



# County of Monterey

Item No.

## Board Report

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

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Consider receiving the 2023 Annual Groundwater Level Contours and Cumulative Change Chart

### RECOMMENDATION:

It is recommended that the Board of Directors of the Monterey County Water Resources Agency:

Receive the 2023 Annual Groundwater Level Contours and Cumulative Change Chart

### SUMMARY/DISCUSSION:

The Monterey County Water Resources Agency (Agency) is responsible for data collection and analysis of groundwater data throughout the Salinas Valley to support the ongoing groundwater elevation contouring, seawater intrusion mapping, and other programs related to current groundwater conditions. Conditions are assessed throughout the year to better understand how aquifers are responding during different hydrologic conditions as well as the relative groundwater storage fluctuations that occur on an annual basis.

These activities align with Strategic Plan Goals B7, *Use of data and analysis to make informed decisions based on science* and E1, *improve public outreach to increase transparency, communication, education and information about Agency projects and programs*. Activities associated with this program are included in Funds 111 & 116 of the FY 23-24 budget.

### Annual Groundwater Elevation Survey

In the latter part of each fall, from mid-November through December, the Agency measures groundwater levels in approximately 450 wells throughout the Salinas Valley, from the San Ardo oilfields to the coast. The timing of this sampling survey allows the Agency to capture conditions in the groundwater basin at a time when a relative lull in agricultural pumping causes groundwater level troughs to relax, prior to the influence of seasonal recharge in response to winter/spring precipitation. In this way, the Annual survey of groundwater level data is an assessment of the relative, year-to-year change in groundwater storage throughout the valley.

The 2023 Annual contours for the 180-Foot, East Side Shallow, Forebay and Upper Valley Aquifers are included as Attachment A. Compared to the 2022 survey, there was an increase in groundwater elevations of 1-3 feet near the coast, with groundwater elevations approximately at sea level. The depth of the East Side trough decreased, with groundwater elevations increasing 5-15 feet on the northern lobe of the trough and 2-10 feet on the southern lobe. Groundwater elevations in the area south of Salinas to Greenfield increased by 5-20 feet, and by 10-20 feet from Greenfield to the north

of San Lucas. South of San Lucas, groundwater elevations were generally within a foot of where they were last year.

The 2023 Annual contours for the 400-Foot and East Side Deep Aquifers are included as Attachment B. Near the coast, groundwater elevations were 1-3 feet higher than levels last year and remained below sea level at the coast. The East Side trough and groundwater levels in the area north of Salinas increased by 2-10 feet. Groundwater elevations in the area south of Salinas to Gonzales were 5-16 feet higher than levels in 2022.

#### Cumulative Groundwater Level Change Chart

The Cumulative Change Chart is an additional product produced using data from the Annual Groundwater Level Survey. This is a cumulative summary of the average change in groundwater elevations between each annual survey, calculated for each subarea, which helps to give an idea of the groundwater storage changes and trends over time.

For 2023, all four of the major subareas showed an increase in groundwater levels from the 2022 survey. Water Year 2023 was the first wet year after a three-year drought. The degree of change was greater than the declines seen last year with the exception of the East Side subarea, which is a similar pattern as what was observed after the 2012-2016 drought. The Cumulative Change Chart for 1944-2023 is included as Attachment C with a more detailed summary of the changes in Attachment D.

#### OTHER AGENCY INVOLVEMENT:

None

#### FINANCING:

There is no financial impact in receiving this report. Activities associated with this program are included in Funds 111 & 116 of the FY 23-24 budget.

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#### Attachments:

1. Attachment A: Annual 2023 Groundwater Elevation Contours, 180-Ft and East Side Shallow, Forebay and Upper Valley Aquifers
2. Attachment B: Annual 2023 Groundwater Elevation Contours, 400-Ft and East Side Deep Aquifers
3. Attachment C: Cumulative Groundwater Level Change Chart, 1944-2023
4. Attachment D: Summary of Annual Groundwater Level Changes, 2022 to 2023

