County of Monterey

Saffron Room
1441 Schilling Place
Salinas, Ca. 93901

Meeting Agenda

Wednesday, March 5, 2025

8:30 AM

Location: Saffron Room 1441 Schillings Place Salinas, Ca. 93901

Water Resources Agency Basin Management Advisory Committee

Matthew Simis - Chair
Deidre Sullivan
John Baillie
David Bunn
Richard Ortiz
Robin Lee
Patrick Breen
Marc Kelley
Sophia Wendt
Mike McCollough

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)
+1 346 248 7799 US (Houston)
+1 312 626 6799 US (Chicago)
+1 929 205 6099 US (New York)
+1 253 215 8782 US +1 301 715 8592 US

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.

PLEASE NOTE: IF ALL COMMITTEE MEMBERS ARE PRESENT IN PERSON, PUBLIC PARTICIPATION BY ZOOM IS FOR CONVENIENCE ONLY AND IS NOT REQUIRED BY LAW. IF THE ZOOM FEED IS LOST FOR ANY REASON, THE MEETING MAY BE PAUSED WHILE A FIX IS ATTEMPTED BUT THE BASIN MANAGEMENT ADVISORY COMMITTEE MEETING MAY CONTINUE AT THE DISCRETION OF THE CHAIRPERSON.

3. If you wish to comment on a specific agenda item while the matter is being heard, you may participate by the following means:When the Chair calls for public comment on an agenda item, the Zoom Meeting Host, or his or her designee, will first ascertain who wants to comment (among those who are in the meeting electronically or telephonically) and will then call on speakers and un mute their device one at a time. Public speakers may be broadcast in audio form only.

4. If you wish to comment on a particular agenda item, please submit your comments in writing via email to Monterey County Water Resources Agency at WRApubliccomment@countyofmonterey.gov by 5:00 p.m. on the Tuesday prior to the Committee meeting. To assist Agency staff in identifying the agenda item to which the comment relates please indicate the Basin Management Advisory Committee meeting date and agenda number in the subject line. Comments received by the 5:00 p.m. Tuesday deadline will be distributed to the Committee and will be placed in the record.

5. If you wish to make either a general public comment for items not on the day's agenda or to comment on a specific agenda item as it is being heard, please submit your comment, limited to 250 words or less, to the Monterey County Water Resources Agency at

WRApubliccomment@countyofmonterey.gov. In an effort to assist Agency staff in identifying the agenda item relating to your public comment please indicate in the subject line, the meeting body (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.

6. If speakers or other members of the public have documents they wish to distribute to the Committee for an agenda item, they are encouraged to submit such documents by 5:00 p.m. on Tuesday before the meeting to: WRApubliccomment@countyofmonterey.gov. To assist Agency staff in identifying the agenda item to which the comment relates, the public is requested to indicate the Basin Management Advisory Committee date and agenda number in the subject line.

7. If members of the public want to present documents/Power Point presentations while speaking, they should submit the document electronically by 5:00 p.m. on Tuesday before the meeting at WRApubliccomment@countyofmonterey.gov (If submitted after that deadline, staff will make best efforts, but cannot guarantee, to make it available to present during the Committee meeting.)

8. Individuals with disabilities who desire to request a reasonable accommodation or modification to observe or participate in the meeting may make such request by sending an email to WRApubliccomment@countyofmonterey.gov. The request should be made no later than noon on the Wednesday prior to the Committee meeting in order to provide time for the Agency to address the request.

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)
+1 346 248 7799 US (Houston)
+1 312 626 6799 US (Chicago)
+1 929 205 6099 US (New York)
+1 253 215 8782 US
+1 301 715 8592 US

Cuando se le solicite el código de acceso para entrar a la reunión, presione los siguientes números: 996 2177 2720 PASSWORD: 478310. Tenga en cuenta que no hay un Código de participante, simplemente presionará # nuevamente después de que la grabación lo solicite. Se le colocará en la reunión como asistente; cuando esté listo para hacer un comentario público si se une al audio de la computadora, levante la mano; y por teléfono presione * 9 en su teclado.

TENGA EN CUENTA: SI TODOS LOS MIEMBROS DEL COMITÉ ESTÁN PRESENTES EN PERSONA, LA PARTICIPACIÓN PÚBLICA DE ZOOM ES SOLO POR CONVENIENCIA Y NO ES REQUERIDA POR LA LEY. SI LA ALIMENTACIÓN DE ZOOM SE PIERDE POR CUALQUIER MOTIVO, LA REUNIÓN PUEDE PAUSARSE MIENTRAS SE INTENTA UNA SOLUCIÓN, PERO LA REUNIÓN DEL COMITÉ ASESOR DE GESTIÓN DE LA CUENCA PUEDE CONTINUAR A DISCRECIÓN DEL PRESIDENTE.

3. Los miembros del público que desean comentar en un artículo específico de la agenda, mientras que el artículo se este presentando durante la reunión, pueden participar por cualquiera de los siguientes medios:Cuando el Presidente del Comité solicite comentarios públicos sobre un artículo de la agenda, el anfitrión de la reunión Zoom o su designado, primero determinará quién quiere testificar (entre los que están en la reunión por vía electrónica o telefónica) y luego llamará a los oradores (speakers) y activará la bocina para el orador, uno a la vez. Todo orador, será transmitido por audio en altavoz solamente.

4. Si un miembro del público desea comentar sobre un artículo de la agenda en particular, se le es sumamente recomendable que envie sus comentarios por escrito por correo electrónico a la Agencia de Administración de Recursos del Agua (Agencia) a WRApubliccomment@countyofmonterey.gov antes de las 5:00 P. M. el Martes antes de la reunión del Comité. Para ayudar al personal de la Agencia a identificar el número del artículo de la agenda con el cual se relaciona el comentario, se solicita al público que indique la fecha de la reunión del Comité y el número del artículo de la agenda en la línea de asunto. Comentarios recibidos en la fecha limite del Martes a las 5 P.M, serán distribuidos al Comité y serán colocados en el registro.

5. Los miembros del público que deseen hacer un comentario público general para temas que no están en la agenda del día o que deseen comentar en un artículo específico mientras se escucha la presentación, lo pueden hacer enviando un comentario por correo electrónico, preferiblemente limitado a 250 palabras o menos, a WRApubliccomment@countyofmonterey.gov. Para ayudar al personal de la Agencia a identificar el artículo de la agenda con el cual se relaciona el comentario, se solicita al público que indique el nombre del Comité (por ejemplo: Comité de Asesor de Gestion de la Cuenca) y el número del artículo de la agenda (por ejemplo: Artículo # 10). Se hará todo lo posible para leer el comentario en el registro, pero algunos comentarios pueden no leerse en voz alta debido a limitaciones de tiempo. Los comentarios recibidos después del cierre del período de comentarios públicos sobre un artículo de la agenda serán parte del registro si se reciben antes que

6. Si los oradores u otros miembros del público tienen documentos que desean distribuir al Comité para un artículo de la agenda, se les recomienda enviar dichos documentos antes de las 5:00 P.M. el Martes antes de la reunión a: WRApubliccomment@countyofmonterey.gov. Para ayudar al personal de la Agencia a identificar el número del artículo de la agenda con el cual se relaciona el comentario, se solicita al público que indique la fecha de la reunion del Comité y el número de agenda
en la línea de asunto.

7. Si los miembros del público desean presentar documentos o presentaciones de PowerPoint mientras hablan, deben enviar el documento electrónicamente antes de las 5:00 P.M. del Martes antes de la reunión a WRApubliccomment@countyofmonterey.gov (Si se presenta después de ese plazo, el personal hará los mejores esfuerzos, pero no puede garantizar que esté disponible su PowerPoint para presentar durante la reunión del Comité).

8. Las personas con discapacidades que deseen solicitar una modificación o modificación razonable para observar o participar en la reunión pueden realizar dicha solicitud enviando un correo electrónico a WRApubliccomment@countyofmonterey.gov. La solicitud debe hacerse a más tardar el mediodía del Martes antes de a la reunión del Comité para dar tiempo a la Agencia para que atienda la solicitud .

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

Roll Call

Public Comment

Committee Member Comments

Consent Calendar

1. Approve the Minutes of the Basin Management Advisory Committee Meeting held on December 4, 2024.

Attachments: Final BMAC Minutes December 4, 2024

Staff Reports

2. Overview of Basin Management Advisory Committee and introduction of Committee Members. (Staff Presenting: Amy Woodrow)

3. Update on the CSIP Optimization Model and Project Development. (Staff Presenting: Shaunna Murray)

4. Update on the 2024 Annual Groundwater Elevation Program - Groundwater Elevation Contour Maps and Cumulative Groundwater Change Chart. (Staff Presenting: Guillermo Diaz-Moreno)

Attachments: Board Report
Attachment A Annual Shallow 24
Attachment B Annual Deep 24
Attachment C Cumulative Changes 2024 WY
Attachment D Summary of Changes 2024

5. Update on data reported in the Salinas Valley Water Conditions Report for the First Quarter of Water Year 2024-2025. (Staff Presenting: Amy Woodrow)

Attachments: Quarterly Report 1st Qtr WY25

6. Overview of Well Bubbler Technology. (Staff Presenting: Ricardo Carmona)

Calendar

7. Set next meeting date and discuss future agenda items.

Adjournment

County of Monterey

Board Report

Legistar File Number: WRABMAC 25-009

Item No.1

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

March 05, 2025

Introduced: 2/20/2025
Version: 1

Current Status: Agenda Ready
Matter Type: WRA BMAC Item

Approve the Minutes of the Basin Management Advisory Committee Meeting held on December 4, 2024.

County of Monterey

Saffron Room
1441 Schilling Place
Salinas, Ca. 93901

Meeting Minutes

Wednesday, December 4, 2024

8:30 AM

Water Resources Agency Basin Management Advisory Committee

.
.

John Baillie Chair
Deidre Sullivan
Matthew Simis
David Bunn
Kevin Piearcy
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)
+1 346 248 7799 US (Houston)
+1 312 626 6799 US (Chicago)
+1 929 205 6099 US (New York)
+1 253 215 8782 US +1 301 715 8592 US

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.

PLEASE NOTE: IF ALL COMMITTEE MEMBERS ARE PRESENT IN PERSON, PUBLIC
PARTICIPATION BY ZOOM IS FOR CONVENIENCE ONLY AND IS NOT REQUIRED BY
LAW. IF THE ZOOM FEED IS LOST FOR ANY REASON, THE MEETING MAY BE PAUSED
WHILE A FIX IS ATTEMPTED BUT THE BASIN MANAGEMENT ADVISORY COMMITTEE
MEETING MAY CONTINUE AT THE DISCRETION OF THE CHAIRPERSON.

3. If you wish to comment on a specific agenda item while the matter is being heard, you may participate by the following means:When the Chair calls for public comment on an agenda item, the
Zoom Meeting Host, or his or her designee, will first ascertain who wants to comment (among those
who are in the meeting electronically or telephonically) and will then call on speakers and un mute
their device one at a time. Public speakers may be broadcast in audio form only.

4. If you wish to comment on a particular agenda item, please submit your comments in

writing via email to Monterey County Water Resources Agency at WRApubliccomment@co.monterey.ca.us by 5:00 p.m. on the Tuesday prior to the Committee meeting. To assist Agency staff in identifying the agenda item to which the comment relates please indicate the Basin Management Advisory Committee meeting date and agenda number in the subject line. Comments received by the 5:00 p.m. Tuesday deadline will be distributed to the Committee and will be placed in the record.

5. If you wish to make either a general public comment for items not on the day's agenda or to comment on a specific agenda item as it is being heard, please submit your comment, limited to 250 words or less, to the Monterey County Water Resources Agency at WRApubliccomment@co.monterey.ca.us. In an effort to assist Agency staff in identifying the agenda item relating to your public comment please indicate in the subject line, the meeting body (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.

6. If speakers or other members of the public have documents they wish to distribute to the Committee for an agenda item, they are encouraged to submit such documents by 5:00 p.m. on Tuesday before the meeting to: WRApubliccomment@co.monterey.ca.us. To assist Agency staff in identifying the agenda item to which the comment relates, the public is requested to indicate the Basin Management Advisory Committee date and agenda number in the subject line.

7. If members of the public want to present documents/Power Point presentations while speaking, they should submit the document electronically by 5:00 p.m. on Tuesday before the meeting at WRApubliccomment@co.monterey.ca.us. (If submitted after that deadline, staff will make best efforts, but cannot guarantee, to make it available to present during the Committee meeting.)

8. Individuals with disabilities who desire to request a reasonable accommodation or modification to observe or participate in the meeting may make such request by sending an email to WRApubliccomment@co.monterey.ca.us. The request should be made no later than noon on the Wednesday prior to the Committee meeting in order to provide time for the Agency to address the request.

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)
+1 346 248 7799 US (Houston)
+1 312 626 6799 US (Chicago)
+1 929 205 6099 US (New York)
+1 253 215 8782 US
+1 301 715 8592 US

Cuando se le solicite el código de acceso para entrar a la reunión, presione los siguientes números:
996 2177 2720 PASSWORD: 478310. Tenga en cuenta que no hay un Código de participante, simplemente presionará # nuevamente después de que la grabación lo solicite. Se le colocará en la reunión como asistente; cuando esté listo para hacer un comentario público si se une al audio de la computadora, levante la mano; y por teléfono presione * 9 en su teclado.

TENGA EN CUENTA: SI TODOS LOS MIEMBROS DEL COMITÉ ESTÁN PRESENTES EN PERSONA, LA PARTICIPACIÓN PÚBLICA DE ZOOM ES SOLO POR

**CONVENIENCIA Y NO
ES REQUERIDA POR LA LEY. SI LA ALIMENTACIÓN DE ZOOM SE PIERDE POR CUALQUIER MOTIVO, LA REUNIÓN PUEDE PAUSARSE MIENTRAS SE INTENTA UNA
SOLUCIÓN, PERO LA REUNIÓN DEL COMITÉ ASESOR DE GESTIÓN DE LA CUENCA
PUEDE CONTINUAR A DISCRECIÓN DEL PRESIDENTE.**

**3. Los miembros del público que desean comentar en un artículo específico de la agenda, mientras
que el artículo se este presentando durante la reunión, pueden participar por cualquiera de los
siguientes medios:Cuando el Presidente del Comité solicite comentarios públicos sobre un artículo
de la agenda, el anfitrión de la reunión Zoom o su designado, primero determinará quién quiere
testificar (entre los que están en la reunión por vía electrónica o telefónica) y luego llamará a los
oradores (speakers) y activará la bocina para el orador, uno a la vez. Todo orador, será transmitido
por audio en altavoz solamente.**

**4. Si un miembro del público desea comentar sobre un artículo de la agenda en particular, se le es
sumamente recomendable que envie sus comentarios por escrito por correo electrónico a la Agencia
de Administración de Recursos del Agua (Agencia) a
WRApubliccomment@co.monterey.ca.us antes
de las 5:00 P. M. el Martes antes de la reunión del Comité. Para ayudar al personal de la Agencia a
identificar el número del artículo de la agenda con el cual se relaciona el comentario, se solicita al
público que indique la fecha de la reunión del Comité y el número del artículo de la agenda en la
línea de asunto. Comentarios recibidos en la fecha limite del Martes a las 5 P.M, serán distribuidos
al Comité y serán colocados en el registro.**

**5. Los miembros del público que deseen hacer un comentario público general para temas que no
están en la agenda del día o que deseen comentar en un artículo específico mientras se escucha la**

**presentación, lo pueden hacer enviando un comentario por correo electrónico, preferiblemente
limitado a 250 palabras o menos, a WRApubliccomment@co.monterey.ca.us. Para ayudar al personal de la Agencia a identificar el artículo de la agenda con el cual se relaciona el comentario,
se solicita al público que indique el nombre del Comité (por ejemplo: Comité de Asesor de Gestion
de la Cuenca) y el número del artículo de la agenda (por ejemplo: Artículo # 10). Se hará todo lo
posible para leer el comentario en el registro, pero algunos comentarios pueden no leerse en voz
alta debido a limitaciones de tiempo. Los comentarios recibidos después del cierre del período de
comentarios públicos sobre un artículo de la agenda serán parte del registro si se reciben antes que
termine la reunión del Comité.**

**6. Si los oradores u otros miembros del público tienen documentos que desean distribuir al Comité
para un artículo de la agenda, se les recomienda enviar dichos documentos antes de las 5:00 P.M. el
Martes antes de la reunión a: WRApubliccomment@co.monterey.ca.us. Para ayudar al personal de
la Agencia a identificar el número del artículo de la agenda con el cual se relaciona el comentario, se
solicita al público que indique la fecha de la reunion del Comité y el número de agenda en la línea de
asunto.**

**7. Si los miembros del público desean presentar documentos o presentaciones de PowerPoint mientras hablan, deben enviar el documento electrónicamente antes de las 5:00 P.M. del Martes
antes de la reunión a WRApubliccomment@co.monterey.ca.us (Si se presenta después de ese plazo,
el personal hará los mejores esfuerzos, pero no puede garantizar que esté disponible su PowerPoint
para presentar durante la reunión del Comité).**

**8. Las personas con discapacidades que deseen solicitar una modificación o modificación razonable
para observar o participar en la reunión pueden realizar dicha solicitud enviando un correo electrónico a WRApubliccomment@co.monterey.ca.us. La solicitud debe hacerse a más**

tardar el
mediodía del Martes antes de a la reunión del Comité para dar tiempo a la Agencia para que atienda
la solicitud .

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 8:31 a.m.

Roll Call

Present: John Baillie, Matthew Simis, Keving Piearcy, Patrick Breen, Richard Oritz, Deidre Sullivan (arrived at 8:34 am)

Public Comment

Amy Woodrow

Committee Member Comments

John Baillie

Consent Calendar

1. Approve the minutes of the Basin Management Advisory Committee meeting held on November 6, 2024.

Attachments: Final BMAC Minutes November 6, 2024

Upon Motion by Matthew Simis, Second by Patrick Breen the committee approved the Consent Calendar of the Basin Management Advisory Committee Meeting.

Staff Reports

2. Review of the 2024 August Trough Groundwater Elevation Contour Maps

Attachments: Board Report
Attachment A ATShallow24
Attachment B ATDeep24

Committee Member Comments: John Baillie, Kevin Piearcy, Patrick Breen
Public Comments: Nancy Isakson

3. Review of the 2024 Seawater Intrusion Contour Maps

Attachments: Board Report
P180 2024 with250line (A)
P180 2024 SWIphases (B)
P400 2024 with250line (C)
P400 2024 SWIphases (D)

Committee Member Comments: John Baillie, Kevin Piearcy, Deidre Sullivan, Patrick Breen, Richard Oritz
Public Comments: Roger Van Horn

Calendar

4. Set next meeting date and discuss future agenda items.

Adjournment

The meeting was adjourned at 9:53 a.m,

County of Monterey

Board Report

Legistar File Number: WRABMAC 25-011

Item No.2

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

March 05, 2025

Introduced: 2/21/2025
Version: 1

Current Status: Agenda Ready
Matter Type: WRA BMAC Item

Overview of Basin Management Advisory Committee and introduction of Committee Members. (Staff Presenting: Amy Woodrow)

County of Monterey

Board Report

Legistar File Number: WRABMAC 25-012

Item No.3

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

March 05, 2025

Introduced: 2/21/2025
Version: 1

Current Status: Agenda Ready
Matter Type: WRA BMAC Item

Update on the CSIP Optimization Model and Project Development. (Staff Presenting: Shaunna Murray)

Introduced: 2/25/2025
Version: 1

Current Status: Agenda Ready
Matter Type: WRA BMAC Item

Update on the 2024 Annual Groundwater Elevation Program - Groundwater Elevation Contour Maps and Cumulative Groundwater Change Chart. (Staff Presenting: Guillermo Diaz-Moreno)

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 24-25 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 decrease 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 2024 Annual groundwater elevation contours for the 180-Foot, East Side Shallow, Forebay and Upper Valley Aquifers are included as Attachment A. Compared to the 2023 survey, there was an overall increase in groundwater elevations by 0 to 2 feet near the coast, with groundwater elevations approximately at sea level. Groundwater elevations in the East Side trough increased by 1 to 10, though a smaller northwest section experienced a 1 to 3 foot decrease. Elevations in the area south of Salinas to Greenfield increased by 2 to 5 feet, though a smaller area near Spreckels saw decreases between 0 and 1 foot. From Greenfield to the north of San Lucas, groundwater elevations increased by 1 to 2 feet. South of San Lucas, groundwater elevations remained generally within a foot of last year's levels.

The 2024 Annual groundwater elevation contours for the 400-Foot and East Side Deep Aquifers are included as Attachment B. Near the coast, groundwater elevations were 1 to 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 1 to 8 feet, though a smaller northwest section experienced a 1 to 5 foot decrease. Groundwater elevations in the area south of Salinas to Gonzales were 1 to 5 feet higher than levels in 2023.

Cumulative Groundwater Level Change Chart

The Cumulative Groundwater Level Change Chart is 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 2024, all four of the major subareas showed an increase in groundwater levels relative to the 2023 survey. Water Year 2024 was a normal-wet year, following a wet year and preceded by a three-year drought. The magnitude of change was less than in 2023 due to reduced precipitation and a slower rate of infiltration, as the soils were already saturated in that same year. However, the East Side subarea experienced a slightly more pronounced increase in elevation compared to the other subareas. The Cumulative Groundwater Level Change Chart for 1944-2024 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 24-25 budget.

Prepared by: Guillermo Diaz Moreno, Hydrologist, (831) 755-4860

Attachments:
1. Attachment A: Annual 2024 Groundwater Elevation Contours, 180-Ft and East Side Shallow, Forebay and Upper Valley Aquifers
2. Attachment B: Annual 2024 Groundwater Elevation Contours, 400-Ft and East Side Deep Aquifers
3. Attachment C: Cumulative Groundwater Level Change Chart, 1944-2024
4. Attachment D: Summary of Annual Groundwater Level Changes, 2023 to 2024

Introduced: 2/25/2025 **Current Status:** Draft

Version: 1 **Matter Type:** WRA BMAC Item

Update on the 2024 Annual Groundwater Elevation Program - Groundwater Elevation Contour Maps and Cumulative Groundwater 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 24-25 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 decrease 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 2024 Annual groundwater elevation contours for the 180-Foot, East Side Shallow, Forebay and Upper Valley Aquifers are included as Attachment A. Compared to the 2023 survey, there was an overall increase in groundwater elevations by 0 to 2 feet near the coast, with groundwater elevations approximately at sea level. Groundwater elevations in the East Side trough increased by 1 to 10, though a smaller northwest section experienced a 1 to 3 foot decrease. Elevations in the area south of Salinas to Greenfield increased by 2 to 5 feet, though a smaller area near Spreckels saw decreases between 0 and 1 foot. From Greenfield to the north of San Lucas, groundwater elevations increased by 1 to 2 feet. South of San Lucas, groundwater elevations remained generally within a foot of last year's levels.

The 2024 Annual groundwater elevation contours for the 400-Foot and East Side Deep Aquifers are included as Attachment B. Near the coast, groundwater elevations were 1 to 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 1 to 8 feet, though a smaller northwest section experienced a 1 to 5 foot decrease. Groundwater elevations in the area south of Salinas to Gonzales were 1 to 5 feet higher than levels in 2023.

Cumulative Groundwater Level Change Chart

The Cumulative Groundwater Level Change Chart is 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.

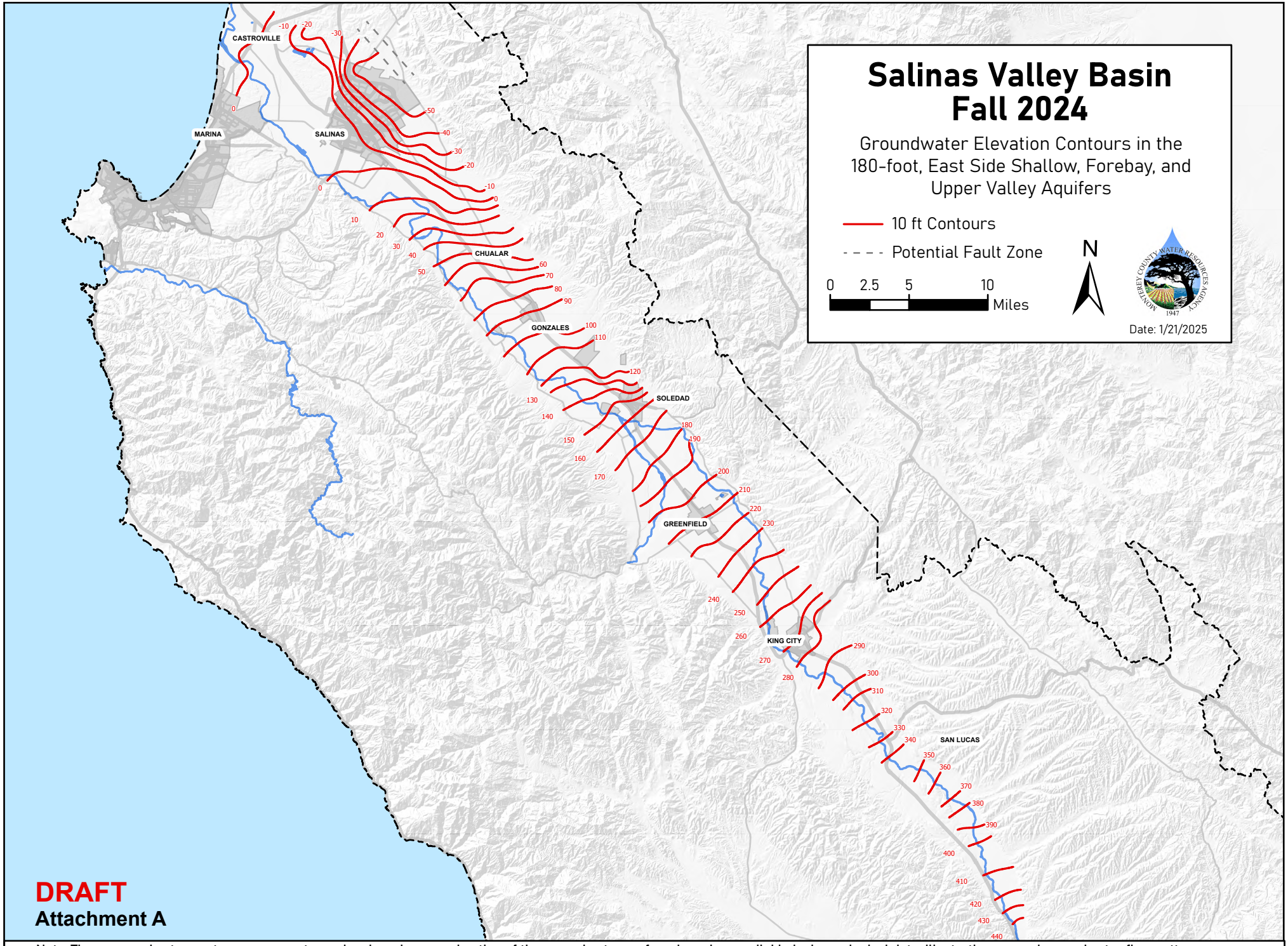
For 2024, all four of the major subareas showed an increase in groundwater levels relative to the 2023 survey. Water Year 2024 was a normal-wet year, following a wet year and preceded by a three-year drought. The magnitude of change was less than in 2023 due to reduced precipitation and a slower rate of infiltration, as the soils were already saturated in that same year. However, the East Side subarea experienced a slightly more pronounced increase in elevation compared to the other subareas. The Cumulative Groundwater Level Change Chart for 1944-2024 is included as Attachment C with a more detailed summary of the changes in Attachment D.

OTHER AGENCY INVOLVEMENT:
None

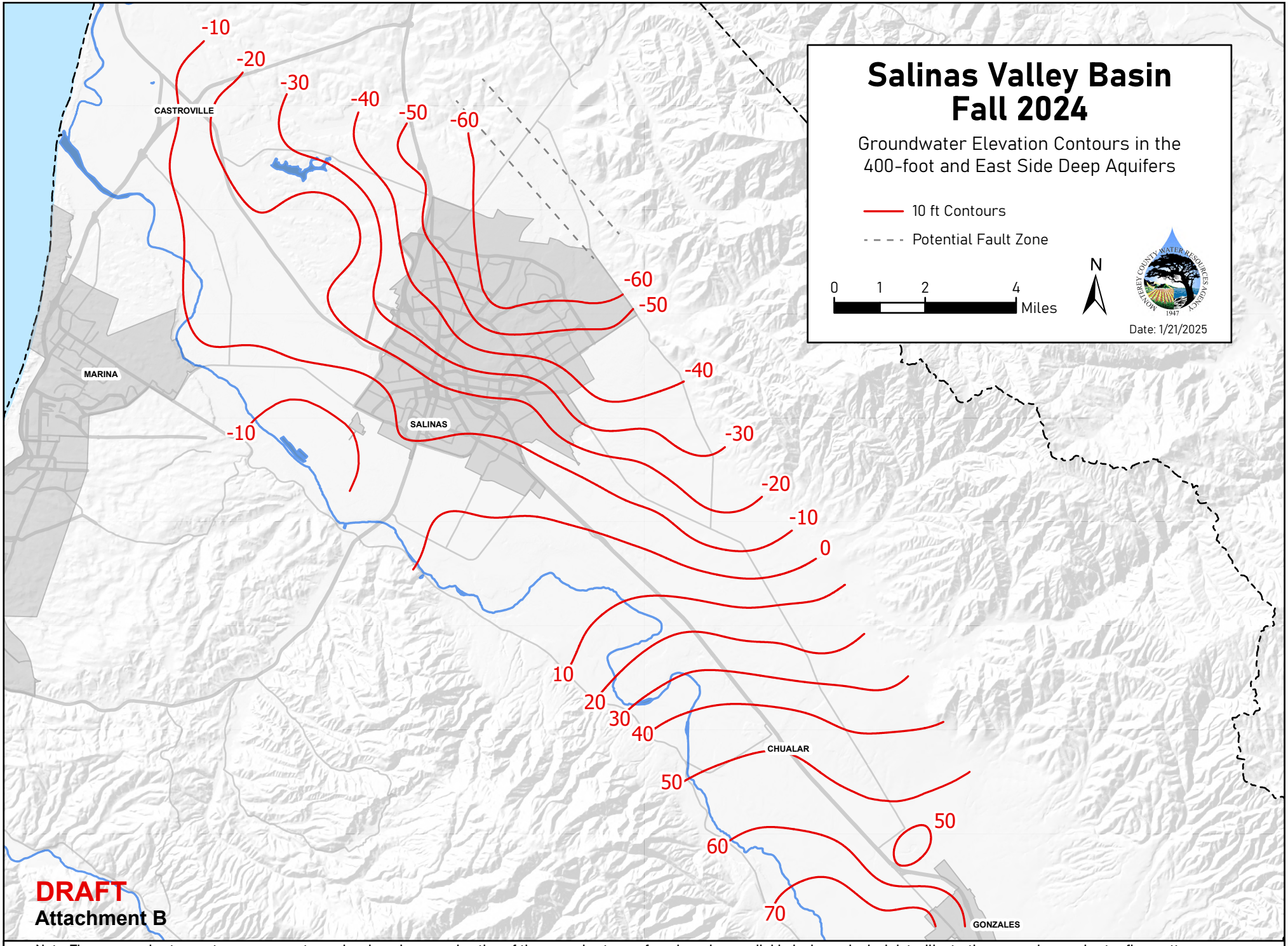
FINANCING:
There is no financial impact in receiving this report. Activities associated with this program are included in Funds 111 & 116 of the FY 24-25 budget.

Prepared by: Guillermo Diaz Moreno, Hydrologist, (831) 755-4860

Attachments:
1. Attachment A: Annual 2024 Groundwater Elevation Contours, 180-Ft and East Side Shallow, Forebay and Upper Valley Aquifers
2. Attachment B: Annual 2024 Groundwater Elevation Contours, 400-Ft and East Side Deep Aquifers
3. Attachment C: Cumulative Groundwater Level Change Chart, 1944-2024
4. Attachment D: Summary of Annual Groundwater Level Changes, 2023 to 2024



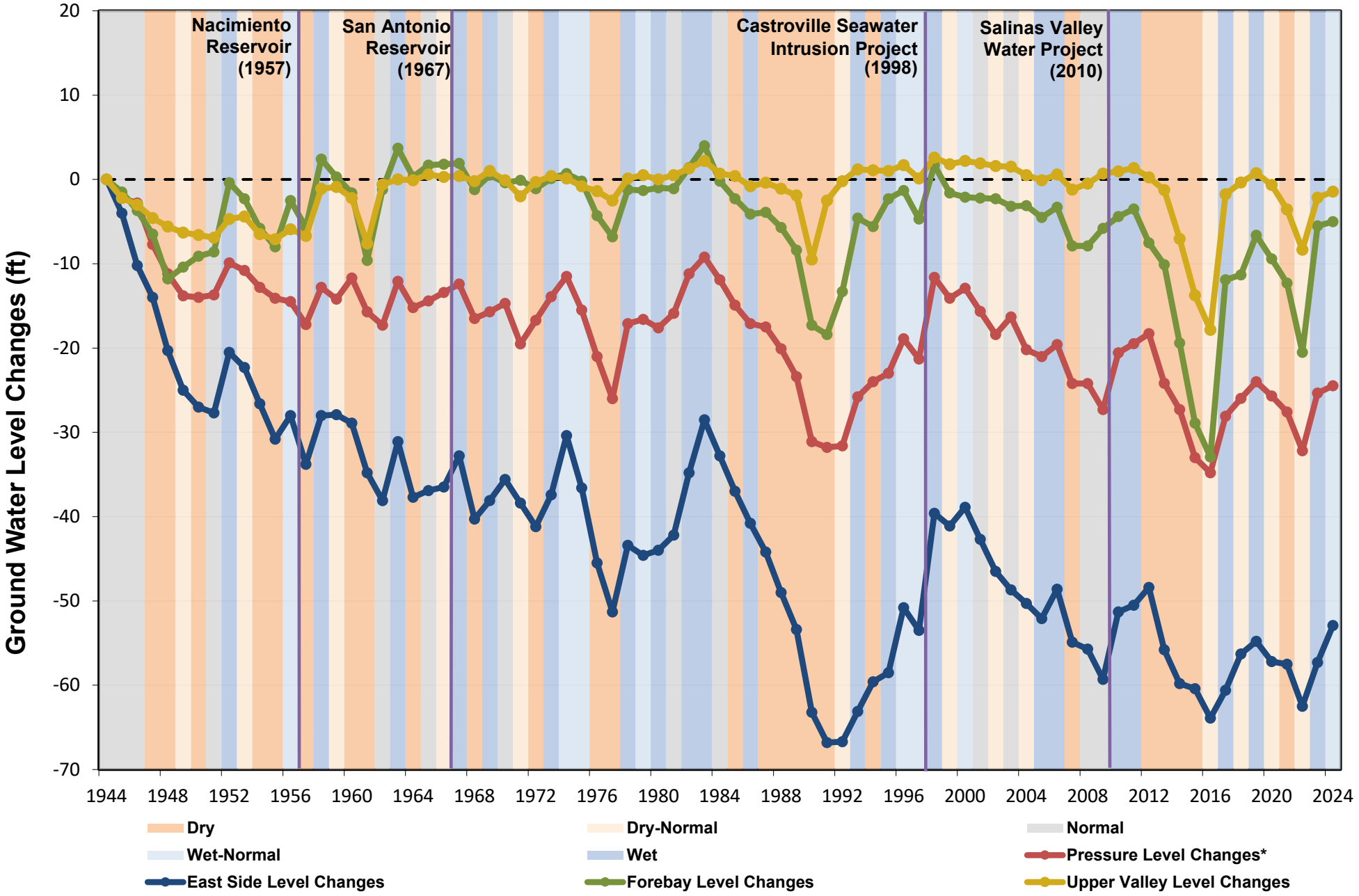
Note: These groundwater contours represent a regional-scale approximation of the groundwater surface, based on available hydrogeological data, illustrating general groundwater flow patterns. They should not be interpreted as precise or localized features.



Note: These groundwater contours represent a regional-scale approximation of the groundwater surface, based on available hydrogeological data, illustrating general groundwater flow patterns. They should not be interpreted as precise or localized features.

Salinas Valley Groundwater Level Changes

1944 - 2024 Average Annual Groundwater Level Changes



*Level Changes for the Pressure subarea are calculated using a weighted average between the 180-Ft and the 400-Ft Aquifers.

SUMMARY OF ANNUAL FALL WELL MEASUREMENTS
SALINAS VALLEY BASIN

Change in Elevation of Ground Water from Fall 2023 to Fall 2024

Area and Quadrant	No of Wells	Average Change (ft.)
EAST SIDE		
13S/02E	2	-1.6
13S/03E	4	6.5
14S/02E	1	-6.1
14S/03E	26	5.4
14S/04E	4	8.9
15S/03E	3	0.0
15S/04E	23	3.3
16S/04E	1	7.0
16S/05E	10	4.8
TOTAL	74	4.4
FOREBAY		
16S/05E	4	0.9
17S/05E	19	0.2
17S/06E	14	0.5
18S/06E	25	0.5
18S/07E	8	0.2
19S/06E	2	2.3
19S/07E	4	2.1
TOTAL	76	0.5
PRESSURE 180		
13S/02E	2	0.8
14S/02E	19	1.8
14S/03E	7	-0.1
15S/02E	2	0.8
15S/03E	9	-0.1
15S/04E	1	0.1
16S/04E	14	2.4
16S/05E	7	2.2
17S/04E	1	1.1
TOTAL	62	1.4

Area and Quadrant	No of Wells	Average Change (ft.)
PRESSURE 400		
12S/02E	1	-5.0
13S/02E	10	1.9
14S/02E	29	0.8
14S/03E	9	-1.3
15S/02E	5	1.1
15S/03E	26	0.0
15S/04E	3	0.1
16S/04E	7	2.8
16S/05E	1	-0.8
TOTAL	91	0.5
PRESSURE BOTH		
16S/04E	1	2.4
TOTAL	1	2.4
PRESSURE DEEP ZONE		
13S/01E	2	1.4
13S/02E	3	0.9
14S/01E	4	0.3
14S/02E	14	2.6
14S/03E	1	6.7
15S/02E	1	3.3
15S/03E	3	5.8
16S/04E	1	12.2
TOTAL	29	2.8
UPPER VALLEY		
19S/07E	8	0.7
19S/08E	3	0.6
20S/08E	8	1.3
21S/08E	1	5.5
21S/09E	6	-0.6
21S/10E	1	-1.1
22S/10E	7	0.7
TOTAL	34	0.7

TOTAL VALLEY WELLS COMPARED: 367

AVERAGE CHANGE FOR THE SALINAS VALLEY (FT.): 1.7

Printed on: 1/23/2025

Attachment D

County of Monterey

Board Report

Legistar File Number: WRABMAC 25-017

Item No.5

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

March 05, 2025

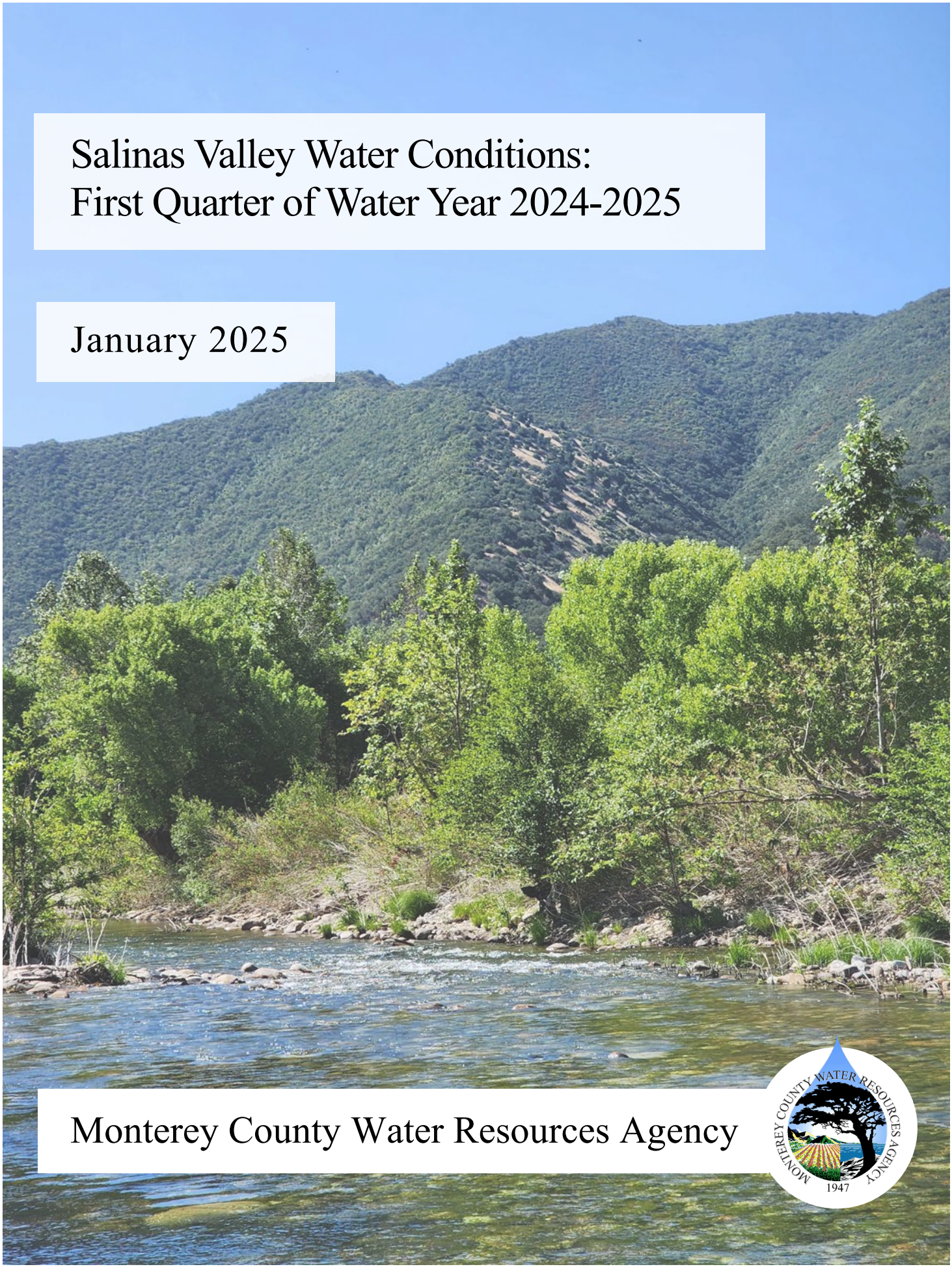
Introduced: 2/25/2025
Version: 1

Current Status: Agenda Ready
Matter Type: WRA BMAC Item

Update on data reported in the Salinas Valley Water Conditions Report for the First Quarter of Water Year 2024-2025. (Staff Presenting: Amy Woodrow)

Salinas Valley Water Conditions: First Quarter of Water Year 2024-2025

January 2025



Monterey County Water Resources Agency

MONTEREY COUNTY WATER RESOURCES AGENCY

Salinas Valley Water Conditions
Quarterly Update for First Quarter of Water Year 2024-2025
January 2025

Prepared by Mackaby Pennington, Guillermo Diaz-Moreno, and Amy Woodrow

Table of Contents

Introduction 3
Precipitation 4
Reservoir Storage 5
Streamflow 7
Groundwater Elevations 8
180-Foot Aquifer 9
400-Foot Aquifer 10
Deep Aquifers 11
East Side Subarea 12
Forebay Subarea 13
Upper Valley Subarea 14
Depth to Groundwater vs Groundwater Elevation 16

List of Figures

Figure 1: Geographic extent of the area covered by this report and supporting data sources 3
Figure 2: Salinas Airport Rainfall for Water Year 2025 4
Figure 3: King City Rainfall for Water Year 2025 5
Figure 4: Nacimiento Reservoir Storage 6
Figure 5: San Antonio Reservoir Storage 6
Figure 6: Mean Daily Flow at Selected Stream Gages 7
Figure 7: Groundwater Elevation Trends for the 180-Foot Aquifer 9
Figure 8: Groundwater Elevation Trends in the 400-Foot Aquifer 10
Figure 9: Groundwater Elevation Trends in the Deep Aquifers 11
Figure 10: Groundwater Elevation Trends in the East Side Subarea 12
Figure 11: Groundwater Elevation Trends in the Forebay Subarea 13
Figure 12: Groundwater Elevation Trends in the Upper Valley Subarea 14
Figure 13: One-Year Groundwater Elevation Changes 15
Figure 14: Determining Depth to Groundwater 16
Figure 15: Depth to Groundwater in Wells Used for Quarterly Conditions Report, WY 2025 18

Introduction

This report covers the first quarter of Water Year 2025 (WY25), consisting of October through December 2024. 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 first quarter of Water Year 2024-2025 indicate overall precipitation levels similar to normal rainfall. Storage in Nacimiento Reservoir is lower than in December 2023 and storage is higher in San Antonio Reservoir compared to December 2023. Over the first quarter of WY25, groundwater elevations increased across all subareas and aquifers.

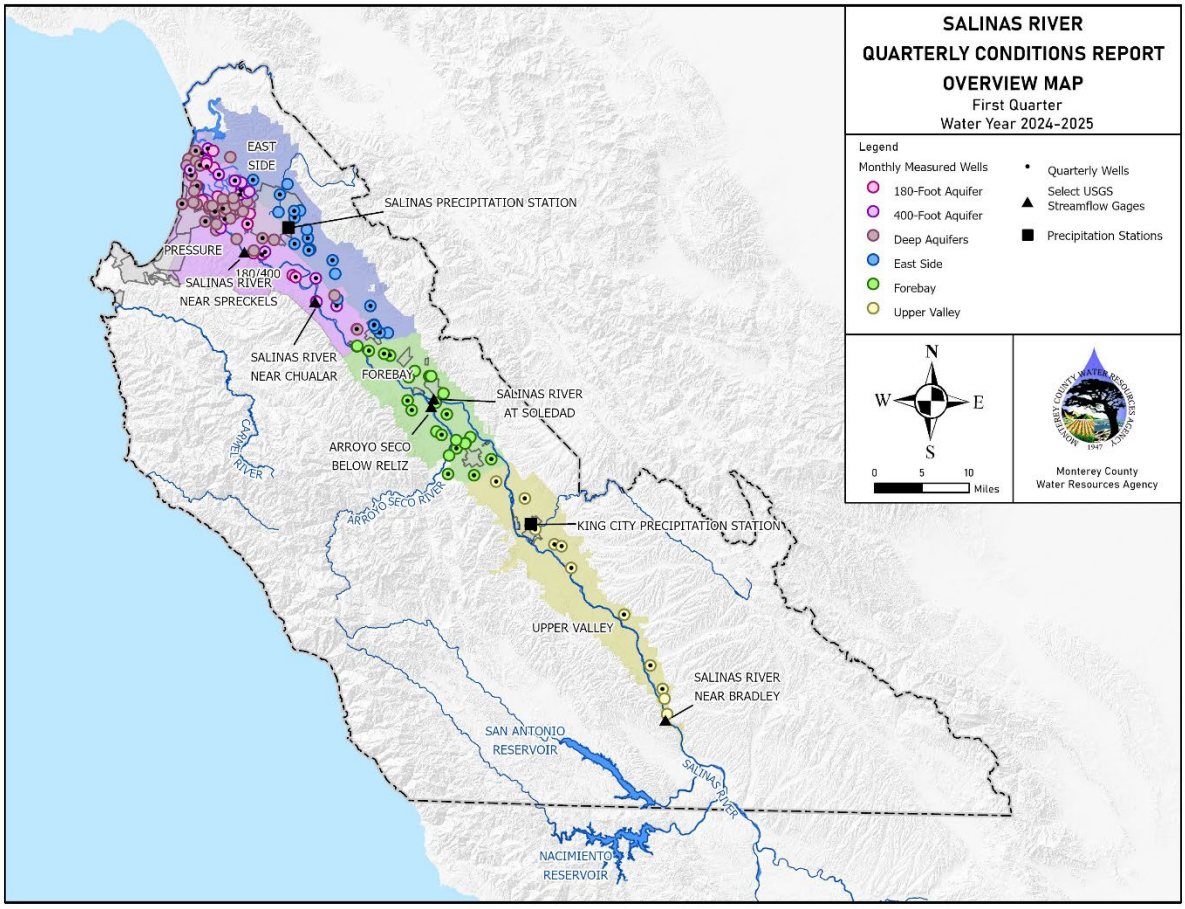
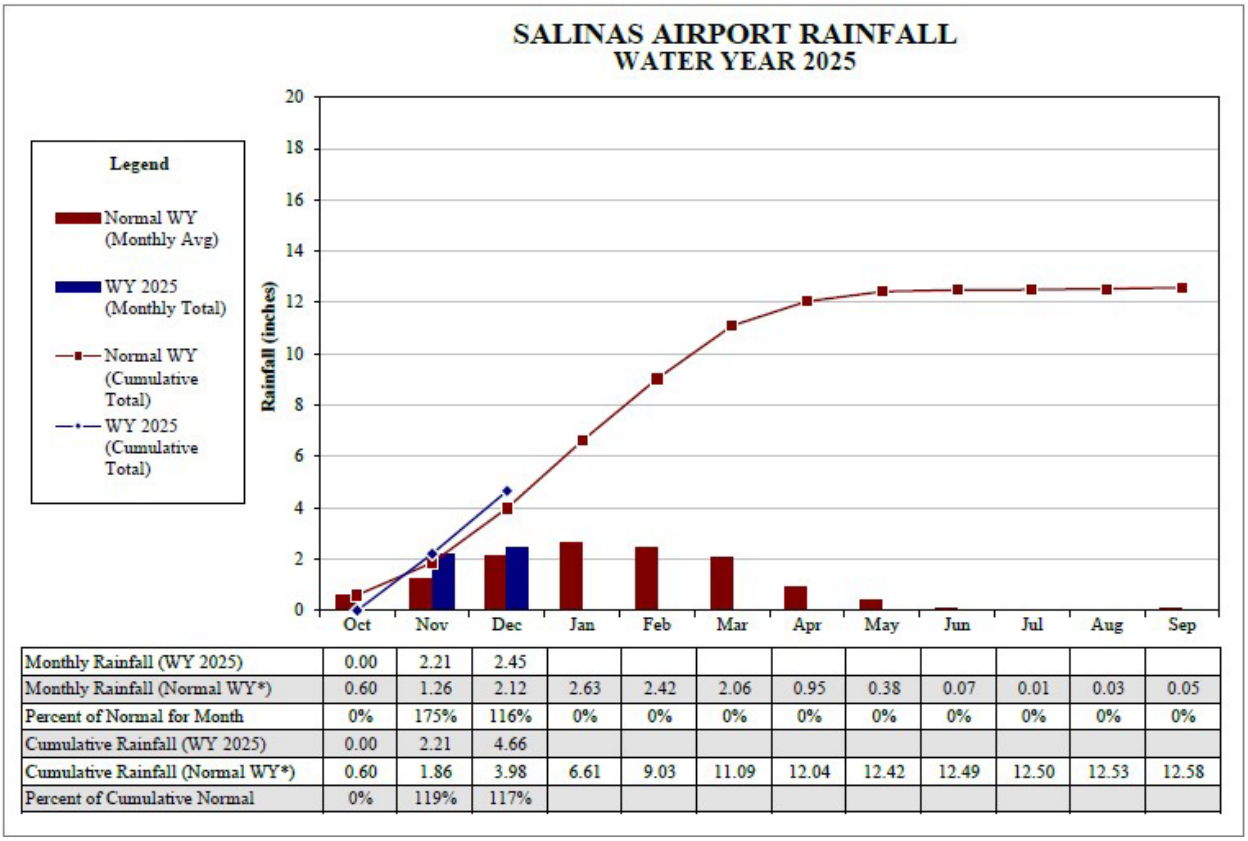


Figure 1: Geographic extent of the area covered by this report and supporting data sources.

Precipitation

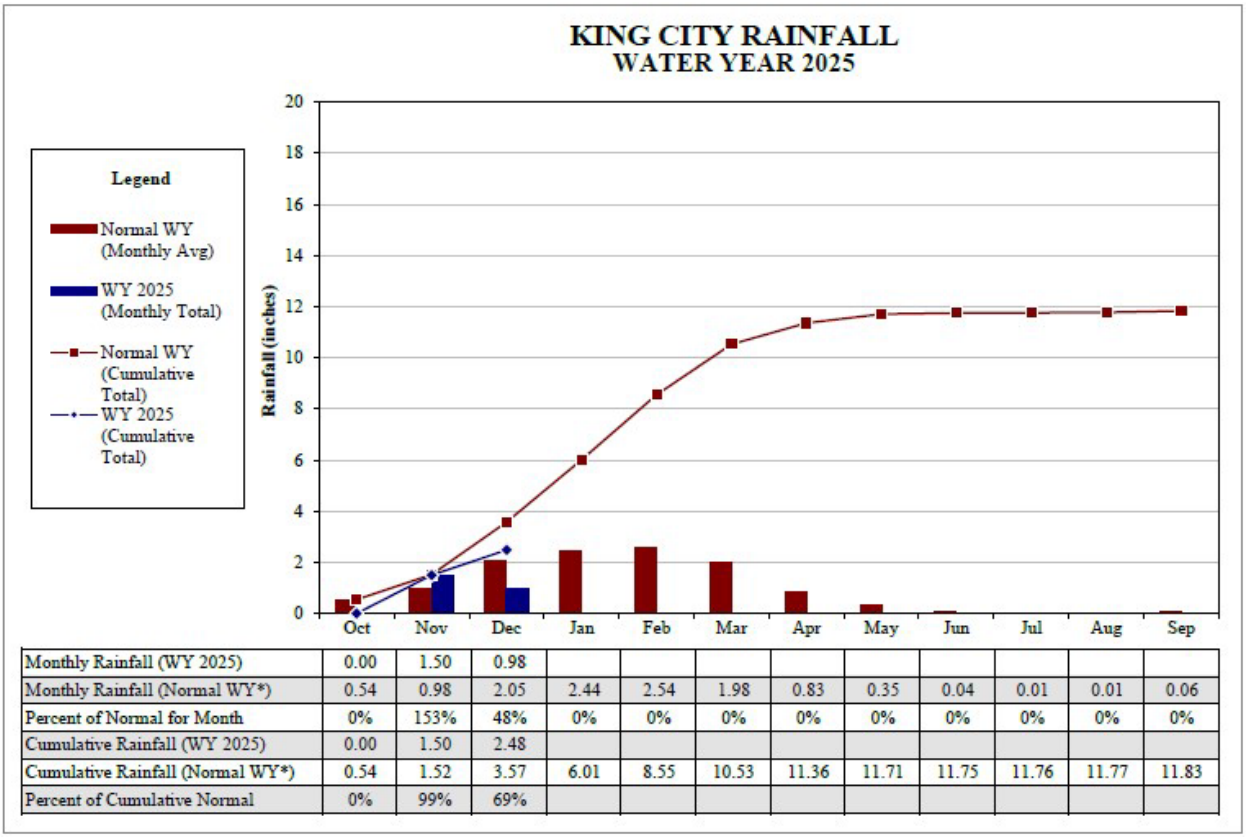
Preliminary National Weather Service rainfall data indicates that the first quarter of WY25 brought above normal rainfall to Salinas and below normal rainfall to King City. Totals for the quarter were 4.66 inches at the Salinas Airport (117% of normal rainfall of 3.98 inches for the quarter) and 2.48 inches in King City (69% of normal rainfall of 3.57 inches for the quarter).

Figure 2 and Figure 3 show monthly and cumulative precipitation data for the current water year and for 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.



	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Monthly Rainfall (WY 2025)	0.00	2.21	2.45									
Monthly Rainfall (Normal WY*)	0.60	1.26	2.12	2.63	2.42	2.06	0.95	0.38	0.07	0.01	0.03	0.05
Percent of Normal for Month	0%	175%	116%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cumulative Rainfall (WY 2025)	0.00	2.21	4.66									
Cumulative Rainfall (Normal WY*)	0.60	1.86	3.98	6.61	9.03	11.09	12.04	12.42	12.49	12.50	12.53	12.58
Percent of Cumulative Normal	0%	119%	117%									

Figure 2: Salinas Airport Rainfall for Water Year 2025



Monthly Rainfall (WY 2025)	0.00	1.50	0.98									
Monthly Rainfall (Normal WY*)	0.54	0.98	2.05	2.44	2.54	1.98	0.83	0.35	0.04	0.01	0.01	0.06
Percent of Normal for Month	0%	153%	48%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cumulative Rainfall (WY 2025)	0.00	1.50	2.48									
Cumulative Rainfall (Normal WY*)	0.54	1.52	3.57	6.01	8.55	10.53	11.36	11.71	11.75	11.76	11.77	11.83
Percent of Cumulative Normal	0%	99%	69%									

Figure 3: King City Rainfall for Water Year 2025

Reservoir Storage

At the end of the first quarter of WY25, storage at Nacimiento Reservoir on December 31, 2024 was 199,748 acre-feet, which is 16,632 acre-feet lower than on the same day in December 2023. Storage in San Antonio Reservoir on December 31, 2024 was 233,650 acre-feet, which is 17,900 acre-feet higher than on the same day in December 2023.

Reservoir	**December 31, 2024 (WY25) Storage in acre-feet**	**December 31, 2023 (WY24) Storage in acre-feet**	**Difference in acre-feet**
Nacimiento	199,748	216,380	-16,632
San Antonio	233,650	215,750	17,900

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.

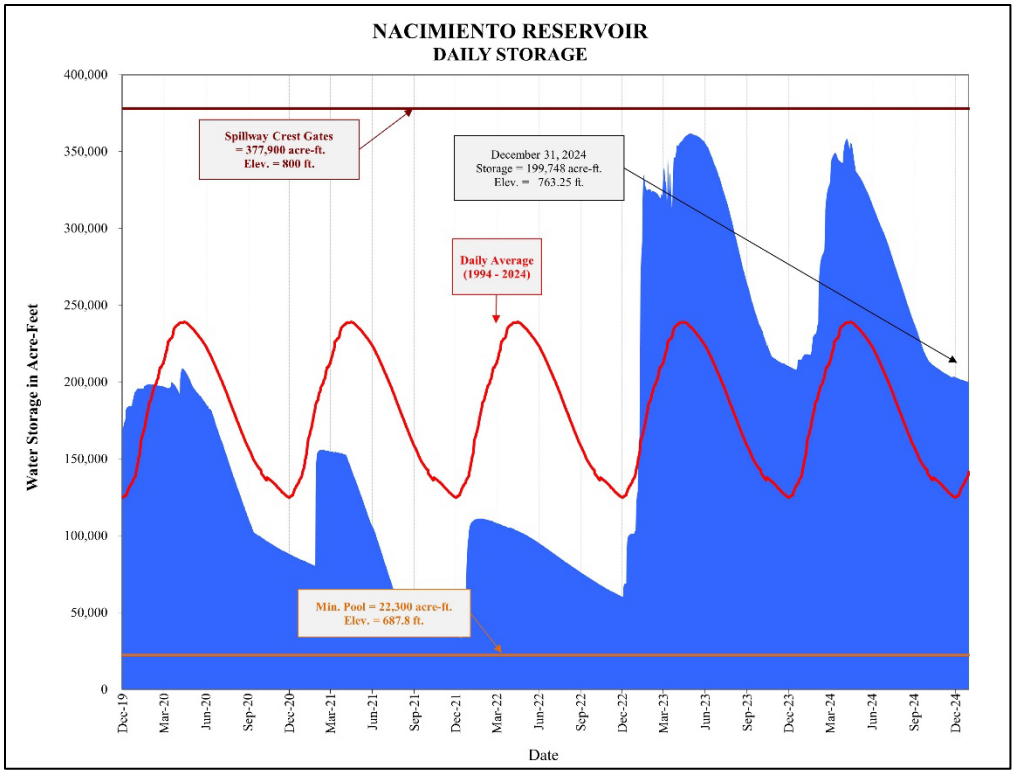


Figure 4: Nacimiento Reservoir Storage

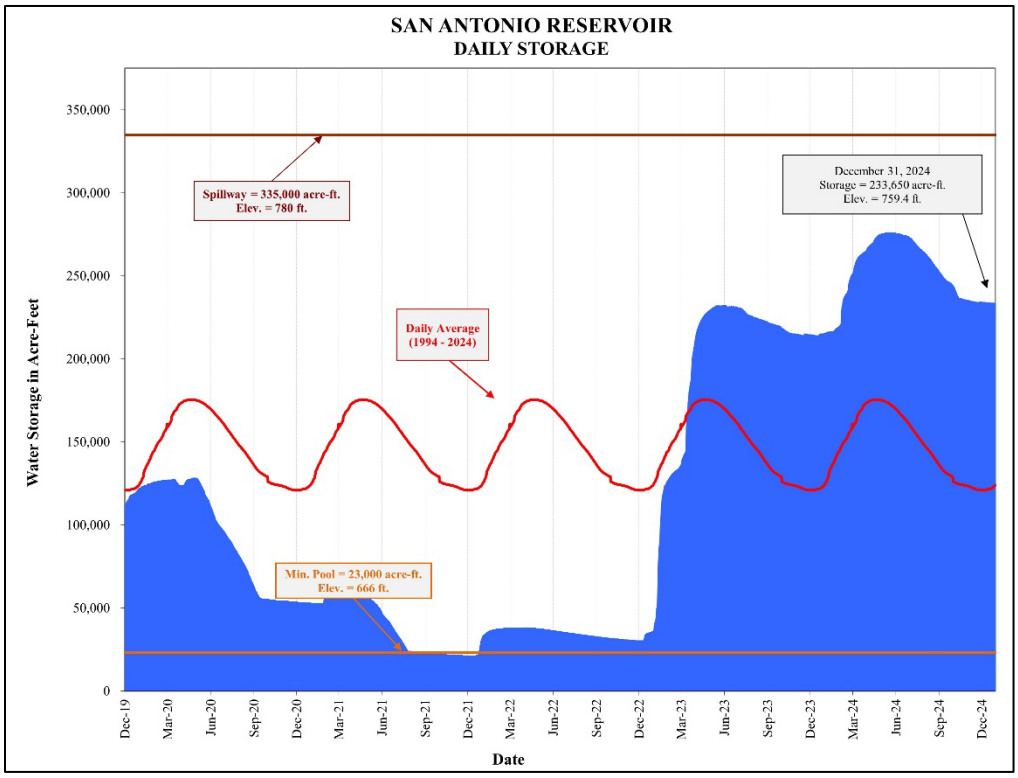


Figure 5: San Antonio Reservoir Storage

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 2020-2024) and the current water year (WY25).

Streamflow recorded during the first quarter of WY25 can be predominantly attributed to releases being made from the Nacimiento and San Antonio reservoirs. October flows are due to conservation and environmental releases from these reservoirs. The conservation releases support groundwater recharge and Salinas River Diversion Facility operations, while environmental releases support fish and wildlife habitat. During the preceding two months of November and December of WY25, streamflow can be attributed to minimum releases from both reservoirs and some precipitation.

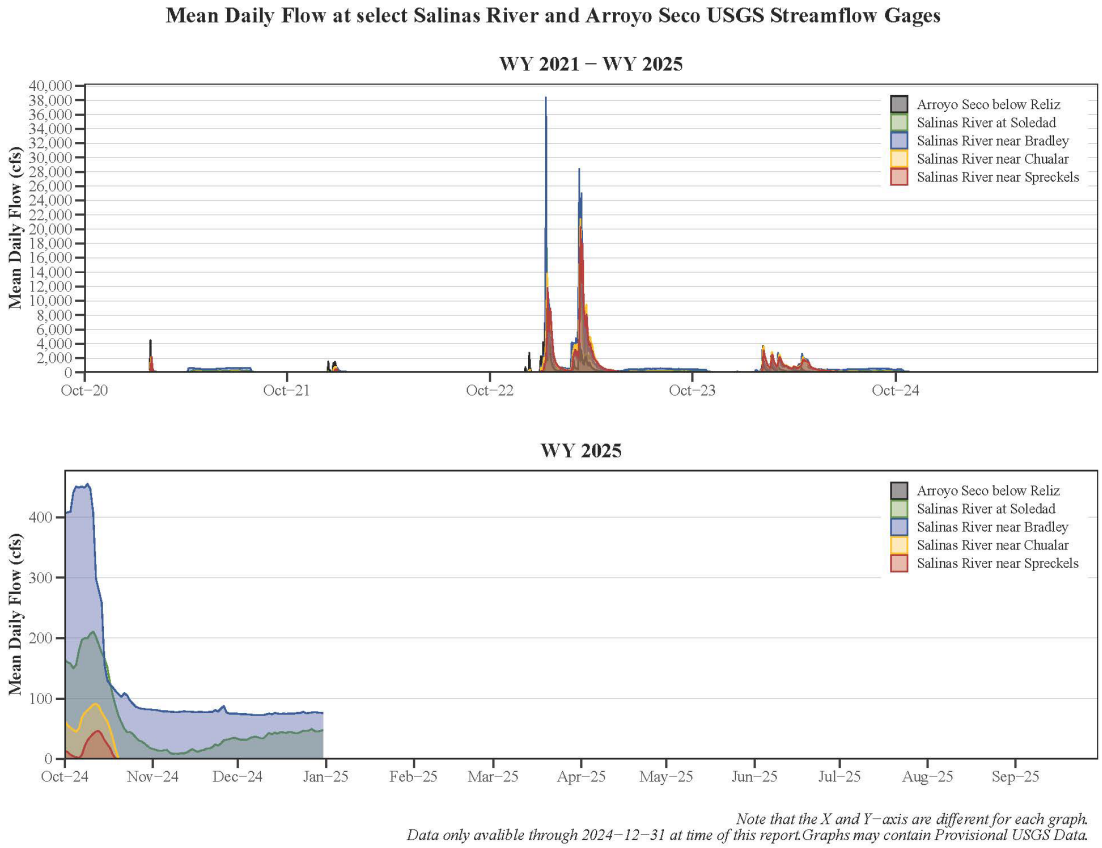


Figure 6: Mean Daily Flow at Selected Stream Gages

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. Changes in groundwater elevations within a confined aquifer will also occur in response to groundwater pumping demands.

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 groundwater elevation value for the wells within each subarea is graphed to compare current groundwater elevations (WY25) with past conditions. Graphs for individual subareas, showing the current year's groundwater elevation conditions, last year's conditions (WY24), wet conditions (WY99) and dry conditions (WY15) are found in the following sections.

For comparison to long term conditions, a curve showing monthly groundwater elevations averaged over the most recent 30 years (WY1995-WY2024) is included on each graph. The Deep Aquifers graph (Figure 9) does not include a 30-year average because there is not yet a 30-year period of record to make that comparison. Table 1 provides a summary of the groundwater elevation trends for December 2024 in units of feet relative to mean sea level (ft-msl), with additional detail provided on Figures 7-12.

Table 1: Groundwater Elevation Trends Summary for December 2024

Subarea/Aquifer	December 2024 Groundwater Elevation (ft-msl)	Change during First Quarter	One Year Change	Difference from 30-Year Average Elevation
180-Foot Aquifer	13 feet	Up 9 feet	Up 2 feet	Up 3 feet
400-Foot Aquifer	6 feet	Up 13 feet	Up 3 feet	Up 4 feet
Deep Aquifers	-23 feet	Up 12 feet	Up <1 foot	Not applicable
East Side	3 feet	Up 33 feet	Up 7 feet	Up 2 feet
Forebay	165 feet	Up 3 feet	Up 1 foot	Up 6 feet
Upper Valley	319 feet	Up 2 feet	Up <1 foot	Up 4 feet

180-Foot Aquifer

Over the last quarter, groundwater elevations increased nine feet in the 180-Foot Aquifer (Figure 7). Groundwater elevations for December 2024 are up two feet compared to December 2023 and are up three feet from the 30-year average.

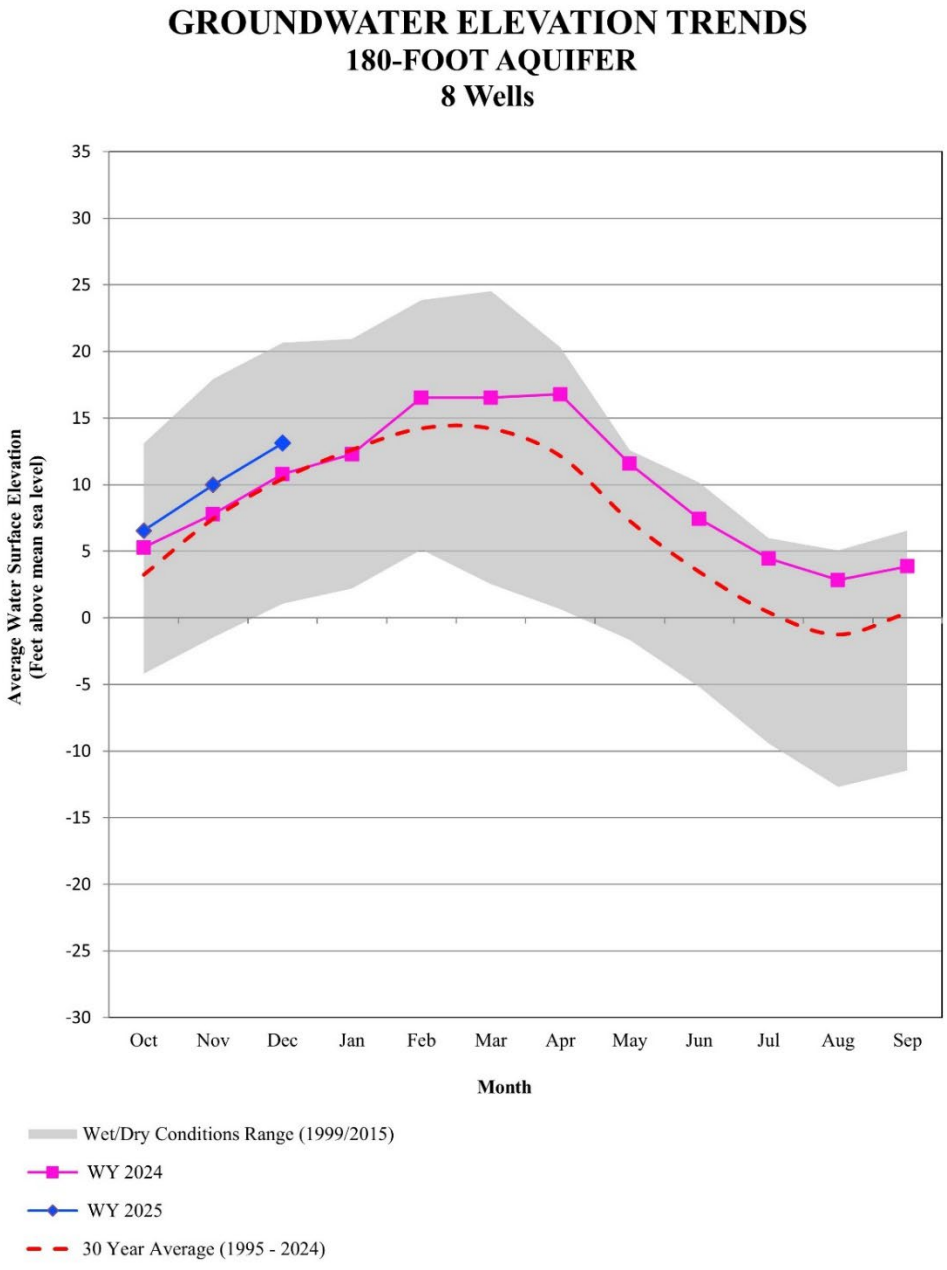


Figure 7: Groundwater Elevation Trends for the 180-Foot Aquifer

400-Foot Aquifer

Over the last quarter, groundwater elevations increased thirteen feet in the 400- Foot Aquifer (Figure 8). Groundwater elevations for December 2024 are up three feet compared to December 2023 and up four feet from the 30-year average.

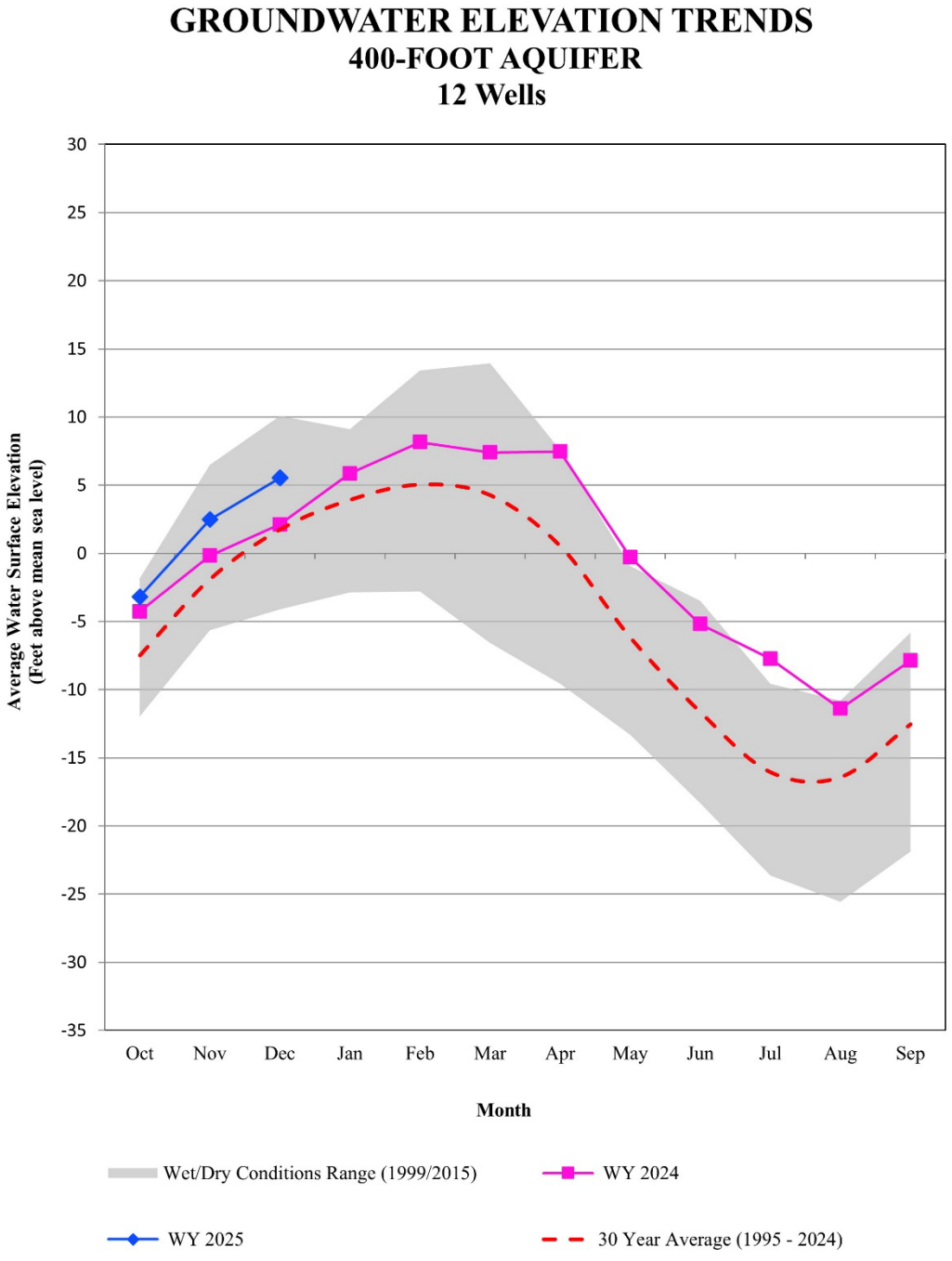


Figure 8: Groundwater Elevation Trends in the 400-Foot Aquifer

Deep Aquifers

Over the last quarter, groundwater elevations increased twelve feet in the Deep Aquifers (Figure 9). Groundwater elevations for December 2024 are up less than one foot compared to December 2023. Given the shorter period of record available for some of the wells monitored in the Deep Aquifers, a 30-year average cannot yet 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 data from the eleven wells to show the seasonal and long-term trends in these wells.

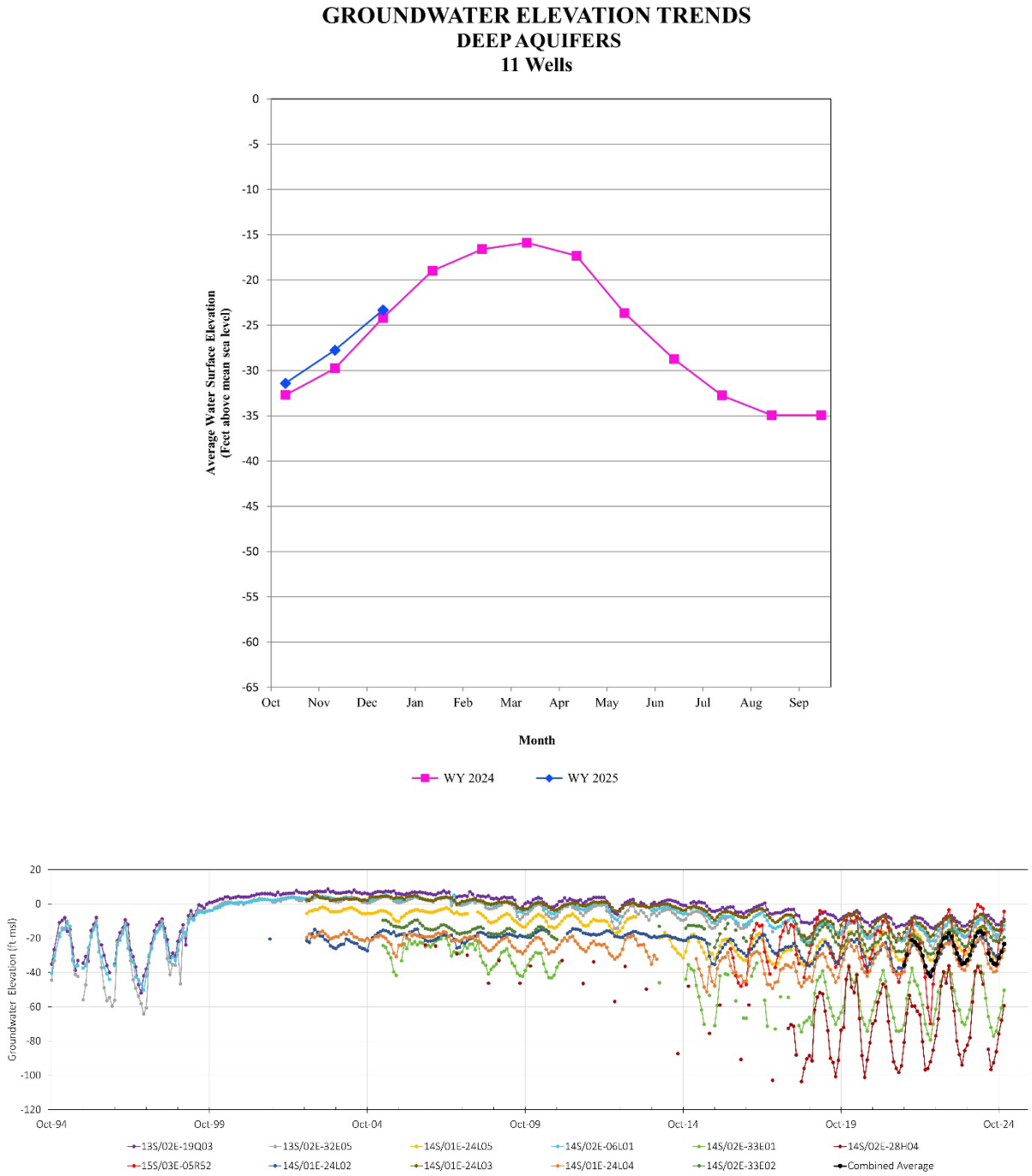


Figure 9: Groundwater Elevation Trends in the Deep Aquifers

East Side Subarea

East Side groundwater elevations increased thirty-three feet over the last quarter (Figure 10). Groundwater elevations for December 2024 are up seven feet from December 2023 elevations and up two feet from the 30-year average.

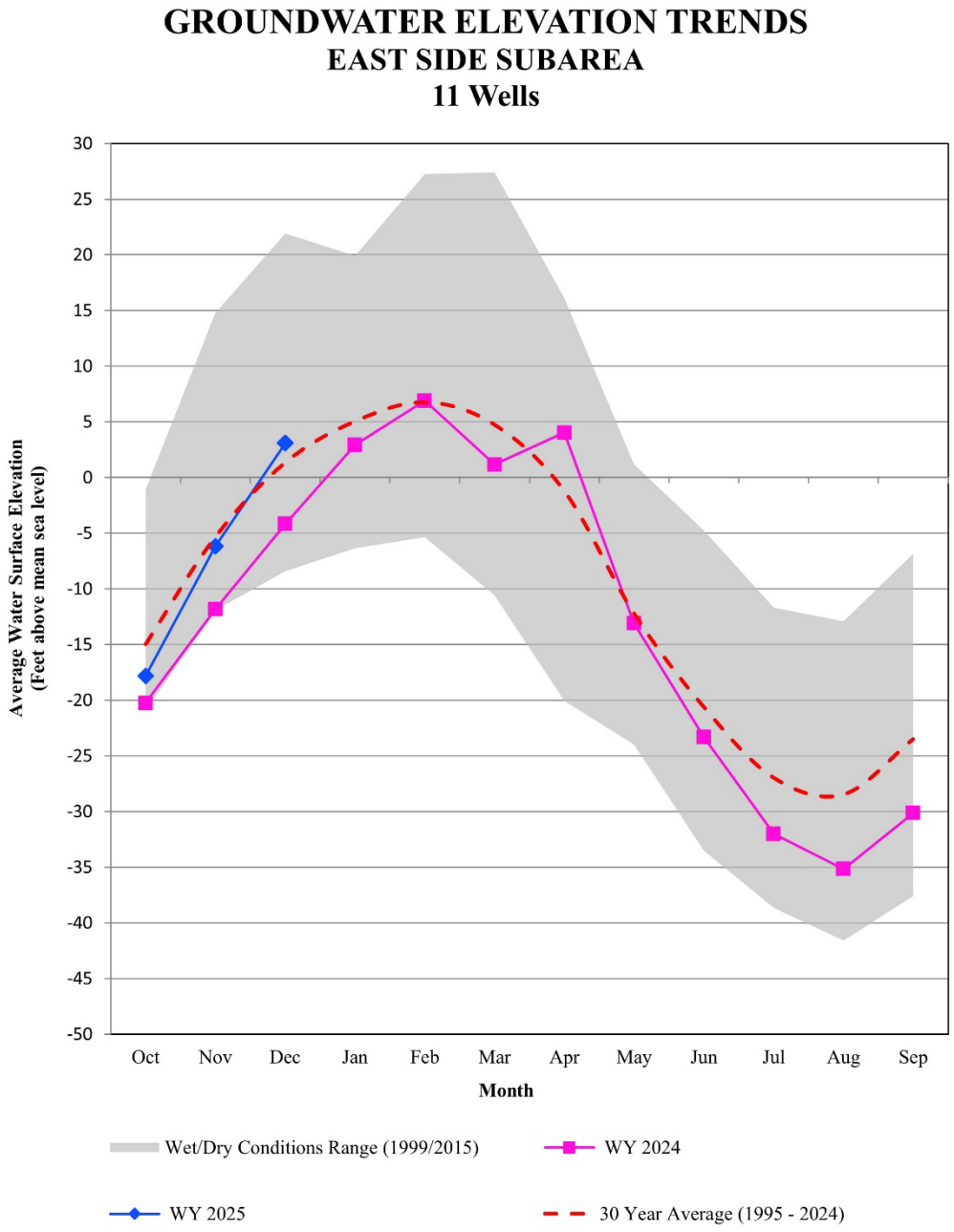


Figure 10: Groundwater Elevation Trends in the East Side Subarea

Forebay Subarea

Over the last quarter, groundwater elevations have increased three feet in the Forebay (Figure 11). Groundwater elevations for December 2024 are up one foot from December 2023 elevations and are up six feet from the 30-year average.

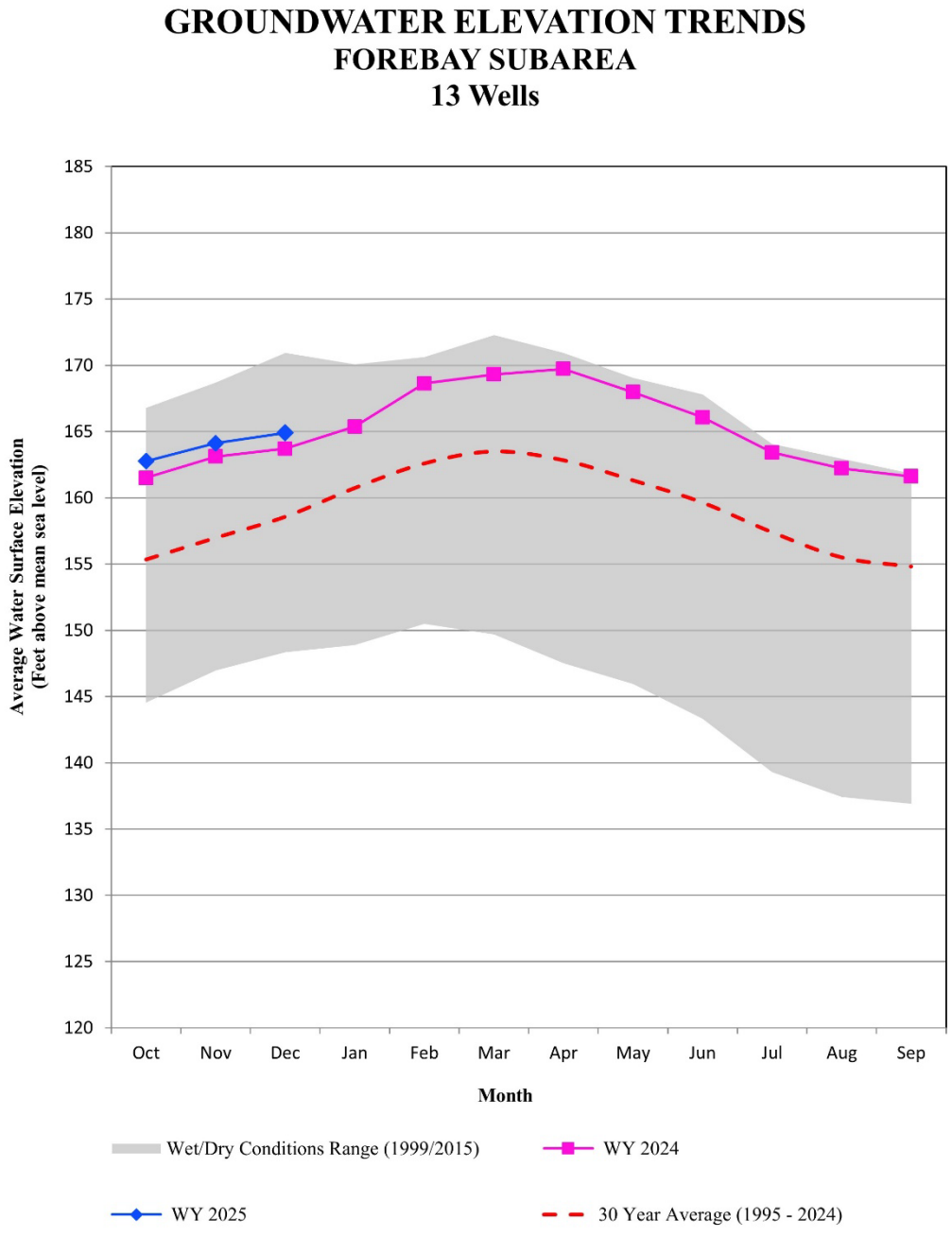


Figure 11: Groundwater Elevation Trends in the Forebay Subarea

Upper Valley Subarea

Upper Valley groundwater elevations have increased two feet over the last quarter (Figure 12). Groundwater elevations for December 2024 are up less than one foot from December 2023 elevations and up four feet from the 30-year average.

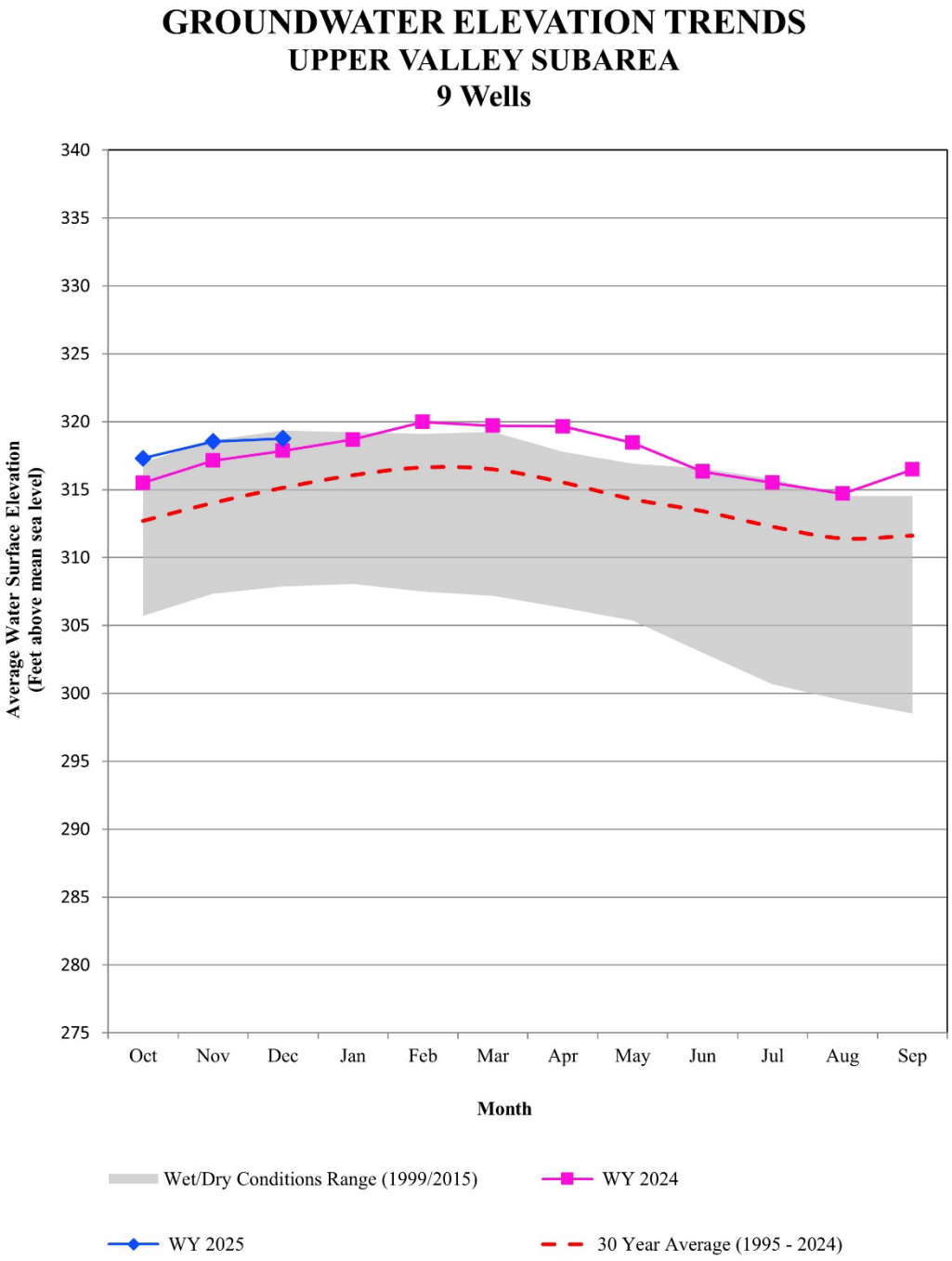


Figure 12: Groundwater Elevation Trends in the Upper Valley Subarea

Figure 13 shows the spatial distribution of changes in groundwater elevations from December 2023 to December 2024. Over the last Water Year, most of the monitored wells in all hydrologic subareas experienced no significant change in groundwater elevation, meaning that fluctuations were within five feet of the prior year's value. However, localized variability in groundwater elevation trends was observed, particularly in the East Side subarea where a majority of the groundwater elevations increased at least five feet compared to the prior year.

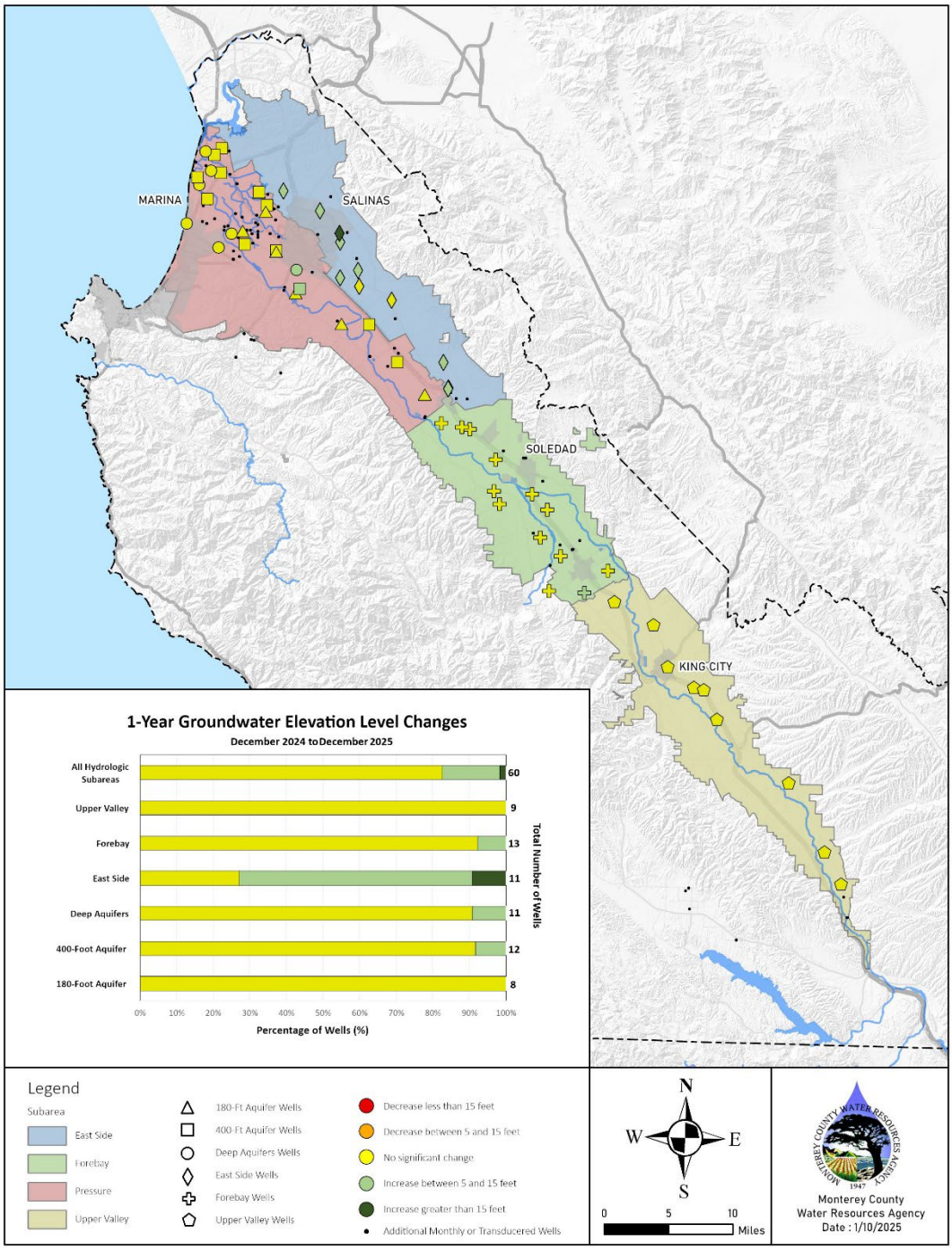


Figure 13: One-Year Groundwater Elevation Changes

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. Using groundwater elevation to describe and analyze the regional groundwater surface allows for comparison of data to determine things such as direction of groundwater flow and groundwater gradient while removing well-to-well variability from topography and well construction design. By measuring the depth to groundwater from a known and consistently used elevation at each well, often referred to as a reference point, it is possible to compare data between wells or to other relevant metrics, such as sea level. Groundwater elevation is calculated from the measured depth to groundwater using the reference point elevation and ground surface elevation. Figure 14 shows the relationship between the reference point and measured depth to water, along with how groundwater elevation is calculated.

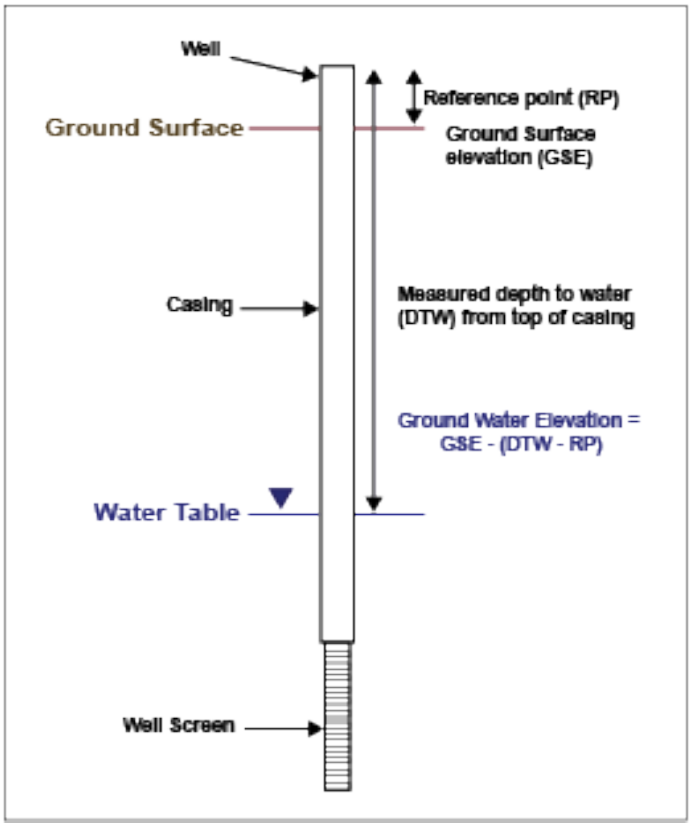
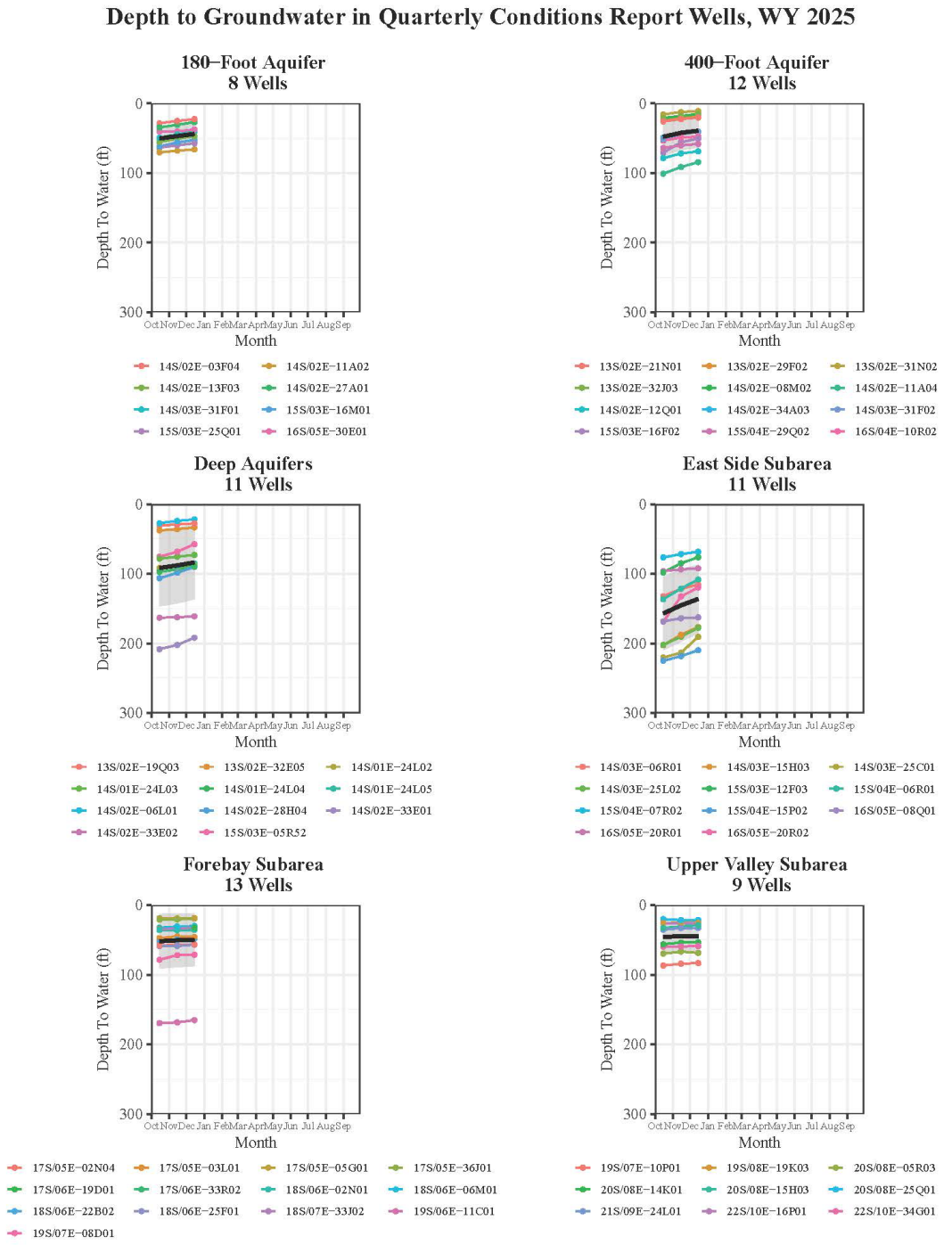


Figure 14: Relationship between Depth to Groundwater and Groundwater Elevation.[1]

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" by accounting for the reference point and elevation of the ground surface and graphed as the "2025 WY" line on each of the preceding subarea-specific graphs (Figures 7-12). The range in depth to water values is the result of many factors (e.g. variations in topography, thickness of the aquifer, and the length of screen in the well) and illustrates the reason why groundwater elevation is the standard method for evaluating the groundwater system on a regional scale. However, the depth-to-water data have been included with this report as a means of demonstrating the methodology behind the groundwater elevation data that are used throughout the rest of the document.



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 2025

County of Monterey

Board Report

Legistar File Number: WRABMAC 25-015

Item No.6

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

March 05, 2025

Introduced: 2/25/2025
Version: 1

Current Status: Agenda Ready
Matter Type: WRA BMAC Item

Overview of Well Bubbler Technology. (Staff Presenting: Ricardo Carmona)

County of Monterey

Board Report

Legistar File Number: WRABMAC 25-010

Item No.7

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

March 05, 2025

Introduced: 2/20/2025
Version: 1

Current Status: Agenda Ready
Matter Type: WRA BMAC Item

Set next meeting date and discuss future agenda items.