

County of Monterey

1441 Schilling Place
Cinnamon Room
Salinas, CA 93901



Meeting Agenda

Wednesday, November 1, 2023

8:30 AM

Water Resources Agency Basin Management Advisory Committee

*John Baillie. Chair
Deidre Sullivan
Matthew Simis
David Bunn
Kevin Piearcy
Marisela Cerda
Patrick Breen
Marc Kelley
Richard Ortiz*

To participate in this Basin Management Advisory Committee meeting through the following methods:

1. You may attend in person,

2. For ZOOM participation please join by computer audio at:

<https://montereycty.zoom.us/j/99621772720>

OR to participate by phone call any of these numbers below: +1 669 900 6833 US (San Jose)

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Enter this Meeting ID number: 996 2177 2720 PASSWORD: 478310 when prompted. Please note there is no Participant Code, you will just hit # again after the recording prompts you. You will be placed in the meeting as an attendee; when you are ready to make a public comment, if joined by computer audio, please Raise your Hand; and by phone, please push *9 on your keypad.

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(i.e. Basin Management Advisory Committee) and item number (i.e. Item No. 10). Every effort will be made to read your comment into the record, but some comments may not be read due to time limitations. Comments received after an agenda item will be made part of the record if received prior to the end of the meeting.

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9. The Chair and/or Secretary may set reasonable rules as needed to conduct the meeting in an orderly manner.

PARA PARTICIPAR EN LA REUNIÓN DEL COMITE DE ASESOR DE GESTION DE LA CUENCA A TRAVES DE LOS SIGUIENTES METODOS:

1. Podar asistir personalmente a la reunion; o,

2. El público puede observar la reunión ZOOM a través de computadora haciendo clic en el siguiente enlace: <https://montereycty.zoom.us/j/99621772720>

O el público puede escuchar a través del teléfono llamando al:

+1 669 900 6833 US (San Jose)

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simplemente presionará # nuevamente después de que la grabación lo solicite.

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Call to Order

Roll Call

Public Comment

Committee Member Comments

Consent Calendar

1. Approve the Minutes of the Basin Management Advisory Committee meeting held on October 4, 2023.

Attachments: [Draft BMAC Minutes October 4, 2023](#)

Staff Reports

2. Salinas Valley Water Conditions: Fourth Quarter of Water Year 2022-2023 (Staff Presenting; Guillermo Diaz-Moreno)

Attachments: [Fourth Quarter Water Year 2022-2023 PPT](#)

Calendar

3. Consider future agenda items and set next meeting date.

Adjournment



County of Monterey

Item No.1

Board Report

Board of Supervisors
Chambers
168 W. Alisal St., 1st Floor
Salinas, CA 93901

Legistar File Number: WRABMAC 23-048

November 01, 2023

Introduced: 10/25/2023

Current Status: Draft

Version: 1

Matter Type: WRA BMAC Item

Approve the Minutes of the Basin Management Advisory Committee meeting held on October 4, 2023.

County of Monterey

1441 Schilling Place
Cinnamon Room
Salinas, CA 93901



Meeting Minutes

Wednesday, October 4, 2023

8:30 AM

Water Resources Agency Basin Management Advisory Committee

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9. El Presidente y / o Secretario pueden establecer reglas razonables según sea necesario para llevar a cabo la reunión de manera ordenada.

Call to Order

The meeting was called to order at 8:33 a.m.

Roll Call

Present: John Baillie, Deidre Sullivan (arrived at 8:39 a.m.), Matthew Simis (arrived at 8:34 a.m.), David Bunn, Marisela Cerda, Marc Kelley, Richard Ortiz
Absent: Kevin Piearcy, Patrick Breen

Public Comment

None

Committee Member Comments

None

Consent Calendar

Upon Motion by Richard Ortiz, Second by Matthew Simis the Committee approved the consent calendar of the Basin Management Advisory Committee meeting.

Ayes: John Baillie, Deidre Sullivan, Matthew Simis, David Bunn, Marisela Cerda, Marc Kelley, Richard Ortiz
Absent: Kevin Piearcy, Patrick Breen,
Abstained: None

1. Approve the Minutes of the Basin Management Advisory Committee meeting held on August 2, 2023.

Attachments: [Draft BMAC Minutes August 2, 2023](#)

Staff Reports

2. Update on 2023 Salinas River Series Stream Flow Measurement Event [Staff Presenting; Guillermo Diaz-Moreno]

Attachments: [River Series 2023](#)

Public Comment: Nancy Isakson

Committee Member Comment: John Baillie, Matthew Simis, David Bunn, Marc Kelley

3. Review of GEMS Extraction Data for CSIP Supplemental Wells: Annual Extractions 1998-2022 and Monthly Extractions 2019-2022 [Staff Presenting; Tamara Voss]

Attachments: [CSIP Extraction Data PPT](#)

Public Comment: Bill Lipe, Nancy Isakson

Committee Member Comment: Matthew Simis, David Bunn, Marc Kelley

Calendar

4. Consider future agenda items and set next meeting date.

Adjournment

The meeting adjourned at 9:35 a.m.



County of Monterey

Item No.2

Board Report

Board of Supervisors
Chambers
168 W. Alisal St., 1st Floor
Salinas, CA 93901

Legistar File Number: WRABMAC 23-047

November 01, 2023

Introduced: 10/24/2023

Current Status: Draft

Version: 1

Matter Type: WRA BMAC Item

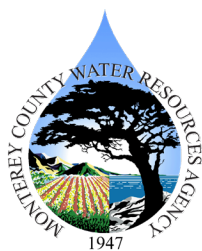
Salinas Valley Water Conditions: Fourth Quarter of Water Year 2022-2023 (Staff Presenting;
Guillermo Diaz-Moreno)

Salinas Valley Water Conditions: Fourth Quarter of Water Year 2022-2023

October 2023

Monterey County Water Resources Agency





MONTEREY COUNTY WATER RESOURCES AGENCY

Salinas Valley Water Conditions

Quarterly Update for Fourth Quarter of Water Year 2022-2023

October 2023

Prepared by Riley Clark, Guillermo Diaz-Moreno, and Tamara Voss

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Introduction

This report covers the July through September 2023, which is the fourth quarter of Water Year 2022-2023 (WY23). It provides a brief overview and discussion of hydrologic conditions in the Salinas Valley including precipitation, reservoir storage, streamflow, and groundwater level trends (Figure 1).

Data for the fourth quarter of Water Year 2022-2023 indicate normal levels of precipitation and reservoir storage is higher than in September 2022 at both Nacimiento and San Antonio Reservoirs. Over the fourth quarter of WY23, groundwater elevations decreased across all monitored subareas and aquifers, however, groundwater elevations are higher in all monitored subareas and aquifers than they were one year ago.

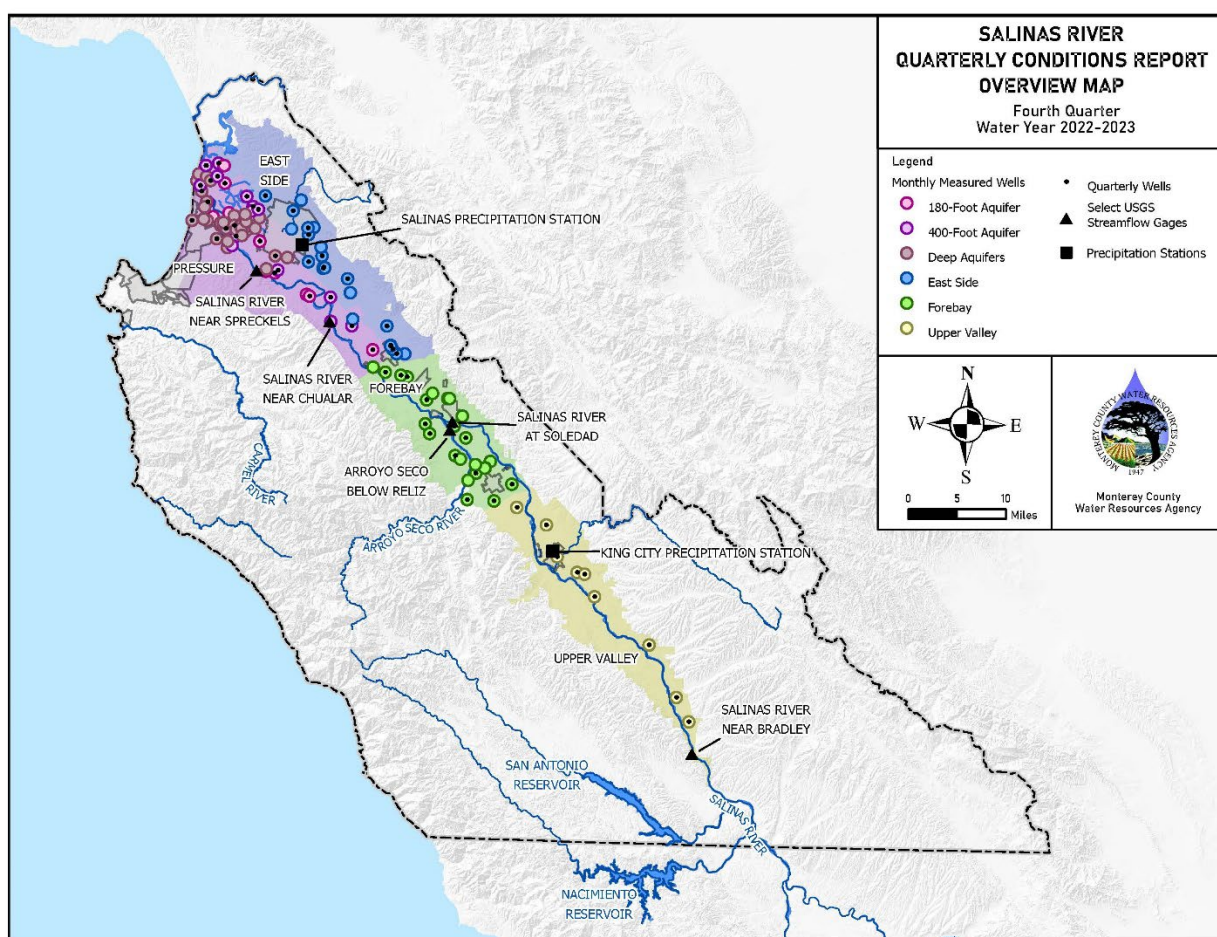


Figure 1: Geographic extent of the area covered by this report and supporting data sources.

Precipitation

Preliminary National Weather Service rainfall data indicates that the fourth quarter of WY23 brought identical to normal rainfall to Salinas and below normal rainfall to King City. Totals for the quarter were 0.09 inches at the Salinas Airport (100% of normal rainfall of 0.09 inches for the quarter) and 0.02 inches in King City (25% of normal rainfall of 0.08 inches for the quarter).

Figure 2 and Figure 3 show monthly and cumulative precipitation data for the current and a “normal” water year, based on long-term monthly precipitation averages, for the Salinas Airport and King City sites, respectively. Included below each graph is a table showing the numeric values for precipitation as well as percent of “normal” precipitation. For the purposes of these graphs, a “normal” water year is the average precipitation over the most recent 30-year period ending in a decade. Currently, the period from 1991 to 2020 is used for this calculation.

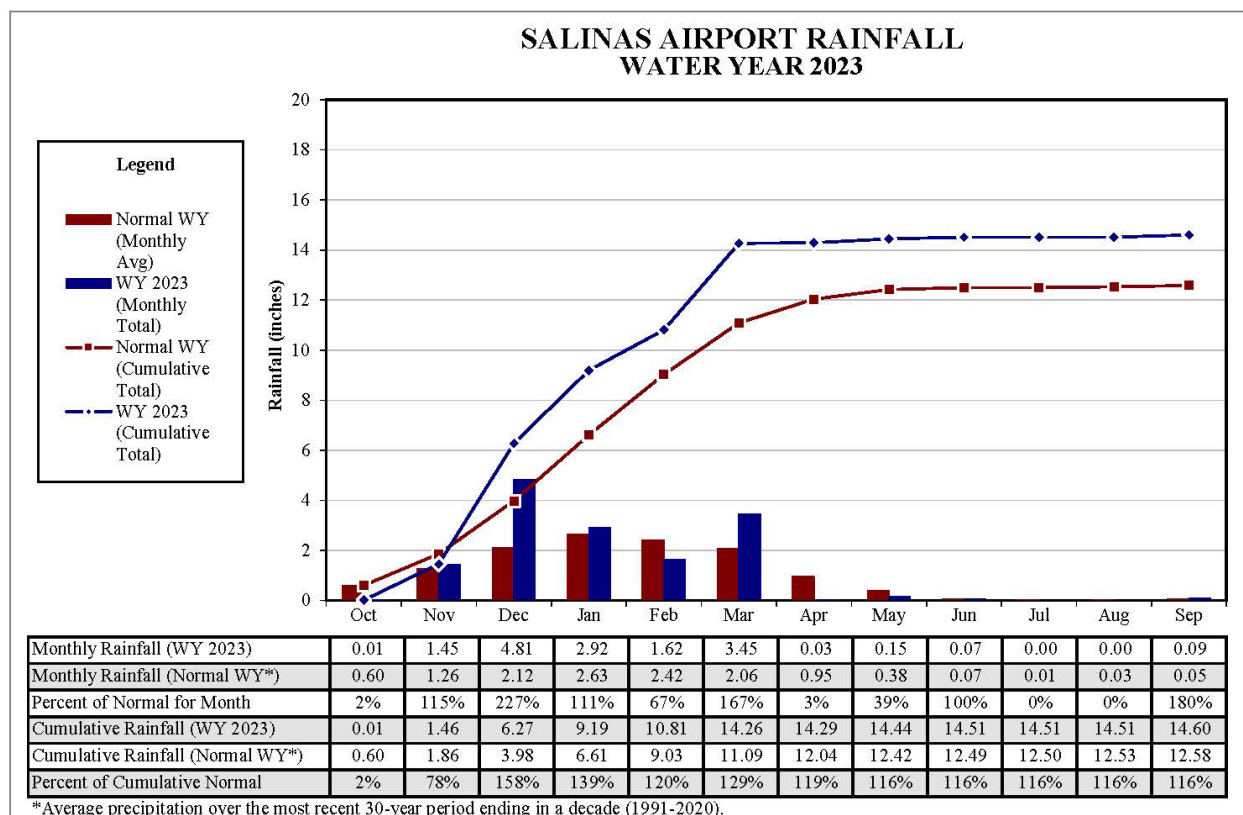


Figure 2: Salinas Airport Rainfall for Water Year 2023

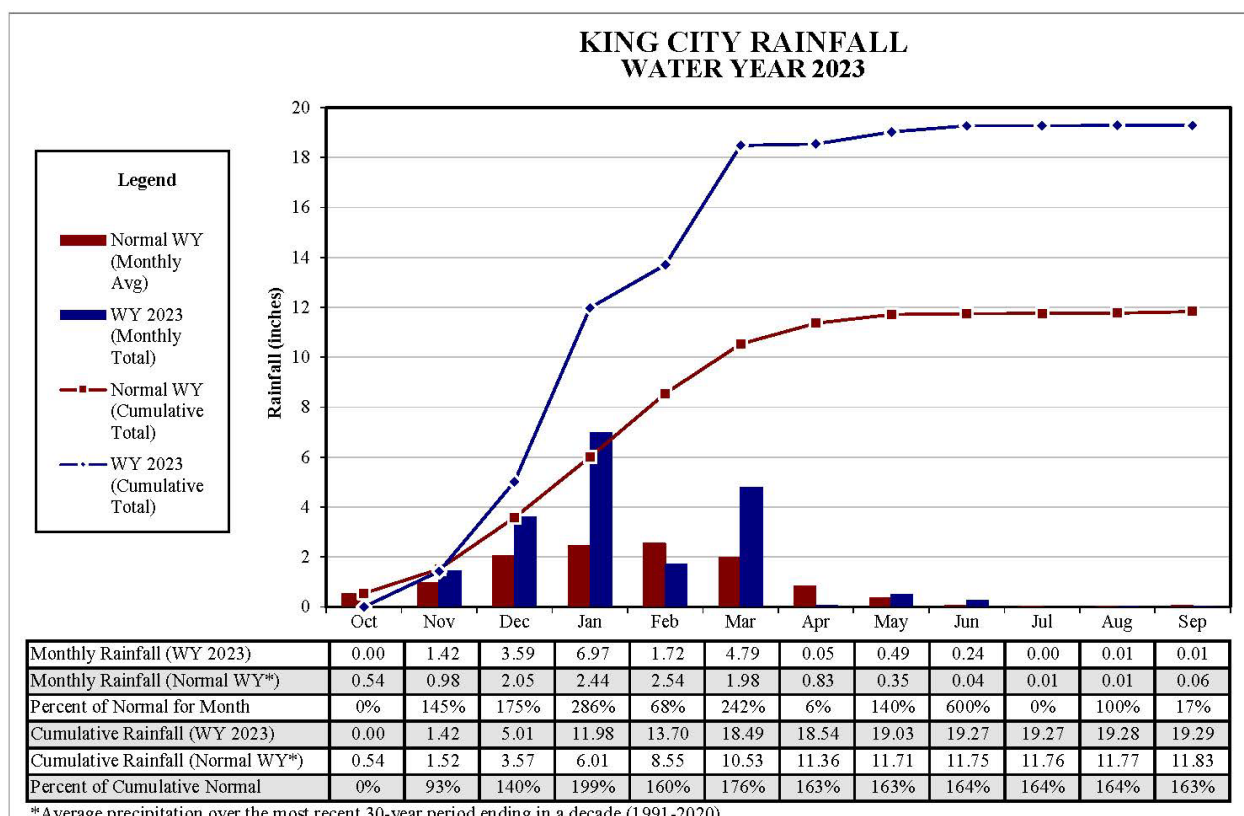


Figure 3: King City Rainfall for Water Year 2023

Reservoir Storage

At the end of the fourth quarter of Water Year 2023, storage at Nacimiento Reservoir was 236,200 acre-feet, which is 165,587 acre-feet higher than in September 2022. Storage in San Antonio Reservoir on September 30, 2023 was 219,500 acre-feet, which is 187,450 acre-feet higher than at the same time in September 2022.

Reservoir	September 30, 2023 (WY23) Storage in acre-feet	September 30, 2022 (WY22) Storage in acre-feet	Difference in acre-feet
Nacimiento	236,200	70,613	165,587
San Antonio	219,550	32,100	187,450

Graphs showing daily reservoir storage for the last five water years along with 30-year average daily storage for comparison are included as Figure 4 and Figure 5.

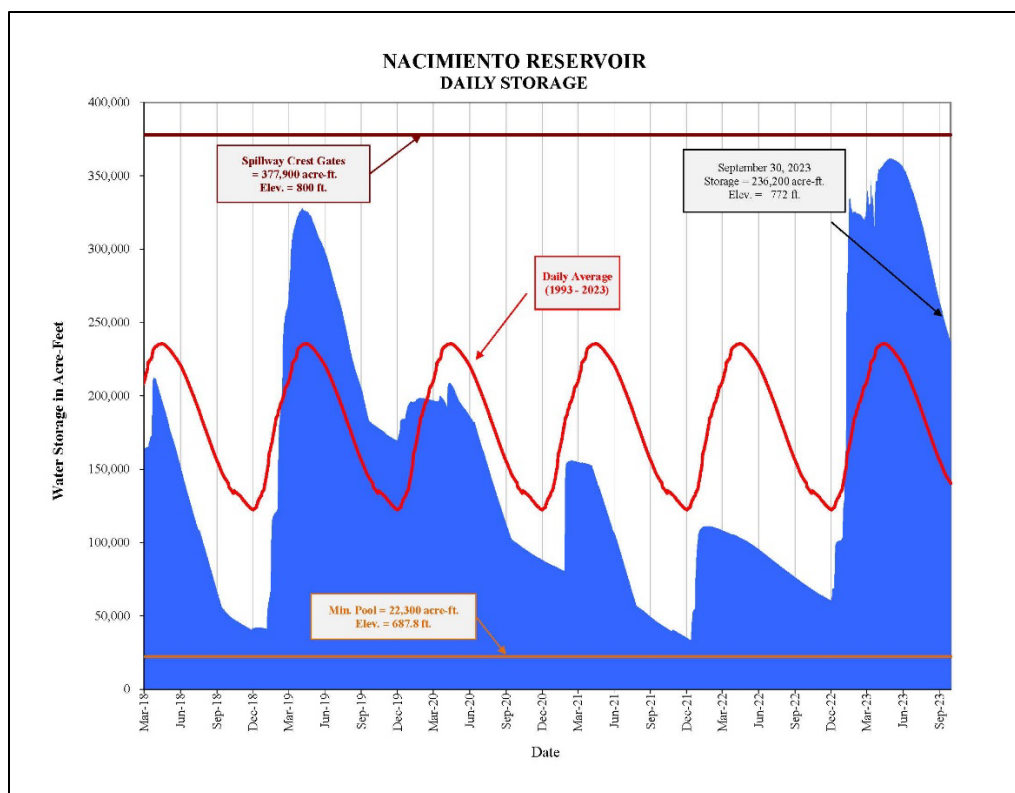


Figure 4: Nacimiento Reservoir Storage

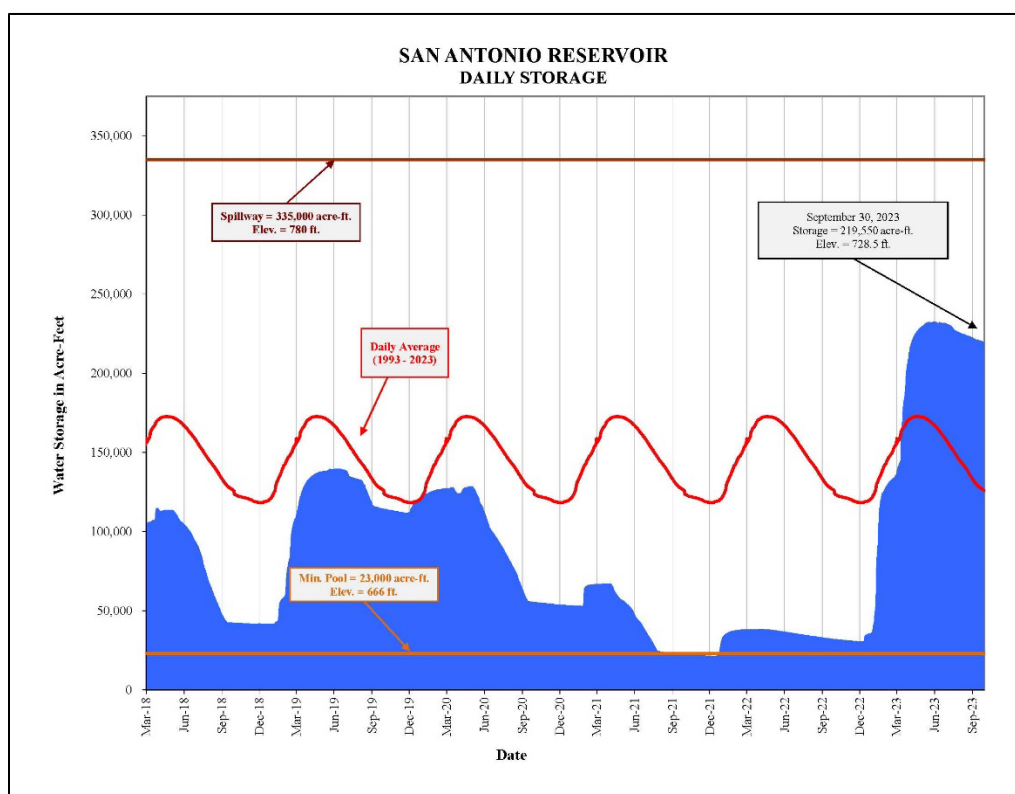


Figure 5: San Antonio Reservoir Storage

Streamflow

The Salinas River is predominately a losing stream meaning streamflow moves from the streambed into the underlying aquifers. The U.S. Geological Survey maintains several streamflow gages throughout the Salinas River watershed that continuously measure discharge or flow in the river (Figure 1). Figure 6 shows mean daily flow, in cubic feet per second, from select gages on the Salinas River and Arroyo Seco for the last five years (WY 2019-2023) and the current water year (WY 2023).

Streamflow recorded during the fourth quarter of WY 2023 was predominantly the result of conservation releases being made from the reservoirs that started in June, as the natural flows from the wet January and March rain events have passed through the system.

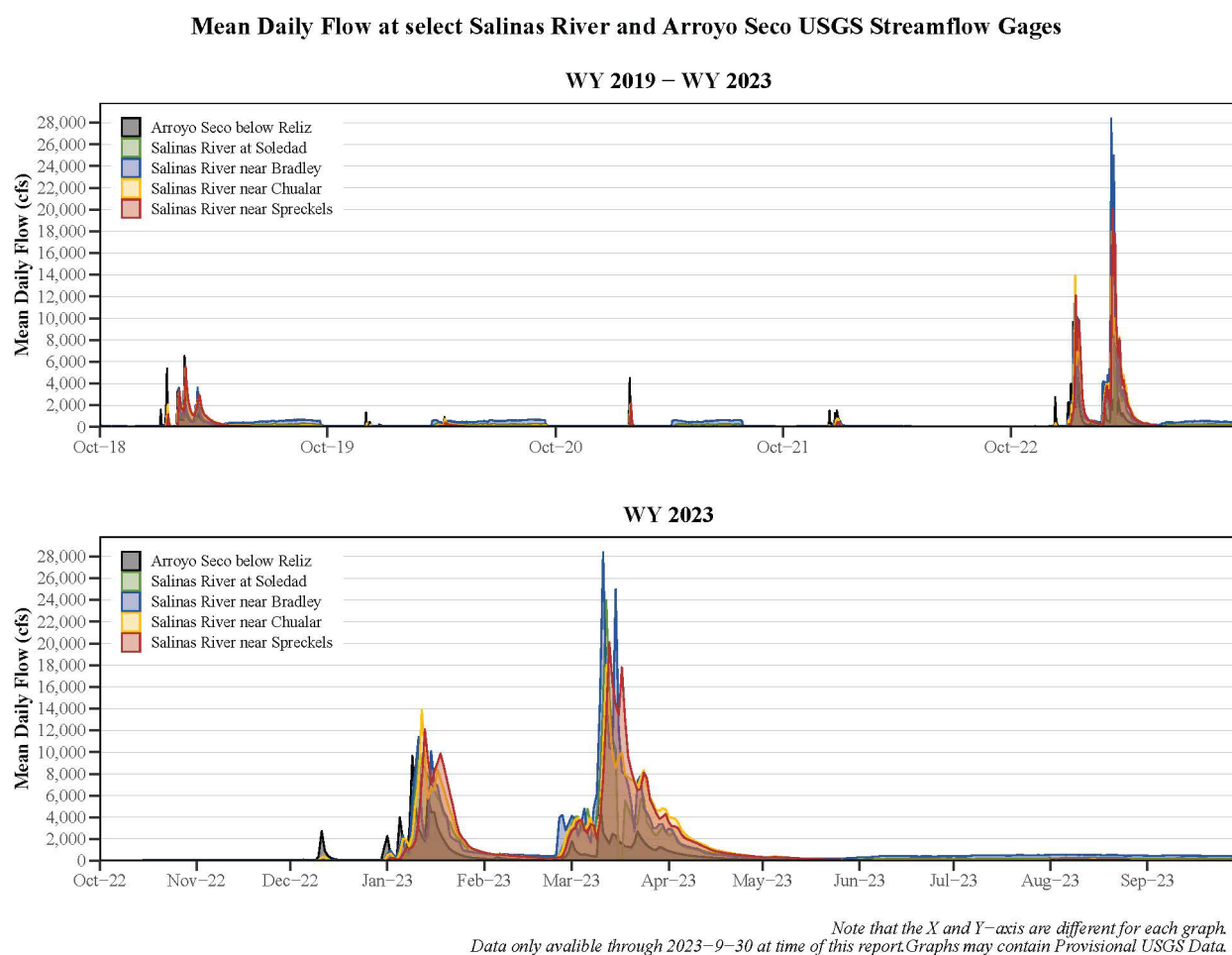


Figure 6: Mean Daily Flow at Selected Stream Gages

Groundwater Elevations

Groundwater elevation data provides insight into how an aquifer or subarea responds to hydrologic conditions over time, such as changes in precipitation and reservoir releases. A one-year comparison can show the short-term effects of a single wet or dry year while a long-term comparison will help provide information on general trends in groundwater storage and demonstrate effects that occur on a longer time scale as surface hydrology interacts with the underlying geology. Subareas or aquifers will respond differently to these hydrologic conditions. For example, groundwater elevations in shallower aquifers may respond more quickly to a wet season while aquifers that are confined, deeper, or more depleted may take longer to show a response to hydrologic conditions.

More than 130 wells are measured monthly throughout the Salinas Valley to monitor seasonal groundwater elevation fluctuations. Data from approximately 50 of these wells are used in the preparation of this report (Figure 1). The measurements are grouped by hydrologic subarea, averaged, and a single value for the wells within each subarea is graphed to compare current groundwater elevations (WY23) with selected past conditions. Graphs for individual subareas, showing the current year's water level conditions, last year's conditions (WY22) and dry conditions (WY15) are found in the following sections.

For comparison to long term conditions, a curve showing monthly water levels averaged over the most recent 30 years (WY1993-WY2022) is included on each graph. The Deep Aquifers graph (Figure 9) does not include a 30-year average because there is not an adequate period of record to make that comparison. Table 1 provides a summary of the groundwater elevation trends for September 2023, with additional detail provided on Figures 7-12.

Table 1: Groundwater Elevation Trends Summary for September 2023				
Subarea/Aquifer	September 2023 Groundwater Elevation (ft-msl)	Change during Fourth Quarter	One Year Change	Difference from 30-Year Average Elevation
180-Foot Aquifer	3 feet	Down 4 feet	Up 11 feet	Up 2 feet
400-Foot Aquifer	-8 feet	Down 1 foot	Up 15 feet	Up 6 feet
Deep Aquifers	-34 feet	Down 6 feet	Up 4 feet	Not applicable
East Side	-27 feet	Down 3 feet	Up 19 feet	Down 3 feet
Forebay	161 feet	Down 4 feet	Up 17 feet	Up 6 feet
Upper Valley	315 feet	Down 2 feet	Up 9 feet	Up 3 feet

180-Foot Aquifer

Over the last quarter, groundwater elevation levels decreased four feet in the 180-Foot Aquifer (Figure 7). Groundwater elevations have increased eleven feet compared to September 2022 and are two feet above the 30-year average.

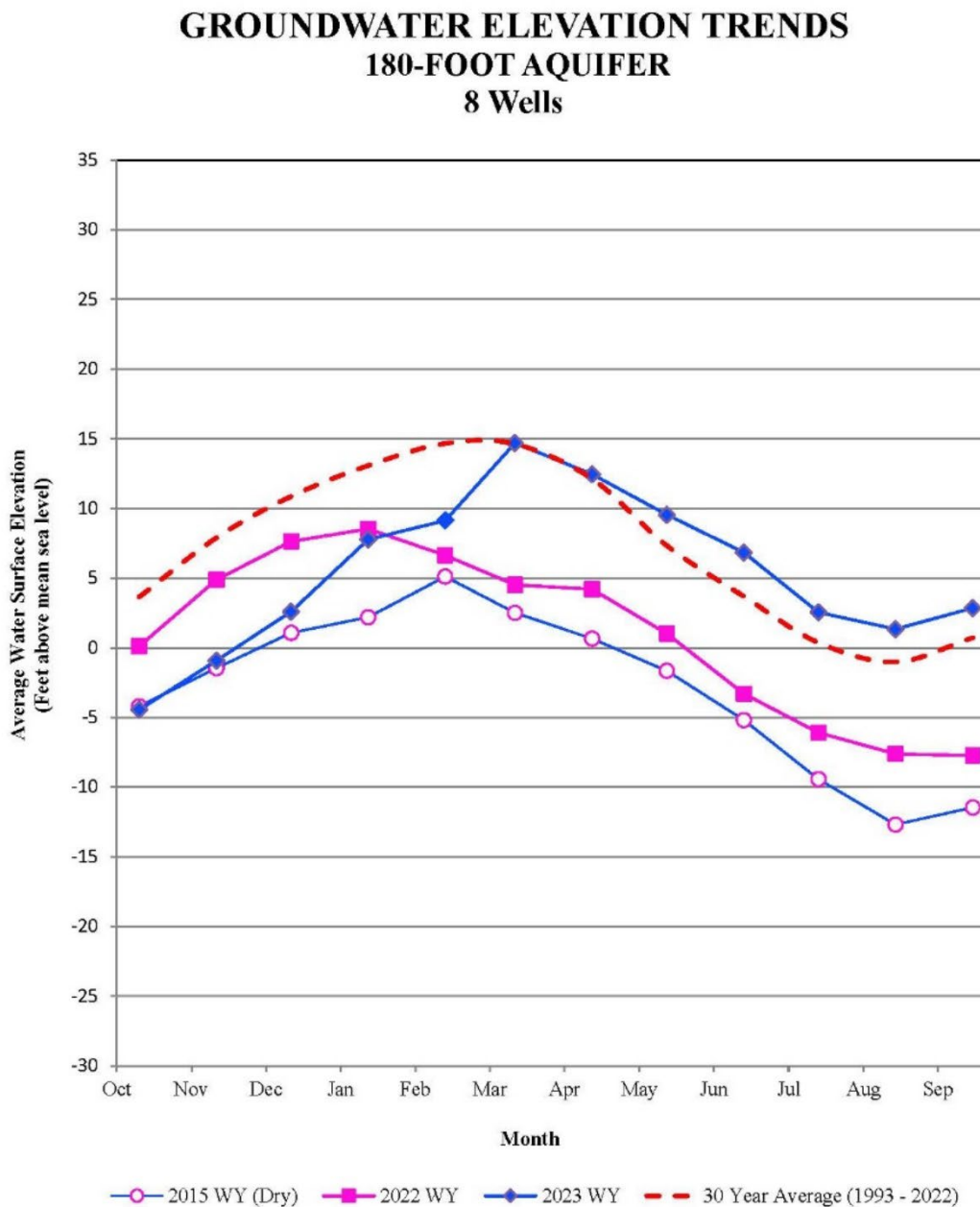


Figure 7: Groundwater Elevation Trends for the 180-Foot Aquifer

400-Foot Aquifer

Over the last quarter, groundwater elevation levels decreased one foot in the 400- Foot Aquifer (Figure 8). Groundwater levels are up fifteen feet compared to September 2022 and up six feet from the 30-year average.

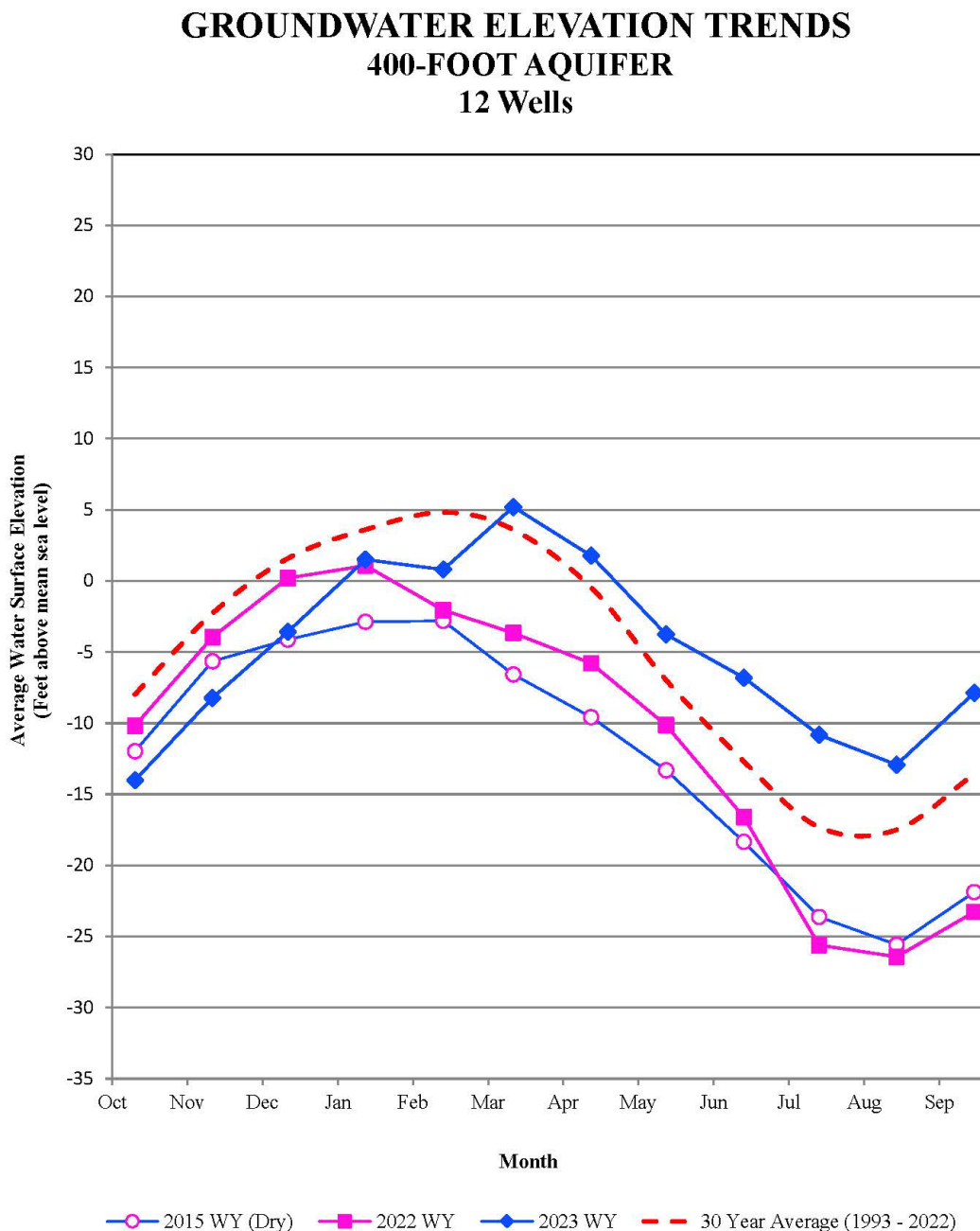


Figure 8: Groundwater Elevation Trends in the 400-Foot Aquifer

Deep Aquifers

Over the last quarter, groundwater elevations decreased six feet in the Deep Aquifers (Figure 9). Groundwater elevation levels are up four feet compared to September 2022. Given the shorter period of record in the wells used for the Deep Aquifers, a 30-year average cannot be calculated. To represent the long-term trends in the Deep Aquifers, Figure 9 also includes a 30-year time series graph with groundwater elevation level data from the eleven wells to show the seasonal and long-term trends in these wells.

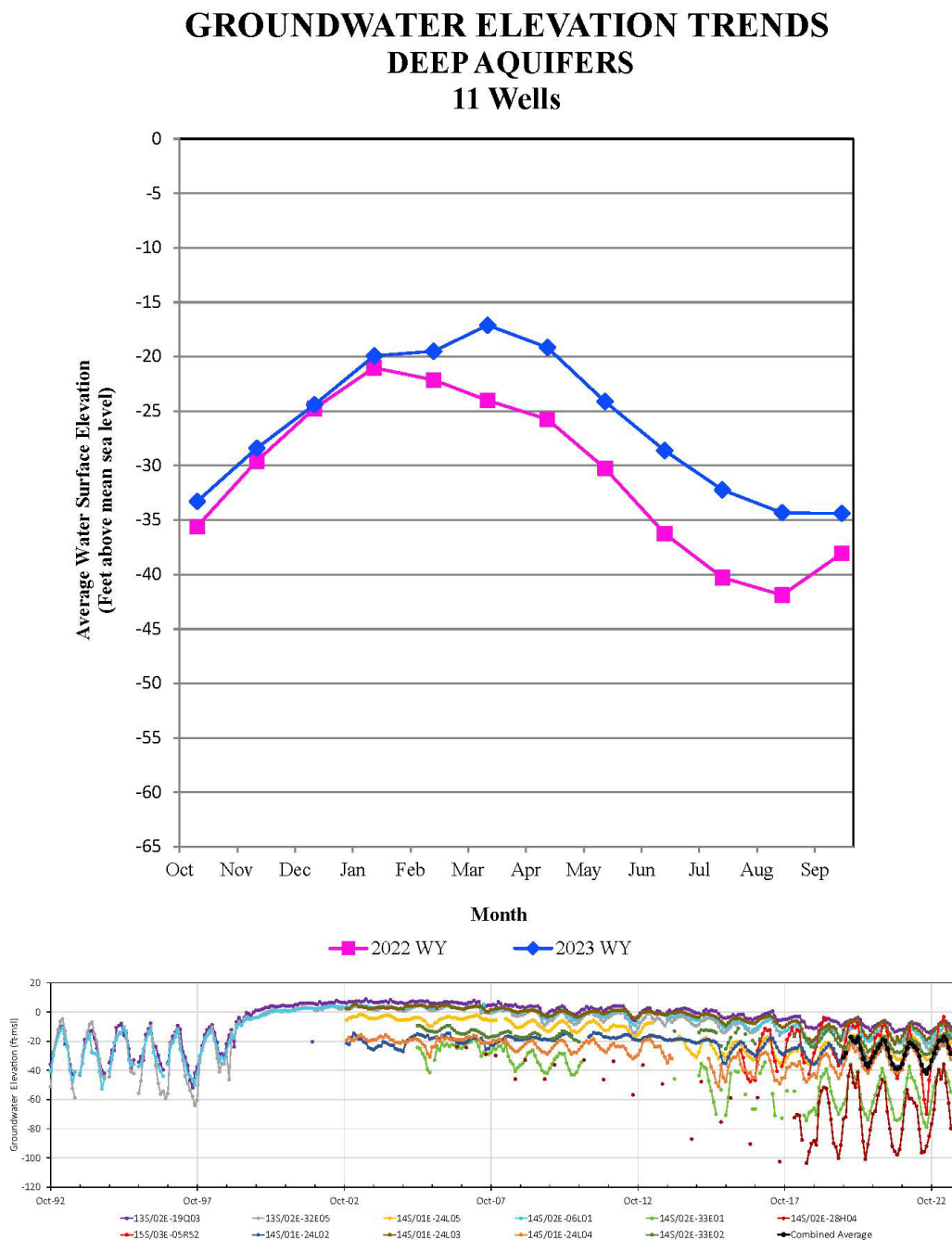


Figure 9: Groundwater Elevation Trends in the Deep Aquifers

East Side Subarea

East Side groundwater elevation levels decreased two feet over the last quarter (Figure 10). Groundwater elevation levels are up nineteen feet from September 2022 levels and down three feet from the 30-year average.

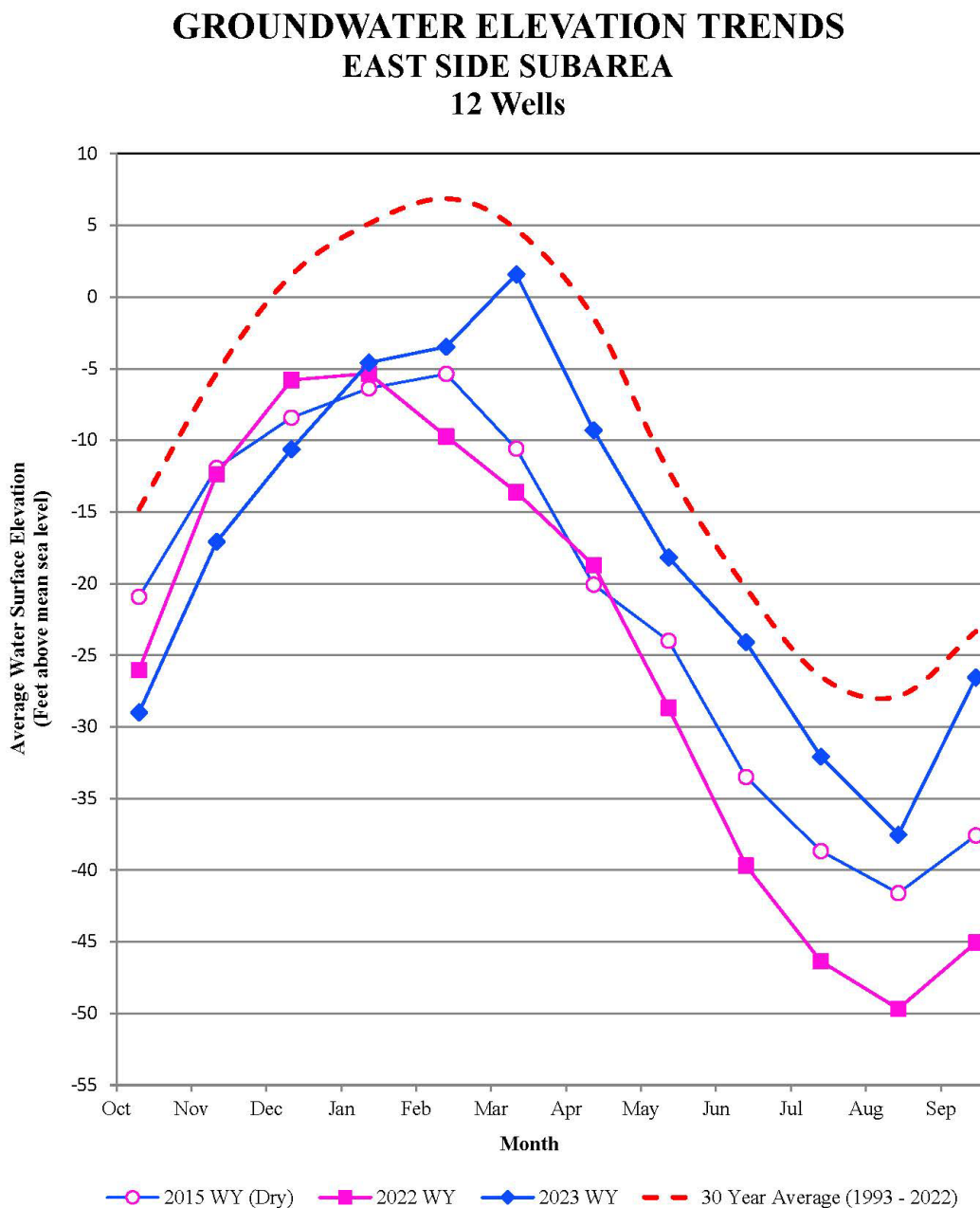


Figure 10: Groundwater Elevation Trends in the East Side Subarea

Forebay Subarea

Over the last quarter, groundwater elevation levels have decreased four feet in the Forebay (Figure 11). Groundwater elevation levels are up seventeen feet from September 2022 levels and are up six feet from the 30-year average.

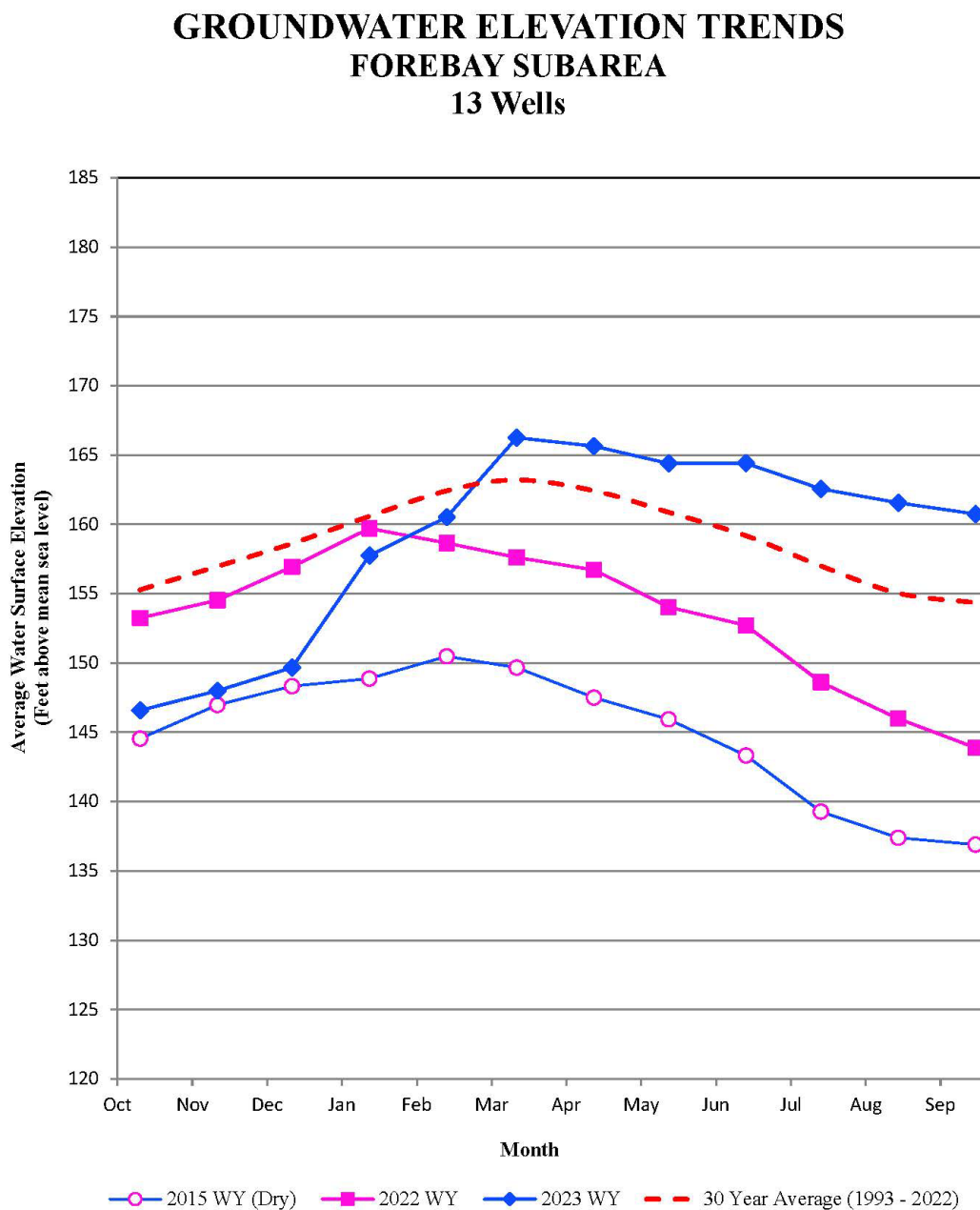


Figure 11: Groundwater Elevation Trends in the Forebay Subarea

Upper Valley Subarea

Upper Valley groundwater elevation levels have decreased two feet over the last quarter (Figure 12). Groundwater elevation levels are up nine feet from September 2022 levels and up three feet from the 30-year average.

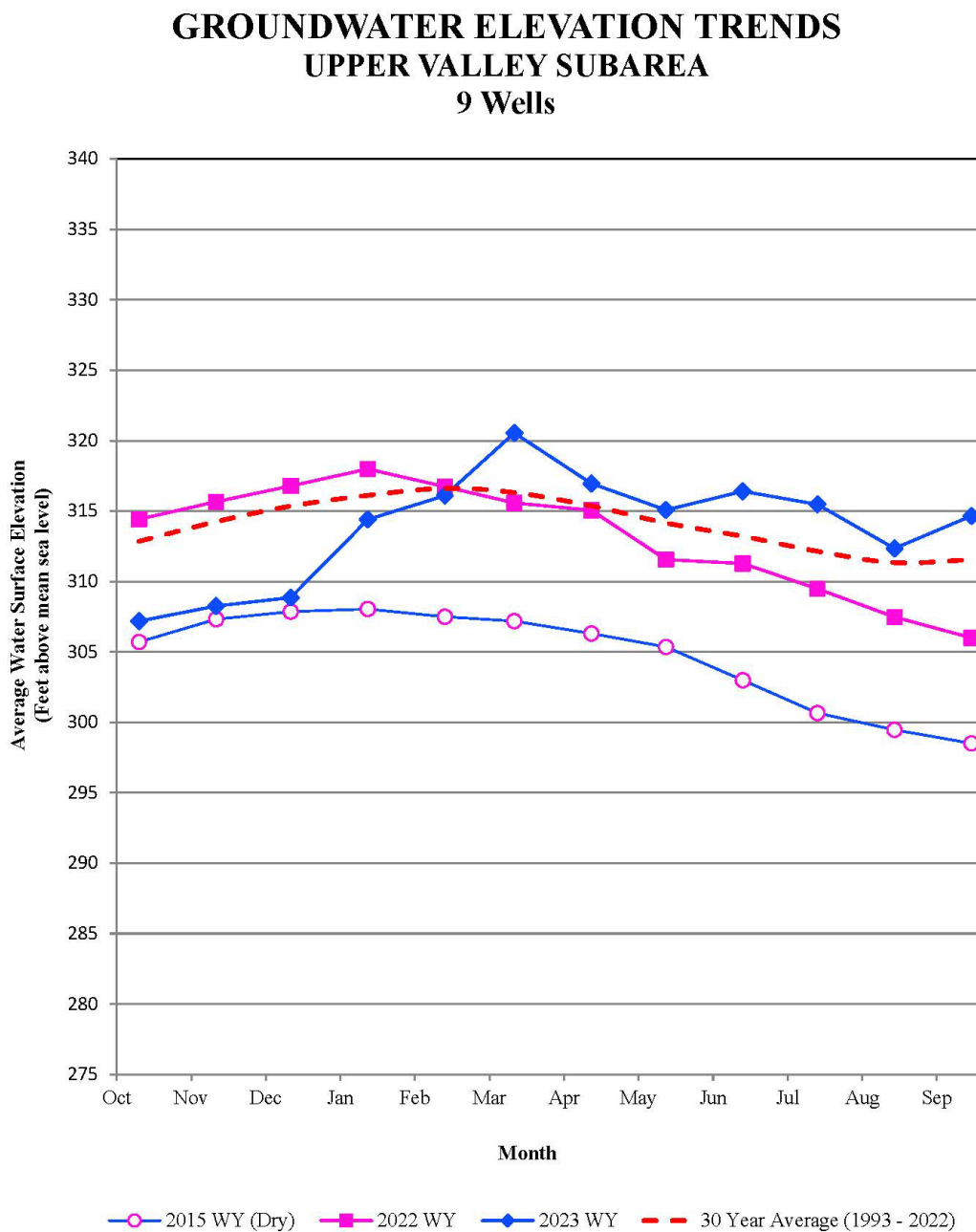


Figure 12: Groundwater Elevation Trends in the Upper Valley Subarea

Figure 13 shows the spatial distribution of changes in groundwater elevation levels from September 2022 to September 2023. Over the last Water Year, all hydrologic subareas experienced increasing groundwater elevations with the exception of the Deep Aquifers, which primarily experienced no significant change in groundwater elevations.

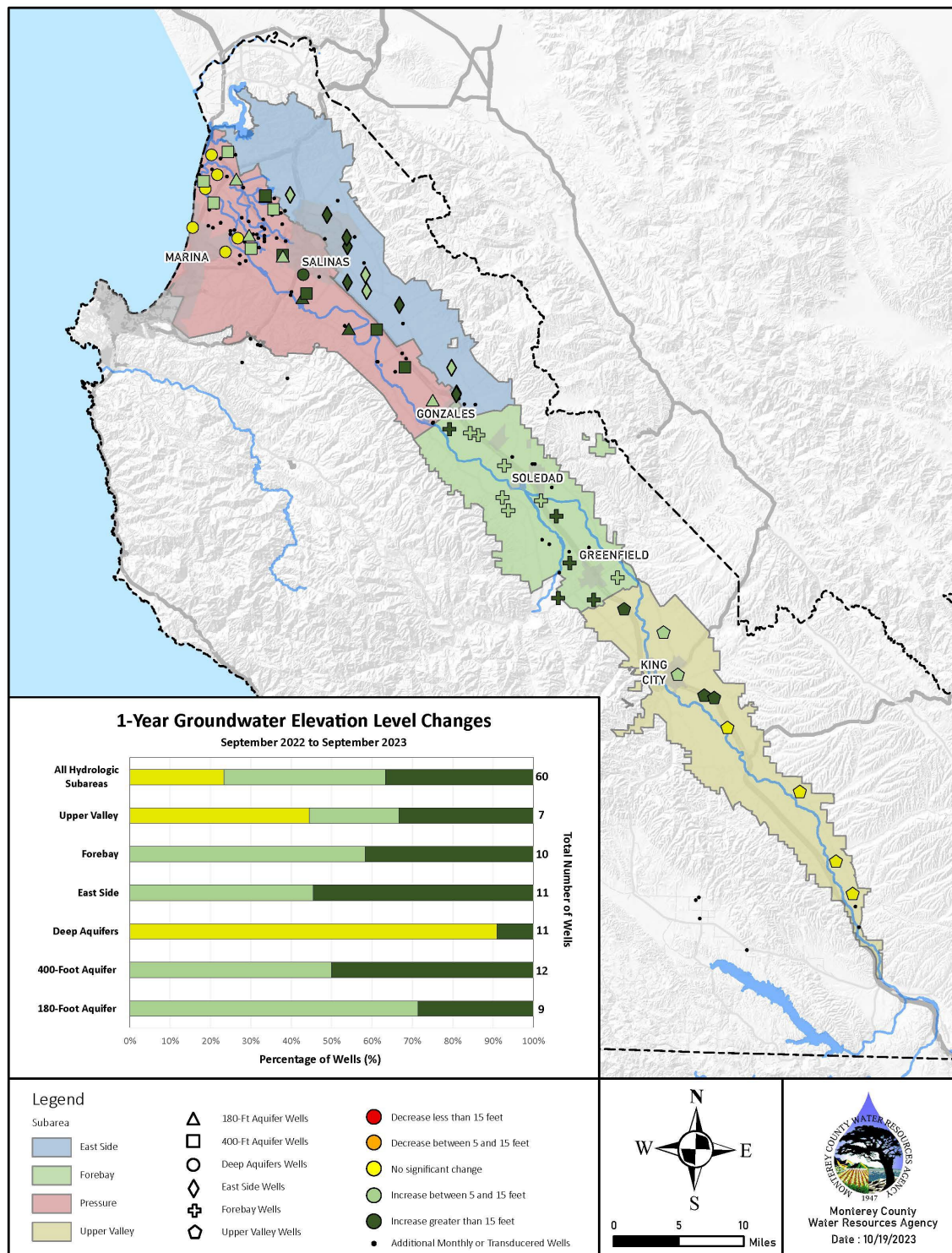


Figure 13: One-Year Groundwater Elevation Changes

Depth to Groundwater vs Groundwater Elevation

Most of the figures in this report use groundwater elevation as a means of describing where groundwater was observed in a well. However, Figure 14 shows the monthly depth to groundwater measured in each well, which is an alternative approach to representing the same type of data.¹ The depth to groundwater is measured from a reference point that is unique to each well. Groundwater elevation is calculated from the measured depth to groundwater using the reference point elevation and ground surface elevation.

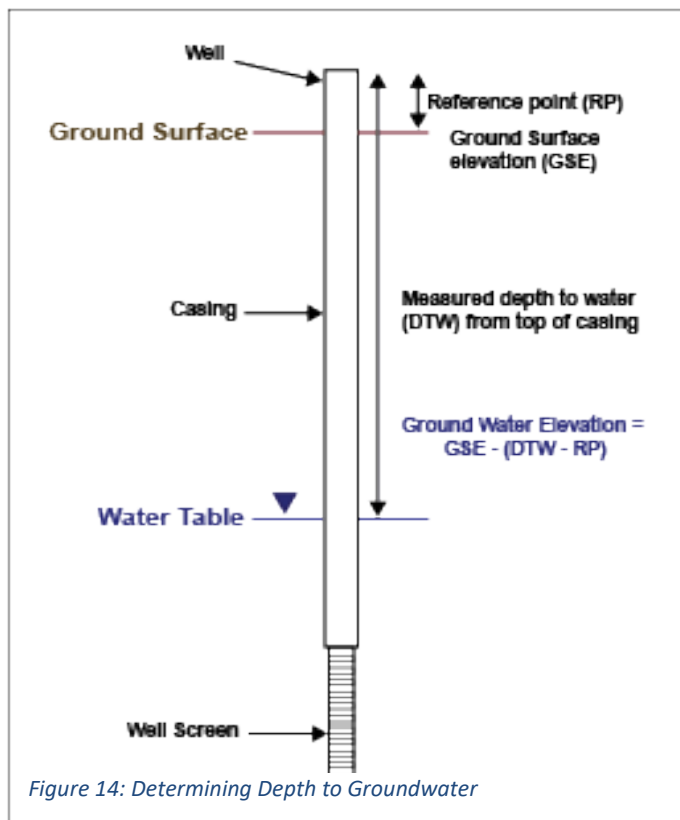
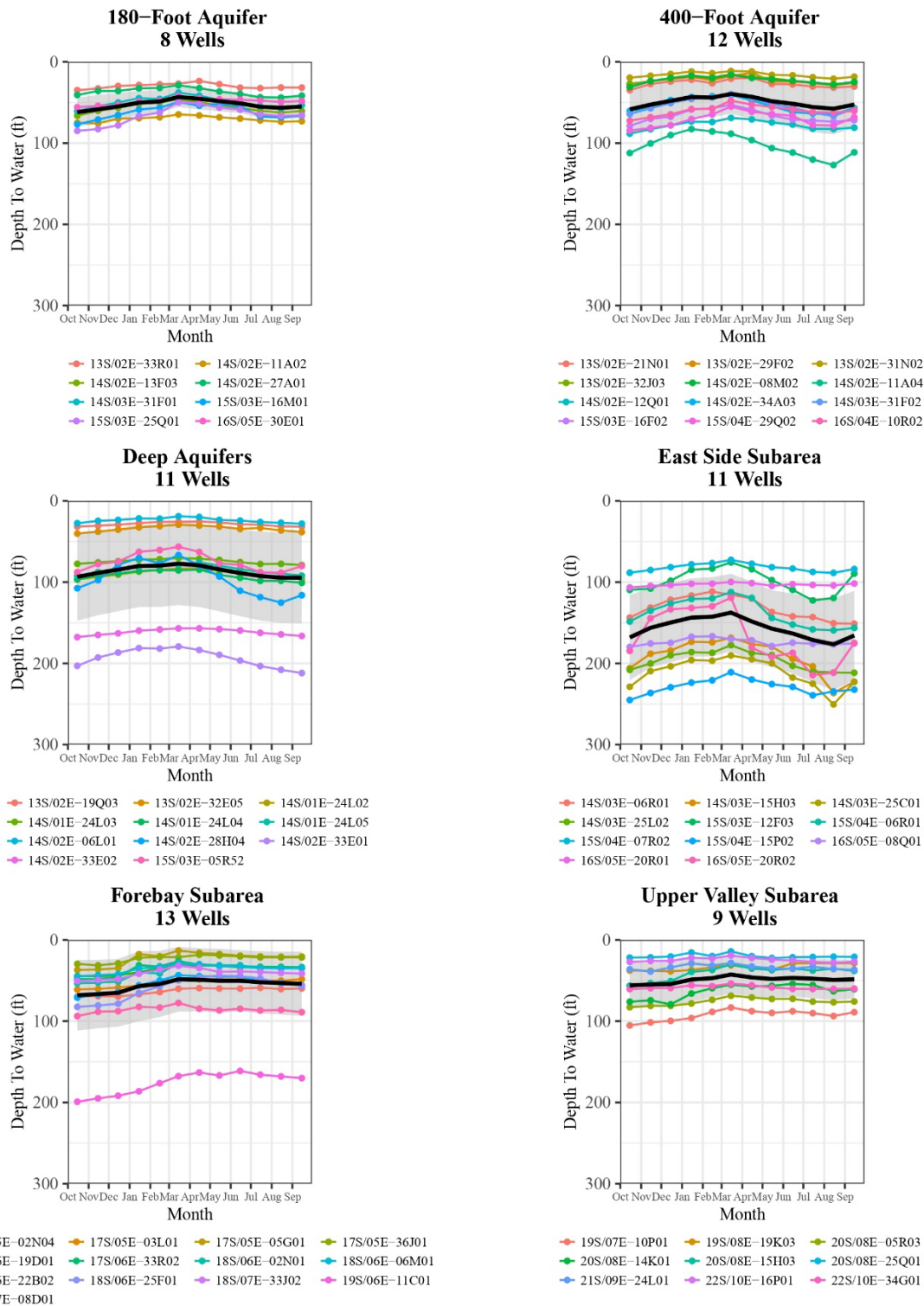


Figure 15 shows the depth to groundwater that was measured in each of the wells, within a given subarea, that is used for developing this quarterly water conditions report. As shown on Figure 15, there is a range of depth to water values within each subarea with some, like the East Side Subarea, having a wider range of measured values than others, like the 180-Foot Aquifer. The black line on each of the subarea graphs in Figure 15 is the average depth to groundwater for each set of wells. This value is converted from “depth to groundwater” to “groundwater elevation” and graphed as the “2023 WY” line on each of the preceding subarea-specific graphs (Figures 7-12).

¹ Figure 14 is modified from the Idaho Department of Environmental Quality.

Depth to Groundwater in Quarterly Conditions Report Wells, WY 2023



Depth to Water is measured in feet below a standard reference point at each well. This may be close to, but not always equal to, the ground surface. The black line on each graph shows the average depth to water for each set of wells. The grey shaded area shows the standard deviation.

Figure 15: Depth to Groundwater in Wells Used for Quarterly Conditions Report, WY 2023



County of Monterey

Item No.3

Board Report

Board of Supervisors
Chambers
168 W. Alisal St., 1st Floor
Salinas, CA 93901

Legistar File Number: WRABMAC 23-049

November 01, 2023

Introduced: 10/25/2023

Current Status: Draft

Version: 1

Matter Type: WRA BMAC Item

Consider future agenda items and set next meeting date.