0.099
583176	5/6/2006 0:00	-0.103	-0.099
583177	5/7/2006 0:00	-0.114	-0.098

583178	5/8/2006 0:00	-0.096	-0.099
583179	5/9/2006 0:00	-0.101	-0.098
583180	5/10/2006 0:00	-0.092	-0.097
583181	5/11/2006 0:00	-0.097	-0.097
583182	5/12/2006 0:00	-0.093	-0.096
583183	5/13/2006 0:00	-0.097	-0.094
583184	5/14/2006 0:00	-0.129	-0.094
583185	5/15/2006 0:00	-0.129	-0.094
583186	5/16/2006 0:00	-0.079	-0.094
583187	5/17/2006 0:00	-0.073	-0.093
583188	5/18/2006 0:00	-0.083	-0.093
583189	5/19/2006 0:00	-0.101	-0.093
583190	5/20/2006 0:00	-0.086	-0.092
583191	5/21/2006 0:00	-0.096	-0.092
583192	5/22/2006 0:00	-0.068	-0.091
583193	5/23/2006 0:00	-0.104	-0.092
583194	5/24/2006 0:00	-0.069	-0.092
583195	5/25/2006 0:00	-0.079	-0.092
583196	5/26/2006 0:00	-0.095	-0.092
583197	5/27/2006 0:00	-0.064	-0.091
583198	5/28/2006 0:00	-0.072	-0.091
583199	5/29/2006 0:00	-0.09	-0.091
583200	5/30/2006 0:00	-0.114	-0.09
583201	5/31/2006 0:00	-0.095	-0.089
583202	6/1/2006 0:00	-0.082	-0.088
583203	6/2/2006 0:00	-0.085	-0.089
583204	6/3/2006 0:00	-0.104	-0.089
583205	6/4/2006 0:00	-0.079	-0.089
583206	6/5/2006 0:00	-0.097	-0.088
583207	6/6/2006 0:00	-0.069	-0.088
583208	6/7/2006 0:00	-0.122	-0.089
583209	6/8/2006 0:00	-0.108	-0.088
583210	6/9/2006 0:00	-0.096	-0.089
583211	6/10/2006 0:00	-0.089	-0.09
583212	6/11/2006 0:00	-0.087	-0.09
583213	6/12/2006 0:00	-0.081	-0.091
583214	6/13/2006 0:00	-0.112	-0.091
583215	6/14/2006 0:00	-0.087	-0.091
583216	6/15/2006 0:00	-0.082	-0.091
583217	6/16/2006 0:00	-0.071	-0.09
583218	6/17/2006 0:00	-0.088	-0.091
583219	6/18/2006 0:00	-0.075	-0.092
583220	6/19/2006 0:00	-0.109	-0.092
583221	6/20/2006 0:00	-0.069	-0.093

583222	6/21/2006 0:00	-0.095	-0.095
583223	6/22/2006 0:00	-0.089	-0.096
583224	6/23/2006 0:00	-0.083	-0.096
583225	6/24/2006 0:00	-0.093	-0.095
583226	6/25/2006 0:00	-0.093	-0.095
583227	6/26/2006 0:00	-0.109	-0.095
583228	6/27/2006 0:00	-0.082	-0.095
583229	6/28/2006 0:00	-0.097	-0.096
583230	6/29/2006 0:00	-0.073	-0.095
583231	6/30/2006 0:00	-0.119	-0.095
583232	7/1/2006 0:00	-0.075	-0.095
583233	7/2/2006 0:00	-0.109	-0.096
583234	7/3/2006 0:00	-0.102	-0.095
583235	7/4/2006 0:00	-0.1	-0.096
583236	7/5/2006 0:00	-0.123	-0.095
583237	7/6/2006 0:00	-0.146	-0.097
583238	7/7/2006 0:00	-0.102	-0.097
583239	7/8/2006 0:00	-0.124	-0.098
583240	7/9/2006 0:00	-0.079	-0.099
583241	7/10/2006 0:00	-0.098	-0.099
583242	7/11/2006 0:00	-0.086	-0.098
583243	7/12/2006 0:00	-0.105	-0.098
583244	7/13/2006 0:00	-0.097	-0.099
583245	7/14/2006 0:00	-0.086	-0.099
583246	7/15/2006 0:00	-0.085	-0.099
583247	7/16/2006 0:00	-0.087	-0.098
583248	7/17/2006 0:00	-0.091	-0.098
583249	7/18/2006 0:00	-0.072	-0.098
583250	7/19/2006 0:00	-0.106	-0.098
583251	7/20/2006 0:00	-0.066	-0.098
583252	7/21/2006 0:00	-0.131	-0.097
583253	7/22/2006 0:00	-0.111	-0.096
583254	7/23/2006 0:00	-0.092	-0.096
583255	7/24/2006 0:00	-0.118	-0.096
583256	7/25/2006 0:00	-0.103	-0.097
583257	7/26/2006 0:00	-0.078	-0.097
583258	7/27/2006 0:00	-0.104	-0.097
583259	7/28/2006 0:00	-0.091	-0.097
583260	7/29/2006 0:00	-0.099	-0.097
583261	7/30/2006 0:00	-0.09	-0.097
583262	7/31/2006 0:00	-0.072	-0.097
583263	8/1/2006 0:00	-0.087	-0.097
583264	8/2/2006 0:00	-0.103	-0.097
583265	8/3/2006 0:00	-0.117	-0.098

583266	8/4/2006 0:00	-0.091	-0.099
583267	8/5/2006 0:00	-0.098	-0.099
583268	8/6/2006 0:00	-0.108	-0.098
583269	8/7/2006 0:00	-0.108	-0.098
583270	8/8/2006 0:00	-0.106	-0.098
583271	8/9/2006 0:00	-0.108	-0.097
583272	8/10/2006 0:00	-0.096	-0.096
583273	8/11/2006 0:00	-0.095	-0.097
583274	8/12/2006 0:00	-0.105	-0.097
583275	8/13/2006 0:00	-0.095	-0.097
583276	8/14/2006 0:00	-0.08	-0.098
583277	8/15/2006 0:00	-0.086	-0.099
583278	8/16/2006 0:00	-0.105	-0.1
583279	8/17/2006 0:00	-0.088	-0.1
583280	8/18/2006 0:00	-0.113	-0.101
583281	8/19/2006 0:00	-0.111	-0.1
583282	8/20/2006 0:00	-0.09	-0.101
583283	8/21/2006 0:00	-0.098	-0.102
583284	8/22/2006 0:00	-0.092	-0.102
583285	8/23/2006 0:00	-0.098	-0.102
583286	8/24/2006 0:00	-0.08	-0.102
583287	8/25/2006 0:00	-0.094	-0.102
583288	8/26/2006 0:00	-0.087	-0.103
583289	8/27/2006 0:00	-0.107	-0.103
583290	8/28/2006 0:00	-0.091	-0.103
583291	8/29/2006 0:00	-0.131	-0.104
583292	8/30/2006 0:00	-0.126	-0.104
583293	8/31/2006 0:00	-0.104	-0.105
583294	9/1/2006 0:00	-0.104	-0.104
583295	9/2/2006 0:00	-0.11	-0.105
583296	9/3/2006 0:00	-0.093	-0.104
583297	9/4/2006 0:00	-0.129	-0.104
583298	9/5/2006 0:00	-0.127	-0.104
583299	9/6/2006 0:00	-0.109	-0.104
583300	9/7/2006 0:00	-0.096	-0.104
583301	9/8/2006 0:00	-0.106	-0.104
583302	9/9/2006 0:00	-0.112	-0.105
583303	9/10/2006 0:00	-0.13	-0.106
583304	9/11/2006 0:00	-0.105	-0.107
583305	9/12/2006 0:00	-0.098	-0.108
583306	9/13/2006 0:00	-0.112	-0.108
583307	9/14/2006 0:00	-0.099	-0.107
583308	9/15/2006 0:00	-0.106	-0.106
583309	9/16/2006 0:00	-0.089	-0.106

583310	9/17/2006 0:00	-0.1	-0.107
583311	9/18/2006 0:00	-0.091	-0.108
583312	9/19/2006 0:00	-0.106	-0.108
583313	9/20/2006 0:00	-0.108	-0.108
583314	9/21/2006 0:00	-0.096	-0.108
583315	9/22/2006 0:00	-0.086	-0.108
583316	9/23/2006 0:00	-0.108	-0.109
583317	9/24/2006 0:00	-0.111	-0.109
583318	9/25/2006 0:00	-0.102	-0.11
583319	9/26/2006 0:00	-0.116	-0.109
583320	9/27/2006 0:00	-0.135	-0.108
583321	9/28/2006 0:00	-0.098	-0.109
583322	9/29/2006 0:00	-0.105	-0.108
583323	9/30/2006 0:00	-0.095	-0.107
583324	10/1/2006 0:00	-0.117	-0.106
583325	10/2/2006 0:00	-0.133	-0.105
583326	10/3/2006 0:00	-0.126	-0.105
583327	10/4/2006 0:00	-0.112	-0.106
583328	10/5/2006 0:00	-0.104	-0.106
583329	10/6/2006 0:00	-0.124	-0.106
583330	10/7/2006 0:00	-0.127	-0.106
583331	10/8/2006 0:00	-0.127	-0.107
583332	10/9/2006 0:00	-0.108	-0.107
583333	10/10/2006 0:00	-0.127	-0.107
583334	10/11/2006 0:00	-0.097	-0.108
583335	10/12/2006 0:00	-0.099	-0.107
583336	10/13/2006 0:00	-0.112	-0.107
583337	10/14/2006 0:00	-0.1	-0.107
583338	10/15/2006 0:00	-0.066	-0.106
583339	10/16/2006 0:00	-0.052	-0.106
583340	10/17/2006 0:00	-0.07	-0.106
583341	10/18/2006 0:00	-0.11	-0.105
583342	10/19/2006 0:00	-0.119	-0.105
583343	10/20/2006 0:00	-0.101	-0.105
583344	10/21/2006 0:00	-0.097	-0.105
583345	10/22/2006 0:00	-0.1	-0.105
583346	10/23/2006 0:00	-0.121	-0.104
583347	10/24/2006 0:00	-0.113	-0.103
583348	10/25/2006 0:00	-0.114	-0.102
583349	10/26/2006 0:00	-0.109	-0.101
583350	10/27/2006 0:00	-0.116	-0.101
583351	10/28/2006 0:00	-0.109	-0.102
583352	10/29/2006 0:00	-0.101	-0.101
583353	10/30/2006 0:00	-0.092	-0.101

583354	10/31/2006 0:00	-0.095	-0.103
583355	11/1/2006 0:00	-0.108	-0.105
583356	11/2/2006 0:00	-0.107	-0.107
583357	11/3/2006 0:00	-0.11	-0.107
583358	11/4/2006 0:00	-0.129	-0.108
583359	11/5/2006 0:00	-0.108	-0.108
583360	11/6/2006 0:00	-0.11	-0.108
583361	11/7/2006 0:00	-0.109	-0.109
583362	11/8/2006 0:00	-0.074	-0.109
583363	11/9/2006 0:00	-0.076	-0.109
583364	11/10/2006 0:00	-0.099	-0.109
583365	11/11/2006 0:00	-0.121	-0.109
583366	11/12/2006 0:00	-0.106	-0.108
583367	11/13/2006 0:00	-0.102	-0.108
583368	11/14/2006 0:00	-0.099	-0.108
583369	11/15/2006 0:00	-0.116	-0.11
583370	11/16/2006 0:00	-0.105	-0.111
583371	11/17/2006 0:00	-0.131	-0.111
583372	11/18/2006 0:00	-0.124	-0.111
583373	11/19/2006 0:00	-0.135	-0.112
583374	11/20/2006 0:00	-0.123	-0.112
583375	11/21/2006 0:00	-0.102	-0.112
583376	11/22/2006 0:00	-0.115	-0.112
583377	11/23/2006 0:00	-0.126	-0.113
583378	11/24/2006 0:00	-0.119	-0.114
583379	11/25/2006 0:00	-0.109	-0.116
583380	11/26/2006 0:00	-0.104	-0.116
583381	11/27/2006 0:00	-0.102	-0.117
583382	11/28/2006 0:00	-0.094	-0.117
583383	11/29/2006 0:00	-0.108	-0.118
583384	11/30/2006 0:00	-0.136	-0.118
583385	12/1/2006 0:00	-0.132	-0.119
583386	12/2/2006 0:00	-0.115	-0.119
583387	12/3/2006 0:00	-0.114	-0.118
583388	12/4/2006 0:00	-0.136	-0.119
583389	12/5/2006 0:00	-0.125	-0.118
583390	12/6/2006 0:00	-0.122	-0.119
583391	12/7/2006 0:00	-0.111	-0.12
583392	12/8/2006 0:00	-0.116	-0.12
583393	12/9/2006 0:00	-0.129	-0.12
583394	12/10/2006 0:00	-0.11	-0.121
583395	12/11/2006 0:00	-0.124	-0.122
583396	12/12/2006 0:00	-0.132	-0.123
583397	12/13/2006 0:00	-0.126	-0.124

583398	12/14/2006 0:00	-0.113	-0.127
583399	12/15/2006 0:00	-0.122	-0.127
583400	12/16/2006 0:00	-0.126	-0.128
583401	12/17/2006 0:00	-0.11	-0.128
583402	12/18/2006 0:00	-0.11	-0.129
583403	12/19/2006 0:00	-0.133	-0.128
583404	12/20/2006 0:00	-0.126	-0.127
583405	12/21/2006 0:00	-0.146	-0.128
583406	12/22/2006 0:00	-0.128	-0.129
583407	12/23/2006 0:00	-0.12	-0.13
583408	12/24/2006 0:00	-0.121	-0.131
583409	12/25/2006 0:00	-0.155	-0.131
583410	12/26/2006 0:00	-0.145	-0.131
583411	12/27/2006 0:00	-0.142	-0.131
583412	12/28/2006 0:00	-0.132	-0.13
583413	12/29/2006 0:00	-0.163	-0.131
583414	12/30/2006 0:00	-0.127	-0.132
583415	12/31/2006 0:00	-0.15	-0.133
583416	1/1/2007 0:00	-0.142	-0.133
583417	1/2/2007 0:00	-0.129	-0.133
583418	1/3/2007 0:00	-0.105	-0.134
583419	1/4/2007 0:00	-0.113	-0.135
583420	1/5/2007 0:00	-0.153	-0.134
583421	1/6/2007 0:00	-0.138	-0.133
583422	1/7/2007 0:00	-0.148	-0.133
583423	1/8/2007 0:00	-0.137	-0.134
583424	1/9/2007 0:00	-0.135	-0.135
583425	1/10/2007 0:00	-0.113	-0.134
583426	1/11/2007 0:00	-0.106	-0.134
583427	1/12/2007 0:00	-0.124	-0.133
583428	1/13/2007 0:00	-0.145	-0.133
583429	1/14/2007 0:00	-0.139	-0.132
583430	1/15/2007 0:00	-0.15	-0.133
583431	1/16/2007 0:00	-0.128	-0.131
583432	1/17/2007 0:00	-0.121	-0.13
583433	1/18/2007 0:00	-0.152	-0.13
583434	1/19/2007 0:00	-0.141	-0.131
583435	1/20/2007 0:00	-0.116	-0.132
583436	1/21/2007 0:00	-0.106	-0.131
583437	1/22/2007 0:00	-0.13	-0.13
583438	1/23/2007 0:00	-0.144	-0.13
583439	1/24/2007 0:00	-0.153	-0.13
583440	1/25/2007 0:00	-0.141	-0.129
583441	1/26/2007 0:00	-0.122	-0.13

583442	1/27/2007 0:00	-0.117	-0.13
583443	1/28/2007 0:00	-0.134	-0.13
583444	1/29/2007 0:00	-0.14	-0.13
583445	1/30/2007 0:00	-0.134	-0.129
583446	1/31/2007 0:00	-0.095	-0.128
583447	2/1/2007 0:00	-0.12	-0.128
583448	2/2/2007 0:00	-0.119	-0.127
583449	2/3/2007 0:00	-0.137	-0.126
583450	2/4/2007 0:00	-0.141	-0.124
583451	2/5/2007 0:00	-0.12	-0.124
583452	2/6/2007 0:00	-0.136	-0.124
583453	2/7/2007 0:00	-0.13	-0.123
583454	2/8/2007 0:00	-0.13	-0.122
583455	2/9/2007 0:00	-0.117	-0.121
583456	2/10/2007 0:00	-0.127	-0.12
583457	2/11/2007 0:00	-0.104	-0.12
583458	2/12/2007 0:00	-0.142	-0.118
583459	2/13/2007 0:00	-0.133	-0.117
583460	2/14/2007 0:00	-0.117	-0.116
583461	2/15/2007 0:00	-0.131	-0.116
583462	2/16/2007 0:00	-0.104	-0.116
583463	2/17/2007 0:00	-0.106	-0.116
583464	2/18/2007 0:00	-0.109	-0.117
583465	2/19/2007 0:00	-0.102	-0.117
583466	2/20/2007 0:00	-0.113	-0.115
583467	2/21/2007 0:00	-0.101	-0.115
583468	2/22/2007 0:00	-0.103	-0.114
583469	2/23/2007 0:00	-0.105	-0.113
583470	2/24/2007 0:00	-0.123	-0.113
583471	2/25/2007 0:00	-0.111	-0.113
583472	2/26/2007 0:00	-0.109	-0.112
583473	2/27/2007 0:00	-0.077	-0.112
583474	2/28/2007 0:00	-0.091	-0.111
583475	3/1/2007 0:00	-0.109	-0.111
583476	3/2/2007 0:00	-0.126	-0.11
583477	3/3/2007 0:00	-0.113	-0.109
583478	3/4/2007 0:00	-0.114	-0.108
583479	3/5/2007 0:00	-0.131	-0.107
583480	3/6/2007 0:00	-0.137	-0.107
583481	3/7/2007 0:00	-0.103	-0.107
583482	3/8/2007 0:00	-0.11	-0.107
583483	3/9/2007 0:00	-0.109	-0.106
583484	3/10/2007 0:00	-0.107	-0.106
583485	3/11/2007 0:00	-0.128	-0.105

583486	3/12/2007 0:00	-0.121	-0.104
583487	3/13/2007 0:00	-0.092	-0.103
583488	3/14/2007 0:00	-0.089	-0.104
583489	3/15/2007 0:00	-0.124	-0.105
583490	3/16/2007 0:00	-0.126	-0.106
583491	3/17/2007 0:00	-0.097	-0.105
583492	3/18/2007 0:00	-0.078	-0.104
583493	3/19/2007 0:00	-0.095	-0.104
583494	3/20/2007 0:00	-0.073	-0.104
583495	3/21/2007 0:00	-0.099	-0.104
583496	3/22/2007 0:00	-0.111	-0.103
583497	3/23/2007 0:00	-0.104	-0.104
583498	3/24/2007 0:00	-0.082	-0.104
583499	3/25/2007 0:00	-0.085	-0.103
583500	3/26/2007 0:00	-0.083	-0.103
583501	3/27/2007 0:00	-0.085	-0.102
583502	3/28/2007 0:00	-0.098	-0.101
583503	3/29/2007 0:00	-0.12	-0.101
583504	3/30/2007 0:00	-0.118	-0.101
583505	3/31/2007 0:00	-0.11	-0.1
583506	4/1/2007 0:00	-0.09	-0.099
583507	4/2/2007 0:00	-0.088	-0.099
583508	4/3/2007 0:00	-0.112	-0.101
583509	4/4/2007 0:00	-0.11	-0.102
583510	4/5/2007 0:00	-0.134	-0.104
583511	4/6/2007 0:00	-0.116	-0.104
583512	4/7/2007 0:00	-0.143	-0.103
583513	4/8/2007 0:00	-0.089	-0.103
583514	4/9/2007 0:00	-0.094	-0.104
583515	4/10/2007 0:00	-0.103	-0.105
583516	4/11/2007 0:00	-0.094	-0.106
583517	4/12/2007 0:00	-0.083	-0.108
583518	4/13/2007 0:00	-0.102	-0.108
583519	4/14/2007 0:00	-0.092	-0.108
583520	4/15/2007 0:00	-0.094	-0.108
583521	4/16/2007 0:00	-0.103	-0.109
583522	4/17/2007 0:00	-0.094	-0.11
583523	4/18/2007 0:00	-0.127	-0.111
583524	4/19/2007 0:00	-0.12	-0.11
583525	4/20/2007 0:00	-0.13	-0.11
583526	4/21/2007 0:00	-0.101	-0.11
583527	4/22/2007 0:00	-0.093	-0.11
583528	4/23/2007 0:00	-0.102	-0.109
583529	4/24/2007 0:00	-0.111	-0.11

583530	4/25/2007 0:00	-0.119	-0.112
583531	4/26/2007 0:00	-0.122	-0.112
583532	4/27/2007 0:00	-0.122	-0.113
583533	4/28/2007 0:00	-0.118	-0.114
583534	4/29/2007 0:00	-0.126	-0.116
583535	4/30/2007 0:00	-0.119	-0.117
583536	5/1/2007 0:00	-0.119	-0.118
583537	5/2/2007 0:00	-0.129	-0.118
583538	5/3/2007 0:00	-0.119	-0.12
583539	5/4/2007 0:00	-0.097	-0.12
583540	5/5/2007 0:00	-0.104	-0.12
583541	5/6/2007 0:00	-0.121	-0.12
583542	5/7/2007 0:00	-0.114	-0.121
583543	5/8/2007 0:00	-0.128	-0.122
583544	5/9/2007 0:00	-0.124	-0.123
583545	5/10/2007 0:00	-0.128	-0.123
583546	5/11/2007 0:00	-0.132	-0.123
583547	5/12/2007 0:00	-0.119	-0.123
583548	5/13/2007 0:00	-0.117	-0.123
583549	5/14/2007 0:00	-0.147	-0.123
583550	5/15/2007 0:00	-0.118	-0.123
583551	5/16/2007 0:00	-0.129	-0.123
583552	5/17/2007 0:00	-0.123	-0.123
583553	5/18/2007 0:00	-0.131	-0.122
583554	5/19/2007 0:00	-0.138	-0.122
583555	5/20/2007 0:00	-0.126	-0.122
583556	5/21/2007 0:00	-0.124	-0.122
583557	5/22/2007 0:00	-0.14	-0.12
583558	5/23/2007 0:00	-0.118	-0.12
583559	5/24/2007 0:00	-0.119	-0.12
583560	5/25/2007 0:00	-0.123	-0.12
583561	5/26/2007 0:00	-0.132	-0.12
583562	5/27/2007 0:00	-0.114	-0.12
583563	5/28/2007 0:00	-0.119	-0.119
583564	5/29/2007 0:00	-0.118	-0.12
583565	5/30/2007 0:00	-0.118	-0.12
583566	5/31/2007 0:00	-0.123	-0.12
583567	6/1/2007 0:00	-0.105	-0.119
583568	6/2/2007 0:00	-0.114	-0.12
583569	6/3/2007 0:00	-0.117	-0.12
583570	6/4/2007 0:00	-0.107	-0.12
583571	6/5/2007 0:00	-0.093	-0.121
583572	6/6/2007 0:00	-0.06	-0.121
583573	6/7/2007 0:00	-0.117	-0.121

583574	6/8/2007 0:00	-0.131	-0.122
583575	6/9/2007 0:00	-0.118	-0.123
583576	6/10/2007 0:00	-0.132	-0.123
583577	6/11/2007 0:00	-0.117	-0.124
583578	6/12/2007 0:00	-0.097	-0.126
583579	6/13/2007 0:00	-0.14	-0.127
583580	6/14/2007 0:00	-0.143	-0.128
583581	6/15/2007 0:00	-0.12	-0.129
583582	6/16/2007 0:00	-0.122	-0.129
583583	6/17/2007 0:00	-0.137	-0.13
583584	6/18/2007 0:00	-0.124	-0.131
583585	6/19/2007 0:00	-0.144	-0.132
583586	6/20/2007 0:00	-0.152	-0.132
583587	6/21/2007 0:00	-0.128	-0.134
583588	6/22/2007 0:00	-0.144	-0.136
583589	6/23/2007 0:00	-0.152	-0.136
583590	6/24/2007 0:00	-0.149	-0.136
583591	6/25/2007 0:00	-0.139	-0.136
583592	6/26/2007 0:00	-0.163	-0.136
583593	6/27/2007 0:00	-0.156	-0.137
583594	6/28/2007 0:00	-0.162	-0.139
583595	6/29/2007 0:00	-0.145	-0.139
583596	6/30/2007 0:00	-0.138	-0.138
583597	7/1/2007 0:00	-0.138	-0.138
583598	7/2/2007 0:00	-0.131	-0.139
583599	7/3/2007 0:00	-0.143	-0.139
583600	7/4/2007 0:00	-0.139	-0.139
583601	7/5/2007 0:00	-0.129	-0.138
583602	7/6/2007 0:00	-0.129	-0.137
583603	7/7/2007 0:00	-0.124	-0.137
583604	7/8/2007 0:00	-0.114	-0.137
583605	7/9/2007 0:00	-0.133	-0.137
583606	7/10/2007 0:00	-0.121	-0.136
583607	7/11/2007 0:00	-0.136	-0.136
583608	7/12/2007 0:00	-0.162	-0.135
583609	7/13/2007 0:00	-0.147	-0.134
583610	7/14/2007 0:00	-0.144	-0.133
583611	7/15/2007 0:00	-0.118	-0.133
583612	7/16/2007 0:00	-0.122	-0.132
583613	7/17/2007 0:00	-0.141	-0.132
583614	7/18/2007 0:00	-0.142	-0.132
583615	7/19/2007 0:00	-0.132	-0.132
583616	7/20/2007 0:00	-0.121	-0.131
583617	7/21/2007 0:00	-0.117	-0.13

583618	7/22/2007 0:00	-0.126	-0.13
583619	7/23/2007 0:00	-0.145	-0.13
583620	7/24/2007 0:00	-0.132	-0.13
583621	7/25/2007 0:00	-0.121	-0.129
583622	7/26/2007 0:00	-0.136	-0.129
583623	7/27/2007 0:00	-0.13	-0.129
583624	7/28/2007 0:00	-0.137	-0.128
583625	7/29/2007 0:00	-0.137	-0.127
583626	7/30/2007 0:00	-0.122	-0.126
583627	7/31/2007 0:00	-0.133	-0.127
583628	8/1/2007 0:00	-0.128	-0.127
583629	8/2/2007 0:00	-0.13	-0.128
583630	8/3/2007 0:00	-0.129	-0.128
583631	8/4/2007 0:00	-0.117	-0.128
583632	8/5/2007 0:00	-0.108	-0.129
583633	8/6/2007 0:00	-0.116	-0.129
583634	8/7/2007 0:00	-0.138	-0.129
583635	8/8/2007 0:00	-0.111	-0.129
583636	8/9/2007 0:00	-0.109	-0.129
583637	8/10/2007 0:00	-0.116	-0.13
583638	8/11/2007 0:00	-0.124	-0.13
583639	8/12/2007 0:00	-0.129	-0.13
583640	8/13/2007 0:00	-0.12	-0.13
583641	8/14/2007 0:00	-0.121	-0.13
583642	8/15/2007 0:00	-0.151	-0.132
583643	8/16/2007 0:00	-0.115	-0.132
583644	8/17/2007 0:00	-0.16	-0.133
583645	8/18/2007 0:00	-0.143	-0.133
583646	8/19/2007 0:00	-0.135	-0.133
583647	8/20/2007 0:00	-0.151	-0.134
583648	8/21/2007 0:00	-0.134	-0.135
583649	8/22/2007 0:00	-0.134	-0.136
583650	8/23/2007 0:00	-0.125	-0.136
583651	8/24/2007 0:00	-0.148	-0.137
583652	8/25/2007 0:00	-0.154	-0.138
583653	8/26/2007 0:00	-0.131	-0.138
583654	8/27/2007 0:00	-0.141	-0.139
583655	8/28/2007 0:00	-0.127	-0.139
583656	8/29/2007 0:00	-0.14	-0.139
583657	8/30/2007 0:00	-0.171	-0.14
583658	8/31/2007 0:00	-0.142	-0.139
583659	9/1/2007 0:00	-0.146	-0.139
583660	9/2/2007 0:00	-0.127	-0.138
583661	9/3/2007 0:00	-0.145	-0.139

583662	9/4/2007 0:00	-0.145	-0.138
583663	9/5/2007 0:00	-0.13	-0.137
583664	9/6/2007 0:00	-0.158	-0.137
583665	9/7/2007 0:00	-0.146	-0.137
583666	9/8/2007 0:00	-0.131	-0.137
583667	9/9/2007 0:00	-0.133	-0.137
583668	9/10/2007 0:00	-0.118	-0.137
583669	9/11/2007 0:00	-0.153	-0.136
583670	9/12/2007 0:00	-0.139	-0.136
583671	9/13/2007 0:00	-0.119	-0.137
583672	9/14/2007 0:00	-0.141	-0.137
583673	9/15/2007 0:00	-0.126	-0.136
583674	9/16/2007 0:00	-0.125	-0.135
583675	9/17/2007 0:00	-0.14	-0.134
583676	9/18/2007 0:00	-0.154	-0.134
583677	9/19/2007 0:00	-0.118	-0.133
583678	9/20/2007 0:00	-0.112	-0.133
583679	9/21/2007 0:00	-0.137	-0.132
583680	9/22/2007 0:00	-0.135	-0.131
583681	9/23/2007 0:00	-0.117	-0.13
583682	9/24/2007 0:00	-0.152	-0.13
583683	9/25/2007 0:00	-0.139	-0.131
583684	9/26/2007 0:00	-0.114	-0.132
583685	9/27/2007 0:00	-0.133	-0.13
583686	9/28/2007 0:00	-0.157	-0.129
583687	9/29/2007 0:00	-0.142	-0.129
583688	9/30/2007 0:00	-0.134	-0.129
583689	10/1/2007 0:00	-0.118	-0.128
583690	10/2/2007 0:00	-0.122	-0.129
583691	10/3/2007 0:00	-0.12	-0.127
583692	10/4/2007 0:00	-0.119	-0.126
583693	10/5/2007 0:00	-0.142	-0.126
583694	10/6/2007 0:00	-0.104	-0.126
583695	10/7/2007 0:00	-0.124	-0.127
583696	10/8/2007 0:00	-0.116	-0.127
583697	10/9/2007 0:00	-0.135	-0.127
583698	10/10/2007 0:00	-0.173	-0.127
583699	10/11/2007 0:00	-0.124	-0.127
583700	10/12/2007 0:00	-0.11	-0.128
583701	10/13/2007 0:00	-0.106	-0.13
583702	10/14/2007 0:00	-0.123	-0.129
583703	10/15/2007 0:00	-0.136	-0.129
583704	10/16/2007 0:00	-0.103	-0.129
583705	10/17/2007 0:00	-0.129	-0.13

583706	10/18/2007 0:00	-0.082	-0.131
583707	10/19/2007 0:00	-0.121	-0.131
583708	10/20/2007 0:00	-0.123	-0.132
583709	10/21/2007 0:00	-0.133	-0.132
583710	10/22/2007 0:00	-0.138	-0.135
583711	10/23/2007 0:00	-0.145	-0.136
583712	10/24/2007 0:00	-0.129	-0.138
583713	10/25/2007 0:00	-0.145	-0.139
583714	10/26/2007 0:00	-0.14	-0.137
583715	10/27/2007 0:00	-0.155	-0.138
583716	10/28/2007 0:00	-0.175	-0.14
583717	10/29/2007 0:00	-0.131	-0.141
583718	10/30/2007 0:00	-0.142	-0.141
583719	10/31/2007 0:00	-0.142	-0.142
583720	11/1/2007 0:00	-0.151	-0.143
583721	11/2/2007 0:00	-0.143	-0.145
583722	11/3/2007 0:00	-0.132	-0.148
583723	11/4/2007 0:00	-0.144	-0.149
583724	11/5/2007 0:00	-0.155	-0.15
583725	11/6/2007 0:00	-0.17	-0.151
583726	11/7/2007 0:00	-0.182	-0.152
583727	11/8/2007 0:00	-0.161	-0.152
583728	11/9/2007 0:00	-0.155	-0.154
583729	11/10/2007 0:00	-0.137	-0.154
583730	11/11/2007 0:00	-0.152	-0.154
583731	11/12/2007 0:00	-0.151	-0.154
583732	11/13/2007 0:00	-0.147	-0.153
583733	11/14/2007 0:00	-0.138	-0.154
583734	11/15/2007 0:00	-0.141	-0.154
583735	11/16/2007 0:00	-0.16	-0.154
583736	11/17/2007 0:00	-0.173	-0.154
583737	11/18/2007 0:00	-0.172	-0.155
583738	11/19/2007 0:00	-0.148	-0.156
583739	11/20/2007 0:00	-0.153	-0.156
583740	11/21/2007 0:00	-0.166	-0.156
583741	11/22/2007 0:00	-0.179	-0.155
583742	11/23/2007 0:00	-0.15	-0.154
583743	11/24/2007 0:00	-0.171	-0.153
583744	11/25/2007 0:00	-0.148	-0.153
583745	11/26/2007 0:00	-0.166	-0.154
583746	11/27/2007 0:00	-0.133	-0.155
583747	11/28/2007 0:00	-0.146	-0.155
583748	11/29/2007 0:00	-0.171	-0.155
583749	11/30/2007 0:00	-0.143	-0.155

583750	12/1/2007 0:00	-0.151	-0.155
583751	12/2/2007 0:00	-0.141	-0.155
583752	12/3/2007 0:00	-0.172	-0.154
583753	12/4/2007 0:00	-0.173	-0.153
583754	12/5/2007 0:00	-0.143	-0.152
583755	12/6/2007 0:00	-0.146	-0.151
583756	12/7/2007 0:00	-0.146	-0.151
583757	12/8/2007 0:00	-0.137	-0.151
583758	12/9/2007 0:00	-0.145	-0.151
583759	12/10/2007 0:00	-0.148	-0.15
583760	12/11/2007 0:00	-0.168	-0.149
583761	12/12/2007 0:00	-0.171	-0.148
583762	12/13/2007 0:00	-0.168	-0.148
583763	12/14/2007 0:00	-0.141	-0.148
583764	12/15/2007 0:00	-0.13	-0.148
583765	12/16/2007 0:00	-0.142	-0.147
583766	12/17/2007 0:00	-0.165	-0.147
583767	12/18/2007 0:00	-0.151	-0.148
583768	12/19/2007 0:00	-0.129	-0.147
583769	12/20/2007 0:00	-0.114	-0.146
583770	12/21/2007 0:00	-0.127	-0.146
583771	12/22/2007 0:00	-0.157	-0.146
583772	12/23/2007 0:00	-0.193	-0.146
583773	12/24/2007 0:00	-0.153	-0.146
583774	12/25/2007 0:00	-0.128	-0.146
583775	12/26/2007 0:00	-0.126	-0.146
583776	12/27/2007 0:00	-0.14	-0.146
583777	12/28/2007 0:00	-0.136	-0.145
583778	12/29/2007 0:00	-0.146	-0.145
583779	12/30/2007 0:00	-0.148	-0.146
583780	12/31/2007 0:00	-0.137	-0.146
583781	1/1/2008 0:00	-0.152	-0.146
583782	1/2/2008 0:00	-0.151	-0.146
583783	1/3/2008 0:00	-0.148	-0.146
583784	1/4/2008 0:00	-0.132	-0.147
583785	1/5/2008 0:00	-0.156	-0.148
583786	1/6/2008 0:00	-0.157	-0.148
583787	1/7/2008 0:00	-0.119	-0.149
583788	1/8/2008 0:00	-0.145	-0.149
583789	1/9/2008 0:00	-0.147	-0.149
583790	1/10/2008 0:00	-0.159	-0.151
583791	1/11/2008 0:00	-0.154	-0.152
583792	1/12/2008 0:00	-0.149	-0.152
583793	1/13/2008 0:00	-0.164	-0.152

583794	1/14/2008 0:00	-0.157	-0.152
583795	1/15/2008 0:00	-0.142	-0.152
583796	1/16/2008 0:00	-0.15	-0.153
583797	1/17/2008 0:00	-0.147	-0.153
583798	1/18/2008 0:00	-0.16	-0.154
583799	1/19/2008 0:00	-0.156	-0.153
583800	1/20/2008 0:00	-0.16	-0.154
583801	1/21/2008 0:00	-0.131	-0.154
583802	1/22/2008 0:00	-0.182	-0.155
583803	1/23/2008 0:00	-0.181	-0.156
583804	1/24/2008 0:00	-0.162	-0.156
583805	1/25/2008 0:00	-0.19	-0.156
583806	1/26/2008 0:00	-0.153	-0.156
583807	1/27/2008 0:00	-0.146	-0.156
583808	1/28/2008 0:00	-0.138	-0.156
583809	1/29/2008 0:00	-0.14	-0.155
583810	1/30/2008 0:00	-0.143	-0.154
583811	1/31/2008 0:00	-0.167	-0.154
583812	2/1/2008 0:00	-0.162	-0.154
583813	2/2/2008 0:00	-0.168	-0.154
583814	2/3/2008 0:00	-0.139	-0.154
583815	2/4/2008 0:00	-0.156	-0.154
583816	2/5/2008 0:00	-0.156	-0.153
583817	2/6/2008 0:00	-0.171	-0.153
583818	2/7/2008 0:00	-0.169	-0.151
583819	2/8/2008 0:00	-0.139	-0.149
583820	2/9/2008 0:00	-0.152	-0.149
583821	2/10/2008 0:00	-0.14	-0.148
583822	2/11/2008 0:00	-0.156	-0.148
583823	2/12/2008 0:00	-0.149	-0.149
583824	2/13/2008 0:00	-0.132	-0.149
583825	2/14/2008 0:00	-0.138	-0.149
583826	2/15/2008 0:00	-0.147	-0.149
583827	2/16/2008 0:00	-0.146	-0.148
583828	2/17/2008 0:00	-0.161	-0.148
583829	2/18/2008 0:00	-0.132	-0.147
583830	2/19/2008 0:00	-0.162	-0.148
583831	2/20/2008 0:00	-0.143	-0.147
583832	2/21/2008 0:00	-0.119	-0.147
583833	2/22/2008 0:00	-0.132	-0.146
583834	2/23/2008 0:00	-0.12	-0.145
583835	2/24/2008 0:00	-0.159	-0.145
583836	2/25/2008 0:00	-0.14	-0.145
583837	2/26/2008 0:00	-0.164	-0.144

583838	2/27/2008 0:00	-0.175	-0.143
583839	2/28/2008 0:00	-0.137	-0.143
583840	2/29/2008 0:00	-0.146	-0.143
583841	3/1/2008 0:00	-0.143	-0.142
583842	3/2/2008 0:00	-0.137	-0.141
583843	3/3/2008 0:00	-0.154	-0.141
583844	3/4/2008 0:00	-0.156	-0.14
583845	3/5/2008 0:00	-0.156	-0.14
583846	3/6/2008 0:00	-0.137	-0.139
583847	3/7/2008 0:00	-0.154	-0.14
583848	3/8/2008 0:00	-0.122	-0.141
583849	3/9/2008 0:00	-0.145	-0.141
583850	3/10/2008 0:00	-0.146	-0.142
583851	3/11/2008 0:00	-0.138	-0.141
583852	3/12/2008 0:00	-0.13	-0.141
583853	3/13/2008 0:00	-0.12	-0.14
583854	3/14/2008 0:00	-0.141	-0.139
583855	3/15/2008 0:00	-0.131	-0.139
583856	3/16/2008 0:00	-0.111	-0.138
583857	3/17/2008 0:00	-0.123	-0.138
583858	3/18/2008 0:00	-0.14	-0.138
583859	3/19/2008 0:00	-0.119	-0.137
583860	3/20/2008 0:00	-0.137	-0.137
583861	3/21/2008 0:00	-0.146	-0.136
583862	3/22/2008 0:00	-0.152	-0.135
583863	3/23/2008 0:00	-0.16	-0.135
583864	3/24/2008 0:00	-0.132	-0.135
583865	3/25/2008 0:00	-0.14	-0.134
583866	3/26/2008 0:00	-0.136	-0.133
583867	3/27/2008 0:00	-0.141	-0.133
583868	3/28/2008 0:00	-0.149	-0.133
583869	3/29/2008 0:00	-0.127	-0.134
583870	3/30/2008 0:00	-0.15	-0.133
583871	3/31/2008 0:00	-0.117	-0.133
583872	4/1/2008 0:00	-0.136	-0.133
583873	4/2/2008 0:00	-0.123	-0.133
583874	4/3/2008 0:00	-0.133	-0.133
583875	4/4/2008 0:00	-0.145	-0.133
583876	4/5/2008 0:00	-0.121	-0.132
583877	4/6/2008 0:00	-0.124	-0.132
583878	4/7/2008 0:00	-0.137	-0.131
583879	4/8/2008 0:00	-0.125	-0.131
583880	4/9/2008 0:00	-0.112	-0.132
583881	4/10/2008 0:00	-0.125	-0.132

583882	4/11/2008 0:00	-0.132	-0.131
583883	4/12/2008 0:00	-0.145	-0.131
583884	4/13/2008 0:00	-0.146	-0.131
583885	4/14/2008 0:00	-0.122	-0.132
583886	4/15/2008 0:00	-0.116	-0.131
583887	4/16/2008 0:00	-0.112	-0.132
583888	4/17/2008 0:00	-0.126	-0.132
583889	4/18/2008 0:00	-0.129	-0.133
583890	4/19/2008 0:00	-0.117	-0.133
583891	4/20/2008 0:00	-0.131	-0.134
583892	4/21/2008 0:00	-0.119	-0.135
583893	4/22/2008 0:00	-0.143	-0.135
583894	4/23/2008 0:00	-0.162	-0.136
583895	4/24/2008 0:00	-0.137	-0.136
583896	4/25/2008 0:00	-0.138	-0.136
583897	4/26/2008 0:00	-0.12	-0.137
583898	4/27/2008 0:00	-0.148	-0.137
583899	4/28/2008 0:00	-0.147	-0.137
583900	4/29/2008 0:00	-0.144	-0.137
583901	4/30/2008 0:00	-0.137	-0.138
583902	5/1/2008 0:00	-0.146	-0.14
583903	5/2/2008 0:00	-0.132	-0.14
583904	5/3/2008 0:00	-0.149	-0.141
583905	5/4/2008 0:00	-0.139	-0.141
583906	5/5/2008 0:00	-0.158	-0.141
583907	5/6/2008 0:00	-0.154	-0.141
583908	5/7/2008 0:00	-0.137	-0.141
583909	5/8/2008 0:00	-0.153	-0.139
583910	5/9/2008 0:00	-0.127	-0.138
583911	5/10/2008 0:00	-0.134	-0.138
583912	5/11/2008 0:00	-0.145	-0.137
583913	5/12/2008 0:00	-0.147	-0.138
583914	5/13/2008 0:00	-0.13	-0.138
583915	5/14/2008 0:00	-0.15	-0.138
583916	5/15/2008 0:00	-0.154	-0.138
583917	5/16/2008 0:00	-0.158	-0.137
583918	5/17/2008 0:00	-0.131	-0.136
583919	5/18/2008 0:00	-0.139	-0.136
583920	5/19/2008 0:00	-0.136	-0.135
583921	5/20/2008 0:00	-0.126	-0.134
583922	5/21/2008 0:00	-0.123	-0.133
583923	5/22/2008 0:00	-0.113	-0.133
583924	5/23/2008 0:00	-0.104	-0.132
583925	5/24/2008 0:00	-0.123	-0.131

583926	5/25/2008 0:00	-0.127	-0.131
583927	5/26/2008 0:00	-0.13	-0.131
583928	5/27/2008 0:00	-0.141	-0.131
583929	5/28/2008 0:00	-0.139	-0.131
583930	5/29/2008 0:00	-0.147	-0.131
583931	5/30/2008 0:00	-0.136	-0.131
583932	5/31/2008 0:00	-0.121	-0.131
583933	6/1/2008 0:00	-0.117	-0.13
583934	6/2/2008 0:00	-0.135	-0.13
583935	6/3/2008 0:00	-0.114	-0.13
583936	6/4/2008 0:00	-0.109	-0.13
583937	6/5/2008 0:00	-0.123	-0.13
583938	6/6/2008 0:00	-0.151	-0.131
583939	6/7/2008 0:00	-0.106	-0.131
583940	6/8/2008 0:00	-0.123	-0.132
583941	6/9/2008 0:00	-0.143	-0.133
583942	6/10/2008 0:00	-0.129	-0.133
583943	6/11/2008 0:00	-0.141	-0.133
583944	6/12/2008 0:00	-0.128	-0.133
583945	6/13/2008 0:00	-0.148	-0.134
583946	6/14/2008 0:00	-0.14	-0.135
583947	6/15/2008 0:00	-0.152	-0.135
583948	6/16/2008 0:00	-0.123	-0.135
583949	6/17/2008 0:00	-0.143	-0.136
583950	6/18/2008 0:00	-0.144	-0.136
583951	6/19/2008 0:00	-0.138	-0.137
583952	6/20/2008 0:00	-0.133	-0.137
583953	6/21/2008 0:00	-0.131	-0.137
583954	6/22/2008 0:00	-0.136	-0.137
583955	6/23/2008 0:00	-0.133	-0.137
583956	6/24/2008 0:00	-0.133	-0.138
583957	6/25/2008 0:00	-0.145	-0.138
583958	6/26/2008 0:00	-0.129	-0.138
583959	6/27/2008 0:00	-0.146	-0.138
583960	6/28/2008 0:00	-0.16	-0.138
583961	6/29/2008 0:00	-0.165	-0.138
583962	6/30/2008 0:00	-0.149	-0.138
583963	7/1/2008 0:00	-0.128	-0.138
583964	7/2/2008 0:00	-0.144	-0.138
583965	7/3/2008 0:00	-0.131	-0.137
583966	7/4/2008 0:00	-0.131	-0.136
583967	7/5/2008 0:00	-0.129	-0.135
583968	7/6/2008 0:00	-0.125	-0.134
583969	7/7/2008 0:00	-0.127	-0.135

583970	7/8/2008 0:00	-0.125	-0.134
583971	7/9/2008 0:00	-0.135	-0.135
583972	7/10/2008 0:00	-0.144	-0.135
583973	7/11/2008 0:00	-0.143	-0.135
583974	7/12/2008 0:00	-0.138	-0.135
583975	7/13/2008 0:00	-0.135	-0.134
583976	7/14/2008 0:00	-0.143	-0.132
583977	7/15/2008 0:00	-0.143	-0.131
583978	7/16/2008 0:00	-0.143	-0.131
583979	7/17/2008 0:00	-0.127	-0.131
583980	7/18/2008 0:00	-0.122	-0.131
583981	7/19/2008 0:00	-0.099	-0.131
583982	7/20/2008 0:00	-0.113	-0.132
583983	7/21/2008 0:00	-0.111	-0.132
583984	7/22/2008 0:00	-0.14	-0.133
583985	7/23/2008 0:00	-0.125	-0.134
583986	7/24/2008 0:00	-0.147	-0.134
583987	7/25/2008 0:00	-0.136	-0.135
583988	7/26/2008 0:00	-0.155	-0.135
583989	7/27/2008 0:00	-0.125	-0.135
583990	7/28/2008 0:00	-0.109	-0.135
583991	7/29/2008 0:00	-0.111	-0.135
583992	7/30/2008 0:00	-0.134	-0.135
583993	7/31/2008 0:00	-0.14	-0.135
583994	8/1/2008 0:00	-0.143	-0.135
583995	8/2/2008 0:00	-0.139	-0.136
583996	8/3/2008 0:00	-0.132	-0.137
583997	8/4/2008 0:00	-0.138	-0.139
583998	8/5/2008 0:00	-0.16	-0.14
583999	8/6/2008 0:00	-0.153	-0.14
584000	8/7/2008 0:00	-0.141	-0.141
584001	8/8/2008 0:00	-0.14	-0.141
584002	8/9/2008 0:00	-0.151	-0.142
584003	8/10/2008 0:00	-0.14	-0.142
584004	8/11/2008 0:00	-0.144	-0.143
584005	8/12/2008 0:00	-0.142	-0.143
584006	8/13/2008 0:00	-0.141	-0.145
584007	8/14/2008 0:00	-0.152	-0.147
584008	8/15/2008 0:00	-0.132	-0.146
584009	8/16/2008 0:00	-0.157	-0.146
584010	8/17/2008 0:00	-0.156	-0.147
584011	8/18/2008 0:00	-0.144	-0.148
584012	8/19/2008 0:00	-0.158	-0.149
584013	8/20/2008 0:00	-0.139	-0.15

584014	8/21/2008 0:00	-0.124	-0.15
584015	8/22/2008 0:00	-0.147	-0.15
584016	8/23/2008 0:00	-0.145	-0.151
584017	8/24/2008 0:00	-0.172	-0.151
584018	8/25/2008 0:00	-0.146	-0.151
584019	8/26/2008 0:00	-0.174	-0.152
584020	8/27/2008 0:00	-0.135	-0.152
584021	8/28/2008 0:00	-0.15	-0.152
584022	8/29/2008 0:00	-0.177	-0.153
584023	8/30/2008 0:00	-0.107	-0.153
584024	8/31/2008 0:00	-0.151	-0.153
584025	9/1/2008 0:00	-0.16	-0.154
584026	9/2/2008 0:00	-0.185	-0.155
584027	9/3/2008 0:00	-0.156	-0.155
584028	9/4/2008 0:00	-0.168	-0.155
584029	9/5/2008 0:00	-0.174	-0.155
584030	9/6/2008 0:00	-0.146	-0.155
584031	9/7/2008 0:00	-0.152	-0.156
584032	9/8/2008 0:00	-0.163	-0.156
584033	9/9/2008 0:00	-0.156	-0.155
584034	9/10/2008 0:00	-0.147	-0.155
584035	9/11/2008 0:00	-0.168	-0.154
584036	9/12/2008 0:00	-0.139	-0.155
584037	9/13/2008 0:00	-0.153	-0.156
584038	9/14/2008 0:00	-0.147	-0.155
584039	9/15/2008 0:00	-0.161	-0.157
584040	9/16/2008 0:00	-0.182	-0.157
584041	9/17/2008 0:00	-0.17	-0.157
584042	9/18/2008 0:00	-0.165	-0.157
584043	9/19/2008 0:00	-0.147	-0.156
584044	9/20/2008 0:00	-0.128	-0.156
584045	9/21/2008 0:00	-0.147	-0.156
584046	9/22/2008 0:00	-0.154	-0.157
584047	9/23/2008 0:00	-0.15	-0.157
584048	9/24/2008 0:00	-0.139	-0.157
584049	9/25/2008 0:00	-0.145	-0.158
584050	9/26/2008 0:00	-0.157	-0.159
584051	9/27/2008 0:00	-0.174	-0.159
584052	9/28/2008 0:00	-0.17	-0.16
584053	9/29/2008 0:00	-0.149	-0.161
584054	9/30/2008 0:00	-0.153	-0.161
584055	10/1/2008 0:00	-0.166	-0.161
584056	10/2/2008 0:00	-0.162	-0.161
584057	10/3/2008 0:00	-0.162	-0.162

584058	10/4/2008 0:00	-0.148	-0.162
584059	10/5/2008 0:00	-0.161	-0.163
584060	10/6/2008 0:00	-0.167	-0.164
584061	10/7/2008 0:00	-0.17	-0.164
584062	10/8/2008 0:00	-0.166	-0.165
584063	10/9/2008 0:00	-0.166	-0.165
584064	10/10/2008 0:00	-0.178	-0.166
584065	10/11/2008 0:00	-0.178	-0.167
584066	10/12/2008 0:00	-0.174	-0.169
584067	10/13/2008 0:00	-0.181	-0.169
584068	10/14/2008 0:00	-0.164	-0.17
584069	10/15/2008 0:00	-0.165	-0.172
584070	10/16/2008 0:00	-0.165	-0.174
584071	10/17/2008 0:00	-0.182	-0.173
584072	10/18/2008 0:00	-0.187	-0.172
584073	10/19/2008 0:00	-0.178	-0.172
584074	10/20/2008 0:00	-0.173	-0.172
584075	10/21/2008 0:00	-0.151	-0.172
584076	10/22/2008 0:00	-0.161	-0.173
584077	10/23/2008 0:00	-0.177	-0.173
584078	10/24/2008 0:00	-0.155	-0.173
584079	10/25/2008 0:00	-0.158	-0.172
584080	10/26/2008 0:00	-0.18	-0.17
584081	10/27/2008 0:00	-0.208	-0.169
584082	10/28/2008 0:00	-0.201	-0.169
584083	10/29/2008 0:00	-0.185	-0.168
584084	10/30/2008 0:00	-0.214	-0.167
584085	10/31/2008 0:00	-0.208	-0.166
584086	11/1/2008 0:00	-0.142	-0.166
584087	11/2/2008 0:00	-0.132	-0.165
584088	11/3/2008 0:00	-0.158	-0.165
584089	11/4/2008 0:00	-0.138	-0.165
584090	11/5/2008 0:00	-0.165	-0.166
584091	11/6/2008 0:00	-0.201	-0.166
584092	11/7/2008 0:00	-0.182	-0.167
584093	11/8/2008 0:00	-0.17	-0.166
584094	11/9/2008 0:00	-0.11	-0.167
584095	11/10/2008 0:00	-0.135	-0.166
584096	11/11/2008 0:00	-0.155	-0.165
584097	11/12/2008 0:00	-0.172	-0.165
584098	11/13/2008 0:00	-0.123	-0.164
584099	11/14/2008 0:00	-0.134	-0.163
584100	11/15/2008 0:00	-0.158	-0.161
584101	11/16/2008 0:00	-0.149	-0.159

584102	11/17/2008 0:00	-0.163	-0.159
584103	11/18/2008 0:00	-0.177	-0.16
584104	11/19/2008 0:00	-0.185	-0.161
584105	11/20/2008 0:00	-0.188	-0.162
584106	11/21/2008 0:00	-0.169	-0.163
584107	11/22/2008 0:00	-0.173	-0.163
584108	11/23/2008 0:00	-0.172	-0.162
584109	11/24/2008 0:00	-0.164	-0.162
584110	11/25/2008 0:00	-0.143	-0.164
584111	11/26/2008 0:00	-0.15	-0.165
584112	11/27/2008 0:00	-0.197	-0.165
584113	11/28/2008 0:00	-0.163	-0.164
584114	11/29/2008 0:00	-0.176	-0.165
584115	11/30/2008 0:00	-0.132	-0.165
584116	12/1/2008 0:00	-0.154	-0.166
584117	12/2/2008 0:00	-0.156	-0.166
584118	12/3/2008 0:00	-0.146	-0.166
584119	12/4/2008 0:00	-0.202	-0.166
584120	12/5/2008 0:00	-0.169	-0.166
584121	12/6/2008 0:00	-0.192	-0.166
584122	12/7/2008 0:00	-0.184	-0.165
584123	12/8/2008 0:00	-0.152	-0.165
584124	12/9/2008 0:00	-0.181	-0.164
584125	12/10/2008 0:00	-0.165	-0.165
584126	12/11/2008 0:00	-0.164	-0.165
584127	12/12/2008 0:00	-0.152	-0.165
584128	12/13/2008 0:00	-0.148	-0.164
584129	12/14/2008 0:00	-0.15	-0.164
584130	12/15/2008 0:00	-0.142	-0.165
584131	12/16/2008 0:00	-0.175	-0.167
584132	12/17/2008 0:00	-0.16	-0.167
584133	12/18/2008 0:00	-0.165	-0.168
584134	12/19/2008 0:00	-0.17	-0.167
584135	12/20/2008 0:00	-0.191	-0.167
584136	12/21/2008 0:00	-0.175	-0.166
584137	12/22/2008 0:00	-0.156	-0.165
584138	12/23/2008 0:00	-0.155	-0.163
584139	12/24/2008 0:00	-0.171	-0.164
584140	12/25/2008 0:00	-0.167	-0.164
584141	12/26/2008 0:00	-0.151	-0.165
584142	12/27/2008 0:00	-0.163	-0.166
584143	12/28/2008 0:00	-0.168	-0.167
584144	12/29/2008 0:00	-0.161	-0.168
584145	12/30/2008 0:00	-0.202	-0.169

584146	12/31/2008 0:00	-0.188	-0.17
584147	1/1/2009 0:00	-0.168	-0.171
584148	1/2/2009 0:00	-0.165	-0.172
584149	1/3/2009 0:00	-0.127	-0.172
584150	1/4/2009 0:00	-0.19	-0.172
584151	1/5/2009 0:00	-0.162	-0.17
584152	1/6/2009 0:00	-0.14	-0.17
584153	1/7/2009 0:00	-0.137	-0.171
584154	1/8/2009 0:00	-0.174	-0.171
584155	1/9/2009 0:00	-0.172	-0.172
584156	1/10/2009 0:00	-0.206	-0.173
584157	1/11/2009 0:00	-0.198	-0.173
584158	1/12/2009 0:00	-0.186	-0.173
584159	1/13/2009 0:00	-0.178	-0.173
584160	1/14/2009 0:00	-0.181	-0.173
584161	1/15/2009 0:00	-0.183	-0.172
584162	1/16/2009 0:00	-0.182	-0.171
584163	1/17/2009 0:00	-0.187	-0.17
584164	1/18/2009 0:00	-0.173	-0.17
584165	1/19/2009 0:00	-0.166	-0.171
584166	1/20/2009 0:00	-0.155	-0.171
584167	1/21/2009 0:00	-0.145	-0.172
584168	1/22/2009 0:00	-0.194	-0.173
584169	1/23/2009 0:00	-0.176	-0.173
584170	1/24/2009 0:00	-0.195	-0.173
584171	1/25/2009 0:00	-0.189	-0.172
584172	1/26/2009 0:00	-0.143	-0.171
584173	1/27/2009 0:00	-0.163	-0.17
584174	1/28/2009 0:00	-0.163	-0.17
584175	1/29/2009 0:00	-0.178	-0.17
584176	1/30/2009 0:00	-0.163	-0.169
584177	1/31/2009 0:00	-0.148	-0.168
584178	2/1/2009 0:00	-0.152	-0.167
584179	2/2/2009 0:00	-0.16	-0.166
584180	2/3/2009 0:00	-0.176	-0.165
584181	2/4/2009 0:00	-0.169	-0.165
584182	2/5/2009 0:00	-0.196	-0.166
584183	2/6/2009 0:00	-0.165	-0.167
584184	2/7/2009 0:00	-0.146	-0.167
584185	2/8/2009 0:00	-0.172	-0.167
584186	2/9/2009 0:00	-0.143	-0.166
584187	2/10/2009 0:00	-0.174	-0.165
584188	2/11/2009 0:00	-0.176	-0.166
584189	2/12/2009 0:00	-0.172	-0.167

584190	2/13/2009 0:00	-0.174	-0.167
584191	2/14/2009 0:00	-0.162	-0.167
584192	2/15/2009 0:00	-0.145	-0.167
584193	2/16/2009 0:00	-0.166	-0.168
584194	2/17/2009 0:00	-0.138	-0.168
584195	2/18/2009 0:00	-0.163	-0.168
584196	2/19/2009 0:00	-0.159	-0.168
584197	2/20/2009 0:00	-0.176	-0.168
584198	2/21/2009 0:00	-0.175	-0.167
584199	2/22/2009 0:00	-0.197	-0.167
584200	2/23/2009 0:00	-0.176	-0.167
584201	2/24/2009 0:00	-0.174	-0.167
584202	2/25/2009 0:00	-0.158	-0.167
584203	2/26/2009 0:00	-0.181	-0.167
584204	2/27/2009 0:00	-0.168	-0.167
584205	2/28/2009 0:00	-0.177	-0.166
584206	3/1/2009 0:00	-0.167	-0.167
584207	3/2/2009 0:00	-0.186	-0.167
584208	3/3/2009 0:00	-0.168	-0.167
584209	3/4/2009 0:00	-0.151	-0.168
584210	3/5/2009 0:00	-0.171	-0.168
584211	3/6/2009 0:00	-0.165	-0.168
584212	3/7/2009 0:00	-0.166	-0.168
584213	3/8/2009 0:00	-0.162	-0.167
584214	3/9/2009 0:00	-0.162	-0.167
584215	3/10/2009 0:00	-0.151	-0.166
584216	3/11/2009 0:00	-0.162	-0.166
584217	3/12/2009 0:00	-0.17	-0.166
584218	3/13/2009 0:00	-0.172	-0.166
584219	3/14/2009 0:00	-0.161	-0.165
584220	3/15/2009 0:00	-0.156	-0.165
584221	3/16/2009 0:00	-0.181	-0.165
584222	3/17/2009 0:00	-0.162	-0.164
584223	3/18/2009 0:00	-0.161	-0.163
584224	3/19/2009 0:00	-0.18	-0.163
584225	3/20/2009 0:00	-0.162	-0.163
584226	3/21/2009 0:00	-0.164	-0.163
584227	3/22/2009 0:00	-0.144	-0.163
584228	3/23/2009 0:00	-0.154	-0.164
584229	3/24/2009 0:00	-0.156	-0.166
584230	3/25/2009 0:00	-0.169	-0.166
584231	3/26/2009 0:00	-0.19	-0.167
584232	3/27/2009 0:00	-0.155	-0.166
584233	3/28/2009 0:00	-0.166	-0.167

584234	3/29/2009 0:00	-0.166	-0.167
584235	3/30/2009 0:00	-0.168	-0.167
584236	3/31/2009 0:00	-0.167	-0.167
584237	4/1/2009 0:00	-0.143	-0.167
584238	4/2/2009 0:00	-0.159	-0.168
584239	4/3/2009 0:00	-0.143	-0.168
584240	4/4/2009 0:00	-0.163	-0.168
584241	4/5/2009 0:00	-0.181	-0.169
584242	4/6/2009 0:00	-0.172	-0.168
584243	4/7/2009 0:00	-0.198	-0.169
584244	4/8/2009 0:00	-0.197	-0.169
584245	4/9/2009 0:00	-0.183	-0.17
584246	4/10/2009 0:00	-0.168	-0.17
584247	4/11/2009 0:00	-0.15	-0.17
584248	4/12/2009 0:00	-0.187	-0.17
584249	4/13/2009 0:00	-0.176	-0.169
584250	4/14/2009 0:00	-0.171	-0.169
584251	4/15/2009 0:00	-0.154	-0.17
584252	4/16/2009 0:00	-0.182	-0.17
584253	4/17/2009 0:00	-0.186	-0.17
584254	4/18/2009 0:00	-0.166	-0.171
584255	4/19/2009 0:00	-0.166	-0.169
584256	4/20/2009 0:00	-0.188	-0.169
584257	4/21/2009 0:00	-0.152	-0.169
584258	4/22/2009 0:00	-0.171	-0.169
584259	4/23/2009 0:00	-0.158	-0.168
584260	4/24/2009 0:00	-0.169	-0.167
584261	4/25/2009 0:00	-0.176	-0.166
584262	4/26/2009 0:00	-0.173	-0.165
584263	4/27/2009 0:00	-0.178	-0.166
584264	4/28/2009 0:00	-0.141	-0.164
584265	4/29/2009 0:00	-0.155	-0.163
584266	4/30/2009 0:00	-0.184	-0.162
584267	5/1/2009 0:00	-0.182	-0.163
584268	5/2/2009 0:00	-0.147	-0.162
584269	5/3/2009 0:00	-0.171	-0.162
584270	5/4/2009 0:00	-0.108	-0.162
584271	5/5/2009 0:00	-0.136	-0.163
584272	5/6/2009 0:00	-0.188	-0.162
584273	5/7/2009 0:00	-0.178	-0.162
584274	5/8/2009 0:00	-0.155	-0.162
584275	5/9/2009 0:00	-0.171	-0.162
584276	5/10/2009 0:00	-0.161	-0.161
584277	5/11/2009 0:00	-0.132	-0.16

584278	5/12/2009 0:00	-0.17	-0.16
584279	5/13/2009 0:00	-0.138	-0.159
584280	5/14/2009 0:00	-0.135	-0.16
584281	5/15/2009 0:00	-0.153	-0.159
584282	5/16/2009 0:00	-0.166	-0.158
584283	5/17/2009 0:00	-0.17	-0.158
584284	5/18/2009 0:00	-0.18	-0.159
584285	5/19/2009 0:00	-0.181	-0.158
584286	5/20/2009 0:00	-0.173	-0.16
584287	5/21/2009 0:00	-0.162	-0.16
584288	5/22/2009 0:00	-0.163	-0.158
584289	5/23/2009 0:00	-0.173	-0.157
584290	5/24/2009 0:00	-0.152	-0.158
584291	5/25/2009 0:00	-0.148	-0.157
584292	5/26/2009 0:00	-0.146	-0.157
584293	5/27/2009 0:00	-0.153	-0.157
584294	5/28/2009 0:00	-0.151	-0.157
584295	5/29/2009 0:00	-0.162	-0.158
584296	5/30/2009 0:00	-0.13	-0.159
584297	5/31/2009 0:00	-0.176	-0.159
584298	6/1/2009 0:00	-0.175	-0.158
584299	6/2/2009 0:00	-0.164	-0.157
584300	6/3/2009 0:00	-0.158	-0.156
584301	6/4/2009 0:00	-0.144	-0.156
584302	6/5/2009 0:00	-0.142	-0.155
584303	6/6/2009 0:00	-0.141	-0.154
584304	6/7/2009 0:00	-0.155	-0.154
584305	6/8/2009 0:00	-0.158	-0.153
584306	6/9/2009 0:00	-0.151	-0.152
584307	6/10/2009 0:00	-0.155	-0.151
584308	6/11/2009 0:00	-0.152	-0.152
584309	6/12/2009 0:00	-0.154	-0.153
584310	6/13/2009 0:00	-0.168	-0.153
584311	6/14/2009 0:00	-0.165	-0.152
584312	6/15/2009 0:00	-0.151	-0.153
584313	6/16/2009 0:00	-0.136	-0.152
584314	6/17/2009 0:00	-0.152	-0.152
584315	6/18/2009 0:00	-0.151	-0.152
584316	6/19/2009 0:00	-0.165	-0.152
584317	6/20/2009 0:00	-0.156	-0.152
584318	6/21/2009 0:00	-0.138	-0.153
584319	6/22/2009 0:00	-0.141	-0.153
584320	6/23/2009 0:00	-0.145	-0.153
584321	6/24/2009 0:00	-0.117	-0.154

584322	6/25/2009 0:00	-0.143	-0.155
584323	6/26/2009 0:00	-0.165	-0.155
584324	6/27/2009 0:00	-0.178	-0.156
584325	6/28/2009 0:00	-0.158	-0.157
584326	6/29/2009 0:00	-0.13	-0.156
584327	6/30/2009 0:00	-0.162	-0.156
584328	7/1/2009 0:00	-0.153	-0.156
584329	7/2/2009 0:00	-0.17	-0.157
584330	7/3/2009 0:00	-0.155	-0.158
584331	7/4/2009 0:00	-0.16	-0.158
584332	7/5/2009 0:00	-0.148	-0.158
584333	7/6/2009 0:00	-0.16	-0.159
584334	7/7/2009 0:00	-0.167	-0.159
584335	7/8/2009 0:00	-0.154	-0.16
584336	7/9/2009 0:00	-0.186	-0.161
584337	7/10/2009 0:00	-0.158	-0.162
584338	7/11/2009 0:00	-0.181	-0.164
584339	7/12/2009 0:00	-0.182	-0.165
584340	7/13/2009 0:00	-0.167	-0.164
584341	7/14/2009 0:00	-0.15	-0.165
584342	7/15/2009 0:00	-0.166	-0.166
584343	7/16/2009 0:00	-0.156	-0.166
584344	7/17/2009 0:00	-0.154	-0.167
584345	7/18/2009 0:00	-0.169	-0.167
584346	7/19/2009 0:00	-0.172	-0.168
584347	7/20/2009 0:00	-0.171	-0.168
584348	7/21/2009 0:00	-0.167	-0.17
584349	7/22/2009 0:00	-0.151	-0.171
584350	7/23/2009 0:00	-0.162	-0.172
584351	7/24/2009 0:00	-0.165	-0.173
584352	7/25/2009 0:00	-0.177	-0.173
584353	7/26/2009 0:00	-0.198	-0.174
584354	7/27/2009 0:00	-0.173	-0.173
584355	7/28/2009 0:00	-0.162	-0.173
584356	7/29/2009 0:00	-0.176	-0.173
584357	7/30/2009 0:00	-0.165	-0.174
584358	7/31/2009 0:00	-0.174	-0.175
584359	8/1/2009 0:00	-0.165	-0.175
584360	8/2/2009 0:00	-0.18	-0.175
584361	8/3/2009 0:00	-0.177	-0.176
584362	8/4/2009 0:00	-0.185	-0.176
584363	8/5/2009 0:00	-0.193	-0.177
584364	8/6/2009 0:00	-0.184	-0.177
584365	8/7/2009 0:00	-0.203	-0.178

584366	8/8/2009 0:00	-0.189	-0.179
584367	8/9/2009 0:00	-0.188	-0.18
584368	8/10/2009 0:00	-0.188	-0.18
584369	8/11/2009 0:00	-0.157	-0.179
584370	8/12/2009 0:00	-0.183	-0.179
584371	8/13/2009 0:00	-0.176	-0.18
584372	8/14/2009 0:00	-0.18	-0.18
584373	8/15/2009 0:00	-0.173	-0.18
584374	8/16/2009 0:00	-0.174	-0.181
584375	8/17/2009 0:00	-0.161	-0.181
584376	8/18/2009 0:00	-0.179	-0.181
584377	8/19/2009 0:00	-0.181	-0.18
584378	8/20/2009 0:00	-0.189	-0.18
584379	8/21/2009 0:00	-0.192	-0.18
584380	8/22/2009 0:00	-0.177	-0.179
584381	8/23/2009 0:00	-0.188	-0.178
584382	8/24/2009 0:00	-0.184	-0.177
584383	8/25/2009 0:00	-0.173	-0.177
584384	8/26/2009 0:00	-0.188	-0.177
584385	8/27/2009 0:00	-0.179	-0.178
584386	8/28/2009 0:00	-0.183	-0.178
584387	8/29/2009 0:00	-0.169	-0.178
584388	8/30/2009 0:00	-0.173	-0.178
584389	8/31/2009 0:00	-0.194	-0.178
584390	9/1/2009 0:00	-0.162	-0.179
584391	9/2/2009 0:00	-0.175	-0.179
584392	9/3/2009 0:00	-0.175	-0.178
584393	9/4/2009 0:00	-0.175	-0.178
584394	9/5/2009 0:00	-0.178	-0.178
584395	9/6/2009 0:00	-0.173	-0.178
584396	9/7/2009 0:00	-0.17	-0.178
584397	9/8/2009 0:00	-0.152	-0.179
584398	9/9/2009 0:00	-0.184	-0.179
584399	9/10/2009 0:00	-0.189	-0.179
584400	9/11/2009 0:00	-0.184	-0.178
584401	9/12/2009 0:00	-0.184	-0.178
584402	9/13/2009 0:00	-0.177	-0.177
584403	9/14/2009 0:00	-0.184	-0.177
584404	9/15/2009 0:00	-0.182	-0.177
584405	9/16/2009 0:00	-0.181	-0.176
584406	9/17/2009 0:00	-0.181	-0.178
584407	9/18/2009 0:00	-0.156	-0.178
584408	9/19/2009 0:00	-0.168	-0.179
584409	9/20/2009 0:00	-0.188	-0.18

584410	9/21/2009 0:00	-0.181	-0.18
584411	9/22/2009 0:00	-0.192	-0.18
584412	9/23/2009 0:00	-0.213	-0.18
584413	9/24/2009 0:00	-0.177	-0.182
584414	9/25/2009 0:00	-0.168	-0.182
584415	9/26/2009 0:00	-0.174	-0.181
584416	9/27/2009 0:00	-0.166	-0.181
584417	9/28/2009 0:00	-0.146	-0.181
584418	9/29/2009 0:00	-0.178	-0.181
584419	9/30/2009 0:00	-0.185	-0.18
584420	10/1/2009 0:00	-0.17	-0.181
584421	10/2/2009 0:00	-0.206	-0.181
584422	10/3/2009 0:00	-0.189	-0.181
584423	10/4/2009 0:00	-0.185	-0.182
584424	10/5/2009 0:00	-0.202	-0.182
584425	10/6/2009 0:00	-0.18	-0.182
584426	10/7/2009 0:00	-0.189	-0.181
584427	10/8/2009 0:00	-0.18	-0.181
584428	10/9/2009 0:00	-0.207	-0.179
584429	10/10/2009 0:00	-0.179	-0.178
584430	10/11/2009 0:00	-0.17	-0.178
584431	10/12/2009 0:00	-0.179	-0.177
584432	10/13/2009 0:00	-0.183	-0.177
584433	10/14/2009 0:00	-0.171	-0.177
584434	10/15/2009 0:00	-0.16	-0.177
584435	10/16/2009 0:00	-0.205	-0.177
584436	10/17/2009 0:00	-0.18	-0.176
584437	10/18/2009 0:00	-0.188	-0.175
584438	10/19/2009 0:00	-0.183	-0.175
584439	10/20/2009 0:00	-0.18	-0.174
584440	10/21/2009 0:00	-0.172	-0.174
584441	10/22/2009 0:00	-0.147	-0.173
584442	10/23/2009 0:00	-0.192	-0.173
584443	10/24/2009 0:00	-0.156	-0.173
584444	10/25/2009 0:00	-0.153	-0.172
584445	10/26/2009 0:00	-0.162	-0.172
584446	10/27/2009 0:00	-0.157	-0.172
584447	10/28/2009 0:00	-0.141	-0.17
584448	10/29/2009 0:00	-0.148	-0.17
584449	10/30/2009 0:00	-0.187	-0.17
584450	10/31/2009 0:00	-0.18	-0.171
584451	11/1/2009 0:00	-0.158	-0.17
584452	11/2/2009 0:00	-0.172	-0.17
584453	11/3/2009 0:00	-0.169	-0.168

584454	11/4/2009 0:00	-0.179	-0.168
584455	11/5/2009 0:00	-0.177	-0.168
584456	11/6/2009 0:00	-0.166	-0.167
584457	11/7/2009 0:00	-0.175	-0.168
584458	11/8/2009 0:00	-0.178	-0.167
584459	11/9/2009 0:00	-0.173	-0.169
584460	11/10/2009 0:00	-0.177	-0.17
584461	11/11/2009 0:00	-0.171	-0.17
584462	11/12/2009 0:00	-0.139	-0.171
584463	11/13/2009 0:00	-0.168	-0.173
584464	11/14/2009 0:00	-0.175	-0.173
584465	11/15/2009 0:00	-0.192	-0.173
584466	11/16/2009 0:00	-0.177	-0.173
584467	11/17/2009 0:00	-0.165	-0.174
584468	11/18/2009 0:00	-0.148	-0.173
584469	11/19/2009 0:00	-0.179	-0.174
584470	11/20/2009 0:00	-0.165	-0.173
584471	11/21/2009 0:00	-0.152	-0.173
584472	11/22/2009 0:00	-0.174	-0.172
584473	11/23/2009 0:00	-0.174	-0.172
584474	11/24/2009 0:00	-0.204	-0.171
584475	11/25/2009 0:00	-0.189	-0.171
584476	11/26/2009 0:00	-0.176	-0.17
584477	11/27/2009 0:00	-0.187	-0.17
584478	11/28/2009 0:00	-0.174	-0.172
584479	11/29/2009 0:00	-0.176	-0.172
584480	11/30/2009 0:00	-0.174	-0.173
584481	12/1/2009 0:00	-0.181	-0.174
584482	12/2/2009 0:00	-0.175	-0.174
584483	12/3/2009 0:00	-0.164	-0.174
584484	12/4/2009 0:00	-0.178	-0.175
584485	12/5/2009 0:00	-0.166	-0.176
584486	12/6/2009 0:00	-0.166	-0.178
584487	12/7/2009 0:00	-0.152	-0.177
584488	12/8/2009 0:00	-0.16	-0.178
584489	12/9/2009 0:00	-0.156	-0.179
584490	12/10/2009 0:00	-0.157	-0.178
584491	12/11/2009 0:00	-0.143	-0.178
584492	12/12/2009 0:00	-0.195	-0.179
584493	12/13/2009 0:00	-0.199	-0.18
584494	12/14/2009 0:00	-0.174	-0.18
584495	12/15/2009 0:00	-0.2	-0.181
584496	12/16/2009 0:00	-0.212	-0.183
584497	12/17/2009 0:00	-0.17	-0.185

584498	12/18/2009 0:00	-0.175	-0.185
584499	12/19/2009 0:00	-0.194	-0.186
584500	12/20/2009 0:00	-0.193	-0.187
584501	12/21/2009 0:00	-0.216	-0.188
584502	12/22/2009 0:00	-0.131	-0.189
584503	12/23/2009 0:00	-0.192	-0.191
584504	12/24/2009 0:00	-0.209	-0.192
584505	12/25/2009 0:00	-0.18	-0.194
584506	12/26/2009 0:00	-0.2	-0.195
584507	12/27/2009 0:00	-0.199	-0.197
584508	12/28/2009 0:00	-0.206	-0.198
584509	12/29/2009 0:00	-0.201	-0.196
584510	12/30/2009 0:00	-0.208	-0.197
584511	12/31/2009 0:00	-0.217	-0.197
584512	1/1/2010 0:00	-0.242	-0.196
584513	1/2/2010 0:00	-0.188	-0.196
584514	1/3/2010 0:00	-0.202	-0.196
584515	1/4/2010 0:00	-0.193	-0.194
584516	1/5/2010 0:00	-0.19	-0.193
584517	1/6/2010 0:00	-0.206	-0.191
584518	1/7/2010 0:00	-0.209	-0.192
584519	1/8/2010 0:00	-0.189	-0.192
584520	1/9/2010 0:00	-0.218	-0.192
584521	1/10/2010 0:00	-0.198	-0.193
584522	1/11/2010 0:00	-0.213	-0.193
584523	1/12/2010 0:00	-0.206	-0.193
584524	1/13/2010 0:00	-0.162	-0.193
584525	1/14/2010 0:00	-0.178	-0.193
584526	1/15/2010 0:00	-0.204	-0.193
584527	1/16/2010 0:00	-0.194	-0.192
584528	1/17/2010 0:00	-0.178	-0.19
584529	1/18/2010 0:00	-0.16	-0.189
584530	1/19/2010 0:00	-0.131	-0.188
584531	1/20/2010 0:00	-0.163	-0.187
584532	1/21/2010 0:00	-0.164	-0.186
584533	1/22/2010 0:00	-0.159	-0.185
584534	1/23/2010 0:00	-0.197	-0.184
584535	1/24/2010 0:00	-0.208	-0.183
584536	1/25/2010 0:00	-0.193	-0.181
584537	1/26/2010 0:00	-0.196	-0.18
584538	1/27/2010 0:00	-0.2	-0.179
584539	1/28/2010 0:00	-0.214	-0.178
584540	1/29/2010 0:00	-0.199	-0.178
584541	1/30/2010 0:00	-0.205	-0.179

584542	1/31/2010 0:00	-0.189	-0.178
584543	2/1/2010 0:00	-0.184	-0.177
584544	2/2/2010 0:00	-0.154	-0.177
584545	2/3/2010 0:00	-0.17	-0.177
584546	2/4/2010 0:00	-0.16	-0.18
584547	2/5/2010 0:00	-0.168	-0.18
584548	2/6/2010 0:00	-0.182	-0.18
584549	2/7/2010 0:00	-0.156	-0.18
584550	2/8/2010 0:00	-0.176	-0.179
584551	2/9/2010 0:00	-0.139	-0.178
584552	2/10/2010 0:00	-0.177	-0.177
584553	2/11/2010 0:00	-0.188	-0.176
584554	2/12/2010 0:00	-0.161	-0.176
584555	2/13/2010 0:00	-0.182	-0.174
584556	2/14/2010 0:00	-0.185	-0.174
584557	2/15/2010 0:00	-0.178	-0.174
584558	2/16/2010 0:00	-0.167	-0.173
584559	2/17/2010 0:00	-0.177	-0.172
584560	2/18/2010 0:00	-0.172	-0.172
584561	2/19/2010 0:00	-0.21	-0.172
584562	2/20/2010 0:00	-0.184	-0.172
584563	2/21/2010 0:00	-0.148	-0.172
584564	2/22/2010 0:00	-0.156	-0.173
584565	2/23/2010 0:00	-0.177	-0.174
584566	2/24/2010 0:00	-0.165	-0.173
584567	2/25/2010 0:00	-0.16	-0.174
584568	2/26/2010 0:00	-0.188	-0.173
584569	2/27/2010 0:00	-0.183	-0.172
584570	2/28/2010 0:00	-0.168	-0.172
584571	3/1/2010 0:00	-0.18	-0.171
584572	3/2/2010 0:00	-0.198	-0.172
584573	3/3/2010 0:00	-0.169	-0.171
584574	3/4/2010 0:00	-0.155	-0.17
584575	3/5/2010 0:00	-0.152	-0.17
584576	3/6/2010 0:00	-0.172	-0.17
584577	3/7/2010 0:00	-0.171	-0.169
584578	3/8/2010 0:00	-0.16	-0.169
584579	3/9/2010 0:00	-0.206	-0.17
584580	3/10/2010 0:00	-0.187	-0.169
584581	3/11/2010 0:00	-0.156	-0.169
584582	3/12/2010 0:00	-0.155	-0.168
584583	3/13/2010 0:00	-0.154	-0.168
584584	3/14/2010 0:00	-0.148	-0.167
584585	3/15/2010 0:00	-0.173	-0.166

584586	3/16/2010 0:00	-0.158	-0.166
584587	3/17/2010 0:00	-0.195	-0.165
584588	3/18/2010 0:00	-0.156	-0.164
584589	3/19/2010 0:00	-0.151	-0.163
584590	3/20/2010 0:00	-0.172	-0.162
584591	3/21/2010 0:00	-0.174	-0.162
584592	3/22/2010 0:00	-0.176	-0.162
584593	3/23/2010 0:00	-0.173	-0.162
584594	3/24/2010 0:00	-0.176	-0.162
584595	3/25/2010 0:00	-0.137	-0.161
584596	3/26/2010 0:00	-0.158	-0.16
584597	3/27/2010 0:00	-0.137	-0.161
584598	3/28/2010 0:00	-0.174	-0.161
584599	3/29/2010 0:00	-0.157	-0.162
584600	3/30/2010 0:00	-0.138	-0.163
584601	3/31/2010 0:00	-0.163	-0.163
584602	4/1/2010 0:00	-0.15	-0.164
584603	4/2/2010 0:00	-0.185	-0.162
584604	4/3/2010 0:00	-0.141	-0.163
584605	4/4/2010 0:00	-0.13	-0.164
584606	4/5/2010 0:00	-0.151	-0.164
584607	4/6/2010 0:00	-0.161	-0.164
584608	4/7/2010 0:00	-0.161	-0.162
584609	4/8/2010 0:00	-0.158	-0.162
584610	4/9/2010 0:00	-0.185	-0.162
584611	4/10/2010 0:00	-0.15	-0.163
584612	4/11/2010 0:00	-0.19	-0.164
584613	4/12/2010 0:00	-0.169	-0.165
584614	4/13/2010 0:00	-0.169	-0.164
584615	4/14/2010 0:00	-0.18	-0.165
584616	4/15/2010 0:00	-0.175	-0.164
584617	4/16/2010 0:00	-0.177	-0.165
584618	4/17/2010 0:00	-0.158	-0.165
584619	4/18/2010 0:00	-0.178	-0.165
584620	4/19/2010 0:00	-0.187	-0.166
584621	4/20/2010 0:00	-0.172	-0.166
584622	4/21/2010 0:00	-0.156	-0.166
584623	4/22/2010 0:00	-0.136	-0.165
584624	4/23/2010 0:00	-0.177	-0.165
584625	4/24/2010 0:00	-0.161	-0.165
584626	4/25/2010 0:00	-0.177	-0.163
584627	4/26/2010 0:00	-0.18	-0.162
584628	4/27/2010 0:00	-0.185	-0.161
584629	4/28/2010 0:00	-0.135	-0.16

584630	4/29/2010 0:00	-0.173	-0.16
584631	4/30/2010 0:00	-0.128	-0.158
584632	5/1/2010 0:00	-0.171	-0.157
584633	5/2/2010 0:00	-0.153	-0.156
584634	5/3/2010 0:00	-0.178	-0.156
584635	5/4/2010 0:00	-0.174	-0.155
584636	5/5/2010 0:00	-0.156	-0.154
584637	5/6/2010 0:00	-0.144	-0.154
584638	5/7/2010 0:00	-0.136	-0.152
584639	5/8/2010 0:00	-0.152	-0.152
584640	5/9/2010 0:00	-0.151	-0.152
584641	5/10/2010 0:00	-0.13	-0.152
584642	5/11/2010 0:00	-0.128	-0.151
584643	5/12/2010 0:00	-0.139	-0.149
584644	5/13/2010 0:00	-0.147	-0.148
584645	5/14/2010 0:00	-0.153	-0.149
584646	5/15/2010 0:00	-0.119	-0.149
584647	5/16/2010 0:00	-0.147	-0.15
584648	5/17/2010 0:00	-0.163	-0.148
584649	5/18/2010 0:00	-0.154	-0.149
584650	5/19/2010 0:00	-0.153	-0.148
584651	5/20/2010 0:00	-0.149	-0.147
584652	5/21/2010 0:00	-0.166	-0.147
584653	5/22/2010 0:00	-0.112	-0.148
584654	5/23/2010 0:00	-0.13	-0.149
584655	5/24/2010 0:00	-0.176	-0.149
584656	5/25/2010 0:00	-0.162	-0.148
584657	5/26/2010 0:00	-0.151	-0.147
584658	5/27/2010 0:00	-0.112	-0.147
584659	5/28/2010 0:00	-0.158	-0.147
584660	5/29/2010 0:00	-0.155	-0.148
584661	5/30/2010 0:00	-0.18	-0.148
584662	5/31/2010 0:00	-0.143	-0.148
584663	6/1/2010 0:00	-0.134	-0.148
584664	6/2/2010 0:00	-0.164	-0.147
584665	6/3/2010 0:00	-0.149	-0.147
584666	6/4/2010 0:00	-0.14	-0.147
584667	6/5/2010 0:00	-0.171	-0.147
584668	6/6/2010 0:00	-0.177	-0.147
584669	6/7/2010 0:00	-0.157	-0.148
584670	6/8/2010 0:00	-0.139	-0.15
584671	6/9/2010 0:00	-0.14	-0.149
584672	6/10/2010 0:00	-0.088	-0.148
584673	6/11/2010 0:00	-0.129	-0.147

584674	6/12/2010 0:00	-0.15	-0.148
584675	6/13/2010 0:00	-0.166	-0.148
584676	6/14/2010 0:00	-0.155	-0.147
584677	6/15/2010 0:00	-0.119	-0.145
584678	6/16/2010 0:00	-0.138	-0.145
584679	6/17/2010 0:00	-0.145	-0.145
584680	6/18/2010 0:00	-0.153	-0.145
584681	6/19/2010 0:00	-0.158	-0.145
584682	6/20/2010 0:00	-0.149	-0.144
584683	6/21/2010 0:00	-0.162	-0.142
584684	6/22/2010 0:00	-0.146	-0.141
584685	6/23/2010 0:00	-0.171	-0.141
584686	6/24/2010 0:00	-0.158	-0.141
584687	6/25/2010 0:00	-0.148	-0.141
584688	6/26/2010 0:00	-0.118	-0.142
584689	6/27/2010 0:00	-0.134	-0.142
584690	6/28/2010 0:00	-0.152	-0.142
584691	6/29/2010 0:00	-0.132	-0.141
584692	6/30/2010 0:00	-0.113	-0.142
584693	7/1/2010 0:00	-0.128	-0.142
584694	7/2/2010 0:00	-0.151	-0.142
584695	7/3/2010 0:00	-0.145	-0.143
584696	7/4/2010 0:00	-0.154	-0.144
584697	7/5/2010 0:00	-0.111	-0.143
584698	7/6/2010 0:00	-0.129	-0.144
584699	7/7/2010 0:00	-0.127	-0.144
584700	7/8/2010 0:00	-0.171	-0.144
584701	7/9/2010 0:00	-0.13	-0.144
584702	7/10/2010 0:00	-0.129	-0.145
584703	7/11/2010 0:00	-0.132	-0.145
584704	7/12/2010 0:00	-0.12	-0.147
584705	7/13/2010 0:00	-0.159	-0.148
584706	7/14/2010 0:00	-0.143	-0.149
584707	7/15/2010 0:00	-0.161	-0.15
584708	7/16/2010 0:00	-0.128	-0.151
584709	7/17/2010 0:00	-0.153	-0.151
584710	7/18/2010 0:00	-0.183	-0.152
584711	7/19/2010 0:00	-0.167	-0.154
584712	7/20/2010 0:00	-0.138	-0.154
584713	7/21/2010 0:00	-0.167	-0.157
584714	7/22/2010 0:00	-0.162	-0.158
584715	7/23/2010 0:00	-0.16	-0.159
584716	7/24/2010 0:00	-0.173	-0.158
584717	7/25/2010 0:00	-0.169	-0.159

584718	7/26/2010 0:00	-0.167	-0.16
584719	7/27/2010 0:00	-0.156	-0.161
584720	7/28/2010 0:00	-0.174	-0.163
584721	7/29/2010 0:00	-0.174	-0.163
584722	7/30/2010 0:00	-0.179	-0.164
584723	7/31/2010 0:00	-0.147	-0.163
584724	8/1/2010 0:00	-0.138	-0.165
584725	8/2/2010 0:00	-0.174	-0.165
584726	8/3/2010 0:00	-0.197	-0.165
584727	8/4/2010 0:00	-0.165	-0.164
584728	8/5/2010 0:00	-0.188	-0.164
584729	8/6/2010 0:00	-0.155	-0.163
584730	8/7/2010 0:00	-0.164	-0.163
584731	8/8/2010 0:00	-0.148	-0.163
584732	8/9/2010 0:00	-0.151	-0.164
584733	8/10/2010 0:00	-0.159	-0.163
584734	8/11/2010 0:00	-0.166	-0.163
584735	8/12/2010 0:00	-0.185	-0.164
584736	8/13/2010 0:00	-0.167	-0.163
584737	8/14/2010 0:00	-0.165	-0.162
584738	8/15/2010 0:00	-0.147	-0.161
584739	8/16/2010 0:00	-0.177	-0.16
584740	8/17/2010 0:00	-0.163	-0.161
584741	8/18/2010 0:00	-0.165	-0.16
584742	8/19/2010 0:00	-0.147	-0.16
584743	8/20/2010 0:00	-0.13	-0.16
584744	8/21/2010 0:00	-0.143	-0.16
584745	8/22/2010 0:00	-0.145	-0.16
584746	8/23/2010 0:00	-0.185	-0.16
584747	8/24/2010 0:00	-0.188	-0.161
584748	8/25/2010 0:00	-0.145	-0.161
584749	8/26/2010 0:00	-0.18	-0.162
584750	8/27/2010 0:00	-0.166	-0.163
584751	8/28/2010 0:00	-0.148	-0.163
584752	8/29/2010 0:00	-0.157	-0.164
584753	8/30/2010 0:00	-0.132	-0.164
584754	8/31/2010 0:00	-0.126	-0.165
584755	9/1/2010 0:00	-0.152	-0.166
584756	9/2/2010 0:00	-0.168	-0.166
584757	9/3/2010 0:00	-0.189	-0.167
584758	9/4/2010 0:00	-0.17	-0.168
584759	9/5/2010 0:00	-0.166	-0.169
584760	9/6/2010 0:00	-0.162	-0.169
584761	9/7/2010 0:00	-0.159	-0.171

584762	9/8/2010 0:00	-0.179	-0.17
584763	9/9/2010 0:00	-0.167	-0.171
584764	9/10/2010 0:00	-0.182	-0.172
584765	9/11/2010 0:00	-0.199	-0.172
584766	9/12/2010 0:00	-0.195	-0.172
584767	9/13/2010 0:00	-0.175	-0.173
584768	9/14/2010 0:00	-0.185	-0.174
584769	9/15/2010 0:00	-0.177	-0.176
584770	9/16/2010 0:00	-0.188	-0.178
584771	9/17/2010 0:00	-0.173	-0.179
584772	9/18/2010 0:00	-0.195	-0.181
584773	9/19/2010 0:00	-0.175	-0.182
584774	9/20/2010 0:00	-0.156	-0.183
584775	9/21/2010 0:00	-0.158	-0.185
584776	9/22/2010 0:00	-0.21	-0.188
584777	9/23/2010 0:00	-0.152	-0.19
584778	9/24/2010 0:00	-0.201	-0.191
584779	9/25/2010 0:00	-0.187	-0.192
584780	9/26/2010 0:00	-0.187	-0.193
584781	9/27/2010 0:00	-0.176	-0.192
584782	9/28/2010 0:00	-0.171	-0.192
584783	9/29/2010 0:00	-0.185	-0.194
584784	9/30/2010 0:00	-0.191	-0.194
584785	10/1/2010 0:00	-0.18	-0.195
584786	10/2/2010 0:00	-0.203	-0.195
584787	10/3/2010 0:00	-0.232	-0.196
584788	10/4/2010 0:00	-0.195	-0.197
584789	10/5/2010 0:00	-0.22	-0.197
584790	10/6/2010 0:00	-0.233	-0.198
584791	10/7/2010 0:00	-0.23	-0.2
584792	10/8/2010 0:00	-0.22	-0.199
584793	10/9/2010 0:00	-0.211	-0.2
584794	10/10/2010 0:00	-0.2	-0.199
584795	10/11/2010 0:00	-0.207	-0.198
584796	10/12/2010 0:00	-0.195	-0.199
584797	10/13/2010 0:00	-0.188	-0.2
584798	10/14/2010 0:00	-0.222	-0.202
584799	10/15/2010 0:00	-0.21	-0.203
584800	10/16/2010 0:00	-0.199	-0.205
584801	10/17/2010 0:00	-0.177	-0.206
584802	10/18/2010 0:00	-0.201	-0.207
584803	10/19/2010 0:00	-0.222	-0.207
584804	10/20/2010 0:00	-0.184	-0.208
584805	10/21/2010 0:00	-0.205	-0.208

584806	10/22/2010 0:00	-0.203	-0.207
584807	10/23/2010 0:00	-0.174	-0.206
584808	10/24/2010 0:00	-0.191	-0.206
584809	10/25/2010 0:00	-0.176	-0.205
584810	10/26/2010 0:00	-0.16	-0.206
584811	10/27/2010 0:00	-0.196	-0.205
584812	10/28/2010 0:00	-0.223	-0.206
584813	10/29/2010 0:00	-0.227	-0.208
584814	10/30/2010 0:00	-0.226	-0.208
584815	10/31/2010 0:00	-0.24	-0.208
584816	11/1/2010 0:00	-0.207	-0.208
584817	11/2/2010 0:00	-0.251	-0.209
584818	11/3/2010 0:00	-0.227	-0.21
584819	11/4/2010 0:00	-0.21	-0.209
584820	11/5/2010 0:00	-0.222	-0.209
584821	11/6/2010 0:00	-0.212	-0.21
584822	11/7/2010 0:00	-0.209	-0.21
584823	11/8/2010 0:00	-0.205	-0.211
584824	11/9/2010 0:00	-0.199	-0.212
584825	11/10/2010 0:00	-0.212	-0.212
584826	11/11/2010 0:00	-0.193	-0.214
584827	11/12/2010 0:00	-0.215	-0.215
584828	11/13/2010 0:00	-0.237	-0.214
584829	11/14/2010 0:00	-0.224	-0.214
584830	11/15/2010 0:00	-0.208	-0.214
584831	11/16/2010 0:00	-0.205	-0.212
584832	11/17/2010 0:00	-0.208	-0.213
584833	11/18/2010 0:00	-0.243	-0.211
584834	11/19/2010 0:00	-0.193	-0.211
584835	11/20/2010 0:00	-0.177	-0.211
584836	11/21/2010 0:00	-0.227	-0.211
584837	11/22/2010 0:00	-0.199	-0.212
584838	11/23/2010 0:00	-0.215	-0.213
584839	11/24/2010 0:00	-0.213	-0.213
584840	11/25/2010 0:00	-0.193	-0.213
584841	11/26/2010 0:00	-0.21	-0.212
584842	11/27/2010 0:00	-0.231	-0.213
584843	11/28/2010 0:00	-0.212	-0.212
584844	11/29/2010 0:00	-0.214	-0.21
584845	11/30/2010 0:00	-0.212	-0.209
584846	12/1/2010 0:00	-0.199	-0.209
584847	12/2/2010 0:00	-0.223	-0.208
584848	12/3/2010 0:00	-0.203	-0.209
584849	12/4/2010 0:00	-0.217	-0.208

584850	12/5/2010 0:00	-0.224	-0.209
584851	12/6/2010 0:00	-0.223	-0.209
584852	12/7/2010 0:00	-0.243	-0.208
584853	12/8/2010 0:00	-0.224	-0.208
584854	12/9/2010 0:00	-0.198	-0.207
584855	12/10/2010 0:00	-0.205	-0.207
584856	12/11/2010 0:00	-0.199	-0.208
584857	12/12/2010 0:00	-0.212	-0.207
584858	12/13/2010 0:00	-0.185	-0.207
584859	12/14/2010 0:00	-0.178	-0.206
584860	12/15/2010 0:00	-0.183	-0.206
584861	12/16/2010 0:00	-0.217	-0.205
584862	12/17/2010 0:00	-0.18	-0.206
584863	12/18/2010 0:00	-0.229	-0.206
584864	12/19/2010 0:00	-0.222	-0.206
584865	12/20/2010 0:00	-0.206	-0.205
584866	12/21/2010 0:00	-0.2	-0.205
584867	12/22/2010 0:00	-0.182	-0.205
584868	12/23/2010 0:00	-0.196	-0.204
584869	12/24/2010 0:00	-0.178	-0.202
584870	12/25/2010 0:00	-0.222	-0.202
584871	12/26/2010 0:00	-0.213	-0.201
584872	12/27/2010 0:00	-0.189	-0.202
584873	12/28/2010 0:00	-0.227	-0.202
584874	12/29/2010 0:00	-0.188	-0.202
584875	12/30/2010 0:00	-0.204	-0.202
584876	12/31/2010 0:00	-0.191	-0.203
584877	1/1/2011 0:00	-0.218	-0.202
584878	1/2/2011 0:00	-0.221	-0.203
584879	1/3/2011 0:00	-0.205	-0.201
584880	1/4/2011 0:00	-0.207	-0.2
584881	1/5/2011 0:00	-0.209	-0.2
584882	1/6/2011 0:00	-0.218	-0.199
584883	1/7/2011 0:00	-0.21	-0.199
584884	1/8/2011 0:00	-0.182	-0.2
584885	1/9/2011 0:00	-0.183	-0.2
584886	1/10/2011 0:00	-0.192	-0.2
584887	1/11/2011 0:00	-0.212	-0.2
584888	1/12/2011 0:00	-0.205	-0.202
584889	1/13/2011 0:00	-0.185	-0.201
584890	1/14/2011 0:00	-0.199	-0.202
584891	1/15/2011 0:00	-0.215	-0.203
584892	1/16/2011 0:00	-0.162	-0.204
584893	1/17/2011 0:00	-0.214	-0.205

584894	1/18/2011 0:00	-0.183	-0.206
584895	1/19/2011 0:00	-0.18	-0.208
584896	1/20/2011 0:00	-0.202	-0.208
584897	1/21/2011 0:00	-0.186	-0.208
584898	1/22/2011 0:00	-0.17	-0.208
584899	1/23/2011 0:00	-0.215	-0.209
584900	1/24/2011 0:00	-0.201	-0.209
584901	1/25/2011 0:00	-0.21	-0.21
584902	1/26/2011 0:00	-0.224	-0.21
584903	1/27/2011 0:00	-0.242	-0.209
584904	1/28/2011 0:00	-0.204	-0.209
584905	1/29/2011 0:00	-0.228	-0.209
584906	1/30/2011 0:00	-0.224	-0.21
584907	1/31/2011 0:00	-0.232	-0.21
584908	2/1/2011 0:00	-0.238	-0.212
584909	2/2/2011 0:00	-0.25	-0.211
584910	2/3/2011 0:00	-0.255	-0.211
584911	2/4/2011 0:00	-0.222	-0.212
584912	2/5/2011 0:00	-0.195	-0.212
584913	2/6/2011 0:00	-0.236	-0.212
584914	2/7/2011 0:00	-0.224	-0.212
584915	2/8/2011 0:00	-0.189	-0.21
584916	2/9/2011 0:00	-0.201	-0.21
584917	2/10/2011 0:00	-0.208	-0.21
584918	2/11/2011 0:00	-0.195	-0.209
584919	2/12/2011 0:00	-0.201	-0.206
584920	2/13/2011 0:00	-0.189	-0.206
584921	2/14/2011 0:00	-0.214	-0.206
584922	2/15/2011 0:00	-0.221	-0.205
584923	2/16/2011 0:00	-0.216	-0.203
584924	2/17/2011 0:00	-0.185	-0.202
584925	2/18/2011 0:00	-0.184	-0.202
584926	2/19/2011 0:00	-0.221	-0.201
584927	2/20/2011 0:00	-0.189	-0.199
584928	2/21/2011 0:00	-0.177	-0.199
584929	2/22/2011 0:00	-0.17	-0.199
584930	2/23/2011 0:00	-0.18	-0.198
584931	2/24/2011 0:00	-0.193	-0.198
584932	2/25/2011 0:00	-0.191	-0.198
584933	2/26/2011 0:00	-0.19	-0.198
584934	2/27/2011 0:00	-0.169	-0.197
584935	2/28/2011 0:00	-0.195	-0.197
584936	3/1/2011 0:00	-0.22	-0.197
584937	3/2/2011 0:00	-0.19	-0.195

584938	3/3/2011 0:00	-0.197	-0.195
584939	3/4/2011 0:00	-0.209	-0.194
584940	3/5/2011 0:00	-0.23	-0.194
584941	3/6/2011 0:00	-0.23	-0.193
584942	3/7/2011 0:00	-0.176	-0.191
584943	3/8/2011 0:00	-0.189	-0.193
584944	3/9/2011 0:00	-0.227	-0.193
584945	3/10/2011 0:00	-0.203	-0.194
584946	3/11/2011 0:00	-0.185	-0.194
584947	3/12/2011 0:00	-0.194	-0.194
584948	3/13/2011 0:00	-0.201	-0.195
584949	3/14/2011 0:00	-0.181	-0.196
584950	3/15/2011 0:00	-0.191	-0.197
584951	3/16/2011 0:00	-0.181	-0.197
584952	3/17/2011 0:00	-0.17	-0.197
584953	3/18/2011 0:00	-0.199	-0.196
584954	3/19/2011 0:00	-0.193	-0.196
584955	3/20/2011 0:00	-0.184	-0.196
584956	3/21/2011 0:00	-0.163	-0.194
584957	3/22/2011 0:00	-0.167	-0.193
584958	3/23/2011 0:00	-0.232	-0.193
584959	3/24/2011 0:00	-0.199	-0.192
584960	3/25/2011 0:00	-0.196	-0.19
584961	3/26/2011 0:00	-0.178	-0.189
584962	3/27/2011 0:00	-0.201	-0.19
584963	3/28/2011 0:00	-0.214	-0.19
584964	3/29/2011 0:00	-0.207	-0.19
584965	3/30/2011 0:00	-0.203	-0.19
584966	3/31/2011 0:00	-0.196	-0.19
584967	4/1/2011 0:00	-0.212	-0.191
584968	4/2/2011 0:00	-0.178	-0.191
584969	4/3/2011 0:00	-0.197	-0.19
584970	4/4/2011 0:00	-0.191	-0.189
584971	4/5/2011 0:00	-0.179	-0.189
584972	4/6/2011 0:00	-0.188	-0.189
584973	4/7/2011 0:00	-0.175	-0.19
584974	4/8/2011 0:00	-0.162	-0.188
584975	4/9/2011 0:00	-0.157	-0.186
584976	4/10/2011 0:00	-0.2	-0.184
584977	4/11/2011 0:00	-0.2	-0.184
584978	4/12/2011 0:00	-0.189	-0.183
584979	4/13/2011 0:00	-0.194	-0.182
584980	4/14/2011 0:00	-0.193	-0.181
584981	4/15/2011 0:00	-0.198	-0.18

584982	4/16/2011 0:00	-0.193	-0.18
584983	4/17/2011 0:00	-0.171	-0.179
584984	4/18/2011 0:00	-0.187	-0.179
584985	4/19/2011 0:00	-0.163	-0.179
584986	4/20/2011 0:00	-0.17	-0.179
584987	4/21/2011 0:00	-0.179	-0.178
584988	4/22/2011 0:00	-0.189	-0.178
584989	4/23/2011 0:00	-0.157	-0.177
584990	4/24/2011 0:00	-0.137	-0.176
584991	4/25/2011 0:00	-0.15	-0.177
584992	4/26/2011 0:00	-0.185	-0.175
584993	4/27/2011 0:00	-0.17	-0.174
584994	4/28/2011 0:00	-0.178	-0.175
584995	4/29/2011 0:00	-0.183	-0.174
584996	4/30/2011 0:00	-0.156	-0.174
584997	5/1/2011 0:00	-0.197	-0.174
584998	5/2/2011 0:00	-0.19	-0.174
584999	5/3/2011 0:00	-0.184	-0.174
585000	5/4/2011 0:00	-0.189	-0.174
585001	5/5/2011 0:00	-0.181	-0.174
585002	5/6/2011 0:00	-0.154	-0.175
585003	5/7/2011 0:00	-0.177	-0.175
585004	5/8/2011 0:00	-0.15	-0.175
585005	5/9/2011 0:00	-0.144	-0.176
585006	5/10/2011 0:00	-0.165	-0.177
585007	5/11/2011 0:00	-0.153	-0.178
585008	5/12/2011 0:00	-0.173	-0.178
585009	5/13/2011 0:00	-0.203	-0.179
585010	5/14/2011 0:00	-0.167	-0.179
585011	5/15/2011 0:00	-0.19	-0.178
585012	5/16/2011 0:00	-0.197	-0.179
585013	5/17/2011 0:00	-0.189	-0.18
585014	5/18/2011 0:00	-0.19	-0.179
585015	5/19/2011 0:00	-0.173	-0.179
585016	5/20/2011 0:00	-0.173	-0.179
585017	5/21/2011 0:00	-0.192	-0.18
585018	5/22/2011 0:00	-0.193	-0.181
585019	5/23/2011 0:00	-0.172	-0.181
585020	5/24/2011 0:00	-0.188	-0.182
585021	5/25/2011 0:00	-0.184	-0.182
585022	5/26/2011 0:00	-0.189	-0.183
585023	5/27/2011 0:00	-0.187	-0.183
585024	5/28/2011 0:00	-0.185	-0.183
585025	5/29/2011 0:00	-0.169	-0.182

585026	5/30/2011 0:00	-0.167	-0.182
585027	5/31/2011 0:00	-0.196	-0.182
585028	6/1/2011 0:00	-0.213	-0.181
585029	6/2/2011 0:00	-0.177	-0.18
585030	6/3/2011 0:00	-0.183	-0.18
585031	6/4/2011 0:00	-0.17	-0.18
585032	6/5/2011 0:00	-0.221	-0.181
585033	6/6/2011 0:00	-0.173	-0.18
585034	6/7/2011 0:00	-0.198	-0.18
585035	6/8/2011 0:00	-0.168	-0.18
585036	6/9/2011 0:00	-0.156	-0.18
585037	6/10/2011 0:00	-0.175	-0.179
585038	6/11/2011 0:00	-0.155	-0.178
585039	6/12/2011 0:00	-0.193	-0.179
585040	6/13/2011 0:00	-0.153	-0.179
585041	6/14/2011 0:00	-0.172	-0.18
585042	6/15/2011 0:00	-0.181	-0.181
585043	6/16/2011 0:00	-0.182	-0.18
585044	6/17/2011 0:00	-0.162	-0.178
585045	6/18/2011 0:00	-0.192	-0.177
585046	6/19/2011 0:00	-0.178	-0.177
585047	6/20/2011 0:00	-0.177	-0.178
585048	6/21/2011 0:00	-0.185	-0.176
585049	6/22/2011 0:00	-0.181	-0.177
585050	6/23/2011 0:00	-0.183	-0.176
585051	6/24/2011 0:00	-0.192	-0.176
585052	6/25/2011 0:00	-0.139	-0.177
585053	6/26/2011 0:00	-0.159	-0.178
585054	6/27/2011 0:00	-0.207	-0.18
585055	6/28/2011 0:00	-0.194	-0.179
585056	6/29/2011 0:00	-0.199	-0.18
585057	6/30/2011 0:00	-0.199	-0.181
585058	7/1/2011 0:00	-0.154	-0.182
585059	7/2/2011 0:00	-0.163	-0.182
585060	7/3/2011 0:00	-0.15	-0.183
585061	7/4/2011 0:00	-0.179	-0.183
585062	7/5/2011 0:00	-0.187	-0.183
585063	7/6/2011 0:00	-0.18	-0.182
585064	7/7/2011 0:00	-0.182	-0.183
585065	7/8/2011 0:00	-0.185	-0.182
585066	7/9/2011 0:00	-0.167	-0.183
585067	7/10/2011 0:00	-0.196	-0.183
585068	7/11/2011 0:00	-0.195	-0.185
585069	7/12/2011 0:00	-0.204	-0.184

585070	7/13/2011 0:00	-0.173	-0.182
585071	7/14/2011 0:00	-0.195	-0.182
585072	7/15/2011 0:00	-0.195	-0.182
585073	7/16/2011 0:00	-0.196	-0.182
585074	7/17/2011 0:00	-0.195	-0.183
585075	7/18/2011 0:00	-0.187	-0.183
585076	7/19/2011 0:00	-0.199	-0.184
585077	7/20/2011 0:00	-0.172	-0.186
585078	7/21/2011 0:00	-0.158	-0.186
585079	7/22/2011 0:00	-0.2	-0.186
585080	7/23/2011 0:00	-0.173	-0.186
585081	7/24/2011 0:00	-0.198	-0.185
585082	7/25/2011 0:00	-0.196	-0.185
585083	7/26/2011 0:00	-0.185	-0.185
585084	7/27/2011 0:00	-0.141	-0.185
585085	7/28/2011 0:00	-0.154	-0.184
585086	7/29/2011 0:00	-0.191	-0.185
585087	7/30/2011 0:00	-0.208	-0.185
585088	7/31/2011 0:00	-0.186	-0.185
585089	8/1/2011 0:00	-0.17	-0.185
585090	8/2/2011 0:00	-0.183	-0.185
585091	8/3/2011 0:00	-0.184	-0.186
585092	8/4/2011 0:00	-0.219	-0.185
585093	8/5/2011 0:00	-0.2	-0.186
585094	8/6/2011 0:00	-0.194	-0.187
585095	8/7/2011 0:00	-0.162	-0.187
585096	8/8/2011 0:00	-0.15	-0.186
585097	8/9/2011 0:00	-0.177	-0.185
585098	8/10/2011 0:00	-0.189	-0.184
585099	8/11/2011 0:00	-0.189	-0.184
585100	8/12/2011 0:00	-0.19	-0.186
585101	8/13/2011 0:00	-0.201	-0.186
585102	8/14/2011 0:00	-0.192	-0.186
585103	8/15/2011 0:00	-0.202	-0.184
585104	8/16/2011 0:00	-0.194	-0.184
585105	8/17/2011 0:00	-0.204	-0.184
585106	8/18/2011 0:00	-0.196	-0.184
585107	8/19/2011 0:00	-0.181	-0.183
585108	8/20/2011 0:00	-0.207	-0.182
585109	8/21/2011 0:00	-0.174	-0.182
585110	8/22/2011 0:00	-0.193	-0.182
585111	8/23/2011 0:00	-0.15	-0.182
585112	8/24/2011 0:00	-0.171	-0.183
585113	8/25/2011 0:00	-0.172	-0.184

585114	8/26/2011 0:00	-0.194	-0.183
585115	8/27/2011 0:00	-0.179	-0.182
585116	8/28/2011 0:00	-0.166	-0.182
585117	8/29/2011 0:00	-0.194	-0.181
585118	8/30/2011 0:00	-0.151	-0.181
585119	8/31/2011 0:00	-0.167	-0.181
585120	9/1/2011 0:00	-0.185	-0.18
585121	9/2/2011 0:00	-0.176	-0.179
585122	9/3/2011 0:00	-0.163	-0.179
585123	9/4/2011 0:00	-0.181	-0.18
585124	9/5/2011 0:00	-0.204	-0.181
585125	9/6/2011 0:00	-0.201	-0.181
585126	9/7/2011 0:00	-0.162	-0.179
585127	9/8/2011 0:00	-0.179	-0.18
585128	9/9/2011 0:00	-0.191	-0.179
585129	9/10/2011 0:00	-0.163	-0.179
585130	9/11/2011 0:00	-0.174	-0.178
585131	9/12/2011 0:00	-0.189	-0.178
585132	9/13/2011 0:00	-0.148	-0.179
585133	9/14/2011 0:00	-0.211	-0.177
585134	9/15/2011 0:00	-0.199	-0.177
585135	9/16/2011 0:00	-0.165	-0.178
585136	9/17/2011 0:00	-0.167	-0.178
585137	9/18/2011 0:00	-0.205	-0.179
585138	9/19/2011 0:00	-0.204	-0.18
585139	9/20/2011 0:00	-0.218	-0.179
585140	9/21/2011 0:00	-0.182	-0.178
585141	9/22/2011 0:00	-0.15	-0.176
585142	9/23/2011 0:00	-0.162	-0.177
585143	9/24/2011 0:00	-0.15	-0.177
585144	9/25/2011 0:00	-0.164	-0.175
585145	9/26/2011 0:00	-0.173	-0.176
585146	9/27/2011 0:00	-0.177	-0.177
585147	9/28/2011 0:00	-0.185	-0.177
585148	9/29/2011 0:00	-0.15	-0.177
585149	9/30/2011 0:00	-0.158	-0.175
585150	10/1/2011 0:00	-0.184	-0.174
585151	10/2/2011 0:00	-0.195	-0.175
585152	10/3/2011 0:00	-0.194	-0.175
585153	10/4/2011 0:00	-0.194	-0.173
585154	10/5/2011 0:00	-0.152	-0.172
585155	10/6/2011 0:00	-0.165	-0.17
585156	10/7/2011 0:00	-0.143	-0.171
585157	10/8/2011 0:00	-0.197	-0.172

585158	10/9/2011 0:00	-0.166	-0.172
585159	10/10/2011 0:00	-0.151	-0.172
585160	10/11/2011 0:00	-0.194	-0.172
585161	10/12/2011 0:00	-0.201	-0.173
585162	10/13/2011 0:00	-0.184	-0.174
585163	10/14/2011 0:00	-0.142	-0.175
585164	10/15/2011 0:00	-0.143	-0.176
585165	10/16/2011 0:00	-0.173	-0.177
585166	10/17/2011 0:00	-0.191	-0.177
585167	10/18/2011 0:00	-0.176	-0.178
585168	10/19/2011 0:00	-0.15	-0.179
585169	10/20/2011 0:00	-0.157	-0.178
585170	10/21/2011 0:00	-0.179	-0.179
585171	10/22/2011 0:00	-0.197	-0.18
585172	10/23/2011 0:00	-0.176	-0.183
585173	10/24/2011 0:00	-0.176	-0.185
585174	10/25/2011 0:00	-0.15	-0.187
585175	10/26/2011 0:00	-0.165	-0.189
585176	10/27/2011 0:00	-0.199	-0.189
585177	10/28/2011 0:00	-0.216	-0.189
585178	10/29/2011 0:00	-0.199	-0.19
585179	10/30/2011 0:00	-0.196	-0.191
585180	10/31/2011 0:00	-0.189	-0.194
585181	11/1/2011 0:00	-0.176	-0.195
585182	11/2/2011 0:00	-0.223	-0.196
585183	11/3/2011 0:00	-0.216	-0.197
585184	11/4/2011 0:00	-0.185	-0.199
585185	11/5/2011 0:00	-0.172	-0.201
585186	11/6/2011 0:00	-0.206	-0.202
585187	11/7/2011 0:00	-0.228	-0.203
585188	11/8/2011 0:00	-0.254	-0.205
585189	11/9/2011 0:00	-0.24	-0.205
585190	11/10/2011 0:00	-0.208	-0.206
585191	11/11/2011 0:00	-0.202	-0.208
585192	11/12/2011 0:00	-0.196	-0.209
585193	11/13/2011 0:00	-0.206	-0.209
585194	11/14/2011 0:00	-0.19	-0.209
585195	11/15/2011 0:00	-0.22	-0.208
585196	11/16/2011 0:00	-0.219	-0.21
585197	11/17/2011 0:00	-0.213	-0.21
585198	11/18/2011 0:00	-0.21	-0.21
585199	11/19/2011 0:00	-0.212	-0.21
585200	11/20/2011 0:00	-0.2	-0.211
585201	11/21/2011 0:00	-0.209	-0.214

585202	11/22/2011 0:00	-0.237	-0.214
585203	11/23/2011 0:00	-0.23	-0.213
585204	11/24/2011 0:00	-0.201	-0.212
585205	11/25/2011 0:00	-0.174	-0.21
585206	11/26/2011 0:00	-0.234	-0.209
585207	11/27/2011 0:00	-0.213	-0.209
585208	11/28/2011 0:00	-0.213	-0.209
585209	11/29/2011 0:00	-0.202	-0.209
585210	11/30/2011 0:00	-0.181	-0.21
585211	12/1/2011 0:00	-0.227	-0.209
585212	12/2/2011 0:00	-0.197	-0.209
585213	12/3/2011 0:00	-0.213	-0.208
585214	12/4/2011 0:00	-0.225	-0.207
585215	12/5/2011 0:00	-0.22	-0.207
585216	12/6/2011 0:00	-0.239	-0.206
585217	12/7/2011 0:00	-0.207	-0.206
585218	12/8/2011 0:00	-0.212	-0.206
585219	12/9/2011 0:00	-0.205	-0.206
585220	12/10/2011 0:00	-0.193	-0.206
585221	12/11/2011 0:00	-0.165	-0.208
585222	12/12/2011 0:00	-0.21	-0.207
585223	12/13/2011 0:00	-0.202	-0.206
585224	12/14/2011 0:00	-0.212	-0.205
585225	12/15/2011 0:00	-0.198	-0.205
585226	12/16/2011 0:00	-0.199	-0.206
585227	12/17/2011 0:00	-0.222	-0.205
585228	12/18/2011 0:00	-0.188	-0.205
585229	12/19/2011 0:00	-0.173	-0.205
585230	12/20/2011 0:00	-0.219	-0.205
585231	12/21/2011 0:00	-0.178	-0.205
585232	12/22/2011 0:00	-0.192	-0.203
585233	12/23/2011 0:00	-0.242	-0.203
585234	12/24/2011 0:00	-0.224	-0.203
585235	12/25/2011 0:00	-0.221	-0.204
585236	12/26/2011 0:00	-0.207	-0.203
585237	12/27/2011 0:00	-0.203	-0.204
585238	12/28/2011 0:00	-0.209	-0.203
585239	12/29/2011 0:00	-0.173	-0.203
585240	12/30/2011 0:00	-0.197	-0.203
585241	12/31/2011 0:00	-0.201	-0.202
585242	1/1/2012 0:00	-0.208	-0.202
585243	1/2/2012 0:00	-0.193	-0.202
585244	1/3/2012 0:00	-0.227	-0.202
585245	1/4/2012 0:00	-0.229	-0.202

585246	1/5/2012 0:00	-0.21	-0.201
585247	1/6/2012 0:00	-0.188	-0.201
585248	1/7/2012 0:00	-0.201	-0.201
585249	1/8/2012 0:00	-0.202	-0.2
585250	1/9/2012 0:00	-0.222	-0.199
585251	1/10/2012 0:00	-0.192	-0.198
585252	1/11/2012 0:00	-0.188	-0.197
585253	1/12/2012 0:00	-0.185	-0.196
585254	1/13/2012 0:00	-0.188	-0.196
585255	1/14/2012 0:00	-0.207	-0.197
585256	1/15/2012 0:00	-0.174	-0.196
585257	1/16/2012 0:00	-0.206	-0.195
585258	1/17/2012 0:00	-0.206	-0.195
585259	1/18/2012 0:00	-0.186	-0.195
585260	1/19/2012 0:00	-0.184	-0.194
585261	1/20/2012 0:00	-0.192	-0.193
585262	1/21/2012 0:00	-0.163	-0.192
585263	1/22/2012 0:00	-0.214	-0.191
585264	1/23/2012 0:00	-0.207	-0.192
585265	1/24/2012 0:00	-0.199	-0.191
585266	1/25/2012 0:00	-0.164	-0.191
585267	1/26/2012 0:00	-0.194	-0.191
585268	1/27/2012 0:00	-0.171	-0.19
585269	1/28/2012 0:00	-0.198	-0.19
585270	1/29/2012 0:00	-0.204	-0.189
585271	1/30/2012 0:00	-0.171	-0.187
585272	1/31/2012 0:00	-0.173	-0.188
585273	2/1/2012 0:00	-0.195	-0.187
585274	2/2/2012 0:00	-0.195	-0.188
585275	2/3/2012 0:00	-0.191	-0.188
585276	2/4/2012 0:00	-0.2	-0.188
585277	2/5/2012 0:00	-0.177	-0.188
585278	2/6/2012 0:00	-0.17	-0.189
585279	2/7/2012 0:00	-0.221	-0.188
585280	2/8/2012 0:00	-0.187	-0.187
585281	2/9/2012 0:00	-0.215	-0.187
585282	2/10/2012 0:00	-0.192	-0.188
585283	2/11/2012 0:00	-0.167	-0.188
585284	2/12/2012 0:00	-0.163	-0.187
585285	2/13/2012 0:00	-0.159	-0.186
585286	2/14/2012 0:00	-0.17	-0.186
585287	2/15/2012 0:00	-0.192	-0.186
585288	2/16/2012 0:00	-0.185	-0.187
585289	2/17/2012 0:00	-0.221	-0.187

585290	2/18/2012 0:00	-0.199	-0.187
585291	2/19/2012 0:00	-0.18	-0.187
585292	2/20/2012 0:00	-0.202	-0.186
585293	2/21/2012 0:00	-0.191	-0.186
585294	2/22/2012 0:00	-0.184	-0.187
585295	2/23/2012 0:00	-0.166	-0.187
585296	2/24/2012 0:00	-0.191	-0.186
585297	2/25/2012 0:00	-0.214	-0.185
585298	2/26/2012 0:00	-0.169	-0.186
585299	2/27/2012 0:00	-0.138	-0.187
585300	2/28/2012 0:00	-0.186	-0.189
585301	2/29/2012 0:00	-0.197	-0.19
585302	3/1/2012 0:00	-0.187	-0.191
585303	3/2/2012 0:00	-0.186	-0.192
585304	3/3/2012 0:00	-0.203	-0.193
585305	3/4/2012 0:00	-0.198	-0.192
585306	3/5/2012 0:00	-0.185	-0.192
585307	3/6/2012 0:00	-0.174	-0.193
585308	3/7/2012 0:00	-0.179	-0.193
585309	3/8/2012 0:00	-0.207	-0.195
585310	3/9/2012 0:00	-0.203	-0.197
585311	3/10/2012 0:00	-0.173	-0.198
585312	3/11/2012 0:00	-0.188	-0.198
585313	3/12/2012 0:00	-0.213	-0.198
585314	3/13/2012 0:00	-0.205	-0.199
585315	3/14/2012 0:00	-0.201	-0.202
585316	3/15/2012 0:00	-0.199	-0.202
585317	3/16/2012 0:00	-0.198	-0.202
585318	3/17/2012 0:00	-0.235	-0.202
585319	3/18/2012 0:00	-0.209	-0.202
585320	3/19/2012 0:00	-0.198	-0.203
585321	3/20/2012 0:00	-0.199	-0.203
585322	3/21/2012 0:00	-0.215	-0.203
585323	3/22/2012 0:00	-0.207	-0.203
585324	3/23/2012 0:00	-0.241	-0.204
585325	3/24/2012 0:00	-0.235	-0.205
585326	3/25/2012 0:00	-0.209	-0.206
585327	3/26/2012 0:00	-0.199	-0.207
585328	3/27/2012 0:00	-0.211	-0.208
585329	3/28/2012 0:00	-0.205	-0.208
585330	3/29/2012 0:00	-0.225	-0.209
585331	3/30/2012 0:00	-0.19	-0.21
585332	3/31/2012 0:00	-0.194	-0.21
585333	4/1/2012 0:00	-0.163	-0.211

585334	4/2/2012 0:00	-0.191	-0.21
585335	4/3/2012 0:00	-0.23	-0.211
585336	4/4/2012 0:00	-0.208	-0.211
585337	4/5/2012 0:00	-0.184	-0.212
585338	4/6/2012 0:00	-0.188	-0.212
585339	4/7/2012 0:00	-0.199	-0.212
585340	4/8/2012 0:00	-0.231	-0.211
585341	4/9/2012 0:00	-0.243	-0.209
585342	4/10/2012 0:00	-0.216	-0.209
585343	4/11/2012 0:00	-0.216	-0.209
585344	4/12/2012 0:00	-0.205	-0.209
585345	4/13/2012 0:00	-0.234	-0.208
585346	4/14/2012 0:00	-0.222	-0.208
585347	4/15/2012 0:00	-0.218	-0.209
585348	4/16/2012 0:00	-0.214	-0.209
585349	4/17/2012 0:00	-0.212	-0.21
585350	4/18/2012 0:00	-0.228	-0.211
585351	4/19/2012 0:00	-0.214	-0.21
585352	4/20/2012 0:00	-0.217	-0.21
585353	4/21/2012 0:00	-0.228	-0.212
585354	4/22/2012 0:00	-0.21	-0.213
585355	4/23/2012 0:00	-0.19	-0.213
585356	4/24/2012 0:00	-0.193	-0.213
585357	4/25/2012 0:00	-0.199	-0.212
585358	4/26/2012 0:00	-0.213	-0.212
585359	4/27/2012 0:00	-0.191	-0.212
585360	4/28/2012 0:00	-0.183	-0.212
585361	4/29/2012 0:00	-0.219	-0.212
585362	4/30/2012 0:00	-0.216	-0.211
585363	5/1/2012 0:00	-0.196	-0.212
585364	5/2/2012 0:00	-0.202	-0.212
585365	5/3/2012 0:00	-0.219	-0.212
585366	5/4/2012 0:00	-0.21	-0.211
585367	5/5/2012 0:00	-0.212	-0.211
585368	5/6/2012 0:00	-0.221	-0.21
585369	5/7/2012 0:00	-0.222	-0.21
585370	5/8/2012 0:00	-0.212	-0.208
585371	5/9/2012 0:00	-0.216	-0.209
585372	5/10/2012 0:00	-0.209	-0.209
585373	5/11/2012 0:00	-0.224	-0.209
585374	5/12/2012 0:00	-0.224	-0.208
585375	5/13/2012 0:00	-0.213	-0.208
585376	5/14/2012 0:00	-0.22	-0.209
585377	5/15/2012 0:00	-0.192	-0.208

585378	5/16/2012 0:00	-0.24	-0.208
585379	5/17/2012 0:00	-0.209	-0.208
585380	5/18/2012 0:00	-0.222	-0.207
585381	5/19/2012 0:00	-0.203	-0.206
585382	5/20/2012 0:00	-0.202	-0.206
585383	5/21/2012 0:00	-0.211	-0.206
585384	5/22/2012 0:00	-0.204	-0.204
585385	5/23/2012 0:00	-0.163	-0.203
585386	5/24/2012 0:00	-0.209	-0.203
585387	5/25/2012 0:00	-0.21	-0.202
585388	5/26/2012 0:00	-0.179	-0.201
585389	5/27/2012 0:00	-0.203	-0.201
585390	5/28/2012 0:00	-0.195	-0.2
585391	5/29/2012 0:00	-0.202	-0.199
585392	5/30/2012 0:00	-0.2	-0.198
585393	5/31/2012 0:00	-0.201	-0.199
585394	6/1/2012 0:00	-0.192	-0.197
585395	6/2/2012 0:00	-0.187	-0.197
585396	6/3/2012 0:00	-0.189	-0.195
585397	6/4/2012 0:00	-0.198	-0.196
585398	6/5/2012 0:00	-0.211	-0.196
585399	6/6/2012 0:00	-0.155	-0.196
585400	6/7/2012 0:00	-0.194	-0.195
585401	6/8/2012 0:00	-0.211	-0.196
585402	6/9/2012 0:00	-0.187	-0.195
585403	6/10/2012 0:00	-0.193	-0.195
585404	6/11/2012 0:00	-0.212	-0.197
585405	6/12/2012 0:00	-0.186	-0.197
585406	6/13/2012 0:00	-0.187	-0.197
585407	6/14/2012 0:00	-0.202	-0.198
585408	6/15/2012 0:00	-0.199	-0.198
585409	6/16/2012 0:00	-0.184	-0.198
585410	6/17/2012 0:00	-0.201	-0.198
585411	6/18/2012 0:00	-0.181	-0.198
585412	6/19/2012 0:00	-0.216	-0.198
585413	6/20/2012 0:00	-0.204	-0.198
585414	6/21/2012 0:00	-0.214	-0.199
585415	6/22/2012 0:00	-0.191	-0.202
585416	6/23/2012 0:00	-0.178	-0.202
585417	6/24/2012 0:00	-0.192	-0.2
585418	6/25/2012 0:00	-0.214	-0.2
585419	6/26/2012 0:00	-0.214	-0.201
585420	6/27/2012 0:00	-0.219	-0.201
585421	6/28/2012 0:00	-0.207	-0.202

585422	6/29/2012 0:00	-0.204	-0.203
585423	6/30/2012 0:00	-0.214	-0.202
585424	7/1/2012 0:00	-0.21	-0.202
585425	7/2/2012 0:00	-0.191	-0.203
585426	7/3/2012 0:00	-0.174	-0.203
585427	7/4/2012 0:00	-0.185	-0.203
585428	7/5/2012 0:00	-0.219	-0.204
585429	7/6/2012 0:00	-0.232	-0.203
585430	7/7/2012 0:00	-0.233	-0.204
585431	7/8/2012 0:00	-0.202	-0.205
585432	7/9/2012 0:00	-0.169	-0.206
585433	7/10/2012 0:00	-0.185	-0.206
585434	7/11/2012 0:00	-0.205	-0.206
585435	7/12/2012 0:00	-0.226	-0.205
585436	7/13/2012 0:00	-0.22	-0.205
585437	7/14/2012 0:00	-0.193	-0.206
585438	7/15/2012 0:00	-0.196	-0.207
585439	7/16/2012 0:00	-0.188	-0.206
585440	7/17/2012 0:00	-0.209	-0.207
585441	7/18/2012 0:00	-0.208	-0.207
585442	7/19/2012 0:00	-0.197	-0.208
585443	7/20/2012 0:00	-0.219	-0.209
585444	7/21/2012 0:00	-0.199	-0.208
585445	7/22/2012 0:00	-0.228	-0.208
585446	7/23/2012 0:00	-0.225	-0.207
585447	7/24/2012 0:00	-0.214	-0.207
585448	7/25/2012 0:00	-0.2	-0.208
585449	7/26/2012 0:00	-0.189	-0.208
585450	7/27/2012 0:00	-0.198	-0.208
585451	7/28/2012 0:00	-0.209	-0.207
585452	7/29/2012 0:00	-0.248	-0.206
585453	7/30/2012 0:00	-0.216	-0.206
585454	7/31/2012 0:00	-0.208	-0.207
585455	8/1/2012 0:00	-0.218	-0.207
585456	8/2/2012 0:00	-0.191	-0.207
585457	8/3/2012 0:00	-0.204	-0.207
585458	8/4/2012 0:00	-0.22	-0.208
585459	8/5/2012 0:00	-0.204	-0.208
585460	8/6/2012 0:00	-0.212	-0.208
585461	8/7/2012 0:00	-0.215	-0.207
585462	8/8/2012 0:00	-0.202	-0.206
585463	8/9/2012 0:00	-0.194	-0.206
585464	8/10/2012 0:00	-0.201	-0.206
585465	8/11/2012 0:00	-0.187	-0.207

585466	8/12/2012 0:00	-0.195	-0.207
585467	8/13/2012 0:00	-0.193	-0.207
585468	8/14/2012 0:00	-0.205	-0.206
585469	8/15/2012 0:00	-0.215	-0.206
585470	8/16/2012 0:00	-0.193	-0.205
585471	8/17/2012 0:00	-0.201	-0.205
585472	8/18/2012 0:00	-0.214	-0.205
585473	8/19/2012 0:00	-0.227	-0.206
585474	8/20/2012 0:00	-0.223	-0.205
585475	8/21/2012 0:00	-0.203	-0.204
585476	8/22/2012 0:00	-0.19	-0.203
585477	8/23/2012 0:00	-0.21	-0.202
585478	8/24/2012 0:00	-0.19	-0.204
585479	8/25/2012 0:00	-0.227	-0.205
585480	8/26/2012 0:00	-0.206	-0.203
585481	8/27/2012 0:00	-0.203	-0.205
585482	8/28/2012 0:00	-0.218	-0.205
585483	8/29/2012 0:00	-0.204	-0.206
585484	8/30/2012 0:00	-0.2	-0.207
585485	8/31/2012 0:00	-0.2	-0.207
585486	9/1/2012 0:00	-0.208	-0.208
585487	9/2/2012 0:00	-0.196	-0.208
585488	9/3/2012 0:00	-0.225	-0.209
585489	9/4/2012 0:00	-0.19	-0.209
585490	9/5/2012 0:00	-0.175	-0.209
585491	9/6/2012 0:00	-0.177	-0.209
585492	9/7/2012 0:00	-0.204	-0.21
585493	9/8/2012 0:00	-0.244	-0.21
585494	9/9/2012 0:00	-0.218	-0.211
585495	9/10/2012 0:00	-0.166	-0.212
585496	9/11/2012 0:00	-0.232	-0.213
585497	9/12/2012 0:00	-0.209	-0.214
585498	9/13/2012 0:00	-0.223	-0.214
585499	9/14/2012 0:00	-0.23	-0.214
585500	9/15/2012 0:00	-0.223	-0.215
585501	9/16/2012 0:00	-0.211	-0.216
585502	9/17/2012 0:00	-0.216	-0.216
585503	9/18/2012 0:00	-0.227	-0.216
585504	9/19/2012 0:00	-0.238	-0.216
585505	9/20/2012 0:00	-0.219	-0.217
585506	9/21/2012 0:00	-0.209	-0.218
585507	9/22/2012 0:00	-0.212	-0.219
585508	9/23/2012 0:00	-0.216	-0.218
585509	9/24/2012 0:00	-0.231	-0.217

585510	9/25/2012 0:00	-0.246	-0.217
585511	9/26/2012 0:00	-0.226	-0.219
585512	9/27/2012 0:00	-0.229	-0.219
585513	9/28/2012 0:00	-0.218	-0.219
585514	9/29/2012 0:00	-0.21	-0.219
585515	9/30/2012 0:00	-0.239	-0.218
585516	10/1/2012 0:00	-0.234	-0.219
585517	10/2/2012 0:00	-0.206	-0.218
585518	10/3/2012 0:00	-0.189	-0.218
585519	10/4/2012 0:00	-0.229	-0.216
585520	10/5/2012 0:00	-0.208	-0.215
585521	10/6/2012 0:00	-0.223	-0.215
585522	10/7/2012 0:00	-0.206	-0.216
585523	10/8/2012 0:00	-0.166	-0.217
585524	10/9/2012 0:00	-0.229	-0.217
585525	10/10/2012 0:00	-0.212	-0.217
585526	10/11/2012 0:00	-0.238	-0.217
585527	10/12/2012 0:00	-0.229	-0.217
585528	10/13/2012 0:00	-0.212	-0.217
585529	10/14/2012 0:00	-0.203	-0.217
585530	10/15/2012 0:00	-0.218	-0.217
585531	10/16/2012 0:00	-0.244	-0.216
585532	10/17/2012 0:00	-0.182	-0.216
585533	10/18/2012 0:00	-0.203	-0.217
585534	10/19/2012 0:00	-0.174	-0.217
585535	10/20/2012 0:00	-0.21	-0.217
585536	10/21/2012 0:00	-0.212	-0.217
585537	10/22/2012 0:00	-0.239	-0.216
585538	10/23/2012 0:00	-0.231	-0.216
585539	10/24/2012 0:00	-0.236	-0.218
585540	10/25/2012 0:00	-0.224	-0.218
585541	10/26/2012 0:00	-0.245	-0.218
585542	10/27/2012 0:00	-0.238	-0.218
585543	10/28/2012 0:00	-0.214	-0.218
585544	10/29/2012 0:00	-0.225	-0.22
585545	10/30/2012 0:00	-0.203	-0.221
585546	10/31/2012 0:00	-0.211	-0.223
585547	11/1/2012 0:00	-0.232	-0.222
585548	11/2/2012 0:00	-0.233	-0.225
585549	11/3/2012 0:00	-0.193	-0.225
585550	11/4/2012 0:00	-0.23	-0.227
585551	11/5/2012 0:00	-0.201	-0.229
585552	11/6/2012 0:00	-0.193	-0.228
585553	11/7/2012 0:00	-0.211	-0.227

585554	11/8/2012 0:00	-0.219	-0.227
585555	11/9/2012 0:00	-0.236	-0.228
585556	11/10/2012 0:00	-0.231	-0.228
585557	11/11/2012 0:00	-0.224	-0.228
585558	11/12/2012 0:00	-0.24	-0.228
585559	11/13/2012 0:00	-0.258	-0.228
585560	11/14/2012 0:00	-0.231	-0.23
585561	11/15/2012 0:00	-0.274	-0.229
585562	11/16/2012 0:00	-0.229	-0.23
585563	11/17/2012 0:00	-0.264	-0.23
585564	11/18/2012 0:00	-0.211	-0.229
585565	11/19/2012 0:00	-0.239	-0.229
585566	11/20/2012 0:00	-0.258	-0.229
585567	11/21/2012 0:00	-0.187	-0.229
585568	11/22/2012 0:00	-0.226	-0.23
585569	11/23/2012 0:00	-0.229	-0.23
585570	11/24/2012 0:00	-0.251	-0.23
585571	11/25/2012 0:00	-0.234	-0.23
585572	11/26/2012 0:00	-0.248	-0.23
585573	11/27/2012 0:00	-0.23	-0.23
585574	11/28/2012 0:00	-0.217	-0.228
585575	11/29/2012 0:00	-0.274	-0.227
585576	11/30/2012 0:00	-0.198	-0.225
585577	12/1/2012 0:00	-0.237	-0.223
585578	12/2/2012 0:00	-0.218	-0.222
585579	12/3/2012 0:00	-0.197	-0.219
585580	12/4/2012 0:00	-0.205	-0.219
585581	12/5/2012 0:00	-0.229	-0.219
585582	12/6/2012 0:00	-0.198	-0.218
585583	12/7/2012 0:00	-0.224	-0.219
585584	12/8/2012 0:00	-0.217	-0.219
585585	12/9/2012 0:00	-0.209	-0.218
585586	12/10/2012 0:00	-0.234	-0.217
585587	12/11/2012 0:00	-0.237	-0.218
585588	12/12/2012 0:00	-0.215	-0.217
585589	12/13/2012 0:00	-0.197	-0.217
585590	12/14/2012 0:00	-0.203	-0.217
585591	12/15/2012 0:00	-0.192	-0.215
585592	12/16/2012 0:00	-0.191	-0.215
585593	12/17/2012 0:00	-0.213	-0.215
585594	12/18/2012 0:00	-0.167	-0.216
585595	12/19/2012 0:00	-0.223	-0.217
585596	12/20/2012 0:00	-0.226	-0.219
585597	12/21/2012 0:00	-0.226	-0.219

585598	12/22/2012 0:00	-0.223	-0.219
585599	12/23/2012 0:00	-0.22	-0.22
585600	12/24/2012 0:00	-0.216	-0.221
585601	12/25/2012 0:00	-0.21	-0.222
585602	12/26/2012 0:00	-0.249	-0.222
585603	12/27/2012 0:00	-0.223	-0.222
585604	12/28/2012 0:00	-0.245	-0.223
585605	12/29/2012 0:00	-0.209	-0.224
585606	12/30/2012 0:00	-0.204	-0.225
585607	12/31/2012 0:00	-0.219	-0.227
585608	1/1/2013 0:00	-0.237	-0.227
585609	1/2/2013 0:00	-0.236	-0.229
585610	1/3/2013 0:00	-0.238	-0.231
585611	1/4/2013 0:00	-0.244	-0.23
585612	1/5/2013 0:00	-0.246	-0.229
585613	1/6/2013 0:00	-0.208	-0.229
585614	1/7/2013 0:00	-0.243	-0.23
585615	1/8/2013 0:00	-0.246	-0.232
585616	1/9/2013 0:00	-0.254	-0.232
585617	1/10/2013 0:00	-0.225	-0.232
585618	1/11/2013 0:00	-0.226	-0.231
585619	1/12/2013 0:00	-0.249	-0.231
585620	1/13/2013 0:00	-0.246	-0.23
585621	1/14/2013 0:00	-0.236	-0.231
585622	1/15/2013 0:00	-0.231	-0.233
585623	1/16/2013 0:00	-0.21	-0.234
585624	1/17/2013 0:00	-0.253	-0.235
585625	1/18/2013 0:00	-0.228	-0.235
585626	1/19/2013 0:00	-0.2	-0.235
585627	1/20/2013 0:00	-0.204	-0.235
585628	1/21/2013 0:00	-0.229	-0.235
585629	1/22/2013 0:00	-0.249	-0.236
585630	1/23/2013 0:00	-0.266	-0.236
585631	1/24/2013 0:00	-0.218	-0.235
585632	1/25/2013 0:00	-0.223	-0.234
585633	1/26/2013 0:00	-0.214	-0.234
585634	1/27/2013 0:00	-0.231	-0.235
585635	1/28/2013 0:00	-0.218	-0.234
585636	1/29/2013 0:00	-0.237	-0.234
585637	1/30/2013 0:00	-0.247	-0.234
585638	1/31/2013 0:00	-0.258	-0.235
585639	2/1/2013 0:00	-0.264	-0.236
585640	2/2/2013 0:00	-0.25	-0.235
585641	2/3/2013 0:00	-0.246	-0.235

585642	2/4/2013 0:00	-0.242	-0.235
585643	2/5/2013 0:00	-0.225	-0.235
585644	2/6/2013 0:00	-0.259	-0.235
585645	2/7/2013 0:00	-0.223	-0.235
585646	2/8/2013 0:00	-0.225	-0.233
585647	2/9/2013 0:00	-0.222	-0.233
585648	2/10/2013 0:00	-0.228	-0.233
585649	2/11/2013 0:00	-0.255	-0.233
585650	2/12/2013 0:00	-0.231	-0.233
585651	2/13/2013 0:00	-0.243	-0.234
585652	2/14/2013 0:00	-0.217	-0.233
585653	2/15/2013 0:00	-0.275	-0.233
585654	2/16/2013 0:00	-0.228	-0.233
585655	2/17/2013 0:00	-0.226	-0.232
585656	2/18/2013 0:00	-0.226	-0.231
585657	2/19/2013 0:00	-0.225	-0.231
585658	2/20/2013 0:00	-0.201	-0.231
585659	2/21/2013 0:00	-0.226	-0.232
585660	2/22/2013 0:00	-0.245	-0.229
585661	2/23/2013 0:00	-0.197	-0.23
585662	2/24/2013 0:00	-0.216	-0.23
585663	2/25/2013 0:00	-0.219	-0.23
585664	2/26/2013 0:00	-0.225	-0.231
585665	2/27/2013 0:00	-0.221	-0.231
585666	2/28/2013 0:00	-0.24	-0.232
585667	3/1/2013 0:00	-0.221	-0.232
585668	3/2/2013 0:00	-0.256	-0.232
585669	3/3/2013 0:00	-0.253	-0.23
585670	3/4/2013 0:00	-0.222	-0.23
585671	3/5/2013 0:00	-0.229	-0.231
585672	3/6/2013 0:00	-0.234	-0.23
585673	3/7/2013 0:00	-0.241	-0.23
585674	3/8/2013 0:00	-0.251	-0.23
585675	3/9/2013 0:00	-0.191	-0.231
585676	3/10/2013 0:00	-0.248	-0.23
585677	3/11/2013 0:00	-0.222	-0.232
585678	3/12/2013 0:00	-0.219	-0.232
585679	3/13/2013 0:00	-0.273	-0.233
585680	3/14/2013 0:00	-0.252	-0.234
585681	3/15/2013 0:00	-0.238	-0.233
585682	3/16/2013 0:00	-0.241	-0.233
585683	3/17/2013 0:00	-0.221	-0.234
585684	3/18/2013 0:00	-0.206	-0.233
585685	3/19/2013 0:00	-0.239	-0.232

585686	3/20/2013 0:00	-0.259	-0.232
585687	3/21/2013 0:00	-0.203	-0.232
585688	3/22/2013 0:00	-0.211	-0.233
585689	3/23/2013 0:00	-0.217	-0.232
585690	3/24/2013 0:00	-0.241	-0.23
585691	3/25/2013 0:00	-0.227	-0.23
585692	3/26/2013 0:00	-0.241	-0.229
585693	3/27/2013 0:00	-0.234	-0.228
585694	3/28/2013 0:00	-0.248	-0.23
585695	3/29/2013 0:00	-0.242	-0.227
585696	3/30/2013 0:00	-0.209	-0.225
585697	3/31/2013 0:00	-0.231	-0.225
585698	4/1/2013 0:00	-0.242	-0.225
585699	4/2/2013 0:00	-0.242	-0.226
585700	4/3/2013 0:00	-0.21	-0.227
585701	4/4/2013 0:00	-0.234	-0.227
585702	4/5/2013 0:00	-0.228	-0.227
585703	4/6/2013 0:00	-0.253	-0.229
585704	4/7/2013 0:00	-0.221	-0.23
585705	4/8/2013 0:00	-0.175	-0.232
585706	4/9/2013 0:00	-0.201	-0.233
585707	4/10/2013 0:00	-0.206	-0.232
585708	4/11/2013 0:00	-0.217	-0.232
585709	4/12/2013 0:00	-0.255	-0.233
585710	4/13/2013 0:00	-0.198	-0.232
585711	4/14/2013 0:00	-0.2	-0.231
585712	4/15/2013 0:00	-0.213	-0.231
585713	4/16/2013 0:00	-0.254	-0.232
585714	4/17/2013 0:00	-0.259	-0.232
585715	4/18/2013 0:00	-0.241	-0.232
585716	4/19/2013 0:00	-0.241	-0.232
585717	4/20/2013 0:00	-0.243	-0.232
585718	4/21/2013 0:00	-0.263	-0.234
585719	4/22/2013 0:00	-0.258	-0.233
585720	4/23/2013 0:00	-0.271	-0.234
585721	4/24/2013 0:00	-0.252	-0.236
585722	4/25/2013 0:00	-0.221	-0.237
585723	4/26/2013 0:00	-0.242	-0.238
585724	4/27/2013 0:00	-0.245	-0.239
585725	4/28/2013 0:00	-0.221	-0.239
585726	4/29/2013 0:00	-0.223	-0.241
585727	4/30/2013 0:00	-0.216	-0.241
585728	5/1/2013 0:00	-0.242	-0.243
585729	5/2/2013 0:00	-0.256	-0.242

585730	5/3/2013 0:00	-0.246	-0.241
585731	5/4/2013 0:00	-0.207	-0.241
585732	5/5/2013 0:00	-0.237	-0.241
585733	5/6/2013 0:00	-0.268	-0.241
585734	5/7/2013 0:00	-0.242	-0.24
585735	5/8/2013 0:00	-0.258	-0.24
585736	5/9/2013 0:00	-0.222	-0.24
585737	5/10/2013 0:00	-0.234	-0.24
585738	5/11/2013 0:00	-0.232	-0.241
585739	5/12/2013 0:00	-0.243	-0.241
585740	5/13/2013 0:00	-0.268	-0.24
585741	5/14/2013 0:00	-0.247	-0.241
585742	5/15/2013 0:00	-0.223	-0.241
585743	5/16/2013 0:00	-0.246	-0.242
585744	5/17/2013 0:00	-0.248	-0.241
585745	5/18/2013 0:00	-0.227	-0.241
585746	5/19/2013 0:00	-0.236	-0.241
585747	5/20/2013 0:00	-0.23	-0.243
585748	5/21/2013 0:00	-0.248	-0.244
585749	5/22/2013 0:00	-0.246	-0.243
585750	5/23/2013 0:00	-0.244	-0.243
585751	5/24/2013 0:00	-0.269	-0.243
585752	5/25/2013 0:00	-0.255	-0.243
585753	5/26/2013 0:00	-0.241	-0.243
585754	5/27/2013 0:00	-0.24	-0.243
585755	5/28/2013 0:00	-0.235	-0.243
585756	5/29/2013 0:00	-0.24	-0.243
585757	5/30/2013 0:00	-0.222	-0.243
585758	5/31/2013 0:00	-0.235	-0.244
585759	6/1/2013 0:00	-0.239	-0.244
585760	6/2/2013 0:00	-0.253	-0.244
585761	6/3/2013 0:00	-0.233	-0.245
585762	6/4/2013 0:00	-0.259	-0.245
585763	6/5/2013 0:00	-0.268	-0.245
585764	6/6/2013 0:00	-0.239	-0.245
585765	6/7/2013 0:00	-0.249	-0.245
585766	6/8/2013 0:00	-0.25	-0.245
585767	6/9/2013 0:00	-0.226	-0.244
585768	6/10/2013 0:00	-0.228	-0.244
585769	6/11/2013 0:00	-0.258	-0.244
585770	6/12/2013 0:00	-0.222	-0.244
585771	6/13/2013 0:00	-0.268	-0.243
585772	6/14/2013 0:00	-0.252	-0.243
585773	6/15/2013 0:00	-0.261	-0.244

585774	6/16/2013 0:00	-0.251	-0.244
585775	6/17/2013 0:00	-0.24	-0.243
585776	6/18/2013 0:00	-0.251	-0.242
585777	6/19/2013 0:00	-0.247	-0.242
585778	6/20/2013 0:00	-0.223	-0.241
585779	6/21/2013 0:00	-0.261	-0.241
585780	6/22/2013 0:00	-0.238	-0.241
585781	6/23/2013 0:00	-0.235	-0.241
585782	6/24/2013 0:00	-0.235	-0.241
585783	6/25/2013 0:00	-0.258	-0.241
585784	6/26/2013 0:00	-0.234	-0.243
585785	6/27/2013 0:00	-0.241	-0.243
585786	6/28/2013 0:00	-0.215	-0.243
585787	6/29/2013 0:00	-0.25	-0.242
585788	6/30/2013 0:00	-0.228	-0.242
585789	7/1/2013 0:00	-0.237	-0.242
585790	7/2/2013 0:00	-0.22	-0.242
585791	7/3/2013 0:00	-0.238	-0.242
585792	7/4/2013 0:00	-0.216	-0.242
585793	7/5/2013 0:00	-0.239	-0.242
585794	7/6/2013 0:00	-0.246	-0.241
585795	7/7/2013 0:00	-0.251	-0.24
585796	7/8/2013 0:00	-0.253	-0.24
585797	7/9/2013 0:00	-0.257	-0.24
585798	7/10/2013 0:00	-0.226	-0.241
585799	7/11/2013 0:00	-0.288	-0.24
585800	7/12/2013 0:00	-0.238	-0.24
585801	7/13/2013 0:00	-0.239	-0.24
585802	7/14/2013 0:00	-0.239	-0.24
585803	7/15/2013 0:00	-0.244	-0.241
585804	7/16/2013 0:00	-0.254	-0.242
585805	7/17/2013 0:00	-0.259	-0.242
585806	7/18/2013 0:00	-0.243	-0.243
585807	7/19/2013 0:00	-0.256	-0.244
585808	7/20/2013 0:00	-0.244	-0.244
585809	7/21/2013 0:00	-0.197	-0.245
585810	7/22/2013 0:00	-0.236	-0.244
585811	7/23/2013 0:00	-0.213	-0.244
585812	7/24/2013 0:00	-0.256	-0.244
585813	7/25/2013 0:00	-0.246	-0.244
585814	7/26/2013 0:00	-0.238	-0.244
585815	7/27/2013 0:00	-0.233	-0.242
585816	7/28/2013 0:00	-0.244	-0.242
585817	7/29/2013 0:00	-0.226	-0.242

585818	7/30/2013 0:00	-0.253	-0.242
585819	7/31/2013 0:00	-0.262	-0.243
585820	8/1/2013 0:00	-0.24	-0.242
585821	8/2/2013 0:00	-0.255	-0.242
585822	8/3/2013 0:00	-0.263	-0.242
585823	8/4/2013 0:00	-0.239	-0.243
585824	8/5/2013 0:00	-0.243	-0.243
585825	8/6/2013 0:00	-0.244	-0.244
585826	8/7/2013 0:00	-0.246	-0.244
585827	8/8/2013 0:00	-0.245	-0.246
585828	8/9/2013 0:00	-0.257	-0.245
585829	8/10/2013 0:00	-0.228	-0.244
585830	8/11/2013 0:00	-0.232	-0.244
585831	8/12/2013 0:00	-0.232	-0.243
585832	8/13/2013 0:00	-0.239	-0.243
585833	8/14/2013 0:00	-0.251	-0.243
585834	8/15/2013 0:00	-0.253	-0.242
585835	8/16/2013 0:00	-0.235	-0.241
585836	8/17/2013 0:00	-0.264	-0.241
585837	8/18/2013 0:00	-0.243	-0.241
585838	8/19/2013 0:00	-0.264	-0.24
585839	8/20/2013 0:00	-0.248	-0.24
585840	8/21/2013 0:00	-0.242	-0.24
585841	8/22/2013 0:00	-0.246	-0.24
585842	8/23/2013 0:00	-0.266	-0.24
585843	9/20/2013 0:00	-0.227	-0.241
585844	9/21/2013 0:00	-0.208	-0.24
585845	9/22/2013 0:00	-0.225	-0.24
585846	9/23/2013 0:00	-0.231	-0.241
585847	9/24/2013 0:00	-0.244	-0.241
585848	9/25/2013 0:00	-0.218	-0.242
585849	9/26/2013 0:00	-0.21	-0.242
585850	9/27/2013 0:00	-0.238	-0.241
585851	9/28/2013 0:00	-0.233	-0.241
585852	9/29/2013 0:00	-0.246	-0.241
585853	9/30/2013 0:00	-0.248	-0.242
585854	10/1/2013 0:00	-0.235	-0.241
585855	10/2/2013 0:00	-0.244	-0.241
585856	10/3/2013 0:00	-0.231	-0.24
585857	10/4/2013 0:00	-0.271	-0.24
585858	10/5/2013 0:00	-0.258	-0.239
585859	10/6/2013 0:00	-0.227	-0.239
585860	10/7/2013 0:00	-0.228	-0.24
585861	10/8/2013 0:00	-0.253	-0.241

585862	10/9/2013 0:00	-0.258	-0.24
585863	10/10/2013 0:00	-0.253	-0.24
585864	10/11/2013 0:00	-0.244	-0.242
585865	10/12/2013 0:00	-0.238	-0.243
585866	10/13/2013 0:00	-0.218	-0.244
585867	10/14/2013 0:00	-0.278	-0.244
585868	10/15/2013 0:00	-0.262	-0.245
585869	10/16/2013 0:00	-0.247	-0.244
585870	10/17/2013 0:00	-0.246	-0.246
585871	10/18/2013 0:00	-0.224	-0.245
585872	10/19/2013 0:00	-0.231	-0.243
585873	10/20/2013 0:00	-0.231	-0.24
585874	10/21/2013 0:00	-0.219	-0.24
585875	10/22/2013 0:00	-0.25	-0.241
585876	10/23/2013 0:00	-0.248	-0.242
585877	10/24/2013 0:00	-0.207	-0.241
585878	10/25/2013 0:00	-0.257	-0.239
585879	10/26/2013 0:00	-0.254	-0.238
585880	10/27/2013 0:00	-0.267	-0.239
585881	10/28/2013 0:00	-0.263	-0.239
585882	10/29/2013 0:00	-0.225	-0.241
585883	10/30/2013 0:00	-0.265	-0.238
585884	10/31/2013 0:00	-0.237	-0.237
585885	11/1/2013 0:00	-0.279	-0.237
585886	11/2/2013 0:00	-0.212	-0.237
585887	11/3/2013 0:00	-0.187	-0.237
585888	11/4/2013 0:00	-0.188	-0.237
585889	11/5/2013 0:00	-0.234	-0.237
585890	11/6/2013 0:00	-0.258	-0.238
585891	11/7/2013 0:00	-0.265	-0.238
585892	11/8/2013 0:00	-0.22	-0.239
585893	11/9/2013 0:00	-0.192	-0.241
585894	11/10/2013 0:00	-0.234	-0.241
585895	11/11/2013 0:00	-0.261	-0.242
585896	11/12/2013 0:00	-0.261	-0.241
585897	11/13/2013 0:00	-0.272	-0.24
585898	11/14/2013 0:00	-0.192	-0.241
585899	11/15/2013 0:00	-0.216	-0.242
585900	11/16/2013 0:00	-0.243	-0.244
585901	11/17/2013 0:00	-0.244	-0.243
585902	11/18/2013 0:00	-0.234	-0.244
585903	11/19/2013 0:00	-0.224	-0.246
585904	11/20/2013 0:00	-0.242	-0.248
585905	11/21/2013 0:00	-0.239	-0.249

585906	11/22/2013 0:00	-0.267	-0.25
585907	11/23/2013 0:00	-0.255	-0.249
585908	11/24/2013 0:00	-0.281	-0.251
585909	11/25/2013 0:00	-0.25	-0.254
585910	11/26/2013 0:00	-0.281	-0.254
585911	11/27/2013 0:00	-0.254	-0.254
585912	11/28/2013 0:00	-0.234	-0.253
585913	11/29/2013 0:00	-0.262	-0.253
585914	11/30/2013 0:00	-0.293	-0.256
585915	12/1/2013 0:00	-0.301	-0.257
585916	12/2/2013 0:00	-0.23	-0.257
585917	12/3/2013 0:00	-0.264	-0.256
585918	12/4/2013 0:00	-0.236	-0.256
585919	12/5/2013 0:00	-0.251	-0.256
585920	12/6/2013 0:00	-0.278	-0.258
585921	12/7/2013 0:00	-0.259	-0.259
585922	12/8/2013 0:00	-0.252	-0.258
585923	12/9/2013 0:00	-0.289	-0.258
585924	12/10/2013 0:00	-0.278	-0.258
585925	12/11/2013 0:00	-0.24	-0.26
585926	12/12/2013 0:00	-0.25	-0.26
585927	12/13/2013 0:00	-0.237	-0.26
585928	12/14/2013 0:00	-0.26	-0.262
585929	12/15/2013 0:00	-0.286	-0.262
585930	12/16/2013 0:00	-0.246	-0.263
585931	12/17/2013 0:00	-0.255	-0.263
585932	12/18/2013 0:00	-0.222	-0.264
585933	12/19/2013 0:00	-0.225	-0.263
585934	12/20/2013 0:00	-0.233	-0.264
585935	12/21/2013 0:00	-0.275	-0.265
585936	12/22/2013 0:00	-0.278	-0.265
585937	12/23/2013 0:00	-0.257	-0.265
585938	12/24/2013 0:00	-0.257	-0.266
585939	12/25/2013 0:00	-0.274	-0.266
585940	12/26/2013 0:00	-0.31	-0.265
585941	12/27/2013 0:00	-0.282	-0.265
585942	12/28/2013 0:00	-0.258	-0.264
585943	12/29/2013 0:00	-0.28	-0.266
585944	12/30/2013 0:00	-0.27	-0.267
585945	12/31/2013 0:00	-0.311	-0.266
585946	1/1/2014 0:00	-0.301	-0.267
585947	1/2/2014 0:00	-0.274	-0.267
585948	1/3/2014 0:00	-0.23	-0.269
585949	1/4/2014 0:00	-0.254	-0.27

585950	1/5/2014 0:00	-0.287	-0.271
585951	1/6/2014 0:00	-0.275	-0.271
585952	1/7/2014 0:00	-0.283	-0.271
585953	1/8/2014 0:00	-0.265	-0.271
585954	1/9/2014 0:00	-0.279	-0.272
585955	1/10/2014 0:00	-0.255	-0.272
585956	1/11/2014 0:00	-0.255	-0.271
585957	1/12/2014 0:00	-0.226	-0.271
585958	1/13/2014 0:00	-0.282	-0.272
585959	1/14/2014 0:00	-0.281	-0.271
585960	1/15/2014 0:00	-0.279	-0.269
585961	1/16/2014 0:00	-0.267	-0.268
585962	1/17/2014 0:00	-0.253	-0.267
585963	1/18/2014 0:00	-0.275	-0.267
585964	1/19/2014 0:00	-0.258	-0.268
585965	1/20/2014 0:00	-0.262	-0.269
585966	1/21/2014 0:00	-0.29	-0.268
585967	1/22/2014 0:00	-0.267	-0.267
585968	1/23/2014 0:00	-0.271	-0.266
585969	1/24/2014 0:00	-0.277	-0.266
585970	1/25/2014 0:00	-0.283	-0.265
585971	1/26/2014 0:00	-0.285	-0.265
585972	1/27/2014 0:00	-0.269	-0.265
585973	1/28/2014 0:00	-0.286	-0.266
585974	1/29/2014 0:00	-0.25	-0.266
585975	1/30/2014 0:00	-0.224	-0.264
585976	1/31/2014 0:00	-0.266	-0.264
585977	2/1/2014 0:00	-0.261	-0.263
585978	2/2/2014 0:00	-0.293	-0.264
585979	2/3/2014 0:00	-0.254	-0.263
585980	2/4/2014 0:00	-0.272	-0.263
585981	2/5/2014 0:00	-0.259	-0.262
585982	2/6/2014 0:00	-0.256	-0.261
585983	2/7/2014 0:00	-0.262	-0.262
585984	2/8/2014 0:00	-0.248	-0.263
585985	2/9/2014 0:00	-0.257	-0.262
585986	2/10/2014 0:00	-0.26	-0.262
585987	2/11/2014 0:00	-0.257	-0.261
585988	2/12/2014 0:00	-0.249	-0.261
585989	2/13/2014 0:00	-0.263	-0.259
585990	2/14/2014 0:00	-0.233	-0.261
585991	2/15/2014 0:00	-0.263	-0.263
585992	2/16/2014 0:00	-0.261	-0.265
585993	2/17/2014 0:00	-0.262	-0.267

585994	2/18/2014 0:00	-0.268	-0.266
585995	2/19/2014 0:00	-0.237	-0.267
585996	2/20/2014 0:00	-0.251	-0.267
585997	2/21/2014 0:00	-0.257	-0.268
585998	2/22/2014 0:00	-0.298	-0.269
585999	2/23/2014 0:00	-0.292	-0.269
586000	2/24/2014 0:00	-0.255	-0.271
586001	2/25/2014 0:00	-0.289	-0.271
586002	2/26/2014 0:00	-0.252	-0.271
586003	2/27/2014 0:00	-0.261	-0.271
586004	2/28/2014 0:00	-0.222	-0.272
586005	3/1/2014 0:00	-0.316	-0.273
586006	3/2/2014 0:00	-0.285	-0.275
586007	3/3/2014 0:00	-0.308	-0.274
586008	3/4/2014 0:00	-0.324	-0.273
586009	3/5/2014 0:00	-0.281	-0.274
586010	3/6/2014 0:00	-0.288	-0.274
586011	3/7/2014 0:00	-0.257	-0.276
586012	3/8/2014 0:00	-0.286	-0.276
586013	3/9/2014 0:00	-0.289	-0.277
586014	3/10/2014 0:00	-0.286	-0.276
586015	3/11/2014 0:00	-0.283	-0.276
586016	3/12/2014 0:00	-0.281	-0.276
586017	3/13/2014 0:00	-0.245	-0.276
586018	3/14/2014 0:00	-0.26	-0.277
586019	3/15/2014 0:00	-0.283	-0.276
586020	3/16/2014 0:00	-0.295	-0.278
586021	3/17/2014 0:00	-0.275	-0.276
586022	3/18/2014 0:00	-0.233	-0.277
586023	3/19/2014 0:00	-0.256	-0.276
586024	3/20/2014 0:00	-0.266	-0.275
586025	3/21/2014 0:00	-0.271	-0.274
586026	3/22/2014 0:00	-0.294	-0.274
586027	3/23/2014 0:00	-0.282	-0.275
586028	3/24/2014 0:00	-0.263	-0.275
586029	3/25/2014 0:00	-0.262	-0.275
586030	3/26/2014 0:00	-0.305	-0.276
586031	3/27/2014 0:00	-0.257	-0.278
586032	3/28/2014 0:00	-0.274	-0.278
586033	3/29/2014 0:00	-0.292	-0.279
586034	3/30/2014 0:00	-0.241	-0.28
586035	3/31/2014 0:00	-0.273	-0.28
586036	4/1/2014 0:00	-0.264	-0.279
586037	4/2/2014 0:00	-0.319	-0.28

586038	4/3/2014 0:00	-0.274	-0.281
586039	4/4/2014 0:00	-0.287	-0.281
586040	4/5/2014 0:00	-0.26	-0.283
586041	4/6/2014 0:00	-0.275	-0.285
586042	4/7/2014 0:00	-0.285	-0.284
586043	4/8/2014 0:00	-0.292	-0.284
586044	4/9/2014 0:00	-0.288	-0.284
586045	4/10/2014 0:00	-0.308	-0.284
586046	4/11/2014 0:00	-0.34	-0.282
586047	4/12/2014 0:00	-0.289	-0.283
586048	4/13/2014 0:00	-0.282	-0.283
586049	4/14/2014 0:00	-0.284	-0.283
586050	4/15/2014 0:00	-0.289	-0.284
586051	4/16/2014 0:00	-0.274	-0.285
586052	4/17/2014 0:00	-0.287	-0.285
586053	4/18/2014 0:00	-0.264	-0.285
586054	4/19/2014 0:00	-0.275	-0.285
586055	4/20/2014 0:00	-0.335	-0.285
586056	4/21/2014 0:00	-0.307	-0.285
586057	4/22/2014 0:00	-0.271	-0.285
586058	4/23/2014 0:00	-0.274	-0.285
586059	4/24/2014 0:00	-0.275	-0.285
586060	4/25/2014 0:00	-0.267	-0.285
586061	4/26/2014 0:00	-0.238	-0.283
586062	4/27/2014 0:00	-0.278	-0.282
586063	4/28/2014 0:00	-0.278	-0.283
586064	4/29/2014 0:00	-0.288	-0.283
586065	4/30/2014 0:00	-0.288	-0.284
586066	5/1/2014 0:00	-0.307	-0.283
586067	5/2/2014 0:00	-0.266	-0.283
586068	5/3/2014 0:00	-0.306	-0.283
586069	5/4/2014 0:00	-0.269	-0.284
586070	5/5/2014 0:00	-0.293	-0.286
586071	5/6/2014 0:00	-0.253	-0.285
586072	5/7/2014 0:00	-0.269	-0.285
586073	5/8/2014 0:00	-0.313	-0.284
586074	5/9/2014 0:00	-0.271	-0.284
586075	5/10/2014 0:00	-0.284	-0.285
586076	5/11/2014 0:00	-0.266	-0.286
586077	5/12/2014 0:00	-0.291	-0.288
586078	5/13/2014 0:00	-0.317	-0.289
586079	5/14/2014 0:00	-0.292	-0.29
586080	5/15/2014 0:00	-0.319	-0.291
586081	5/16/2014 0:00	-0.263	-0.291

586082	5/17/2014 0:00	-0.281	-0.291
586083	5/18/2014 0:00	-0.288	-0.291
586084	5/19/2014 0:00	-0.295	-0.291
586085	5/20/2014 0:00	-0.319	-0.292
586086	5/21/2014 0:00	-0.303	-0.291
586087	5/22/2014 0:00	-0.306	-0.292
586088	5/23/2014 0:00	-0.254	-0.293
586089	5/24/2014 0:00	-0.272	-0.293
586090	5/25/2014 0:00	-0.301	-0.293
586091	5/26/2014 0:00	-0.296	-0.294
586092	5/27/2014 0:00	-0.307	-0.295
586093	5/28/2014 0:00	-0.3	-0.295
586094	5/29/2014 0:00	-0.304	-0.295
586095	5/30/2014 0:00	-0.312	-0.295
586096	5/31/2014 0:00	-0.303	-0.294
586097	6/1/2014 0:00	-0.296	-0.296
586098	6/2/2014 0:00	-0.278	-0.297
586099	6/3/2014 0:00	-0.294	-0.297
586100	6/4/2014 0:00	-0.306	-0.297
586101	6/5/2014 0:00	-0.263	-0.296
586102	6/6/2014 0:00	-0.287	-0.295
586103	6/7/2014 0:00	-0.287	-0.296
586104	6/8/2014 0:00	-0.315	-0.297
586105	6/9/2014 0:00	-0.287	-0.298
586106	6/10/2014 0:00	-0.302	-0.298
586107	6/11/2014 0:00	-0.298	-0.298
586108	6/12/2014 0:00	-0.304	-0.297
586109	6/13/2014 0:00	-0.295	-0.296
586110	6/14/2014 0:00	-0.297	-0.295
586111	6/15/2014 0:00	-0.313	-0.295
586112	6/16/2014 0:00	-0.298	-0.295
586113	6/17/2014 0:00	-0.31	-0.296
586114	6/18/2014 0:00	-0.294	-0.297
586115	6/19/2014 0:00	-0.299	-0.297
586116	6/20/2014 0:00	-0.294	-0.296
586117	6/21/2014 0:00	-0.286	-0.297
586118	6/22/2014 0:00	-0.308	-0.298
586119	6/23/2014 0:00	-0.304	-0.298
586120	6/24/2014 0:00	-0.303	-0.297
586121	6/25/2014 0:00	-0.291	-0.297
586122	6/26/2014 0:00	-0.29	-0.296
586123	6/27/2014 0:00	-0.3	-0.296
586124	6/28/2014 0:00	-0.27	-0.296
586125	6/29/2014 0:00	-0.258	-0.295

586126	6/30/2014 0:00	-0.312	-0.294
586127	7/1/2014 0:00	-0.307	-0.292
586128	7/2/2014 0:00	-0.332	-0.291
586129	7/3/2014 0:00	-0.301	-0.291
586130	7/4/2014 0:00	-0.304	-0.291
586131	7/5/2014 0:00	-0.262	-0.29
586132	7/6/2014 0:00	-0.305	-0.289
586133	7/7/2014 0:00	-0.32	-0.29
586134	7/8/2014 0:00	-0.292	-0.289
586135	7/9/2014 0:00	-0.278	-0.29
586136	7/10/2014 0:00	-0.272	-0.29
586137	7/11/2014 0:00	-0.272	-0.29
586138	7/12/2014 0:00	-0.298	-0.289
586139	7/13/2014 0:00	-0.305	-0.289
586140	7/14/2014 0:00	-0.276	-0.291
586141	7/15/2014 0:00	-0.249	-0.292
586142	7/16/2014 0:00	-0.256	-0.293
586143	7/17/2014 0:00	-0.271	-0.292
586144	7/18/2014 0:00	-0.303	-0.291
586145	7/19/2014 0:00	-0.307	-0.291
586146	7/20/2014 0:00	-0.278	-0.292
586147	7/21/2014 0:00	-0.251	-0.294
586148	7/22/2014 0:00	-0.301	-0.294
586149	7/23/2014 0:00	-0.304	-0.292
586150	7/24/2014 0:00	-0.316	-0.293
586151	7/25/2014 0:00	-0.311	-0.294
586152	7/26/2014 0:00	-0.278	-0.295
586153	7/27/2014 0:00	-0.285	-0.297
586154	7/28/2014 0:00	-0.296	-0.297
586155	7/29/2014 0:00	-0.318	-0.298
586156	7/30/2014 0:00	-0.302	-0.299
586157	7/31/2014 0:00	-0.319	-0.301
586158	8/1/2014 0:00	-0.297	-0.303
586159	8/2/2014 0:00	-0.298	-0.305
586160	8/3/2014 0:00	-0.299	-0.305
586161	8/4/2014 0:00	-0.335	-0.305
586162	8/5/2014 0:00	-0.326	-0.306
586163	8/6/2014 0:00	-0.288	-0.308
586164	8/7/2014 0:00	-0.284	-0.308
586165	8/8/2014 0:00	-0.298	-0.309
586166	8/9/2014 0:00	-0.317	-0.31
586167	8/10/2014 0:00	-0.313	-0.309
586168	8/11/2014 0:00	-0.321	-0.312
586169	8/12/2014 0:00	-0.314	-0.313

586170	8/13/2014 0:00	-0.316	-0.313
586171	8/14/2014 0:00	-0.311	-0.312
586172	8/15/2014 0:00	-0.327	-0.313
586173	8/16/2014 0:00	-0.319	-0.312
586174	8/17/2014 0:00	-0.31	-0.312
586175	8/18/2014 0:00	-0.308	-0.312
586176	8/19/2014 0:00	-0.315	-0.312
586177	8/20/2014 0:00	-0.309	-0.311
586178	8/21/2014 0:00	-0.311	-0.311
586179	8/22/2014 0:00	-0.313	-0.313
586180	8/23/2014 0:00	-0.311	-0.314
586181	8/24/2014 0:00	-0.346	-0.315
586182	8/25/2014 0:00	-0.301	-0.315
586183	8/26/2014 0:00	-0.351	-0.316
586184	8/27/2014 0:00	-0.327	-0.315
586185	8/28/2014 0:00	-0.3	-0.316
586186	8/29/2014 0:00	-0.286	-0.315
586187	8/30/2014 0:00	-0.331	-0.315
586188	8/31/2014 0:00	-0.28	-0.315
586189	9/1/2014 0:00	-0.306	-0.316
586190	9/2/2014 0:00	-0.306	-0.317
586191	9/3/2014 0:00	-0.293	-0.317
586192	9/4/2014 0:00	-0.316	-0.317
586193	9/5/2014 0:00	-0.319	-0.318
586194	9/6/2014 0:00	-0.33	-0.319
586195	9/7/2014 0:00	-0.331	-0.319
586196	9/8/2014 0:00	-0.334	-0.32
586197	9/9/2014 0:00	-0.32	-0.319
586198	9/10/2014 0:00	-0.34	-0.321
586199	9/11/2014 0:00	-0.294	-0.321
586200	9/12/2014 0:00	-0.323	-0.321
586201	9/13/2014 0:00	-0.303	-0.322
586202	9/14/2014 0:00	-0.31	-0.324
586203	9/15/2014 0:00	-0.325	-0.324
586204	9/16/2014 0:00	-0.357	-0.326
586205	9/17/2014 0:00	-0.322	-0.327
586206	9/18/2014 0:00	-0.317	-0.328
586207	9/19/2014 0:00	-0.318	-0.329
586208	9/20/2014 0:00	-0.335	-0.33
586209	9/21/2014 0:00	-0.338	-0.332
586210	9/22/2014 0:00	-0.335	-0.332
586211	9/23/2014 0:00	-0.325	-0.332
586212	9/24/2014 0:00	-0.318	-0.332
586213	9/25/2014 0:00	-0.372	-0.333

586214	9/26/2014 0:00	-0.35	-0.333
586215	9/27/2014 0:00	-0.317	-0.334
586216	9/28/2014 0:00	-0.344	-0.334
586217	9/29/2014 0:00	-0.323	-0.335
586218	9/30/2014 0:00	-0.349	-0.336
586219	10/1/2014 0:00	-0.342	-0.337
586220	10/2/2014 0:00	-0.333	-0.337
586221	10/3/2014 0:00	-0.338	-0.338
586222	10/4/2014 0:00	-0.332	-0.339
586223	10/5/2014 0:00	-0.349	-0.34
586224	10/6/2014 0:00	-0.359	-0.34
586225	10/7/2014 0:00	-0.331	-0.34
586226	10/8/2014 0:00	-0.334	-0.341
586227	10/9/2014 0:00	-0.35	-0.341
586228	10/10/2014 0:00	-0.335	-0.342
586229	10/11/2014 0:00	-0.348	-0.341
586230	10/12/2014 0:00	-0.324	-0.34
586231	10/13/2014 0:00	-0.327	-0.341
586232	10/14/2014 0:00	-0.343	-0.341
586233	10/15/2014 0:00	-0.339	-0.342
586234	10/16/2014 0:00	-0.345	-0.341
586235	10/17/2014 0:00	-0.345	-0.341
586236	10/18/2014 0:00	-0.369	-0.342
586237	10/19/2014 0:00	-0.339	-0.342
586238	10/20/2014 0:00	-0.351	-0.343
586239	10/21/2014 0:00	-0.324	-0.342
586240	10/22/2014 0:00	-0.358	-0.341
586241	10/23/2014 0:00	-0.345	-0.341
586242	10/24/2014 0:00	-0.341	-0.341
586243	10/25/2014 0:00	-0.348	-0.34
586244	10/26/2014 0:00	-0.341	-0.338
586245	10/27/2014 0:00	-0.324	-0.336
586246	10/28/2014 0:00	-0.33	-0.336
586247	10/29/2014 0:00	-0.351	-0.335
586248	10/30/2014 0:00	-0.354	-0.335
586249	10/31/2014 0:00	-0.317	-0.335
586250	11/1/2014 0:00	-0.344	-0.333
586251	11/2/2014 0:00	-0.355	-0.333
586252	11/3/2014 0:00	-0.359	-0.332
586253	11/4/2014 0:00	-0.358	-0.331
586254	11/5/2014 0:00	-0.324	-0.33
586255	11/6/2014 0:00	-0.319	-0.329
586256	11/7/2014 0:00	-0.324	-0.327
586257	11/8/2014 0:00	-0.334	-0.325

586258	11/9/2014 0:00	-0.321	-0.325
586259	11/10/2014 0:00	-0.281	-0.324
586260	11/11/2014 0:00	-0.275	-0.324
586261	11/12/2014 0:00	-0.317	-0.324
586262	11/13/2014 0:00	-0.313	-0.324
586263	11/14/2014 0:00	-0.341	-0.323
586264	11/15/2014 0:00	-0.323	-0.323
586265	11/16/2014 0:00	-0.293	-0.323
586266	11/17/2014 0:00	-0.348	-0.323
586267	11/18/2014 0:00	-0.327	-0.323
586268	11/19/2014 0:00	-0.325	-0.322
586269	11/20/2014 0:00	-0.323	-0.32
586270	11/21/2014 0:00	-0.296	-0.321
586271	11/22/2014 0:00	-0.276	-0.321
586272	11/23/2014 0:00	-0.286	-0.322
586273	11/24/2014 0:00	-0.334	-0.322
586274	11/25/2014 0:00	-0.335	-0.323
586275	11/26/2014 0:00	-0.333	-0.327
586276	11/27/2014 0:00	-0.334	-0.329
586277	11/28/2014 0:00	-0.338	-0.33
586278	11/29/2014 0:00	-0.314	-0.331
586279	11/30/2014 0:00	-0.336	-0.33
586280	12/1/2014 0:00	-0.341	-0.331
586281	12/2/2014 0:00	-0.334	-0.332
586282	12/3/2014 0:00	-0.35	-0.333
586283	12/4/2014 0:00	-0.338	-0.334
586284	12/5/2014 0:00	-0.298	-0.335
586285	12/6/2014 0:00	-0.343	-0.336
586286	12/7/2014 0:00	-0.323	-0.338
586287	12/8/2014 0:00	-0.342	-0.341
586288	12/9/2014 0:00	-0.356	-0.343
586289	12/10/2014 0:00	-0.355	-0.342
586290	12/11/2014 0:00	-0.394	-0.343
586291	12/12/2014 0:00	-0.333	-0.344
586292	12/13/2014 0:00	-0.348	-0.345
586293	12/14/2014 0:00	-0.336	-0.345
586294	12/15/2014 0:00	-0.328	-0.346
586295	12/16/2014 0:00	-0.352	-0.347
586296	12/17/2014 0:00	-0.328	-0.346
586297	12/18/2014 0:00	-0.359	-0.347
586298	12/19/2014 0:00	-0.372	-0.348
586299	12/20/2014 0:00	-0.366	-0.349
586300	12/21/2014 0:00	-0.346	-0.351
586301	12/22/2014 0:00	-0.35	-0.352

586302	12/23/2014 0:00	-0.362	-0.353
586303	12/24/2014 0:00	-0.35	-0.353
586304	12/25/2014 0:00	-0.322	-0.353
586305	12/26/2014 0:00	-0.354	-0.353
586306	12/27/2014 0:00	-0.357	-0.352
586307	12/28/2014 0:00	-0.36	-0.352
586308	12/29/2014 0:00	-0.341	-0.353
586309	12/30/2014 0:00	-0.34	-0.355
586310	12/31/2014 0:00	-0.369	-0.357
586311	1/1/2015 0:00	-0.335	-0.358
586312	1/2/2015 0:00	-0.365	-0.359
586313	1/3/2015 0:00	-0.368	-0.359
586314	1/4/2015 0:00	-0.375	-0.359
586315	1/5/2015 0:00	-0.362	-0.359
586316	1/6/2015 0:00	-0.368	-0.36
586317	1/7/2015 0:00	-0.353	-0.361
586318	1/8/2015 0:00	-0.342	-0.361
586319	1/9/2015 0:00	-0.363	-0.361
586320	1/10/2015 0:00	-0.351	-0.362
586321	1/11/2015 0:00	-0.345	-0.363
586322	1/12/2015 0:00	-0.358	-0.363
586323	1/13/2015 0:00	-0.372	-0.363
586324	1/14/2015 0:00	-0.386	-0.364
586325	1/15/2015 0:00	-0.394	-0.366
586326	1/16/2015 0:00	-0.378	-0.367
586327	1/17/2015 0:00	-0.359	-0.368
586328	1/18/2015 0:00	-0.358	-0.369
586329	1/19/2015 0:00	-0.37	-0.369
586330	1/20/2015 0:00	-0.378	-0.369
586331	1/21/2015 0:00	-0.371	-0.369
586332	1/22/2015 0:00	-0.374	-0.37
586333	1/23/2015 0:00	-0.358	-0.371
586334	1/24/2015 0:00	-0.354	-0.371
586335	1/25/2015 0:00	-0.37	-0.371
586336	1/26/2015 0:00	-0.38	-0.372
586337	1/27/2015 0:00	-0.345	-0.373
586338	1/28/2015 0:00	-0.363	-0.374
586339	1/29/2015 0:00	-0.383	-0.374
586340	1/30/2015 0:00	-0.404	-0.373
586341	1/31/2015 0:00	-0.387	-0.372
586342	2/1/2015 0:00	-0.386	-0.372
586343	2/2/2015 0:00	-0.374	-0.373
586344	2/3/2015 0:00	-0.369	-0.374
586345	2/4/2015 0:00	-0.378	-0.374

586346	2/5/2015 0:00	-0.369	-0.373
586347	2/6/2015 0:00	-0.393	-0.374
586348	2/7/2015 0:00	-0.375	-0.374
586349	2/8/2015 0:00	-0.346	-0.373
586350	2/9/2015 0:00	-0.362	-0.375
586351	2/10/2015 0:00	-0.381	-0.375
586352	2/11/2015 0:00	-0.39	-0.375
586353	2/12/2015 0:00	-0.38	-0.376
586354	2/13/2015 0:00	-0.372	-0.375
586355	2/14/2015 0:00	-0.374	-0.375
586356	2/15/2015 0:00	-0.362	-0.374
586357	2/16/2015 0:00	-0.38	-0.374
586358	2/17/2015 0:00	-0.379	-0.373
586359	2/18/2015 0:00	-0.384	-0.373
586360	2/19/2015 0:00	-0.379	-0.374
586361	2/20/2015 0:00	-0.356	-0.373
586362	2/21/2015 0:00	-0.388	-0.375
586363	2/22/2015 0:00	-0.361	-0.374
586364	2/23/2015 0:00	-0.347	-0.374
586365	2/24/2015 0:00	-0.4	-0.374
586366	2/25/2015 0:00	-0.381	-0.374
586367	2/26/2015 0:00	-0.386	-0.373
586368	2/27/2015 0:00	-0.377	-0.372
586369	2/28/2015 0:00	-0.329	-0.372
586370	3/1/2015 0:00	-0.374	-0.372
586371	3/2/2015 0:00	-0.381	-0.372
586372	3/3/2015 0:00	-0.377	-0.373
586373	3/4/2015 0:00	-0.359	-0.373
586374	3/5/2015 0:00	-0.388	-0.373
586375	3/6/2015 0:00	-0.392	-0.372
586376	3/7/2015 0:00	-0.35	-0.372
586377	3/8/2015 0:00	-0.422	-0.373
586378	3/9/2015 0:00	-0.365	-0.371
586379	3/10/2015 0:00	-0.359	-0.371
586380	3/11/2015 0:00	-0.365	-0.372
586381	3/12/2015 0:00	-0.343	-0.373
586382	3/13/2015 0:00	-0.357	-0.372
586383	3/14/2015 0:00	-0.363	-0.371
586384	3/15/2015 0:00	-0.373	-0.371
586385	3/16/2015 0:00	-0.373	-0.373
586386	3/17/2015 0:00	-0.37	-0.372
586387	3/18/2015 0:00	-0.399	-0.373
586388	3/19/2015 0:00	-0.385	-0.372
586389	3/20/2015 0:00	-0.378	-0.373

586390	3/21/2015 0:00	-0.367	-0.373
586391	3/22/2015 0:00	-0.363	-0.372
586392	3/23/2015 0:00	-0.373	-0.374
586393	3/24/2015 0:00	-0.35	-0.371
586394	3/25/2015 0:00	-0.352	-0.372
586395	3/26/2015 0:00	-0.387	-0.373
586396	3/27/2015 0:00	-0.409	-0.373
586397	3/28/2015 0:00	-0.373	-0.373
586398	3/29/2015 0:00	-0.356	-0.375
586399	3/30/2015 0:00	-0.38	-0.375
586400	3/31/2015 0:00	-0.387	-0.374
586401	4/1/2015 0:00	-0.347	-0.374
586402	4/2/2015 0:00	-0.386	-0.374
586403	4/3/2015 0:00	-0.361	-0.374
586404	4/4/2015 0:00	-0.383	-0.373
586405	4/5/2015 0:00	-0.392	-0.373
586406	4/6/2015 0:00	-0.372	-0.373
586407	4/7/2015 0:00	-0.393	-0.374
586408	4/8/2015 0:00	-0.352	-0.374
586409	4/9/2015 0:00	-0.372	-0.375
586410	4/10/2015 0:00	-0.393	-0.376
586411	4/11/2015 0:00	-0.361	-0.377
586412	4/12/2015 0:00	-0.364	-0.376
586413	4/13/2015 0:00	-0.398	-0.378
586414	4/14/2015 0:00	-0.379	-0.378
586415	4/15/2015 0:00	-0.348	-0.378
586416	4/16/2015 0:00	-0.375	-0.378
586417	4/17/2015 0:00	-0.345	-0.38
586418	4/18/2015 0:00	-0.4	-0.381
586419	4/19/2015 0:00	-0.38	-0.383
586420	4/20/2015 0:00	-0.359	-0.383
586421	4/21/2015 0:00	-0.387	-0.383
586422	4/22/2015 0:00	-0.377	-0.384
586423	4/23/2015 0:00	-0.383	-0.384
586424	4/24/2015 0:00	-0.388	-0.385
586425	4/25/2015 0:00	-0.371	-0.387
586426	4/26/2015 0:00	-0.409	-0.387
586427	4/27/2015 0:00	-0.391	-0.388
586428	4/28/2015 0:00	-0.425	-0.39
586429	4/29/2015 0:00	-0.375	-0.39
586430	4/30/2015 0:00	-0.377	-0.391
586431	5/1/2015 0:00	-0.377	-0.393
586432	5/2/2015 0:00	-0.412	-0.394
586433	5/3/2015 0:00	-0.414	-0.396

586434	5/4/2015 0:00	-0.408	-0.396
586435	5/5/2015 0:00	-0.406	-0.396
586436	5/6/2015 0:00	-0.384	-0.398
586437	5/7/2015 0:00	-0.4	-0.398
586438	5/8/2015 0:00	-0.378	-0.4
586439	5/9/2015 0:00	-0.408	-0.401
586440	5/10/2015 0:00	-0.413	-0.401
586441	5/11/2015 0:00	-0.398	-0.403
586442	5/12/2015 0:00	-0.408	-0.406
586443	5/13/2015 0:00	-0.415	-0.408
586444	5/14/2015 0:00	-0.413	-0.41
586445	5/15/2015 0:00	-0.395	-0.413
586446	5/16/2015 0:00	-0.401	-0.416
586447	5/17/2015 0:00	-0.416	-0.419
586448	5/18/2015 0:00	-0.407	-0.422
586449	5/19/2015 0:00	-0.387	-0.424
586450	5/20/2015 0:00	-0.404	-0.425
586451	5/21/2015 0:00	-0.394	-0.427
586452	5/22/2015 0:00	-0.41	-0.43
586453	5/23/2015 0:00	-0.428	-0.432
586454	5/24/2015 0:00	-0.409	-0.436
586455	5/25/2015 0:00	-0.397	-0.439
586456	5/26/2015 0:00	-0.445	-0.441
586457	5/27/2015 0:00	-0.477	-0.443
586458	5/28/2015 0:00	-0.477	-0.445
586459	5/29/2015 0:00	-0.465	-0.446
586460	5/30/2015 0:00	-0.476	-0.449
586461	5/31/2015 0:00	-0.47	-0.451
586462	6/1/2015 0:00	-0.488	-0.453
586463	6/2/2015 0:00	-0.483	-0.455
586464	6/3/2015 0:00	-0.475	-0.457
586465	6/4/2015 0:00	-0.462	-0.46
586466	6/5/2015 0:00	-0.467	-0.462
586467	6/6/2015 0:00	-0.472	-0.464
586468	6/7/2015 0:00	-0.469	-0.466
586469	6/8/2015 0:00	-0.494	-0.467
586470	6/9/2015 0:00	-0.49	-0.469
586471	6/10/2015 0:00	-0.468	-0.471
586472	6/11/2015 0:00	-0.46	-0.473
586473	6/12/2015 0:00	-0.479	-0.473
586474	6/13/2015 0:00	-0.459	-0.473
586475	6/14/2015 0:00	-0.484	-0.473
586476	6/15/2015 0:00	-0.468	-0.473
586477	6/16/2015 0:00	-0.479	-0.473

586478	6/17/2015 0:00	-0.475	-0.472
586479	6/18/2015 0:00	-0.464	-0.471
586480	6/19/2015 0:00	-0.482	-0.471
586481	6/20/2015 0:00	-0.452	-0.471
586482	6/21/2015 0:00	-0.456	-0.471
586483	6/22/2015 0:00	-0.467	-0.471
586484	6/23/2015 0:00	-0.462	-0.47
586485	6/24/2015 0:00	-0.476	-0.469
586486	6/25/2015 0:00	-0.474	-0.467
586487	6/26/2015 0:00	-0.482	-0.467
586488	6/27/2015 0:00	-0.477	-0.467
586489	6/28/2015 0:00	-0.483	-0.466
586490	6/29/2015 0:00	-0.466	-0.466
586491	6/30/2015 0:00	-0.466	-0.465
586492	7/1/2015 0:00	-0.474	-0.465
586493	7/2/2015 0:00	-0.452	-0.464
586494	7/3/2015 0:00	-0.463	-0.465
586495	7/4/2015 0:00	-0.481	-0.465
586496	7/5/2015 0:00	-0.465	-0.464
586497	7/6/2015 0:00	-0.471	-0.464
586498	7/7/2015 0:00	-0.448	-0.464
586499	7/8/2015 0:00	-0.467	-0.464
586500	7/9/2015 0:00	-0.449	-0.464
586501	7/10/2015 0:00	-0.437	-0.464
586502	7/11/2015 0:00	-0.46	-0.463
586503	7/12/2015 0:00	-0.463	-0.463
586504	7/13/2015 0:00	-0.441	-0.462
586505	7/14/2015 0:00	-0.451	-0.462
586506	7/15/2015 0:00	-0.465	-0.462
586507	7/16/2015 0:00	-0.457	-0.462
586508	7/17/2015 0:00	-0.471	-0.461
586509	7/18/2015 0:00	-0.489	-0.462
586510	7/19/2015 0:00	-0.455	-0.461
586511	7/20/2015 0:00	-0.465	-0.46
586512	7/21/2015 0:00	-0.447	-0.46
586513	7/22/2015 0:00	-0.471	-0.459
586514	7/23/2015 0:00	-0.459	-0.46
586515	7/24/2015 0:00	-0.467	-0.459
586516	7/25/2015 0:00	-0.458	-0.46
586517	7/26/2015 0:00	-0.465	-0.461
586518	7/27/2015 0:00	-0.473	-0.461
586519	7/28/2015 0:00	-0.452	-0.462
586520	7/29/2015 0:00	-0.464	-0.463
586521	7/30/2015 0:00	-0.468	-0.463

586522	7/31/2015 0:00	-0.468	-0.463
586523	8/1/2015 0:00	-0.456	-0.462
586524	8/2/2015 0:00	-0.469	-0.463
586525	8/3/2015 0:00	-0.444	-0.462
586526	8/4/2015 0:00	-0.443	-0.462
586527	8/5/2015 0:00	-0.453	-0.461
586528	8/6/2015 0:00	-0.467	-0.462
586529	8/7/2015 0:00	-0.453	-0.463
586530	8/8/2015 0:00	-0.46	-0.464
586531	8/9/2015 0:00	-0.463	-0.465
586532	8/10/2015 0:00	-0.471	-0.466
586533	8/11/2015 0:00	-0.469	-0.467
586534	8/12/2015 0:00	-0.484	-0.468
586535	8/13/2015 0:00	-0.473	-0.468
586536	8/14/2015 0:00	-0.462	-0.469
586537	8/15/2015 0:00	-0.455	-0.468
586538	8/16/2015 0:00	-0.44	-0.469
586539	8/17/2015 0:00	-0.477	-0.469
586540	8/18/2015 0:00	-0.474	-0.469
586541	8/19/2015 0:00	-0.451	-0.471
586542	8/20/2015 0:00	-0.45	-0.472
586543	8/21/2015 0:00	-0.45	-0.473
586544	8/22/2015 0:00	-0.507	-0.474
586545	8/23/2015 0:00	-0.49	-0.475
586546	8/24/2015 0:00	-0.496	-0.476
586547	8/25/2015 0:00	-0.508	-0.476
586548	8/26/2015 0:00	-0.499	-0.476
586549	8/27/2015 0:00	-0.495	-0.476
586550	8/28/2015 0:00	-0.461	-0.476
586551	8/29/2015 0:00	-0.472	-0.477
586552	8/30/2015 0:00	-0.463	-0.477
586553	8/31/2015 0:00	-0.472	-0.478
586554	9/1/2015 0:00	-0.46	-0.479
586555	9/2/2015 0:00	-0.491	-0.479
586556	9/3/2015 0:00	-0.478	-0.479
586557	9/4/2015 0:00	-0.48	-0.48
586558	9/5/2015 0:00	-0.496	-0.481
586559	9/6/2015 0:00	-0.487	-0.481
586560	9/7/2015 0:00	-0.483	-0.48
586561	9/8/2015 0:00	-0.49	-0.481
586562	9/9/2015 0:00	-0.472	-0.482
586563	9/10/2015 0:00	-0.468	-0.481
586564	9/11/2015 0:00	-0.48	-0.482
586565	9/12/2015 0:00	-0.483	-0.482

586566	9/13/2015 0:00	-0.488	-0.483
586567	9/14/2015 0:00	-0.48	-0.484
586568	9/15/2015 0:00	-0.467	-0.484
586569	9/16/2015 0:00	-0.486	-0.484
586570	9/17/2015 0:00	-0.487	-0.484
586571	9/18/2015 0:00	-0.473	-0.485
586572	9/19/2015 0:00	-0.469	-0.485
586573	9/20/2015 0:00	-0.488	-0.485
586574	9/21/2015 0:00	-0.453	-0.485
586575	9/22/2015 0:00	-0.48	-0.485
586576	9/23/2015 0:00	-0.513	-0.486
586577	9/24/2015 0:00	-0.508	-0.486
586578	9/25/2015 0:00	-0.487	-0.486
586579	9/26/2015 0:00	-0.521	-0.487
586580	9/27/2015 0:00	-0.504	-0.487
586581	9/28/2015 0:00	-0.497	-0.488
586582	9/29/2015 0:00	-0.487	-0.488
586583	9/30/2015 0:00	-0.464	-0.488
586584	10/1/2015 0:00	-0.474	-0.489
586585	10/2/2015 0:00	-0.476	-0.489
586586	10/3/2015 0:00	-0.505	-0.488
586587	10/4/2015 0:00	-0.481	-0.488
586588	10/5/2015 0:00	-0.494	-0.489
586589	10/6/2015 0:00	-0.492	-0.489
586590	10/7/2015 0:00	-0.497	-0.49
586591	10/8/2015 0:00	-0.494	-0.49
586592	10/9/2015 0:00	-0.497	-0.49
586593	10/10/2015 0:00	-0.483	-0.49
586594	10/11/2015 0:00	-0.496	-0.491
586595	10/12/2015 0:00	-0.486	-0.49
586596	10/13/2015 0:00	-0.501	-0.489
586597	10/14/2015 0:00	-0.483	-0.488
586598	10/15/2015 0:00	-0.476	-0.488
586599	10/16/2015 0:00	-0.5	-0.489
586600	10/17/2015 0:00	-0.481	-0.49
586601	10/18/2015 0:00	-0.471	-0.491
586602	10/19/2015 0:00	-0.477	-0.491
586603	10/20/2015 0:00	-0.488	-0.491
586604	10/21/2015 0:00	-0.501	-0.491
586605	10/22/2015 0:00	-0.477	-0.492
586606	10/23/2015 0:00	-0.49	-0.493
586607	10/24/2015 0:00	-0.505	-0.493
586608	10/25/2015 0:00	-0.503	-0.493
586609	10/26/2015 0:00	-0.511	-0.493

586610	10/27/2015 0:00	-0.499	-0.493
586611	10/28/2015 0:00	-0.472	-0.493
586612	10/29/2015 0:00	-0.46	-0.493
586613	10/30/2015 0:00	-0.49	-0.494
586614	10/31/2015 0:00	-0.493	-0.495
586615	11/1/2015 0:00	-0.503	-0.494
586616	11/2/2015 0:00	-0.509	-0.495
586617	11/3/2015 0:00	-0.498	-0.495
586618	11/4/2015 0:00	-0.492	-0.496
586619	11/5/2015 0:00	-0.504	-0.496
586620	11/6/2015 0:00	-0.521	-0.497
586621	11/7/2015 0:00	-0.511	-0.497
586622	11/8/2015 0:00	-0.493	-0.497
586623	11/9/2015 0:00	-0.498	-0.497
586624	11/10/2015 0:00	-0.504	-0.496
586625	11/11/2015 0:00	-0.498	-0.496
586626	11/12/2015 0:00	-0.49	-0.497
586627	11/13/2015 0:00	-0.499	-0.499
586628	11/14/2015 0:00	-0.497	-0.501
586629	11/15/2015 0:00	-0.504	-0.501
586630	11/16/2015 0:00	-0.486	-0.502
586631	11/17/2015 0:00	-0.492	-0.502
586632	11/18/2015 0:00	-0.496	-0.502
586633	11/19/2015 0:00	-0.489	-0.502
586634	11/20/2015 0:00	-0.508	-0.503
586635	11/21/2015 0:00	-0.519	-0.503
586636	11/22/2015 0:00	-0.484	-0.503
586637	11/23/2015 0:00	-0.481	-0.503
586638	11/24/2015 0:00	-0.498	-0.504
586639	11/25/2015 0:00	-0.476	-0.504
586640	11/26/2015 0:00	-0.529	-0.503
586641	11/27/2015 0:00	-0.53	-0.503
586642	11/28/2015 0:00	-0.51	-0.503
586643	11/29/2015 0:00	-0.515	-0.503
586644	11/30/2015 0:00	-0.507	-0.503
586645	12/1/2015 0:00	-0.528	-0.503
586646	12/2/2015 0:00	-0.507	-0.504
586647	12/3/2015 0:00	-0.502	-0.504
586648	12/4/2015 0:00	-0.498	-0.505
586649	12/5/2015 0:00	-0.51	-0.506
586650	12/6/2015 0:00	-0.526	-0.506
586651	12/7/2015 0:00	-0.512	-0.505
586652	12/8/2015 0:00	-0.505	-0.505
586653	12/9/2015 0:00	-0.514	-0.506

586654	12/10/2015 0:00	-0.499	-0.505
586655	12/11/2015 0:00	-0.476	-0.508
586656	12/12/2015 0:00	-0.499	-0.508
586657	12/13/2015 0:00	-0.51	-0.507
586658	12/14/2015 0:00	-0.49	-0.506
586659	12/15/2015 0:00	-0.507	-0.506
586660	12/16/2015 0:00	-0.482	-0.507
586661	12/17/2015 0:00	-0.509	-0.506
586662	12/18/2015 0:00	-0.519	-0.506
586663	12/19/2015 0:00	-0.5	-0.507
586664	12/20/2015 0:00	-0.526	-0.507
586665	12/21/2015 0:00	-0.515	-0.506
586666	12/22/2015 0:00	-0.5	-0.506
586667	12/23/2015 0:00	-0.486	-0.506
586668	12/24/2015 0:00	-0.496	-0.506
586669	12/25/2015 0:00	-0.485	-0.507
586670	12/26/2015 0:00	-0.56	-0.507
586671	12/27/2015 0:00	-0.513	-0.508
586672	12/28/2015 0:00	-0.508	-0.51
586673	12/29/2015 0:00	-0.495	-0.51
586674	12/30/2015 0:00	-0.506	-0.511
586675	12/31/2015 0:00	-0.529	-0.511
586676	1/1/2016 0:00	-0.502	-0.511
586677	1/2/2016 0:00	-0.503	-0.512
586678	1/3/2016 0:00	-0.521	-0.512
586679	1/4/2016 0:00	-0.498	-0.513
586680	1/5/2016 0:00	-0.493	-0.513
586681	1/6/2016 0:00	-0.527	-0.513
586682	1/7/2016 0:00	-0.514	-0.514
586683	1/8/2016 0:00	-0.509	-0.515
586684	1/9/2016 0:00	-0.532	-0.516
586685	1/10/2016 0:00	-0.498	-0.517
586686	1/11/2016 0:00	-0.527	-0.515
586687	1/12/2016 0:00	-0.557	-0.516
586688	1/13/2016 0:00	-0.513	-0.516
586689	1/14/2016 0:00	-0.5	-0.516
586690	1/15/2016 0:00	-0.512	-0.515
586691	1/16/2016 0:00	-0.5	-0.514
586692	1/17/2016 0:00	-0.538	-0.514
586693	1/18/2016 0:00	-0.513	-0.515
586694	1/19/2016 0:00	-0.532	-0.515
586695	1/20/2016 0:00	-0.527	-0.516
586696	1/21/2016 0:00	-0.515	-0.517
586697	1/22/2016 0:00	-0.517	-0.517

586698	1/23/2016 0:00	-0.522	-0.518
586699	1/24/2016 0:00	-0.535	-0.519
586700	1/25/2016 0:00	-0.502	-0.518
586701	1/26/2016 0:00	-0.508	-0.519
586702	1/27/2016 0:00	-0.528	-0.519
586703	1/28/2016 0:00	-0.534	-0.518
586704	1/29/2016 0:00	-0.497	-0.518
586705	1/30/2016 0:00	-0.477	-0.518
586706	1/31/2016 0:00	-0.482	-0.518
586707	2/1/2016 0:00	-0.513	-0.518
586708	2/2/2016 0:00	-0.509	-0.516
586709	2/3/2016 0:00	-0.538	-0.516
586710	2/4/2016 0:00	-0.524	-0.515
586711	2/5/2016 0:00	-0.533	-0.515
586712	2/6/2016 0:00	-0.518	-0.514
586713	2/7/2016 0:00	-0.54	-0.515
586714	2/8/2016 0:00	-0.539	-0.514
586715	2/9/2016 0:00	-0.522	-0.514
586716	2/10/2016 0:00	-0.531	-0.515
586717	2/11/2016 0:00	-0.515	-0.515
586718	2/12/2016 0:00	-0.519	-0.515
586719	2/13/2016 0:00	-0.522	-0.515
586720	2/14/2016 0:00	-0.503	-0.516
586721	2/15/2016 0:00	-0.502	-0.517
586722	2/16/2016 0:00	-0.508	-0.518
586723	2/17/2016 0:00	-0.483	-0.518
586724	2/18/2016 0:00	-0.492	-0.518
586725	2/19/2016 0:00	-0.512	-0.518
586726	2/20/2016 0:00	-0.513	-0.517
586727	2/21/2016 0:00	-0.513	-0.517
586728	2/22/2016 0:00	-0.533	-0.517
586729	2/23/2016 0:00	-0.498	-0.517
586730	2/24/2016 0:00	-0.527	-0.517
586731	2/25/2016 0:00	-0.522	-0.517
586732	2/26/2016 0:00	-0.522	-0.516
586733	2/27/2016 0:00	-0.532	-0.516
586734	2/28/2016 0:00	-0.533	-0.516
586735	2/29/2016 0:00	-0.516	-0.516
586736	3/1/2016 0:00	-0.499	-0.516
586737	3/2/2016 0:00	-0.526	-0.517
586738	3/3/2016 0:00	-0.511	-0.517
586739	3/4/2016 0:00	-0.517	-0.518
586740	3/5/2016 0:00	-0.525	-0.519
586741	3/6/2016 0:00	-0.512	-0.52

586742	3/7/2016 0:00	-0.528	-0.52
586743	3/8/2016 0:00	-0.513	-0.52
586744	3/9/2016 0:00	-0.541	-0.52
586745	3/10/2016 0:00	-0.529	-0.52
586746	3/11/2016 0:00	-0.523	-0.52
586747	3/12/2016 0:00	-0.508	-0.52
586748	3/13/2016 0:00	-0.518	-0.52
586749	3/14/2016 0:00	-0.503	-0.52
586750	3/15/2016 0:00	-0.532	-0.52
586751	3/16/2016 0:00	-0.498	-0.52
586752	3/17/2016 0:00	-0.525	-0.52
586753	3/18/2016 0:00	-0.518	-0.521
586754	3/19/2016 0:00	-0.523	-0.521
586755	3/20/2016 0:00	-0.532	-0.521
586756	3/21/2016 0:00	-0.519	-0.522
586757	3/22/2016 0:00	-0.51	-0.522
586758	3/23/2016 0:00	-0.531	-0.523
586759	3/24/2016 0:00	-0.541	-0.523
586760	3/25/2016 0:00	-0.492	-0.523
586761	3/26/2016 0:00	-0.519	-0.522
586762	3/27/2016 0:00	-0.525	-0.522
586763	3/28/2016 0:00	-0.534	-0.523
586764	3/29/2016 0:00	-0.505	-0.524
586765	3/30/2016 0:00	-0.539	-0.525
586766	3/31/2016 0:00	-0.535	-0.525
586767	4/1/2016 0:00	-0.503	-0.526
586768	4/2/2016 0:00	-0.544	-0.527
586769	4/3/2016 0:00	-0.52	-0.527
586770	4/4/2016 0:00	-0.516	-0.527
586771	4/5/2016 0:00	-0.551	-0.527
586772	4/6/2016 0:00	-0.518	-0.528
586773	4/7/2016 0:00	-0.541	-0.529
586774	4/8/2016 0:00	-0.533	-0.528
586775	4/9/2016 0:00	-0.52	-0.527
586776	4/10/2016 0:00	-0.508	-0.528
586777	4/11/2016 0:00	-0.535	-0.528
586778	4/12/2016 0:00	-0.533	-0.529
586779	4/13/2016 0:00	-0.531	-0.528
586780	4/14/2016 0:00	-0.533	-0.529
586781	4/15/2016 0:00	-0.529	-0.529
586782	4/16/2016 0:00	-0.55	-0.529
586783	4/17/2016 0:00	-0.538	-0.53
586784	4/18/2016 0:00	-0.527	-0.529
586785	4/19/2016 0:00	-0.533	-0.53

586786	4/20/2016 0:00	-0.541	-0.53
586787	4/21/2016 0:00	-0.545	-0.529
586788	4/22/2016 0:00	-0.526	-0.529
586789	4/23/2016 0:00	-0.514	-0.528
586790	4/24/2016 0:00	-0.513	-0.528
586791	4/25/2016 0:00	-0.527	-0.528
586792	4/26/2016 0:00	-0.517	-0.529
586793	4/27/2016 0:00	-0.543	-0.529
586794	4/28/2016 0:00	-0.491	-0.529
586795	4/29/2016 0:00	-0.539	-0.528
586796	4/30/2016 0:00	-0.545	-0.528
586797	5/1/2016 0:00	-0.528	-0.527
586798	5/2/2016 0:00	-0.537	-0.526
586799	5/3/2016 0:00	-0.523	-0.526
586800	5/4/2016 0:00	-0.534	-0.526
586801	5/5/2016 0:00	-0.519	-0.525
586802	5/6/2016 0:00	-0.522	-0.525
586803	5/7/2016 0:00	-0.524	-0.525
586804	5/8/2016 0:00	-0.527	-0.525
586805	5/9/2016 0:00	-0.52	-0.526
586806	5/10/2016 0:00	-0.528	-0.526
586807	5/11/2016 0:00	-0.542	-0.525
586808	5/12/2016 0:00	-0.53	-0.526
586809	5/13/2016 0:00	-0.518	-0.525
586810	5/14/2016 0:00	-0.513	-0.527
586811	5/15/2016 0:00	-0.518	-0.527
586812	5/16/2016 0:00	-0.514	-0.527
586813	5/17/2016 0:00	-0.517	-0.527
586814	5/18/2016 0:00	-0.541	-0.528
586815	5/19/2016 0:00	-0.518	-0.528
586816	5/20/2016 0:00	-0.494	-0.528
586817	5/21/2016 0:00	-0.547	-0.528
586818	5/22/2016 0:00	-0.535	-0.528
586819	5/23/2016 0:00	-0.546	-0.529
586820	5/24/2016 0:00	-0.529	-0.529
586821	5/25/2016 0:00	-0.518	-0.529
586822	5/26/2016 0:00	-0.513	-0.529
586823	5/27/2016 0:00	-0.525	-0.528
586824	5/28/2016 0:00	-0.531	-0.528
586825	5/29/2016 0:00	-0.554	-0.528
586826	5/30/2016 0:00	-0.538	-0.528
586827	5/31/2016 0:00	-0.531	-0.529
586828	6/1/2016 0:00	-0.546	-0.529
586829	6/2/2016 0:00	-0.55	-0.529

586830	6/3/2016 0:00	-0.536	-0.529
586831	6/4/2016 0:00	-0.534	-0.529
586832	6/5/2016 0:00	-0.52	-0.53
586833	6/6/2016 0:00	-0.527	-0.529
586834	6/7/2016 0:00	-0.529	-0.529
586835	6/8/2016 0:00	-0.532	-0.528
586836	6/9/2016 0:00	-0.528	-0.527
586837	6/10/2016 0:00	-0.513	-0.527
586838	6/11/2016 0:00	-0.527	-0.528
586839	6/12/2016 0:00	-0.525	-0.528
586840	6/13/2016 0:00	-0.533	-0.528
586841	6/14/2016 0:00	-0.507	-0.526
586842	6/15/2016 0:00	-0.527	-0.526
586843	6/16/2016 0:00	-0.519	-0.526
586844	6/17/2016 0:00	-0.527	-0.525
586845	6/18/2016 0:00	-0.524	-0.526
586846	6/19/2016 0:00	-0.531	-0.525
586847	6/20/2016 0:00	-0.518	-0.524
586848	6/21/2016 0:00	-0.52	-0.525
586849	6/22/2016 0:00	-0.527	-0.525
586850	6/23/2016 0:00	-0.53	-0.525
586851	6/24/2016 0:00	-0.51	-0.525
586852	6/25/2016 0:00	-0.512	-0.526
586853	6/26/2016 0:00	-0.531	-0.526
586854	6/27/2016 0:00	-0.536	-0.525
586855	6/28/2016 0:00	-0.511	-0.526
586856	6/29/2016 0:00	-0.521	-0.526
586857	6/30/2016 0:00	-0.52	-0.527
586858	7/1/2016 0:00	-0.531	-0.527
586859	7/2/2016 0:00	-0.533	-0.528
586860	7/3/2016 0:00	-0.554	-0.528
586861	7/4/2016 0:00	-0.515	-0.529
586862	7/5/2016 0:00	-0.52	-0.529
586863	7/6/2016 0:00	-0.528	-0.53
586864	7/7/2016 0:00	-0.527	-0.53
586865	7/8/2016 0:00	-0.547	-0.53
586866	7/9/2016 0:00	-0.535	-0.531
586867	7/10/2016 0:00	-0.534	-0.532
586868	7/11/2016 0:00	-0.517	-0.532
586869	7/12/2016 0:00	-0.514	-0.533
586870	7/13/2016 0:00	-0.534	-0.532
586871	7/14/2016 0:00	-0.545	-0.532
586872	7/15/2016 0:00	-0.543	-0.532
586873	7/16/2016 0:00	-0.529	-0.532

586874	7/17/2016 0:00	-0.538	-0.533
586875	7/18/2016 0:00	-0.527	-0.533
586876	7/19/2016 0:00	-0.547	-0.532
586877	7/20/2016 0:00	-0.55	-0.533
586878	7/21/2016 0:00	-0.54	-0.533
586879	7/22/2016 0:00	-0.525	-0.533
586880	7/23/2016 0:00	-0.538	-0.533
586881	7/24/2016 0:00	-0.537	-0.532
586882	7/25/2016 0:00	-0.537	-0.532
586883	7/26/2016 0:00	-0.543	-0.532
586884	7/27/2016 0:00	-0.533	-0.533
586885	7/28/2016 0:00	-0.507	-0.534
586886	7/29/2016 0:00	-0.536	-0.535
586887	7/30/2016 0:00	-0.511	-0.535
586888	7/31/2016 0:00	-0.518	-0.534
586889	8/1/2016 0:00	-0.548	-0.534
586890	8/2/2016 0:00	-0.541	-0.534
586891	8/3/2016 0:00	-0.529	-0.535
586892	8/4/2016 0:00	-0.544	-0.534
586893	8/5/2016 0:00	-0.511	-0.534
586894	8/6/2016 0:00	-0.533	-0.534
586895	8/7/2016 0:00	-0.521	-0.534
586896	8/8/2016 0:00	-0.531	-0.534
586897	8/9/2016 0:00	-0.528	-0.534
586898	8/10/2016 0:00	-0.527	-0.534
586899	8/11/2016 0:00	-0.549	-0.534
586900	8/12/2016 0:00	-0.562	-0.535
586901	8/13/2016 0:00	-0.546	-0.537
586902	8/14/2016 0:00	-0.54	-0.537
586903	8/15/2016 0:00	-0.531	-0.538
586904	8/16/2016 0:00	-0.532	-0.539
586905	8/17/2016 0:00	-0.536	-0.538
586906	8/18/2016 0:00	-0.543	-0.538
586907	8/19/2016 0:00	-0.537	-0.538
586908	8/20/2016 0:00	-0.537	-0.537
586909	8/21/2016 0:00	-0.531	-0.537
586910	8/22/2016 0:00	-0.528	-0.536
586911	8/23/2016 0:00	-0.532	-0.537
586912	8/24/2016 0:00	-0.549	-0.538
586913	8/25/2016 0:00	-0.547	-0.539
586914	8/26/2016 0:00	-0.542	-0.539
586915	8/27/2016 0:00	-0.558	-0.539
586916	8/28/2016 0:00	-0.554	-0.538
586917	8/29/2016 0:00	-0.554	-0.538

586918	8/30/2016 0:00	-0.547	-0.538
586919	8/31/2016 0:00	-0.54	-0.539
586920	9/1/2016 0:00	-0.52	-0.539
586921	9/2/2016 0:00	-0.532	-0.538
586922	9/3/2016 0:00	-0.533	-0.537
586923	9/4/2016 0:00	-0.514	-0.537
586924	9/5/2016 0:00	-0.517	-0.536
586925	9/6/2016 0:00	-0.506	-0.536
586926	9/7/2016 0:00	-0.544	-0.536
586927	9/8/2016 0:00	-0.569	-0.535
586928	9/9/2016 0:00	-0.536	-0.535
586929	9/10/2016 0:00	-0.548	-0.535
586930	9/11/2016 0:00	-0.558	-0.534
586931	9/12/2016 0:00	-0.531	-0.533
586932	9/13/2016 0:00	-0.539	-0.532
586933	9/14/2016 0:00	-0.541	-0.533
586934	9/15/2016 0:00	-0.549	-0.533
586935	9/16/2016 0:00	-0.54	-0.533
586936	9/17/2016 0:00	-0.509	-0.533
586937	9/18/2016 0:00	-0.518	-0.533
586938	9/19/2016 0:00	-0.51	-0.533
586939	9/20/2016 0:00	-0.524	-0.534
586940	9/21/2016 0:00	-0.528	-0.533
586941	9/22/2016 0:00	-0.517	-0.534
586942	9/23/2016 0:00	-0.526	-0.533
586943	9/24/2016 0:00	-0.526	-0.531
586944	9/25/2016 0:00	-0.543	-0.53
586945	9/26/2016 0:00	-0.522	-0.53
586946	9/27/2016 0:00	-0.52	-0.529
586947	9/28/2016 0:00	-0.545	-0.529
586948	9/29/2016 0:00	-0.569	-0.528
586949	9/30/2016 0:00	-0.548	-0.528
586950	10/1/2016 0:00	-0.548	-0.528
586951	10/2/2016 0:00	-0.524	-0.527
586952	10/3/2016 0:00	-0.529	-0.527
586953	10/4/2016 0:00	-0.534	-0.528
586954	10/5/2016 0:00	-0.529	-0.529
586955	10/6/2016 0:00	-0.512	-0.53
586956	10/7/2016 0:00	-0.521	-0.53
586957	10/8/2016 0:00	-0.506	-0.53
586958	10/9/2016 0:00	-0.518	-0.532
586959	10/10/2016 0:00	-0.513	-0.533
586960	10/11/2016 0:00	-0.525	-0.534
586961	10/12/2016 0:00	-0.532	-0.534

586962	10/13/2016 0:00	-0.531	-0.535
586963	10/14/2016 0:00	-0.528	-0.535
586964	10/15/2016 0:00	-0.524	-0.534
586965	10/16/2016 0:00	-0.543	-0.534
586966	10/17/2016 0:00	-0.518	-0.534
586967	10/18/2016 0:00	-0.523	-0.534
586968	10/19/2016 0:00	-0.524	-0.535
586969	10/20/2016 0:00	-0.549	-0.536
586970	10/21/2016 0:00	-0.543	-0.537
586971	10/22/2016 0:00	-0.528	-0.538
586972	10/23/2016 0:00	-0.546	-0.54
586973	10/24/2016 0:00	-0.574	-0.541
586974	10/25/2016 0:00	-0.565	-0.542
586975	10/26/2016 0:00	-0.571	-0.543
586976	10/27/2016 0:00	-0.525	-0.544
586977	10/28/2016 0:00	-0.547	-0.544
586978	10/29/2016 0:00	-0.534	-0.545
586979	10/30/2016 0:00	-0.552	-0.546
586980	10/31/2016 0:00	-0.545	-0.547
586981	11/1/2016 0:00	-0.549	-0.547
586982	11/2/2016 0:00	-0.517	-0.548
586983	11/3/2016 0:00	-0.553	-0.549
586984	11/4/2016 0:00	-0.569	-0.55
586985	11/5/2016 0:00	-0.568	-0.549
586986	11/6/2016 0:00	-0.545	-0.549
586987	11/7/2016 0:00	-0.563	-0.55
586988	11/8/2016 0:00	-0.54	-0.55
586989	11/9/2016 0:00	-0.55	-0.549
586990	11/10/2016 0:00	-0.553	-0.549
586991	11/11/2016 0:00	-0.546	-0.548
586992	11/12/2016 0:00	-0.541	-0.549
586993	11/13/2016 0:00	-0.548	-0.549
586994	11/14/2016 0:00	-0.566	-0.549
586995	11/15/2016 0:00	-0.559	-0.55
586996	11/16/2016 0:00	-0.53	-0.55
586997	11/17/2016 0:00	-0.555	-0.551
586998	11/18/2016 0:00	-0.553	-0.552
586999	11/19/2016 0:00	-0.552	-0.552
587000	11/20/2016 0:00	-0.541	-0.552
587001	11/21/2016 0:00	-0.533	-0.552
587002	11/22/2016 0:00	-0.547	-0.553
587003	11/23/2016 0:00	-0.553	-0.553
587004	11/24/2016 0:00	-0.551	-0.553
587005	11/25/2016 0:00	-0.554	-0.554

587006	11/26/2016 0:00	-0.56	-0.553
587007	11/27/2016 0:00	-0.549	-0.553
587008	11/28/2016 0:00	-0.547	-0.553
587009	11/29/2016 0:00	-0.542	-0.554
587010	11/30/2016 0:00	-0.56	-0.553
587011	12/1/2016 0:00	-0.552	-0.553
587012	12/2/2016 0:00	-0.571	-0.554
587013	12/3/2016 0:00	-0.564	-0.554
587014	12/4/2016 0:00	-0.563	-0.554
587015	12/5/2016 0:00	-0.552	-0.554
587016	12/6/2016 0:00	-0.565	-0.555
587017	12/7/2016 0:00	-0.569	-0.555
587018	12/8/2016 0:00	-0.571	-0.556
587019	12/9/2016 0:00	-0.56	-0.556
587020	12/10/2016 0:00	-0.553	-0.556
587021	12/11/2016 0:00	-0.543	-0.556
587022	12/12/2016 0:00	-0.547	-0.556
587023	12/13/2016 0:00	-0.544	-0.556
587024	12/14/2016 0:00	-0.566	-0.557
587025	12/15/2016 0:00	-0.549	-0.557
587026	12/16/2016 0:00	-0.554	-0.557
587027	12/17/2016 0:00	-0.554	-0.557
587028	12/18/2016 0:00	-0.55	-0.557
587029	12/19/2016 0:00	-0.565	-0.557
587030	12/20/2016 0:00	-0.55	-0.556
587031	12/21/2016 0:00	-0.553	-0.557
587032	12/22/2016 0:00	-0.548	-0.557
587033	12/23/2016 0:00	-0.57	-0.558
587034	12/24/2016 0:00	-0.554	-0.558
587035	12/25/2016 0:00	-0.543	-0.559
587036	12/26/2016 0:00	-0.56	-0.559
587037	12/27/2016 0:00	-0.564	-0.559
587038	12/28/2016 0:00	-0.547	-0.56
587039	12/29/2016 0:00	-0.575	-0.561
587040	12/30/2016 0:00	-0.561	-0.562
587041	12/31/2016 0:00	-0.557	-0.562
587042	1/1/2017 0:00	-0.551	-0.563
587043	1/2/2017 0:00	-0.558	-0.564
587044	1/3/2017 0:00	-0.559	-0.564
587045	1/4/2017 0:00	-0.553	-0.564
587046	1/5/2017 0:00	-0.571	-0.564
587047	1/6/2017 0:00	-0.568	-0.564
587048	1/7/2017 0:00	-0.588	-0.566
587049	1/8/2017 0:00	-0.576	-0.566

587050	1/9/2017 0:00	-0.586	-0.566
587051	1/10/2017 0:00	-0.549	-0.567
587052	1/11/2017 0:00	-0.573	-0.569
587053	1/12/2017 0:00	-0.571	-0.57
587054	1/13/2017 0:00	-0.577	-0.572
587055	1/14/2017 0:00	-0.58	-0.573
587056	1/15/2017 0:00	-0.57	-0.574
587057	1/16/2017 0:00	-0.584	-0.574
587058	1/17/2017 0:00	-0.564	-0.576
587059	1/18/2017 0:00	-0.569	-0.576
587060	1/19/2017 0:00	-0.561	-0.578
587061	1/20/2017 0:00	-0.558	-0.579
587062	1/21/2017 0:00	-0.537	-0.579
587063	1/22/2017 0:00	-0.598	-0.579
587064	1/23/2017 0:00	-0.571	-0.579
587065	1/24/2017 0:00	-0.569	-0.58
587066	1/25/2017 0:00	-0.582	-0.58
587067	1/26/2017 0:00	-0.599	-0.581
587068	1/27/2017 0:00	-0.609	-0.581
587069	1/28/2017 0:00	-0.614	-0.583
587070	1/29/2017 0:00	-0.61	-0.584
587071	1/30/2017 0:00	-0.581	-0.585
587072	1/31/2017 0:00	-0.576	-0.585
587073	2/1/2017 0:00	-0.591	-0.585
587074	2/2/2017 0:00	-0.579	-0.586
587075	2/3/2017 0:00	-0.601	-0.586
587076	2/4/2017 0:00	-0.589	-0.587
587077	2/5/2017 0:00	-0.558	-0.59
587078	2/6/2017 0:00	-0.578	-0.591
587079	2/7/2017 0:00	-0.606	-0.591
587080	2/8/2017 0:00	-0.584	-0.593
587081	2/9/2017 0:00	-0.592	-0.594
587082	2/10/2017 0:00	-0.571	-0.594
587083	2/11/2017 0:00	-0.594	-0.593
587084	2/12/2017 0:00	-0.617	-0.592
587085	2/13/2017 0:00	-0.619	-0.592
587086	2/14/2017 0:00	-0.605	-0.592
587087	2/15/2017 0:00	-0.585	-0.593
587088	2/16/2017 0:00	-0.583	-0.594
587089	2/17/2017 0:00	-0.574	-0.593
587090	2/18/2017 0:00	-0.586	-0.594
587091	2/19/2017 0:00	-0.592	-0.593
587092	2/20/2017 0:00	-0.631	-0.593
587093	2/21/2017 0:00	-0.589	-0.594

587094	2/22/2017 0:00	-0.604	-0.595
587095	2/23/2017 0:00	-0.611	-0.595
587096	2/24/2017 0:00	-0.597	-0.595
587097	2/25/2017 0:00	-0.586	-0.595
587098	2/26/2017 0:00	-0.577	-0.595
587099	2/27/2017 0:00	-0.586	-0.595
587100	2/28/2017 0:00	-0.601	-0.594
587101	3/1/2017 0:00	-0.607	-0.593
587102	3/2/2017 0:00	-0.604	-0.593
587103	3/3/2017 0:00	-0.604	-0.593
587104	3/4/2017 0:00	-0.577	-0.593
587105	3/5/2017 0:00	-0.6	-0.594
587106	3/6/2017 0:00	-0.573	-0.594
587107	3/7/2017 0:00	-0.592	-0.593
587108	3/8/2017 0:00	-0.595	-0.591
587109	3/9/2017 0:00	-0.592	-0.591
587110	3/10/2017 0:00	-0.615	-0.59
587111	3/11/2017 0:00	-0.598	-0.59
587112	3/12/2017 0:00	-0.581	-0.589
587113	3/13/2017 0:00	-0.582	-0.589
587114	3/14/2017 0:00	-0.58	-0.589
587115	3/15/2017 0:00	-0.587	-0.59
587116	3/16/2017 0:00	-0.589	-0.589
587117	3/17/2017 0:00	-0.604	-0.589
587118	3/18/2017 0:00	-0.601	-0.589
587119	3/19/2017 0:00	-0.583	-0.588
587120	3/20/2017 0:00	-0.588	-0.588
587121	3/21/2017 0:00	-0.581	-0.588
587122	3/22/2017 0:00	-0.567	-0.589
587123	3/23/2017 0:00	-0.566	-0.588
587124	3/24/2017 0:00	-0.585	-0.588
587125	3/25/2017 0:00	-0.594	-0.587
587126	3/26/2017 0:00	-0.593	-0.586
587127	3/27/2017 0:00	-0.585	-0.587
587128	3/28/2017 0:00	-0.584	-0.588
587129	3/29/2017 0:00	-0.576	-0.588
587130	3/30/2017 0:00	-0.595	-0.589
587131	3/31/2017 0:00	-0.581	-0.589
587132	4/1/2017 0:00	-0.599	-0.589
587133	4/2/2017 0:00	-0.599	-0.589
587134	4/3/2017 0:00	-0.586	-0.589
587135	4/4/2017 0:00	-0.592	-0.589
587136	4/5/2017 0:00	-0.596	-0.59
587137	4/6/2017 0:00	-0.603	-0.59

587138	4/7/2017 0:00	-0.563	-0.591
587139	4/8/2017 0:00	-0.575	-0.592
587140	4/9/2017 0:00	-0.575	-0.592
587141	4/10/2017 0:00	-0.591	-0.592
587142	4/11/2017 0:00	-0.602	-0.592
587143	4/12/2017 0:00	-0.616	-0.592
587144	4/13/2017 0:00	-0.589	-0.592
587145	4/14/2017 0:00	-0.604	-0.593
587146	4/15/2017 0:00	-0.598	-0.594
587147	4/16/2017 0:00	-0.595	-0.594
587148	4/17/2017 0:00	-0.604	-0.594
587149	4/18/2017 0:00	-0.584	-0.594
587150	4/19/2017 0:00	-0.587	-0.594
587151	4/20/2017 0:00	-0.609	-0.594
587152	4/21/2017 0:00	-0.588	-0.594
587153	4/22/2017 0:00	-0.603	-0.594
587154	4/23/2017 0:00	-0.61	-0.595
587155	4/24/2017 0:00	-0.58	-0.596
587156	4/25/2017 0:00	-0.586	-0.597
587157	4/26/2017 0:00	-0.594	-0.598
587158	4/27/2017 0:00	-0.595	-0.598
587159	4/28/2017 0:00	-0.582	-0.597
587160	4/29/2017 0:00	-0.605	-0.597
587161	4/30/2017 0:00	-0.605	-0.596
587162	5/1/2017 0:00	-0.595	-0.596
587163	5/2/2017 0:00	-0.587	-0.596
587164	5/3/2017 0:00	-0.601	-0.595
587165	5/4/2017 0:00	-0.608	-0.596
587166	5/5/2017 0:00	-0.585	-0.596
587167	5/6/2017 0:00	-0.591	-0.595
587168	5/7/2017 0:00	-0.599	-0.595
587169	5/8/2017 0:00	-0.607	-0.594
587170	5/9/2017 0:00	-0.603	-0.594
587171	5/10/2017 0:00	-0.596	-0.593
587172	5/11/2017 0:00	-0.62	-0.593
587173	5/12/2017 0:00	-0.606	-0.592
587174	5/13/2017 0:00	-0.588	-0.592
587175	5/14/2017 0:00	-0.603	-0.592
587176	5/15/2017 0:00	-0.571	-0.591
587177	5/16/2017 0:00	-0.586	-0.59
587178	5/17/2017 0:00	-0.582	-0.589
587179	5/18/2017 0:00	-0.592	-0.589
587180	5/19/2017 0:00	-0.614	-0.588
587181	5/20/2017 0:00	-0.595	-0.587

587182	5/21/2017 0:00	-0.58	-0.586
587183	5/22/2017 0:00	-0.584	-0.585
587184	5/23/2017 0:00	-0.576	-0.585
587185	5/24/2017 0:00	-0.582	-0.584
587186	5/25/2017 0:00	-0.567	-0.583
587187	5/26/2017 0:00	-0.573	-0.583
587188	5/27/2017 0:00	-0.578	-0.581
587189	5/28/2017 0:00	-0.59	-0.58
587190	5/29/2017 0:00	-0.588	-0.58
587191	5/30/2017 0:00	-0.556	-0.578
587192	5/31/2017 0:00	-0.576	-0.579
587193	6/1/2017 0:00	-0.579	-0.578
587194	6/2/2017 0:00	-0.578	-0.577
587195	6/3/2017 0:00	-0.582	-0.577
587196	6/4/2017 0:00	-0.575	-0.576
587197	6/5/2017 0:00	-0.56	-0.575
587198	6/6/2017 0:00	-0.561	-0.575
587199	6/7/2017 0:00	-0.582	-0.574
587200	6/8/2017 0:00	-0.589	-0.574
587201	6/9/2017 0:00	-0.571	-0.574
587202	6/10/2017 0:00	-0.594	-0.574
587203	6/11/2017 0:00	-0.564	-0.574
587204	6/12/2017 0:00	-0.556	-0.574
587205	6/13/2017 0:00	-0.592	-0.574
587206	6/14/2017 0:00	-0.557	-0.573
587207	6/15/2017 0:00	-0.577	-0.574
587208	6/16/2017 0:00	-0.563	-0.575
587209	6/17/2017 0:00	-0.568	-0.575
587210	6/18/2017 0:00	-0.582	-0.575
587211	6/19/2017 0:00	-0.569	-0.575
587212	6/20/2017 0:00	-0.586	-0.576
587213	6/21/2017 0:00	-0.557	-0.577
587214	6/22/2017 0:00	-0.561	-0.577
587215	6/23/2017 0:00	-0.577	-0.577
587216	6/24/2017 0:00	-0.578	-0.577
587217	6/25/2017 0:00	-0.589	-0.577
587218	6/26/2017 0:00	-0.572	-0.576
587219	6/27/2017 0:00	-0.577	-0.576
587220	6/28/2017 0:00	-0.577	-0.577
587221	6/29/2017 0:00	-0.559	-0.577
587222	6/30/2017 0:00	-0.586	-0.578
587223	7/1/2017 0:00	-0.593	-0.577
587224	7/2/2017 0:00	-0.578	-0.578
587225	7/3/2017 0:00	-0.582	-0.578

587226	7/4/2017 0:00	-0.6	-0.578
587227	7/5/2017 0:00	-0.599	-0.579
587228	7/6/2017 0:00	-0.579	-0.58
587229	7/7/2017 0:00	-0.575	-0.581
587230	7/8/2017 0:00	-0.593	-0.582
587231	7/9/2017 0:00	-0.575	-0.582
587232	7/10/2017 0:00	-0.573	-0.583
587233	7/11/2017 0:00	-0.57	-0.583
587234	7/12/2017 0:00	-0.57	-0.583
587235	7/13/2017 0:00	-0.587	-0.584
587236	7/14/2017 0:00	-0.568	-0.584
587237	7/15/2017 0:00	-0.592	-0.585
587238	7/16/2017 0:00	-0.562	-0.585
587239	7/17/2017 0:00	-0.572	-0.586
587240	7/18/2017 0:00	-0.566	-0.586
587241	7/19/2017 0:00	-0.598	-0.587
587242	7/20/2017 0:00	-0.602	-0.586
587243	7/21/2017 0:00	-0.601	-0.586
587244	7/22/2017 0:00	-0.598	-0.587
587245	7/23/2017 0:00	-0.58	-0.587
587246	7/24/2017 0:00	-0.601	-0.587
587247	7/25/2017 0:00	-0.59	-0.588
587248	7/26/2017 0:00	-0.585	-0.588
587249	7/27/2017 0:00	-0.593	-0.589
587250	7/28/2017 0:00	-0.596	-0.589
587251	7/29/2017 0:00	-0.588	-0.59
587252	7/30/2017 0:00	-0.598	-0.591
587253	7/31/2017 0:00	-0.581	-0.59
587254	8/1/2017 0:00	-0.604	-0.591
587255	8/2/2017 0:00	-0.595	-0.592
587256	8/3/2017 0:00	-0.593	-0.593
587257	8/4/2017 0:00	-0.589	-0.593
587258	8/5/2017 0:00	-0.579	-0.592
587259	8/6/2017 0:00	-0.616	-0.591
587260	8/7/2017 0:00	-0.577	-0.591
587261	8/8/2017 0:00	-0.605	-0.592
587262	8/9/2017 0:00	-0.591	-0.592
587263	8/10/2017 0:00	-0.59	-0.592
587264	8/11/2017 0:00	-0.583	-0.592
587265	8/12/2017 0:00	-0.595	-0.592
587266	8/13/2017 0:00	-0.594	-0.592
587267	8/14/2017 0:00	-0.592	-0.592
587268	8/15/2017 0:00	-0.58	-0.592
587269	8/16/2017 0:00	-0.583	-0.591

587270	8/17/2017 0:00	-0.609	-0.59
587271	8/18/2017 0:00	-0.594	-0.589
587272	8/19/2017 0:00	-0.588	-0.588
587273	8/20/2017 0:00	-0.579	-0.589
587274	8/21/2017 0:00	-0.577	-0.59
587275	8/22/2017 0:00	-0.602	-0.589
587276	8/23/2017 0:00	-0.598	-0.589
587277	8/24/2017 0:00	-0.607	-0.588
587278	8/25/2017 0:00	-0.594	-0.587
587279	8/26/2017 0:00	-0.587	-0.586
587280	8/27/2017 0:00	-0.596	-0.585
587281	8/28/2017 0:00	-0.581	-0.584
587282	8/29/2017 0:00	-0.599	-0.584
587283	8/30/2017 0:00	-0.589	-0.584
587284	8/31/2017 0:00	-0.565	-0.583
587285	9/1/2017 0:00	-0.553	-0.582
587286	9/2/2017 0:00	-0.559	-0.581
587287	9/3/2017 0:00	-0.578	-0.58
587288	9/4/2017 0:00	-0.63	-0.58
587289	9/5/2017 0:00	-0.587	-0.58
587290	9/6/2017 0:00	-0.589	-0.58
587291	9/7/2017 0:00	-0.572	-0.579
587292	9/8/2017 0:00	-0.579	-0.579
587293	9/9/2017 0:00	-0.571	-0.577
587294	9/10/2017 0:00	-0.565	-0.576
587295	9/11/2017 0:00	-0.546	-0.576
587296	9/12/2017 0:00	-0.567	-0.576
587297	9/13/2017 0:00	-0.576	-0.575
587298	9/14/2017 0:00	-0.584	-0.575
587299	9/15/2017 0:00	-0.575	-0.575
587300	9/16/2017 0:00	-0.551	-0.576
587301	9/17/2017 0:00	-0.569	-0.577
587302	9/18/2017 0:00	-0.574	-0.577
587303	9/19/2017 0:00	-0.571	-0.578
587304	9/20/2017 0:00	-0.58	-0.577
587305	9/21/2017 0:00	-0.577	-0.577
587306	9/22/2017 0:00	-0.58	-0.577
587307	9/23/2017 0:00	-0.583	-0.576
587308	9/24/2017 0:00	-0.568	-0.577
587309	9/25/2017 0:00	-0.565	-0.578
587310	9/26/2017 0:00	-0.581	-0.578
587311	9/27/2017 0:00	-0.577	-0.58
587312	9/28/2017 0:00	-0.573	-0.58
587313	9/29/2017 0:00	-0.59	-0.58

587314	9/30/2017 0:00	-0.588	-0.58
587315	10/1/2017 0:00	-0.587	-0.581
587316	10/2/2017 0:00	-0.588	-0.582
587317	10/3/2017 0:00	-0.573	-0.582
587318	10/4/2017 0:00	-0.601	-0.582
587319	10/5/2017 0:00	-0.603	-0.582
587320	10/6/2017 0:00	-0.58	-0.582
587321	10/7/2017 0:00	-0.577	-0.583
587322	10/8/2017 0:00	-0.562	-0.583
587323	10/9/2017 0:00	-0.592	-0.583
587324	10/10/2017 0:00	-0.602	-0.584
587325	10/11/2017 0:00	-0.578	-0.584
587326	10/12/2017 0:00	-0.596	-0.585
587327	10/13/2017 0:00	-0.581	-0.585
587328	10/14/2017 0:00	-0.573	-0.586
587329	10/15/2017 0:00	-0.586	-0.586
587330	10/16/2017 0:00	-0.598	-0.586
587331	10/17/2017 0:00	-0.595	-0.586
587332	10/18/2017 0:00	-0.553	-0.587
587333	10/19/2017 0:00	-0.585	-0.588
587334	10/20/2017 0:00	-0.584	-0.588
587335	10/21/2017 0:00	-0.572	-0.588
587336	10/22/2017 0:00	-0.595	-0.589
587337	10/23/2017 0:00	-0.591	-0.59
587338	10/24/2017 0:00	-0.594	-0.591
587339	10/25/2017 0:00	-0.569	-0.591
587340	10/26/2017 0:00	-0.581	-0.59
587341	10/27/2017 0:00	-0.607	-0.591
587342	10/28/2017 0:00	-0.594	-0.591
587343	10/29/2017 0:00	-0.595	-0.591
587344	10/30/2017 0:00	-0.591	-0.591
587345	10/31/2017 0:00	-0.588	-0.592
587346	11/1/2017 0:00	-0.594	-0.592
587347	11/2/2017 0:00	-0.598	-0.592
587348	11/3/2017 0:00	-0.61	-0.593
587349	11/4/2017 0:00	-0.592	-0.593
587350	11/5/2017 0:00	-0.606	-0.593
587351	11/6/2017 0:00	-0.621	-0.594
587352	11/7/2017 0:00	-0.602	-0.594
587353	11/8/2017 0:00	-0.599	-0.594
587354	11/9/2017 0:00	-0.576	-0.594
587355	11/10/2017 0:00	-0.595	-0.595
587356	11/11/2017 0:00	-0.589	-0.595
587357	11/12/2017 0:00	-0.608	-0.595

587358	11/13/2017 0:00	-0.588	-0.594
587359	11/14/2017 0:00	-0.577	-0.594
587360	11/15/2017 0:00	-0.604	-0.595
587361	11/16/2017 0:00	-0.584	-0.595
587362	11/17/2017 0:00	-0.593	-0.595
587363	11/18/2017 0:00	-0.582	-0.594
587364	11/19/2017 0:00	-0.598	-0.593
587365	11/20/2017 0:00	-0.6	-0.593
587366	11/21/2017 0:00	-0.596	-0.593
587367	11/22/2017 0:00	-0.594	-0.592
587368	11/23/2017 0:00	-0.59	-0.592
587369	11/24/2017 0:00	-0.589	-0.592
587370	11/25/2017 0:00	-0.59	-0.592
587371	11/26/2017 0:00	-0.604	-0.593
587372	11/27/2017 0:00	-0.583	-0.593
587373	11/28/2017 0:00	-0.585	-0.593
587374	11/29/2017 0:00	-0.595	-0.593
587375	11/30/2017 0:00	-0.6	-0.593
587376	12/1/2017 0:00	-0.6	-0.593
587377	12/2/2017 0:00	-0.581	-0.593
587378	12/3/2017 0:00	-0.575	-0.593
587379	12/4/2017 0:00	-0.588	-0.593
587380	12/5/2017 0:00	-0.589	-0.593
587381	12/6/2017 0:00	-0.604	-0.592
587382	12/7/2017 0:00	-0.594	-0.592
587383	12/8/2017 0:00	-0.596	-0.592
587384	12/9/2017 0:00	-0.59	-0.593
587385	12/10/2017 0:00	-0.603	-0.593
587386	12/11/2017 0:00	-0.601	-0.594
587387	12/12/2017 0:00	-0.609	-0.595
587388	12/13/2017 0:00	-0.592	-0.595
587389	12/14/2017 0:00	-0.588	-0.595
587390	12/15/2017 0:00	-0.593	-0.595
587391	12/16/2017 0:00	-0.593	-0.595
587392	12/17/2017 0:00	-0.593	-0.595
587393	12/18/2017 0:00	-0.587	-0.595
587394	12/19/2017 0:00	-0.585	-0.596
587395	12/20/2017 0:00	-0.597	-0.596
587396	12/21/2017 0:00	-0.585	-0.597
587397	12/22/2017 0:00	-0.586	-0.597
587398	12/23/2017 0:00	-0.595	-0.596
587399	12/24/2017 0:00	-0.6	-0.596
587400	12/25/2017 0:00	-0.619	-0.596
587401	12/26/2017 0:00	-0.615	-0.596

587402	12/27/2017 0:00	-0.611	-0.596
587403	12/28/2017 0:00	-0.612	-0.597
587404	12/29/2017 0:00	-0.576	-0.598
587405	12/30/2017 0:00	-0.589	-0.598
587406	12/31/2017 0:00	-0.592	-0.599
587407	1/1/2018 0:00	-0.611	-0.6
587408	1/2/2018 0:00	-0.588	-0.601
587409	1/3/2018 0:00	-0.6	-0.602
587410	1/4/2018 0:00	-0.588	-0.602
587411	1/5/2018 0:00	-0.608	-0.603
587412	1/6/2018 0:00	-0.597	-0.603
587413	1/7/2018 0:00	-0.591	-0.604
587414	1/8/2018 0:00	-0.586	-0.604
587415	1/9/2018 0:00	-0.595	-0.605
587416	1/10/2018 0:00	-0.594	-0.604
587417	1/11/2018 0:00	-0.602	-0.603
587418	1/12/2018 0:00	-0.625	-0.603
587419	1/13/2018 0:00	-0.626	-0.603
587420	1/14/2018 0:00	-0.613	-0.604
587421	1/15/2018 0:00	-0.618	-0.605
587422	1/16/2018 0:00	-0.614	-0.606
587423	1/17/2018 0:00	-0.62	-0.606
587424	1/18/2018 0:00	-0.622	-0.606
587425	1/19/2018 0:00	-0.602	-0.606
587426	1/20/2018 0:00	-0.601	-0.607
587427	1/21/2018 0:00	-0.597	-0.607
587428	1/22/2018 0:00	-0.612	-0.607
587429	1/23/2018 0:00	-0.61	-0.608
587430	1/24/2018 0:00	-0.617	-0.609
587431	1/25/2018 0:00	-0.58	-0.61
587432	1/26/2018 0:00	-0.608	-0.61
587433	1/27/2018 0:00	-0.591	-0.61
587434	1/28/2018 0:00	-0.624	-0.609
587435	1/29/2018 0:00	-0.618	-0.609
587436	1/30/2018 0:00	-0.61	-0.609
587437	1/31/2018 0:00	-0.609	-0.608
587438	2/1/2018 0:00	-0.611	-0.608
587439	2/2/2018 0:00	-0.607	-0.607
587440	2/3/2018 0:00	-0.604	-0.606
587441	2/4/2018 0:00	-0.601	-0.606
587442	2/5/2018 0:00	-0.609	-0.606
587443	2/6/2018 0:00	-0.614	-0.606
587444	2/7/2018 0:00	-0.616	-0.606
587445	2/8/2018 0:00	-0.616	-0.605

587446	2/9/2018 0:00	-0.607	-0.605
587447	2/10/2018 0:00	-0.597	-0.605
587448	2/11/2018 0:00	-0.612	-0.605
587449	2/12/2018 0:00	-0.59	-0.605
587450	2/13/2018 0:00	-0.624	-0.604
587451	2/14/2018 0:00	-0.606	-0.605
587452	2/15/2018 0:00	-0.61	-0.605
587453	2/16/2018 0:00	-0.593	-0.605
587454	2/17/2018 0:00	-0.602	-0.605
587455	2/18/2018 0:00	-0.585	-0.605
587456	2/19/2018 0:00	-0.595	-0.605
587457	2/20/2018 0:00	-0.597	-0.605
587458	2/21/2018 0:00	-0.603	-0.605
587459	2/22/2018 0:00	-0.614	-0.605
587460	2/23/2018 0:00	-0.578	-0.604
587461	2/24/2018 0:00	-0.613	-0.603
587462	2/25/2018 0:00	-0.604	-0.604
587463	2/26/2018 0:00	-0.58	-0.603
587464	2/27/2018 0:00	-0.608	-0.603
587465	2/28/2018 0:00	-0.592	-0.603
587466	3/1/2018 0:00	-0.637	-0.602
587467	3/2/2018 0:00	-0.62	-0.602
587468	3/3/2018 0:00	-0.615	-0.602
587469	3/4/2018 0:00	-0.613	-0.602
587470	3/5/2018 0:00	-0.608	-0.603
587471	3/6/2018 0:00	-0.595	-0.604
587472	3/7/2018 0:00	-0.609	-0.604
587473	3/8/2018 0:00	-0.609	-0.605
587474	3/9/2018 0:00	-0.591	-0.605
587475	3/10/2018 0:00	-0.591	-0.605
587476	3/11/2018 0:00	-0.602	-0.606
587477	3/12/2018 0:00	-0.619	-0.606
587478	3/13/2018 0:00	-0.58	-0.606
587479	3/14/2018 0:00	-0.604	-0.607
587480	3/15/2018 0:00	-0.592	-0.608
587481	3/16/2018 0:00	-0.605	-0.609
587482	3/17/2018 0:00	-0.601	-0.607
587483	3/18/2018 0:00	-0.604	-0.607
587484	3/19/2018 0:00	-0.609	-0.606
587485	3/20/2018 0:00	-0.605	-0.606
587486	3/21/2018 0:00	-0.622	-0.606
587487	3/22/2018 0:00	-0.601	-0.606
587488	3/23/2018 0:00	-0.615	-0.606
587489	3/24/2018 0:00	-0.626	-0.606

587490	3/25/2018 0:00	-0.608	-0.606
587491	3/26/2018 0:00	-0.6	-0.607
587492	3/27/2018 0:00	-0.612	-0.607
587493	3/28/2018 0:00	-0.613	-0.606
587494	3/29/2018 0:00	-0.62	-0.606
587495	3/30/2018 0:00	-0.627	-0.607
587496	3/31/2018 0:00	-0.616	-0.607
587497	4/1/2018 0:00	-0.6	-0.607
587498	4/2/2018 0:00	-0.597	-0.607
587499	4/3/2018 0:00	-0.598	-0.607
587500	4/4/2018 0:00	-0.597	-0.607
587501	4/5/2018 0:00	-0.606	-0.608
587502	4/6/2018 0:00	-0.611	-0.608
587503	4/7/2018 0:00	-0.597	-0.608
587504	4/8/2018 0:00	-0.616	-0.608
587505	4/9/2018 0:00	-0.598	-0.607
587506	4/10/2018 0:00	-0.619	-0.608
587507	4/11/2018 0:00	-0.596	-0.609
587508	4/12/2018 0:00	-0.598	-0.608
587509	4/13/2018 0:00	-0.585	-0.608
587510	4/14/2018 0:00	-0.624	-0.608
587511	4/15/2018 0:00	-0.601	-0.608
587512	4/16/2018 0:00	-0.585	-0.607
587513	4/17/2018 0:00	-0.606	-0.607
587514	4/18/2018 0:00	-0.615	-0.608
587515	4/19/2018 0:00	-0.612	-0.609
587516	4/20/2018 0:00	-0.62	-0.609
587517	4/21/2018 0:00	-0.618	-0.61
587518	4/22/2018 0:00	-0.607	-0.61
587519	4/23/2018 0:00	-0.619	-0.611
587520	4/24/2018 0:00	-0.608	-0.61
587521	4/25/2018 0:00	-0.633	-0.61
587522	4/26/2018 0:00	-0.613	-0.609
587523	4/27/2018 0:00	-0.608	-0.609
587524	4/28/2018 0:00	-0.608	-0.609
587525	4/29/2018 0:00	-0.616	-0.61
587526	4/30/2018 0:00	-0.606	-0.609
587527	5/1/2018 0:00	-0.605	-0.61
587528	5/2/2018 0:00	-0.598	-0.61
587529	5/3/2018 0:00	-0.622	-0.61
587530	5/4/2018 0:00	-0.62	-0.61
587531	5/5/2018 0:00	-0.609	-0.609
587532	5/6/2018 0:00	-0.624	-0.607
587533	5/7/2018 0:00	-0.626	-0.606

587534	5/8/2018 0:00	-0.623	-0.605
587535	5/9/2018 0:00	-0.587	-0.605
587536	5/10/2018 0:00	-0.594	-0.605
587537	5/11/2018 0:00	-0.584	-0.604
587538	5/12/2018 0:00	-0.596	-0.603
587539	5/13/2018 0:00	-0.603	-0.602
587540	5/14/2018 0:00	-0.615	-0.602
587541	5/15/2018 0:00	-0.611	-0.6
587542	5/16/2018 0:00	-0.607	-0.599
587543	5/17/2018 0:00	-0.596	-0.599
587544	5/18/2018 0:00	-0.614	-0.599
587545	5/19/2018 0:00	-0.595	-0.598
587546	5/20/2018 0:00	-0.59	-0.597
587547	5/21/2018 0:00	-0.57	-0.597
587548	5/22/2018 0:00	-0.586	-0.596
587549	5/23/2018 0:00	-0.579	-0.594
587550	5/24/2018 0:00	-0.6	-0.594
587551	5/25/2018 0:00	-0.611	-0.595
587552	5/26/2018 0:00	-0.599	-0.595
587553	5/27/2018 0:00	-0.588	-0.596
587554	5/28/2018 0:00	-0.59	-0.596
587555	5/29/2018 0:00	-0.585	-0.595
587556	5/30/2018 0:00	-0.581	-0.595
587557	5/31/2018 0:00	-0.57	-0.595
587558	6/1/2018 0:00	-0.601	-0.595
587559	6/2/2018 0:00	-0.604	-0.595
587560	6/3/2018 0:00	-0.594	-0.593
587561	6/4/2018 0:00	-0.588	-0.593
587562	6/5/2018 0:00	-0.594	-0.594
587563	6/6/2018 0:00	-0.588	-0.595
587564	6/7/2018 0:00	-0.584	-0.595
587565	6/8/2018 0:00	-0.607	-0.595
587566	6/9/2018 0:00	-0.62	-0.594
587567	6/10/2018 0:00	-0.599	-0.594
587568	6/11/2018 0:00	-0.598	-0.594
587569	6/12/2018 0:00	-0.594	-0.595
587570	6/13/2018 0:00	-0.6	-0.596
587571	6/14/2018 0:00	-0.612	-0.596
587572	6/15/2018 0:00	-0.604	-0.596
587573	6/16/2018 0:00	-0.589	-0.598
587574	6/17/2018 0:00	-0.597	-0.598
587575	6/18/2018 0:00	-0.577	-0.598
587576	6/19/2018 0:00	-0.591	-0.598
587577	6/20/2018 0:00	-0.601	-0.598

587578	6/21/2018 0:00	-0.609	-0.598
587579	6/22/2018 0:00	-0.586	-0.599
587580	6/23/2018 0:00	-0.578	-0.6
587581	6/24/2018 0:00	-0.581	-0.6
587582	6/25/2018 0:00	-0.596	-0.599
587583	6/26/2018 0:00	-0.616	-0.599
587584	6/27/2018 0:00	-0.613	-0.599
587585	6/28/2018 0:00	-0.607	-0.6
587586	6/29/2018 0:00	-0.593	-0.6
587587	6/30/2018 0:00	-0.596	-0.6
587588	7/1/2018 0:00	-0.612	-0.601
587589	7/2/2018 0:00	-0.606	-0.601
587590	7/3/2018 0:00	-0.599	-0.602
587591	7/4/2018 0:00	-0.602	-0.603
587592	7/5/2018 0:00	-0.593	-0.603
587593	7/6/2018 0:00	-0.604	-0.604
587594	7/7/2018 0:00	-0.604	-0.604
587595	7/8/2018 0:00	-0.603	-0.605
587596	7/9/2018 0:00	-0.609	-0.606
587597	7/10/2018 0:00	-0.599	-0.607
587598	7/11/2018 0:00	-0.603	-0.608
587599	7/12/2018 0:00	-0.608	-0.608
587600	7/13/2018 0:00	-0.606	-0.608
587601	7/14/2018 0:00	-0.615	-0.608
587602	7/15/2018 0:00	-0.608	-0.61
587603	7/16/2018 0:00	-0.622	-0.61
587604	7/17/2018 0:00	-0.611	-0.61
587605	7/18/2018 0:00	-0.603	-0.61
587606	7/19/2018 0:00	-0.618	-0.61
587607	7/20/2018 0:00	-0.601	-0.611
587608	7/21/2018 0:00	-0.626	-0.611
587609	7/22/2018 0:00	-0.621	-0.612
587610	7/23/2018 0:00	-0.598	-0.612
587611	7/24/2018 0:00	-0.619	-0.612
587612	7/25/2018 0:00	-0.615	-0.613
587613	7/26/2018 0:00	-0.606	-0.613
587614	7/27/2018 0:00	-0.622	-0.614
587615	7/28/2018 0:00	-0.608	-0.614
587616	7/29/2018 0:00	-0.632	-0.615
587617	7/30/2018 0:00	-0.633	-0.615
587618	7/31/2018 0:00	-0.613	-0.615
587619	8/1/2018 0:00	-0.589	-0.615
587620	8/2/2018 0:00	-0.611	-0.615
587621	8/3/2018 0:00	-0.612	-0.615

587622	8/4/2018 0:00	-0.626	-0.615
587623	8/5/2018 0:00	-0.609	-0.616
587624	8/6/2018 0:00	-0.616	-0.615
587625	8/7/2018 0:00	-0.603	-0.616
587626	8/8/2018 0:00	-0.617	-0.616
587627	8/9/2018 0:00	-0.626	-0.616
587628	8/10/2018 0:00	-0.617	-0.616
587629	8/11/2018 0:00	-0.617	-0.616
587630	8/12/2018 0:00	-0.62	-0.616
587631	8/13/2018 0:00	-0.616	-0.616
587632	8/14/2018 0:00	-0.621	-0.615
587633	8/15/2018 0:00	-0.624	-0.615
587634	8/16/2018 0:00	-0.608	-0.615
587635	8/17/2018 0:00	-0.612	-0.615
587636	8/18/2018 0:00	-0.62	-0.615
587637	8/19/2018 0:00	-0.608	-0.615
587638	8/20/2018 0:00	-0.623	-0.614
587639	8/21/2018 0:00	-0.617	-0.614
587640	8/22/2018 0:00	-0.625	-0.614
587641	8/23/2018 0:00	-0.616	-0.615
587642	8/24/2018 0:00	-0.611	-0.615
587643	8/25/2018 0:00	-0.621	-0.614
587644	8/26/2018 0:00	-0.603	-0.614
587645	8/27/2018 0:00	-0.612	-0.615
587646	8/28/2018 0:00	-0.61	-0.616
587647	8/29/2018 0:00	-0.613	-0.616
587648	8/30/2018 0:00	-0.614	-0.616
587649	8/31/2018 0:00	-0.629	-0.616
587650	9/1/2018 0:00	-0.599	-0.617
587651	9/2/2018 0:00	-0.6	-0.618
587652	9/3/2018 0:00	-0.609	-0.619
587653	9/4/2018 0:00	-0.611	-0.619
587654	9/5/2018 0:00	-0.602	-0.62
587655	9/6/2018 0:00	-0.623	-0.621
587656	9/7/2018 0:00	-0.635	-0.621
587657	9/8/2018 0:00	-0.611	-0.622
587658	9/9/2018 0:00	-0.596	-0.623
587659	9/10/2018 0:00	-0.623	-0.623
587660	9/11/2018 0:00	-0.632	-0.625
587661	9/12/2018 0:00	-0.638	-0.625
587662	9/13/2018 0:00	-0.628	-0.626
587663	9/14/2018 0:00	-0.624	-0.626
587664	9/15/2018 0:00	-0.625	-0.626
587665	9/16/2018 0:00	-0.635	-0.627

587666	9/17/2018 0:00	-0.637	-0.628
587667	9/18/2018 0:00	-0.646	-0.629
587668	9/19/2018 0:00	-0.623	-0.629
587669	9/20/2018 0:00	-0.648	-0.63
587670	9/21/2018 0:00	-0.657	-0.632
587671	9/22/2018 0:00	-0.63	-0.632
587672	9/23/2018 0:00	-0.629	-0.632
587673	9/24/2018 0:00	-0.638	-0.632
587674	9/25/2018 0:00	-0.639	-0.633
587675	9/26/2018 0:00	-0.654	-0.633
587676	9/27/2018 0:00	-0.621	-0.633
587677	9/28/2018 0:00	-0.628	-0.633
587678	9/29/2018 0:00	-0.629	-0.632
587679	9/30/2018 0:00	-0.625	-0.633
587680	10/1/2018 0:00	-0.65	-0.634
587681	10/2/2018 0:00	-0.619	-0.634
587682	10/3/2018 0:00	-0.631	-0.635
587683	10/4/2018 0:00	-0.628	-0.635
587684	10/5/2018 0:00	-0.64	-0.635
587685	10/6/2018 0:00	-0.661	-0.635
587686	10/7/2018 0:00	-0.63	-0.635
587687	10/8/2018 0:00	-0.614	-0.635
587688	10/9/2018 0:00	-0.612	-0.636
587689	10/10/2018 0:00	-0.632	-0.636
587690	10/11/2018 0:00	-0.623	-0.636
587691	10/12/2018 0:00	-0.631	-0.636
587692	10/13/2018 0:00	-0.627	-0.636
587693	10/14/2018 0:00	-0.617	-0.637
587694	10/15/2018 0:00	-0.649	-0.637
587695	10/16/2018 0:00	-0.644	-0.636
587696	10/17/2018 0:00	-0.657	-0.636
587697	10/18/2018 0:00	-0.658	-0.636
587698	10/19/2018 0:00	-0.638	-0.635
587699	10/20/2018 0:00	-0.634	-0.635
587700	10/21/2018 0:00	-0.64	-0.634
587701	10/22/2018 0:00	-0.661	-0.633
587702	10/23/2018 0:00	-0.639	-0.633
587703	10/24/2018 0:00	-0.661	-0.634
587704	10/25/2018 0:00	-0.636	-0.635
587705	10/26/2018 0:00	-0.636	-0.635
587706	10/27/2018 0:00	-0.637	-0.635
587707	10/28/2018 0:00	-0.639	-0.635
587708	10/29/2018 0:00	-0.645	-0.636
587709	10/30/2018 0:00	-0.62	-0.637

587710	10/31/2018 0:00	-0.623	-0.636
587711	11/1/2018 0:00	-0.636	-0.635
587712	11/2/2018 0:00	-0.627	-0.634
587713	11/3/2018 0:00	-0.595	-0.633
587714	11/4/2018 0:00	-0.617	-0.633
587715	11/5/2018 0:00	-0.618	-0.633
587716	11/6/2018 0:00	-0.621	-0.632
587717	11/7/2018 0:00	-0.632	-0.631
587718	11/8/2018 0:00	-0.636	-0.631
587719	11/9/2018 0:00	-0.643	-0.63
587720	11/10/2018 0:00	-0.64	-0.63
587721	11/11/2018 0:00	-0.632	-0.63
587722	11/12/2018 0:00	-0.629	-0.63
587723	11/13/2018 0:00	-0.645	-0.629
587724	11/14/2018 0:00	-0.644	-0.63
587725	11/15/2018 0:00	-0.644	-0.63
587726	11/16/2018 0:00	-0.613	-0.63
587727	11/17/2018 0:00	-0.628	-0.629
587728	11/18/2018 0:00	-0.624	-0.628
587729	11/19/2018 0:00	-0.631	-0.63
587730	11/20/2018 0:00	-0.62	-0.63
587731	11/21/2018 0:00	-0.626	-0.63
587732	11/22/2018 0:00	-0.625	-0.63
587733	11/23/2018 0:00	-0.631	-0.63
587734	11/24/2018 0:00	-0.633	-0.63
587735	11/25/2018 0:00	-0.634	-0.63
587736	11/26/2018 0:00	-0.635	-0.63
587737	11/27/2018 0:00	-0.636	-0.629
587738	11/28/2018 0:00	-0.616	-0.629
587739	11/29/2018 0:00	-0.665	-0.629
587740	11/30/2018 0:00	-0.634	-0.628
587741	12/1/2018 0:00	-0.626	-0.628
587742	12/2/2018 0:00	-0.586	-0.628
587743	12/3/2018 0:00	-0.623	-0.628
587744	12/4/2018 0:00	-0.657	-0.629
587745	12/5/2018 0:00	-0.608	-0.628
587746	12/6/2018 0:00	-0.624	-0.628
587747	12/7/2018 0:00	-0.614	-0.628
587748	12/8/2018 0:00	-0.624	-0.628
587749	12/9/2018 0:00	-0.649	-0.629
587750	12/10/2018 0:00	-0.619	-0.628
587751	12/11/2018 0:00	-0.642	-0.628
587752	12/12/2018 0:00	-0.626	-0.626
587753	12/13/2018 0:00	-0.629	-0.626

587754	12/14/2018 0:00	-0.634	-0.626
587755	12/15/2018 0:00	-0.607	-0.626
587756	12/16/2018 0:00	-0.643	-0.625
587757	12/17/2018 0:00	-0.617	-0.625
587758	12/18/2018 0:00	-0.627	-0.627
587759	12/19/2018 0:00	-0.64	-0.627
587760	12/20/2018 0:00	-0.614	-0.626
587761	12/21/2018 0:00	-0.609	-0.626
587762	12/22/2018 0:00	-0.63	-0.626
587763	12/23/2018 0:00	-0.645	-0.627
587764	12/24/2018 0:00	-0.637	-0.628
587765	12/25/2018 0:00	-0.615	-0.629
587766	12/26/2018 0:00	-0.622	-0.629
587767	12/27/2018 0:00	-0.599	-0.629
587768	12/28/2018 0:00	-0.61	-0.629
587769	12/29/2018 0:00	-0.637	-0.63
587770	12/30/2018 0:00	-0.656	-0.631
587771	12/31/2018 0:00	-0.618	-0.633
587772	1/1/2019 0:00	-0.626	-0.633
587773	1/2/2019 0:00	-0.634	-0.634
587774	1/3/2019 0:00	-0.618	-0.635
587775	1/4/2019 0:00	-0.618	-0.636
587776	1/5/2019 0:00	-0.619	-0.638
587777	1/6/2019 0:00	-0.634	-0.639
587778	1/7/2019 0:00	-0.634	-0.64
587779	1/8/2019 0:00	-0.673	-0.64
587780	1/9/2019 0:00	-0.658	-0.64
587781	1/10/2019 0:00	-0.641	-0.641
587782	1/11/2019 0:00	-0.628	-0.642
587783	1/12/2019 0:00	-0.633	-0.644
587784	1/13/2019 0:00	-0.649	-0.645
587785	1/14/2019 0:00	-0.673	-0.644
587786	1/15/2019 0:00	-0.662	-0.643
587787	1/16/2019 0:00	-0.65	-0.644
587788	1/17/2019 0:00	-0.638	-0.644
587789	1/18/2019 0:00	-0.653	-0.644
587790	1/19/2019 0:00	-0.676	-0.643
587791	1/20/2019 0:00	-0.687	-0.644
587792	1/21/2019 0:00	-0.643	-0.644
587793	1/22/2019 0:00	-0.654	-0.645
587794	1/23/2019 0:00	-0.638	-0.644
587795	1/24/2019 0:00	-0.649	-0.643
587796	1/25/2019 0:00	-0.641	-0.643
587797	1/26/2019 0:00	-0.662	-0.643

587798	1/27/2019 0:00	-0.644	-0.643
587799	1/28/2019 0:00	-0.636	-0.644
587800	1/29/2019 0:00	-0.615	-0.643
587801	1/30/2019 0:00	-0.638	-0.64
587802	1/31/2019 0:00	-0.637	-0.639
587803	2/1/2019 0:00	-0.624	-0.637
587804	2/2/2019 0:00	-0.626	-0.638
587805	2/3/2019 0:00	-0.612	-0.637
587806	2/4/2019 0:00	-0.638	-0.636
587807	2/5/2019 0:00	-0.633	-0.634
587808	2/6/2019 0:00	-0.648	-0.633
587809	2/7/2019 0:00	-0.62	-0.632
587810	2/8/2019 0:00	-0.64	-0.633
587811	2/9/2019 0:00	-0.649	-0.633
587812	2/10/2019 0:00	-0.64	-0.634
587813	2/11/2019 0:00	-0.64	-0.634
587814	2/12/2019 0:00	-0.645	-0.634
587815	2/13/2019 0:00	-0.624	-0.634
587816	2/14/2019 0:00	-0.593	-0.635
587817	2/15/2019 0:00	-0.605	-0.635
587818	2/16/2019 0:00	-0.614	-0.637
587819	2/17/2019 0:00	-0.643	-0.637
587820	2/18/2019 0:00	-0.638	-0.638
587821	2/19/2019 0:00	-0.627	-0.64
587822	2/20/2019 0:00	-0.633	-0.641
587823	2/21/2019 0:00	-0.626	-0.641
587824	2/22/2019 0:00	-0.624	-0.641
587825	2/23/2019 0:00	-0.652	-0.642
587826	2/24/2019 0:00	-0.659	-0.643
587827	2/25/2019 0:00	-0.656	-0.642
587828	2/26/2019 0:00	-0.664	-0.642
587829	2/27/2019 0:00	-0.651	-0.642
587830	2/28/2019 0:00	-0.644	-0.643
587831	3/1/2019 0:00	-0.653	-0.645
587832	3/2/2019 0:00	-0.632	-0.648
587833	3/3/2019 0:00	-0.677	-0.651
587834	3/4/2019 0:00	-0.646	-0.652
587835	3/5/2019 0:00	-0.661	-0.653
587836	3/6/2019 0:00	-0.666	-0.655
587837	3/7/2019 0:00	-0.66	-0.656
587838	3/8/2019 0:00	-0.638	-0.657
587839	3/9/2019 0:00	-0.656	-0.659
587840	3/10/2019 0:00	-0.643	-0.66
587841	3/11/2019 0:00	-0.658	-0.66

587842	3/12/2019 0:00	-0.641	-0.661
587843	3/13/2019 0:00	-0.629	-0.661
587844	3/14/2019 0:00	-0.652	-0.661
587845	3/15/2019 0:00	-0.678	-0.662
587846	3/16/2019 0:00	-0.681	-0.662
587847	3/17/2019 0:00	-0.687	-0.662
587848	3/18/2019 0:00	-0.675	-0.662
587849	3/19/2019 0:00	-0.671	-0.662
587850	3/20/2019 0:00	-0.679	-0.662
587851	3/21/2019 0:00	-0.673	-0.662
587852	3/22/2019 0:00	-0.669	-0.662
587853	3/23/2019 0:00	-0.675	-0.661
587854	3/24/2019 0:00	-0.671	-0.662
587855	3/25/2019 0:00	-0.664	-0.663
587856	3/26/2019 0:00	-0.663	-0.663
587857	3/27/2019 0:00	-0.675	-0.663
587858	3/28/2019 0:00	-0.665	-0.662
587859	3/29/2019 0:00	-0.663	-0.662
587860	3/30/2019 0:00	-0.676	-0.662
587861	3/31/2019 0:00	-0.66	-0.661
587862	4/1/2019 0:00	-0.646	-0.66
587863	4/2/2019 0:00	-0.634	-0.659
587864	4/3/2019 0:00	-0.66	-0.658
587865	4/4/2019 0:00	-0.67	-0.657
587866	4/5/2019 0:00	-0.658	-0.656
587867	4/6/2019 0:00	-0.655	-0.654
587868	4/7/2019 0:00	-0.641	-0.654
587869	4/8/2019 0:00	-0.658	-0.653
587870	4/9/2019 0:00	-0.674	-0.653
587871	4/10/2019 0:00	-0.642	-0.652
587872	4/11/2019 0:00	-0.661	-0.651
587873	4/12/2019 0:00	-0.625	-0.65
587874	4/13/2019 0:00	-0.629	-0.65
587875	4/14/2019 0:00	-0.652	-0.649
587876	4/15/2019 0:00	-0.639	-0.648
587877	4/16/2019 0:00	-0.639	-0.648
587878	4/17/2019 0:00	-0.664	-0.648
587879	4/18/2019 0:00	-0.659	-0.648
587880	4/19/2019 0:00	-0.64	-0.647
587881	4/20/2019 0:00	-0.636	-0.646
587882	4/21/2019 0:00	-0.621	-0.646
587883	4/22/2019 0:00	-0.649	-0.645
587884	4/23/2019 0:00	-0.667	-0.645
587885	4/24/2019 0:00	-0.647	-0.645

587886	4/25/2019 0:00	-0.654	-0.643
587887	4/26/2019 0:00	-0.635	-0.643
587888	4/27/2019 0:00	-0.644	-0.641
587889	4/28/2019 0:00	-0.644	-0.641
587890	4/29/2019 0:00	-0.647	-0.641
587891	4/30/2019 0:00	-0.634	-0.641
587892	5/1/2019 0:00	-0.658	-0.64
587893	5/2/2019 0:00	-0.646	-0.64
587894	5/3/2019 0:00	-0.64	-0.639
587895	5/4/2019 0:00	-0.637	-0.638
587896	5/5/2019 0:00	-0.637	-0.637
587897	5/6/2019 0:00	-0.642	-0.636
587898	5/7/2019 0:00	-0.634	-0.636
587899	5/8/2019 0:00	-0.642	-0.636
587900	5/9/2019 0:00	-0.644	-0.636
587901	5/10/2019 0:00	-0.63	-0.635
587902	5/11/2019 0:00	-0.624	-0.635
587903	5/12/2019 0:00	-0.62	-0.635
587904	5/13/2019 0:00	-0.618	-0.634
587905	5/14/2019 0:00	-0.639	-0.634
587906	5/15/2019 0:00	-0.649	-0.634
587907	5/16/2019 0:00	-0.616	-0.634
587908	5/17/2019 0:00	-0.623	-0.633
587909	5/18/2019 0:00	-0.628	-0.632
587910	5/19/2019 0:00	-0.624	-0.632
587911	5/20/2019 0:00	-0.606	-0.632
587912	5/21/2019 0:00	-0.625	-0.631
587913	5/22/2019 0:00	-0.616	-0.631
587914	5/23/2019 0:00	-0.651	-0.632
587915	5/24/2019 0:00	-0.651	-0.632
587916	5/25/2019 0:00	-0.643	-0.632
587917	5/26/2019 0:00	-0.646	-0.633
587918	5/27/2019 0:00	-0.632	-0.634
587919	5/28/2019 0:00	-0.62	-0.635
587920	5/29/2019 0:00	-0.631	-0.636
587921	5/30/2019 0:00	-0.64	-0.636
587922	5/31/2019 0:00	-0.631	-0.636
587923	6/1/2019 0:00	-0.628	-0.637
587924	6/2/2019 0:00	-0.639	-0.638
587925	6/3/2019 0:00	-0.624	-0.639
587926	6/4/2019 0:00	-0.63	-0.639
587927	6/5/2019 0:00	-0.627	-0.64
587928	6/6/2019 0:00	-0.635	-0.64
587929	6/7/2019 0:00	-0.649	-0.641

587930	6/8/2019 0:00	-0.644	-0.64
587931	6/9/2019 0:00	-0.646	-0.64
587932	6/10/2019 0:00	-0.662	-0.639
587933	6/11/2019 0:00	-0.656	-0.639
587934	6/12/2019 0:00	-0.653	-0.64
587935	6/13/2019 0:00	-0.644	-0.641
587936	6/14/2019 0:00	-0.646	-0.641
587937	6/15/2019 0:00	-0.642	-0.642
587938	6/16/2019 0:00	-0.646	-0.643
587939	6/17/2019 0:00	-0.654	-0.644
587940	6/18/2019 0:00	-0.663	-0.644
587941	6/19/2019 0:00	-0.634	-0.644
587942	6/20/2019 0:00	-0.633	-0.645
587943	6/21/2019 0:00	-0.639	-0.646
587944	6/22/2019 0:00	-0.644	-0.646
587945	6/23/2019 0:00	-0.621	-0.646
587946	6/24/2019 0:00	-0.626	-0.647
587947	6/25/2019 0:00	-0.628	-0.647
587948	6/26/2019 0:00	-0.648	-0.647
587949	6/27/2019 0:00	-0.653	-0.648
587950	6/28/2019 0:00	-0.648	-0.648
587951	6/29/2019 0:00	-0.652	-0.649
587952	6/30/2019 0:00	-0.671	-0.649
587953	7/1/2019 0:00	-0.637	-0.649
587954	7/2/2019 0:00	-0.66	-0.649
587955	7/3/2019 0:00	-0.643	-0.65
587956	7/4/2019 0:00	-0.645	-0.649
587957	7/5/2019 0:00	-0.651	-0.65
587958	7/6/2019 0:00	-0.652	-0.65
587959	7/7/2019 0:00	-0.645	-0.652
587960	7/8/2019 0:00	-0.641	-0.652
587961	7/9/2019 0:00	-0.662	-0.653
587962	7/10/2019 0:00	-0.672	-0.654
587963	7/11/2019 0:00	-0.66	-0.655
587964	7/12/2019 0:00	-0.663	-0.655
587965	7/13/2019 0:00	-0.667	-0.656
587966	7/14/2019 0:00	-0.676	-0.656
587967	7/15/2019 0:00	-0.647	-0.656
587968	7/16/2019 0:00	-0.637	-0.656
587969	7/17/2019 0:00	-0.659	-0.657
587970	7/18/2019 0:00	-0.668	-0.657
587971	7/19/2019 0:00	-0.639	-0.658
587972	7/20/2019 0:00	-0.656	-0.658
587973	7/21/2019 0:00	-0.653	-0.658

587974	7/22/2019 0:00	-0.676	-0.657
587975	7/23/2019 0:00	-0.648	-0.658
587976	7/24/2019 0:00	-0.654	-0.659
587977	7/25/2019 0:00	-0.66	-0.659
587978	7/26/2019 0:00	-0.678	-0.658
587979	7/27/2019 0:00	-0.647	-0.658
587980	7/28/2019 0:00	-0.662	-0.659
587981	7/29/2019 0:00	-0.657	-0.659
587982	7/30/2019 0:00	-0.656	-0.659
587983	7/31/2019 0:00	-0.661	-0.658
587984	8/1/2019 0:00	-0.67	-0.658
587985	8/2/2019 0:00	-0.666	-0.658
587986	8/3/2019 0:00	-0.666	-0.658
587987	8/4/2019 0:00	-0.658	-0.658
587988	8/5/2019 0:00	-0.633	-0.658
587989	8/6/2019 0:00	-0.642	-0.657
587990	8/7/2019 0:00	-0.658	-0.656
587991	8/8/2019 0:00	-0.663	-0.656
587992	8/9/2019 0:00	-0.671	-0.656
587993	8/10/2019 0:00	-0.66	-0.656
587994	8/11/2019 0:00	-0.651	-0.655
587995	8/12/2019 0:00	-0.696	-0.655
587996	8/13/2019 0:00	-0.655	-0.655
587997	8/14/2019 0:00	-0.669	-0.655
587998	8/15/2019 0:00	-0.635	-0.655
587999	8/16/2019 0:00	-0.645	-0.655
588000	8/17/2019 0:00	-0.654	-0.654
588001	8/18/2019 0:00	-0.66	-0.654
588002	8/19/2019 0:00	-0.648	-0.654
588003	8/20/2019 0:00	-0.636	-0.654
588004	8/21/2019 0:00	-0.628	-0.655
588005	8/22/2019 0:00	-0.642	-0.656
588006	8/23/2019 0:00	-0.652	-0.656
588007	8/24/2019 0:00	-0.639	-0.656
588008	8/25/2019 0:00	-0.661	-0.656
588009	8/26/2019 0:00	-0.654	-0.656
588010	8/27/2019 0:00	-0.656	-0.656
588011	8/28/2019 0:00	-0.668	-0.654
588012	8/29/2019 0:00	-0.656	-0.654
588013	8/30/2019 0:00	-0.655	-0.654
588014	8/31/2019 0:00	-0.643	-0.655
588015	9/1/2019 0:00	-0.651	-0.656
588016	9/2/2019 0:00	-0.672	-0.656
588017	9/3/2019 0:00	-0.658	-0.656

588018	9/4/2019 0:00	-0.672	-0.656
588019	9/5/2019 0:00	-0.666	-0.657
588020	9/6/2019 0:00	-0.665	-0.658
588021	9/7/2019 0:00	-0.665	-0.658
588022	9/8/2019 0:00	-0.642	-0.658
588023	9/9/2019 0:00	-0.671	-0.659
588024	9/10/2019 0:00	-0.66	-0.658
588025	9/11/2019 0:00	-0.644	-0.658
588026	9/12/2019 0:00	-0.653	-0.657
588027	9/13/2019 0:00	-0.658	-0.656
588028	9/14/2019 0:00	-0.663	-0.655
588029	9/15/2019 0:00	-0.666	-0.655
588030	9/16/2019 0:00	-0.66	-0.655
588031	9/17/2019 0:00	-0.662	-0.656
588032	9/18/2019 0:00	-0.666	-0.656
588033	9/19/2019 0:00	-0.664	-0.657
588034	9/20/2019 0:00	-0.654	-0.656
588035	9/21/2019 0:00	-0.653	-0.656
588036	9/22/2019 0:00	-0.656	-0.655
588037	9/23/2019 0:00	-0.646	-0.655
588038	9/24/2019 0:00	-0.66	-0.656
588039	9/25/2019 0:00	-0.642	-0.655
588040	9/26/2019 0:00	-0.635	-0.655
588041	9/27/2019 0:00	-0.647	-0.655
588042	9/28/2019 0:00	-0.626	-0.654
588043	9/29/2019 0:00	-0.642	-0.654
588044	9/30/2019 0:00	-0.646	-0.654
588045	10/1/2019 0:00	-0.655	-0.654
588046	10/2/2019 0:00	-0.67	-0.653
588047	10/3/2019 0:00	-0.669	-0.652
588048	10/4/2019 0:00	-0.678	-0.651
588049	10/5/2019 0:00	-0.66	-0.65
588050	10/6/2019 0:00	-0.656	-0.65
588051	10/7/2019 0:00	-0.648	-0.649
588052	10/8/2019 0:00	-0.657	-0.649
588053	10/9/2019 0:00	-0.66	-0.649
588054	10/10/2019 0:00	-0.659	-0.648
588055	10/11/2019 0:00	-0.643	-0.648
588056	10/12/2019 0:00	-0.642	-0.648
588057	10/13/2019 0:00	-0.632	-0.648
588058	10/14/2019 0:00	-0.653	-0.649
588059	10/15/2019 0:00	-0.66	-0.649
588060	10/16/2019 0:00	-0.663	-0.649
588061	10/17/2019 0:00	-0.637	-0.649

588062	10/18/2019 0:00	-0.628	-0.649
588063	10/19/2019 0:00	-0.65	-0.648
588064	10/20/2019 0:00	-0.637	-0.647
588065	10/21/2019 0:00	-0.63	-0.646
588066	10/22/2019 0:00	-0.64	-0.647
588067	10/23/2019 0:00	-0.642	-0.647
588068	10/24/2019 0:00	-0.654	-0.647
588069	10/25/2019 0:00	-0.644	-0.647
588070	10/26/2019 0:00	-0.626	-0.647
588071	10/27/2019 0:00	-0.637	-0.647
588072	10/28/2019 0:00	-0.646	-0.648
588073	10/29/2019 0:00	-0.652	-0.648
588074	10/30/2019 0:00	-0.651	-0.647
588075	10/31/2019 0:00	-0.655	-0.647
588076	11/1/2019 0:00	-0.645	-0.647
588077	11/2/2019 0:00	-0.656	-0.647
588078	11/3/2019 0:00	-0.648	-0.648
588079	11/4/2019 0:00	-0.646	-0.647
588080	11/5/2019 0:00	-0.639	-0.646
588081	11/6/2019 0:00	-0.666	-0.646
588082	11/7/2019 0:00	-0.655	-0.646
588083	11/8/2019 0:00	-0.659	-0.646
588084	11/9/2019 0:00	-0.665	-0.646
588085	11/10/2019 0:00	-0.66	-0.646
588086	11/11/2019 0:00	-0.651	-0.646
588087	11/12/2019 0:00	-0.657	-0.646
588088	11/13/2019 0:00	-0.638	-0.646
588089	11/14/2019 0:00	-0.633	-0.646
588090	11/15/2019 0:00	-0.654	-0.646
588091	11/16/2019 0:00	-0.656	-0.646
588092	11/17/2019 0:00	-0.651	-0.646
588093	11/18/2019 0:00	-0.634	-0.646
588094	11/19/2019 0:00	-0.619	-0.646
588095	11/20/2019 0:00	-0.62	-0.647
588096	11/21/2019 0:00	-0.637	-0.648
588097	11/22/2019 0:00	-0.63	-0.647
588098	11/23/2019 0:00	-0.642	-0.647
588099	11/24/2019 0:00	-0.648	-0.647
588100	11/25/2019 0:00	-0.636	-0.646
588101	11/26/2019 0:00	-0.65	-0.648
588102	11/27/2019 0:00	-0.628	-0.649
588103	11/28/2019 0:00	-0.639	-0.65
588104	11/29/2019 0:00	-0.65	-0.65
588105	11/30/2019 0:00	-0.67	-0.651

588106	12/1/2019 0:00	-0.656	-0.651
588107	12/2/2019 0:00	-0.638	-0.651
588108	12/3/2019 0:00	-0.641	-0.651
588109	12/4/2019 0:00	-0.664	-0.652
588110	12/5/2019 0:00	-0.656	-0.654
588111	12/6/2019 0:00	-0.676	-0.655
588112	12/7/2019 0:00	-0.637	-0.656
588113	12/8/2019 0:00	-0.646	-0.657
588114	12/9/2019 0:00	-0.662	-0.658
588115	12/10/2019 0:00	-0.658	-0.658
588116	12/11/2019 0:00	-0.704	-0.658
588117	12/12/2019 0:00	-0.675	-0.658
588118	12/13/2019 0:00	-0.688	-0.658
588119	12/14/2019 0:00	-0.662	-0.659
588120	12/15/2019 0:00	-0.648	-0.66
588121	12/16/2019 0:00	-0.645	-0.659
588122	12/17/2019 0:00	-0.67	-0.659
588123	12/18/2019 0:00	-0.659	-0.659
588124	12/19/2019 0:00	-0.659	-0.66
588125	12/20/2019 0:00	-0.663	-0.661
588126	12/21/2019 0:00	-0.654	-0.662
588127	12/22/2019 0:00	-0.675	-0.662
588128	12/23/2019 0:00	-0.669	-0.663
588129	12/24/2019 0:00	-0.673	-0.663
588130	12/25/2019 0:00	-0.646	-0.663
588131	12/26/2019 0:00	-0.637	-0.664
588132	12/27/2019 0:00	-0.634	-0.663
588133	12/28/2019 0:00	-0.651	-0.663
588134	12/29/2019 0:00	-0.658	-0.663
588135	12/30/2019 0:00	-0.679	-0.663
588136	12/31/2019 0:00	-0.651	-0.663
588137	1/1/2020 0:00	-0.646	-0.664
588138	1/2/2020 0:00	-0.653	-0.664
588139	1/3/2020 0:00	-0.667	-0.664
588140	1/4/2020 0:00	-0.677	-0.665
588141	1/5/2020 0:00	-0.694	-0.665
588142	1/6/2020 0:00	-0.681	-0.665
588143	1/7/2020 0:00	-0.665	-0.665
588144	1/8/2020 0:00	-0.648	-0.665
588145	1/9/2020 0:00	-0.658	-0.664
588146	1/10/2020 0:00	-0.682	-0.665
588147	1/11/2020 0:00	-0.683	-0.666
588148	1/12/2020 0:00	-0.679	-0.667
588149	1/13/2020 0:00	-0.679	-0.667

588150	1/14/2020 0:00	-0.662	-0.668
588151	1/15/2020 0:00	-0.656	-0.667
588152	1/16/2020 0:00	-0.671	-0.667
588153	1/17/2020 0:00	-0.67	-0.668
588154	1/18/2020 0:00	-0.668	-0.669
588155	1/19/2020 0:00	-0.672	-0.669
588156	1/20/2020 0:00	-0.663	-0.669
588157	1/21/2020 0:00	-0.677	-0.667
588158	1/22/2020 0:00	-0.677	-0.666
588159	1/23/2020 0:00	-0.652	-0.666
588160	1/24/2020 0:00	-0.662	-0.667
588161	1/25/2020 0:00	-0.671	-0.666
588162	1/26/2020 0:00	-0.651	-0.665
588163	1/27/2020 0:00	-0.663	-0.664
588164	1/28/2020 0:00	-0.667	-0.664
588165	1/29/2020 0:00	-0.674	-0.664
588166	1/30/2020 0:00	-0.651	-0.663
588167	1/31/2020 0:00	-0.66	-0.664
588168	2/1/2020 0:00	-0.672	-0.664
588169	2/2/2020 0:00	-0.671	-0.664
588170	2/3/2020 0:00	-0.671	-0.664
588171	2/4/2020 0:00	-0.674	-0.664
588172	2/5/2020 0:00	-0.651	-0.664
588173	2/6/2020 0:00	-0.65	-0.663
588174	2/7/2020 0:00	-0.669	-0.663
588175	2/8/2020 0:00	-0.66	-0.663
588176	2/9/2020 0:00	-0.646	-0.663
588177	2/10/2020 0:00	-0.645	-0.663
588178	2/11/2020 0:00	-0.665	-0.665
588179	2/12/2020 0:00	-0.669	-0.665
588180	2/13/2020 0:00	-0.665	-0.665
588181	2/14/2020 0:00	-0.653	-0.664
588182	2/15/2020 0:00	-0.677	-0.665
588183	2/16/2020 0:00	-0.676	-0.664
588184	2/17/2020 0:00	-0.666	-0.664
588185	2/18/2020 0:00	-0.664	-0.664
588186	2/19/2020 0:00	-0.665	-0.664
588187	2/20/2020 0:00	-0.668	-0.664
588188	2/21/2020 0:00	-0.662	-0.665
588189	2/22/2020 0:00	-0.667	-0.666
588190	2/23/2020 0:00	-0.652	-0.666
588191	2/24/2020 0:00	-0.671	-0.666
588192	2/25/2020 0:00	-0.672	-0.666
588193	2/26/2020 0:00	-0.693	-0.667

588194	2/27/2020 0:00	-0.677	-0.666
588195	2/28/2020 0:00	-0.65	-0.667
588196	2/29/2020 0:00	-0.662	-0.668
588197	3/1/2020 0:00	-0.665	-0.669
588198	3/2/2020 0:00	-0.649	-0.668
588199	3/3/2020 0:00	-0.659	-0.668
588200	3/4/2020 0:00	-0.682	-0.668
588201	3/5/2020 0:00	-0.669	-0.668
588202	3/6/2020 0:00	-0.67	-0.669
588203	3/7/2020 0:00	-0.691	-0.668
588204	3/8/2020 0:00	-0.68	-0.668
588205	3/9/2020 0:00	-0.66	-0.669
588206	3/10/2020 0:00	-0.666	-0.669
588207	3/11/2020 0:00	-0.647	-0.669
588208	3/12/2020 0:00	-0.652	-0.668
588209	3/13/2020 0:00	-0.659	-0.668
588210	3/14/2020 0:00	-0.697	-0.668
588211	3/15/2020 0:00	-0.7	-0.669
588212	3/16/2020 0:00	-0.671	-0.67
588213	3/17/2020 0:00	-0.65	-0.671
588214	3/18/2020 0:00	-0.673	-0.672
588215	3/19/2020 0:00	-0.662	-0.672
588216	3/20/2020 0:00	-0.676	-0.672
588217	3/21/2020 0:00	-0.671	-0.671
588218	3/22/2020 0:00	-0.661	-0.671
588219	3/23/2020 0:00	-0.666	-0.671
588220	3/24/2020 0:00	-0.674	-0.67
588221	3/25/2020 0:00	-0.675	-0.67
588222	3/26/2020 0:00	-0.651	-0.671
588223	3/27/2020 0:00	-0.655	-0.671
588224	3/28/2020 0:00	-0.684	-0.672
588225	3/29/2020 0:00	-0.673	-0.672
588226	3/30/2020 0:00	-0.687	-0.671
588227	3/31/2020 0:00	-0.697	-0.67
588228	4/1/2020 0:00	-0.696	-0.669
588229	4/2/2020 0:00	-0.676	-0.67
588230	4/3/2020 0:00	-0.676	-0.668
588231	4/4/2020 0:00	-0.667	-0.668
588232	4/5/2020 0:00	-0.652	-0.666
588233	4/6/2020 0:00	-0.662	-0.666
588234	4/7/2020 0:00	-0.68	-0.666
588235	4/8/2020 0:00	-0.665	-0.666
588236	4/9/2020 0:00	-0.664	-0.665
588237	4/10/2020 0:00	-0.679	-0.665

588238	4/11/2020 0:00	-0.661	-0.665
588239	4/12/2020 0:00	-0.662	-0.666
588240	4/13/2020 0:00	-0.663	-0.664
588241	4/14/2020 0:00	-0.661	-0.664
588242	4/15/2020 0:00	-0.666	-0.663
588243	4/16/2020 0:00	-0.666	-0.661
588244	4/17/2020 0:00	-0.655	-0.66
588245	4/18/2020 0:00	-0.64	-0.659
588246	4/19/2020 0:00	-0.643	-0.659
588247	4/20/2020 0:00	-0.631	-0.659
588248	4/21/2020 0:00	-0.664	-0.659
588249	4/22/2020 0:00	-0.668	-0.659
588250	4/23/2020 0:00	-0.643	-0.658
588251	4/24/2020 0:00	-0.664	-0.659
588252	4/25/2020 0:00	-0.652	-0.659
588253	4/26/2020 0:00	-0.664	-0.658
588254	4/27/2020 0:00	-0.671	-0.658
588255	4/28/2020 0:00	-0.648	-0.658
588256	4/29/2020 0:00	-0.668	-0.657
588257	4/30/2020 0:00	-0.642	-0.657
588258	5/1/2020 0:00	-0.642	-0.657
588259	5/2/2020 0:00	-0.664	-0.656
588260	5/3/2020 0:00	-0.649	-0.656
588261	5/4/2020 0:00	-0.663	-0.656
588262	5/5/2020 0:00	-0.662	-0.657
588263	5/6/2020 0:00	-0.659	-0.658
588264	5/7/2020 0:00	-0.656	-0.658
588265	5/8/2020 0:00	-0.667	-0.657
588266	5/9/2020 0:00	-0.678	-0.658
588267	5/10/2020 0:00	-0.67	-0.659
588268	5/11/2020 0:00	-0.654	-0.659
588269	5/12/2020 0:00	-0.657	-0.659
588270	5/13/2020 0:00	-0.668	-0.658
588271	5/14/2020 0:00	-0.644	-0.659
588272	5/15/2020 0:00	-0.65	-0.659
588273	5/16/2020 0:00	-0.672	-0.659
588274	5/17/2020 0:00	-0.639	-0.66
588275	5/18/2020 0:00	-0.636	-0.66
588276	5/19/2020 0:00	-0.662	-0.66
588277	5/20/2020 0:00	-0.671	-0.66
588278	5/21/2020 0:00	-0.666	-0.659
588279	5/22/2020 0:00	-0.645	-0.659
588280	5/23/2020 0:00	-0.656	-0.659
588281	5/24/2020 0:00	-0.67	-0.659

588282	5/25/2020 0:00	-0.68	-0.658
588283	5/26/2020 0:00	-0.659	-0.657
588284	5/27/2020 0:00	-0.658	-0.657
588285	5/28/2020 0:00	-0.657	-0.657
588286	5/29/2020 0:00	-0.668	-0.657
588287	5/30/2020 0:00	-0.672	-0.658
588288	5/31/2020 0:00	-0.646	-0.658
588289	6/1/2020 0:00	-0.655	-0.657
588290	6/2/2020 0:00	-0.657	-0.657
588291	6/3/2020 0:00	-0.655	-0.658
588292	6/4/2020 0:00	-0.663	-0.657
588293	6/5/2020 0:00	-0.646	-0.656
588294	6/6/2020 0:00	-0.659	-0.656
588295	6/7/2020 0:00	-0.659	-0.656
588296	6/8/2020 0:00	-0.646	-0.656
588297	6/9/2020 0:00	-0.65	-0.655
588298	6/10/2020 0:00	-0.652	-0.654
588299	6/11/2020 0:00	-0.655	-0.655
588300	6/12/2020 0:00	-0.664	-0.654
588301	6/13/2020 0:00	-0.657	-0.654
588302	6/14/2020 0:00	-0.659	-0.653
588303	6/15/2020 0:00	-0.65	-0.652
588304	6/16/2020 0:00	-0.65	-0.652
588305	6/17/2020 0:00	-0.631	-0.651
588306	6/18/2020 0:00	-0.665	-0.651
588307	6/19/2020 0:00	-0.648	-0.652
588308	6/20/2020 0:00	-0.65	-0.652
588309	6/21/2020 0:00	-0.647	-0.653
588310	6/22/2020 0:00	-0.648	-0.652
588311	6/23/2020 0:00	-0.648	-0.652
588312	6/24/2020 0:00	-0.656	-0.651
588313	6/25/2020 0:00	-0.658	-0.651
588314	6/26/2020 0:00	-0.67	-0.651
588315	6/27/2020 0:00	-0.64	-0.651
588316	6/28/2020 0:00	-0.634	-0.651
588317	6/29/2020 0:00	-0.657	-0.65
588318	6/30/2020 0:00	-0.638	-0.651
588319	7/1/2020 0:00	-0.633	-0.651
588320	7/2/2020 0:00	-0.642	-0.651
588321	7/3/2020 0:00	-0.665	-0.652
588322	7/4/2020 0:00	-0.662	-0.651
588323	7/5/2020 0:00	-0.674	-0.651
588324	7/6/2020 0:00	-0.666	-0.652
588325	7/7/2020 0:00	-0.652	-0.652

588326	7/8/2020 0:00	-0.631	-0.652
588327	7/9/2020 0:00	-0.642	-0.652
588328	7/10/2020 0:00	-0.635	-0.652
588329	7/11/2020 0:00	-0.651	-0.653
588330	7/12/2020 0:00	-0.645	-0.652
588331	7/13/2020 0:00	-0.669	-0.652
588332	7/14/2020 0:00	-0.65	-0.653
588333	7/15/2020 0:00	-0.664	-0.653
588334	7/16/2020 0:00	-0.649	-0.655
588335	7/17/2020 0:00	-0.673	-0.656
588336	7/18/2020 0:00	-0.646	-0.657
588337	7/19/2020 0:00	-0.636	-0.657
588338	7/20/2020 0:00	-0.664	-0.658
588339	7/21/2020 0:00	-0.663	-0.657
588340	7/22/2020 0:00	-0.645	-0.657
588341	7/23/2020 0:00	-0.651	-0.657
588342	7/24/2020 0:00	-0.651	-0.658
588343	7/25/2020 0:00	-0.668	-0.659
588344	7/26/2020 0:00	-0.67	-0.66
588345	7/27/2020 0:00	-0.636	-0.66
588346	7/28/2020 0:00	-0.651	-0.661
588347	7/29/2020 0:00	-0.663	-0.662
588348	7/30/2020 0:00	-0.663	-0.663
588349	7/31/2020 0:00	-0.686	-0.664
588350	8/1/2020 0:00	-0.673	-0.665
588351	8/2/2020 0:00	-0.663	-0.665
588352	8/3/2020 0:00	-0.683	-0.666
588353	8/4/2020 0:00	-0.676	-0.667
588354	8/5/2020 0:00	-0.653	-0.667
588355	8/6/2020 0:00	-0.666	-0.668
588356	8/7/2020 0:00	-0.654	-0.669
588357	8/8/2020 0:00	-0.663	-0.67
588358	8/9/2020 0:00	-0.673	-0.671
588359	8/10/2020 0:00	-0.666	-0.67
588360	8/11/2020 0:00	-0.662	-0.67
588361	8/12/2020 0:00	-0.671	-0.671
588362	8/13/2020 0:00	-0.695	-0.672
588363	8/14/2020 0:00	-0.68	-0.672
588364	8/15/2020 0:00	-0.692	-0.672
588365	8/16/2020 0:00	-0.67	-0.671
588366	8/17/2020 0:00	-0.679	-0.671
588367	8/18/2020 0:00	-0.681	-0.671
588368	8/19/2020 0:00	-0.674	-0.671
588369	8/20/2020 0:00	-0.663	-0.671

588370	8/21/2020 0:00	-0.696	-0.672
588371	8/22/2020 0:00	-0.673	-0.672
588372	8/23/2020 0:00	-0.681	-0.673
588373	8/24/2020 0:00	-0.678	-0.672
588374	8/25/2020 0:00	-0.636	-0.672
588375	8/26/2020 0:00	-0.664	-0.673
588376	8/27/2020 0:00	-0.679	-0.673
588377	8/28/2020 0:00	-0.671	-0.673
588378	8/29/2020 0:00	-0.664	-0.673
588379	8/30/2020 0:00	-0.666	-0.673
588380	8/31/2020 0:00	-0.665	-0.673
588381	9/1/2020 0:00	-0.665	-0.674
588382	9/2/2020 0:00	-0.67	-0.674
588383	9/3/2020 0:00	-0.671	-0.674
588384	9/4/2020 0:00	-0.676	-0.674
588385	9/5/2020 0:00	-0.696	-0.675
588386	9/6/2020 0:00	-0.662	-0.674
588387	9/7/2020 0:00	-0.665	-0.674
588388	9/8/2020 0:00	-0.662	-0.674
588389	9/9/2020 0:00	-0.667	-0.675
588390	9/10/2020 0:00	-0.683	-0.676
588391	9/11/2020 0:00	-0.672	-0.676
588392	9/12/2020 0:00	-0.683	-0.676
588393	9/13/2020 0:00	-0.682	-0.676
588394	9/14/2020 0:00	-0.686	-0.676
588395	9/15/2020 0:00	-0.691	-0.677
588396	9/16/2020 0:00	-0.691	-0.677
588397	9/17/2020 0:00	-0.69	-0.677
588398	9/18/2020 0:00	-0.685	-0.677
588399	9/19/2020 0:00	-0.657	-0.677
588400	9/20/2020 0:00	-0.69	-0.677
588401	9/21/2020 0:00	-0.673	-0.676
588402	9/22/2020 0:00	-0.679	-0.677
588403	9/23/2020 0:00	-0.689	-0.676
588404	9/24/2020 0:00	-0.685	-0.677
588405	9/25/2020 0:00	-0.679	-0.677
588406	9/26/2020 0:00	-0.674	-0.677
588407	9/27/2020 0:00	-0.679	-0.677
588408	9/28/2020 0:00	-0.658	-0.676
588409	9/29/2020 0:00	-0.671	-0.675
588410	9/30/2020 0:00	-0.677	-0.675
588411	10/1/2020 0:00	-0.682	-0.674
588412	10/2/2020 0:00	-0.669	-0.675
588413	10/3/2020 0:00	-0.664	-0.674

588414	10/4/2020 0:00	-0.667	-0.674
588415	10/5/2020 0:00	-0.678	-0.674
588416	10/6/2020 0:00	-0.679	-0.674
588417	10/7/2020 0:00	-0.672	-0.674
588418	10/8/2020 0:00	-0.66	-0.675
588419	10/9/2020 0:00	-0.676	-0.674
588420	10/10/2020 0:00	-0.681	-0.674
588421	10/11/2020 0:00	-0.671	-0.673
588422	10/12/2020 0:00	-0.66	-0.673
588423	10/13/2020 0:00	-0.672	-0.673
588424	10/14/2020 0:00	-0.654	-0.674
588425	10/15/2020 0:00	-0.668	-0.674
588426	10/16/2020 0:00	-0.676	-0.674
588427	10/17/2020 0:00	-0.696	-0.674
588428	10/18/2020 0:00	-0.681	-0.674
588429	10/19/2020 0:00	-0.674	-0.675
588430	10/20/2020 0:00	-0.675	-0.675
588431	10/21/2020 0:00	-0.678	-0.675
588432	10/22/2020 0:00	-0.68	-0.675
588433	10/23/2020 0:00	-0.687	-0.674
588434	10/24/2020 0:00	-0.67	-0.674
588435	10/25/2020 0:00	-0.673	-0.673
588436	10/26/2020 0:00	-0.658	-0.672
588437	10/27/2020 0:00	-0.686	-0.672
588438	10/28/2020 0:00	-0.677	-0.672
588439	10/29/2020 0:00	-0.671	-0.672
588440	10/30/2020 0:00	-0.685	-0.672
588441	10/31/2020 0:00	-0.681	-0.673
588442	11/1/2020 0:00	-0.684	-0.672
588443	11/2/2020 0:00	-0.674	-0.671
588444	11/3/2020 0:00	-0.67	-0.672
588445	11/4/2020 0:00	-0.684	-0.671
588446	11/5/2020 0:00	-0.679	-0.671
588447	11/6/2020 0:00	-0.667	-0.67
588448	11/7/2020 0:00	-0.656	-0.67
588449	11/8/2020 0:00	-0.642	-0.67
588450	11/9/2020 0:00	-0.653	-0.669
588451	11/10/2020 0:00	-0.665	-0.669
588452	11/11/2020 0:00	-0.66	-0.669
588453	11/12/2020 0:00	-0.668	-0.669
588454	11/13/2020 0:00	-0.661	-0.668
588455	11/14/2020 0:00	-0.654	-0.668
588456	11/15/2020 0:00	-0.689	-0.668
588457	11/16/2020 0:00	-0.654	-0.667

588458	11/17/2020 0:00	-0.664	-0.668
588459	11/18/2020 0:00	-0.702	-0.668
588460	11/19/2020 0:00	-0.649	-0.669
588461	11/20/2020 0:00	-0.667	-0.669
588462	11/21/2020 0:00	-0.671	-0.669
588463	11/22/2020 0:00	-0.674	-0.671
588464	11/23/2020 0:00	-0.67	-0.672
588465	11/24/2020 0:00	-0.655	-0.673
588466	11/25/2020 0:00	-0.676	-0.674
588467	11/26/2020 0:00	-0.665	-0.674
588468	11/27/2020 0:00	-0.667	-0.675
588469	11/28/2020 0:00	-0.663	-0.676
588470	11/29/2020 0:00	-0.668	-0.676
588471	11/30/2020 0:00	-0.663	-0.677
588472	12/1/2020 0:00	-0.667	-0.677
588473	12/2/2020 0:00	-0.698	-0.679
588474	12/3/2020 0:00	-0.683	-0.679
588475	12/4/2020 0:00	-0.689	-0.679
588476	12/5/2020 0:00	-0.696	-0.679
588477	12/6/2020 0:00	-0.697	-0.679
588478	12/7/2020 0:00	-0.698	-0.68
588479	12/8/2020 0:00	-0.694	-0.68
588480	12/9/2020 0:00	-0.683	-0.68
588481	12/10/2020 0:00	-0.68	-0.68
588482	12/11/2020 0:00	-0.67	-0.68
588483	12/12/2020 0:00	-0.696	-0.68
588484	12/13/2020 0:00	-0.678	-0.681
588485	12/14/2020 0:00	-0.683	-0.681
588486	12/15/2020 0:00	-0.687	-0.681
588487	12/16/2020 0:00	-0.69	-0.682
588488	12/17/2020 0:00	-0.696	-0.682
588489	12/18/2020 0:00	-0.684	-0.682
588490	12/19/2020 0:00	-0.679	-0.681
588491	12/20/2020 0:00	-0.666	-0.681
588492	12/21/2020 0:00	-0.675	-0.681
588493	12/22/2020 0:00	-0.672	-0.68
588494	12/23/2020 0:00	-0.683	-0.68
588495	12/24/2020 0:00	-0.684	-0.679
588496	12/25/2020 0:00	-0.66	-0.679
588497	12/26/2020 0:00	-0.659	-0.68
588498	12/27/2020 0:00	-0.668	-0.68
588499	12/28/2020 0:00	-0.691	-0.68
588500	12/29/2020 0:00	-0.673	-0.681
588501	12/30/2020 0:00	-0.682	-0.68

588502	12/31/2020 0:00	-0.668	-0.68
588503	1/1/2021 0:00	-0.688	-0.679
588504	1/2/2021 0:00	-0.678	-0.678
588505	1/3/2021 0:00	-0.674	-0.678
588506	1/4/2021 0:00	-0.676	-0.677
588507	1/5/2021 0:00	-0.683	-0.677
588508	1/6/2021 0:00	-0.673	-0.677
588509	1/7/2021 0:00	-0.692	-0.677
588510	1/8/2021 0:00	-0.684	-0.676
588511	1/9/2021 0:00	-0.689	-0.676
588512	1/10/2021 0:00	-0.698	-0.677
588513	1/11/2021 0:00	-0.681	-0.677
588514	1/12/2021 0:00	-0.69	-0.677
588515	1/13/2021 0:00	-0.693	-0.678
588516	1/14/2021 0:00	-0.666	-0.679
588517	1/15/2021 0:00	-0.671	-0.679
588518	1/16/2021 0:00	-0.674	-0.68
588519	1/17/2021 0:00	-0.663	-0.68
588520	1/18/2021 0:00	-0.681	-0.681
588521	1/19/2021 0:00	-0.656	-0.682
588522	1/20/2021 0:00	-0.673	-0.683
588523	1/21/2021 0:00	-0.672	-0.683
588524	1/22/2021 0:00	-0.654	-0.684
588525	1/23/2021 0:00	-0.676	-0.684
588526	1/24/2021 0:00	-0.674	-0.683
588527	1/25/2021 0:00	-0.678	-0.684
588528	1/26/2021 0:00	-0.666	-0.684
588529	1/27/2021 0:00	-0.682	-0.684
588530	1/28/2021 0:00	-0.71	-0.683
588531	1/29/2021 0:00	-0.698	-0.683
588532	1/30/2021 0:00	-0.687	-0.684
588533	1/31/2021 0:00	-0.692	-0.685
588534	2/1/2021 0:00	-0.709	-0.684
588535	2/2/2021 0:00	-0.711	-0.684
588536	2/3/2021 0:00	-0.7	-0.685
588537	2/4/2021 0:00	-0.691	-0.687
588538	2/5/2021 0:00	-0.698	-0.688
588539	2/6/2021 0:00	-0.685	-0.688
588540	2/7/2021 0:00	-0.69	-0.689
588541	2/8/2021 0:00	-0.68	-0.69
588542	2/9/2021 0:00	-0.692	-0.691
588543	2/10/2021 0:00	-0.696	-0.692
588544	2/11/2021 0:00	-0.693	-0.693
588545	2/12/2021 0:00	-0.676	-0.692

588546	2/13/2021 0:00	-0.666	-0.691
588547	2/14/2021 0:00	-0.71	-0.69
588548	2/15/2021 0:00	-0.691	-0.69
588549	2/16/2021 0:00	-0.667	-0.69
588550	2/17/2021 0:00	-0.66	-0.69
588551	2/18/2021 0:00	-0.708	-0.689
588552	2/19/2021 0:00	-0.713	-0.689
588553	2/20/2021 0:00	-0.698	-0.689
588554	2/21/2021 0:00	-0.685	-0.69
588555	2/22/2021 0:00	-0.685	-0.69
588556	2/23/2021 0:00	-0.701	-0.691
588557	2/24/2021 0:00	-0.712	-0.692
588558	2/25/2021 0:00	-0.701	-0.692
588559	2/26/2021 0:00	-0.684	-0.692
588560	2/27/2021 0:00	-0.664	-0.692
588561	2/28/2021 0:00	-0.666	-0.693
588562	3/1/2021 0:00	-0.696	-0.694
588563	3/2/2021 0:00	-0.68	-0.693
588564	3/3/2021 0:00	-0.69	-0.693
588565	3/4/2021 0:00	-0.692	-0.695
588566	3/5/2021 0:00	-0.698	-0.696
588567	3/6/2021 0:00	-0.684	-0.696
588568	3/7/2021 0:00	-0.701	-0.696
588569	3/8/2021 0:00	-0.717	-0.695
588570	3/9/2021 0:00	-0.706	-0.694
588571	3/10/2021 0:00	-0.699	-0.694
588572	3/11/2021 0:00	-0.714	-0.693
588573	3/12/2021 0:00	-0.69	-0.693
588574	3/13/2021 0:00	-0.709	-0.692
588575	3/14/2021 0:00	-0.703	-0.692
588576	3/15/2021 0:00	-0.696	-0.693
588577	3/16/2021 0:00	-0.691	-0.694
588578	3/17/2021 0:00	-0.697	-0.694
588579	3/18/2021 0:00	-0.692	-0.695
588580	3/19/2021 0:00	-0.722	-0.694
588581	3/20/2021 0:00	-0.697	-0.694
588582	3/21/2021 0:00	-0.698	-0.694
588583	3/22/2021 0:00	-0.698	-0.694
588584	3/23/2021 0:00	-0.666	-0.693
588585	3/24/2021 0:00	-0.664	-0.692
588586	3/25/2021 0:00	-0.673	-0.691
588587	3/26/2021 0:00	-0.676	-0.691
588588	3/27/2021 0:00	-0.705	-0.69
588589	3/28/2021 0:00	-0.689	-0.689

588590	3/29/2021 0:00	-0.692	-0.688
588591	3/30/2021 0:00	-0.69	-0.687
588592	3/31/2021 0:00	-0.704	-0.687
588593	4/1/2021 0:00	-0.691	-0.686
588594	4/2/2021 0:00	-0.69	-0.686
588595	4/3/2021 0:00	-0.683	-0.685
588596	4/4/2021 0:00	-0.693	-0.684
588597	4/5/2021 0:00	-0.687	-0.683
588598	4/6/2021 0:00	-0.682	-0.682
588599	4/7/2021 0:00	-0.679	-0.681
588600	4/8/2021 0:00	-0.678	-0.681
588601	4/9/2021 0:00	-0.677	-0.682
588602	4/10/2021 0:00	-0.685	-0.681
588603	4/11/2021 0:00	-0.681	-0.681
588604	4/12/2021 0:00	-0.68	-0.68
588605	4/13/2021 0:00	-0.676	-0.68
588606	4/14/2021 0:00	-0.675	-0.68
588607	4/15/2021 0:00	-0.677	-0.68
588608	4/16/2021 0:00	-0.675	-0.678
588609	4/17/2021 0:00	-0.686	-0.678
588610	4/18/2021 0:00	-0.678	-0.677
588611	4/19/2021 0:00	-0.671	-0.677
588612	4/20/2021 0:00	-0.678	-0.677
588613	4/21/2021 0:00	-0.665	-0.676
588614	4/22/2021 0:00	-0.673	-0.676
588615	4/23/2021 0:00	-0.664	-0.676
588616	4/24/2021 0:00	-0.674	-0.677
588617	4/25/2021 0:00	-0.658	-0.677
588618	4/26/2021 0:00	-0.665	-0.677
588619	4/27/2021 0:00	-0.675	-0.677
588620	4/28/2021 0:00	-0.683	-0.678
588621	4/29/2021 0:00	-0.695	-0.679
588622	4/30/2021 0:00	-0.684	-0.68
588623	5/1/2021 0:00	-0.67	-0.68
588624	5/2/2021 0:00	-0.667	-0.68
588625	5/3/2021 0:00	-0.679	-0.681
588626	5/4/2021 0:00	-0.683	-0.682
588627	5/5/2021 0:00	-0.673	-0.683
588628	5/6/2021 0:00	-0.681	-0.684
588629	5/7/2021 0:00	-0.678	-0.685
588630	5/8/2021 0:00	-0.685	-0.686
588631	5/9/2021 0:00	-0.688	-0.688
588632	5/10/2021 0:00	-0.681	-0.688
588633	5/11/2021 0:00	-0.688	-0.689

588634	5/12/2021 0:00	-0.682	-0.689
588635	5/13/2021 0:00	-0.697	-0.689
588636	5/14/2021 0:00	-0.708	-0.689
588637	5/15/2021 0:00	-0.707	-0.689
588638	5/16/2021 0:00	-0.678	-0.689
588639	5/17/2021 0:00	-0.696	-0.689
588640	5/18/2021 0:00	-0.717	-0.69
588641	5/19/2021 0:00	-0.692	-0.69
588642	5/20/2021 0:00	-0.711	-0.69
588643	5/21/2021 0:00	-0.692	-0.69
588644	5/22/2021 0:00	-0.712	-0.69
588645	5/23/2021 0:00	-0.707	-0.689
588646	5/24/2021 0:00	-0.707	-0.69
588647	5/25/2021 0:00	-0.68	-0.69
588648	5/26/2021 0:00	-0.687	-0.69
588649	5/27/2021 0:00	-0.683	-0.691
588650	5/28/2021 0:00	-0.675	-0.69
588651	5/29/2021 0:00	-0.685	-0.69
588652	5/30/2021 0:00	-0.67	-0.689
588653	5/31/2021 0:00	-0.69	-0.689
588654	6/1/2021 0:00	-0.685	-0.689
588655	6/2/2021 0:00	-0.68	-0.689
588656	6/3/2021 0:00	-0.691	-0.688
588657	6/4/2021 0:00	-0.677	-0.688
588658	6/5/2021 0:00	-0.668	-0.687
588659	6/6/2021 0:00	-0.677	-0.688
588660	6/7/2021 0:00	-0.667	-0.687
588661	6/8/2021 0:00	-0.702	-0.686
588662	6/9/2021 0:00	-0.706	-0.685
588663	6/10/2021 0:00	-0.687	-0.685
588664	6/11/2021 0:00	-0.69	-0.685
588665	6/12/2021 0:00	-0.68	-0.685
588666	6/13/2021 0:00	-0.689	-0.686
588667	6/14/2021 0:00	-0.683	-0.686
588668	6/15/2021 0:00	-0.702	-0.687
588669	6/16/2021 0:00	-0.679	-0.687
588670	6/17/2021 0:00	-0.686	-0.687
588671	6/18/2021 0:00	-0.692	-0.688
588672	6/19/2021 0:00	-0.693	-0.688
588673	6/20/2021 0:00	-0.687	-0.689
588674	6/21/2021 0:00	-0.7	-0.69
588675	6/22/2021 0:00	-0.674	-0.69
588676	6/23/2021 0:00	-0.684	-0.691
588677	6/24/2021 0:00	-0.684	-0.691

588678	6/25/2021 0:00	-0.67	-0.691
588679	6/26/2021 0:00	-0.691	-0.691
588680	6/27/2021 0:00	-0.692	-0.691
588681	6/28/2021 0:00	-0.693	-0.692
588682	6/29/2021 0:00	-0.695	-0.692
588683	6/30/2021 0:00	-0.697	-0.692
588684	7/1/2021 0:00	-0.689	-0.692
588685	7/2/2021 0:00	-0.686	-0.694
588686	7/3/2021 0:00	-0.709	-0.694
588687	7/4/2021 0:00	-0.698	-0.696
588688	7/5/2021 0:00	-0.694	-0.697
588689	7/6/2021 0:00	-0.71	-0.698
588690	7/7/2021 0:00	-0.687	-0.698
588691	7/8/2021 0:00	-0.699	-0.7
588692	7/9/2021 0:00	-0.69	-0.7
588693	7/10/2021 0:00	-0.705	-0.701
588694	7/11/2021 0:00	-0.687	-0.703
588695	7/12/2021 0:00	-0.697	-0.703
588696	7/13/2021 0:00	-0.697	-0.704
588697	7/14/2021 0:00	-0.698	-0.705
588698	7/15/2021 0:00	-0.692	-0.705
588699	7/16/2021 0:00	-0.702	-0.706
588700	7/17/2021 0:00	-0.733	-0.708
588701	7/18/2021 0:00	-0.703	-0.709
588702	7/19/2021 0:00	-0.731	-0.71
588703	7/20/2021 0:00	-0.719	-0.71
588704	7/21/2021 0:00	-0.726	-0.711
588705	7/22/2021 0:00	-0.715	-0.71
588706	7/23/2021 0:00	-0.72	-0.711
588707	7/24/2021 0:00	-0.694	-0.711
588708	7/25/2021 0:00	-0.712	-0.712
588709	7/26/2021 0:00	-0.717	-0.712
588710	7/27/2021 0:00	-0.695	-0.713
588711	7/28/2021 0:00	-0.719	-0.713
588712	7/29/2021 0:00	-0.728	-0.714
588713	7/30/2021 0:00	-0.72	-0.716
588714	7/31/2021 0:00	-0.724	-0.717
588715	8/1/2021 0:00	-0.734	-0.717
588716	8/2/2021 0:00	-0.726	-0.717
588717	8/3/2021 0:00	-0.726	-0.717
588718	8/4/2021 0:00	-0.71	-0.716
588719	8/5/2021 0:00	-0.709	-0.716
588720	8/6/2021 0:00	-0.702	-0.715
588721	8/7/2021 0:00	-0.713	-0.714

588722	8/8/2021 0:00	-0.701	-0.714
588723	8/9/2021 0:00	-0.722	-0.715
588724	8/10/2021 0:00	-0.709	-0.716
588725	8/11/2021 0:00	-0.708	-0.716
588726	8/12/2021 0:00	-0.714	-0.717
588727	8/13/2021 0:00	-0.722	-0.716
588728	8/14/2021 0:00	-0.744	-0.716
588729	8/15/2021 0:00	-0.721	-0.715
588730	8/16/2021 0:00	-0.726	-0.714
588731	8/17/2021 0:00	-0.707	-0.713
588732	8/18/2021 0:00	-0.718	-0.712
588733	8/19/2021 0:00	-0.703	-0.711
588734	8/20/2021 0:00	-0.717	-0.711
588735	8/21/2021 0:00	-0.697	-0.712
588736	8/22/2021 0:00	-0.69	-0.713
588737	8/23/2021 0:00	-0.709	-0.712
588738	8/24/2021 0:00	-0.728	-0.712
588739	8/25/2021 0:00	-0.724	-0.712
588740	8/26/2021 0:00	-0.719	-0.712
588741	8/27/2021 0:00	-0.726	-0.711
588742	8/28/2021 0:00	-0.7	-0.711
588743	8/29/2021 0:00	-0.719	-0.71
588744	8/30/2021 0:00	-0.704	-0.708
588745	8/31/2021 0:00	-0.697	-0.707
588746	9/1/2021 0:00	-0.687	-0.706
588747	9/2/2021 0:00	-0.714	-0.706
588748	9/3/2021 0:00	-0.694	-0.705
588749	9/4/2021 0:00	-0.714	-0.705
588750	9/5/2021 0:00	-0.732	-0.705
588751	9/6/2021 0:00	-0.714	-0.705
588752	9/7/2021 0:00	-0.699	-0.705
588753	9/8/2021 0:00	-0.691	-0.705
588754	9/9/2021 0:00	-0.713	-0.704
588755	9/10/2021 0:00	-0.707	-0.704
588756	9/11/2021 0:00	-0.702	-0.702
588757	9/12/2021 0:00	-0.703	-0.702
588758	9/13/2021 0:00	-0.696	-0.702
588759	9/14/2021 0:00	-0.685	-0.701
588760	9/15/2021 0:00	-0.682	-0.701
588761	9/16/2021 0:00	-0.695	-0.701
588762	9/17/2021 0:00	-0.703	-0.701
588763	9/18/2021 0:00	-0.691	-0.7
588764	9/19/2021 0:00	-0.717	-0.699
588765	9/20/2021 0:00	-0.694	-0.699

588766	9/21/2021 0:00	-0.706	-0.697
588767	9/22/2021 0:00	-0.704	-0.697
588768	9/23/2021 0:00	-0.689	-0.697
588769	9/24/2021 0:00	-0.713	-0.697
588770	9/25/2021 0:00	-0.707	-0.696
588771	9/26/2021 0:00	-0.676	-0.695
588772	9/27/2021 0:00	-0.698	-0.694
588773	9/28/2021 0:00	-0.707	-0.693
588774	9/29/2021 0:00	-0.699	-0.693
588775	9/30/2021 0:00	-0.692	-0.693
588776	10/1/2021 0:00	-0.694	-0.693
588777	10/2/2021 0:00	-0.694	-0.693
588778	10/3/2021 0:00	-0.696	-0.692
588779	10/4/2021 0:00	-0.671	-0.693
588780	10/5/2021 0:00	-0.69	-0.692
588781	10/6/2021 0:00	-0.688	-0.692
588782	10/7/2021 0:00	-0.709	-0.693
588783	10/8/2021 0:00	-0.697	-0.692
588784	10/9/2021 0:00	-0.685	-0.692
588785	10/10/2021 0:00	-0.689	-0.691
588786	10/11/2021 0:00	-0.666	-0.691
588787	10/12/2021 0:00	-0.675	-0.692
588788	10/13/2021 0:00	-0.689	-0.692
588789	10/14/2021 0:00	-0.672	-0.691
588790	10/15/2021 0:00	-0.683	-0.691
588791	10/16/2021 0:00	-0.701	-0.692
588792	10/17/2021 0:00	-0.692	-0.691
588793	10/18/2021 0:00	-0.674	-0.692
588794	10/19/2021 0:00	-0.702	-0.693
588795	10/20/2021 0:00	-0.703	-0.694
588796	10/21/2021 0:00	-0.702	-0.694
588797	10/22/2021 0:00	-0.728	-0.694
588798	10/23/2021 0:00	-0.683	-0.694
588799	10/24/2021 0:00	-0.68	-0.694
588800	10/25/2021 0:00	-0.693	-0.695
588801	10/26/2021 0:00	-0.687	-0.696
588802	10/27/2021 0:00	-0.709	-0.697
588803	10/28/2021 0:00	-0.693	-0.698
588804	10/29/2021 0:00	-0.702	-0.699
588805	10/30/2021 0:00	-0.696	-0.7
588806	10/31/2021 0:00	-0.697	-0.701
588807	11/1/2021 0:00	-0.68	-0.702
588808	11/2/2021 0:00	-0.72	-0.702
588809	11/3/2021 0:00	-0.714	-0.704

588810	11/4/2021 0:00	-0.704	-0.703
588811	11/5/2021 0:00	-0.704	-0.704
588812	11/6/2021 0:00	-0.688	-0.704
588813	11/7/2021 0:00	-0.698	-0.704
588814	11/8/2021 0:00	-0.703	-0.705
588815	11/9/2021 0:00	-0.727	-0.706
588816	11/10/2021 0:00	-0.719	-0.707
588817	11/11/2021 0:00	-0.694	-0.709
588818	11/12/2021 0:00	-0.715	-0.709
588819	11/13/2021 0:00	-0.711	-0.71
588820	11/14/2021 0:00	-0.703	-0.71
588821	11/15/2021 0:00	-0.71	-0.711
588822	11/16/2021 0:00	-0.717	-0.711
588823	11/17/2021 0:00	-0.711	-0.712
588824	11/18/2021 0:00	-0.719	-0.712
588825	11/19/2021 0:00	-0.694	-0.712
588826	11/20/2021 0:00	-0.709	-0.712
588827	11/21/2021 0:00	-0.721	-0.713
588828	11/22/2021 0:00	-0.729	-0.713
588829	11/23/2021 0:00	-0.704	-0.713
588830	11/24/2021 0:00	-0.702	-0.713
588831	11/25/2021 0:00	-0.743	-0.712
588832	11/26/2021 0:00	-0.732	-0.712
588833	11/27/2021 0:00	-0.726	-0.712
588834	11/28/2021 0:00	-0.721	-0.712
588835	11/29/2021 0:00	-0.704	-0.712
588836	11/30/2021 0:00	-0.713	-0.713
588837	12/1/2021 0:00	-0.719	-0.713
588838	12/2/2021 0:00	-0.705	-0.713
588839	12/3/2021 0:00	-0.708	-0.713
588840	12/4/2021 0:00	-0.716	-0.713
588841	12/5/2021 0:00	-0.705	-0.714
588842	12/6/2021 0:00	-0.721	-0.714
588843	12/7/2021 0:00	-0.702	-0.714
588844	12/8/2021 0:00	-0.706	-0.713
588845	12/9/2021 0:00	-0.701	-0.712
588846	12/10/2021 0:00	-0.695	-0.712
588847	12/11/2021 0:00	-0.705	-0.711
588848	12/12/2021 0:00	-0.713	-0.71
588849	12/13/2021 0:00	-0.696	-0.709
588850	12/14/2021 0:00	-0.73	-0.709
588851	12/15/2021 0:00	-0.719	-0.709
588852	12/16/2021 0:00	-0.703	-0.708
588853	12/17/2021 0:00	-0.73	-0.707

588854	12/18/2021 0:00	-0.718	-0.708
588855	12/19/2021 0:00	-0.717	-0.709
588856	12/20/2021 0:00	-0.712	-0.71
588857	12/21/2021 0:00	-0.703	-0.711
588858	12/22/2021 0:00	-0.725	-0.711
588859	12/23/2021 0:00	-0.716	-0.711
588860	12/24/2021 0:00	-0.672	-0.712
588861	12/25/2021 0:00	-0.693	-0.713
588862	12/26/2021 0:00	-0.712	-0.715
588863	12/27/2021 0:00	-0.701	-0.716
588864	12/28/2021 0:00	-0.693	-0.717
588865	12/29/2021 0:00	-0.721	-0.718
588866	12/30/2021 0:00	-0.695	-0.718
588867	12/31/2021 0:00	-0.693	-0.719
588868	1/1/2022 0:00	-0.702	-0.72
588869	1/2/2022 0:00	-0.734	-0.72
588870	1/3/2022 0:00	-0.734	-0.72
588871	1/4/2022 0:00	-0.734	-0.721
588872	1/5/2022 0:00	-0.745	-0.722
588873	1/6/2022 0:00	-0.716	-0.724
588874	1/7/2022 0:00	-0.721	-0.724
588875	1/8/2022 0:00	-0.718	-0.725
588876	1/9/2022 0:00	-0.746	-0.726
588877	1/10/2022 0:00	-0.739	-0.728
588878	1/11/2022 0:00	-0.744	-0.729
588879	1/12/2022 0:00	-0.748	-0.73
588880	1/13/2022 0:00	-0.734	-0.731
588881	1/14/2022 0:00	-0.718	-0.732
588882	1/15/2022 0:00	-0.754	-0.733
588883	1/16/2022 0:00	-0.729	-0.734
588884	1/17/2022 0:00	-0.734	-0.735
588885	1/18/2022 0:00	-0.725	-0.734
588886	1/19/2022 0:00	-0.743	-0.734
588887	1/20/2022 0:00	-0.75	-0.735
588888	1/21/2022 0:00	-0.74	-0.735
588889	1/22/2022 0:00	-0.737	-0.736
588890	1/23/2022 0:00	-0.737	-0.736
588891	1/24/2022 0:00	-0.722	-0.736
588892	1/25/2022 0:00	-0.744	-0.735
588893	1/26/2022 0:00	-0.733	-0.735
588894	1/27/2022 0:00	-0.737	-0.734
588895	1/28/2022 0:00	-0.735	-0.734
588896	1/29/2022 0:00	-0.739	-0.734
588897	1/30/2022 0:00	-0.731	-0.734

588898	1/31/2022 0:00	-0.731	-0.733
588899	2/1/2022 0:00	-0.717	-0.733
588900	2/2/2022 0:00	-0.722	-0.732
588901	2/3/2022 0:00	-0.722	-0.732
588902	2/4/2022 0:00	-0.764	-0.732
588903	2/5/2022 0:00	-0.755	-0.731
588904	2/6/2022 0:00	-0.73	-0.731
588905	2/7/2022 0:00	-0.738	-0.73
588906	2/8/2022 0:00	-0.72	-0.73
588907	2/9/2022 0:00	-0.725	-0.73
588908	2/10/2022 0:00	-0.719	-0.73
588909	2/11/2022 0:00	-0.736	-0.73
588910	2/12/2022 0:00	-0.72	-0.731
588911	2/13/2022 0:00	-0.738	-0.731
588912	2/14/2022 0:00	-0.734	-0.731
588913	2/15/2022 0:00	-0.712	-0.731
588914	2/16/2022 0:00	-0.717	-0.731
588915	2/17/2022 0:00	-0.733	-0.731
588916	2/18/2022 0:00	-0.725	-0.731
588917	2/19/2022 0:00	-0.722	-0.731
588918	2/20/2022 0:00	-0.722	-0.731
588919	2/21/2022 0:00	-0.732	-0.73
588920	2/22/2022 0:00	-0.727	-0.73
588921	2/23/2022 0:00	-0.719	-0.731
588922	2/24/2022 0:00	-0.737	-0.731
588923	2/25/2022 0:00	-0.735	-0.731
588924	2/26/2022 0:00	-0.742	-0.731
588925	2/27/2022 0:00	-0.747	-0.731
588926	2/28/2022 0:00	-0.737	-0.731
588927	3/1/2022 0:00	-0.746	-0.731
588928	3/2/2022 0:00	-0.742	-0.731
588929	3/3/2022 0:00	-0.73	-0.732
588930	3/4/2022 0:00	-0.716	-0.732
588931	3/5/2022 0:00	-0.726	-0.731
588932	3/6/2022 0:00	-0.73	-0.731
588933	3/7/2022 0:00	-0.756	-0.732
588934	3/8/2022 0:00	-0.731	-0.732
588935	3/9/2022 0:00	-0.725	-0.732
588936	3/10/2022 0:00	-0.749	-0.731
588937	3/11/2022 0:00	-0.73	-0.73
588938	3/12/2022 0:00	-0.73	-0.73
588939	3/13/2022 0:00	-0.706	-0.731
588940	3/14/2022 0:00	-0.738	-0.73
588941	3/15/2022 0:00	-0.739	-0.728

588942	3/16/2022 0:00	-0.721	-0.727
588943	3/17/2022 0:00	-0.736	-0.726
588944	3/18/2022 0:00	-0.732	-0.726
588945	3/19/2022 0:00	-0.716	-0.726
588946	3/20/2022 0:00	-0.72	-0.726
588947	3/21/2022 0:00	-0.735	-0.725
588948	3/22/2022 0:00	-0.728	-0.724
588949	3/23/2022 0:00	-0.745	-0.723
588950	3/24/2022 0:00	-0.707	-0.722
588951	3/25/2022 0:00	-0.698	-0.722
588952	3/26/2022 0:00	-0.703	-0.72
588953	3/27/2022 0:00	-0.722	-0.719
588954	3/28/2022 0:00	-0.77	-0.719
588955	3/29/2022 0:00	-0.711	-0.72
588956	3/30/2022 0:00	-0.705	-0.719
588957	3/31/2022 0:00	-0.706	-0.718
588958	4/1/2022 0:00	-0.709	-0.719
588959	4/2/2022 0:00	-0.729	-0.719
588960	4/3/2022 0:00	-0.743	-0.72
588961	4/4/2022 0:00	-0.717	-0.721
588962	4/5/2022 0:00	-0.696	-0.721
588963	4/6/2022 0:00	-0.695	-0.721
588964	4/7/2022 0:00	-0.71	-0.721
588965	4/8/2022 0:00	-0.719	-0.72
588966	4/9/2022 0:00	-0.709	-0.721
588967	4/10/2022 0:00	-0.692	-0.722
588968	4/11/2022 0:00	-0.715	-0.724
588969	4/12/2022 0:00	-0.719	-0.723
588970	4/13/2022 0:00	-0.73	-0.722
588971	4/14/2022 0:00	-0.726	-0.722
588972	4/15/2022 0:00	-0.709	-0.723
588973	4/16/2022 0:00	-0.741	-0.724
588974	4/17/2022 0:00	-0.749	-0.724
588975	4/18/2022 0:00	-0.762	-0.725
588976	4/19/2022 0:00	-0.735	-0.724
588977	4/20/2022 0:00	-0.721	-0.725
588978	4/21/2022 0:00	-0.727	-0.726
588979	4/22/2022 0:00	-0.725	-0.727
588980	4/23/2022 0:00	-0.733	-0.727
588981	4/24/2022 0:00	-0.74	-0.727
588982	4/25/2022 0:00	-0.727	-0.727
588983	4/26/2022 0:00	-0.742	-0.728
588984	4/27/2022 0:00	-0.719	-0.728
588985	4/28/2022 0:00	-0.723	-0.728

588986	4/29/2022 0:00	-0.713	-0.728
588987	4/30/2022 0:00	-0.73	-0.729
588988	5/1/2022 0:00	-0.73	-0.729
588989	5/2/2022 0:00	-0.733	-0.728
588990	5/3/2022 0:00	-0.735	-0.728
588991	5/4/2022 0:00	-0.732	-0.727
588992	5/5/2022 0:00	-0.73	-0.726
588993	5/6/2022 0:00	-0.732	-0.727
588994	5/7/2022 0:00	-0.726	-0.727
588995	5/8/2022 0:00	-0.708	-0.727
588996	5/9/2022 0:00	-0.714	-0.727
588997	5/10/2022 0:00	-0.715	-0.726
588998	5/11/2022 0:00	-0.715	-0.726
588999	5/12/2022 0:00	-0.736	-0.725
589000	5/13/2022 0:00	-0.717	-0.725
589001	5/14/2022 0:00	-0.728	-0.724
589002	5/15/2022 0:00	-0.74	-0.725
589003	5/16/2022 0:00	-0.726	-0.725
589004	5/17/2022 0:00	-0.714	-0.726
589005	5/18/2022 0:00	-0.741	-0.726
589006	5/19/2022 0:00	-0.725	-0.726
589007	5/20/2022 0:00	-0.725	-0.726
589008	5/21/2022 0:00	-0.728	-0.726
589009	5/22/2022 0:00	-0.739	-0.726
589010	5/23/2022 0:00	-0.735	-0.726
589011	5/24/2022 0:00	-0.717	-0.727
589012	5/25/2022 0:00	-0.715	-0.727
589013	5/26/2022 0:00	-0.724	-0.728
589014	5/27/2022 0:00	-0.72	-0.728
589015	5/28/2022 0:00	-0.708	-0.729
589016	5/29/2022 0:00	-0.702	-0.73
589017	5/30/2022 0:00	-0.747	-0.73
589018	5/31/2022 0:00	-0.732	-0.73
589019	6/1/2022 0:00	-0.744	-0.73
589020	6/2/2022 0:00	-0.742	-0.731
589021	6/3/2022 0:00	-0.731	-0.731
589022	6/4/2022 0:00	-0.729	-0.731
589023	6/5/2022 0:00	-0.736	-0.732
589024	6/6/2022 0:00	-0.716	-0.732
589025	6/7/2022 0:00	-0.74	-0.733
589026	6/8/2022 0:00	-0.719	-0.733
589027	6/9/2022 0:00	-0.732	-0.734
589028	6/10/2022 0:00	-0.735	-0.735
589029	6/11/2022 0:00	-0.738	-0.736

589030	6/12/2022 0:00	-0.748	-0.737
589031	6/13/2022 0:00	-0.759	-0.739
589032	6/14/2022 0:00	-0.719	-0.74
589033	6/15/2022 0:00	-0.732	-0.74
589034	6/16/2022 0:00	-0.744	-0.74
589035	6/17/2022 0:00	-0.741	-0.74
589036	6/18/2022 0:00	-0.738	-0.74
589037	6/19/2022 0:00	-0.729	-0.741
589038	6/20/2022 0:00	-0.74	-0.742
589039	6/21/2022 0:00	-0.746	-0.743
589040	6/22/2022 0:00	-0.752	-0.745
589041	6/23/2022 0:00	-0.745	-0.745
589042	6/24/2022 0:00	-0.739	-0.746
589043	6/25/2022 0:00	-0.745	-0.748
589044	6/26/2022 0:00	-0.765	-0.749
589045	6/27/2022 0:00	-0.754	-0.749
589046	6/28/2022 0:00	-0.757	-0.75
589047	6/29/2022 0:00	-0.752	-0.75
589048	6/30/2022 0:00	-0.731	-0.752
589049	7/1/2022 0:00	-0.749	-0.752
589050	7/2/2022 0:00	-0.745	-0.752
589051	7/3/2022 0:00	-0.743	-0.753
589052	7/4/2022 0:00	-0.75	-0.754
589053	7/5/2022 0:00	-0.771	-0.755
589054	7/6/2022 0:00	-0.762	-0.756
589055	7/7/2022 0:00	-0.756	-0.756
589056	7/8/2022 0:00	-0.764	-0.756
589057	7/9/2022 0:00	-0.753	-0.757
589058	7/10/2022 0:00	-0.772	-0.757
589059	7/11/2022 0:00	-0.762	-0.758
589060	7/12/2022 0:00	-0.756	-0.758
589061	7/13/2022 0:00	-0.768	-0.758
589062	7/14/2022 0:00	-0.762	-0.758
589063	7/15/2022 0:00	-0.773	-0.759
589064	7/16/2022 0:00	-0.761	-0.76
589065	7/17/2022 0:00	-0.746	-0.76
589066	7/18/2022 0:00	-0.756	-0.761
589067	7/19/2022 0:00	-0.759	-0.761
589068	7/20/2022 0:00	-0.76	-0.761
589069	7/21/2022 0:00	-0.769	-0.761
589070	7/22/2022 0:00	-0.751	-0.761
589071	7/23/2022 0:00	-0.769	-0.761
589072	7/24/2022 0:00	-0.755	-0.76
589073	7/25/2022 0:00	-0.761	-0.76

589074	7/26/2022 0:00	-0.753	-0.76
589075	7/27/2022 0:00	-0.763	-0.76
589076	7/28/2022 0:00	-0.757	-0.759
589077	7/29/2022 0:00	-0.78	-0.759
589078	7/30/2022 0:00	-0.779	-0.759
589079	7/31/2022 0:00	-0.755	-0.759
589080	8/1/2022 0:00	-0.745	-0.759
589081	8/2/2022 0:00	-0.767	-0.759
589082	8/3/2022 0:00	-0.758	-0.759
589083	8/4/2022 0:00	-0.753	-0.759
589084	8/5/2022 0:00	-0.77	-0.759
589085	8/6/2022 0:00	-0.756	-0.758
589086	8/7/2022 0:00	-0.754	-0.758
589087	8/8/2022 0:00	-0.737	-0.758
589088	8/9/2022 0:00	-0.758	-0.758
589089	8/10/2022 0:00	-0.754	-0.758
589090	8/11/2022 0:00	-0.763	-0.758
589091	8/12/2022 0:00	-0.745	-0.757
589092	8/13/2022 0:00	-0.772	-0.756
589093	8/14/2022 0:00	-0.763	-0.754
589094	8/15/2022 0:00	-0.759	-0.753
589095	8/16/2022 0:00	-0.748	-0.753
589096	8/17/2022 0:00	-0.754	-0.753
589097	8/18/2022 0:00	-0.758	-0.752
589098	8/19/2022 0:00	-0.761	-0.75
589099	8/20/2022 0:00	-0.752	-0.75
589100	8/21/2022 0:00	-0.753	-0.748
589101	8/22/2022 0:00	-0.746	-0.747
589102	8/23/2022 0:00	-0.758	-0.747
589103	8/24/2022 0:00	-0.76	-0.747
589104	8/25/2022 0:00	-0.758	-0.746
589105	8/26/2022 0:00	-0.747	-0.745
589106	8/27/2022 0:00	-0.741	-0.744
589107	8/28/2022 0:00	-0.718	-0.744
589108	8/29/2022 0:00	-0.731	-0.742
589109	8/30/2022 0:00	-0.753	-0.741
589110	8/31/2022 0:00	-0.743	-0.74
589111	9/1/2022 0:00	-0.741	-0.739
589112	9/2/2022 0:00	-0.733	-0.738
589113	9/3/2022 0:00	-0.72	-0.738
589114	9/4/2022 0:00	-0.738	-0.736
589115	9/5/2022 0:00	-0.713	-0.735
589116	9/6/2022 0:00	-0.73	-0.735
589117	9/7/2022 0:00	-0.736	-0.734

589118	9/8/2022 0:00	-0.746	-0.733
589119	9/9/2022 0:00	-0.721	-0.732
589120	9/10/2022 0:00	-0.74	-0.732
589121	9/11/2022 0:00	-0.728	-0.731
589122	9/12/2022 0:00	-0.728	-0.731
589123	9/13/2022 0:00	-0.722	-0.731
589124	9/14/2022 0:00	-0.721	-0.731
589125	9/15/2022 0:00	-0.741	-0.73
589126	9/16/2022 0:00	-0.723	-0.73
589127	9/17/2022 0:00	-0.731	-0.73
589128	9/18/2022 0:00	-0.736	-0.73
589129	9/19/2022 0:00	-0.703	-0.731
589130	9/20/2022 0:00	-0.732	-0.731
589131	9/21/2022 0:00	-0.745	-0.732
589132	9/22/2022 0:00	-0.73	-0.733
589133	9/23/2022 0:00	-0.729	-0.733
589134	9/24/2022 0:00	-0.726	-0.733
589135	9/25/2022 0:00	-0.745	-0.734
589136	9/26/2022 0:00	-0.731	-0.733
589137	9/27/2022 0:00	-0.738	-0.733
589138	9/28/2022 0:00	-0.72	-0.733
589139	9/29/2022 0:00	-0.731	-0.733
589140	9/30/2022 0:00	-0.705	-0.733
589141	10/1/2022 0:00	-0.741	-0.733
589142	10/2/2022 0:00	-0.736	-0.733
589143	10/3/2022 0:00	-0.746	-0.734
589144	10/4/2022 0:00	-0.75	-0.735
589145	10/5/2022 0:00	-0.735	-0.736
589146	10/6/2022 0:00	-0.755	-0.735
589147	10/7/2022 0:00	-0.746	-0.734
589148	10/8/2022 0:00	-0.737	-0.733
589149	10/9/2022 0:00	-0.751	-0.734
589150	10/10/2022 0:00	-0.741	-0.734
589151	10/11/2022 0:00	-0.719	-0.734
589152	10/12/2022 0:00	-0.717	-0.734
589153	10/13/2022 0:00	-0.731	-0.734
589154	10/14/2022 0:00	-0.728	-0.735
589155	10/15/2022 0:00	-0.725	-0.734
589156	10/16/2022 0:00	-0.728	-0.735
589157	10/17/2022 0:00	-0.743	-0.735
589158	10/18/2022 0:00	-0.75	-0.736
589159	10/19/2022 0:00	-0.765	-0.736
589160	10/20/2022 0:00	-0.723	-0.735
589161	10/21/2022 0:00	-0.722	-0.736

589162	10/22/2022 0:00	-0.71	-0.736
589163	10/23/2022 0:00	-0.714	-0.736
589164	10/24/2022 0:00	-0.731	-0.737
589165	10/25/2022 0:00	-0.734	-0.737
589166	10/26/2022 0:00	-0.761	-0.738
589167	10/27/2022 0:00	-0.727	-0.739
589168	10/28/2022 0:00	-0.733	-0.74
589169	10/29/2022 0:00	-0.738	-0.741
589170	10/30/2022 0:00	-0.721	-0.742
589171	10/31/2022 0:00	-0.733	-0.744
589172	11/1/2022 0:00	-0.749	-0.745
589173	11/2/2022 0:00	-0.744	-0.746
589174	11/3/2022 0:00	-0.741	-0.747
589175	11/4/2022 0:00	-0.746	-0.747
589176	11/5/2022 0:00	-0.743	-0.748
589177	11/6/2022 0:00	-0.755	-0.749
589178	11/7/2022 0:00	-0.746	-0.75
589179	11/8/2022 0:00	-0.775	-0.751
589180	11/9/2022 0:00	-0.762	-0.753
589181	11/10/2022 0:00	-0.753	-0.754
589182	11/11/2022 0:00	-0.75	-0.753
589183	11/12/2022 0:00	-0.76	-0.753
589184	11/13/2022 0:00	-0.763	-0.753
589185	11/14/2022 0:00	-0.767	-0.753
589186	11/15/2022 0:00	-0.779	-0.753
589187	11/16/2022 0:00	-0.768	-0.753
589188	11/17/2022 0:00	-0.774	-0.753
589189	11/18/2022 0:00	-0.761	-0.753
589190	11/19/2022 0:00	-0.768	-0.754
589191	11/20/2022 0:00	-0.758	-0.753
589192	11/21/2022 0:00	-0.745	-0.754
589193	11/22/2022 0:00	-0.746	-0.754
589194	11/23/2022 0:00	-0.759	-0.754
589195	11/24/2022 0:00	-0.779	-0.754
589196	11/25/2022 0:00	-0.763	-0.754
589197	11/26/2022 0:00	-0.735	-0.754
589198	11/27/2022 0:00	-0.737	-0.754
589199	11/28/2022 0:00	-0.73	-0.755
589200	11/29/2022 0:00	-0.736	-0.755
589201	11/30/2022 0:00	-0.729	-0.755
589202	12/1/2022 0:00	-0.726	-0.755
589203	12/2/2022 0:00	-0.741	-0.755
589204	12/3/2022 0:00	-0.751	-0.755
589205	12/4/2022 0:00	-0.766	-0.755

589206	12/5/2022 0:00	-0.733	-0.755
589207	12/6/2022 0:00	-0.758	-0.755
589208	12/7/2022 0:00	-0.752	-0.756
589209	12/8/2022 0:00	-0.756	-0.757
589210	12/9/2022 0:00	-0.764	-0.757
589211	12/10/2022 0:00	-0.762	-0.757
589212	4/30/2023 0:00	-0.754	-0.758
589213	5/1/2023 0:00	-0.757	-0.758
589214	5/2/2023 0:00	-0.778	-0.759
589215	5/3/2023 0:00	-0.786 null	
589216	5/4/2023 0:00	-0.76 null	
589217	5/5/2023 0:00	-0.765 null	
589218	5/6/2023 0:00	-0.767 null	
589219	5/7/2023 0:00	-0.768 null	
589220	5/8/2023 0:00	-0.773 null	
589221	5/9/2023 0:00	-0.766 null	
589222	5/10/2023 0:00	-0.765 null	
589223	5/11/2023 0:00	-0.767 null	
589224	5/12/2023 0:00	-0.777 null	
589225	5/13/2023 0:00	-0.767 null	
589226	5/14/2023 0:00	-0.787 null	
589227	5/15/2023 0:00	-0.772 null	
589228	5/16/2023 0:00	-0.756 null	
589229	5/17/2023 0:00	-0.754 null	

APPENDIX G

Casmalia Stream Gage Data

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USGS Home
 Contact USGS
 Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category: Geographic Area:

Click to hide News Bulletins

- Explore the *NEW* [USGS National Water Dashboard](#) interactive map to access real-time water data from over 13,500 stations nationwide.
- [Full News](#)

USGS 11136100 SAN ANTONIO C NR CASMALIA CA

PROVISIONAL DATA SUBJECT TO REVISION

Available data for this site

Click to hidestation-specific text

This station managed by the Santa Maria Field Office.

Available Parameters

Period of Record

- | | |
|---|-----------------------|
| <input type="checkbox"/> All 3 Available Parameters for this site | |
| <input type="checkbox"/> 00010 Temperature, water(Max.,Min.) | 1981-12-08 1983-10-04 |
| <input checked="" type="checkbox"/> 00060 Discharge(Mean) | 1955-10-01 2024-01-30 |
| <input type="checkbox"/> 00400 pH(Max.,Min.) | 1981-12-08 1983-10-04 |

Output format

- Graph
- Graph w/ stats
- Graph w/ meas
- Graph w/ (up to 3) parms
- Table
- Tab-separated

Days (364) [Summary of all available data for this site](#)

[Instantaneous-data availability statement](#)

-- or --

Begin date

End date

Daily Mean Discharge, cubic feet per second

DATE	Oct 2022	Nov 2022	Dec 2022	Jan 2023	Feb 2023	Mar 2023	Apr 2023	May 2023	Jun 2023	Jul 2023	Aug 2023	Sep 2023
1	0.35 ^A	0.27 ^P	0.27 ^P	20.3 ^P	4.71 ^P	61.8 ^P	28.4 ^P	1.60 ^P	4.47 ^P	---	0.60 ^P	---
2	0.32 ^A	0.26 ^P	0.44 ^P	7.07 ^P	4.36 ^P	44.1 ^P	17.2 ^P	1.58 ^P	2.59 ^P	0.77 ^P	0.50 ^P	---
3	0.34 ^A	0.22 ^P	0.52 ^P	3.05 ^P	4.20 ^P	29.4 ^P	11.4 ^P	1.56 ^P	2.85 ^P	0.68 ^P	0.50 ^P	---
4	0.37 ^A	0.19 ^P	0.78 ^P	1.64 ^P	3.96 ^P	20.4 ^P	8.07 ^P	1.85 ^P	2.90 ^P	0.74 ^P	0.58 ^P	---

5	0.34 ^A	0.20 ^P	0.50 ^P	38.6 ^P	4.29 ^P	15.9 ^P	6.16 ^P	1.64 ^P	2.62 ^P	0.79 ^P	0.54 ^P	---
6	0.37 ^A	0.18 ^P	0.35 ^P	12.5 ^P	3.76 ^P	12.5 ^P	6.89 ^P	1.89 ^P	2.86 ^P	---	---	---
7	0.29 ^A	0.23 ^P	0.30 ^P	5.55 ^P	3.38 ^P	8.51 ^P	4.58 ^P	3.42 ^P	3.06 ^P	---	---	---
8	0.31 ^A	0.37 ^{P e}	0.30 ^P	3.60 ^P	3.28 ^P	5.63 ^P	3.66 ^P	1.86 ^P	2.35 ^P	0.77 ^P	0.49 ^P	0.41 ^P
9	0.34 ^A	0.45 ^{P e}	0.32 ^P	---	3.10 ^P	3.95 ^P	3.52 ^P	1.76 ^P	2.34 ^P	0.68 ^P	0.45 ^P	0.50 ^P
10	0.33 ^A	0.28 ^P	0.41 ^P	---	2.93 ^P	106 ^P	3.42 ^P	2.26 ^P	2.12 ^P	0.73 ^P	0.56 ^P	0.42 ^P
11	0.40 ^A	0.24 ^P	1.25 ^P	171 ^P	2.78 ^P	117 ^P	3.29 ^P	1.99 ^P	2.80 ^P	0.77 ^P	0.65 ^P	0.48 ^P
12	0.33 ^A	0.21 ^P	0.72 ^P	61.1 ^P	2.63 ^P	58.7 ^P	3.26 ^P	1.67 ^P	3.93 ^P	---	0.51 ^P	0.38 ^P
13	0.37 ^A	0.23 ^P	0.51 ^P	31.9 ^P	2.52 ^P	42.5 ^P	2.55 ^P	1.62 ^P	2.08 ^P	0.61 ^P	0.57 ^P	---
14	0.38 ^A	0.23 ^P	0.46 ^P	73.4 ^P	2.40 ^P	349 ^P	2.34 ^P	1.58 ^P	3.10 ^P	---	0.56 ^P	---
15	0.37 ^A	0.24 ^P	0.43 ^P	112 ^P	2.30 ^P	493 ^P	2.29 ^P	1.58 ^P	1.89 ^P	0.77 ^P	0.47 ^P	---
16	0.32 ^A	0.21 ^P	0.40 ^P	88.9 ^P	2.26 ^P	196 ^P	2.41 ^P	1.54 ^P	1.67 ^P	---	0.60 ^P	---
17	0.31 ^A	0.19 ^P	0.37 ^P	65.3 ^P	2.46 ^P	138 ^P	2.66 ^P	2.00 ^P	1.98 ^P	0.74 ^P	---	---
18	0.29 ^A	0.20 ^P	0.34 ^P	42.8 ^P	2.34 ^P	93.9 ^P	2.36 ^P	2.05 ^P	1.97 ^P	0.64 ^P	0.53 ^P	0.47 ^P
19	0.25 ^A	0.22 ^P	0.32 ^P	29.2 ^P	2.10 ^P	63.1 ^P	2.19 ^P	1.87 ^P	1.62 ^P	0.64 ^P	0.58 ^P	0.48 ^{P e}
20	0.21 ^A	0.21 ^P	0.30 ^P	20.9 ^P	2.07 ^P	52.5 ^P	2.40 ^P	2.10 ^P	1.38 ^P	0.63 ^P	0.58 ^P	0.54 ^{P e}
21	0.24 ^A	0.20 ^P	0.31 ^P	16.3 ^P	2.08 ^P	131 ^P	2.16 ^P	2.82 ^P	1.88 ^P	0.63 ^P	0.46 ^P	0.54 ^{P e}
22	0.30 ^A	0.21 ^P	0.30 ^P	13.6 ^P	2.06 ^P	201 ^P	2.17 ^P	3.26 ^P	1.29 ^P	---	0.42 ^P	0.53 ^{P e}
23	0.29 ^A	0.21 ^P	0.29 ^P	13.1 ^P	2.10 ^P	217 ^P	2.24 ^P	2.26 ^P	---	0.58 ^P	0.33 ^P	0.53 ^{P e}
24	0.21 ^P	0.19 ^P	0.28 ^P	10.3 ^P	153 ^P	151 ^P	2.59 ^P	2.13 ^P	---	---	---	0.53 ^{P e}
25	0.26 ^P	0.18 ^P	0.26 ^P	8.80 ^P	694 ^P	111 ^P	2.14 ^P	2.18 ^P	0.80 ^P	---	0.62 ^P	0.53 ^{P e}
26	0.26 ^P	0.20 ^P	0.25 ^P	7.91 ^P	114 ^P	80.4 ^P	2.02 ^P	2.27 ^P	0.85 ^P	---	0.58 ^P	0.53 ^{P e}
27	0.25 ^P	0.23 ^P	0.97 ^P	7.37 ^P	86.6 ^P	53.2 ^P	1.81 ^P	2.19 ^P	0.72 ^P	---	---	0.53 ^{P e}
28	0.26 ^P	0.25 ^P	3.63 ^P	6.79 ^P	68.0 ^P	38.0 ^P	2.08 ^P	2.36 ^P	0.64 ^P	0.69 ^P	0.58 ^P	0.53 ^{P e}
29	0.29 ^P	0.24 ^P	4.78 ^P	6.18 ^P		87.6 ^P	2.09 ^P	2.36 ^P	---	0.67 ^P	0.37 ^P	0.53 ^{P e}
30	0.24 ^P	0.24 ^P	1.25 ^P	5.48 ^P		82.7 ^P	1.71 ^P	2.64 ^P	---	---	0.47 ^P	0.53 ^{P e}
31	0.27 ^P		1.01 ^P	5.06 ^P		50.7 ^P		3.33 ^P		---	0.42 ^P	
COUNT	31	30	31	29	28	31	30	31	26	18	26	18
MAX	0.40	0.45	4.78	171	694	493	28.4	3.42	4.47	0.79	0.65	0.54
MIN	0.21	0.18	0.25	1.64	2.06	3.95	1.71	1.54	0.64	0.58	0.33	0.38

Explanation

A	Approved for publication -- Processing and review completed.
P	Provisional data subject to revision.
e	Value has been estimated.

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