

# Monterey County

1441 Schilling Place  
Salinas, CA 93901



## Meeting Agenda - Final

Wednesday, May 5, 2021

8:30 AM

**IMPORTANT COVID-19 NOTICE ON PAGE 2-4**  
**AVISO IMPORTANTE SOBRE COVID-19 EN LA PAGINA 2-4**

### **Water Resources Agency Basin Management**

#### **Advisory Committee**

*John Baillie*  
*Deidre Sullivan*  
*Matthew Simis*  
*David Bunn*  
*Bill Lipe*  
*Kevin Piearcy*  
*Amy White*  
*Marisela Cerda*  
*Patrick Breen*  
*Patrick Collins*

## **IMPORTANT NOTICE REGARDING COVID 19 AND PARTICIPATION IN THE BASIN MANAGEMENT ADVISORY COMMITTEE MEETING**

The Basin Management Advisory Committee meeting will be held by teleconference in order to minimize the spread of the COVID 19 virus, in accordance with the State of Emergency proclaimed by Governor Newsom on March 4, 2020, Executive Order N 29 20 issued by Governor Newsom on March 17, 2020, and the Shelter in Place Order issued by the Monterey County Health Officer on March 17, 2020, as may be periodically amended.

To participate in this Basin Management Advisory Committee meeting, the public is invited to observe and address the Committee telephonically or electronically. Instructions for public participation are below:

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

<https://montereycty.zoom.us/j/98016048495> 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: 980 1604 8495 PASSWORD: 471712 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.

2. 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 unmute their device one at a time. Public speakers may be broadcast in audio form only.

3. 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](mailto: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.

4. 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](mailto: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.

5. 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](mailto: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.

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7. 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](mailto: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.

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

#### **AVISO IMPORTANTE SOBRE COVID 19 Y PARTICIPACIÓN EN LA REUNIÓN DEL COMITE DE ASESOR DE GESTION DE LA CUENCA**

La reunión del Comité de Asesor de Gestion de la Cuenca se llevará a cabo por teleconferencia para minimizar la propagación del virus COVID 19, de acuerdo con el Estado de Emergencia proclamado por el Gobernador Newsom el 4 de Marzo del 2020, Orden Ejecutiva N 29 20 emitida por el Gobernador Newsom el 17 de Marzo del 2020, y la Orden de Refugio en el Lugar”) emitida por el Oficial de Salud del Condado de Monterey el 17 de Marzo del 2020, según se pueda enmendar periódicamente.

Para participar en esta reunión del Comité de Asesor de Gestion de la Cuenca el público están invitados a observar y dirigirse al Comité telefónicamente o por vía electrónica. Las instrucciones para la participación pública están a continuación:

1. El público puede observar la reunión ZOOM a través de computadora haciendo clic en el siguiente enlace: <https://montereycty.zoom.us/j/98016048495> 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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2. 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.

3. Si un miembro del público desea comentar sobre un artículo de la agenda en particular, se le es sumamente recomendable que envíe sus comentarios por escrito por correo electrónico a la Agencia de Administración de Recursos del Agua (Agencia) a [WRAPubliccomment@co.monterey.ca.us](mailto: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 límite del Martes a las 5 P.M, serán distribuidos al Comité y serán colocados en el registro.

4. 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](mailto: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.



5. 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](mailto: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.

6. 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](mailto: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).

7. 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](mailto: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 .

8. 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

### Consent Calendar

1. Approve the Minutes of the Basin Management Advisory Committee meetings held on April 7, 2021.

**Attachments:** [Draft Action Minutes April 7, 2021](#)

### Scheduled Matters

2. Consider receiving a report on the Analysis of Groundwater Wells and Extractions in the “Area of Impact” of the 180/400 Foot Aquifer Subbasin and provide guidance to Staff for a presentation of that information to the Agency Board of Directors

**Attachments:** [Board Report](#)  
[Groundwater Extraction Data Package](#)

3. Consider receiving a report on the DWR Bulletin 74: California Well Standards

Update Project and providing input to Staff for upcoming Technical Advisory Committee meetings

**Attachments:** [Board Report](#)

### **Staff Reports**

4. Update on the well permit application process in Monterey County

**Attachments:** [Board Report](#)  
[Well Permit Application Process Flowchart](#)  
[Article XI Amended 2019](#)

5. Proposition 1 Implementation Grant Update: *Protection of Domestic Drinking Water Supplies for the Lower Salinas Valley*

**Attachments:** [Proposition 1 Grant Update](#)  
[Right-of-Entry Agreement Template](#)

6. Update on Well Permit Application Activities

**Attachments:** [Well Permit Information Item 4-8-2021](#)

7. Update on Groundwater Sustainability Agency activities in the Salinas Valley Basin

**Attachments:** [GSA Activities Update](#)

8. Update on Agency Modeling Activities

**Attachments:** [Agency Modeling Activities](#)

9. Salinas Valley Water Conditions for the Second Quarter of Water Year 2020-2021

**Attachments:** [Quarterly Report - 2nd Quarter WY 2021](#)

### **Calendar**

10. Consider future agenda items and set next meeting date

### **Adjournment**



# Monterey County

## Item No.1

### Board Report

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

Legistar File Number: WRABMAC 21-030

May 05, 2021

Introduced: 4/29/2021

Current Status: Draft

Version: 1

Matter Type: WRA BMAC Item

Approve the Minutes of the Basin Management Advisory Committee meetings held on April 7, 2021.

# Monterey County

1441 Schilling Place  
Salinas, CA 93901



## Action Minutes - Draft

Wednesday, April 7, 2021

8:30 AM

IMPORTANT COVID-19 NOTICE ON PAGE 2-4  
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## Water Resources Agency Basin Management Advisory Committee

*John Baillie  
Deidre Sullivan  
Matthew Simis  
David Bunn  
Bill Lipe  
Kevin Piearcy  
Amy White  
Marisela Cerda  
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7. 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](mailto: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 .

8. 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 8:32 a.m.

#### Roll Call

Present: John Baillie, Matthew Simis, David Bunn, Bill Lipe, Kevin Piearcy, Patrick Collins  
Absent: Deidre Sullivan, Amy White, Marisela Cerda, Patrick Breen

#### Public Comment

None

#### Consent Calendar

1. Approve the Minutes of the Basin Management Advisory Committee meetings held on March 3,



2021.

**Attachments:**     [Draft Action Minutes March 3, 2021](#)

Upon Motion by Matt Simis and Second by David Bunn the Committee approved the Minutes of the Basin Management Advisory Committee meeting held on March 3, 2021.

**Ayes:** Baillie, Simis, Bunn, Lipe Piearcy and Collins

**Noes:** None

**Absent:** Sullivan, White Cerda and Breen

### **Scheduled Matters**

2. Consider receiving a report on the Analysis of Groundwater Wells and Extractions in the “Area of Impact” of the 180/400 Foot Aquifer Subbasin and provide input to Staff and Agency Board of Directors

**Attachments:**     [Board Report](#)

Upon Motion by Kevin Piearcy and Second by David unn the Committee received a report on Analysis of Groundwater Wells and Extractions in the “Area of Impact” of the 180/400 Foot Aquifer Subbasin and provided input to Staff, and requested that this be brought back to the Committee in May.

**Ayes:** Baillie, Simis, Bunn, Lipe Piearcy and Collins

**Noes:** None

**Absent:** Sullivan, White Cerda and Breen

**Public Comment:** George Fontes, Nancy Isakson

3. Consider receiving a report on the DWR Bulletin 74: California Well Standards Update Project and providing input to Staff for upcoming Technical Advisory Committee meetings.

**Attachments:**     [Board Report](#)  
                          [Final Technical Advisory Committee Kickoff Meeting Summary](#)  
                          [TAC Roster Siting Focus Group](#)  
                          [FG2 Siting Syllabus](#)

Upon Motion by David Bunn and SEcond by Matthew Simis the Committee received a report on the DWR Bulletin 74: California Well Standards Update Project and provided input to Staff for upcoming Technical Advisory Committee meetings.

**Ayes:** Baillie, Simis, Bunn, Lipe Piearcy and Collins

**Noes:** None

**Absent:** Sullivan, White Cerda and Breen

### **Staff Reports**

4. Update on Source Water Discussions with Monterey One Water

**Attachments:**    [Source Water Discussions](#)  
                              [New Source Waters - Draft](#)

5.      Update on the Well Permitting Process

**Attachments:**    [4 Well Permitting and CEQA](#)  
                              [POWER v Stanislaus Final Decision 27 Aug 20](#)

6.      Proposition 1 Implementation Grant Update: *Protection of Domestic Drinking Water Supplies for the Lower Salinas Valley*

**Attachments:**    [Proposition 1 Grant Update](#)  
                              [Opt Out Agreement Template](#)  
                              [Right-of-Entry Agreement Template](#)

**Public Comment:**   **George Fontes, Grant Cremers**

7.      Update on Well Permit Application Activities

**Attachments:**    [Well Permit Activities Update](#)

8.      Update on Groundwater Sustainability Agency activities in the Salinas Valley Basin

**Attachments:**    [7 GSA Activities](#)  
                              [Groundwater Subbasins Map](#)

9.      Update on Agency Modeling Activities

**Attachments:**    [Agency Modeling Activities](#)

### **Calendar**

10.     Consider future agenda items and set next meeting date

### **Adjournment**

**The meeting adjourned at 19:24 a.m.**



# Monterey County

## Item No.2

### Board Report

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

Legistar File Number: WRABMAC 21-039

May 05, 2021

Introduced: 4/29/2021

Current Status: Agenda Ready

Version: 1

Matter Type: WRA BMAC Item

Consider receiving a report on the Analysis of Groundwater Wells and Extractions in the “Area of Impact” of the 180/400 Foot Aquifer Subbasin and provide guidance to Staff for a presentation of that information to the Agency Board of Directors

#### RECOMMENDATION:

It is recommended that the Basin Management Advisory Committee:

Receive a report on Analysis of Groundwater Wells and Extractions in the “Area of Impact” of the 180/400 Foot Aquifer Subbasin and provide guidance to Staff for a presentation of that information to the Agency Board of Directors

#### SUMMARY:

On March 15, 2021 the Agency Board of Directors asked staff to evaluate the number of wells and amount of groundwater extraction occurring within the “Area of Impact” of the 180/400 Foot Aquifer Subbasin of the Salinas Valley Groundwater Basin. This information was presented in a summary format to the Agency’s Basin Management Advisory Committee on April 7, 2021. At that meeting the BMAC requested staff provide additional information and detail as part of a comprehensive data package for the BMAC to review and discuss at their May 5, 2021 meeting.

#### DISCUSSION:

Staff will present and discuss with the BMAC data from their initial analysis of wells and groundwater extraction occurring within the “Area of Interest” of the 180/400 Foot Aquifer Subbasin. The Committee will be asked to provide feedback and guidance, which Staff will use to refine and focus their investigations. Based on that feedback and guidance, Staff will finalize analysis for presentation to the Agency Board of Directors in response to the Directors request of March 15, 2021.

#### OTHER AGENCY INVOLVEMENT:

None. This work is being done at the direction of the Monterey County Water Resources Agency Board of Directors.

#### FINANCING:

There is no financial impact in receiving this report.

Funds 111, 116: Data Collection, Processing, Analysis and Reporting

Prepared by: Howard Franklin, Senior Hydrologist, (831) 755-4860  
Nicole Koerth, Hydrologist, (831) 755-4860

Approved by: Brent Buche, General Manager

Attachment:

Groundwater Extraction Data Package



# Monterey County

Item No.

## Board Report

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

Legistar File Number: WRABMAC 21-039

May 05, 2021

Introduced: 4/29/2021

Current Status: Agenda Ready

Version: 1

Matter Type: WRA BMAC Item

Consider receiving a report on the Analysis of Groundwater Wells and Extractions in the “Area of Impact” of the 180/400 Foot Aquifer Subbasin and provide guidance to Staff for a presentation of that information to the Agency Board of Directors

### RECOMMENDATION:

It is recommended that the Basin Management Advisory Committee:

Receive a report on Analysis of Groundwater Wells and Extractions in the “Area of Impact” of the 180/400 Foot Aquifer Subbasin and provide guidance to Staff for a presentation of that information to the Agency Board of Directors

### SUMMARY:

On March 15, 2021 the Agency Board of Directors asked staff to evaluate the number of wells and amount of groundwater extraction occurring within the “Area of Impact” of the 180/400 Foot Aquifer Subbasin of the Salinas Valley Groundwater Basin. This information was presented in a summary format to the Agency’s Basin Management Advisory Committee on April 7, 2021. At that meeting the BMAC requested staff provide additional information and detail as part of a comprehensive data package for the BMAC to review and discuss at their May 5, 2021 meeting.

### DISCUSSION:

Staff will present and discuss with the BMAC data from their initial analysis of wells and groundwater extraction occurring within the “Area of Interest” of the 180/400 Foot Aquifer Subbasin. The Committee will be asked to provide feedback and guidance, which Staff will use to refine and focus their investigations. Based on that feedback and guidance, Staff will finalize analysis for presentation to the Agency Board of Directors in response to the Directors request of March 15, 2021.

### OTHER AGENCY INVOLVEMENT:

None. This work is being done at the direction of the Monterey County Water Resources Agency Board of Directors.

### FINANCING:

There is no financial impact in receiving this report.

Funds 111, 116: Data Collection, Processing, Analysis and Reporting

Prepared by: Howard Franklin, Senior Hydrologist, (831) 755-4860  
Nicole Koerth, Hydrologist, (831) 755-4860

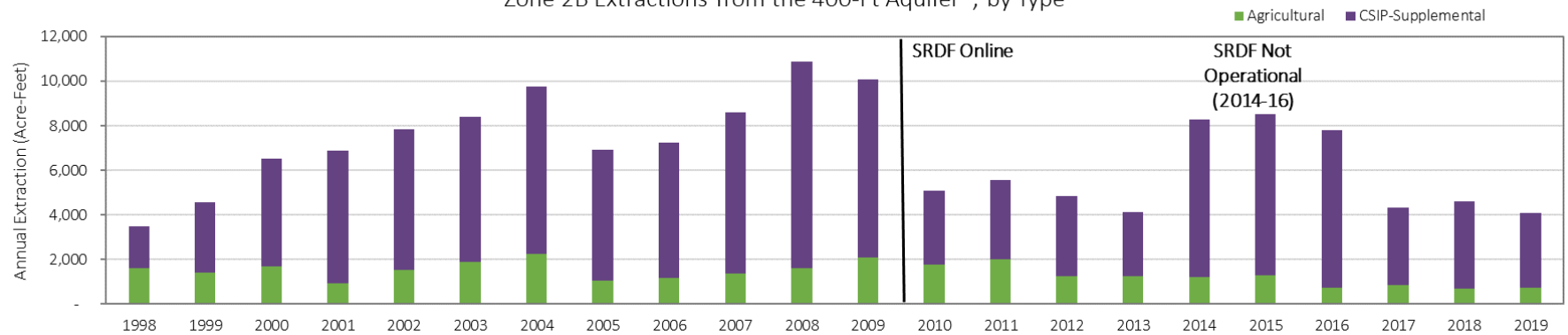
Approved by: Brent Buche, General Manager

Attachment:

Groundwater Extraction Data Package

ATTACHMENT 1

Zone 2B Extractions from the 400-Ft Aquifer\*, by Type



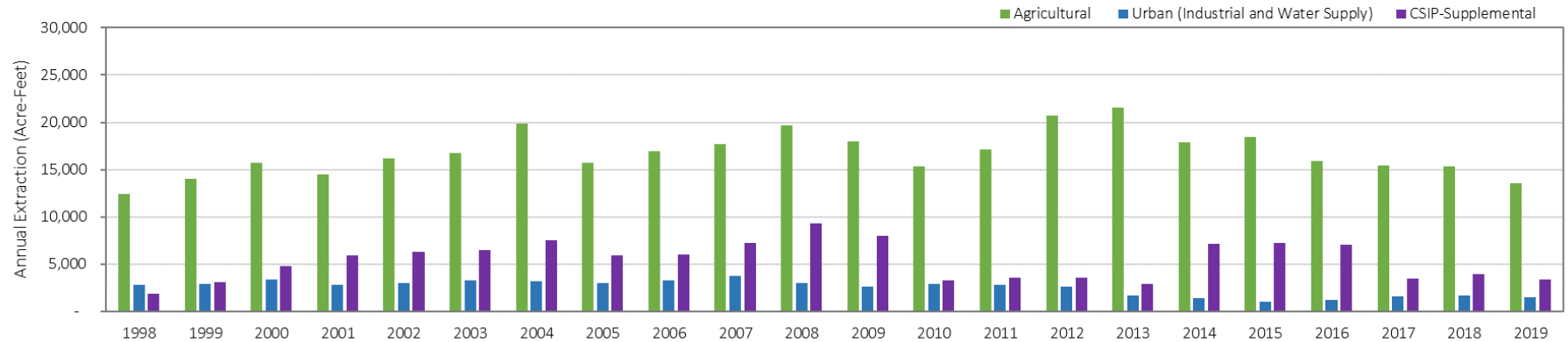
Zone 2B Extractions (acre-feet) from the 400-Ft Aquifer*, Annual Extractions by Type											
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Agricultural	1,616	1,421	1,701	916	1,535	1,909	2,234	1,053	1,176	1,355	1,604
Urban (Industrial and Water Supply)	-	-	-	-	-	-	-	-	-	-	-
CSIP-Supplemental	1,879	3,137	4,803	5,949	6,317	6,504	7,535	5,878	6,058	7,256	9,283
<b>Total</b>	<b>3,495</b>	<b>4,558</b>	<b>6,504</b>	<b>6,865</b>	<b>7,852</b>	<b>8,413</b>	<b>9,768</b>	<b>6,930</b>	<b>7,234</b>	<b>8,610</b>	<b>10,887</b>
continued....											
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Agricultural	2,112	1,773	2,019	1,243	1,246	1,196	1,285	736	836	693	753
Urban (Industrial and Water Supply)	-	-	-	-	-	-	-	-	-	-	-
CSIP-Supplemental	7,961	3,302	3,528	3,603	2,864	7,101	7,214	7,046	3,511	3,932	3,348
<b>Total</b>	<b>10,073</b>	<b>5,075</b>	<b>5,547</b>	<b>4,845</b>	<b>4,110</b>	<b>8,298</b>	<b>8,499</b>	<b>7,782</b>	<b>4,347</b>	<b>4,625</b>	<b>4,101</b>

\*Includes wells screened in the 400-Ft Aquifer, East Side Deep, or wells with Unknown Construction

Zone 2B Extractions (acre-feet) from the 400-Ft Aquifer*, Number of Wells With Extractions > 0											
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Agricultural	9	11	10	6	10	13	13	13	15	14	14
Urban	0	0	0	0	0	0	0	0	0	0	0
CSIP-Supplemental	15	15	15	14	14	15	15	14	14	15	15
<b>Total</b>	<b>24</b>	<b>26</b>	<b>25</b>	<b>20</b>	<b>24</b>	<b>28</b>	<b>28</b>	<b>27</b>	<b>29</b>	<b>29</b>	<b>29</b>
continued....											
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Agricultural	15	15	15	15	12	13	11	11	11	11	12
Urban (Industrial and Water Supply)	0	0	0	0	0	0	0	0	0	0	0
CSIP-Supplemental	15	15	14	13	13	13	14	15	12	12	10
<b>Total</b>	<b>30</b>	<b>30</b>	<b>29</b>	<b>28</b>	<b>25</b>	<b>26</b>	<b>25</b>	<b>26</b>	<b>23</b>	<b>23</b>	<b>22</b>

\*Includes wells screened in the 400-Ft Aquifer, East Side Deep, or wells with Unknown Construction

## Area of Impact Extractions from the 400-Ft Aquifer\*, by Type



Area of Impact Extractions (acre-feet) from the 400-Ft Aquifer*, Annual Extractions by Type											
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Agricultural	12,384	14,016	15,690	14,479	16,217	16,712	19,862	15,698	16,902	17,693	19,681
Urban (Industrial and Water Supply)	2,787	2,869	3,373	2,809	3,007	3,242	3,215	3,019	3,254	3,738	3,026
CSIP-Supplemental	1,879	3,137	4,803	5,949	6,317	6,504	7,535	5,878	6,058	7,256	9,283
<b>Total</b>	<b>17,050</b>	<b>20,022</b>	<b>23,866</b>	<b>23,237</b>	<b>25,540</b>	<b>26,458</b>	<b>30,612</b>	<b>24,595</b>	<b>26,214</b>	<b>28,686</b>	<b>31,991</b>
continued....											
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Agricultural	17,990	15,380	17,175	20,668	21,515	17,856	18,425	15,940	15,473	15,319	13,528
Urban (Industrial and Water Supply)	2,599	2,862	2,839	2,603	1,664	1,428	1,048	1,214	1,542	1,661	1,454
CSIP-Supplemental	7,961	3,302	3,528	3,603	2,864	7,101	7,214	7,046	3,511	3,932	3,348
<b>Total</b>	<b>28,550</b>	<b>21,545</b>	<b>23,541</b>	<b>26,874</b>	<b>26,042</b>	<b>26,386</b>	<b>26,687</b>	<b>24,199</b>	<b>20,527</b>	<b>20,912</b>	<b>18,331</b>

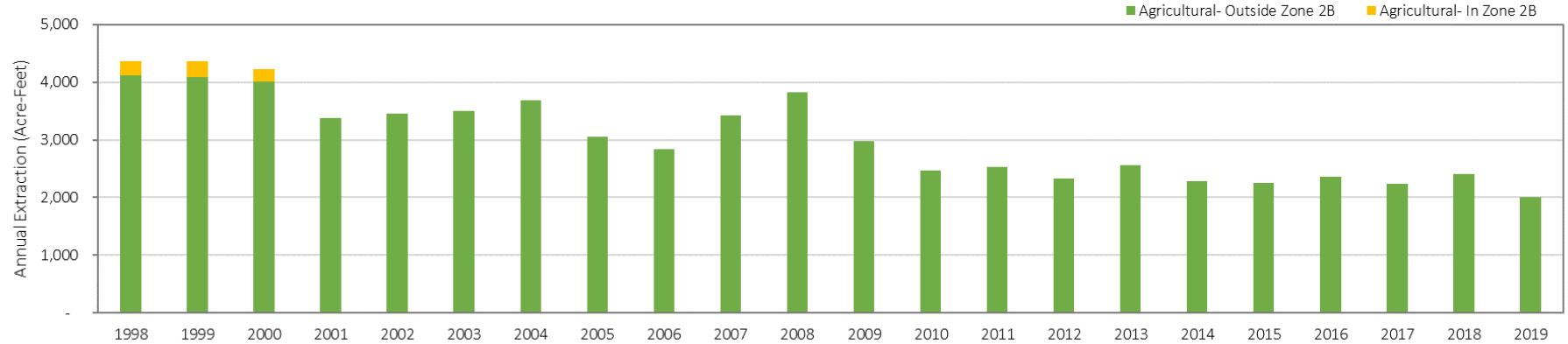
\*Includes wells screened in the 400-Ft Aquifer, East Side Deep, or wells with Unknown Construction

Area of Impact Extractions (acre-feet) from the 400-Ft Aquifer*, Number of Wells with Extractions > 0											
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Agricultural	76	80	83	75	86	94	95	97	99	98	99
Urban (Industrial and Water Supply)	6	6	5	5	5	6	6	6	5	5	5
CSIP-Supplemental	15	15	15	14	14	15	15	14	14	15	15
<b>Total</b>	<b>97</b>	<b>101</b>	<b>103</b>	<b>94</b>	<b>105</b>	<b>115</b>	<b>116</b>	<b>117</b>	<b>118</b>	<b>118</b>	<b>119</b>
continued....											
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Agricultural	101	102	103	103	99	101	99	95	94	95	90
Urban (Industrial and Water Supply)	6	6	6	6	5	5	5	5	5	5	5
CSIP-Supplemental	15	15	14	13	13	13	14	15	12	12	10
<b>Total</b>	<b>122</b>	<b>123</b>	<b>123</b>	<b>122</b>	<b>117</b>	<b>119</b>	<b>118</b>	<b>115</b>	<b>111</b>	<b>112</b>	<b>105</b>

\*Includes wells screened in the 400-Ft Aquifer, East Side Deep, or wells with Unknown Construction



Zone 2B and Area of Impact Extractions from the 180-Ft Aquifer, by Type

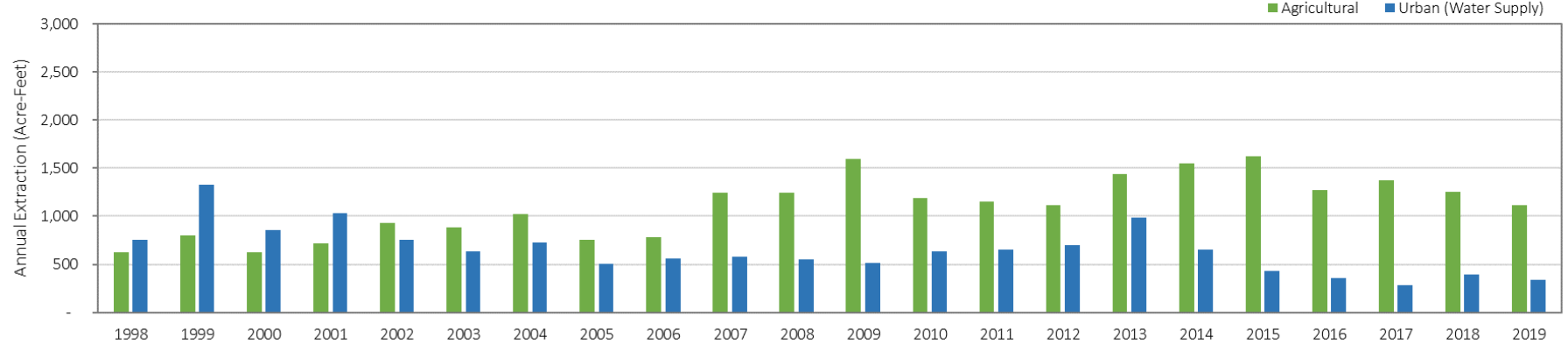


Zone 2B and Area of Impact Extractions (acre-feet) from the 180-Ft Aquifer, Annual Extractions by Type											
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Agricultural- Outside Zone 2B	4,116	4,085	4,006	3,384	3,457	3,498	3,681	3,060	2,834	3,427	3,819
Agricultural- In Zone 2B	245	277	215	-	-	-	-	-	-	-	-
Urban (Industrial and Water Supply)	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>4,361</b>	<b>4,361</b>	<b>4,222</b>	<b>3,384</b>	<b>3,457</b>	<b>3,498</b>	<b>3,681</b>	<b>3,060</b>	<b>2,834</b>	<b>3,427</b>	<b>3,819</b>
continued....											
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Agricultural- Outside Zone 2B	2,978	2,470	2,531	2,327	2,556	2,278	2,253	2,365	2,236	2,404	2,005
Agricultural- In Zone 2B	-	-	-	-	-	-	-	-	-	-	-
Urban (Industrial and Water Supply)	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>2,978</b>	<b>2,470</b>	<b>2,531</b>	<b>2,327</b>	<b>2,556</b>	<b>2,278</b>	<b>2,253</b>	<b>2,365</b>	<b>2,236</b>	<b>2,420</b>	<b>2,016</b>

Zone 2B and Area of Impact Extractions (acre-feet) from the 180-Ft Aquifer, Number of Wells with Extractions > 0											
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Agricultural- Outside Zone 2B	37	34	34	26	29	28	27	26	25	24	21
Agricultural- In Zone 2B	7	6	6	0	0	0	0	0	0	0	0
Urban (Industrial and Water Supply)	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>44</b>	<b>40</b>	<b>40</b>	<b>26</b>	<b>29</b>	<b>28</b>	<b>27</b>	<b>26</b>	<b>25</b>	<b>24</b>	<b>21</b>
continued....											
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Agricultural- Outside Zone 2B	21	20	20	19	17	19	18	19	19	20	19
Agricultural- In Zone 2B	0	0	0	0	0	0	0	0	0	0	0
Urban (Industrial and Water Supply)	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>21</b>	<b>20</b>	<b>20</b>	<b>19</b>	<b>17</b>	<b>19</b>	<b>18</b>	<b>19</b>	<b>19</b>	<b>20</b>	<b>19</b>

ATTACHMENT 1

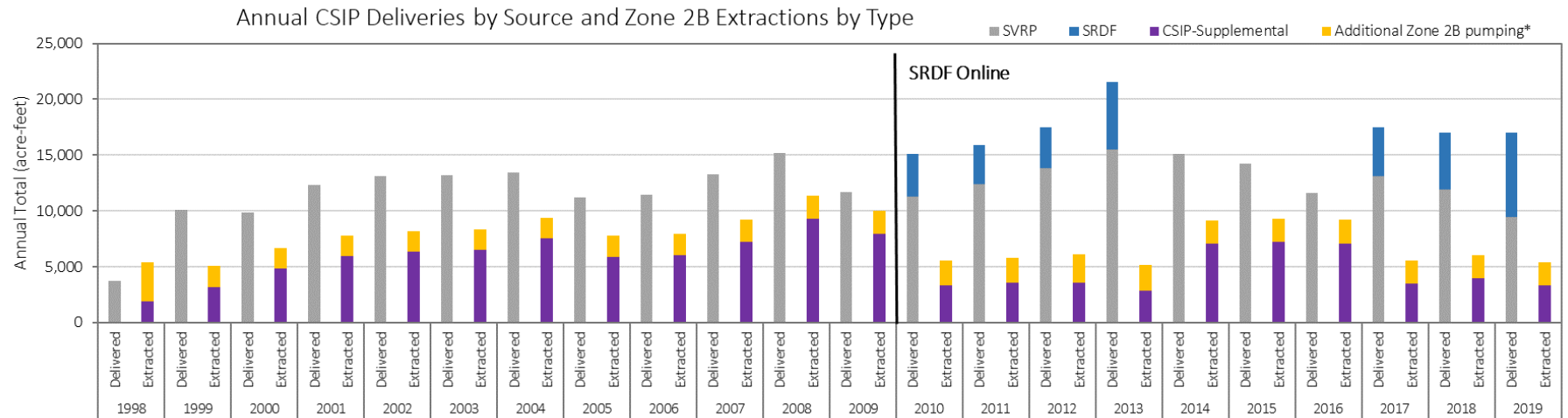
Area of Impact Extractions from Dual Screened Wells, by Type



Area of Impact Extractions (acre-feet) from wells dual screened in the 180 and 400-Ft Aquifers, Annual Extractions by Type											
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Agricultural	629	797	626	719	929	886	1,019	753	781	1,248	1,248
Urban (Water Supply)	758	1,323	855	1,035	754	634	724	505	558	581	550
<b>Total</b>	<b>1,387</b>	<b>2,120</b>	<b>1,481</b>	<b>1,754</b>	<b>1,682</b>	<b>1,521</b>	<b>1,743</b>	<b>1,259</b>	<b>1,340</b>	<b>1,829</b>	<b>1,798</b>
continued....											
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Agricultural	1,593	1,192	1,153	1,118	1,435	1,546	1,621	1,275	1,371	1,256	1,112
Urban (Water Supply)	511	639	649	701	982	654	431	354	288	395	337
<b>Total</b>	<b>2,103</b>	<b>1,831</b>	<b>1,801</b>	<b>1,819</b>	<b>2,417</b>	<b>2,200</b>	<b>2,052</b>	<b>1,628</b>	<b>1,659</b>	<b>1,651</b>	<b>1,449</b>

Area of Impact Extractions (acre-feet) from wells dual screened in the 180 and 400-Ft Aquifers, Number of Wells with Extractions > 0											
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Agricultural	5	5	4	4	5	5	5	5	5	6	6
Urban (Water Supply)	2	2	2	2	2	2	2	2	2	2	2
<b>Total</b>	<b>7</b>	<b>7</b>	<b>6</b>	<b>6</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>8</b>	<b>8</b>
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Agricultural	6	6	6	6	6	6	6	6	6	6	6
Urban (Water Supply)	2	2	2	2	2	2	2	2	2	2	2
<b>Total</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>

ATTACHMENT 1



Annual CSIP Deliveries and Extractions (acre-feet), by Source

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
SVRP- Recycled	3,685	10,087	9,887	12,300	13,085	13,184	13,410	11,226	11,471	13,305	15,221
SRDF- River	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
CSIP-Supplemental	1,879	3,137	4,803	5,949	6,317	6,504	7,535	5,878	6,058	7,256	9,283
Additional Zone 2B pumping*	3,510	1,958	1,863	1,862	1,862	1,862	1,862	1,909	1,862	1,933	2,063
<b>Total Water Usage</b>	<b>9,074</b>	<b>15,181</b>	<b>16,553</b>	<b>20,111</b>	<b>21,263</b>	<b>21,550</b>	<b>22,806</b>	<b>19,013</b>	<b>19,391</b>	<b>22,493</b>	<b>26,567</b>
<b>continued....</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
SVRP- Recycled	11,692	11,260	12,429	13,827	15,485	15,144	14,250	11,615	13,116	11,960	9,423
SRDF- River	#N/A	3,880	3,467	3,694	6,094	-	-	-	4,355	5,093	7,556
CSIP-Supplemental	7,961	3,302	3,528	3,603	2,864	7,101	7,214	7,046	3,511	3,932	3,348
Additional Zone 2B pumping*	2,073	2,254	2,225	2,511	2,296	2,058	2,089	2,154	2,061	2,064	2,039
<b>Total Water Usage</b>	<b>21,727</b>	<b>20,696</b>	<b>21,649</b>	<b>23,635</b>	<b>26,740</b>	<b>24,303</b>	<b>23,554</b>	<b>20,815</b>	<b>23,042</b>	<b>23,049</b>	<b>22,366</b>

\*includes extractions from the 180-Ft, 400-Ft and Deep Aquifers

Zone 2B Extractions, Number of Wells with Extractions > 0

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
CSIP-Supplemental	15	15	15	14	14	15	15	14	14	15	15
Additional Zone 2B pumping*	18	19	18	8	12	15	15	15	17	16	16
<b>Total</b>	<b>33</b>	<b>34</b>	<b>33</b>	<b>22</b>	<b>26</b>	<b>30</b>	<b>30</b>	<b>29</b>	<b>31</b>	<b>31</b>	<b>31</b>
<b>continued....</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
CSIP-Supplemental	15	15	14	13	13	13	14	15	12	12	10
Additional Zone 2B pumping*	17	17	17	17	14	15	13	14	14	14	15
<b>Total</b>	<b>32</b>	<b>32</b>	<b>31</b>	<b>30</b>	<b>27</b>	<b>28</b>	<b>27</b>	<b>29</b>	<b>26</b>	<b>26</b>	<b>25</b>

\*includes extractions from the 180-Ft, 400-Ft and Deep Aquifers



# Monterey County

## Item No.3

### Board Report

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

Legistar File Number: WRABMAC 21-038

May 05, 2021

Introduced: 4/29/2021

Current Status: Agenda Ready

Version: 1

Matter Type: WRA BMAC Item

Consider receiving a report on the DWR Bulletin 74: California Well Standards Update Project and providing input to Staff for upcoming Technical Advisory Committee meetings

#### RECOMMENDATION:

It is recommended that the Monterey County Water Resources Agency Basin Management Advisory Committee:

Receive a report on the DWR Bulletin 74: California Well Standards Update Project and provide input to Staff for upcoming Technical Advisory Committee meetings

#### SUMMARY:

The California Department of Water Resources (DWR) is in the process of updating the State Well Standards, known as Bulletin 74, which was last updated in 1991. Upon completion of the update, Bulletin 74 will be submitted to the State Water Resources Control Board for adoption into a Statewide Model Well Ordinance (<https://water.ca.gov/well-standards>).

DWR has formed a Technical Advisory Committee (TAC) as part of the updating process and, as the MCWRA Board of Directors was informed in January 2021, Staff Hydrologist Amy Woodrow ("Staff") has been selected by DWR to participate on the TAC.

#### DISCUSSION:

##### TAC Process

The TAC process is designed to occur in two phases. The first phase will be concluding in June 2021 and the second phase occurs from November 2021 - February 2022. The full TAC will reconvene in August 2022 to preview the Public Review Draft and again in December 2022 to preview the Final Standards before DWR submits them to the State Water Resources Control Board for adoption into the Model Well Ordinance.

##### Focus Groups

Focus group topics for the first phase include Water Well Siting and Design, Sealing Materials and Placement, Large Diameter Infiltration/Recharge Wells, Non-Vertical Wells, and Destruction. Focus group topics for the second phase include Water Wells, Monitoring Wells, Cathodic Protection Wells, and Geothermal Heat Exchange Wells.

Staff has been assigned to the Water Well Siting and Design focus group for the first phase and the Water Wells focus group for the second phase.

### Meetings To-Date

The first TAC Plenary meeting was held on March 1, 2021 to kick off the DWR Bulletin 74 Update Project, review the TAC Charter, and address questions from TAC members.

Staff participated in the Water Well Siting and Design Focus Group (“Focus Group”) meetings on March 15, 2021 and April 19, 2021. A meeting summary from the April 19, 2021 Focus Group was not available in time for inclusion with this report, but it will be shared during future updates. The Focus Group meetings covered the following topics: depth of annular surface seals, sealing-off strata, inter-aquifer seals, setbacks, and floodproofing a wellhead.

### Opportunities for Participation

Staff will provide regular updates to BMAC and the MCWRA Board of Directors. Meeting summaries and discussion questions from the Focus Group will be shared. Responses to the Focus Group questions from Committee members, Directors, and the public will be brought back to the TAC.

Meetings of the Focus Groups and Plenary meetings of the TAC are available to the public via YouTube live stream, though there is not a mechanism for the public to provide real-time input during the meetings.

Members of the public can also participate in the update process by receiving email updates from DWR, submitting comments directly to DWR through an online comment portal or via email, and providing comments once the public review draft is released in September 2022. Details on these engagement opportunities is available at <https://water.ca.gov/well-standards>.

Following the April BMAC meeting, Staff shared the concerns that were expressed about additional transparency and opportunities for input to the Well Standards Update. Both DWR staff and the TAC Facilitator have offered to speak directly with concerned stakeholders. Staff is available to assist with arranging a meeting with DWR if desired.

### OTHER AGENCY INVOLVEMENT:

The DWR Bulletin 74: California Well Standards Update Project is being coordinated by the California Department of Water Resources. County staff from the Environmental Health Bureau are members of the California Conference of Directors of Environmental Health (CCDEH) which, in collaboration with the California Groundwater Association (CGA), are also active participants in the DWR Bulletin 74: California Well Standards Update Project.

### FINANCING:

Fund 111

Prepared by: Amy Woodrow, Hydrologist, (831) 755-4860  
Howard Franklin, Senior Hydrologist, (831) 755-4860

Approved by: Brent Buche, General Manager





# Monterey County

Item No.

## Board Report

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

Legistar File Number: WRABMAC 21-038

May 05, 2021

Introduced: 4/29/2021

Current Status: Agenda Ready

Version: 1

Matter Type: WRA BMAC Item

Consider receiving a report on the DWR Bulletin 74: California Well Standards Update Project and providing input to Staff for upcoming Technical Advisory Committee meetings

### RECOMMENDATION:

It is recommended that the Monterey County Water Resources Agency Basin Management Advisory Committee:

Receive a report on the DWR Bulletin 74: California Well Standards Update Project and provide input to Staff for upcoming Technical Advisory Committee meetings

### SUMMARY:

The California Department of Water Resources (DWR) is in the process of updating the State Well Standards, known as Bulletin 74, which was last updated in 1991. Upon completion of the update, Bulletin 74 will be submitted to the State Water Resources Control Board for adoption into a Statewide Model Well Ordinance (<https://water.ca.gov/well-standards>).

DWR has formed a Technical Advisory Committee (TAC) as part of the updating process and, as the MCWRA Board of Directors was informed in January 2021, Staff Hydrologist Amy Woodrow ("Staff") has been selected by DWR to participate on the TAC.

### DISCUSSION:

#### TAC Process

The TAC process is designed to occur in two phases. The first phase will be concluding in June 2021 and the second phase occurs from November 2021 - February 2022. The full TAC will reconvene in August 2022 to preview the Public Review Draft and again in December 2022 to preview the Final Standards before DWR submits them to the State Water Resources Control Board for adoption into the Model Well Ordinance.

#### Focus Groups

Focus group topics for the first phase include Water Well Siting and Design, Sealing Materials and Placement, Large Diameter Infiltration/Recharge Wells, Non-Vertical Wells, and Destruction. Focus group topics for the second phase include Water Wells, Monitoring Wells, Cathodic Protection Wells, and Geothermal Heat Exchange Wells.

Staff has been assigned to the Water Well Siting and Design focus group for the first phase and the Water Wells focus group for the second phase.

### Meetings To-Date

The first TAC Plenary meeting was held on March 1, 2021 to kick off the DWR Bulletin 74 Update Project, review the TAC Charter, and address questions from TAC members.

Staff participated in the Water Well Siting and Design Focus Group (“Focus Group”) meetings on March 15, 2021 and April 19, 2021. A meeting summary from the April 19, 2021 Focus Group was not available in time for inclusion with this report, but it will be shared during future updates. The Focus Group meetings covered the following topics: depth of annular surface seals, sealing-off strata, inter-aquifer seals, setbacks, and floodproofing a wellhead.

### Opportunities for Participation

Staff will provide regular updates to BMAC and the MCWRA Board of Directors. Meeting summaries and discussion questions from the Focus Group will be shared. Responses to the Focus Group questions from Committee members, Directors, and the public will be brought back to the TAC.

Meetings of the Focus Groups and Plenary meetings of the TAC are available to the public via YouTube live stream, though there is not a mechanism for the public to provide real-time input during the meetings.

Members of the public can also participate in the update process by receiving email updates from DWR, submitting comments directly to DWR through an online comment portal or via email, and providing comments once the public review draft is released in September 2022. Details on these engagement opportunities is available at <https://water.ca.gov/well-standards>.

Following the April BMAC meeting, Staff shared the concerns that were expressed about additional transparency and opportunities for input to the Well Standards Update. Both DWR staff and the TAC Facilitator have offered to speak directly with concerned stakeholders. Staff is available to assist with arranging a meeting with DWR if desired.

### OTHER AGENCY INVOLVEMENT:

The DWR Bulletin 74: California Well Standards Update Project is being coordinated by the California Department of Water Resources. County staff from the Environmental Health Bureau are members of the California Conference of Directors of Environmental Health (CCDEH) which, in collaboration with the California Groundwater Association (CGA), are also active participants in the DWR Bulletin 74: California Well Standards Update Project.

### FINANCING:

Fund 111

Prepared by: Amy Woodrow, Hydrologist, (831) 755-4860  
Howard Franklin, Senior Hydrologist, (831) 755-4860

Approved by: Brent Buche, General Manager







# Monterey County

## Item No.4

### Board Report

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

Legistar File Number: WRABMAC 21-031

May 05, 2021

Introduced: 4/29/2021

Current Status: Agenda Ready

Version: 1

Matter Type: WRA BMAC Item

Update on the well permit application process in Monterey County

#### SUMMARY:

At the April 7, 2021 BMAC meeting, committee members requested that staff return with a report on the current well permit application process in Monterey County. Committee members were specifically interested in understanding where permit applications are routed, and which department(s) participate in the review process. This report summarizes the well application review process and depicts the process in a flow chart format (Attachment 1).

#### DISCUSSION:

All well permits in Monterey County are issued by the Monterey County Health Department, Environmental Health Bureau (EHB) and all permit applications are submitted to EHB. When EHB receives a permit application, it is first reviewed by EHB for completeness, including payment of permit fees and any additional conditions that may apply to the permit based on its location. For example, a well permit application in an Archaeological Sensitivity area would require additional guidance.

EHB then determines which partner agencies need to receive the permit application for review. If the well permit application pertains to property within an incorporated City, the appropriate City Planning Department is provided an opportunity to review the application and submit comments or conditions to EHB. Similarly, well permit applications on property within the jurisdiction of the Monterey Peninsula Water Management District (MPWMD) are routed to that agency.

The County of Monterey Housing & Community Development (HCD) department receives all well permit applications to review. Following the California Supreme Court opinion in *Protecting Our Water and Environmental Resources v. County of Stanislaus (POWER)* that was issued on August 27, 2020, HCD has also assumed responsibility for conducting the appropriate level of review for each permit application that is required by the California Environmental Quality Act (CEQA).

The Monterey County Water Resources Agency (Agency) provides technical input on well permit applications located within Zone 2C if the permit is for (1) construction of a well that is expected to pump five acre-feet of water per year or more; (2) repair or reconstruction of a well; or (3) destruction of a well. The Agency is also called out in the 2010 Monterey County General Plan, policies PS-3.3 and PS-3.4, to evaluate new domestic and high capacity wells in inland areas of the County.

All comments and/or permit conditions from partner agencies are returned to EHB, which then issues

the well permit.

OTHER AGENCY INVOLVEMENT:

The Monterey County Health Department, Environmental Health Bureau is the well permit issuing entity for Monterey County. Staff with the County of Monterey Housing & Community Development and other parties external to the County also provide review as part of the well permit application process, as depicted in Attachment 1.

FINANCING:

Agency staff time spent reviewing well permit applications is covered by fees paid by the permit applicant, per Article XI of the County Fee Resolution (Attachment 2).

Prepared by:           Amy Woodrow, Hydrologist, (831) 755-4860  
                                  Howard Franklin, Senior Hydrologist, (831) 755-4860

Approved by:           Brent Buche, General Manager

Attachments:

Attachment 1 - Monterey County Well Permit Application Process Flow Chart

Attachment 2 - Article XI Monterey County Water Resources Agency Fees



# Monterey County

Item No.

## Board Report

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

Legistar File Number: WRABMAC 21-031

May 05, 2021

Introduced: 4/29/2021

Current Status: Agenda Ready

Version: 1

Matter Type: WRA BMAC Item

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Prepared by:           Amy Woodrow, Hydrologist, (831) 755-4860  
                                  Howard Franklin, Senior Hydrologist, (831) 755-4860

Approved by:           Brent Buche, General Manager

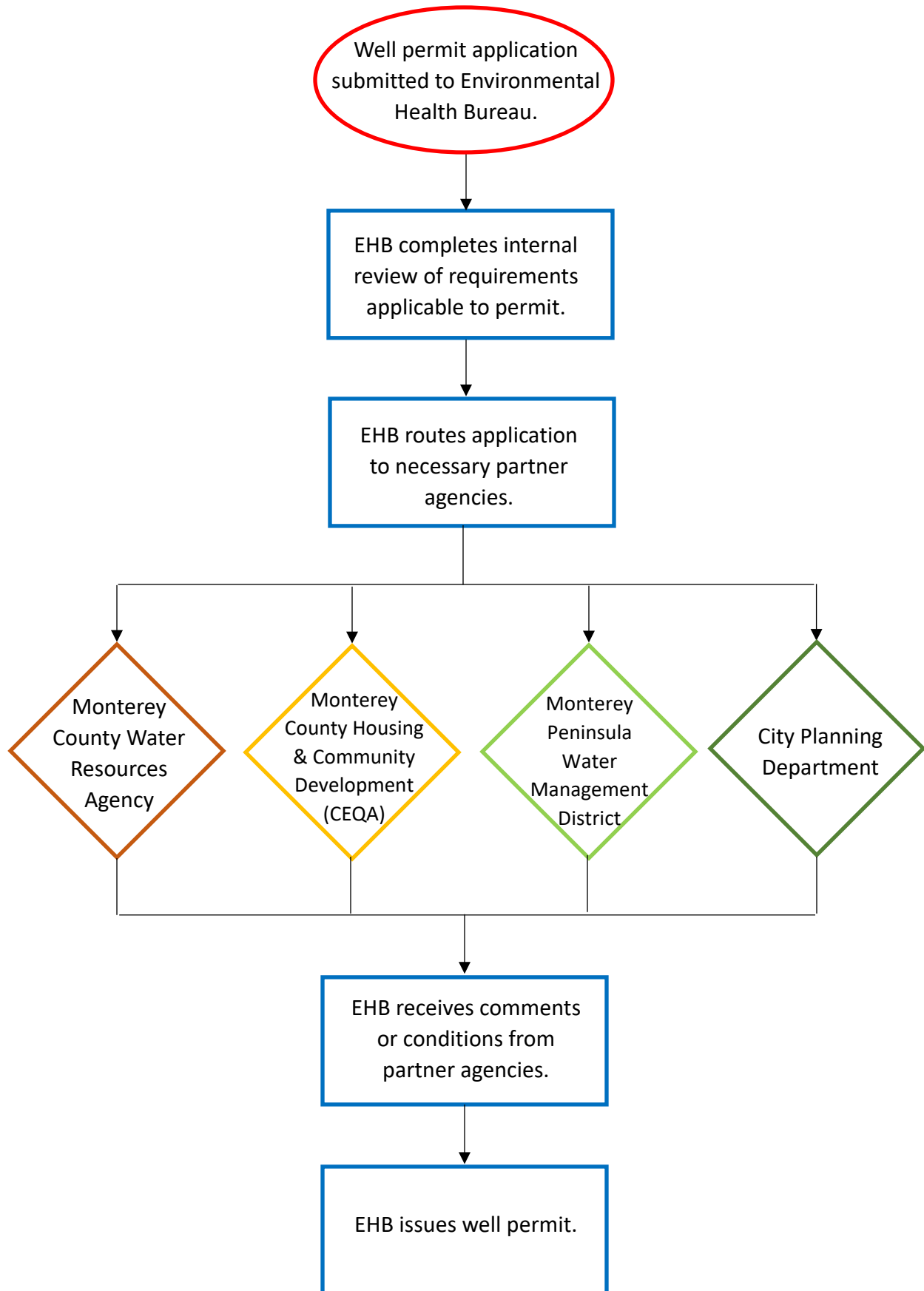
Attachments:

Attachment 1 - Monterey County Well Permit Application Process Flow Chart

Attachment 2 - Article XI Monterey County Water Resources Agency Fees

# Monterey County Well Permit Application Process Flowchart

April 2021



**ARTICLE XI**  
**MONTEREY COUNTY WATER RESOURCES AGENCY FEES**  
(Per Resolution No. 19-XXX, adopted June 25, 2019 by the Board of Supervisors of the  
Monterey County Water Resources Agency)

**SECTION I. LAND USE**

In March 2019, the Monterey County Resource Management Agency (RMA), at its cost and expense, assumed all responsibility with respect to stormwater and drainage management agreements, development and drainage review, floodplain management, and other services previously performed by the Monterey County Water Resources Agency (WRA) for the benefit of the RMA as a condition of various land use permits as established in Titles 20 and 21 of the Monterey County Code. Therefore, the WRA is no longer responsible for providing such land use permit review and implementation services, and such fees are removed from Article XI. The RMA in some cases may rely upon the WRA for technical and subject matter assistance and upon the request of the RMA, the WRA shall provide assistance to the RMA with respect to development and drainage review, floodplain management, and water supply. Services for such assistance shall be compensated in accordance with the appropriate hourly rate for the applicable personnel. Hourly rates listed below shall be adjusted annually by the WRA to reflect salary and benefit increases and/or Cost of Living Adjustment (COLA). WRA shall immediately notify the RMA of such adjustments.

<u>DESCRIPTION</u>	<u>AMOUNT</u>	<u>UNIT/TIME</u>
General Manager	\$263.00	Per Hour
Deputy General Manager	\$233.00	Per Hour
Senior Engineer or Senior Hydrologist	\$170.00	Per Hour
Associate Engineer or Associate Hydrologist	\$146.00	Per Hour
Water Resources Hydrologist	\$113.00	Per Hour
Water Resources Technician	\$97.00	Per Hour

**SECTION 2. MISCELLANEOUS**

As described in Section 1, the RMA at its cost and expense, assumed the permit review and implementation services previously performed by the WRA as relating to stormwater and drainage management agreements, development and drainage review, and floodplain management. Therefore, the Section 2 miscellaneous fees pursuant to Government Code section 65104 for planning services provided by the WRA are mostly removed from Article XI. The WRA will continue its responsibility to provide services for water well permit review required per Monterey County Code Chapter 15.08, and Hydrogeologic Report administration and review required by Monterey County Code Title 19. The RMA will endeavor to create specific criteria for a determination of Long-Term Sustainable Water Supply (LTSWS) as required by General Plan Policies 3.1 and 3.2, and assumes the current responsibility of the WRA for providing an analysis of LTSWS for discretionary permits. Once there is a defined project to develop the specific criteria for LTSWS, the WRA will participate in the development of the specific criteria,

and the WRA will be reimbursed in accordance with the appropriate hourly rate for the applicable personnel as included in Section 1.

**A. Water well permits as required in Chapter 15.08, Monterey County Code**

<u>DESCRIPTION</u>	<u>AMOUNT</u>	<u>UNIT/TIME</u>
1. Well Construction Fees for Wells Producing Over 5 acre-feet per year in Zone 2C and additional areas of Monterey County inclusive of the jurisdiction of the Pajaro Valley Water Management Agency	\$610.00	Each
2. Well Reconstruction/Destruction Fees for Wells in Zone 2C and additional areas of Monterey County inclusive of the jurisdiction of the Pajaro Valley Water Management Agency	\$365.00	Each
3. Well Construction/Destruction Database Maintenance Fees County Wide <sup>1</sup>	\$365.00	Each
4. Well Construction Fee for New Domestic Well, in the inland areas of Monterey County <sup>2</sup>	\$121.00	Each
5. Well Construction Fee for New High Capacity Well, in the inland areas of Monterey County <sup>3</sup>	\$243.00	Each

**B. Hydrogeologic Report Preparation as required by Title 19, Monterey County Code (Subdivisions)**

<u>DESCRIPTION</u>	<u>AMOUNT</u>	<u>UNIT/TIME</u>
1. Contract Administration <sup>4</sup>	\$2,721.00	Deposit

**Notes:**

- 1) This fee is added to the \$610.08 in B-1, the \$365.83 in B-2, the \$121.58 in B-4, and the \$243.16 in B-5.
- 2) This fee is added to the \$610.08 in B-1 for new domestic wells with greater than fifteen (15) connections located in the inland areas of Monterey County within Zone 2C, and areas of Monterey County inclusive of the jurisdiction of the Pajaro Valley Water Management Agency.
- 3) This fee is added to the \$610.08 in B-1 for new wells proposing a flow over 1,000 gallons per minute that are located in the inland areas of Monterey County within Zone 2C and areas of Monterey County inclusive of the jurisdiction of the Pajaro Valley Water Management Agency.
- 4) When a hydrogeologic report is required to be prepared for a subdivision or other application subject to Title 19 of the Monterey County Code, the report shall be based on a comprehensive hydrological investigation prepared by a certified hydrogeologist, selected by the County and under contract with the County, at the applicant's expense. A deposit for staff costs associated with preparation and administration of the contract, and review of the hydrogeologic report shall be in addition to the deposit for the associated development application.





# Monterey County

## Item No.5

### Board Report

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

Legistar File Number: WRABMAC 21-032

May 05, 2021

Introduced: 4/29/2021

Current Status: Draft

Version: 1

Matter Type: WRA BMAC Item

Proposition 1 Implementation Grant Update: *Protection of Domestic Drinking Water Supplies for the Lower Salinas Valley*

Update on Proposition 1 Implementation Grant – *Protection of Domestic Drinking Water Supplies for the Lower Salinas Valley Project*

SUMMARY:

Implementation of the *Protection of Domestic Drinking Water Supplies for the Lower Salinas Valley* project (Project) is ongoing. The Project is funded in part by a Proposition 1 Implementation Grant from the State Water Resources Control Board (SWRCB).

DISCUSSION:

Well Reclassification and Destruction Notification Process

MCWRA is continuing to meet with well owners and others who have appealed well reclassification or destruction notifications that were sent in January and March 2021.

Right-of-Entry Agreements

The terms of MCWRA's grant agreement with the SWRCB requires that a Right-of-Entry Agreement be completed by each well owner before the well destruction work can begin (Attachment 1).

As of April 27, twenty-nine (29) Right-of-Entry agreements have been provided to the owners of wells where the decision to destroy the well as part of the Project has not been appealed. Two Right-of-Entry agreements have been signed and returned to MCWRA.

OTHER AGENCY INVOLVEMENT:

State Water Resources Control Board

FINANCING:

Project totals \$9,125,524 over a three-year period. The Project is funded in part (54%) by the SWRCB (\$4,927,729) with the remaining 46% of the funding as local match from MCWRA. MCWRA is satisfying the match through a combination of in-kind services (\$1,534,495) and additional funds (\$2,663,300).

MCWRA was originally responsible for the full \$2,663,300 in additional funds, but that amount has been reduced to \$2,115,801 due to contributions from the Monterey County Cannabis Assignment (\$399,499), Monterey One Water (\$65,000), and Castroville Community Services District (\$83,000). MCWRA has identified reserves in Fund 134 to cover any portion of the remaining \$2,198,801 in additional funds that is not covered by contributions from outside sources.

There is no financial impact in receiving this update.

Prepared by: Amy Woodrow, Hydrologist, (831) 755-4860  
Howard Franklin, Senior Hydrologist, (831) 755-4860

Attachments

Attachment 1 - Right-of-Entry Agreement Template

**AGREEMENT TO ENTER  
AND PERFORM WORK UPON PROPERTY  
(Proposition 1 Ground Water Quality Grant Program)**

This agreement ("Agreement") is made and entered into by [PROPERTY OWNER NAME] ("Property Owner") and the Monterey County Water Resources Agency ("Agency") for purposes of destruction of a water well located on the real property owned by the Property Owner, located at APN XXX-XXX-XXX, known as the ("Property"). Agency is a political subdivision of the State of California.

Section 1: Recitals.

a. Agency has entered into a grant agreement for the Proposition 1 Ground Water Quality Grant Program with the California State Water Resources Control Board ("State Water Board") to receive funding for the destruction of groundwater wells to protect the lower Salinas Valley's main groundwater supply for domestic drinking water in the 400-Foot Aquifer. The Grant Agreement is available on the Agency's website at <https://www.co.monterey.ca.us/government/government-links/water-resources-agency/programs/protection-of-domestic-drinking-water-supplies-in-the-lower-salinas-valley>.

b. Agency's project will protect the lower Salinas Valley's main source of domestic drinking water, the 400-Foot Aquifer, from seawater and nitrate contamination due to vertical migration between the 180-Foot Aquifer and the 400-Foot Aquifer by destruction of selected abandoned wells. Preventing nitrates and seawater from vertically entering the 400-Foot Aquifer will protect the water quality of drinking water, provide increased opportunity for recharge and aquifer storage, and help slow the advance of seawater intrusion.

c. Property Owner agrees to allow Agency to destroy Property Owner's water well to prevent the vertical migration of chloride and nitrate contaminated groundwater into aquifers that serve as a drinking water supply.

Section 2: Conditions.

a. Property Owner grants to the Agency, its employees, contractors, subcontractors, and agents, authority to destroy its water well, and access to all lands, easements and rights of way necessary for the purposes of the destruction of water well STATE WELL ID (OWNER WELL NAME). Property Owner grants to the State Water Board, its employees, contractors, subcontractors, and agents, the right of safe and suitable access at reasonable times to all lands, easements, and rights of way, if requested, for the purposes of overseeing the destruction of the water well.

b. Property Owner warrants that it possesses authority, title and/or interest in the Property sufficient to execute this Agreement.

c. All work conducted on the Property shall be conducted in accordance with all state, local and regional laws and requirements. Agency shall obtain all required licenses and permits in connection with well destruction work.

d. It is understood and agreed that at the expiration of this Agreement, the Property will be generally restored to the same condition as before the Agency's entry, except for the well destruction improvements.

### Section 3: Effective Date and Term.

This Agreement shall commence effective upon the Agency's execution hereof and shall be effective until the work completion date of the project, February 28, 2023, as agreed to in the Grant Agreement, or any extension thereof granted by the Grant Manager upon request of the Agency. Following completion of the well destruction, the Agency and the State Water Board shall have the right to inspect the project location upon reasonable prior notice if needed until the Records Retention End Date of the Grant Agreement.

### Section 4: Indemnification.

Agency shall hold harmless, indemnify, and defend the Property Owner, its officers, directors, agents, lessees, and employees from any and all claims, lawsuits, liabilities, losses and damages of every kind resulting from or in any way related to the Agency's, its officers', agents', employees', subcontractors' and designees', negligent or intentional acts, and errors and omissions in connection with this Agreement. Agency will assume full responsibility for any and all damages proximately caused by Agency's operation under this Agreement, and Agency shall, at its option, either repair or pay of such damages. However, this indemnification will not extend to any loss of use claims by Property Owner's lessees. This indemnification will also not extend to any claim or losses arising out of the sole negligence or willful misconduct of the Property Owner or of the Property Owner's officers, agents, lessees or employees.

### Section 5: Notices.

Notices required under this Agreement shall be delivered by first class mail and by electronic mail. Notice shall be deemed effective upon the third day after deposit with the U.S. Postal Service. Notices shall be addressed as follows:

#### **AGENCY**

Name: Brent Buche

Address: PO Box 930  
Salinas, CA 93902

Telephone: 831-755-4860

E-Mail: bucheb@co.monterey.ca.us

#### **PROPERTY OWNER**

Name:

Address:

Telephone:

E-Mail:

#### Section 6: Entire Agreement.

This Agreement contains the entire agreement between the parties pertaining to the subject matter in it and supersedes all prior and contemporaneous agreements, representations, and understandings of the Parties. No supplement, modification, or amendment of this Agreement shall be binding unless executed in writing by all Parties.

#### Section 7: Assignment.

No portion of this Agreement may be assigned without the prior written consent of all Parties.

#### Section 8. Compliance with Applicable Law.

The Parties shall comply with all applicable federal, state, and local laws and regulations in performing this Agreement.

#### Section 9. Controlling Venue.

This Agreement and all matters relating to it shall be governed by the laws of the State of California. Any action brought relating to this Agreement shall be brought exclusively in the County of Monterey.

#### Section 10. Expiration of Agreement.

This Agreement shall expire and be of no further force and effect upon the expiration of the term, as defined in Section 3.

#### Section 11. Section Headings.

The section headings contained in this Agreement are for convenience and identification only and shall not be deemed to limit or define the contents of the section to which they relate.

#### Section 12. No Presumption Re: Drafter.

The Parties acknowledge and agree that the terms and provisions of this Agreement have been negotiated and discussed between the Parties and their attorneys, and this Agreement reflects their mutual agreement regarding the same. Because of the nature of such negotiations and discussions, it would be inappropriate to deem any party to be the drafter of this Agreement, and therefore no presumption for or against validity or as to any interpretation hereof, based upon the identity of the drafter shall be applicable in interpreting or enforcing this Agreement.

#### Section 13. Modification.

This Agreement shall not be modified except by written agreement of the Parties.

#### Section 14. Severability.

If any term, condition or covenant of this Agreement, or the application thereof to any person or circumstance shall be held invalid or unenforceable, the remainder of this Agreement, or the application of such term, condition or covenant to persons or circumstances other than those as to whom which it is held invalid or unenforceable, shall not be affected thereby, and every provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law.

IN WITNESS WHEREOF, Agency and Property Owner execute this Agreement as follows:

Date: \_\_\_\_\_

Date: \_\_\_\_\_

MONTEREY COUNTY  
WATER RESOURCES AGENCY

PROPERTY OWNER

By: \_\_\_\_\_

By: \_\_\_\_\_

Brent Buche  
General Manager

Name:  
Title:

Approved as to form:

\_\_\_\_\_  
Kelly L. Donlon  
Deputy County Counsel



# Monterey County

## Item No.6

### Board Report

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

Legistar File Number: WRABMAC 21-033

May 05, 2021

Introduced: 4/29/2021

Current Status: Draft

Version: 1

Matter Type: WRA BMAC Item

Update on Well Permit Application Activities

## Well Permit Application Activities Update

### SUMMARY/DISCUSSION:

In support of Monterey County's Well Permit Application Program the Agency acts as technical advisor to the program's lead agency, the Environmental Health Bureau (EHB). In accordance with a 1991 interdepartmental Memorandum of Agreement between the Agency and EHB, the Agency performs a comprehensive review process on well permit applications for new wells pumping five acre-feet of water or more per year, as well as for proposed well destructions and repairs.

The Agency provides review and/or advisement to EHB within five (5) business days of receiving new well permit applications. The Agency also reviews final well designs and annular seal depth proposals on an on-going basis and is committed to providing a response to EHB within twenty-four (24) hours of receiving design proposals.

The Agency receives funds that cover staff time for well application review, well completion report processing, and database maintenance from fees collected by EHB. The Agency's fees are defined in Article XI of the Monterey County Fee Resolution.

Table 1 (attached) provides a summation of well permit applications received in the last month for evaluation by Agency staff, categorized by permit type, Agency management area, and aquifer unit. Also included is a tabulation of new well applications reviewed for the fiscal year. This table is provided to the Board of Directors and Basin Management Advisory Committee on a monthly basis.

Publication of the Agency's Report, "Recommendations To Address the Expansion of Seawater Intrusion in the Salinas Valley Groundwater Basin (October, 2017) and subsequent adoption of Interim Urgency Ordinance 5302 and Ordinance 5303 by the Monterey County Board of Supervisors (May 22, 2018 and June 26, 2018, respectively) have led to increased interest in data related to wells in and extractions from the Deep Aquifers (Figure 1).

Figure 2 depicts the history of well installation in the Deep Aquifers by water use category. As illustrated in the chart, a total of fifty-seven (57) wells have been installed in the Deep Aquifers since 1974, with twenty-five (25) of those wells being constructed in the last ten years, including fourteen (14) within the last three years. Figure 2 includes a tabular historical summary of reported annual Deep Aquifer well extractions by water use category.

Two (2) additional permits have been issued for new Deep Aquifers wells but construction has not been completed as of the date of this report. The proposed wells were applied for as replacement wells after the expiration of Ordinance No. 5302, which expired on May 21, 2020.



OTHER AGENCY INVOLVEMENT:

None

FINANCING:

None

Prepared by:           Nicole Koerth, Hydrologist, (831) 755-4860  
                              Amy Woodrow, Hydrologist, (831) 755-4860  
                              Tamara Voss, Associate Hydrologist (831) 744-4860  
                              Howard Franklin, Senior Hydrologist, (831) 755-4860

Attachments:

Table 1 - Summary of Well Permits Received

Figure 1- Map showing Deep Aquifer Wells

Figure 2 - Timeline of Well Installation in the Deep Aquifers with Summary of Deep Aquifer  
Groundwater Extractions

# Figure 1

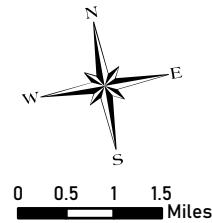
## Legend

### Deep Aquifer Wells

By Use, Labeled by Year Constructed

- Agricultural
- Municipal
- Industrial
- Domestic
- Monitoring

Area of Impact



Monterey County  
Water Resources Agency

Date: 4/8/2021

4 Monitoring Wells  
constructed in 2000

2 Monitoring Wells  
constructed in 2005

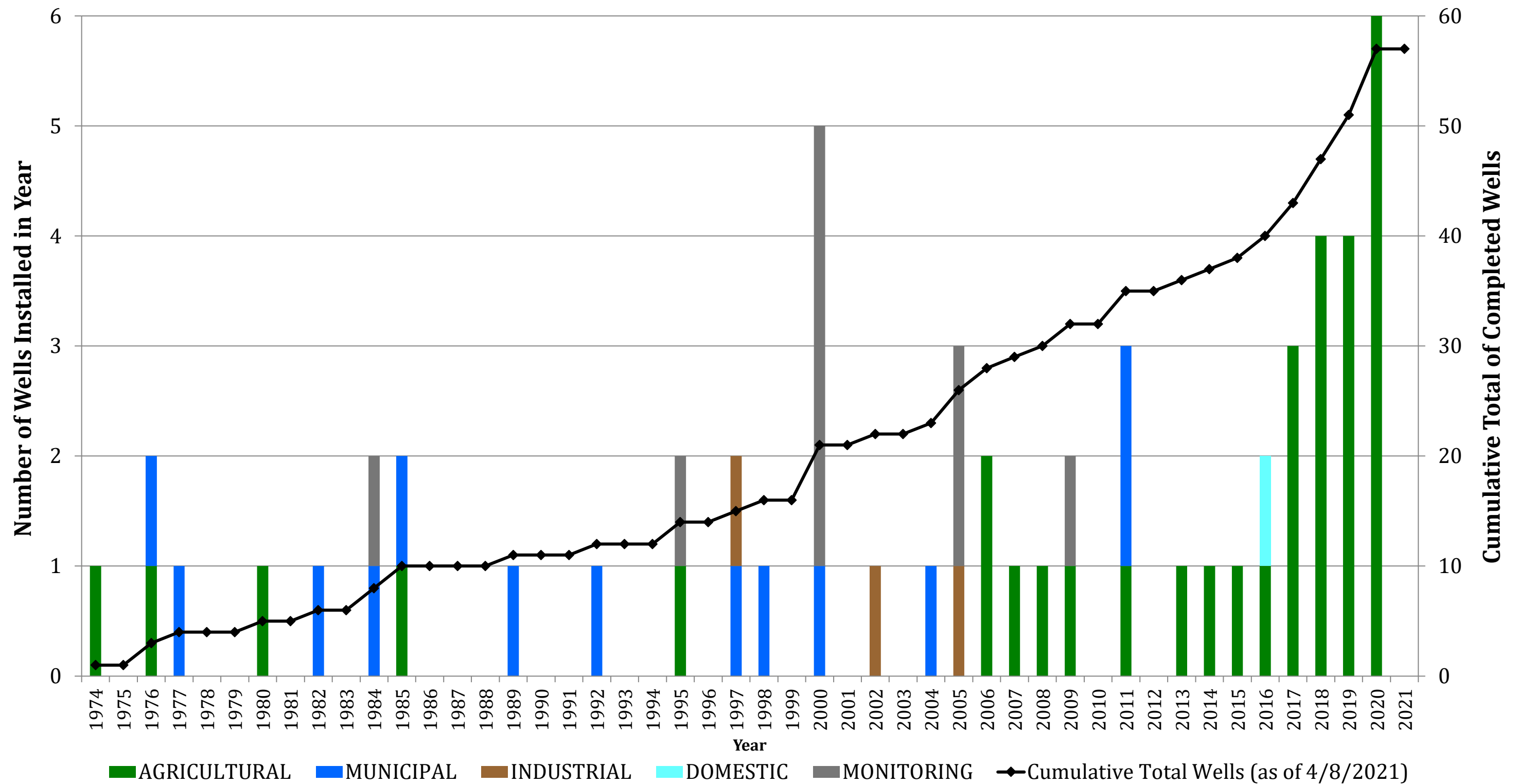
2 Municipal Wells  
constructed in 1998 and 2000



Source: MCWRA  
Date: 4/8/2021

Figure 2

## Timeline of Well Installation in Deep Aquifers of the 180/400 Foot Aquifer Subbasin



### Deep Aquifers Groundwater Extraction History Since 1993\*

1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
2,054	1,992	2,036	2,137	2,170	1,906	2,056	2,302	2,355	2,399	2,366	2,442	2,358	2,005	1,738	2,004	2,102	1,903	1,803	2,044	1,989	3,784	3,746	3,788	4,116	4,605	4,820
1,507	2,620	2,302	1,990	2,556	1,648	96	1	0	0	0	0	0	0	58	384	696	982	927	1,397	1,097	2,031	2,010	4,194	4,834	4,749	5,331
0	0	0	0	0	0	0	3	13	17	379	305	343	336	393	371	348	333	370	380	523	620	617	569	567	291	196
3,561	4,612	4,338	4,127	4,725	3,554	2,151	2,307	2,368	2,416	2,745	2,747	2,701	2,341	2,189	2,759	3,146	3,218	3,100	3,821	3,608	6,436	6,373	8,551	9,516	9,645	10,347

\* Notes: Table includes all reported extraction data for the thirty-four (34) Deep Aquifer production wells that have reported extractions since inception of the Agency's GEMS program in 1993. Data are reported in acre-feet. Colors denote water use category ([Municipal](#), [Agricultural](#), [Industrial](#)). An additional twelve (12) recently constructed Deep Aquifers Agricultural production wells have yet to report extractions as of Reporting Year 2019.

**Table 1. Well Permit Applications Received by Category - March, 2021**

<b>Subarea/ Aquifer</b>	<b>Construction</b>	<b>Destruction</b>	<b>Repair</b>	<b>Other</b>	<b>Total</b>	<b>FY (20/21) Total</b>
180-Ft Aquifer						9
400-Ft Aquifer						9
Deep Aquifers						7
East Side	1	3			4	13
Forebay						10
Upper Valley						5
Outside Zone 2C, Undefined GW Basin	4	3		3	10	38
<b>Total</b>	<b>5</b>	<b>6</b>		<b>3</b>	<b>14</b>	<b>91</b>



# Monterey County

## Item No.7

### Board Report

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

**Legistar File Number: WRABMAC 21-034**

**May 05, 2021**

**Introduced:** 4/29/2021

**Current Status:** Draft

**Version:** 1

**Matter Type:** WRA BMAC Item

Update on Groundwater Sustainability Agency activities in the Salinas Valley Basin

## Update on ground water sustainability agency activities in the Salinas Valley Basin

### SUMMARY/DISCUSSION:

- Joint Funding Agreement
  - Agency staff is working with the Salinas Valley Basin Groundwater Sustainability Agency (SVBGSA) and United States Geological Survey (USGS) to develop a Joint Funding Agreement (JFA). The JFA will provide a means for all three entities to cooperate on finalizing and publishing the Salinas Valley Operational Model (SVOM), and performing future refinements and updates to the SVOM and Salinas Valley Integrated Hydrologic Model (SVIHM).
- GSP Development and Implementation
  - The SVBGSA has formed Subbasin Committees, consisting of SVBGSA Directors and stakeholders from each subbasin, that meet every two months to provide input during the development of the remaining five GSPs. Committees for all five subbasins that still require development of GSPs (Eastside, Forebay, Langley, Monterey, and Upper Valley) meet regularly. The meeting schedule is available on the SVBGSA website at <https://svbgsa.org/meetings/>.
  - In April 2021, Agency staff provided comments to the SVBGSA on draft chapters for the Eastside, Forebay, Langley, Monterey, and Upper Valley subbasin GSPs.
  - Agency staff meets regularly with SVBGSA staff to discuss projects or other aspects of the implementing Groundwater Sustainability Plans that may involve Agency staff or infrastructure, or impact Agency operations.
- Meeting Participation
  - Agency staff continues to attend meetings of the Arroyo Seco GSA, Marina Coast Water District GSA, and Salinas Valley Basin GSA and their various subcommittees.
  - The Agency is represented on the Advisory Committee of the Salinas Valley Basin GSA and participates in the SVBGSA's Seawater Intrusion Group (SWIG).
  - On March 19, 2021, Agency staff and some members of the Agency's Board of Directors participated in a Strategic Planning meeting with the SVBGSA.

### OTHER AGENCY INVOLVEMENT:

Salinas Valley Basin Groundwater Sustainability Agency

### FINANCING:

There is no financial impact in receiving this update.

Prepared by: Amy Woodrow, Hydrologist, (831) 755-4860  
Howard Franklin, Senior Hydrologist, (831) 755-4860



# Monterey County

## Item No.8

### Board Report

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

Legistar File Number: WRABMAC 21-035

May 05, 2021

Introduced: 4/29/2021

Current Status: Draft

Version: 1

Matter Type: WRA BMAC Item

Update on Agency Modeling Activities



## Update on Agency Modeling Activities

### SUMMARY:

The Monterey County Water Resources Agency (Agency) is utilizing the Salinas Valley Operational Model (SVOM) to model project scenarios and evaluate conditions for the Interlake Tunnel Project. The SVOM is a tool developed by the U.S. Geological Survey (USGS) and Agency that has been refined for use on this project by Wood Environment & Infrastructure, Inc. (Wood).

The Agency is also working with the County of Monterey on the Salinas Valley Groundwater Basin Investigation (“Basin Investigation” or “Zone 2C Study”) which, in part, uses the Salinas Valley Integrated Hydrologic Model (SVIHM) to evaluate current and future water conditions and demands within Zone 2C.

### DISCUSSION:

- On May 18, 2021 there will be a presentation to the Monterey County Board of Supervisors providing an update on the County’s Basin Investigation and the status of the SVIHM. The presentation will be made by Agency staff, the USGS and the project consultant working on the Basin Investigation, Montgomery and Associates.
- After updating the Monterey County Board of Supervisors on May 18<sup>th</sup>, a technical workshop on the model for stakeholders will be scheduled, in cooperation with the Salinas Valley Basin Groundwater Sustainability Agency.
- The Agency received preliminary output from the Salinas Valley Integrated Hydrologic Model (“SVIHM” or “historical model”) in April 2021. Staff is reviewing the model output for consistency with the Agency’s conceptual understanding of the groundwater basin as well as to evaluate the correlation between model output and historical data.
- The Agency continues to coordinate with Wood to develop operational parameters for a “Pre-Salinas Valley Water Project” baseline run. The intent of this modeling effort is to conduct a quantitative comparison of conditions before the SVWP and the existing baseline model, in response to stakeholder questions about the Interlake Tunnel project.
- MCWRA and Wood working closely with another consultant, ICF, to use the SVOM in support of ICF’s work on the Environmental Impact Report for the Interlake Tunnel Project.
- Preliminary data from the SVOM is being used by the Agency’s consultant, WSC, to support the San Antonio Dam Spillway Rehabilitation Cost Share Analysis project.

OTHER AGENCY INVOLVEMENT

None.

FINANCING:

There is no financial impact for receiving this report.

Prepared by:      Amy Woodrow, Hydrologist, (831) 755-4860  
                         Howard Franklin, Senior Hydrologist, (831) 755-4860

Approved by:      Brent Buche, General Manager



# Monterey County

## Item No.9

### Board Report

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

Legistar File Number: WRABMAC 21-036

May 05, 2021

Introduced: 4/29/2021

Current Status: Draft

Version: 1

Matter Type: WRA BMAC Item

Salinas Valley Water Conditions for the Second Quarter of Water Year 2020-2021

## Report on Salinas Valley Water Conditions for the Second Quarter of Water Year 2020-2021

### SUMMARY/DISCUSSION:

Groundwater level data provides insight on how an aquifer or subarea responds to hydrologic conditions, such as precipitation and reservoir releases, over time. 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. Subareas or aquifers will respond differently to these hydrologic conditions. For example, groundwater levels in shallower aquifers may respond quicker to a wet season while aquifers that are deeper or more depleted may take longer for groundwater levels to respond and recover.

This report covers the second quarter of Water Year 2020-2021 (WY21), January through March 2021. It provides a brief overview and discussion of hydrologic conditions in the Salinas Valley including precipitation, reservoir storage and groundwater level trends.

Precipitation – Preliminary National Weather Service rainfall data indicates that the second quarter of WY21 brought below normal rainfall to Salinas and King City. Totals for the quarter were 4.76 inches (65% of normal rainfall of 7.35 inches for the quarter) at the Salinas Airport, and 6.19 inches (88% of normal rainfall of 7.03 inches for the quarter) in King City.

Attachment B contains graphs for both stations showing monthly and cumulative precipitation data for the current and a “normal” water year, based on long-term monthly precipitation averages. Attachment B also includes tables showing values for precipitation totals as well as percent of “normal” precipitation.

Reservoirs - The following table compares second quarter storage at Nacimiento and San Antonio reservoirs for the past two years. Storage in Nacimiento Reservoir is 42,175 acre-feet lower than in March 2020, and storage in San Antonio Reservoir is 56,967 acre-feet lower.

<b>Reservoir</b>	<b>March 31, 2021 (WY21) Storage in acre-feet</b>	<b>March 31, 2020 (WY20) Storage in acre-feet</b>	<b>Difference in acre-feet</b>
Nacimiento	153,020	195,195	-42,175
San Antonio	67,182	124,149	-56,967

Graphs showing daily reservoir storage for the last five water years along with 30-year average daily storage for comparison are included as Attachments C and D.

Groundwater Levels – More than 100 wells are measured monthly throughout the Salinas Valley to monitor seasonal groundwater level fluctuations. Data from approximately 50 of these wells are used in the preparation of this report. The measurements are categorized by hydrologic subarea, averaged, and graphed to compare current water levels (WY21) with selected past conditions. Graphs for individual subareas, showing the current year’s water level conditions, last year’s conditions (WY20) and dry conditions (WY15) are found in Attachments E through I. For comparison to long term conditions, a curve showing monthly water levels averaged over the most recent 30 years (WY1990-WY2020) is included on each graph. Attachment J is a summary of water level changes for all subareas.

180-Foot Aquifer: Over the last quarter, groundwater levels rose four feet in the 180-Foot Aquifer.

Groundwater levels are less than one foot higher than March 2020 levels and down five feet from the 30-year average. Attachment E shows monthly groundwater trends for the 180-Foot Aquifer.

400-Foot Aquifer: Over the last quarter, groundwater elevations increased three feet in the 400-Foot Aquifer. Groundwater levels are up two feet compared to March 2020 and down one foot from the 30-year average. Attachment F shows monthly groundwater trends for the 400-Foot Aquifer.

East Side Subarea: East Side groundwater levels increased five feet over the last quarter. Groundwater levels are up one foot from March 2020 levels and down ten feet from the 30-year average. Attachment G shows monthly groundwater trends for the East Side Subarea.

Forebay Subarea: Over the last quarter, groundwater levels have increased two feet in the Forebay. Groundwater levels are down three feet from March 2020 levels and are down two feet from the 30-year average. Attachment H shows monthly groundwater trends for the Forebay Subarea.

Upper Valley Subarea: Upper Valley groundwater levels have increased two feet over the last quarter. Groundwater levels are less than one foot lower than March 2020 and less than one foot lower than the 30-year average. Attachment I shows monthly groundwater trends for the Upper Valley Subarea.

Deep Aquifers: Currently, the Quarterly Conditions Report does not include groundwater levels that represent the Deep Aquifers. Staff has prepared a Deep Aquifers Addendum, included as Attachment J, which includes Staff's current analysis and discussion of Deep Aquifer conditions. This information is being presented while Staff continues to analyze which data will be used to represent groundwater level trends in the Deep Aquifers for the Quarterly Conditions Report, beginning next water year 2021-2022.

OTHER AGENCY INVOLVEMENT:

None

FINANCING:

Funds 111, 116

Prepared by: Howard Franklin, Senior Hydrologist, (831) 755-4860  
Tamara Voss, Associate Hydrologist, (831) 755-4860  
Nicole Koerth, Hydrologist (831) 755-4860  
April Woods, Water Resource Technician (831) 755-4860

Approved by: Brent Buche, General Manager, (831) 755-4860

Attachments:

1. Attachment A, Salinas Valley Hydrologic Subareas Map
2. Attachment B, Salinas and King City Precipitation Graphs
3. Attachment C, Nacimiento Reservoir Graph
4. Attachment D, San Antonio Reservoir Graph
5. Attachment E, Groundwater Trends 180-Foot Aquifer
6. Attachment F, Groundwater Trends 400-Foot Aquifer
7. Attachment G, Groundwater Trends East Side Subarea

8. Attachment H, Groundwater Trends Forebay Subarea
9. Attachment I, Groundwater Trends Upper Valley Subarea
10. Attachment J, Groundwater Trends Summary
11. Attachment K, Deep Aquifers Addendum, Second Quarter, WY 2021



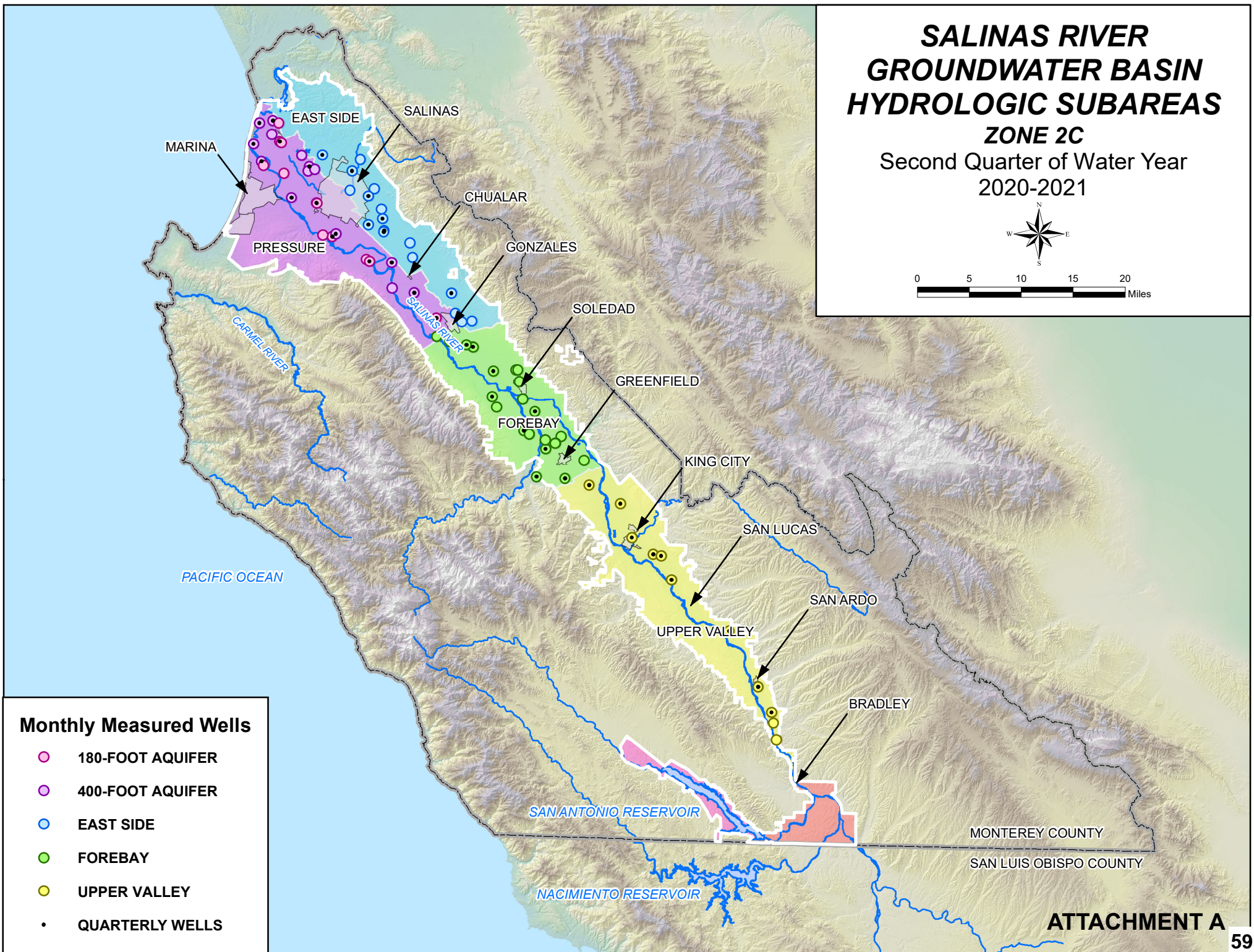
# SALINAS RIVER GROUNDWATER BASIN HYDROLOGIC SUBAREAS

## ZONE 2C

Second Quarter of Water Year  
2020-2021



0 5 10 15 20  
Miles

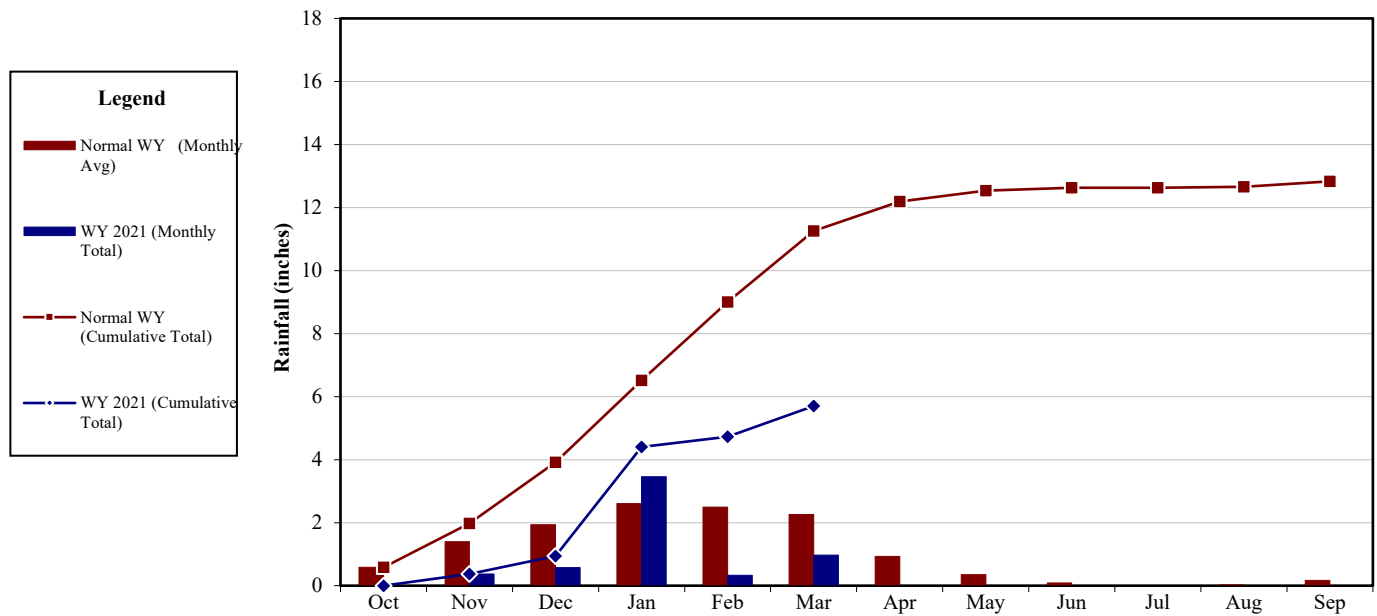


### Monthly Measured Wells

- 180-FOOT AQUIFER
- 400-FOOT AQUIFER
- EAST SIDE
- FOREBAY
- UPPER VALLEY
- QUARTERLY WELLS

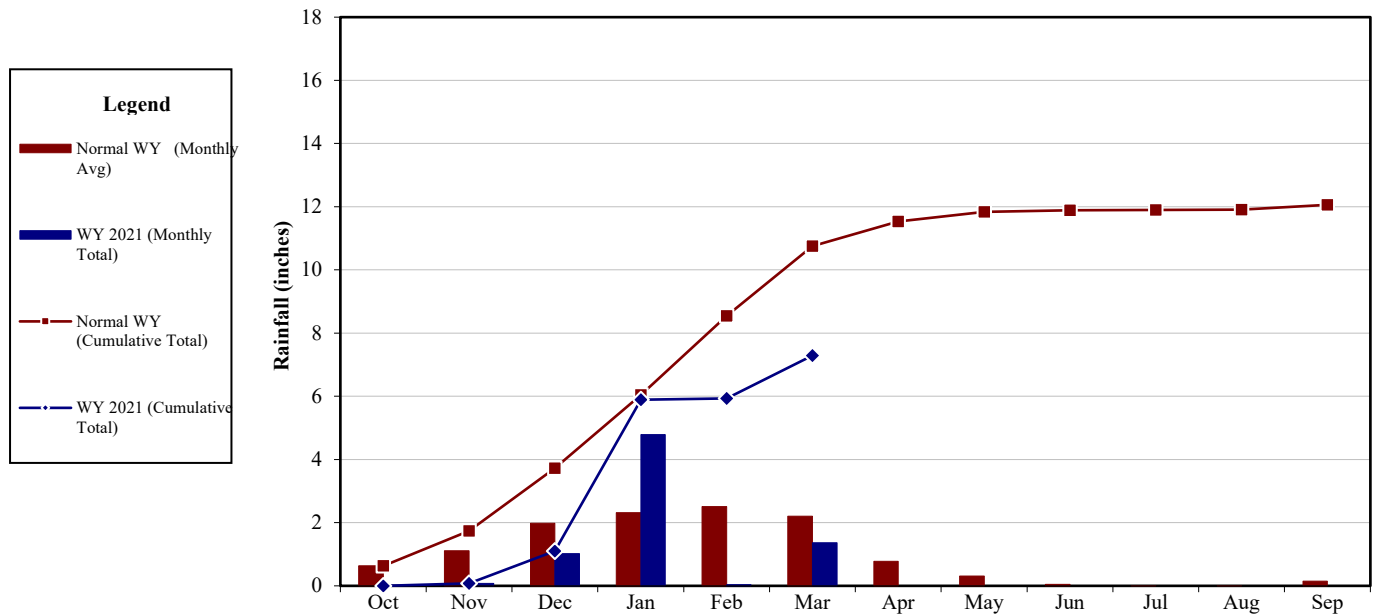
ATTACHMENT A

## SALINAS AIRPORT RAINFALL WATER YEAR 2021



Monthly Rainfall (WY 2021)	0.00	0.37	0.57	3.46	0.33	0.97						
Monthly Rainfall (Normal WY*)	0.58	1.40	1.93	2.60	2.49	2.26	0.93	0.35	0.09	0.00	0.03	0.17
Percent of Normal for Month	0%	26%	30%	133%	13%	43%	0%	0%	0%	0%	0%	0%
Cumulative Rainfall (WY 2021)	0.00	0.37	0.94	4.40	4.73	5.70						
Cumulative Rainfall (Normal WY*)	0.58	1.98	3.91	6.51	9.00	11.26	12.19	12.54	12.63	12.63	12.66	12.83
Percent of Cumulative Normal	0%	19%	24%	68%	53%	51%						

## KING CITY RAINFALL WATER YEAR 2021



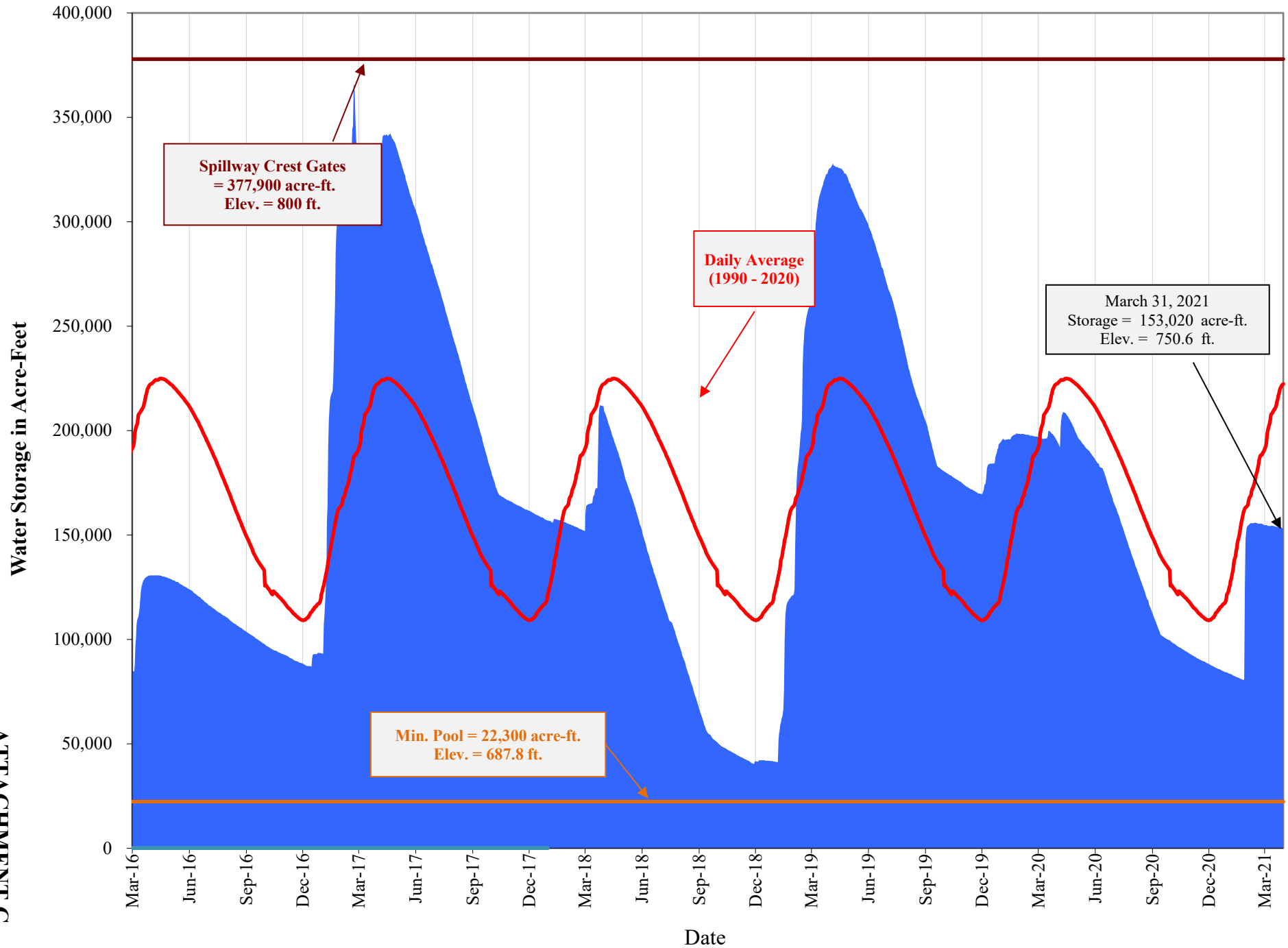
Monthly Rainfall (WY 2021)	0.00	0.08	1.02	4.79	0.04	1.36						
Monthly Rainfall (Normal WY*)	0.63	1.11	1.98	2.32	2.51	2.20	0.78	0.31	0.05	0.01	0.01	0.15
Percent of Normal for Month	0%	7%	52%	206%	2%	62%	0%	0%	0%	0%	0%	0%
Cumulative Rainfall (WY 2021)	0.00	0.08	1.10	5.89	5.93	7.29						
Cumulative Rainfall (Normal WY*)	0.63	1.74	3.72	6.04	8.55	10.75	11.53	11.84	11.89	11.90	11.91	12.06
Percent of Cumulative Normal	0%	5%	30%	98%	69%	68%						

\*Average precipitation over the most recent 30-year period ending in a decade (1981-2010)

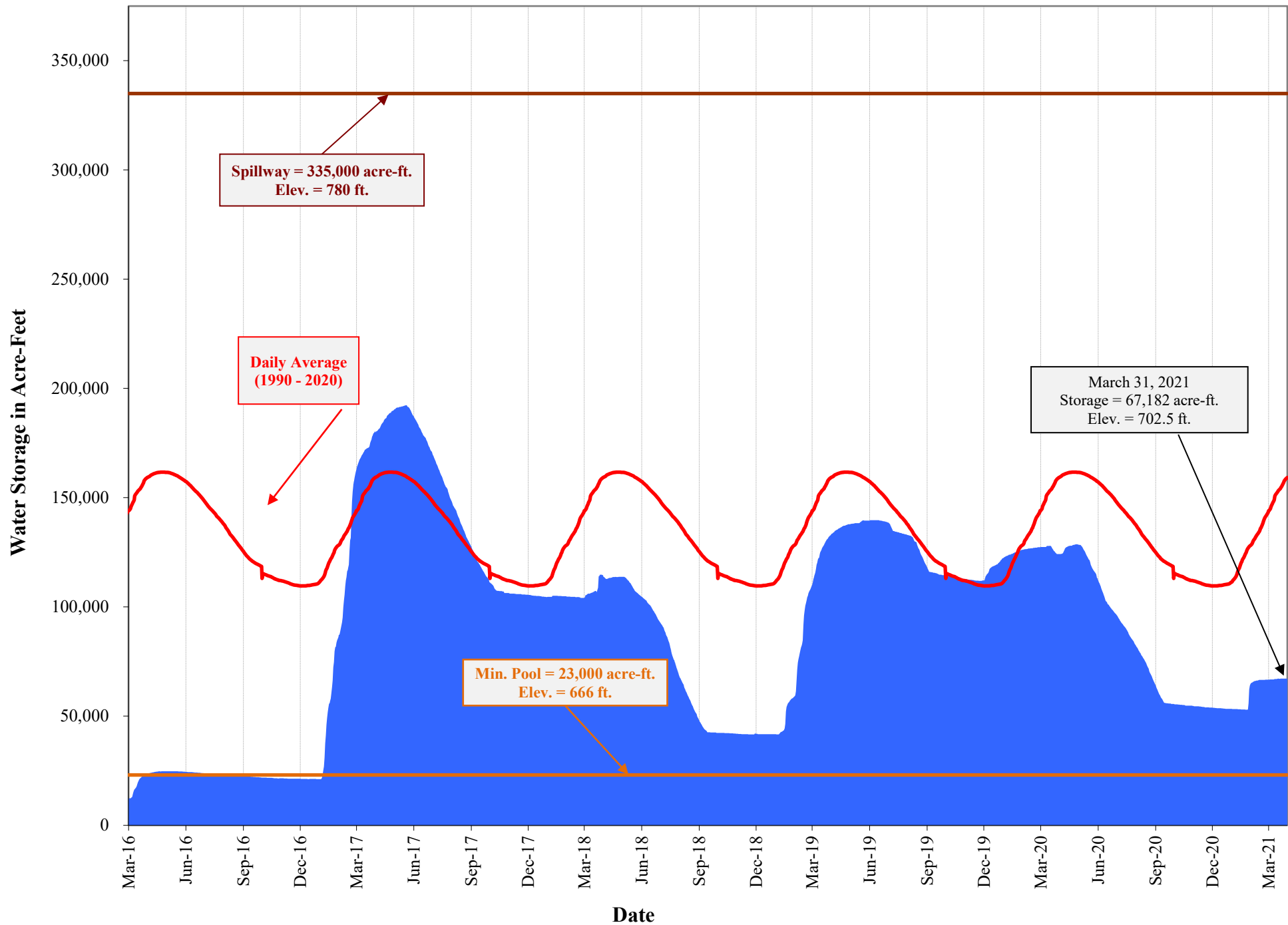
**ATTACHMENT B**



# NACIMIENTO RESERVOIR DAILY STORAGE



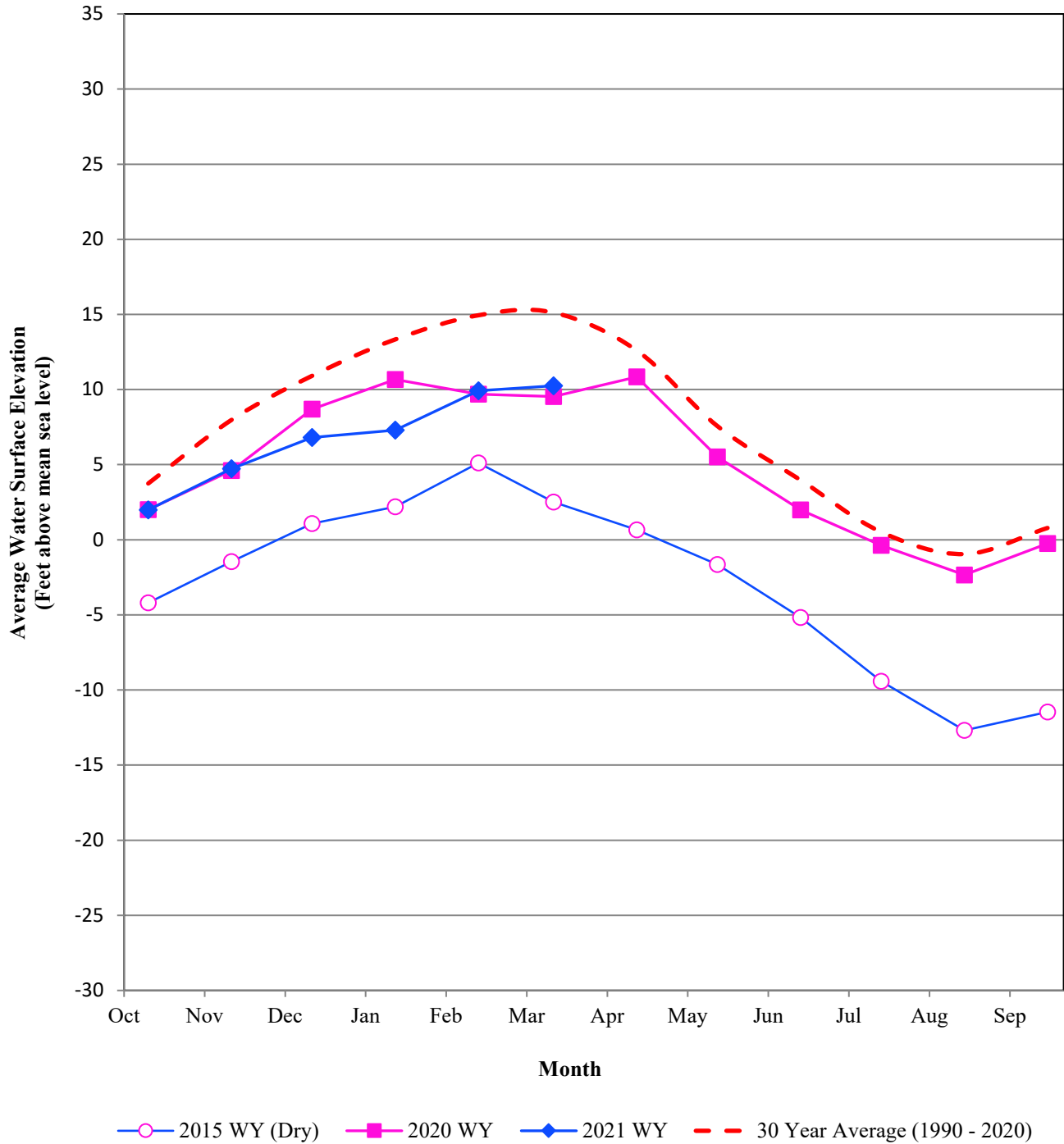
# SAN ANTONIO RESERVOIR DAILY STORAGE



# GROUNDWATER TRENDS

## 180-FOOT AQUIFER

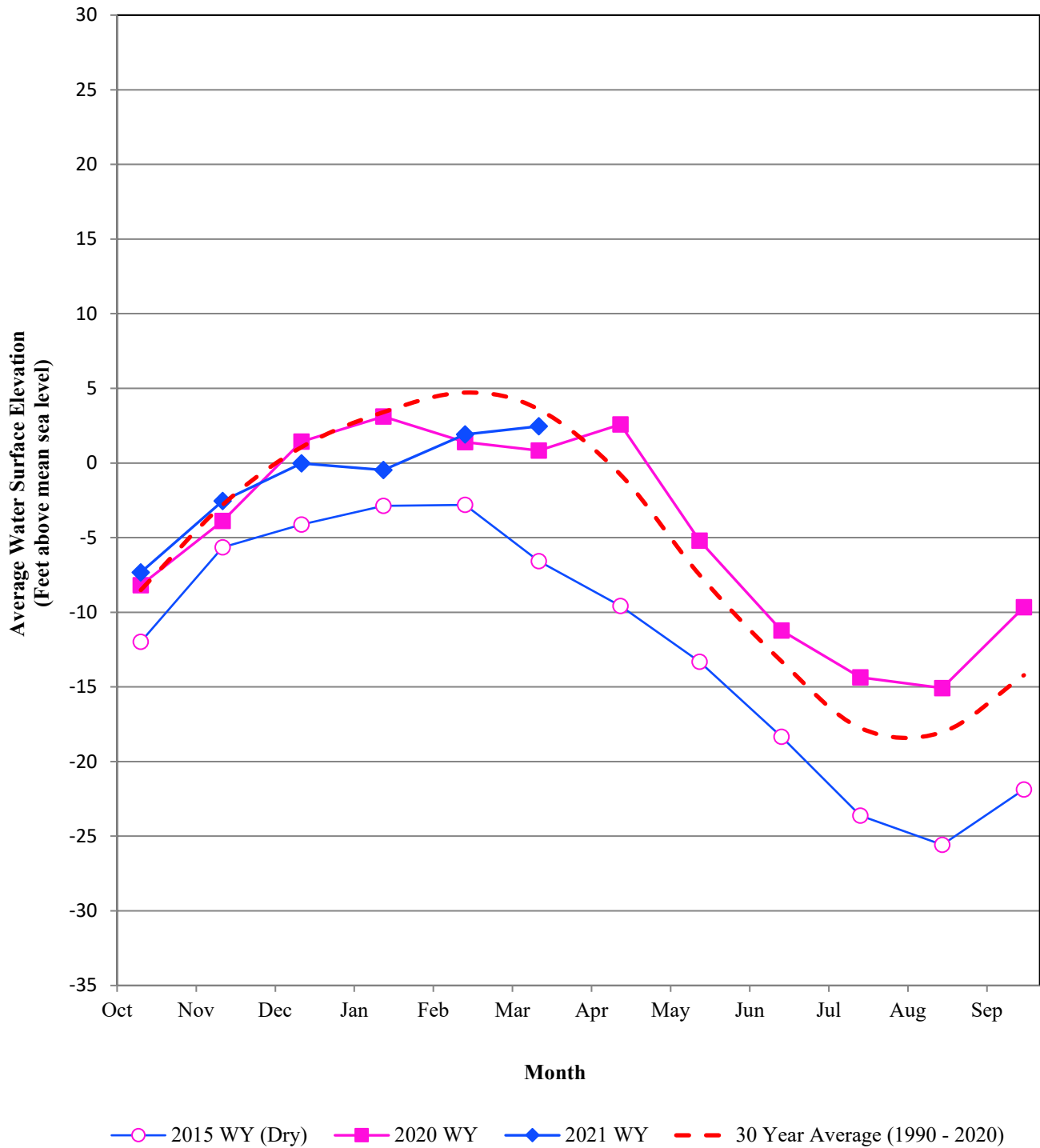
### 8 Wells



# GROUNDWATER TRENDS

## 400-FOOT AQUIFER

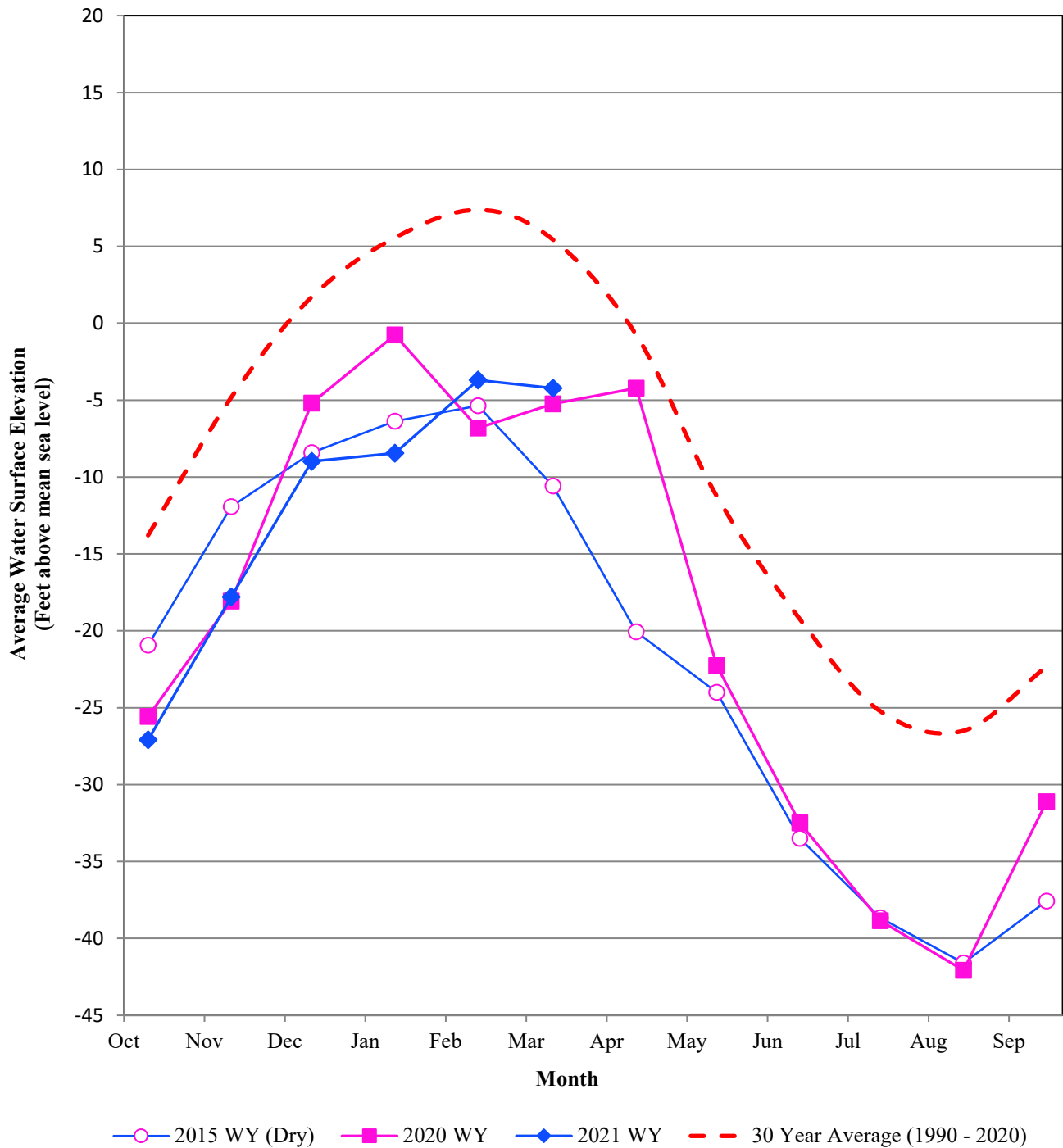
### 12 Wells



# GROUNDWATER TRENDS

## EAST SIDE SUBAREA

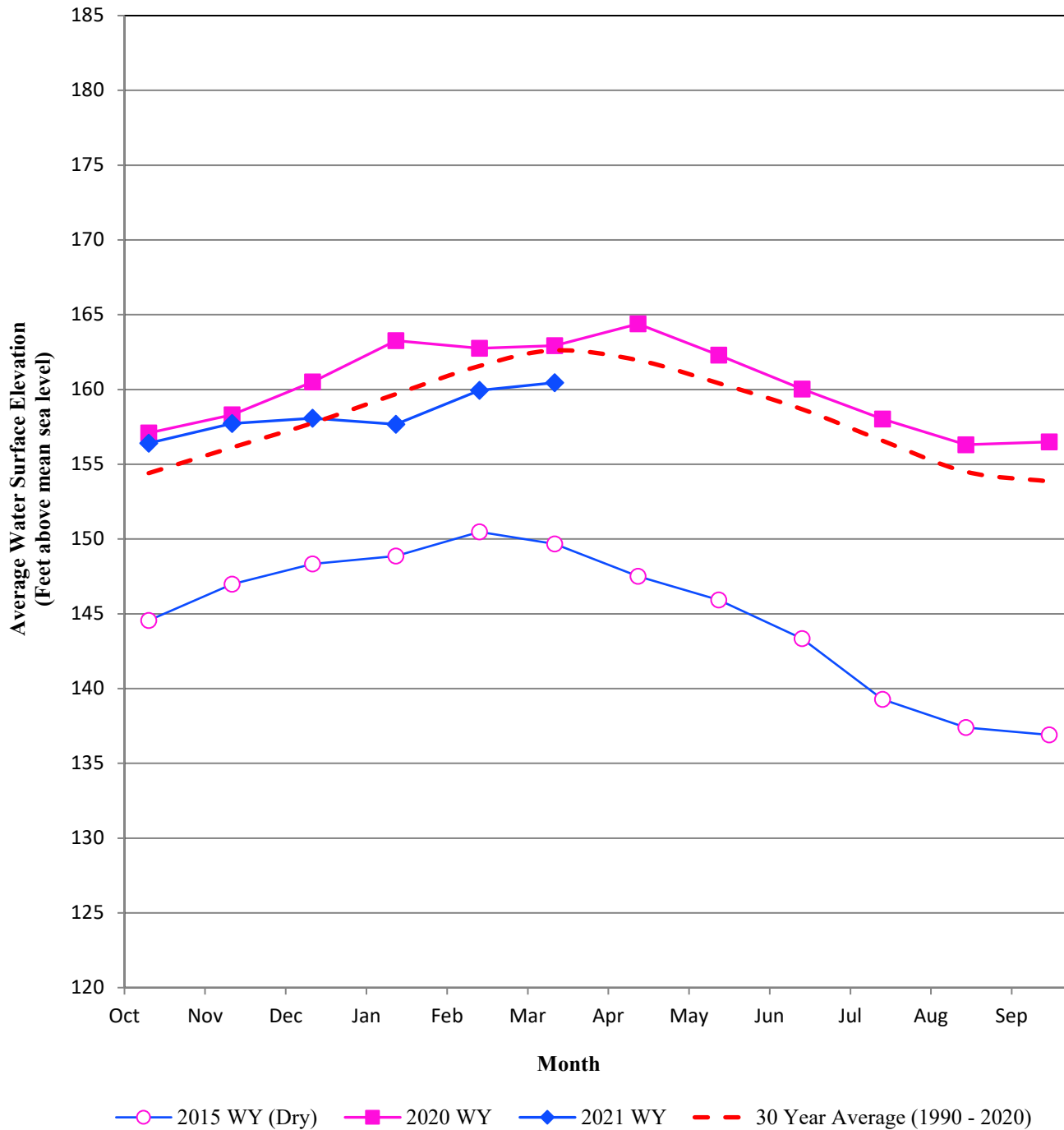
### 12 Wells



# GROUNDWATER TRENDS

## FOREBAY SUBAREA

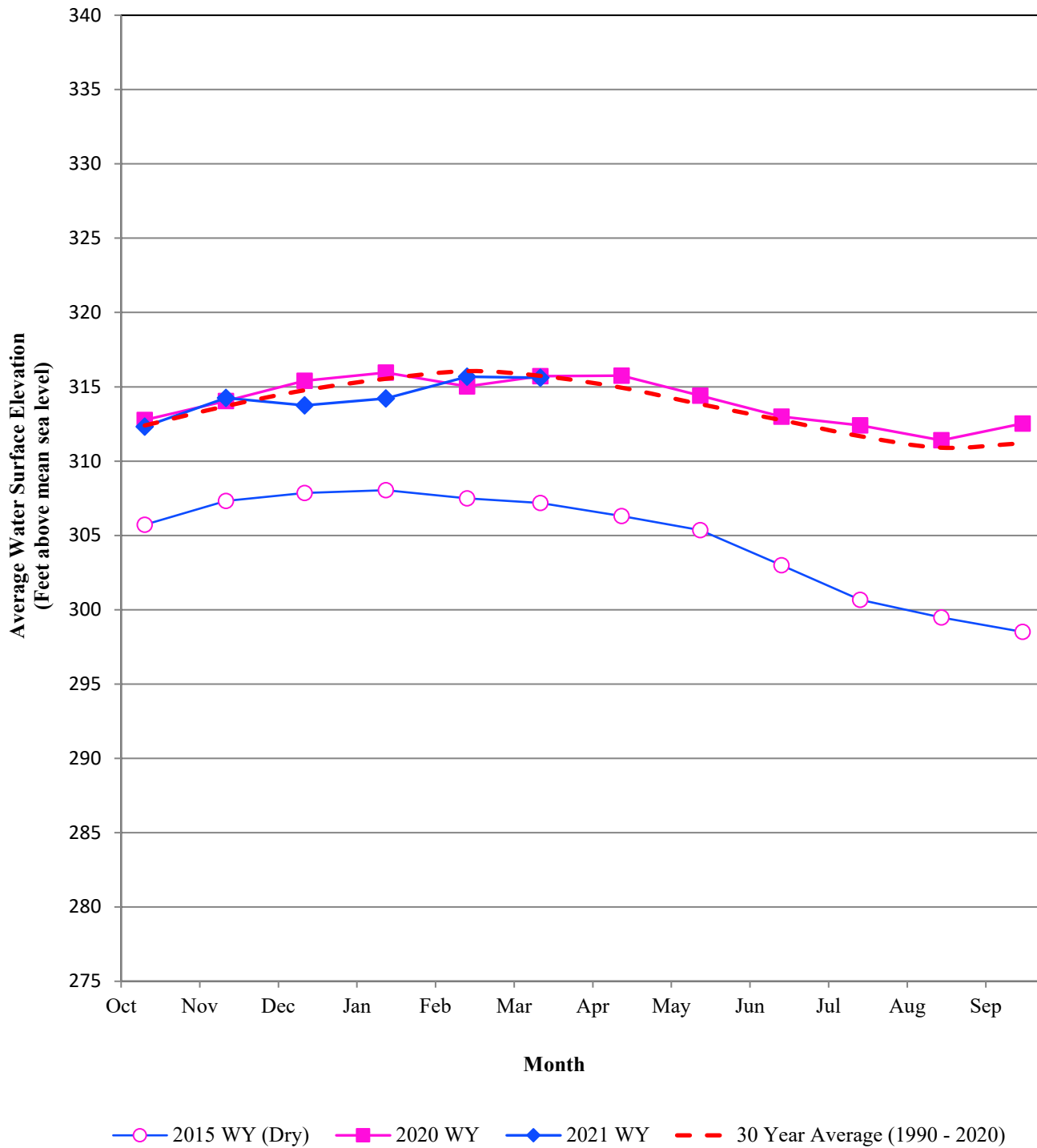
### 13 Wells



# GROUNDWATER TRENDS

## UPPER VALLEY SUBAREA

### 9 Wells



## Groundwater Trends Summary

### March 2021

Area	March 2021 Groundwater Elevation (ft msl)	Change over Second Quarter	1 Year Change	Difference from 30 year Average Elevation
180-Foot Aquifer	10 '	Up 4 '	Up < 1 '	Down 5 '
400-Foot Aquifer	3 '	Up 3 '	Up 2 '	Down 1 '
East Side Subarea	-4 '	Up 5 '	Up 1 '	Down 10 '
Forebay Subarea	161 '	Up 2 '	Down 3 '	Down 2 '
Upper Valley Subarea	316 '	Up 2 '	Down < 1 '	Down < 1 '



## Deep Aquifers Addendum to the Salinas Valley Water Conditions Second Quarter of Water Year 2020-2021

### 1. Background of the Deep Aquifers

The Deep Aquifers are formational aquifers, consisting of several aquifer units within the Paso Robles Formation, Purisima Formation, and Santa Margarita Sandstone. A lot about the Deep Aquifers is still unknown, including the extent of these formations that are productive water-bearing unit in the Salinas Valley, the hydrogeologic properties of the aquifer units, what separates each aquifer unit from each other, and what separates the Deep Aquifers from the overlying 400-Ft Aquifer.

The Paso Robles Formation (Paso Robles) is a Pliocene- Pleistocene unit that consists of lenticular beds of sands, gravel, silts and clays. Potential depositional environments of these layers include alluvial fan or braided streams<sup>1</sup>, from the ancient Salinas River<sup>2</sup>, or alluvial fan, lake and floodplain deposits<sup>3</sup>. The Paso Robles outcrops in 37,500 acres of Monterey County, including the El Toro area and west side of the Salinas Valley<sup>4</sup>. The Paso Robles is also exposed at the land surface in San Luis Obispo County. The lower portions of the 400-Ft Aquifer and upper portions of the Deep Aquifers are in the Paso Robles formation. The degree of hydrologic separation between these units is unknown.

The Purisima Formation (Purisima) is a Pleistocene aged, shallow marine unit composed of clays and shale<sup>1</sup>, siltstone, sandstone, and conglomerates<sup>5</sup>. Micro-fossils from Purisima core samples indicate a marine shelf environment around 0-150 feet below sea level<sup>6</sup>. In geologic logs, a shift to more clays, particularly blue clays, and shales seen are a good indicator of this shift to a marine deposited environment. The Purisima outcrops on the southwest side of the Monterey submarine canyon, as well as on land in Santa Cruz County<sup>4</sup>. The Purisima is not exposed on land in Monterey County.

The Santa Margarita Sandstone (Santa Margarita) is a late Miocene deposited, shallow marine friable arkosic sandstone unit<sup>5</sup>. Some studies describe this as a transgressive sandstone unit<sup>4</sup>. The Santa Margarita can be seen below the Purisima, or below the Paso Robles where the Purisima is absent.

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<sup>1</sup> Harding ESE. 2001. *Final Report Hydrogeologic Investigation of the Salinas Valley Basin in the Vicinity of Fort Ord and Marina Salinas Valley, California*.

<sup>2</sup> Thorup, Richard R. 1976. *Report on Castroville Irrigation Project Deep Test Hole and Freshwater Bearing Strata Below the Pressure 400-Foot Aquifer, Salinas Valley, CA*.

<sup>3</sup> Greene, H.G. 1970. *Geology of Southern Monterey Bay and its Relationship to the Ground Water Basin and Sea Water Intrusion*. U.S. Geological Survey, 50 p.

<sup>4</sup> Feeney, M.B., and L.I. Rosenberg. 2003. *Technical Memorandum- Deep Aquifer Investigation- Hydrogeologic Data Inventory, Review, Interpretation and Implications*. 40 p.

<sup>5</sup> Greene, H.G. 1977. *Geology of Southern Monterey Bay Region*. U.S. Geological Survey, 347 p.

<sup>6</sup> Hanson, R.T., Rhett R. Everett, Mark W. Newhouse, Steven M. Crawford, M. Isabel Pimentel, and Gregory Smith. 2002. *Geohydrology of a Deep-Aquifer System Monitoring Well Site at Marina, Monterey County, California*. U.S. Geological Survey, 289 p.

## Purpose of this Addendum

The Salinas Valley Water Conditions Report (Quarterly Conditions Report), produced every quarter of the water year, provides a brief overview and discussion of water conditions including precipitation, reservoir storage and groundwater level trends. More than 100 wells are measured each month to monitor seasonal groundwater level fluctuations in the Salinas Valley. A subset of wells is used to generate average groundwater levels for each aquifer or subarea. Currently, the Quarterly Conditions Report does not include the Deep Aquifers. This addendum will show Staff's analysis of current Deep Aquifers conditions and trends and will be updated every quarter. This information is being presented while Staff continues to analyze which data will be used to represent groundwater level trends in the Deep Aquifers for the Quarterly Conditions Report.

## 2. Groundwater Levels

Staff collects groundwater levels from thirty-two Deep Aquifers wells on a monthly basis. In addition, seven Deep Aquifers monitoring wells have pressure transducers which collect hourly groundwater level data. Three groups of Deep Aquifers wells are discussed below; wells in the Deep Aquifers in the Paso Robles Formation, wells in the Deep Aquifers in the Purisima Formation, and a Deep Aquifers set using both the Paso Robles and Purisima wells.

### Paso Robles Groundwater Levels

Eight wells have been identified to represent the Deep Aquifers in the Paso Robles Formation (Table 1). The screened formation of each well was identified in previous reports or was made by Staff based on interpretation of geologic logs and geophysical logs if available. The depths of these wells range from 840 feet below ground surface (ft-bgs) to 1605 ft-bgs, with screened intervals ranging from 600 ft-bgs to 1600 ft-bgs. These wells were selected because there is a long period of consecutive monthly groundwater level measurements to use for this analysis. Wells with a shorter, but still consistent, period of record were included if the location helped expand spatial coverage of Paso Robles wells (Figure 1).

Table 1. Paso Robles Deep Aquifer Wells							
State Well ID	Facility Code	Year Drilled	GSE (ft-msl)	Depth (ft-bgs)	Screened Interval (ft-bgs)	Screened Formation	Monthly Groundwater Level Period of Record <sup>4</sup>
13S/02E-19Q03	75	1980	13	1562	1280-1550	Paso Robles <sup>1</sup>	October 1983- Current
13S/02E-31A02	1153	1985	11	1600	850-1600	Paso Robles <sup>1</sup>	October 1986- Current
13S/02E-32E05	10164	1984	8	1605	775-1585	Paso Robles <sup>1</sup>	June 1986- Current
14S/01E-24L05	22277	2000	67	970	930-950	Paso Robles <sup>2</sup>	November 2002- Current
14S/02E-06L01	1672	1976	13	1560	880-1540	Paso Robles <sup>1</sup>	October 1988- Current
14S/02E-33E01	26313	2005	140	1095	1045-1095	Paso Robles <sup>3</sup>	June 2018- Current
14S/02E-28H04	22929	2006	26	1180	940-1160	Paso Robles <sup>3</sup>	July 2018- Current
15S/03E-05R52	22905	2006	52	840	600-820	Paso Robles <sup>3</sup>	April 2016- Current

1. Feeney and Rosenberg, 2003; 2. Hanson et. al, 2002; 3. Based on interpretation of geologic log; 4. Period of record where relatively consistent monthly measurements were collected

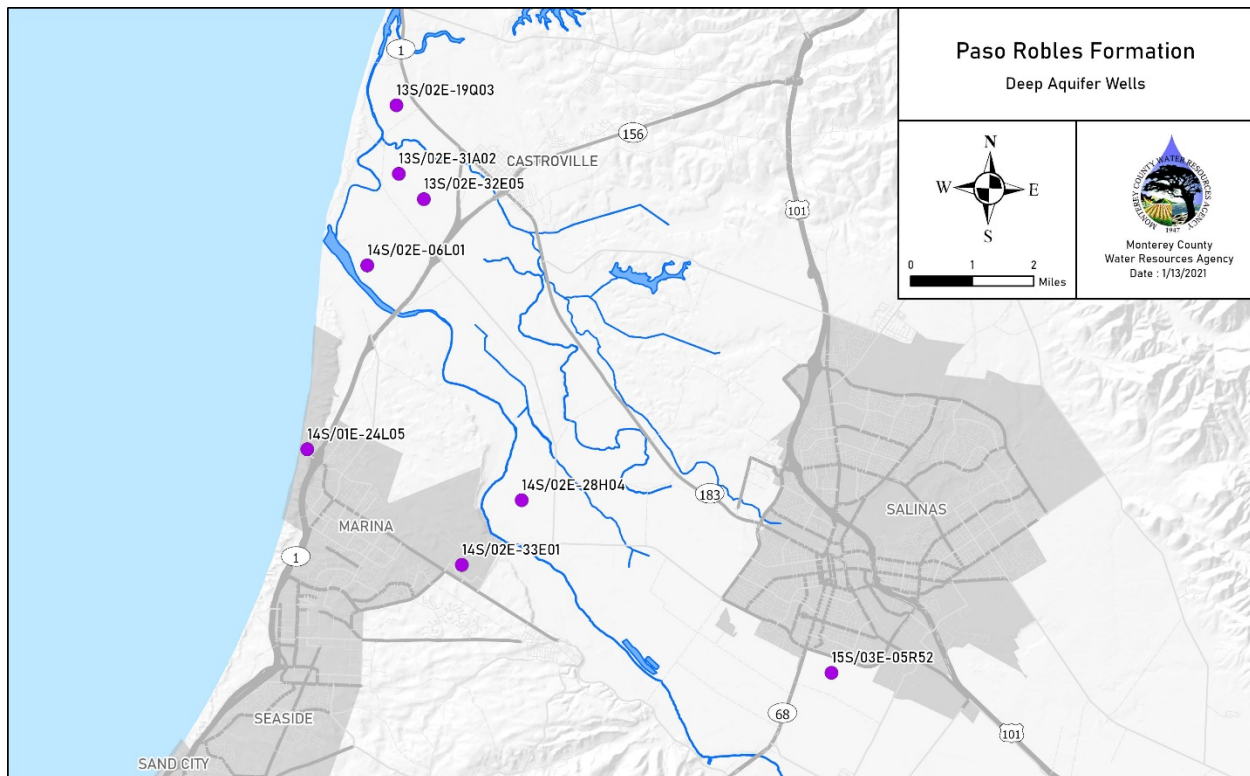


Figure 1. Deep Aquifer wells in the Paso Robles Formation used for groundwater level hydrographs, labeled by State Well ID

Individual hydrographs for the selected Paso Robles wells can be seen in Figure 2. Groundwater elevations are all below sea level. The variability in groundwater levels varies spatially. Wells in the northern coastal region (e.g., 19Q03, 31A02, 06L01, 32E05) have higher groundwater levels on average and see less seasonal variability. This is in an area where less pumping is occurring from the Deep Aquifers, likely resulting in less seasonal drawdown of groundwater levels.

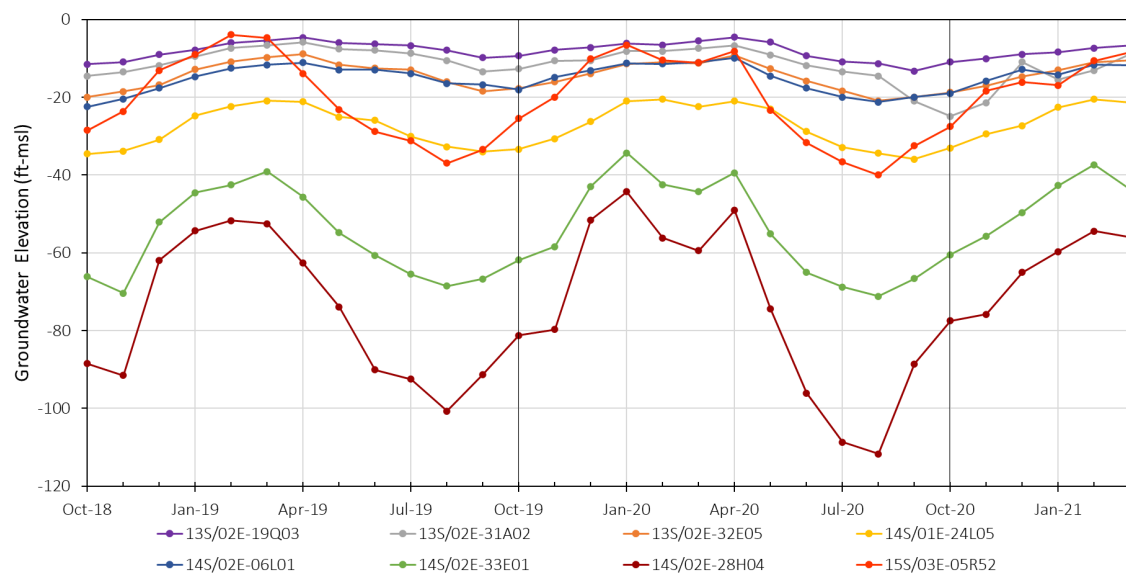
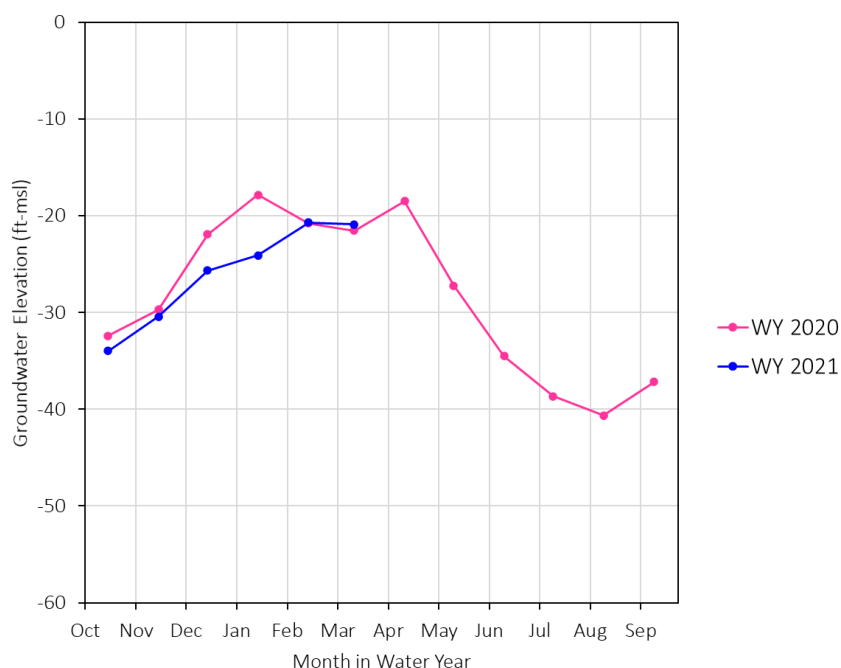


Figure 2. Individual hydrographs for selected wells, WY 2019 to Second Quarter WY 2021

Lower groundwater elevations and a larger seasonal drawdown is seen in Deep Aquifer wells further inland. These wells are closer to areas where more Deep Aquifer extractions are occurring. Groundwater extraction data for the 2020 reporting year is currently being collected. A more in-depth analysis of the effect of groundwater extractions on Deep Aquifer groundwater levels will be included in a future version of this addendum. A noticeable trough in groundwater levels is seen in several wells in February and March 2020. Potential causes of this will be analyzed and included in later versions as well.

In the Quarterly Conditions report, groundwater elevations from a representative set of wells in each aquifer or subarea are averaged together to compare water levels across water years (WY). Average groundwater elevations of the eight Deep Aquifers wells in the Paso Robles formation can be seen in Figure 3 for the last water year, WY 2020 (pink), and the current water year, WY 2021 (blue). Average elevations by the end of the second quarter of WY 2021 were twenty-one feet below sea level. WY 2021 started with groundwater elevations lower than those at the start of WY 2020, but by the end of the quarter were just above levels last March. Since not all the wells used in this average have groundwater levels from 2018 or earlier, a dry year and 30-year average line were not included.



*Figure 3. Average hydrographs for Paso Robles Deep Aquifer Wells (n=8)*

## Purisima Groundwater Levels

Four wells have been identified to represent the Deep Aquifers in the Purisima Formation (Table 2). There are a limited number of wells screened exclusively in the Purisima Formation that also have a sufficient period of record or groundwater level data. The screened formation of each well

was identified in previous reports or was made by Staff based on interpretation of geologic logs and geophysical logs, if available. The depths of these wells range from 1080 ft-bgs to 1880 ft-bgs, with screened intervals ranging from 1040 ft-bgs to 1860 ft-bgs. These wells were selected because there is a long period of consecutive monthly groundwater level measurements to use for this analysis, and because these wells appear to be screened exclusively in the Purisima formation. Wells with a shorter, but still consistent, period of record were included if the well's location helped expand spatial coverage of Purisima wells (Figure 4).

State Well ID	Facility Code	Year Drilled	GSE (ft-msl)	Depth (ft-bgs)	Screened Interval (ft-bgs)	Screened Formation	Monthly Groundwater Level Period of Record <sup>3</sup>
14S/01E-24L02	22274	2000	67	1880	1820-1860	Purisima <sup>1</sup>	November 2002- Current
14S/01E-24L03	22275	2000	67	1430	1410-1430	Purisima <sup>1</sup>	November 2002- Current
14S/01E-24L04	22276	2000	67	1080	1040-1060	Purisima <sup>1</sup>	November 2002- Current
14S/02E-33E02	26314	2005	140	1760	1680-1760	Purisima <sup>2</sup>	June 2018- Current

1. Hanson et al., 2002; 2. Based on interpretation of geologic logs; 3. Period of record where relatively consistent monthly measurements were collected

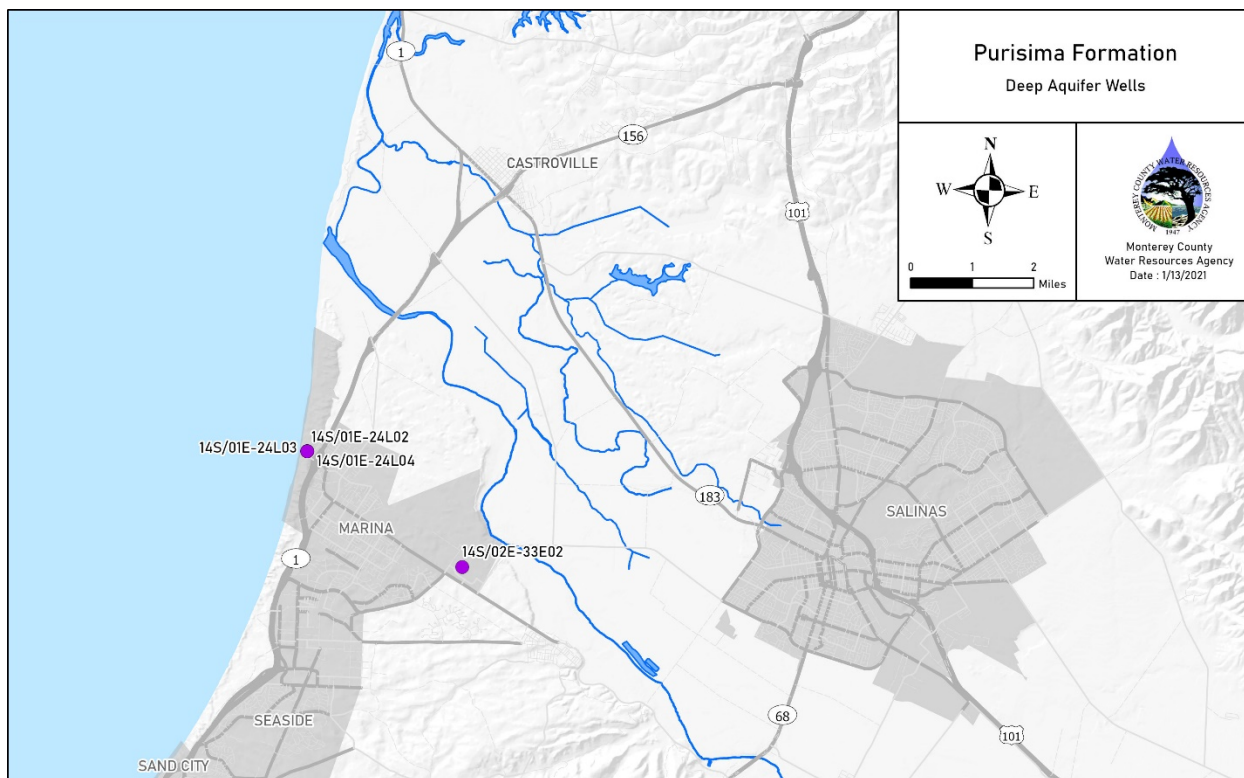


Figure 4. Deep Aquifer wells in the Purisima Formation used for groundwater level hydrographs, labeled by State Well ID

Individual hydrographs for the selected Purisima wells can be seen in Figure 5. Similar to the Paso Robles, groundwater elevations in the Purisima are all below sea level. The trough seen in Paso Robles groundwater levels in February and March 2020 can also be seen in Purisima groundwater levels, though not as pronounced. Potential causes of this will be analyzed and included in later versions of this addendum.

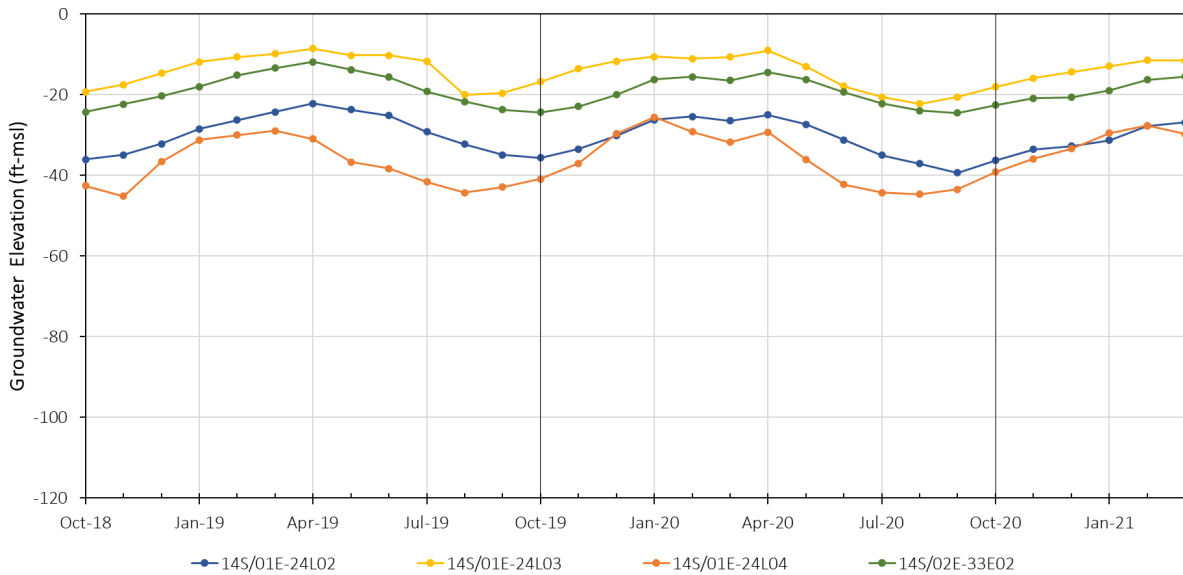


Figure 5. Individual hydrographs for selected wells, WY 2019 to Second Quarter WY 2021

Average groundwater elevations of the four Deep Aquifers wells in the Purisima formation can be seen in Figure 6 for WY 2020 and WY 2021. Average elevations by the end of the second quarter of WY 2021 were twenty-one feet below sea level, similar to the average elevations in the Paso Robles. Groundwater elevations in WY 2021 have been similar to groundwater elevations in WY 2020, except for December and January when levels were a few feet lower than in WY 2020. Since not all the wells used in this average have groundwater levels from WY 2015 or earlier, a Dry year and 30-year average line was not included.

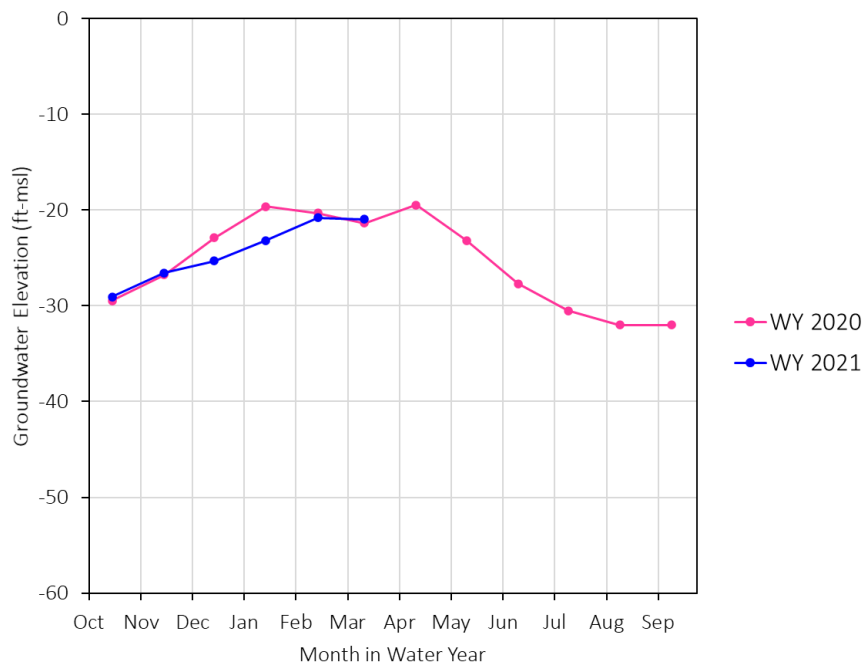
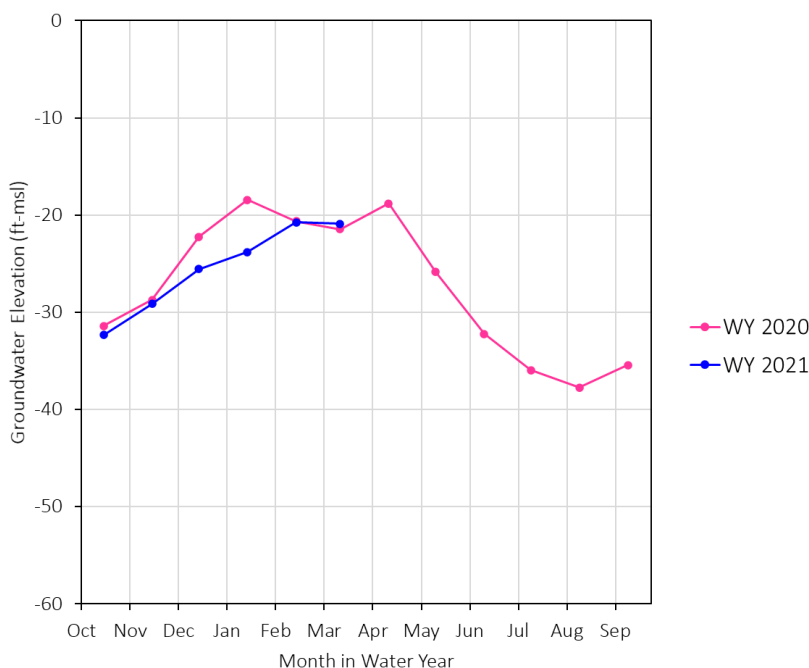


Figure 6. Average hydrographs for Purisima Deep Aquifer Wells (n=4)

### Paso Robles and Purisima Combined

One option for the Quarterly Conditions Report is averaging the Paso Robles and Purisima screened wells mentioned above together for a single set of Deep Aquifers hydrographs, instead of two. This approach would make adding new wells to this set easier, since most of the recently constructed Deep Aquifers wells are screened in both the Paso Robles and Purisima formations. However, it would move away from comparing groundwater levels in the Paso Robles versus Purisima formation in the Quarterly Conditions Report.



*Figure 7. Average hydrographs for Deep Aquifer Wells, Paso Robles and Purisima combined (n=12)*

Figure 7 shows the groundwater level hydrographs for WY 2020 and WY 2021 if the Paso Robles and Purisima wells were averaged together. The hydrographs show similar trends as the Paso Robles and Purisima set hydrographs. Average elevations by the end of the second quarter of WY 2021 were twenty-one feet below sea level. Groundwater elevations in WY 2021 have been similar to those in WY 2020, with the exception of December and January.

### 3. Vertical Hydraulic Gradients

Vertical hydraulic, or pressure, gradients can be calculated by finding the difference in groundwater elevations between two aquifers. The direction of the vertical hydraulic gradient determines the potential direction of flow between two aquifers, so long as pathways exist for water to move. Table 3 shows the average groundwater elevations from the end of the quarter, March 2021, in the Deep Aquifers and the overlying aquifers.



Table 3. Average Groundwater Elevations (ft-msl) March 2021				
180-Ft Aquifer <sup>1</sup>	400-Ft Aquifer <sup>1</sup>	Paso Robles Deep Aquifer Wells	Purisima Deep Aquifer Wells	Combined Paso Robles and Purisima Deep Aquifer Wells
10.3'	2.5'	-20.9'	-21.0'	-20.9'

1. Salinas Valley Water Conditions for the Second Quarter of Water Year 2020-2021

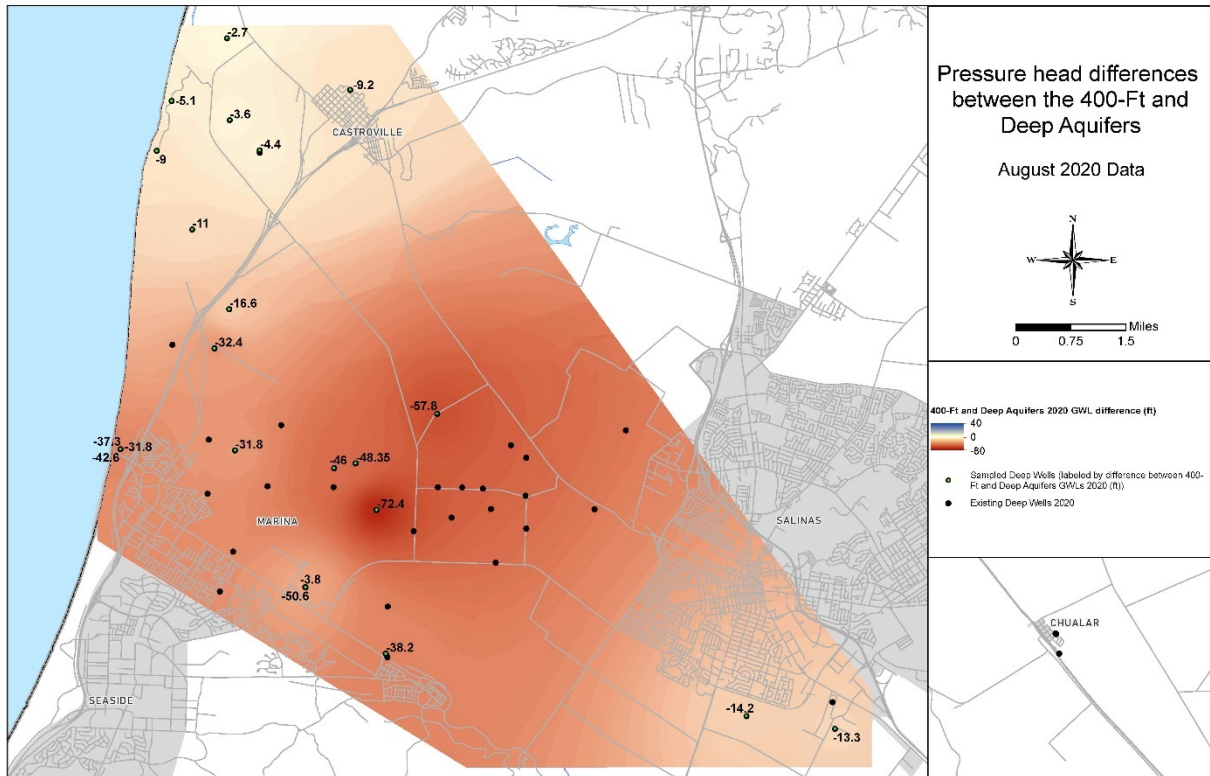
In March 2021, groundwater elevations in the 180-Ft aquifer were eight feet higher than groundwater elevations in the 400-Ft aquifer, and the vertical hydraulic gradient between the two was -7.8 ft (400-Ft Aquifer elevation minus 180-Ft Aquifer elevation). A negative vertical gradient value represents downward flow, while a positive vertical gradient represents upward flow. The negative gradient in this case means water has the potential to move from the 180-Ft aquifer downward into the 400-Ft Aquifer. As discussed in the 2017 Recommendations Report<sup>7</sup>, a combination of the downward gradient, geology, regional seawater intrusion in the overlying 180-Ft aquifer, groundwater pumping and well construction/conditions allowed for inter-aquifer seawater intrusion between the 180 and 400-Ft Aquifers.

Looking at the groundwater elevations between the 400-Ft Aquifer and the combined Deep Aquifer wells, the vertical hydraulic gradient is -23.4 ft (Combined Deep Aquifer wells elevation minus 400-Ft Aquifer elevation). This is a slight relaxation from the December 2020 vertical gradient of -26 ft. Again, the negative vertical gradient means there is a mechanism in place for 400-Ft aquifer water to move downward into the Deep Aquifers. Unlike the overlying aquifers, we don't have enough information about potential pathways that exist for water to move between the Deep Aquifers and the overlying 400-Ft Aquifer.

This way of looking at vertical gradients between aquifers relies on a single average groundwater elevation to represent the entire aquifer. However, the difference in vertical gradients also varies spatially. Figure 8 shows the spatial differences in groundwater elevations between the 400-Ft Aquifer and Deep Aquifers in August 2020. This map was generated by taking the difference between the 400-Ft /East Side Deep Aquifer August 2020 contours and the groundwater elevation at each Deep Aquifer well sampled that month. A raster surface was then interpolated from those points. Red colors represent areas with negative vertical gradients, meaning vertical flow would be downward from the overlying 400-Ft Aquifer into the Deep Aquifers. Blue colors would represent areas with positive vertical gradients where vertical flow would be upward from the Deep Aquifers into the 400-Ft Aquifer. In August 2020, groundwater elevations in the Deep Aquifers were entirely below elevations in the 400-Ft Aquifer. Differences between the two aquifers were smallest near the coast, the smallest difference being -2.7 feet, but ranged upward of -72.4 feet difference further inland.

<sup>7</sup> Monterey County Water Resources Agency. 2017. *Recommendations to Address the Expansion of Seawater Intrusion in the Salinas Valley Groundwater Basin*. <https://www.co.monterey.ca.us/home/showdocument?id=57396>





*Figure 8. Vertical Hydraulic (or Pressure) head differences between the 400-Ft and Deep Aquifers, August 2020*



# Monterey County

## Item No.10

### Board Report

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

Legistar File Number: WRABMAC 21-037

May 05, 2021

Introduced: 4/29/2021

Current Status: Draft

Version: 1

Matter Type: WRA BMAC Item

Consider future agenda items and set next meeting date