

Monterey County

1441 Schilling Place
Salinas, CA 93901



Meeting Agenda - Final

Wednesday, February 3, 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/99812160143> 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: 998 1216 0143 PASSWORD: 540848 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 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. 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.

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

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. 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/99812160143> O el público puede escuchar a través del teléfono llamando al:

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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 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. 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. 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 (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).

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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 November 4, 2020.

Attachments: [Draft Action Minutes November 4, 2020](#)

Scheduled Matters

2. Consider receiving a report on the Groundwater Extraction Management System (GEMS) 2019 Groundwater Extraction Summary Report.

Attachments: [Board Report](#)
[2019 GEMS 2019 GW Extraction Summary Report](#)

3. Consider receiving a report on the addition of a Deep Aquifers Addendum to the Salinas Valley Water Conditions Quarterly Conditions Report and provide guidance

to Staff on recommended changes.

Attachments: [Board Report](#)
 [1. Quarterly Report](#)
 [2. Deep Aquifer Addendum](#)

Staff Reports

4. Update on Well Permit Activities

Attachments: [Well Permit Activities Update](#)

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

Attachments: [Proposition 1 Grant Update](#)
 [Ordinance #3910](#)

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

Attachments: [GSA Activities Update](#)

7. Update on Agency Modeling Activities

Attachments: [Agency Modeling Activities Update](#)

Calendar

8. 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 21-002

February 03, 2021

Introduced: 1/26/2021

Current Status: Draft

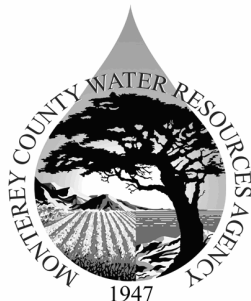
Version: 1

Matter Type: WRA BMAC Item

Approve the Minutes of the Basin Management Advisory Committee meetings held on November 4, 2020.

Monterey County

*Monterey County Government Center
Board of Supervisors Chambers
168 W. Alisal St., 1st Floor
Salinas, CA 93901*



Action Minutes - Draft

Wednesday, November 4, 2020

8:30 AM

BASIN MANAGEMENT ADVISORY COMMITTEE

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

Water Resources Agency Board of Directors

*Vice-Chair John Baillie
Mark Gonzalez
Deidre Sullivan
Ken Ekelund
Mike Scattini
Mike LeBarre
Jason Smith
Matt Simis
Marvin Borzini*

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

Committee Members

Richard Ortiz, Chair
Deidre Sullivan
John Baillie
David Bunn
Vacancy

Kevin Piearcy
Bill Lipe
Amy White
Marisela Cerda
Vacancy

Call to Order at 8:30 a.m.

Roll Call

Present: Ortiz, Sullivan, Baillie, Lipe, White, Bunn, Cerda

Absent: Pearcy

Public Comment

None

Consent Calendar

1. Approve the Minutes of the Basin Management Advisory Committee meetings held on October 7, 2020.

Attachments: [Draft Action Minutes October 7, 2020](#)

Upon Motion by John Baillie and Second by David Bunn the Committee approved the Minutes of the meeting held on October 7, 2020.

Ayes: Ortiz, Sullivan, Baillie, Lipe, White, Bunn, Cerda

Noes: None

Absent: Pearcy

Abstain: Amy White

Staff Reports

2. Receive a report on the Basin Management Advisory Committee Member Application Process

Attachments: [Committee Report](#)
 [BMAC Member Application Form](#)

3. Receive a report on the Salinas Valley Basin Groundwater Sustainability Agency's Seawater Intrusion Group (SVBGSA-SWIG) and the County of Monterey CAO's Deep Aquifers Wells Working Group (DAWWG) Activities.

Attachments: [Committee Report](#)
 [Attachment 1. CAO - DAWWG Letter](#)
 [Attachment 2. FAQ DAWWG](#)

4. Receive a report on the Hydrogeologic Characteristics of the Deep Aquifers and Historical and Current Groundwater Level Trends

Attachments: [Committee Report](#)
 [2003 Deep Aquifer Investigation Technical Memorandum](#)

5. Receive a report on the Prop 1 Drinking Water Protection Grant

Attachments: [Committee Report](#)
 [Table 1 Prop 1 Grant](#)
 [Figure 1 - Prop 1 Grant Project Boundary with Zones 2Y and 2Z](#)
 [Attachment 1 MCWRA Ordinance 3790](#)
 [Attachment 2 Orradre v Co of Monterey Settlement Agreement 2003](#)
 [Attachment 3 WellDestruction Priority List 1994](#)

Status Reports

6. Update on Well Permit Activities

Attachments: [Well Permit Activities Update](#)

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

Attachments: [GSA Activities Update](#)

8. Update on Agency Modeling Activities

Attachments: [Update on Agency Modeling Activities](#)
 [SVWC & MCWRA Fully Executed Settlement Agreement 11-15-19](#)

Calendar

9. Consider future agenda items and set next meeting date

Adjournment

The meeting adjourned at 9:55 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 21-007

February 03, 2021

Introduced: 1/26/2021

Current Status: Agenda Ready

Version: 1

Matter Type: WRA BMAC Item

Consider receiving a report on the Groundwater Extraction Management System (GEMS) 2019 Groundwater Extraction Summary Report.

RECOMMENDATION:

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

Receive a report on the Groundwater Extraction Management System (GEMS) 2019 Groundwater Extraction Summary Report.

SUMMARY:

Staff has prepared the 2019 Groundwater Extraction Summary Report. This report includes Staff's analysis and the summation of extraction data collected through the GEMS Program. This annual report is updated each year with the recently collected data.

DISCUSSION:

The Groundwater Extraction Summary Report is produced annually and provides a summary overview and discussion of groundwater extraction information from over 1,800 groundwater wells, with information broken down by subarea and crop type (Attachment 1). It also provides a summary of the forecasted conservation practices for both agricultural and urban entities.

OTHER AGENCY INVOLVEMENT:

None

FINANCING:

There is no financial impact for receiving this report. The activities associated with completing this report is funded through Fund 116 and included in each year's budget.

Prepared by: Tamara Voss, Associate Hydrologist, (831) 755-4860
Nicole Koerth, Hydrologist, (831) 755-4860
Marinn Browne, Water Resources Technician, (831) 755-4860

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

Attachments:

2019 Groundwater Extraction Summary Report - Provisional



Monterey County

Item No.

Board Report

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

Legistar File Number: WRABMAC 21-007

February 03, 2021

Introduced: 1/26/2021

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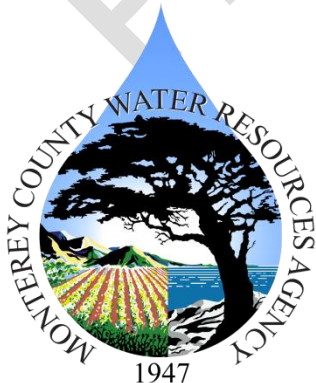
Approved by: Brent Buche, General Manager, (831) 755-4860

Attachments:

2019 Groundwater Extraction Summary Report - Provisional

2019

Groundwater Extraction Summary Report



Monterey County Water Resources Agency
January 2021



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Overview of the Groundwater Reporting Program

History of the Groundwater Reporting Program

In 1993, the Monterey County Board of Supervisors adopted Ordinances No. 3717 and 3718 that require water suppliers within Zones 2, 2A, and 2B to report water-use information for groundwater extraction facilities (wells) and service connections, with a discharge pipe having an inside diameter of at least three inches, to the Monterey County Water Resources Agency (Agency).

The purpose of the Groundwater Reporting Program is to provide the Agency with the most accurate water-use information available to effectively manage groundwater resources. In order to obtain accurate water pumping information, methods of directly measuring water extractions have been implemented.

The Agency collects groundwater extraction data from well operators annually for a period beginning November 1 and ending October 31 ("reporting year"). Data collection began with the 1992-1993 reporting year. Information submitted by than three hundred well operators in Agency management zones of the Salinas Valley (Figure 1) is stored in an Agency database.

Since 1991, the Agency has required the annual submittal of Agricultural Water Conservation Plans (Ordinance 3851), which outline the best management practices (BMPs) that are to be adopted each year by growers in the Salinas Valley. In 1996, an ordinance was passed that requires the filing of Urban Water Conservation Plans (Ordinance 3886). Developed as the urban counterpart of the agricultural water conservation plans, this program provides an overview of the BMPs to

be implemented by urban water purveyors as conservation measures.

For management purposes, the Agency divides a portion of the Salinas Valley Groundwater Basin into four hydrologic subareas or zones; Pressure, East Side, Forebay, and Upper Valley. These subareas are hydrologically and hydraulically connected, and their boundaries are defined by differences in local hydrogeology and recharge.

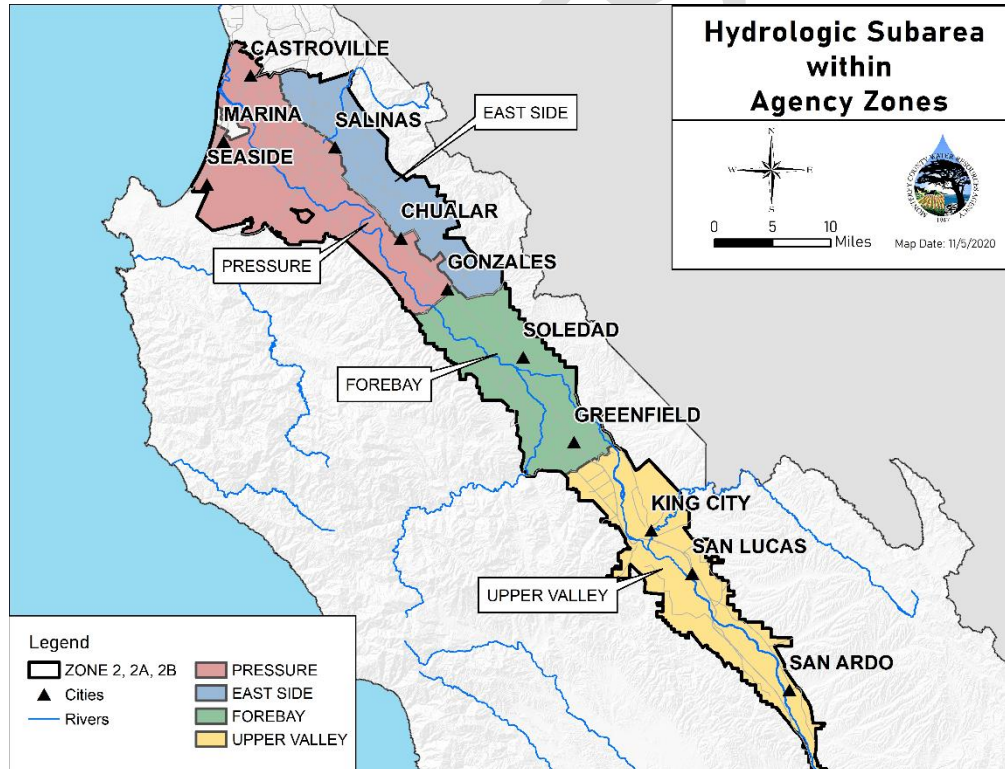


Figure 1. Salinas Valley Groundwater Basin Subareas and Agency Zones

Groundwater Summary Report

The purpose of this report is to summarize the data submitted to the Agency by well operators in February 2020 from the following annual forms:

- Groundwater Extraction Forms (agricultural and urban)
- Water Conservation Plans (agricultural and urban)
- Water and Land Use Forms (agricultural)

Month	Meter Type	Unit & multiplier	Meter S/N	Reading	Month Total (AF)
Oct 2017	Flowmeter	Acres Ft x 0.001	Serial Number	000000	
Nov 2017	Flowmeter	Acres Ft x 0.001	Serial Number	000150	0.15
Dec 2017	Flowmeter	Acres Ft x 0.001	Serial Number	050000	54.85
Jan 2018	Flowmeter	Acres Ft x 0.001	Serial Number	125000	70
Feb 2018	Flowmeter	Acres Ft x 0.001	Serial Number	201600	76.6
Mar 2018	Flowmeter	Acres Ft x 0.001	Serial Number	303000	101.43
Apr 2018	Flowmeter	Acres Ft x 0.001	Serial Number	350000	47.02

The agricultural data from the groundwater extraction program covers the reporting year of November 1, 2018, through October 31, 2019; the urban data covers calendar year 2019. The agricultural and urban water conservation plans for 2020 are also summarized. This report is intended to present a synopsis of current water extraction within the Salinas Valley, including agricultural and urban water conservation improvements that are being implemented to reduce the total amount of water pumped. It is not the purpose of this report to thoroughly analyze the factors that contribute to increases or decreases in pumping.

Reporting Format

Groundwater extraction data are presented in this report by measurement in acre-feet (AF). One acre-foot is equal to 325,851 gallons.

Reporting Methods

The Groundwater Reporting Program provides well operators with a choice of three different reporting methods: Water Flowmeter, Electrical Meter, or Hour Meter (timer). The summary of groundwater extractions presented in this report is compiled from data generated by all three reporting methods. Ordinance 3717 requires annual pump efficiency tests and/or meter calibration of each well to ensure the accuracy of the data reported. The distribution of methods used for the 2019 reporting year was: 82% Flowmeter; 17% Electrical Meter and <1% Hour Meter.



Disclaimer

While the Agency has made every effort to ensure the accuracy of the data presented in this report, it should be noted that the data are submitted by individual reporting parties. In addition, since so many factors can affect the extraction calibration, it is understood that no reporting method is 100 percent accurate. The Agency maintains strict quality assurance in the compilation, standardization, and entry of the data received. Changes to historical data may occur due to additional submittals after the due date. Rounding errors may cause the total extraction values displayed to be within 5 AF of actual totals. The Agency received Groundwater Extraction Reports from ninety-five percent (95%) of the 1,858 wells in Zones 2, 2A, and 2B of the Salinas Valley for the 2019 reporting year. Agricultural and Urban Water Conservation Plan submittal compliance for 2020 was eighty-two percent (82%) ninety-three percent (93%), respectively.

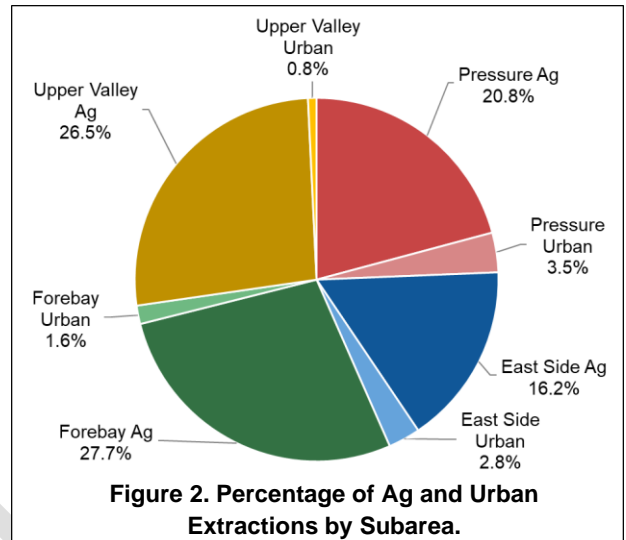
Groundwater Extraction Form – Data Summary

Total Extractions by Subarea and Type of Use

All data presented in this section are derived from the agricultural and urban Groundwater Extraction Forms.

Table 1. Extraction Data by Subarea and Type of Use.

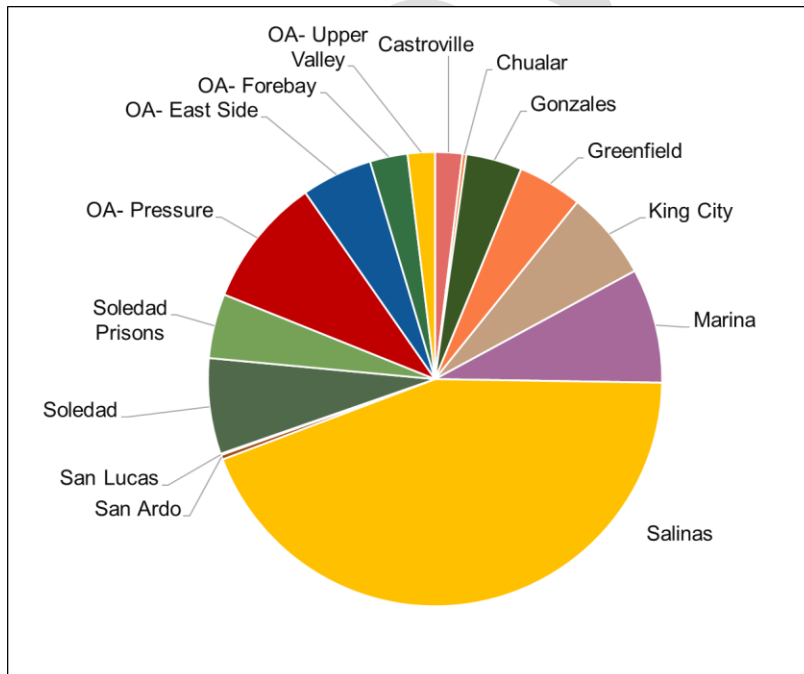
Subarea	Agricultural Pumping (AF)	Urban Pumping (AF)	Total Pumping (AF)
Pressure	93,829	15,885	109,714
East Side	73,006	12,822	85,828
Forebay	124,600	7,374	131,974
Upper Valley	119,477	3,430	122,907
Total (AF)	410,912	39,511	450,423
Percent of Total	91.2%	8.8%	100.0%



Urban Extraction Data by City or Area

The total groundwater extractions attributed to urban use include residential, commercial, institutional, industrial and governmental pumping, and are summarized below.

Table 2. Urban Extractions by City or Area



OA=Other Area

Total Groundwater Extractions in Zones 2, 2A, 2B

This figure provides a spatial representation of groundwater extractions within Zones 2, 2A, and 2B for the 2019 reporting year. The figures and tables on the next four pages provide extraction information by subarea. The number of wells shown in Figures 4 to 11 may be different than the total number of wells in the program, as stated on Page 2. This is due to delinquent extraction reports and the exact location of some wells being unknown.

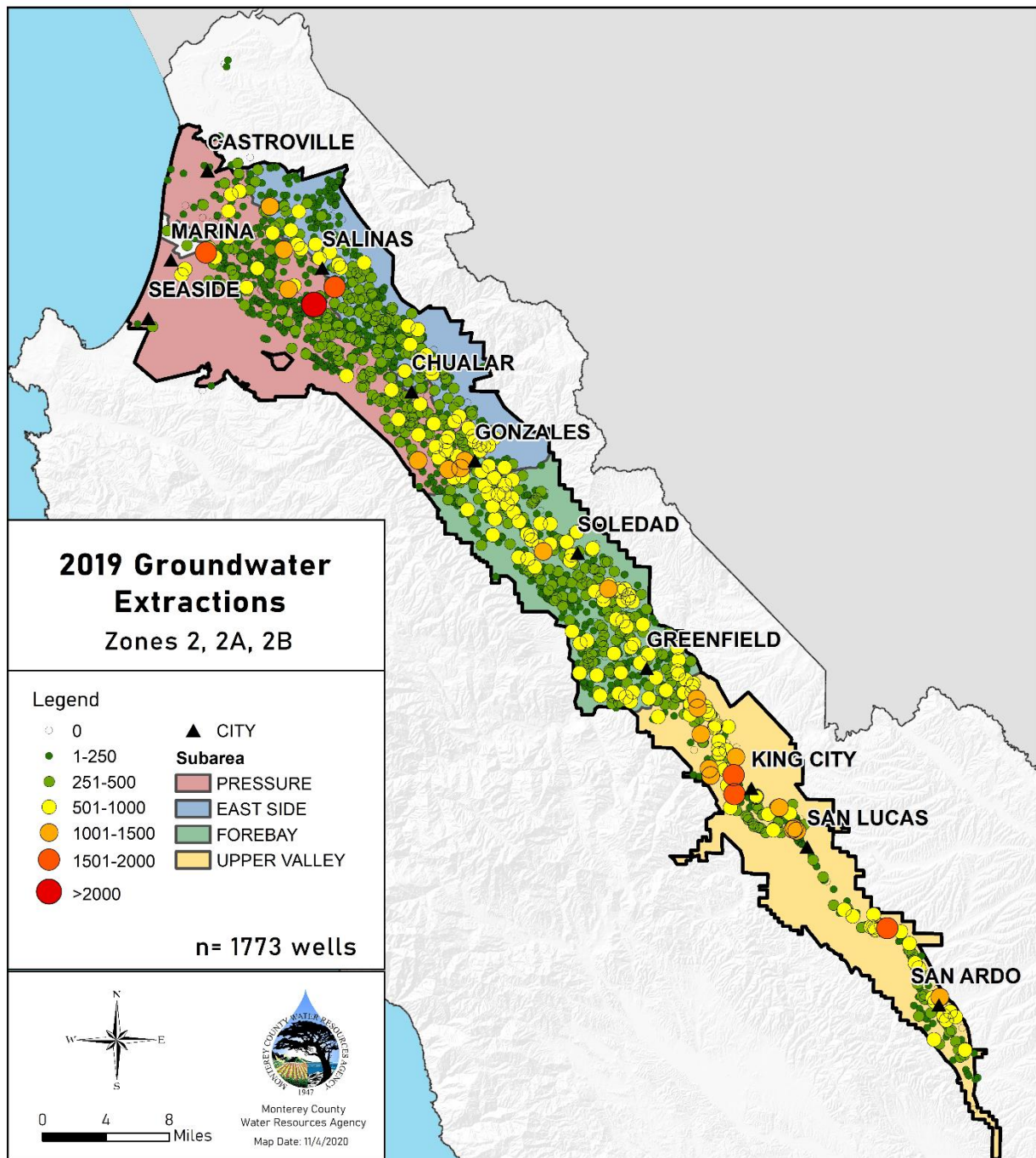


Figure 4. 2019 Groundwater Extractions (AF).

Pressure Subarea – Extraction Data

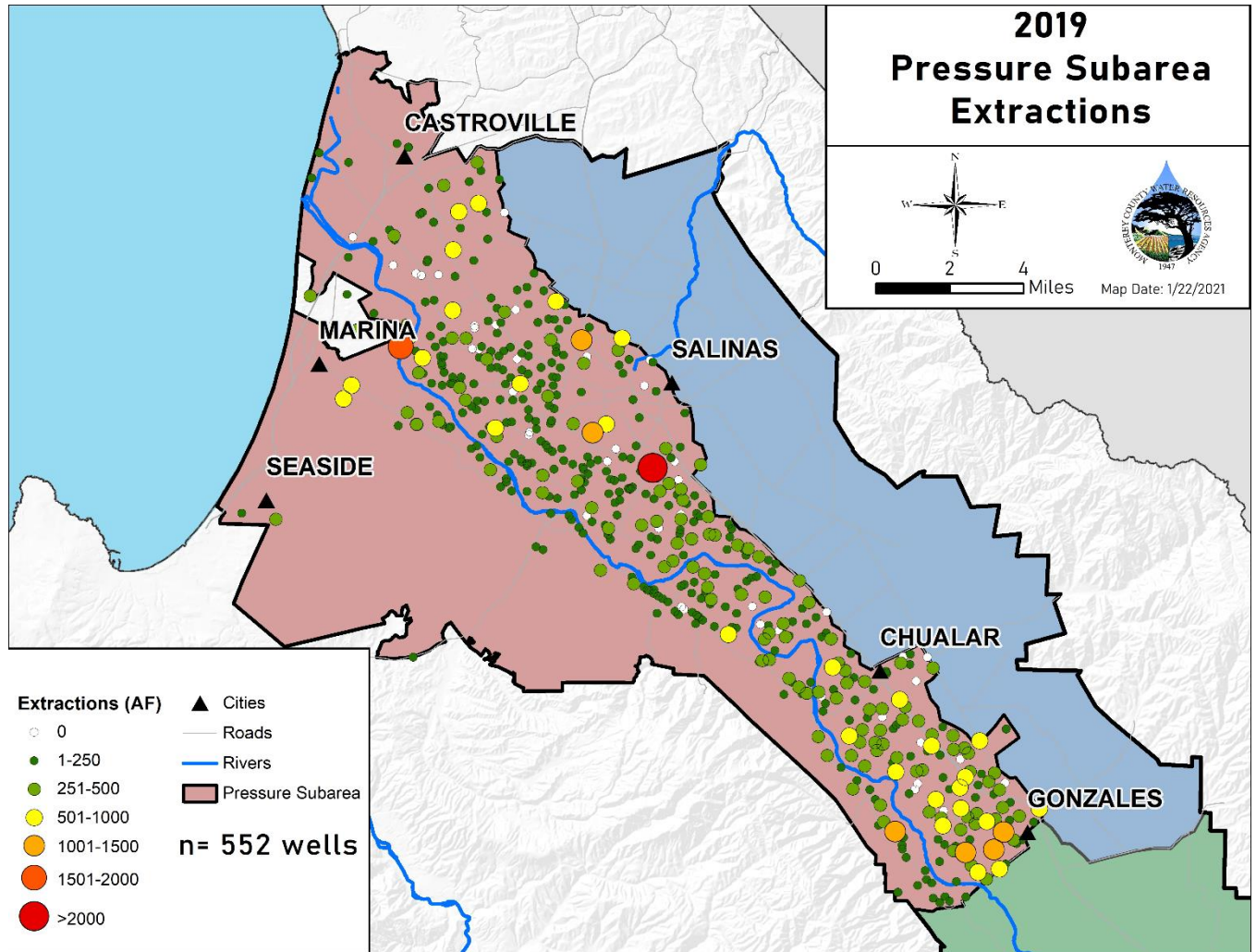


Figure 5. 2019 Groundwater Extraction in the Pressure Subarea.

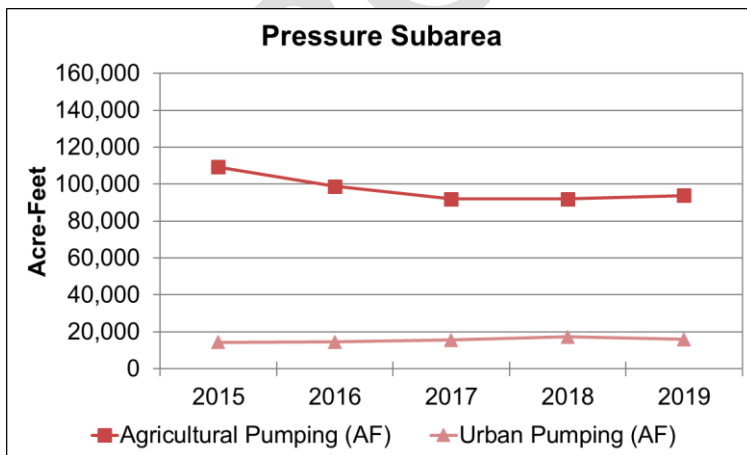


Figure 6. Agricultural and Urban Extractions (AF) in the Pressure Subarea 2015-2019.

Year	Agricultural Pumping (AF)	Urban Pumping (AF)	Total Pumping (AF)
2015	109,214	14,443	123,657
2016	98,890	14,605	113,495
2017	91,901	15,523	107,424
2018	92,010	17,246	109,256
2019	93,829	15,885	109,714

Table 3. Total, Agricultural, and Urban Extractions (AF) in the Pressure Subarea 2015-2019.

CSIP, Zone 2B and Area of Impact- Extraction Data

The Castroville Seawater Intrusion Project (CSIP) delivers recycled water from the Salinas Valley Reclamation Project, treated Salinas River water from the Salinas River Diversion Facility, and groundwater from twelve supplemental wells to 12,000 acres of irrigated land in the Castroville area, referred to as Zone 2B, in an effort to reduce groundwater pumping near the coast. Pumping from non- CSIP supplemental wells has decreased since CSIP began operations in 1998 but is still occurring (Figure 8). The Area of Impact encompasses the region where chloride concentrations in the 180-Ft and 400-Ft Aquifers are 250 mg/L or greater. Groundwater within the Area of Impact is considered vulnerable due to the presence of pathways for seawater intrusion (Figure 7, Table 4).

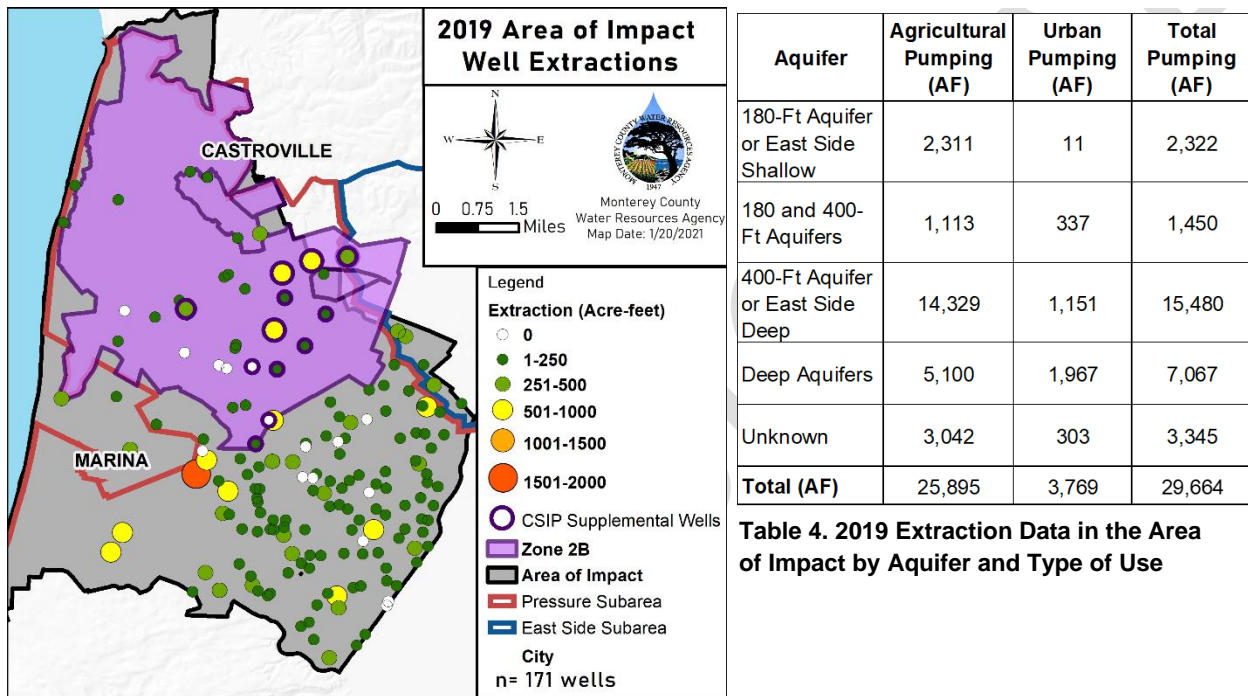


Figure 7. 2019 Groundwater Extraction (AF) in the Area of Impact.

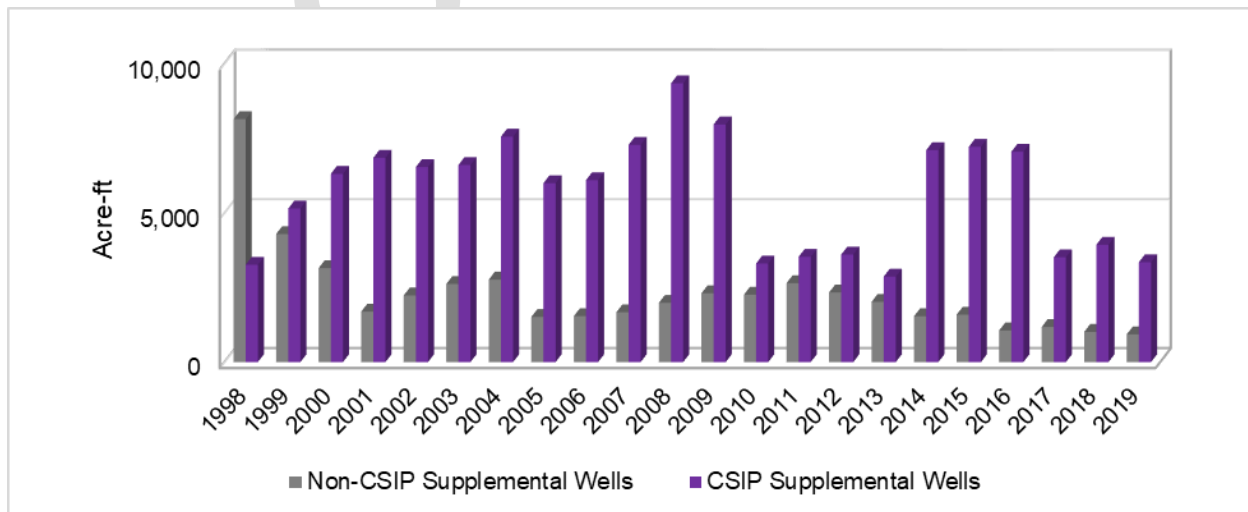


Figure 8. Groundwater Extractions in Zone 2B from CSIP and Non-CSIP Supplemental Wells, 1993-2019

Deep Aquifers – Extraction Data

The first production well in the Deep Aquifers was installed in 1974. As of December 2020, fifty-seven wells have been installed in the Deep Aquifers, with seventeen installed in the last three years (Figure 9). Twelve out of these seventeen wells have not yet begun report extractions as of 2019. Similar to the number of wells installed, the amount of water extracted from the Deep Aquifers has increased in recent years (Figure 10, Table 5). The potential for inducing leakage from the overlying impaired aquifers is a growing concern as groundwater extractions from the Deep Aquifers continue to increase.

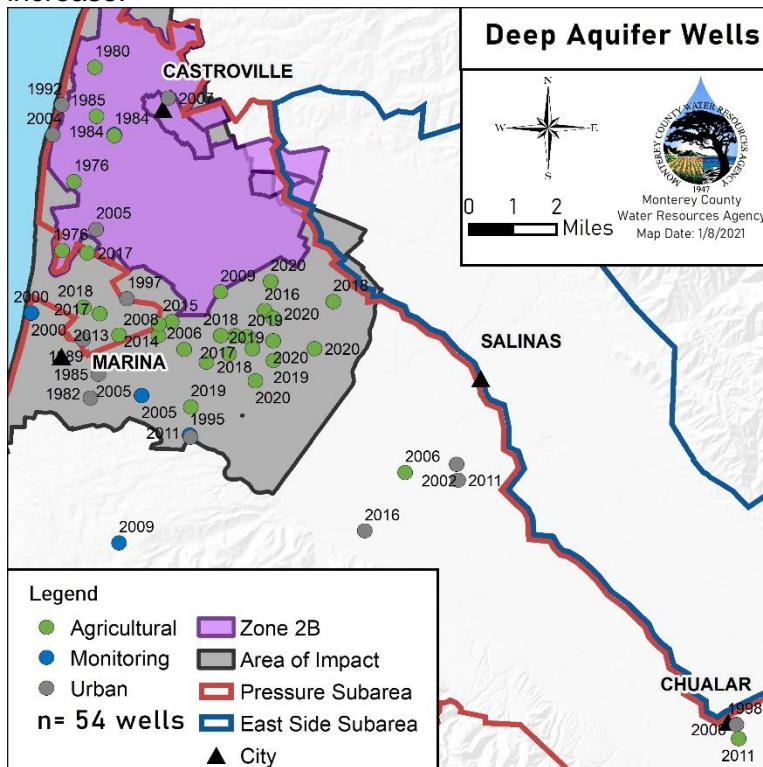


Figure 9. Deep Aquifers wells by Year Drilled and Type of Use

Reporting Year	Agricultural Pumping (AF)	Urban Pumping (AF)	Total Pumping (AF)
1993	1,507	2,054	3,561
1994	2,620	1,992	4,612
1995	2,302	2,036	4,338
1996	1,990	2,137	4,127
1997	2,556	2,170	4,726
1998	1,648	1,906	3,554
1999	96	2,055	2,151
2000	1	2,305	2,306
2001	0	2,368	2,368
2002	0	2,416	2,416
2003	0	2,745	2,745
2004	0	2,747	2,747
2005	0	2,701	2,701
2006	0	2,341	2,341
2007	58	2,131	2,189
2008	384	2,375	2,759
2009	696	2,450	3,146
2010	982	2,236	3,218
2011	927	2,173	3,100
2012	1,397	2,424	3,821
2013	1,097	2,505	3,602
2014	2,031	4,404	6,435
2015	2,010	4,363	6,373
2016	4,293	4,259	8,552
2017	4,958	4,558	9,516
2018	4,855	4,790	9,645
2019	5,331	5,016	10,347

Table 5. Deep Aquifer Groundwater Extractions by Type of Use, 1993-2019

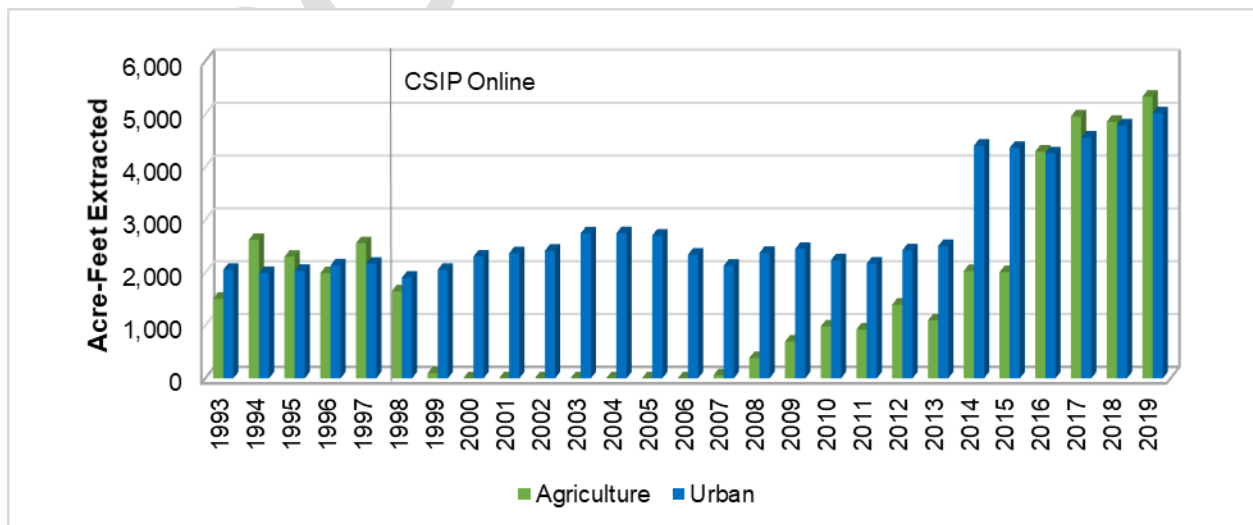


Figure 10. Deep Aquifer Groundwater Extractions by Type of Use, 1993-2019

East Side Subarea – Extraction Data

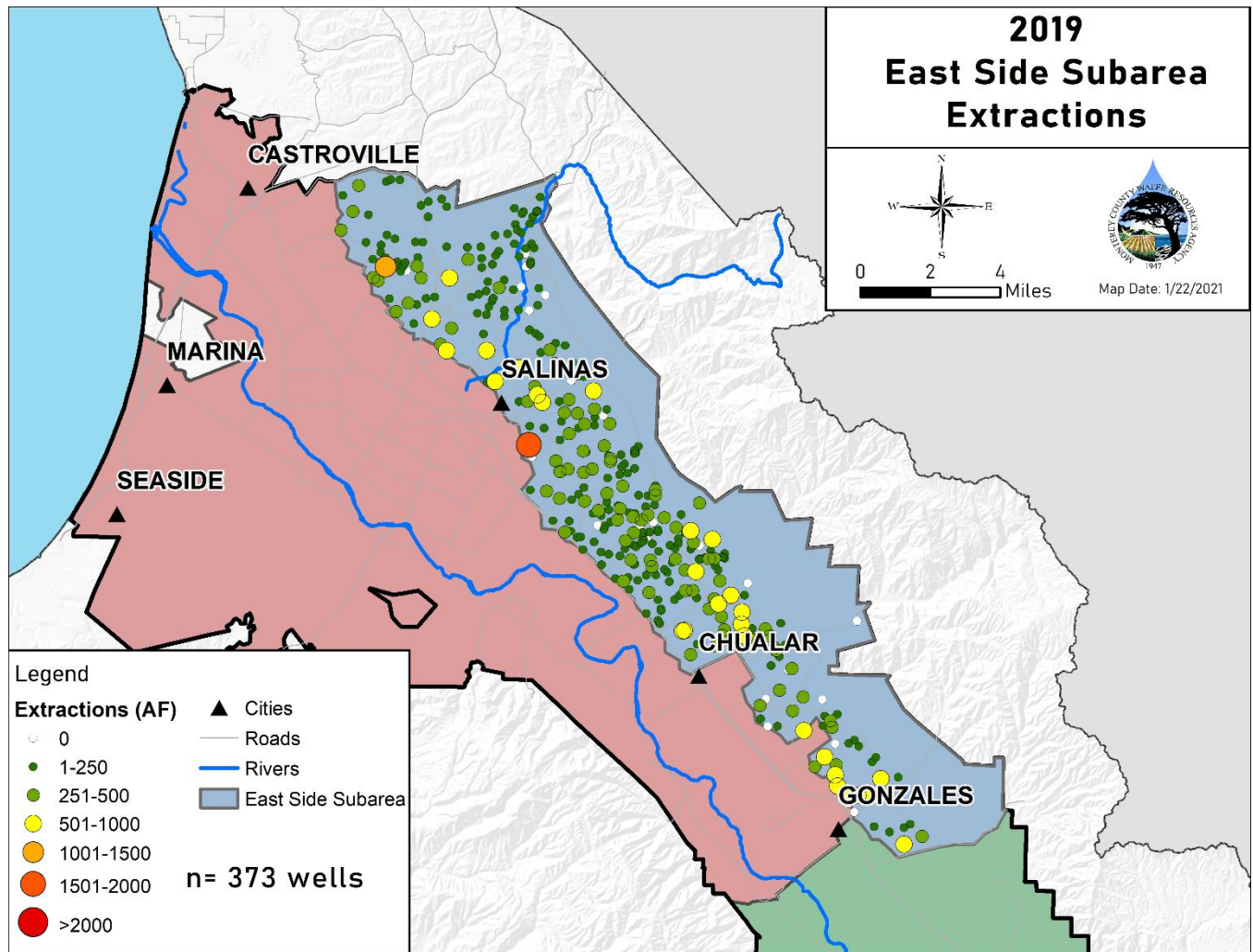


Figure 11. 2019 Groundwater Extraction in the East Side Subarea.

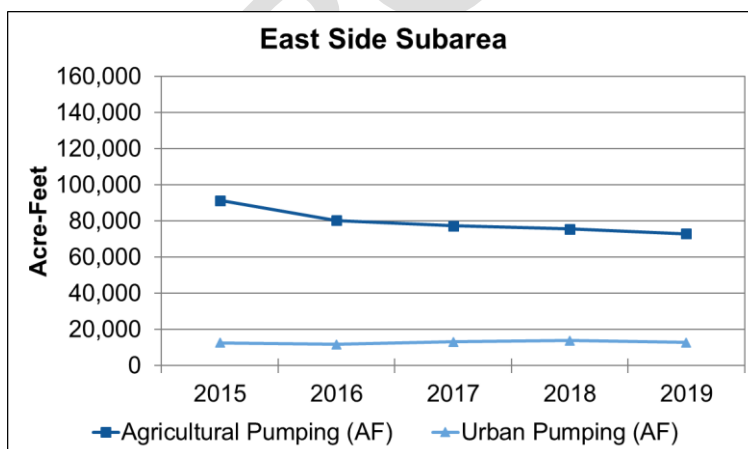


Figure 12. Agricultural and Urban Extractions (AF) in the East Side Subarea 2015-2019.

Year	Agricultural Pumping (AF)	Urban Pumping (AF)	Total Pumping (AF)
2015	91,491	12,631	104,122
2016	80,379	11,802	92,181
2017	77,353	13,258	90,611
2018	75,629	13,938	89,567
2019	73,006	12,822	85,828

Table 6. Total, Agricultural, and Urban Extractions (AF) in the East Side Subarea 2015-2019.

Forebay Subarea – Extraction Data

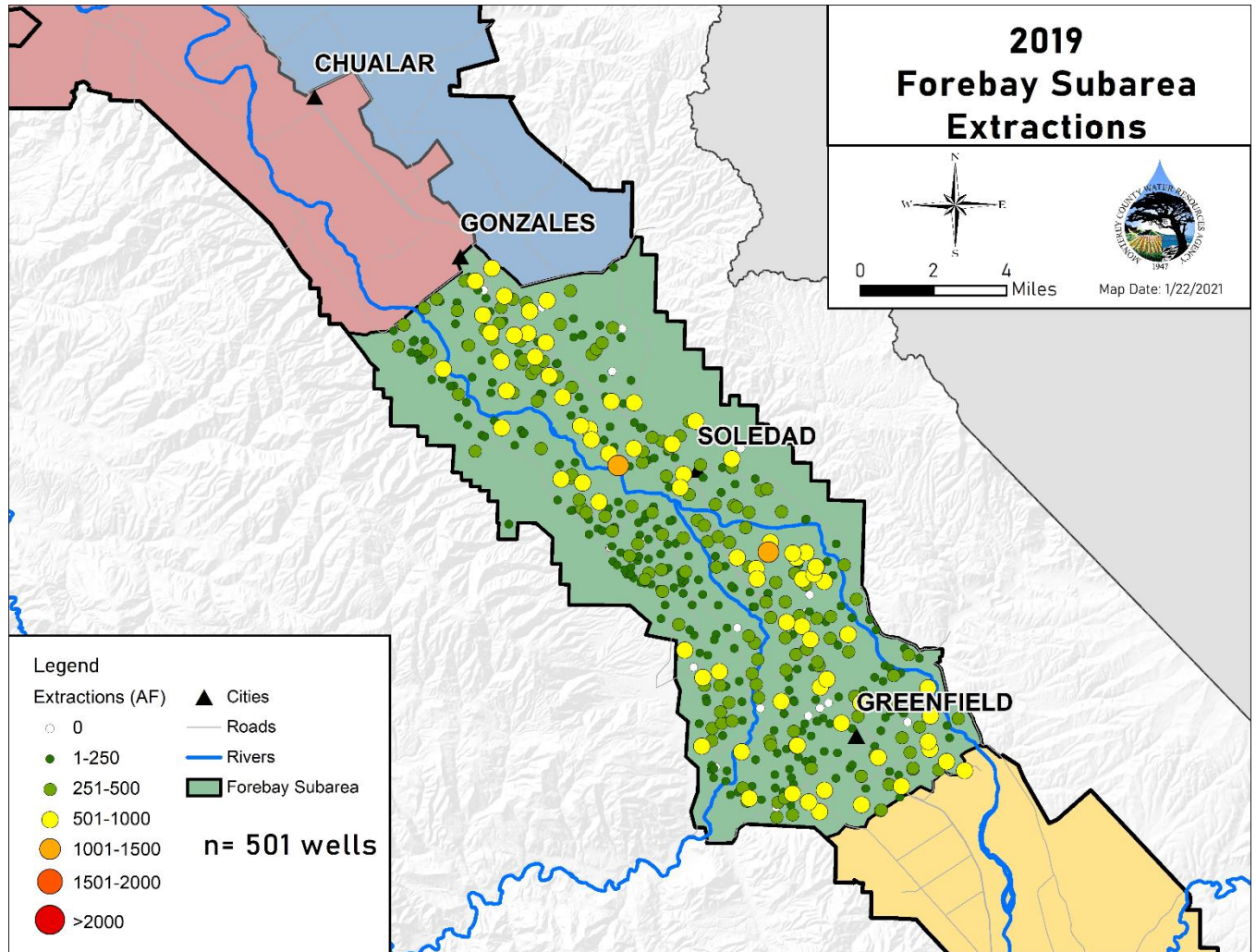


Figure 13. 2019 Groundwater Extraction in the Forebay Subarea.

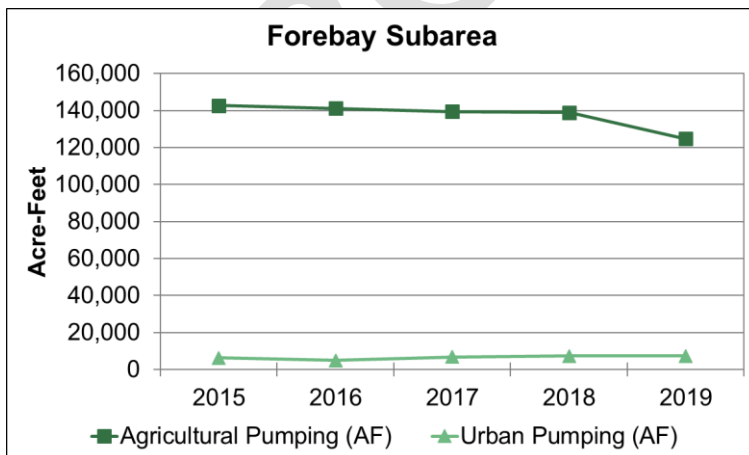


Figure 14. Agricultural and Urban Extractions (AF) in the Forebay Subarea 2015-2019.

Year	Agricultural Pumping (AF)	Urban Pumping (AF)	Total Pumping (AF)
2015	142,668	6,221	148,889
2016	141,163	4,866	146,029
2017	139,359	6,764	146,123
2018	138,838	7,303	146,141
2019	124,600	7,374	131,974

Table 7. Total, Agricultural, and Urban Extractions (AF) in the Forebay Subarea 2015-2019.

Upper Valley Subarea – Extraction Data

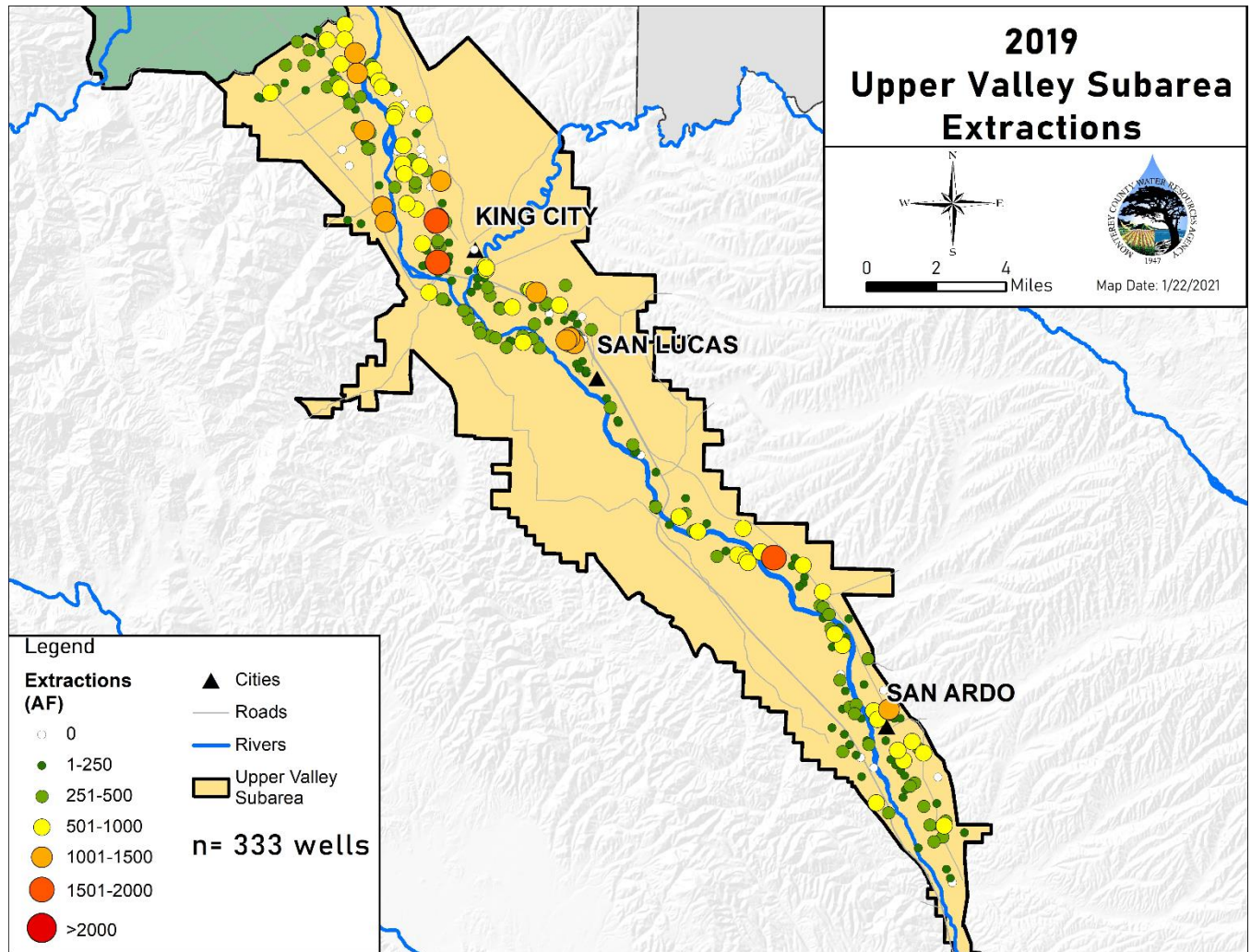
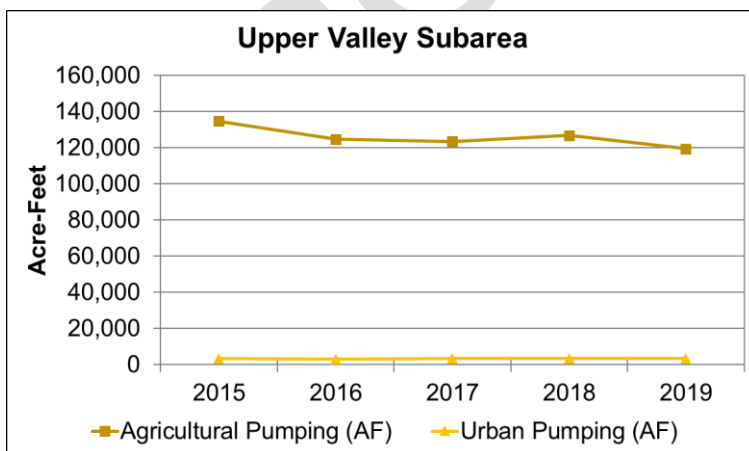


Figure 15. 2019 Groundwater Extraction in the Upper Valley Subarea



Year	Agricultural Pumping (AF)	Urban Pumping (AF)	Total Pumping (AF)
2015	134,740	3,306	138,046
2016	124,678	2,991	127,669
2017	123,446	3,407	126,853
2018	126,919	3,418	130,337
2019	119,477	3,430	122,907

Table 8. Total, Agricultural, and Urban Extractions (AF) in the Upper Valley Subarea 2015-2019.

Figure 16. Agricultural and Urban Extractions (AF) in the Upper Valley Subarea 2015-2019.

Agricultural Water Conservation – Data Summary

The Agricultural Water Conservation Plans include information on net irrigated acreage, irrigation methods, and crop type. This information is forecasted and indicates what the grower plans to do in the upcoming year. The first figure (17) and table (9) present a breakdown of irrigation methods by crop type. The next figure (18) shows the change in irrigation methods over the length of the program and the final figure (19) shows the top ten Best Management Practices (BMPs) to be implemented in 2020.

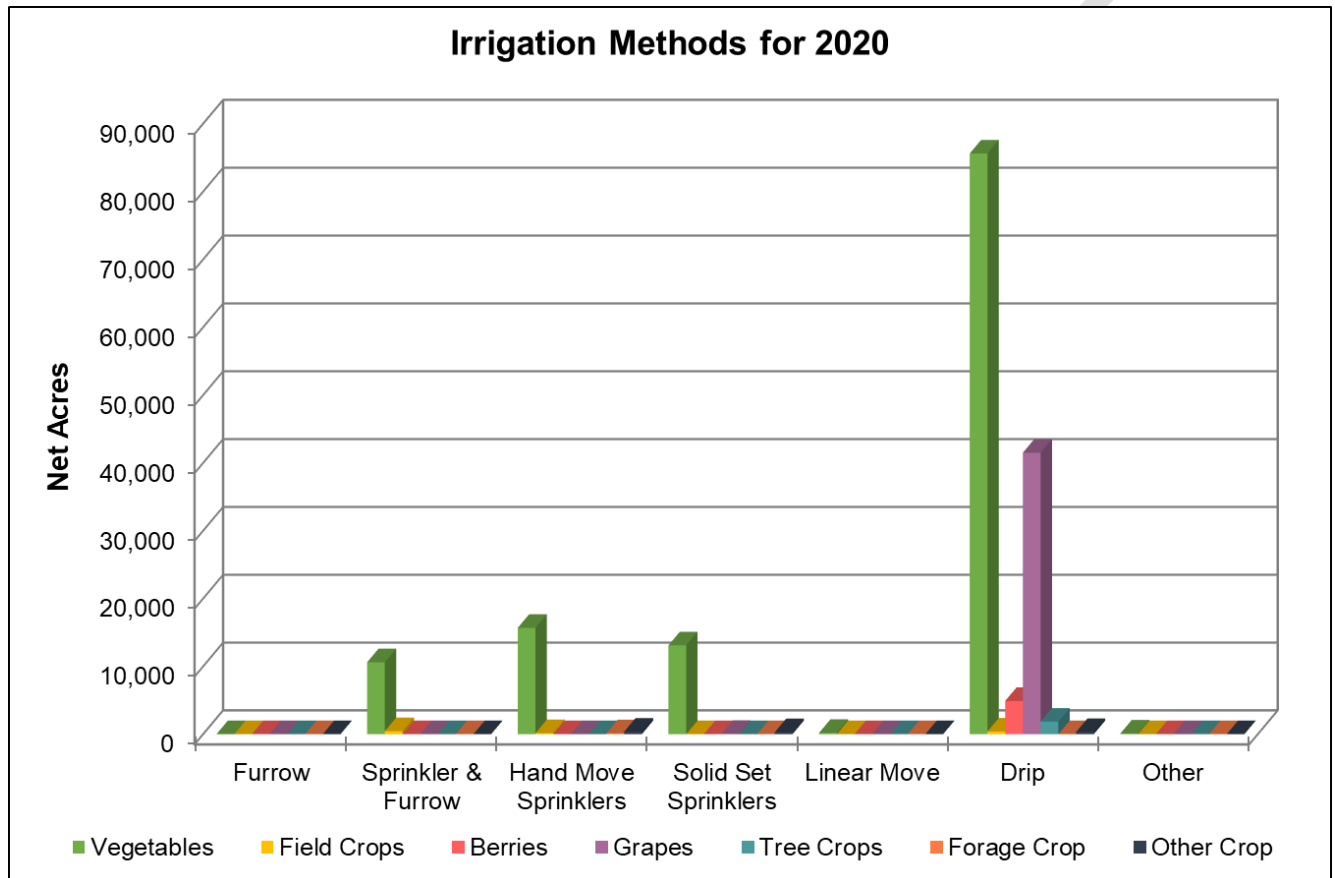


Figure 17. 2020 Forecasted Net Acre Distribution of Irrigation Methods by Crop Type.

2020	Furrow	Sprinkler & Furrow	Hand Move Sprinklers	Solid Set Sprinklers	Linear Move	Drip	Other	Total
Vegetables	0	10,602	15,679	13,096	194	85,609	104	125,284
Field Crops	0	445	149	0	0	393	0	987
Berries	0	0	0	0	0	4,898	0	4,898
Grapes	0	0	0	39	0	41,500	0	41,539
Tree Crops	0	0	0	0	0	1,843	0	1,843
Forage Crop	0	0	126	0	5	0	0	131
Other Crop	0	0	366	288	0	316	0	970
Unirrigated								2,037
Total	0	11,047	16,321	13,423	199	134,560	104	177,690

Table 9. Net Acres by Irrigation Method and Crop Type.

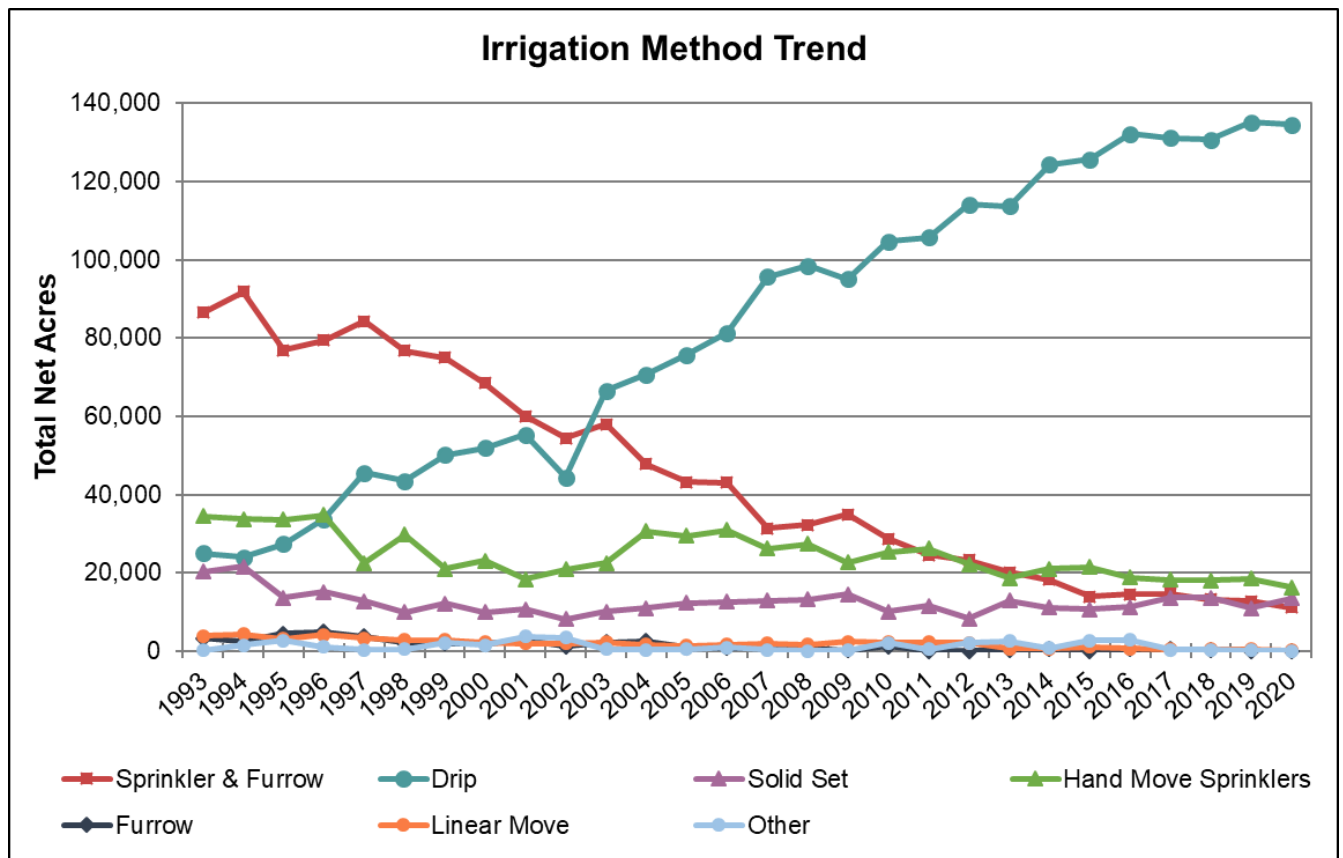


Figure 18. Changes in Irrigation Methods Used Over Time (1993 – 2020) in Zones 2, 2A, and 2B.

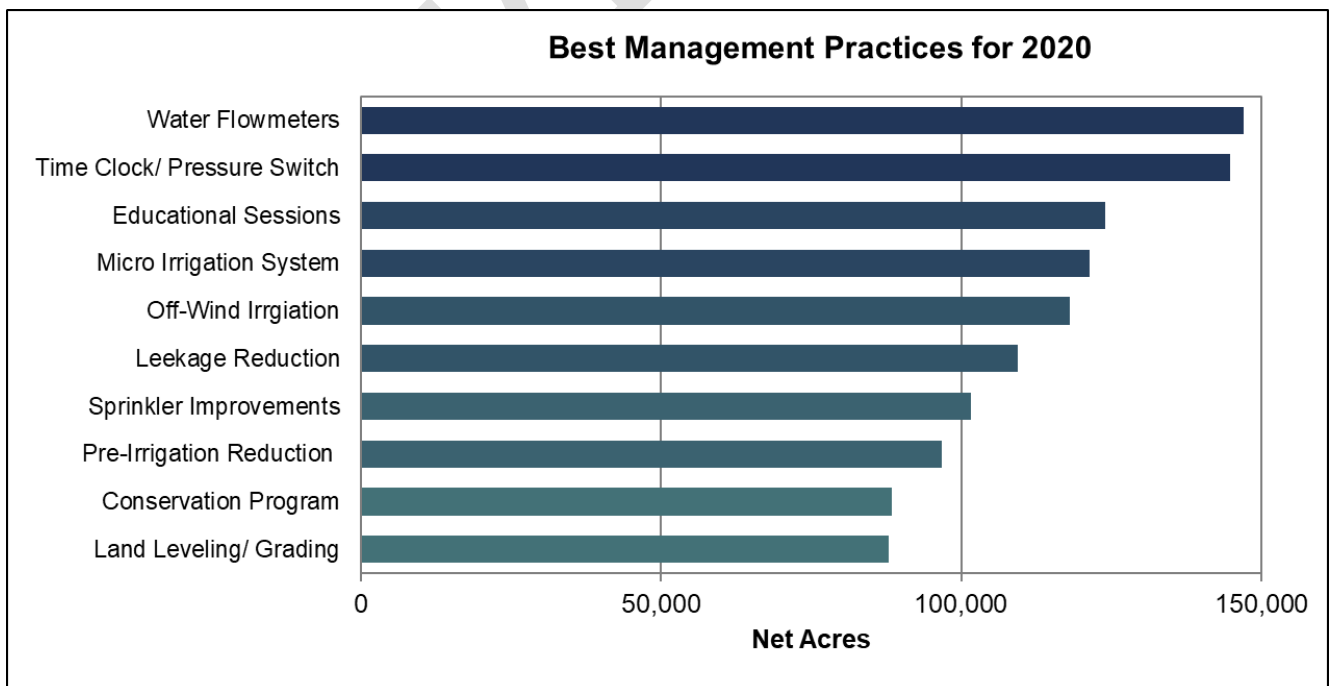


Figure 19. Top Ten BMPs Forecasted for 2020 Based on Reported Net Acres.

Water and Land Use Form – Data Summary

The following three figures show the agricultural water extracted (Fig. 20), irrigated net acres (Fig. 21), and amount of water used per acre (Fig. 22) by hydrologic subarea and crop type based on data submitted on the Water and Land Use forms. The data account for all crop types reported and all reporting methods: water flowmeter, electrical meter, and hour meter.

Changing weather patterns, variable soil types, and crop types affect the amount of water needed for efficient irrigation. Even during a normal rain year, pumping rates will vary from one subarea to another and crop types will vary depending on economic demand.

Examples of Crop Type categorizations include: strawberries and raspberries under Berries; beans and grains under Field Crops; alfalfa and pasture under Forage Crops; avocados and lemons under Tree Crops; and sod, flower bulbs, ornamentals, and cactus pears under Other Crops.

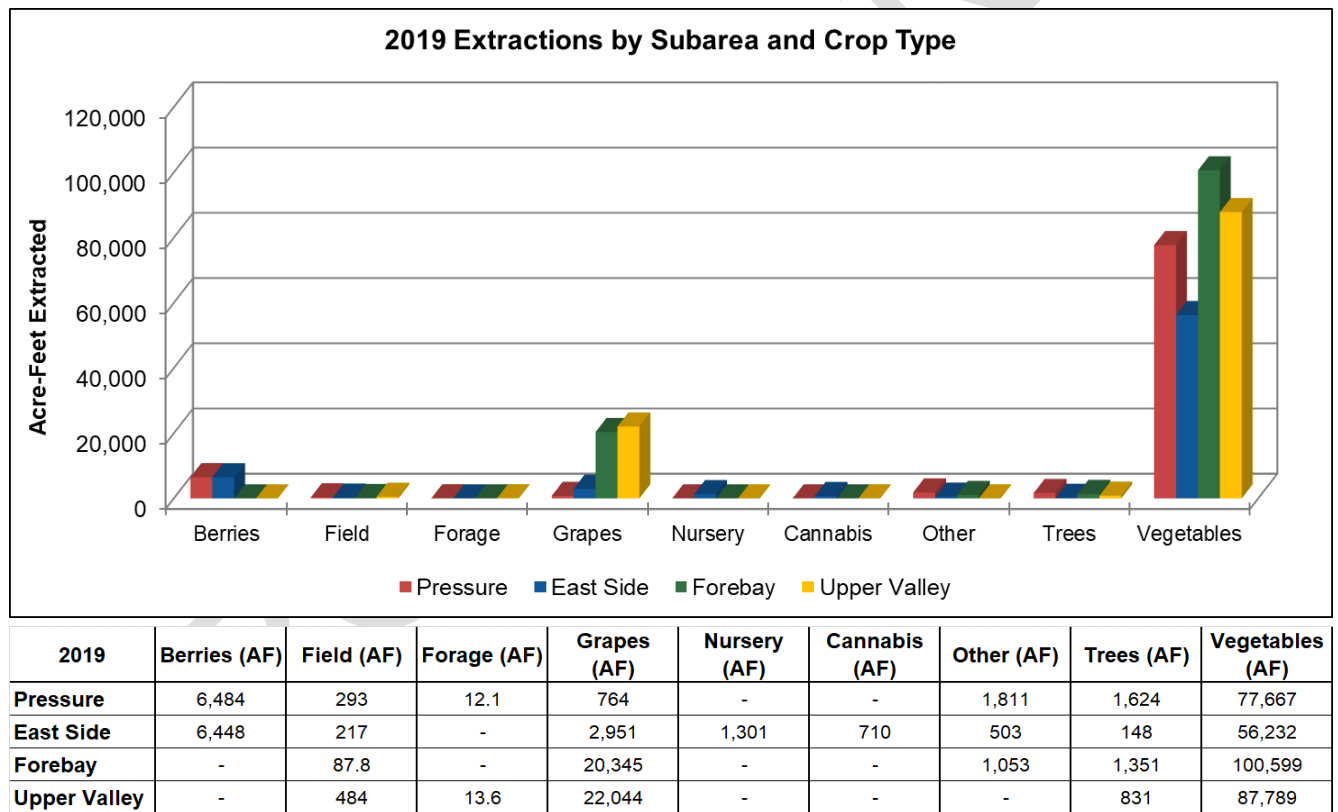


Figure 20. 2019 Extractions Reported by Crop Type and Subarea.

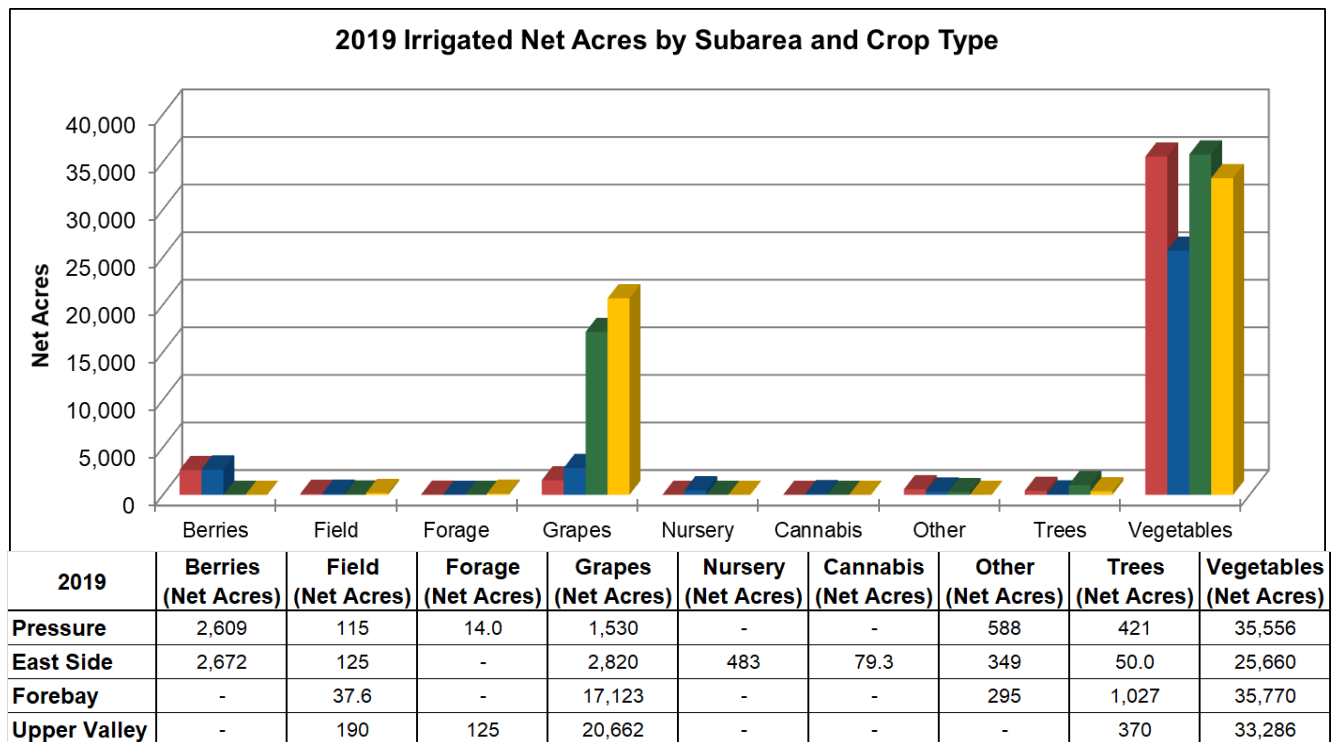
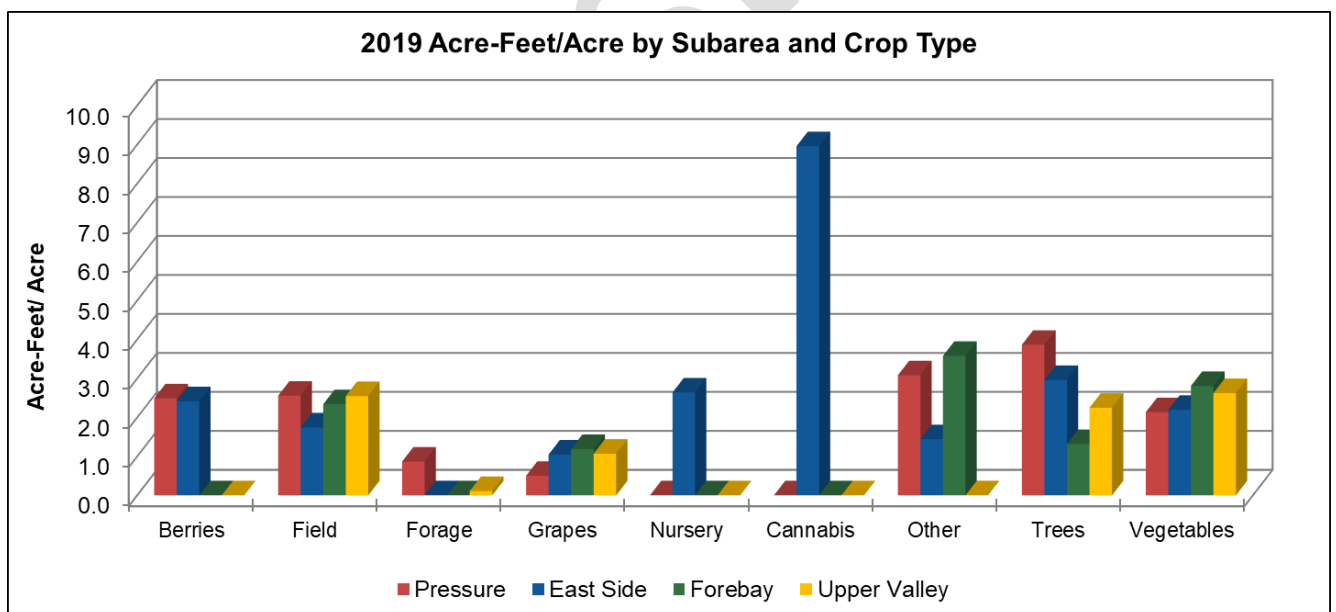


Figure 21. 2019 Irrigated Net Acres Reported by Crop Type and Subarea.



2019	Berries (AF/Acre)	Field (AF/Acre)	Forage (AF/Acre)	Grapes (AF/Acre)	Nursery (AF/Acre)	Cannabis (AF/Acre)	Other (AF/Acre)	Trees (AF/Acre)	Vegetables (AF/Acre)
Pressure	2.5	2.6	0.9	0.5	-	-	3.1	3.9	2.1
East Side	2.4	1.7	-	1.0	2.6	9.0	1.4	3.0	2.2
Forebay	-	2.3	-	1.2	-	-	3.6	1.3	2.8
Upper Valley	-	2.5	0.1	1.1	-	-	-	2.2	2.6

Figure 22. 2019 Acre-Feet/Acre by Crop Type and Subarea.

Urban Water Conservation – Data Summary

Since 1996, the Agency has collected data on the Urban Water Conservation Plan program. Tables 10 and 11 show the top ten Best Management Practices (BMPs) for 2020, as a percentage of total acreage reported for “large” water systems (200 or more customer connections), and “small” water systems (between 15 and 199 customer connections). Tables 12 and 13, and figures 23 and 24 give the reported Water Use per Connection for different Connection Classes for both “large” and “small” water systems.

Table 10. Top Ten BMPs – Large Water Systems.

Top Ten BMPs Implemented for Large Water Systems	2020
Advise customers when it appears possible that leaks exist on customer’s side of water meter	100%
Complete an audit of water distribution system at least every three years as prescribed by American Water Works Association	100%
Implement requirements that all new connections be metered and billed by volume of use	100%
Enforcement and support of water conserving plumbing fixture standards, including gradual requirement for High Efficiency Toilets (HET) in all new construction	99%
Perform distribution system leak detection and repair whenever the audit reveals that it would be cost-effective	97%
Provide conservation information in bill inserts	92%
Coordinate with other entities in regional efforts to promote water conservation practices	92%
Support of legislation prohibiting sale of toilets using more than 1.6 gpf	92%
Offer free interior and exterior water audits to identify water conservation opportunities	90%
Provide speakers to community groups and media	89%

Table 11. Top Ten BMPs – Small Water Systems.

Top Ten BMPs Implemented for Small Water Systems	2020
Perform distribution system leak detection and repair whenever the audit reveals that it would be cost-effective	99%
Complete an audit of water distribution system at least every three years as prescribed by American Water Works Association	96%
Advise customers when it appears possible that leaks exist on customer’s side of water meter	94%
Implement requirements that all new connections be metered and billed by volume of use	93%
Establish a program to retrofit any existing unmetered connections and bill by volume of use	91%
Provide conservation information in bill inserts	81%
Encourage local nurseries to promote use of low water use plants	71%
Support of legislation prohibiting sale of toilets using more than 1.6 gpf	69%
Provide individual historical water use information on water bills	62%
Enact and enforce measure prohibiting water waste as specified in Monterey County Water Resources Agency Ordinance No. 3932 or as subsequently amended, and encourage the efficient use of water	50%

Table 12. Water Use per Connection – Small Water Systems (2015-2019).

Small Water Systems: Water Use (AF) Per Connection Class	2015	2016	2017	2018	2019
Single-Family Residential	0.416	0.426	0.516	0.411	0.429
Multi-Family Residential	0.603	0.640	0.689	0.567	0.763
Commercial/ Institutional	0.963	0.709	0.940	0.769	0.864
Industrial	5.001	12.652	12.562	12.055	84.342
Landscape Irrigation	1.945	1.100	1.934	3.220	3.559
Other	1.130	0.454	1.098	2.819	3.066

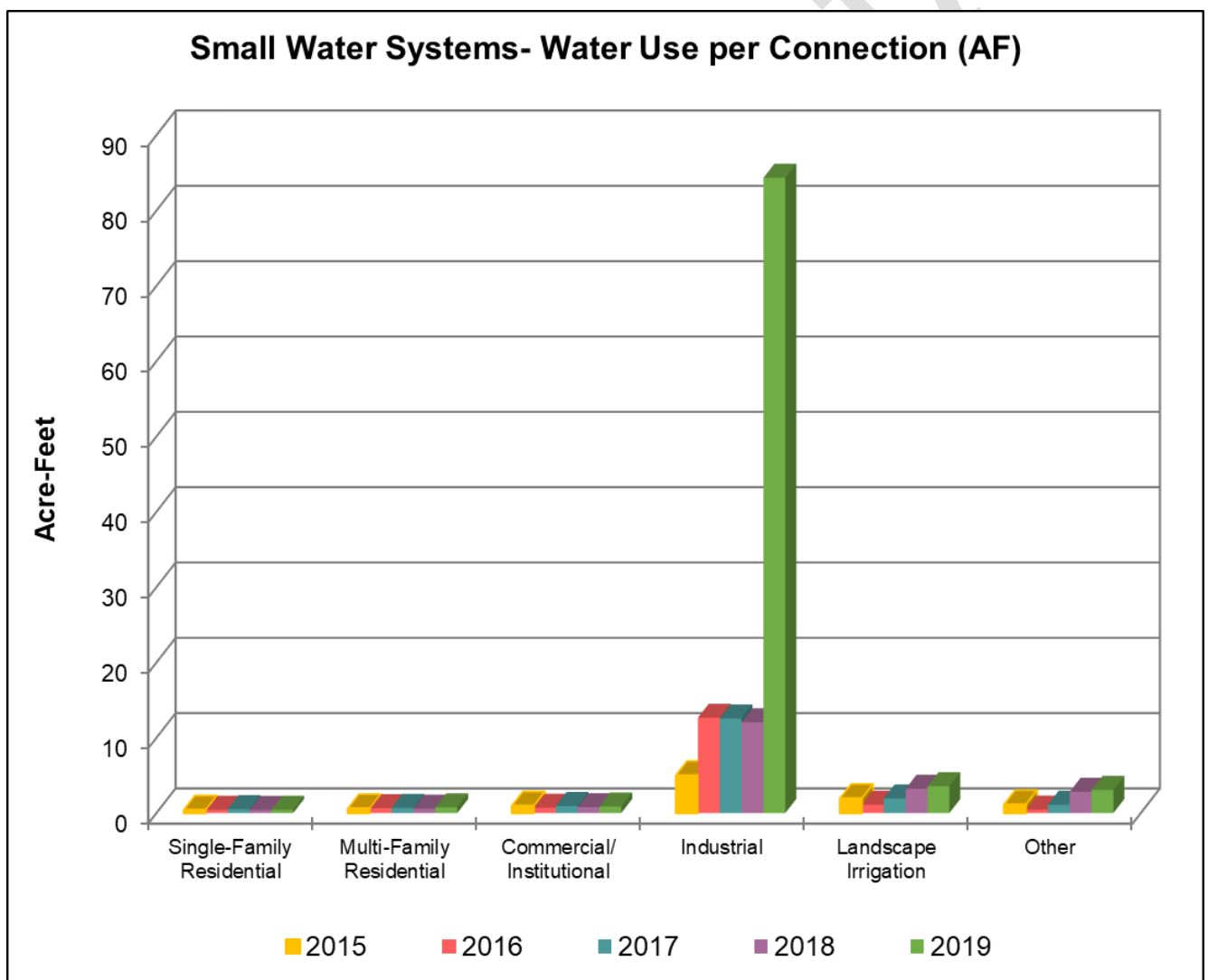


Figure 23. Urban Water Use per Connection – For Small Water Systems

Table 13. Water Use per Connection – Large Water Systems (2015-2019).

Large Water Systems: Water Use (AF) Per Connection Class	2015	2016	2017	2018	2019
Single-Family Residential	0.314	0.274	0.292	0.282	0.277
Multi-Family Residential	1.296	0.858	1.026	0.892	0.827
Commercial/ Institutional	0.965	1.579	1.583	1.635	1.553
Industrial	3.910	15.491	15.718	19.879	18.712
Landscape Irrigation	4.828	1.195	2.138	2.157	2.133
Agricultural Irrigation	-	38.649	21.223	87.650	110.451
Other	15.591	1.918	0.934	2.382	2.034

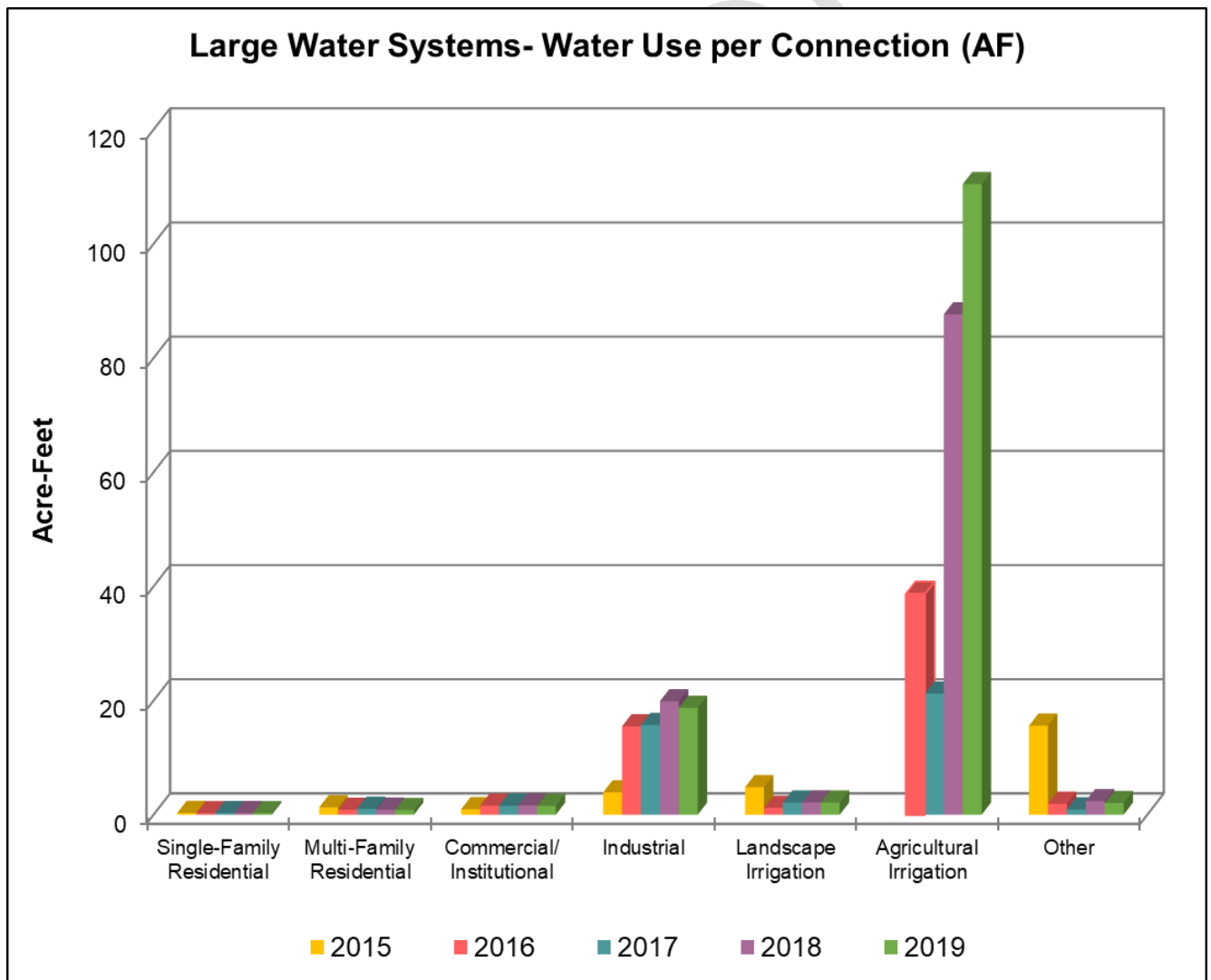


Figure 24. Urban Water Use per Connection – For Large Water Systems

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Chris Lopez	District #3
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Ken Ekelund	District #5
Matt Simis	Grower-Shipper Association
Jason Smith	Monterey County Farm Bureau
John Baillie, Chair	Agricultural Advisory Committee
Mike LeBarre	City Select Committee

Monterey County Water Resources Agency

Brent Buche, General Manager
Elizabeth Krafft, Deputy General Manager

Groundwater Extraction Summary Report Team

Howard Franklin, Senior Hydrologist
Tamara Voss, Associate Hydrologist
Nicole Koerth, Water Resources Hydrologist
Marinn Browne, Water Resources Technician

For more information, contact:

Monterey County Water Resources Agency

1441 Schilling Place, Salinas

Mailing address:

P.O. Box 930, Salinas, CA 93902-0930

831.755.4860
831.424.7935 (fax)

www.mcwra.co.monterey.ca.us



Monterey County

Item No.3

Board Report

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

Legistar File Number: WRABMAC 21-008

February 03, 2021

Introduced: 1/26/2021

Current Status: Agenda Ready

Version: 1

Matter Type: WRA BMAC Item

Consider receiving a report on the addition of a Deep Aquifers Addendum to the Salinas Valley Water Conditions Quarterly Conditions Report and provide guidance to Staff on recommended changes.

RECOMMENDATION:

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

Receive a report on the addition of a Deep Aquifers Addendum to the Salinas Valley Water Conditions Quarterly Conditions Report and provide guidance to Staff on recommended changes.

SUMMARY:

Staff has prepared a Deep Aquifers Addendum to the Salinas Valley Water Conditions Report (Quarterly Conditions Report). This addendum includes Staff's analysis and discussion of current Deep Aquifer conditions and will be updated every quarter with more information. This is being done in preparation of selecting a subset of wells to represent the Deep Aquifers in the Quarterly Conditions Report, beginning next water year.

DISCUSSION:

The Quarterly Conditions Report is produced every quarter of the water year and provides a brief overview and discussion of water conditions including precipitation, reservoir storage and groundwater level trends (Attachment 1). 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.

Staff has prepared a Deep Aquifers Addendum to the Quarterly Conditions Report (Attachment 2). This addendum includes Staff's analysis and discussion of current Deep Aquifer data and will be updated every quarter. The first version includes information on the wells being considered to represent the Deep Aquifers, current groundwater levels and trends of these wells, and discussion on the vertical hydraulic gradient between the Deep and overlying aquifers. 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:

There is no financial impact for receiving this report.

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

Approved by: Brent Buche, General Manager

Attachments:

1. Salinas Valley Water Conditions for the First Quarter of Water Year 2020-2021
2. Deep Aquifers Addendum to the Salinas Valley Water Conditions, First Quarter of Water Year 2020-2021



Monterey County

Item No.

Board Report

Board of Supervisors
Chambers
168 W. Alisal St., 1st Floor
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Legistar File Number: WRABMAC 21-008

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DISCUSSION:

The Quarterly Conditions Report is produced every quarter of the water year and provides a brief overview and discussion of water conditions including precipitation, reservoir storage and groundwater level trends (Attachment 1). 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.

Staff has prepared a Deep Aquifers Addendum to the Quarterly Conditions Report (Attachment 2). This addendum includes Staff's analysis and discussion of current Deep Aquifer data and will be updated every quarter. The first version includes information on the wells being considered to represent the Deep Aquifers, current groundwater levels and trends of these wells, and discussion on the vertical hydraulic gradient between the Deep and overlying aquifers. 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:

There is no financial impact for receiving this report.

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

Approved by: Brent Buche, General Manager

Attachments:

1. Salinas Valley Water Conditions for the First Quarter of Water Year 2020-2021
2. Deep Aquifers Addendum to the Salinas Valley Water Conditions, First Quarter of Water Year 2020-2021

Receive Report on Salinas Valley Water Conditions for the First 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 first quarter of Water Year 2020-2021 (WY21), October through December 2020. 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 first quarter of WY21 brought below normal rainfall to Salinas and King City. Totals for the quarter were 0.94 inches (24% of normal rainfall of 3.91 inches for the quarter) at the Salinas Airport, and 1.1 inches (30% of normal rainfall of 3.72 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 first quarter storage at Nacimiento and San Antonio reservoirs for the past two years. Storage in Nacimiento Reservoir is 110,445 acre-feet lower than in December 2019, and storage in San Antonio Reservoir is 68,957 acre-feet lower.

Reservoir	December 31, 2020 (WY21) Storage in acre-feet	December 31, 2019 (WY20) Storage in acre-feet	Difference in acre-feet
Nacimiento	83,960	194,405	-110,445
San Antonio	53,268	122,225	-68,957

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 seven feet in the 180-Foot Aquifer. Groundwater levels are down two feet compared to December 2020 levels and down four 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 ten feet in the 400-Foot Aquifer. Groundwater levels are down two feet compared to December 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 twenty-two feet over the last quarter. Groundwater levels are down four feet from December 2020 levels and down eleven feet from the 30-year average. The East Side is the only subarea whose groundwater levels during the first quarter of WY21 remain below to what they were in WY15 (dry conditions). 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 two feet from December 2020 levels and are less than a foot higher than the 30-year average. Attachment H shows monthly groundwater trends for the Forebay Subarea.

Upper Valley Subarea: Upper Valley groundwater levels have increased one foot over the last quarter. Groundwater levels are down two feet compared to December 2020 and down one foot from the 30-year average. Attachment I shows monthly groundwater trends for the Upper Valley Subarea.

OTHER AGENCY INVOLVEMENT:

None

FINANCING:

Funds 113, 114, 115, 116

Prepared by: Howard Franklin, Senior Hydrologist, (831) 755-4860
Tamara Voss, Associate Hydrologist, (831) 755-4860
Amy Woodrow, Hydrologist (831) 755-4860
Nicole Koerth, Hydrologist (831) 755-4860
Guillermo Diaz Moreno, Water Resource Technician (831) 755- 4860

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

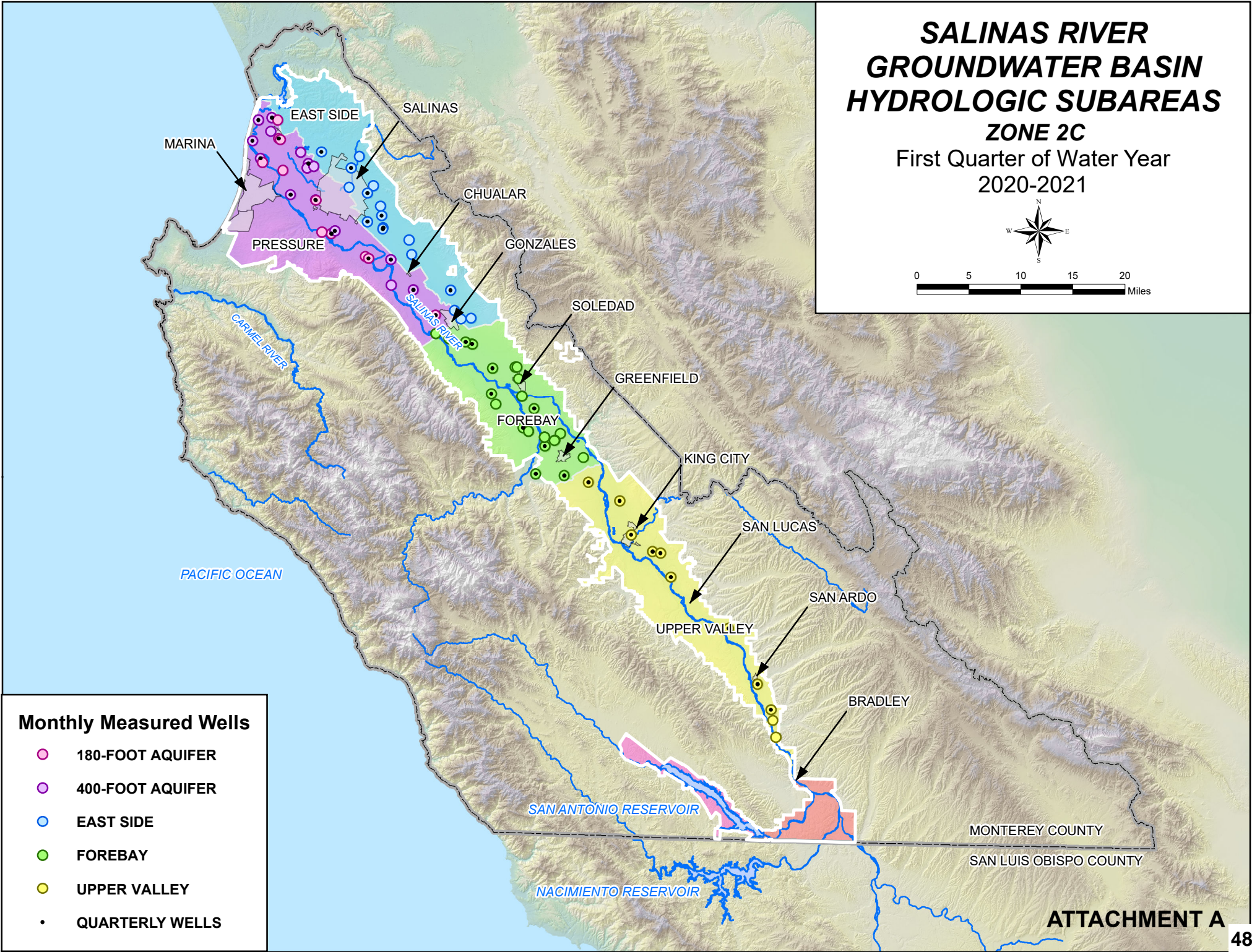
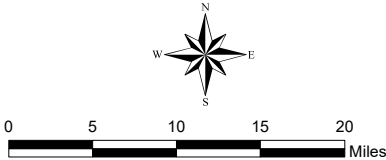
Attachments:

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

**SALINAS RIVER
GROUNDWATER BASIN
HYDROLOGIC SUBAREAS**

ZONE 2C

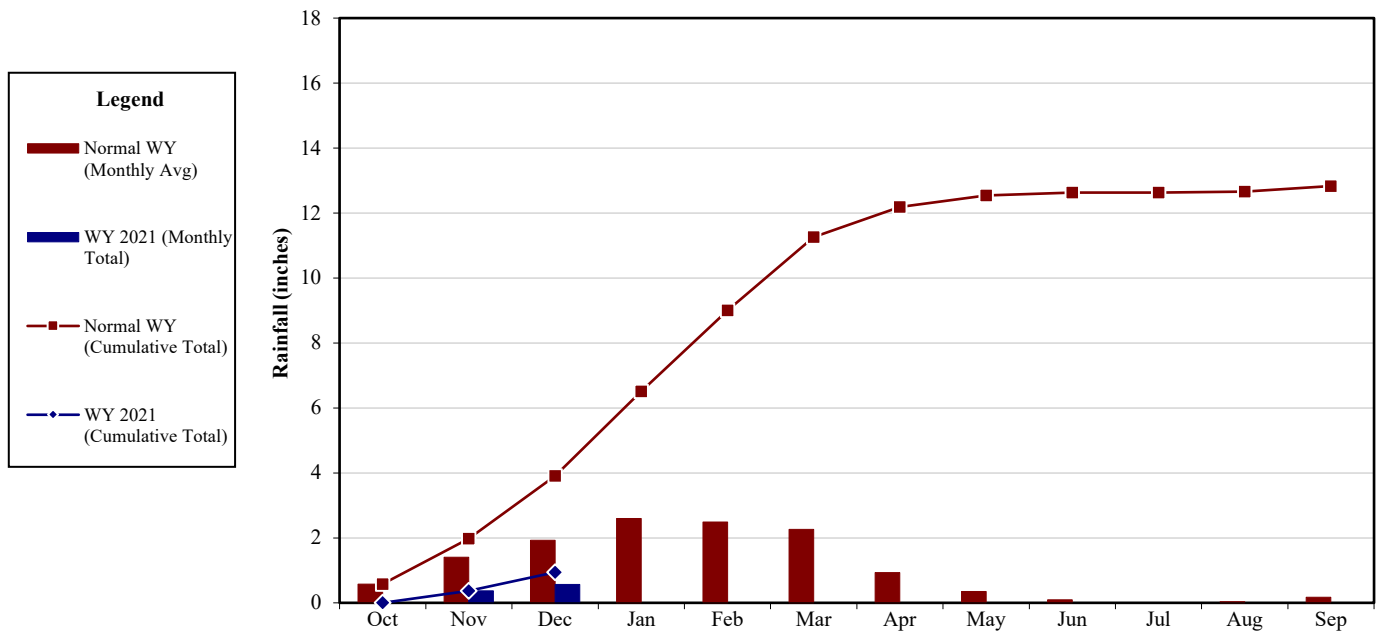
First Quarter of Water Year
2020-2021



Monthly Measured Wells

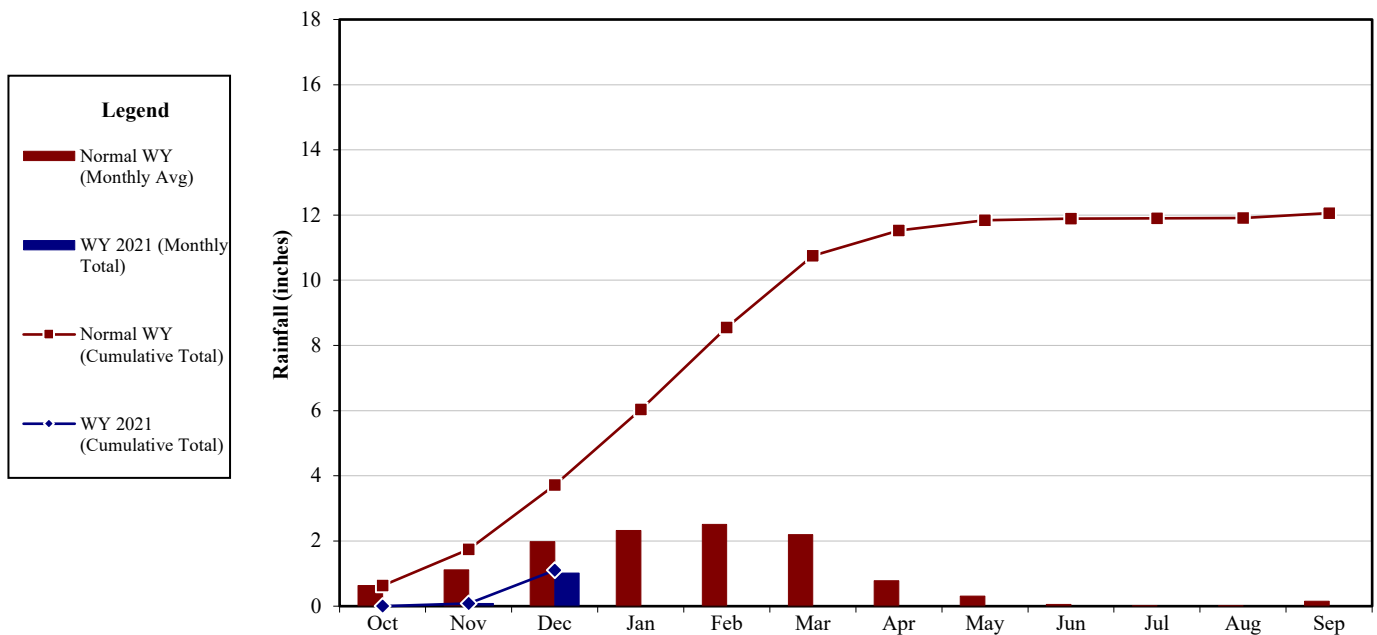
- 180-FOOT AQUIFER
- 400-FOOT AQUIFER
- EAST SIDE
- FOREBAY
- UPPER VALLEY
- QUARTERLY WELLS

SALINAS AIRPORT RAINFALL WATER YEAR 2021



Monthly Rainfall (WY 2021)	0.00	0.37	0.57									
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%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cumulative Rainfall (WY 2021)	0.00	0.37	0.94									
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%									

KING CITY RAINFALL WATER YEAR 2021

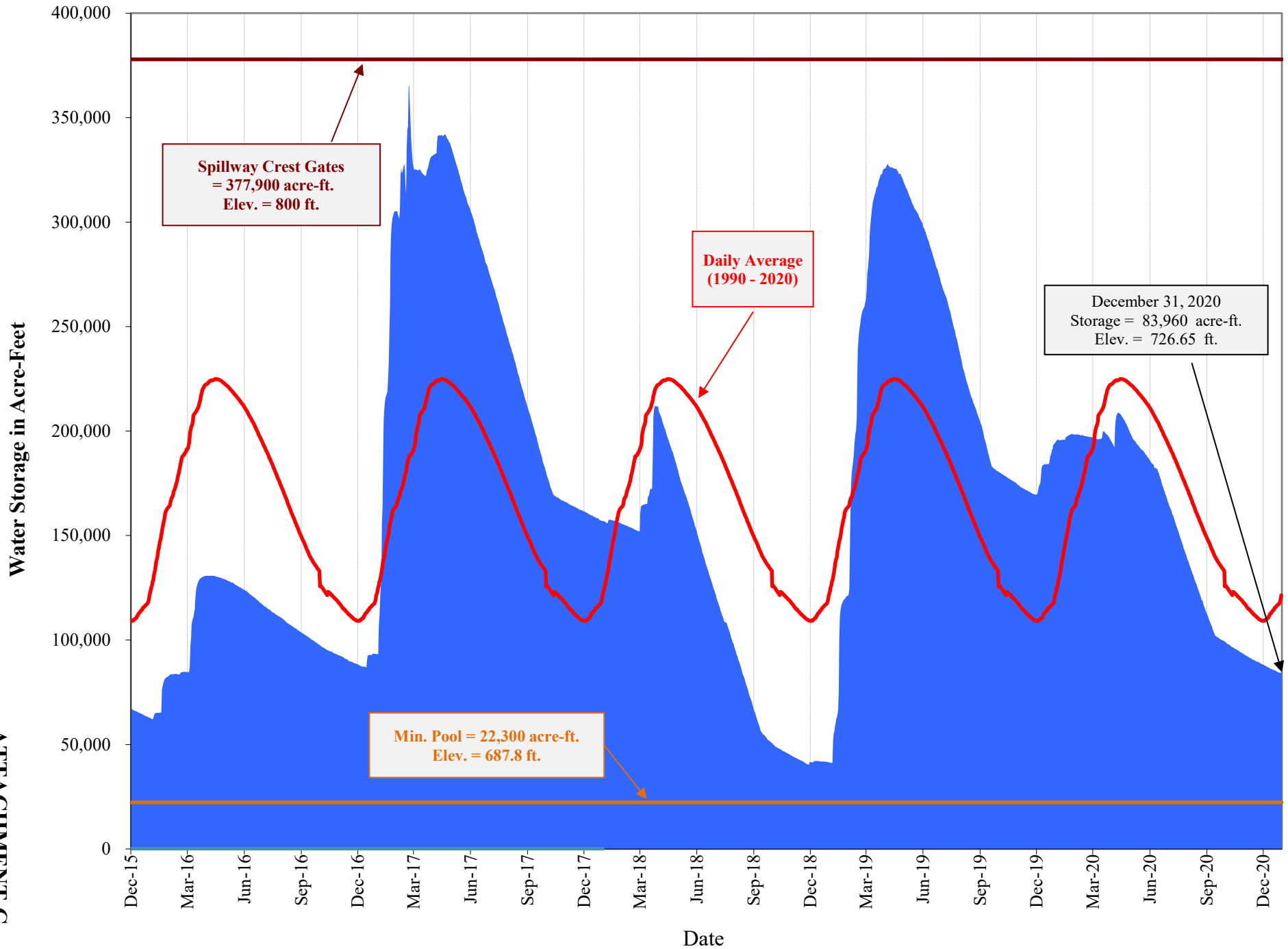


Monthly Rainfall (WY 2021)	0.00	0.08	1.02									
Monthly Rainfall (Normal WY*)	0.63	1.11	1.98	2.32	2.51	2.20	0.78	0.31	0.05	0.01	0.01	0.15
Percent of Normal for Month	0%	7%	52%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cumulative Rainfall (WY 2021)	0.00	0.08	1.10									
Cumulative Rainfall (Normal WY*)	0.63	1.74	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%									

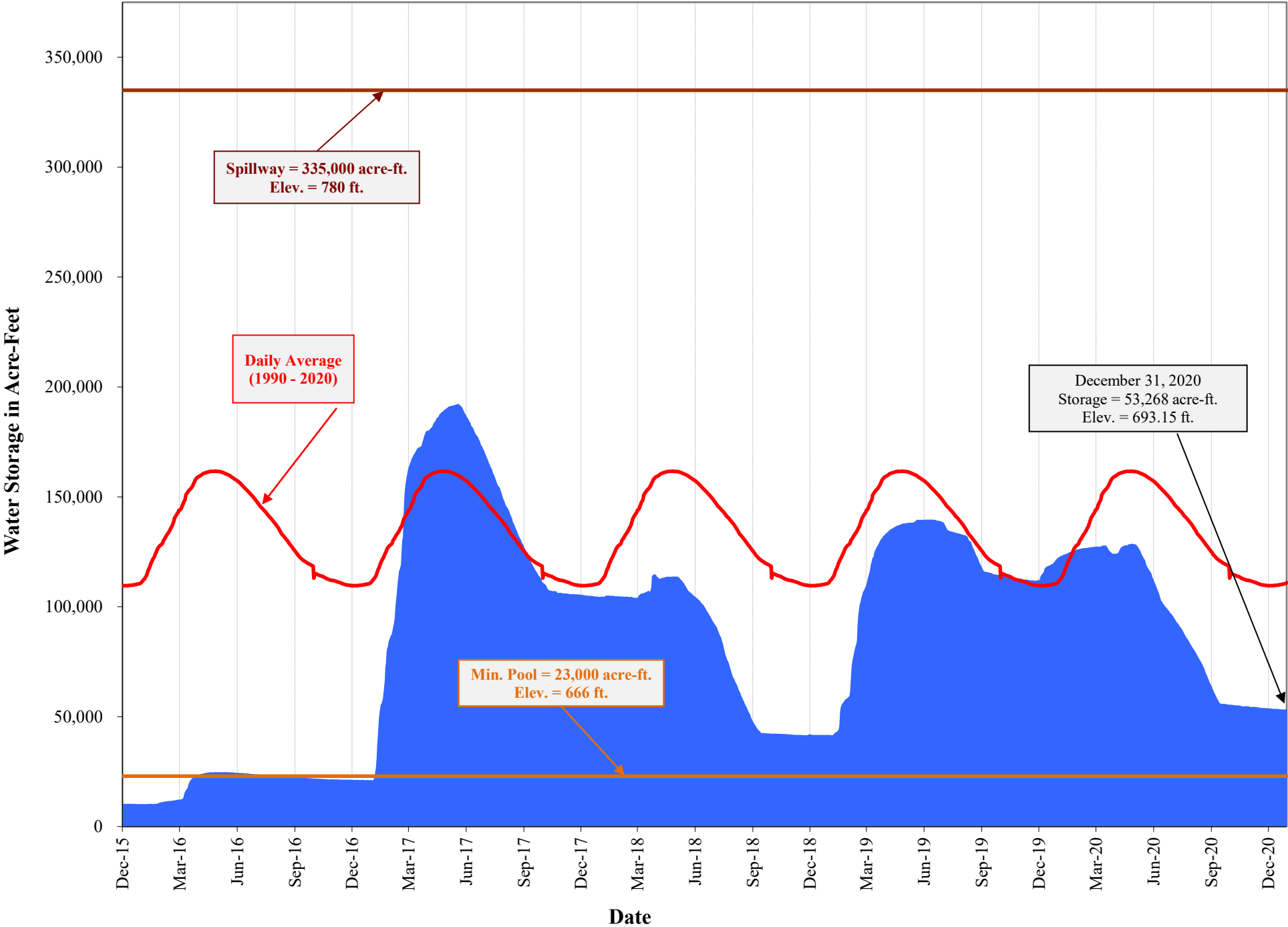
*Average precipitation over the most recent 30-year period ending in a decade (1981-2010)

ATTACHMENT B

NACIMIENTO RESERVOIR DAILY STORAGE



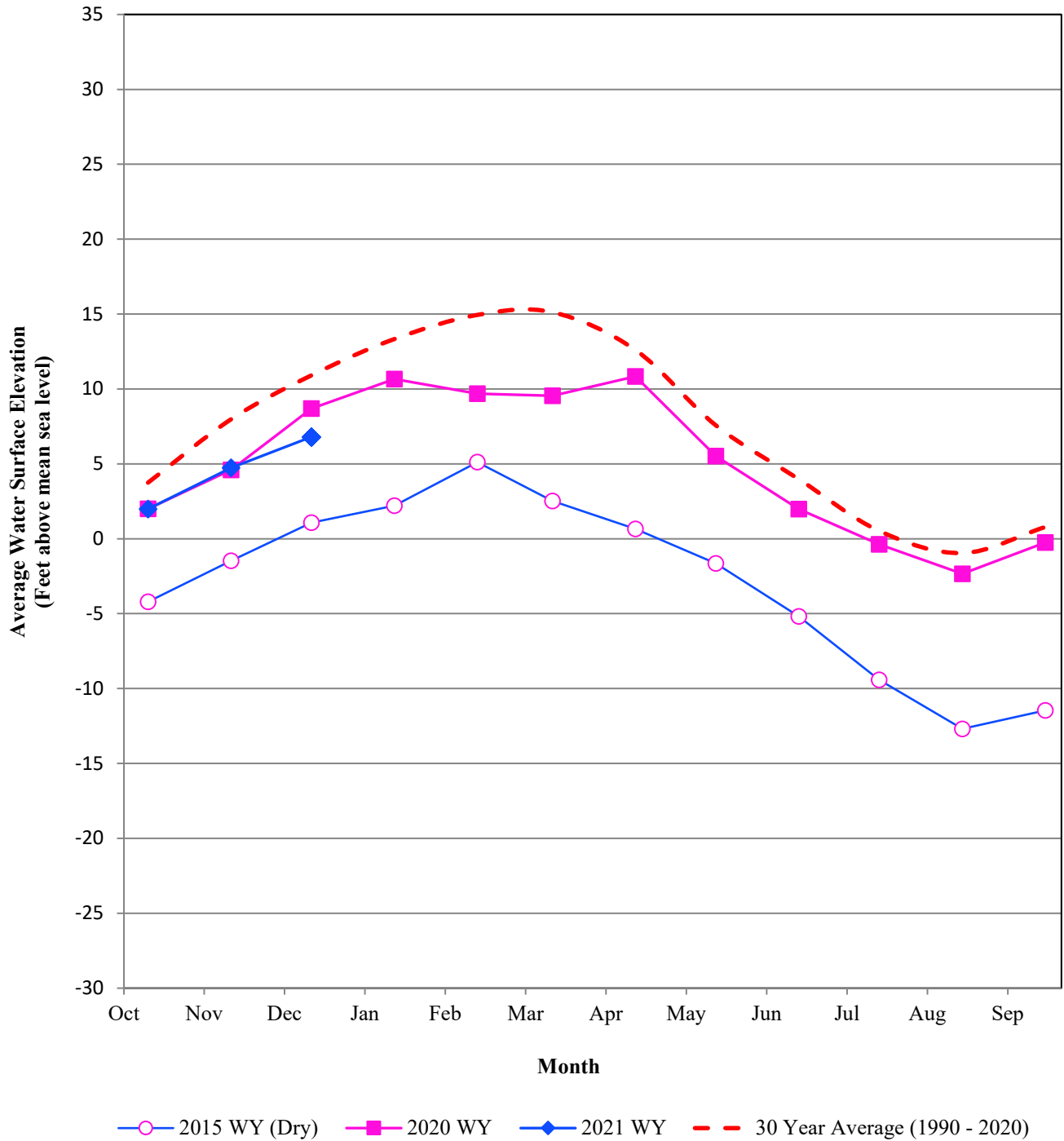
SAN ANTONIO RESERVOIR DAILY STORAGE



GROUNDWATER TRENDS

180-FOOT AQUIFER

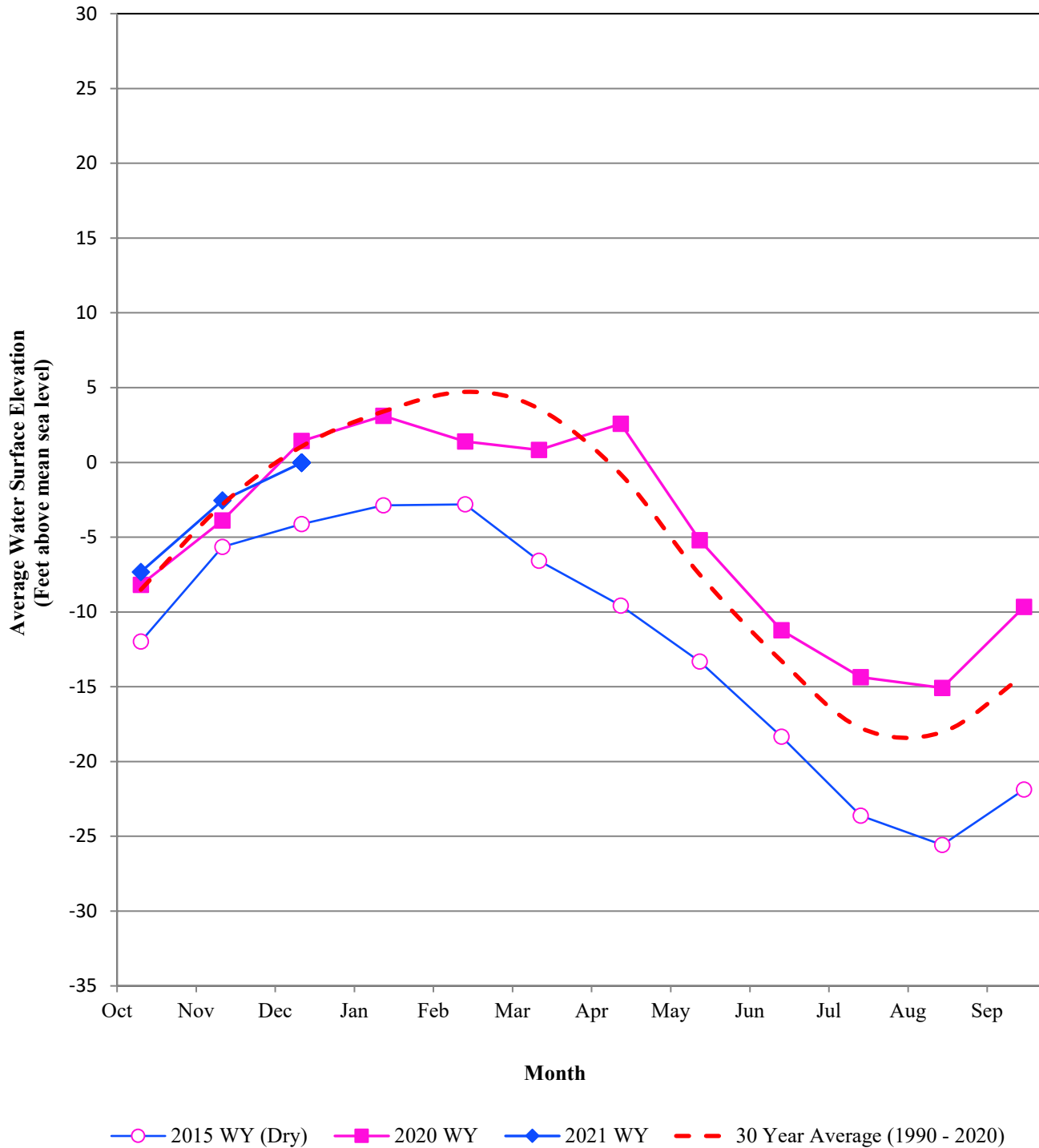
8 Wells



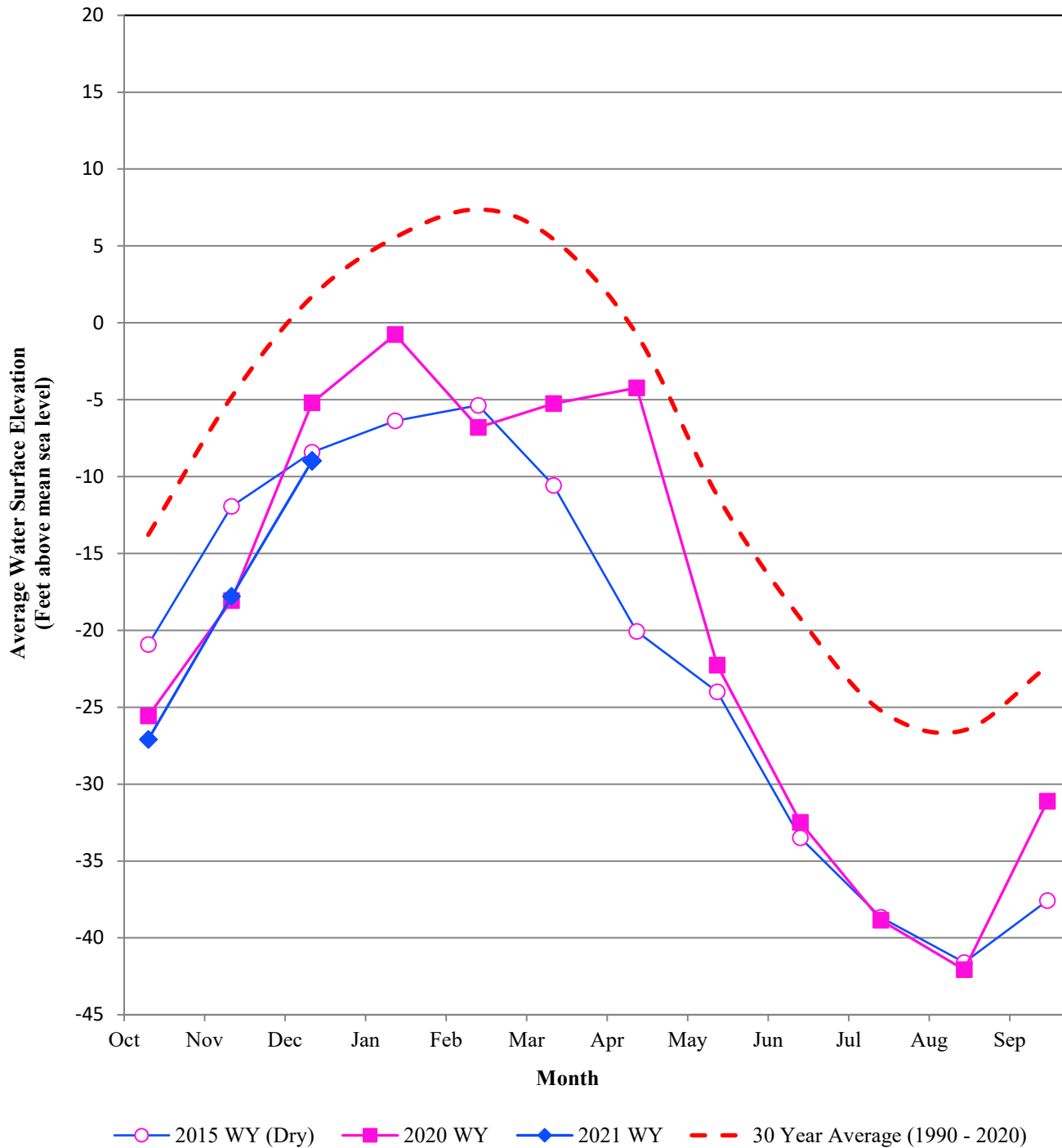
GROUNDWATER TRENDS

400-FOOT AQUIFER

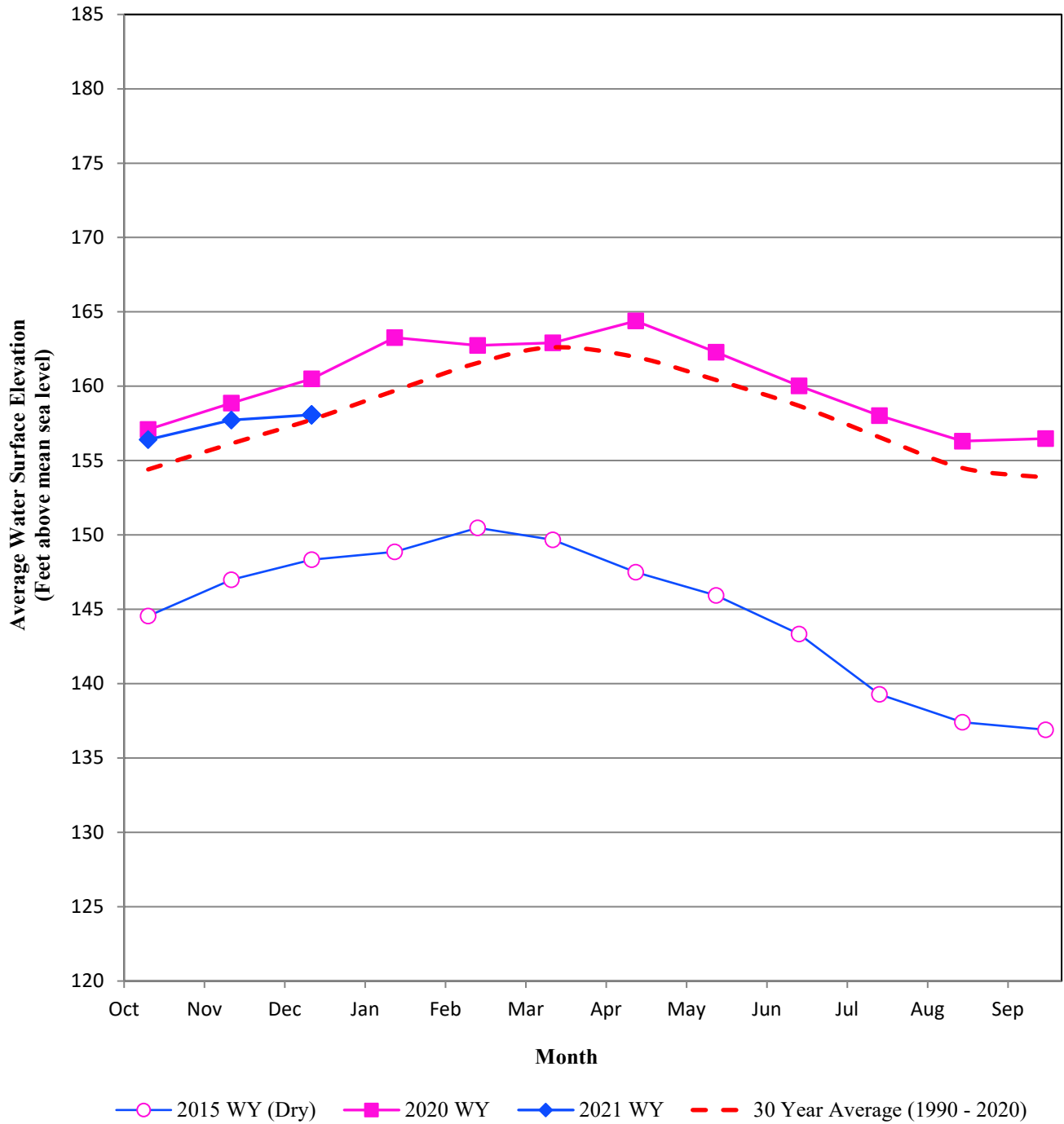
12 Wells



GROUNDWATER TRENDS EAST SIDE SUBAREA 12 Wells



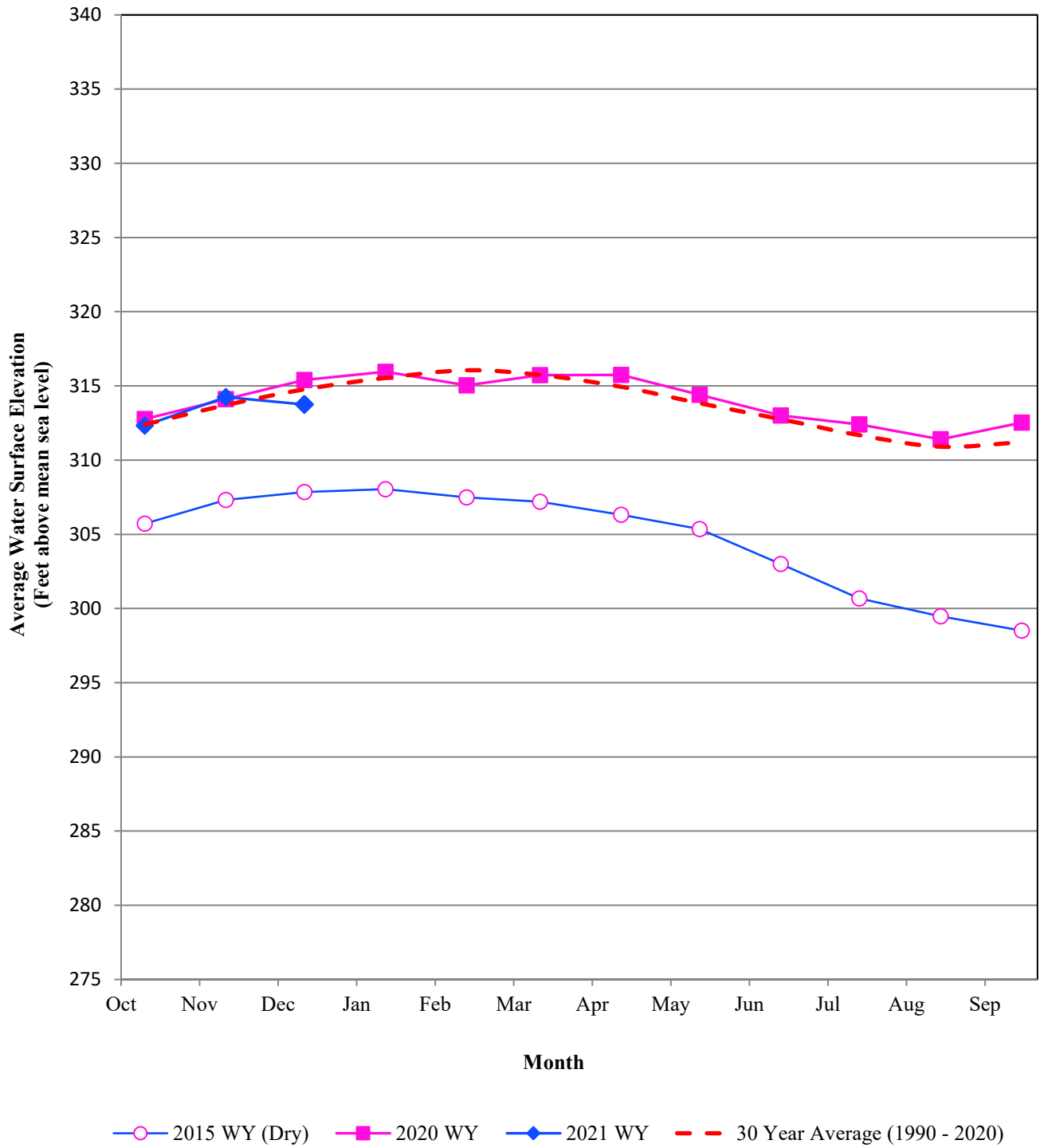
GROUNDWATER TRENDS FOREBAY SUBAREA 13 Wells



GROUNDWATER TRENDS

UPPER VALLEY SUBAREA

9 Wells



Groundwater Trends Summary December 2020

Area	December 2020 Groundwater Elevation (ft msl)	Change over First Quarter	1 Year Change	Difference from 30 year Average Elevation
180-Foot Aquifer	7 '	Up 7 '	Down 2 '	Down 4 '
400-Foot Aquifer	0 '	Up 10 '	Down 2 '	Down 1 '
East Side Subarea	-9 '	Up 22 '	Down 4 '	Down 11 '
Forebay Subarea	158 '	Up 2 '	Down 2 '	Up < 1 '
Upper Valley Subarea	314 '	Up 1 '	Down 2 '	Down 1 '

Deep Aquifers Addendum to the Salinas Valley Water Conditions First 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 includes alluvial fan or braided stream¹, by the ancient Salinas River², and alluvial fan, lake and floodplain deposits³. The Paso Robles outcrops in 37,500 acres of Monterey County, including the El Toro area and west side of the Salinas Valley⁴. 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 is unknown.

The Purisima Formation (Purisima) is a Pleistocene aged, shallow marine unit composed of clays and shale¹, siltstone, sandstone, and conglomerates⁵. Micro-fossils from Purisima core samples indicate a marine shelf environment around 0-150 feet below sea level⁶. 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 County⁴. 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 unit⁵. Some studies describe this as a transgressive sandstone unit⁴. The Santa Margarita can be seen below the Purisima, or below the Paso Robles where the Purisima is absent.

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

² 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*.

³ 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.

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

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

⁶ 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 ⁴
13S/02E-19Q03	75	1980	13	1562	1280-1550	Paso Robles ¹	October 1983- Current
13S/02E-31A02	1153	1985	11	1600	850-1600	Paso Robles ¹	October 1986- Current
13S/02E-32E05	10164	1984	8	1605	775-1585	Paso Robles ¹	June 1986- Current
14S/01E-24L05	22277	2000	67	970	930-950	Paso Robles ²	November 2002- Current
14S/02E-06L01	1672	1976	13	1560	880-1540	Paso Robles ¹	October 1988- Current
14S/02E-33E01	26313	2005	140	1095	1045-1095	Paso Robles ³	June 2018- Current
14S/02E-28H04	22929	2006	26	1180	940-1160	Paso Robles ³	July 2018- Current
15S/03E-05R52	22905	2006	52	840	600-820	Paso Robles ³	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

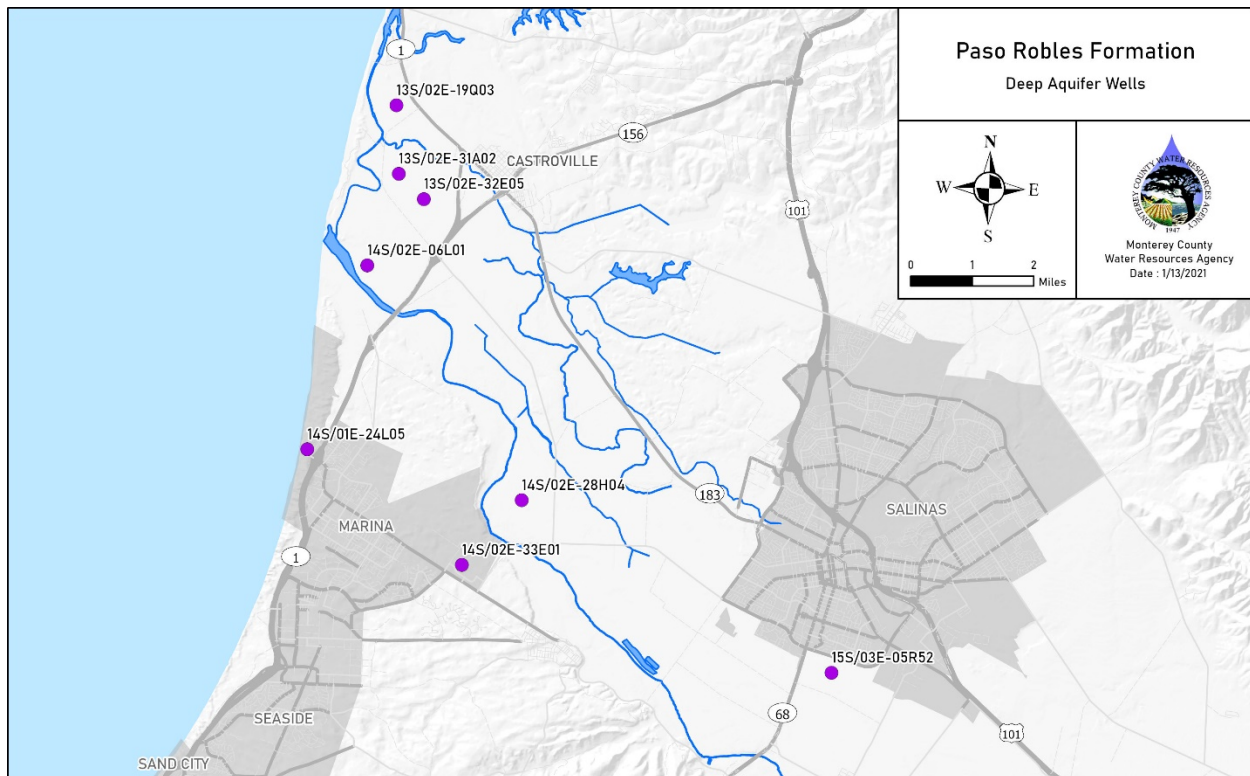


Figure 1. Deep Aquifer wells in the Paso Robles Formation used for groundwater level hydrographs, labeled by State Well ID

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 here.

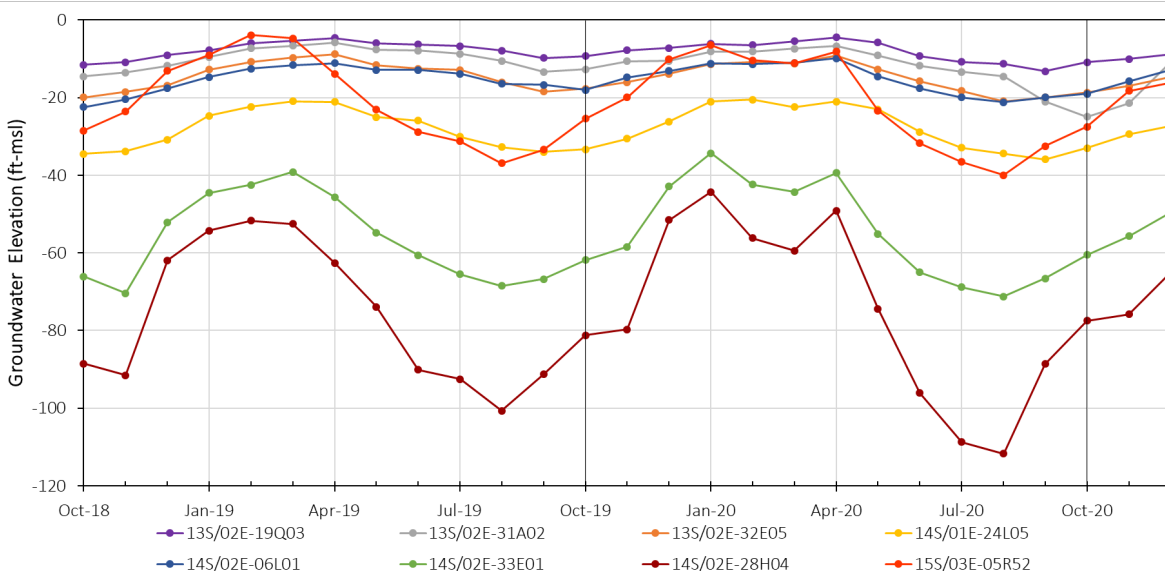


Figure 2. Individual hydrographs for selected wells, WY 2019 to First Quarter WY 2021

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 first quarter of WY 2021 were twenty-six feet below sea level. WY 2021 started with groundwater elevations lower than those at the start of WY 2020, and by the end of the quarter were four feet lower than elevations last December. 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.

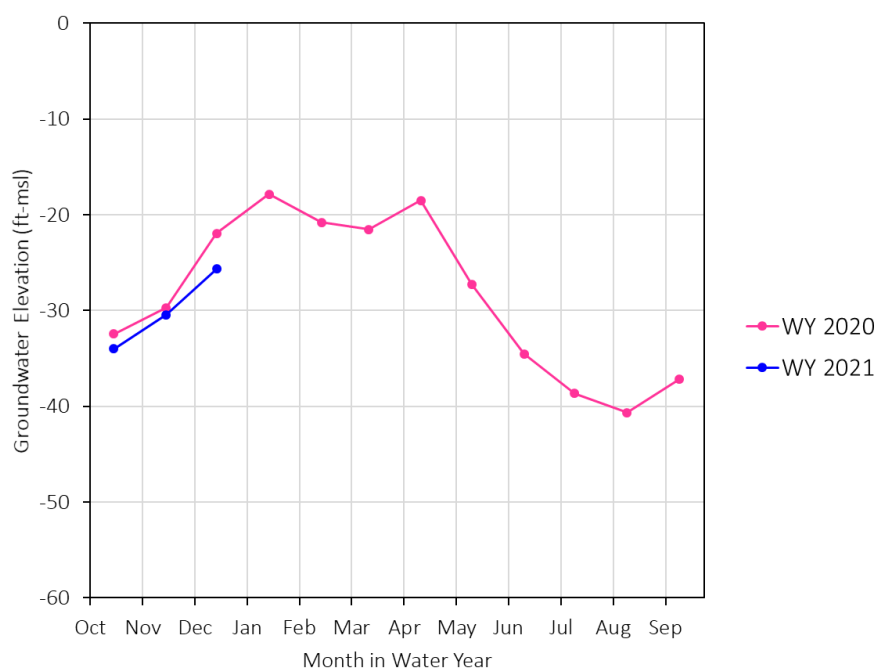


Figure 3. Average hydrographs for Paso Robles Deep Aquifer Wells (n=8)

Purisima Groundwater Levels

Four wells have been identified to represent the Deep Aquifers in the Purisima Formation (Table 2). 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 ³
14S/01E-24L02	22274	2000	67	1880	1820-1860	Purisima ¹	November 2002- Current
14S/01E-24L03	22275	2000	67	1430	1410-1430	Purisima ¹	November 2002- Current
14S/01E-24L04	22276	2000	67	1080	1040-1060	Purisima ¹	November 2002- Current
14S/02E-33E02	26314	2005	140	1760	1680-1760	Purisima ²	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

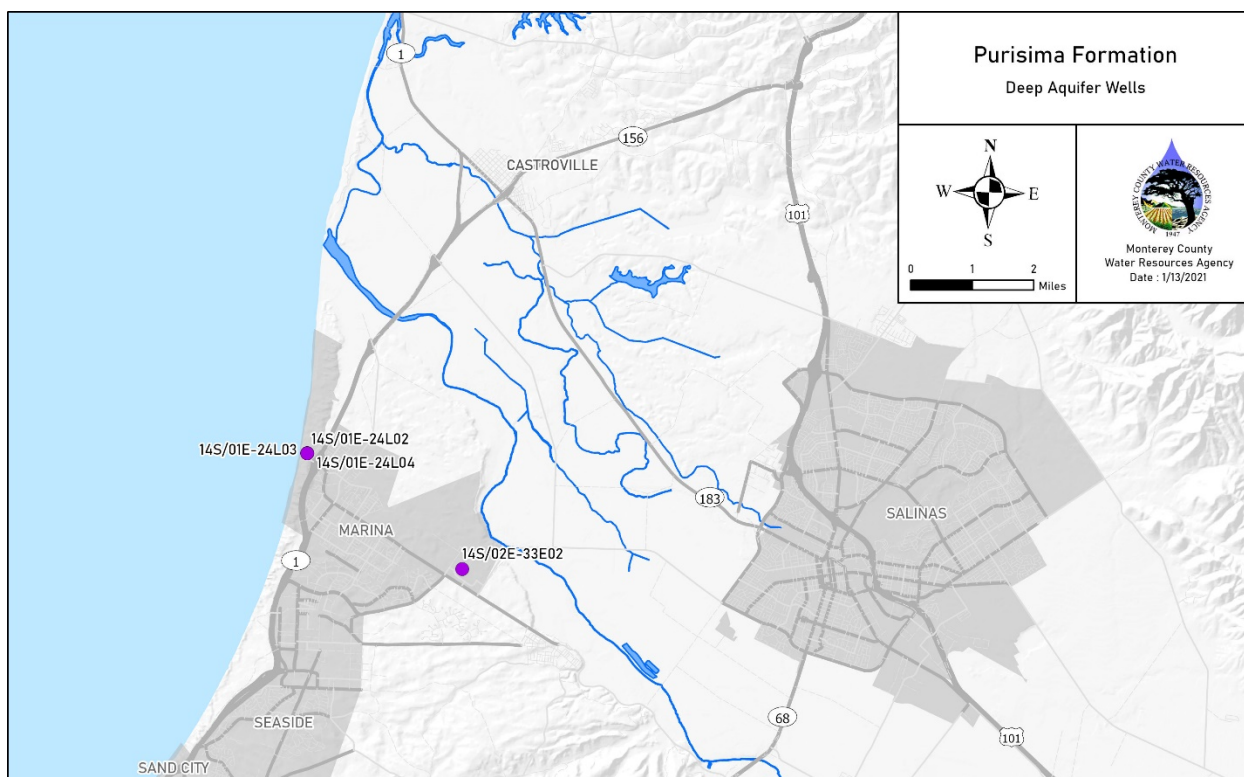


Figure 4. Deep Aquifer wells in the Purisima Formation used for groundwater level hydrographs, labeled by State Well ID

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.

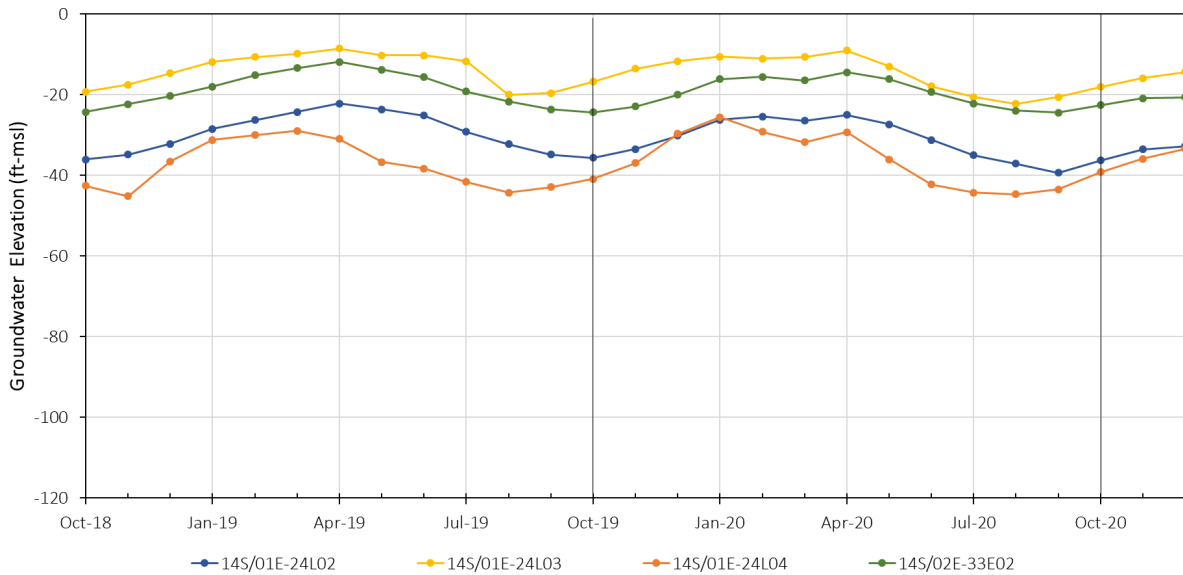


Figure 5. Individual hydrographs for selected wells, WY 2019 to First Quarter WY 2021

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 first quarter of WY 2021 were twenty-five feet below sea level, barely above the average elevations in the Paso Robles. Groundwater elevations in WY 2021 started out similar to those at the beginning of WY 2020, but fell two feet lower by the end of the quarter. 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.

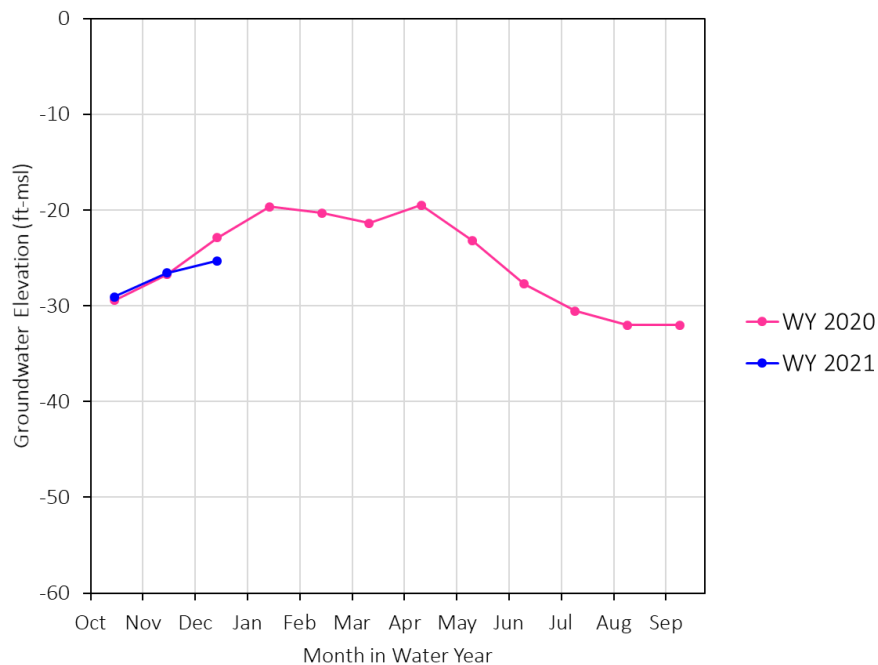


Figure 6. Average hydrographs for Purisima Deep Aquifer Wells (n=4)

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.

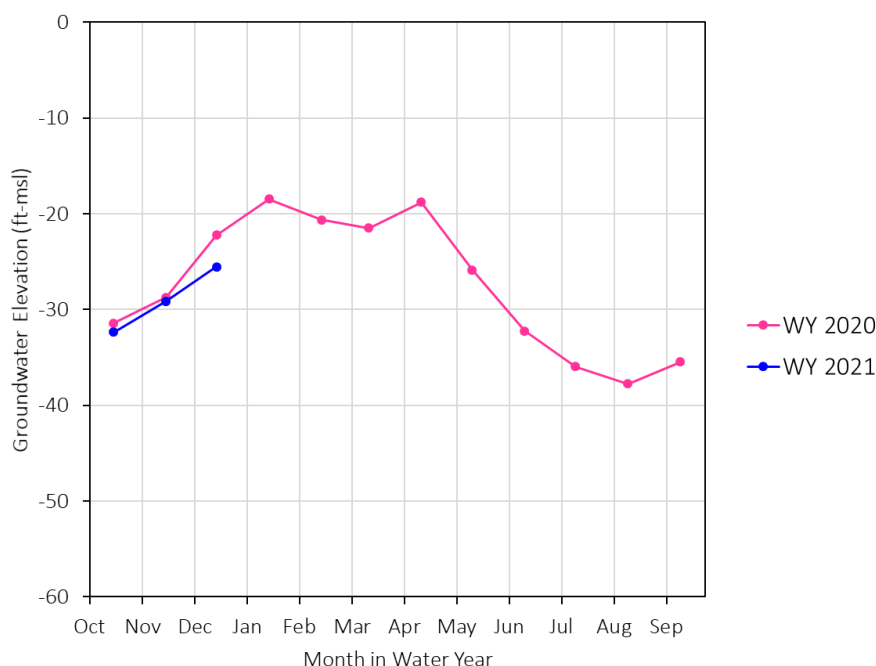


Figure 7. Average hydrographs for Deep Aquifer Wells, Paso Robles and Purisima combined (n=12)

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 first quarter of WY 2021 were twenty-six feet below sea level. WY 2021 started with lower groundwater elevations than those at the start of WY 2020, and by the end of the quarter remained two feet lower than last December.

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, December 2020, in the Deep Aquifers and the overlying aquifers.

Table 3. Average Groundwater Elevations (ft-msl) December 2020				
180-Ft Aquifer ¹	400-Ft Aquifer ¹	Paso Robles Deep Aquifer Wells	Purisima Deep Aquifer Wells	Combined Paso Robles and Purisima Deep Aquifer Wells
7'	0'	-26'	-25'	-26'

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

In December 2020, groundwater elevations in the 180-Ft aquifer were seven feet higher than groundwater elevations in the 400-Ft aquifer, and the vertical hydraulic gradient between the two was -7 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 Report⁷, 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 -26 ft (Combined Deep Aquifer wells elevation minus 400-Ft Aquifer elevation). 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. A similar map will be generated for December 2020 and included in a future version of this addendum once contour lines from the Annual 2020 sampling event are finalized. Further discussion on the historical trends and changes in vertical gradients will also be included.

⁷ 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>

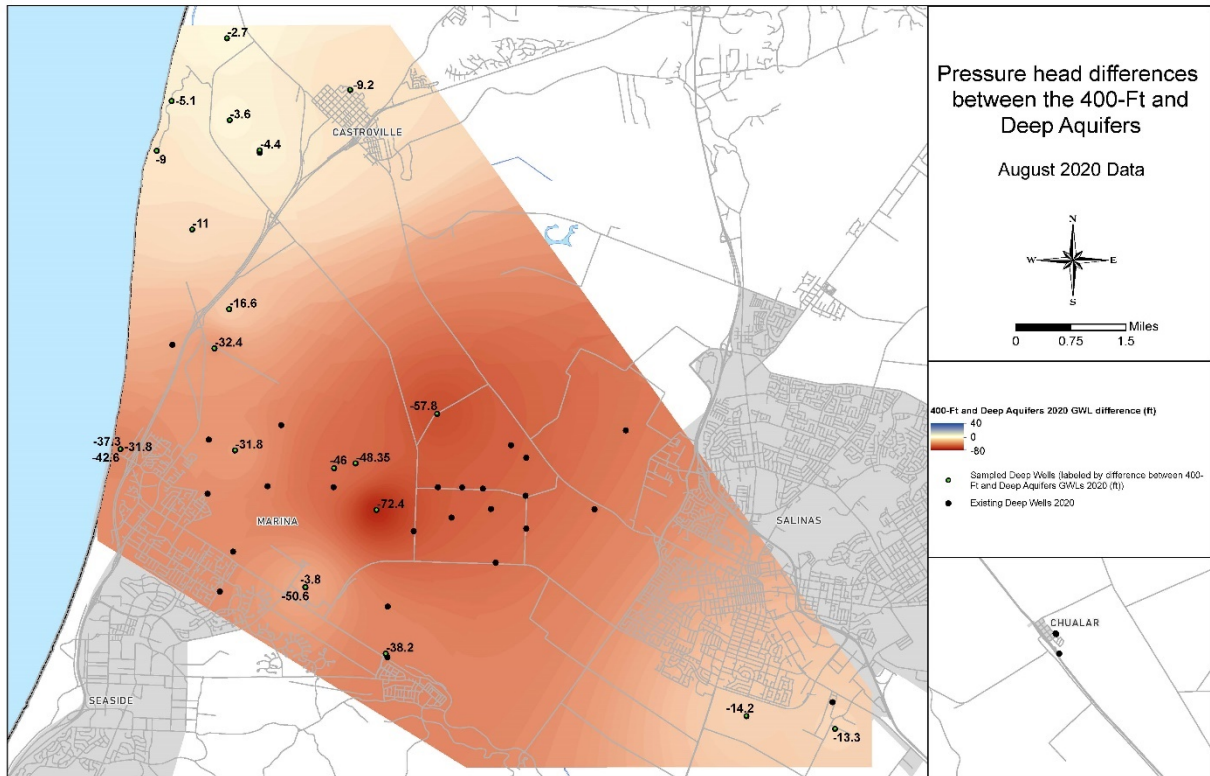


Figure 8. Vertical Hydraulic (or Pressure) head differences between the 400-Ft and Deep Aquifers, August 2020



Monterey County

Item No.4

Board Report

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

Legistar File Number: WRABMAC 21-003

February 03, 2021

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Update on Well Permit 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

Table 1. Well Permit Applications Received by Category - December, 2020

Subarea/ Aquifer	Construction	Destruction	Repair	Other	Total	FY (20/21) Total
Pressure 180-Ft Aquifer						5
Pressure 400-Ft Aquifer						8
Pressure Deep Aquifers						7
East Side	2	1			3	8
Forebay						8
Upper Valley						4
Outside Zone 2C, Undefined GW Basin	5				5	23
Total	7	1			8	63

Figure 1

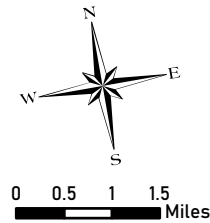
Legend

Deep Aquifer Wells

By Use, Labeled by Year Constructed

- Agricultural
- Municipal
- Industrial
- Domestic
- Monitoring

Area of Impact



Monterey County
Water Resources Agency

Date: 1/4/2021

4 Monitoring Wells
constructed in 2000

2 Monitoring Wells
constructed in 2005

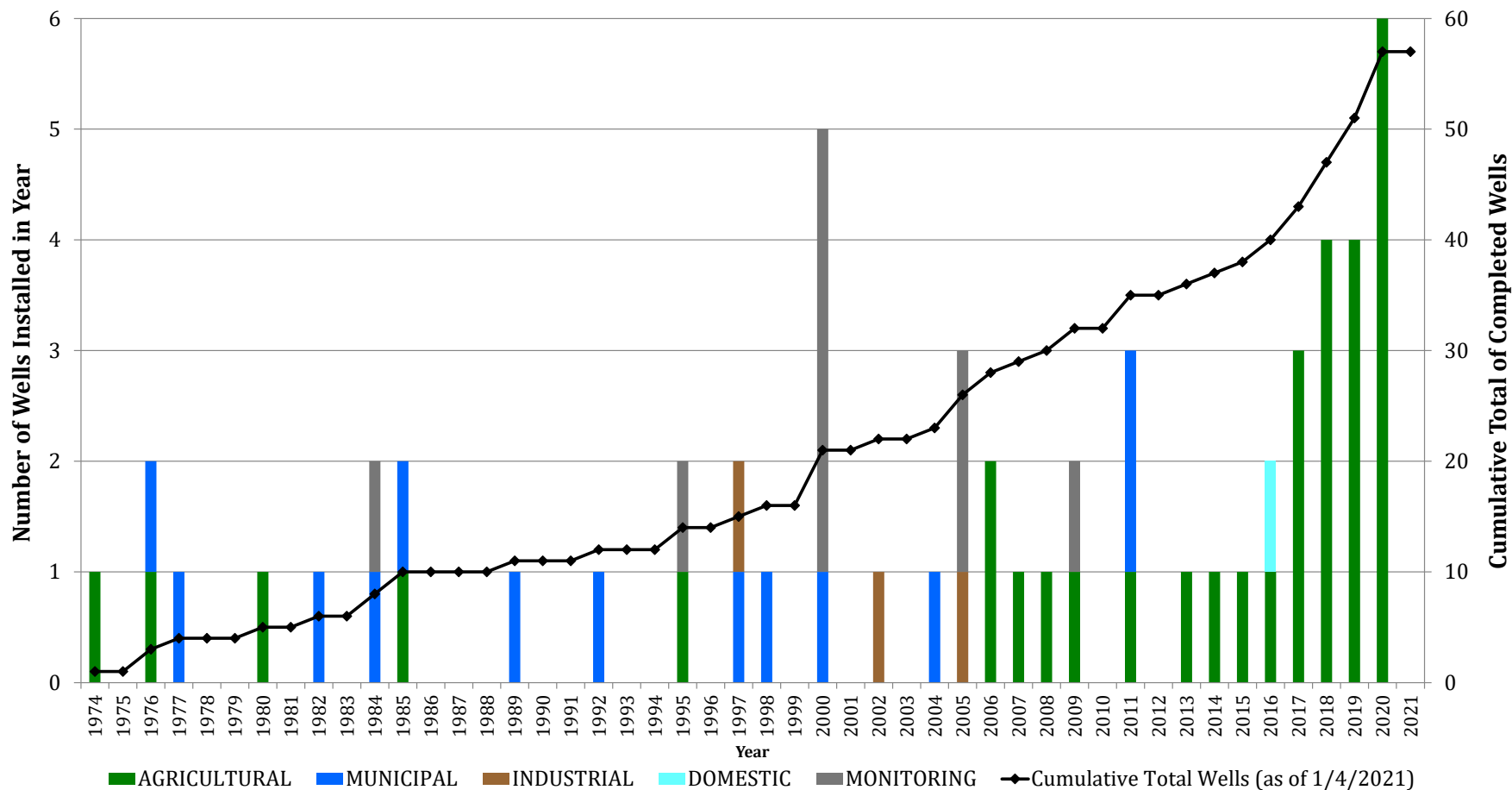
2 Municipal Wells
constructed in 1998 and 2000

Figure 2

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



Source: MCWRA
Date: 1/4/2021



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
2,054	1,992	2,036	2,137	2,170	1,906	2,055	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	1,982	3,784	3,746	3,690	3,991	4,499
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	4,293	4,958	4,855
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
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

* Notes: Table includes all reported extraction data for the twenty-nine (29) 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 eight (8) recently constructed deep agricultural production wells not shown above have yet to report extractions as of Reporting Year 2018.



Monterey County

Item No.5

Board Report

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

Legistar File Number: WRABMAC 21-009

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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

Destruction of wells as part of the Project is being conducted as described in Monterey County Water Resources Agency (“MCWRA”) Ordinance No. 3790 (“Ord. 3790”). In order to destroy a well under the process in Ord. 3790, the well must be classified as abandoned or meet certain criteria defined in Section 1.03.04; Ord. 3790 governs classification and reclassification of wells in Zone 2B.

Prior to the start-up of the Castroville Seawater Intrusion Project (CSIP), MCWRA classified all wells in Zone 2B (the CSIP area) into one of ten classification categories described in Ord. 3790. In order to move forward with the Project, MCWRA has initiated a process to reclassify the status of wells that have been identified for inclusion in the Project but which do not currently have an “abandoned” classification. The first round of notification letters was sent in early January 2021 to the owner(s) and operator(s) of wells that were successfully located and identified in the September/October 2020 field reconnaissance effort. A second round of notification letters will be forthcoming in Spring 2021, following the outcome of another field effort.

The well reclassification letters identified the well, informed the well owner(s) and operator(s) of the General Manager’s decision to reclassify the well, and provided information on the process for appealing that decision.

Well destruction notification letters were sent to owners/operators of wells in the Project area that were identified for the Project and which have an existing “abandoned” classification. These letters identified the well, informed the well owner(s) and operator(s) of the General Manager’s decision to destroy the well, and provided information on the process for appealing that decision.

Notification Appeals

MCWRA Ordinance No. 3910 (“Ord. 3910,” Attachment 1) prescribes rules and procedures for the conduct of appeals of administrative determinations such as the General Manager’s decision to reclassify or destroy a well under Ord. 3790.

While the overall procedure is similar, there are different time frames for filing an appeal to a well reclassification notice (15 days from the date of the notice) and a well destruction notice (65 days from the date of the notice). The appeal period for the first round of well reclassifications ended on January 23, 2021; the appeal period for the first round of well destruction notices ends on March 14, 2021.

Following is a summary of the appeal process, which is prescribed in more detail in Ord. 3910:

- Appeals shall be in writing and shall include, at a minimum: name, mailing address, daytime phone number, determination being appealed, factual basis for appeal, and appellant's signature.
- Within fifteen days of receipt of an appeal, MCWRA shall acknowledge receipt of the appeal and either confirm in writing that all necessary information has been submitted or inform the appellant in writing of additional information necessary to process the appeal. Response will include General Manager's written recommendation as to the appropriate disposition of the appeal and notice of the Board of Directors meeting at which the appeal will be heard.
 - o In additional information is requested, the appellant shall submit all such information with fifteen days of MCWRA's request (or longer period if mutually agreed upon).
- Appeal hearings will be scheduled to commence within thirty days of the General Manager's written recommendation, unless extended by mutual agreement; will be open to the public; and are held at a regular or special meeting of the MCWRA Board of Directors.

Budget Committee

On January 27, 2021, Staff will be going before the Board of Supervisors Budget Committee ("Committee") to request the Committee's support in amending the FY 2021-21 Adopted Budget to include a \$399,499 increase, financed by the Cannabis Tax Assignment.

If moved forward to the Board of Supervisors and approved by the BOS (4/5ths vote required), this contribution will offset the FY 20-21 portion of the \$2,663,300 in total additional funds needed to meet MCWRA's 46% match on the SWRCB grant.

OTHER AGENCY INVOLVEMENT:

None

FINANCING:

There is no financial impact in receiving this update.

Prepared by: Amy Woodrow, Hydrologist, (831) 755-4860
Tamara Voss, Associate Hydrologist, (831) 755-4860

Attachments

1 – Ordinance No. 3910

ORDINANCE NO. 3910

AN ORDINANCE OF THE MONTEREY COUNTY WATER RESOURCES AGENCY
PRESCRIBING RULES AND PROCEDURES FOR THE CONDUCT OF APPEALS OF
ASSESSMENTS, CHARGES, FEES AND ADMINISTRATIVE DETERMINATIONS

PASSED: APRIL 1, 1997

ORDINANCE NO. 03910

AN ORDINANCE OF THE MONTEREY COUNTY WATER RESOURCES AGENCY
PRESCRIBING RULES AND PROCEDURES FOR THE CONDUCT OF APPEALS OF
ASSESSMENTS, CHARGES, FEES AND ADMINISTRATIVE DETERMINATIONS

County Counsel Summary

This Ordinance provides a uniform administrative remedy for challenging the imposition of property-related assessments, charges and fees, and for challenging determinations of Agency staff relating to the granting or denial of variances and the enforcement of ordinances. The rules and procedures of this Ordinance supersede the appeals provisions contained in other ordinances of the Agency, except as specifically provided in this Ordinance.

The Board of Supervisors of the Monterey County Water Resources Agency ordains as follows:

SECTION 1. The following provisions are adopted:

1.0 Purpose and Scope.

1.01. Except as otherwise provided herein, the provisions of this Ordinance shall govern all appeals of assessments, charges or fees imposed upon real property by the Monterey County Water Resources Agency.

1.02. Except as otherwise provided herein, the provisions of this Ordinance shall govern all appeals of final determinations by Agency staff including, without limitation, the granting or denial of variances, orders for corrective action, and the imposition of penalties.

1.03. Except as otherwise provided herein, the provisions of this Ordinance supersede the appeals provisions of previously enacted ordinances of the Water Resources Agency, and any reference to appeals procedures in such ordinances shall be deemed a reference to this Ordinance.

1.04. The provisions of this Ordinance are procedural only, and do not create rights of appeal independent of those existing under other Water Resources Agency ordinances. This Ordinance does not add to or reduce the Water Resources Agency's duties or authority relating to the enforcement of ordinances. Nothing in this Ordinance shall be construed to extend or otherwise affect the time period for challenging the validity of any Water Resources Agency ordinance.

1.05. Judicial review of matters governed by this Ordinance shall not be available until the appeals procedures of this or any other applicable ordinance have been exhausted.

2.0. Matters Subject to Appeal.

2.01. On appeal of an assessment, charge or fee imposed by the Water Resources Agency upon real property, an affected property owner may challenge the following determinations as they relate to his or her property:

2.01.01. The size or acreage of the property subject to the assessment, charge or fee;

2.01.02. The location of the property subject to the assessment, charge or fee;

2.01.03. The character or land use classification of the property subject to the assessment, charge or fee;

2.01.04. The basis for inclusion of the property within a zone, district or area subject to the assessment, charge or fee.

2.01.05. The type and degree of benefit conferred on the appellant's property by a flood control or other project of the Agency funded in whole or in part by the subject assessment, charge or fee.

2.02. On appeal of an administrative determination made pursuant to a Water Resources Agency ordinance, other than an ordinance imposing an assessment, charge or fee on real property, the subject ordinance shall govern:

2.02.01. What determinations may be appealed;

2.02.02. Who may bring an appeal;

2.02.03. The time for bringing an appeal, except that where no time is specified, the provisions of this Ordinance shall apply;

2.02.04. Any applicable fees for bringing an appeal.

3.0. Hearing Board.

3.01. All appeals governed by this Ordinance shall be heard by the Water Resources Agency Board of Directors.

3.02. Appeal hearings shall be open to the public, and may be conducted at any duly noticed regular or special meeting of the Board of Directors. Appeal hearings may be continued to future meetings until concluded.

3.03. At the hearing, the Board of Directors will consider de novo the issues on appeal. In deciding an appeal, the Board of Directors is not bound by the factual determinations of Agency staff which are the subject of the appeal.

3.04. The decision of the Board of Directors on any appeal shall be final, and there shall be no appeal to the Board of Supervisors of the Water Resources Agency, unless such further appeal is permitted by ordinance or by other law.

4.0. Procedure for Appeal of an Assessment, Charge or Fee Imposed on Real Property.

4.01. Time for bringing appeal; retroactivity. An appeal relating to any of the bases set forth in Section 2.01 may be brought at any time. Any inaccurate assessment, charge or fee discovered as a result of an appeal will be adjusted for the tax year in which the appeal was brought and for the immediately preceding tax years in which the inaccurate assessment, charge or fee was paid by the appellant, up to a maximum of the four consecutive tax years immediately preceding the appeal. Assessments, charges and fees older than four years shall not be subject to appeal or adjustment.

4.02. Informal resolution of issues. The Agency General Manager is hereby authorized to resolve factual issues with appellants or potential appellants and to make administrative adjustments to the Agency's tax roll without requiring formal evidentiary submittals or a hearing before the Board of Directors. Nothing in this section shall limit or preclude an appellant from submitting any relevant evidence to the Agency or from receiving a hearing before the Board of Directors as provided in this Ordinance. The General Manager shall report any administrative adjustments made pursuant to this section to the Board of Directors.

4.03. Formal appeals.

4.03.01. Form and Content. Appeals shall be in writing, signed, and shall set forth, at a minimum, the appellant's name, mailing address, daytime telephone number, the Assessor's Parcel Number of any parcel affected by the appeal, an identification of the assessment, charge or fee being appealed, and the factual basis for the appeal.

4.03.02. Agency response and requests for additional information. Within 30 days of receipt of an appeal pursuant to this section, the Agency shall acknowledge receipt of the appeal, and shall either confirm in writing that all necessary information has been submitted or inform the appellant in writing of any additional information necessary to process the appeal. In the event that additional information is requested by the Agency, the appellant shall submit all such information within 30 days of the Agency's request, or within any longer time period mutually agreed to by the Agency and the appellant.

4.03.03. General Manager's recommendation. Within 30 days of receipt of an appeal or all supplemental information submitted by the appellant, whichever is later, the Agency General Manager shall provide a written recommendation as to the appropriate disposition of the appeal. The General Manager's recommendation shall be based on findings which are supported by substantial evidence. The General Manager's recommendation shall be provided to the appellant, together with notice of the Board of Directors meeting at which the appeal will be heard pursuant to this Ordinance. A hearing before the Board of Directors shall be scheduled to commence within 60 days of the General Manager's written recommendation, unless that time is extended by mutual agreement.

5.0. Procedure for Appeal of an Administrative Determination Pursuant to Ordinance.

5.01. Time for bringing appeal. Unless otherwise provided in the ordinance giving rise to the subject of the appeal, an appeal of an administrative determination shall be brought within 15 days of the issuance of a citation or other written notification of the determination being appealed.

5.02. Formal appeals.

5.02.01. Form and content. Appeals shall be in writing and shall set forth, at a minimum, the appellant's name, mailing address, daytime telephone number, the determination being appealed, the factual basis for the appeal, and the appellant's signature.

5.02.02. Agency requests for additional information. Within 15 days of receipt of an appeal pursuant to this section, the Agency shall acknowledge receipt of the appeal, and shall either confirm in writing that all necessary information has been submitted or inform the appellant in writing of any additional information necessary to process the appeal. In the event that additional information is requested by the Agency, the appellant shall submit all such information within 15 days of the Agency's request, or within any longer time period mutually agreed to by the Agency and the appellant.

5.02.03. General Manager's recommendation. Within 15 days of receipt of an appeal or all supplemental information submitted by the appellant, whichever is later, the Agency General Manager shall provide a written recommendation as to the appropriate disposition of the appeal. The General Manager's recommendation shall be based on findings which are supported by substantial evidence. The General Manager's recommendation shall be provided to the appellant, together with notice of the Board of Directors meeting at which the appeal will be heard pursuant to this Ordinance. A hearing before the Board of Directors shall be scheduled to commence within 30 days of the General Manager's written recommendation, unless that time is extended by mutual agreement.

6.0. Appeal hearings.

6.01. Presumptions; burden and standard of proof. There shall be a rebuttable presumption that an Agency ordinance which imposes an assessment, charge or fee or which prescribes or proscribes any activity or conduct is a valid legislative act. Except as otherwise provided in Article XIID of the California Constitution, the appellant shall bear the burden to prove, by a preponderance of the evidence, facts which support all elements of the appeal.

6.02. Presentations. All appeal hearings shall be conducted by the Board of Directors as provided by law and as may be specified in any bylaws duly adopted by the Board of Directors. At a minimum, the General Manager or Agency staff shall present a recommended disposition of the appeal for the Board's consideration, and the appellant shall have an opportunity to present testimony or other evidence supporting or opposing the staff recommendation.

6.03. Public participation. All appeal hearings shall be open to the public and shall be duly noticed in accordance with open meeting laws. Members of the public shall be afforded an opportunity to comment on any appeal being considered by the Board of Directors.

6.04. Findings and decision. The Board of Directors' disposition of any appeal shall be set forth in a resolution, which shall be based on and contain findings supported by substantial evidence in the record.

7.0. Effect of Appeal on Related Proceedings.

7.01. Civil proceedings. The bringing of an appeal will not stay any civil proceeding pending against the appellant, or one in privity with the appellant, relating to a violation or alleged violation of a Water Resources Agency ordinance. The decision of a court in such civil proceeding shall prevail over any contrary result reached in an administrative appeal conducted pursuant to this or any other Agency ordinance.

7.02. Criminal proceedings.

7.02.01. If the issuance of a citation is appealed pursuant to this or any other ordinance authorizing the appeal, then any criminal prosecution based on that citation shall be suspended until the appeal is completed. The foregoing shall not apply to prosecutions in which a time waiver is required and the defendant refuses to waive time. If the appeal is not pursued to completion, the criminal prosecution may be resumed, stayed or dismissed, at the Agency's discretion.

7.02.02. If the issuance of the subject citation is affirmed on appeal, the final decision shall state the amount of any fine to be paid to the Agency, and such fine shall be civilly enforceable against the defendant-appellant. If the issuance of the subject citation is overturned on appeal, any criminal prosecution based on that citation shall be dismissed, and no further criminal action taken with regard to the particular violation alleged therein.

8.0. Severability.

If any provision of this Ordinance is for any reason held to be unconstitutional or invalid, such decision shall not affect the validity of the remaining portions of this Ordinance. The Board of Supervisors hereby declares that it would have passed this Ordinance and each section, subsection, sentence, clause, or phrase hereof irrespective of any other part being unconstitutional or invalid.

SECTION 2. This ordinance shall become effective on the thirty-first day following its adoption.



Monterey County

Item No.6

Board Report

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

Legistar File Number: WRABMAC 21-004

February 03, 2021

Introduced: 1/26/2021

Current Status: Draft

Version: 1

Matter Type: WRA BMAC Item

Update on Groundwater Sustainability Agency activities in the Salinas Valley Basin

Update on groundwater sustainability agency activities in the Salinas Valley Basin

SUMMARY/DISCUSSION:

- Proposition 68 Grant Application
 - In January 2021, the SVBGSA applied for a Sustainable Groundwater Management Program Proposition 68 grant from the Department of Water Resources. MCWRA, Monterey One Water, and the Resource Conservation District of Monterey County assisted with preparation of the grant application and will receive funding if the grant is awarded. Initial notification of grant awards is expected in March 2021.
- GSP Development and Implementation
 - The SVBGSA has formed Subbasin Committees, consisting of SVBGSA Directors and stakeholders from each subbasin, that will meet every two months to provide input during the development of the remaining five GSPs. Committees for all five subbasins (East Side, Forebay, Langley, Monterey, and Upper Valley) meet regularly. The meeting schedule is available on the SVBGSA website at <https://svbgsa.org/meetings/>.
 - Draft chapters of the Groundwater Sustainability Plans for the East Side, Forebay, Langley, Monterey, and Upper Valley subbasins are being reviewed by the Subbasin Committees. Agency staff review the draft chapters as they are made available. Draft chapters for each subbasin released to date cover the following topics: Introduction to the Subbasin, Description of Plan Area, Hydrogeologic Conceptual Model, Groundwater Conditions, Water Budgets, and Monitoring Networks.
 - Agency staff has opened communication 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 actively participate in 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 Seawater Intrusion Group. Staff will bring forward updates to this committee as pertinent information arises.

OTHER AGENCY INVOLVEMENT:

None

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.7

Board Report

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

Legistar File Number: WRABMAC 21-005

February 03, 2021

Introduced: 1/26/2021

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Version: 1

Matter Type: WRA BMAC Item

Update on Agency Modeling Activities

Update on Agency Modeling Activities

SUMMARY:

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

DISCUSSION:

- MCWRA and Wood have been using the SVOM to model a “Winter Release Scenario” in fulfillment of a November 2019 Settlement Agreement between MCWRA, Monterey County and the Salinas Valley Water Coalition (SVWC). This work involves modeling a specified set of operational parameters for reservoir releases between December 1 and May 31, as detailed in the Settlement Agreement. MCWRA is working with Wood to develop a Technical Memorandum on the results of the Winter Release Scenario modeling.
- Concurrent with the Winter Release Scenario, Wood is working on implementation of a modeling scenario in response to stakeholder inquiries about the Interlake Tunnel modeling results and their relationship to results from modeling performed prior to the Salinas Valley Water Project (SVWP). Wood is working to configure the SVOM with the operational rules and parameters necessary to complete 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.
- MCWRA and Wood are coordinating on refinements to the SVOM that will be implemented for use with modeling the Interlake Tunnel 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.8

Board Report

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

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Consider future agenda items and set next meeting date