



Fillmore and Piru Basins
Groundwater Sustainability Agency

Board of Directors Meeting

Thursday, February 15, 2024, 4:00 p.m.
City of Fillmore City Hall Council Chambers
250 Central Avenue, Fillmore, CA 93015

To participate in the Board of Directors meeting via Zoom, please access:

<https://us02web.zoom.us/j/85480305580?pwd=ZnFBWGhtVU05dXd3REFkM255c0h6UT09>

Meeting ID: **854 8030 5580** Password: **FPBGSA**

To hear just the audio portion of the meeting, phone into:
Toll-free number: **877 853 5247** Meeting ID: **854 8030 5580**

AGENDA

1. CALL TO ORDER

1A Pledge of Allegiance

1B Directors Roll Call

1C Public Comments

Fillmore and Piru Basins Groundwater Sustainability Agency (Agency) will accept public comment concerning agenda items at the time the item is considered and on any non-agenda item within the jurisdiction of the Board during the agendized Public Comment period. No action will be taken by the Board on any non-agenda item. In accordance with Government Code § 54954.3(b)(1), public comment will be limited to three (3) minutes per speaker per issue.

1D Approval of Agenda

Motion

2. UPDATES

2A Director Announcements/Board Communications:

Oral Reports from the Board

Fillmore Pumpers Association Stakeholder Director Update

Piru Pumpers Association Stakeholder Director Update

Environmental Stakeholder Director Update

City of Fillmore Member Director Update

United Water Conservation District Member Director Update

County of Ventura Member Director Update

2B Executive Director Update

Information Item

The Executive Director will provide an informational update on Agency activities since the previous Board of Directors meeting of January 18, 2024.

2C Legal Counsel Update

Information Item

Legal Counsel will provide an informational update on Agency’s legal issues and concerns since the previous Board of Directors meeting of January 18, 2024.

2D GSP Consultant Update

Information Item

Representatives from Daniel B Stephens & Associates will provide an informational update on the Agency’s groundwater sustainability planning and reporting activities since the previous Board of Directors meeting of January 18, 2024.

3. CONSENT CALENDAR

All matters listed under the Consent Calendar are considered routine by the Board and will be enacted by one motion. There will be no separate discussion of these items unless a Board member pulls an item from the Calendar. Pulled items will be discussed and acted on separately by the Board. Members of the public who want to comment on a Consent Calendar item should do so under Public Comments. (ROLL CALL VOTE REQUIRED)

3A Approval of Minutes

The Board will consider approving the Minutes from the Board of Directors meeting of January 18, 2024.

3B Approval of Warrants

The Board will consider approving payment of outstanding vendor invoices:

United Water Conservation District	\$41,711.84
DBS&A	\$12,239.75
RAMS	\$ 2,755.00
Aleshire & Wynder LLP Attorneys at Law	\$ 1,932.30
County of Ventura IT Services Department	\$ 628.50

3C Monthly Financial Report

The Board will receive the monthly financial report for the Fillmore and Piru Basins Groundwater Sustainability Agency.

4. MOTION ITEMS

4A Waiver of Late Fees and Interest for Ignacio Loemli

Motion

The Board will consider waiving the late fees and interest in the amount of \$1,327.41 for Ignacio Lomeli.

4B Amendment of Groundwater Sustainability Plans in Response to Findings and Comments from California Department of Water Resources

Motion

The Board will receive a presentation from staff summarizing the findings, comments, and recommendations received from the California Department of Water Resources regarding its Sustainable Groundwater Management Act review of the Agency’s Fillmore Basin Groundwater Sustainability Plan and Piru Basin Groundwater Sustainability Plan and provide comments and direction.

4C Formation of Ad Hoc Committee for Amendment of Groundwater Sustainability Plans

Motion

The Board will consider forming an Ad Hoc Committee for Amendment of Groundwater Sustainability Plans.

4D Annual Reports to California Department of Water Resources

Motion

The Board will receive a presentation from Daniel B. Stephens and Associates summarizing the Water Year 2023 Annual Reports to the California Department of Water Resources and provide comments and direction.

5. FUTURE TOPICS FOR BOARD DISCUSSION

6. ADJOURNMENT

The Board will adjourn to the next **Regular Board Meeting on Thursday, March 21, 2024**, or call of the Chair.

Materials, which are non-exempt public records and are provided to the Board of Directors to be used in consideration of the above agenda items, including any documents provided subsequent to the publishing of this agenda, are available for inspection at UWCD’s offices at 1701 N. Lombard Street in Oxnard during normal business hours.

The Americans with Disabilities Act provides that no qualified individual with a disability shall be excluded from participation in, or denied the benefits of, the District’s services, programs or activities because of any disability. If you need special assistance to participate in this meeting, or if you require agenda materials in an alternative format, please contact the UWCD Office at (805) 525-4431 or the City of Fillmore at (805) 524- 1500. Notification of at least 48 hours prior to the meeting will enable the District to make appropriate arrangements.

Approved: 
Board Chair Kelly Long

Posted: (date) February 9, 2024 (time) 3:30 p.m. (attest) Eva Ibarra
At: <https://www.FPBGSA.org>

Posted: (date) February 9, 2024 (time) 3:35 p.m. (attest) Eva Ibarra
At: <https://www.facebook.com/FPBGSA/>

Posted: (date) February 9, 2024 (time) 3:40 p.m. (attest) Eva Ibarra
At: UWCD, 1701 N. Lombard Street, Oxnard

Posted: (date) February 9, 2024 (time) 3:45 pm (attest) Eva Ibarra
At: Fillmore City Hall, 250 Central Avenue, Fillmore, CA



Board of Directors Meeting

Thursday, January 18, 2024, at 4:00p.m.

MINUTES

Directors in Attendance

Director Carole Fornoff
Director Debbie Jackson
Director Gordon Kimball
Director Kelly Long (arrived 4:37)
Director Candice Meneghin

Directors Absent

Albert Mendez

Staff in Attendance

Anthony Emmert, executive director
Steve O'Neill, legal counsel
Eva Ibarra, clerk of the board

Public in Attendance

Sara Guzman, UWCD (virtual)
Bert Handy (virtual)
Zachary Hanson, UWCD (virtual)
Shawn Kelley, Santa Clara River Conservancy
Rachel Laenen, Kimball Ranches-El Hogar
Helen McGrath (virtual)
Brian Moniz, DWR (virtual)
Tony Morgan, DBS&A
Patrick O'Connell, UWCD
Ed Reese, UWCD
Jason Sun, UWCD (virtual)
Gus Tolley, DBS&A (virtual)

1. CALL TO ORDER 4:05 p.m.

Director Kimball called the meeting to order at 4:05p.m.

1A Pledge of Allegiance

Director Fornoff led everyone in reciting the Pledge of Allegiance.

1B Directors Roll Call

The clerk called the roll. 4 Directors were present: Fornoff, Jackson, Kimball, and Meneghin. Director Long and Director Mendez were absent. 04/0/02.

Director Meneghin requested she attend virtually under “good cause,” under Bill 2449, as she was ill and requested a motion to allow her virtual attendance. Director

Kimball called for a motion.

Motion to approve, Director Fornoff; Second, Director Jackson. Voice vote: 4 ayes (Fornoff, Jackson, Kimball, and Meneghin), none opposed. Motion carries unanimously 4/0/2.

1C Public Comments

Director Kimball asked if there were any comments or questions from the public. None were offered.

1D Approval of Agenda

Motion

Director Kimball asked Executive Director Anthony Emmert if there were any changes to the agenda. Mr. Emmert responded that there had been no changes to the agenda. Director Kimball then asked for a motion.

Motion to approve the agenda, Director Fornoff; Second, Director Jackson. Voice vote: 4 ayes (Fornoff, Jackson, Kimball, and Meneghin), none opposed. Motion carries unanimously 4/0/2.

2. Updates

2A Director Announcements/Board Communications:

Fillmore Pumpers Association Stakeholder Director Update

Director Jackson said the Fillmore Pumpers Association had nothing to report.

Piru Pumpers Association Stakeholder Director Update

Director Fornoff said Piru Pumpers Association Stakeholders had nothing to report.

Environmental Stakeholder Director Update

Director Meneghin reported Friends of the Santa Clara River have not met and are scheduled to meet next week. She also said she will be in contact with stakeholders to hopefully address DWR's issues in the comments regarding the GSPs.

City of Fillmore Member Director Update

Director Mendez was absent.

United Water Conservation District Member Director Update

Director Kimball provided an update on United Water's numbers for record storm water capture, water diverted, and discussed the work currently being performed at spreading basins and Freeman Diversion.

County of Ventura Member Director Update

Chair Long was absent.

2B Executive Director Update

Information Item

The Executive Director reported on the GSP grant, and said he is working with DWR on amendment to grant agreement to clarify monitoring wells project and facilitate grant coverage of additional Agency expenditures. He said DWR has deemed the GSPs as incomplete, requiring additional clarification on groundwater levels in relation to shallow wells, and surface water-groundwater interaction. He said he conducted a phone call with DWR earlier today and said staff and DBS&A will review letter and staff report. He also said he is working on scheduling meetings with DWR staff to ensure their comments are clearly understood and thereafter schedule meetings to review technical issues. He said staff will develop a timeline for the Agency's actions to develop and finalize updated GSPs by July 16, 2024. He finalized his update with the mention of Shawn Kelly, Executive Director for Santa Clara River Conservancy's presentation.

2C Legal Counsel Update

Information Item

Legal Counsel reported he has been working with Executive Director and DBS&A on development of guidelines for well permitting.

2D GSP Consultant Update

Information Item

Tony Morgan from Daniel B Stephens & Associates presented slides and discussed items in progress and pending for DBS&A to complete, and said annual reports are underway and expected to be available by next meeting. He also discussed GSPs deficiencies found by DWR and expected activities with DWR going forward. He ended his discussion with a layout of the framework ahead for the Agency.

3. CONSENT CALENDAR

All matters listed under the Consent Calendar are considered routine by the Board and will be enacted by one motion. There will be no separate discussion of these items unless a Board member pulls an item from the Calendar. Pulled items will be discussed and acted on separately by the Board. Members of the public who want to comment on a Consent Calendar item should do so under Public Comments. (ROLL CALL VOTE REQUIRED)

3A Approval of Minutes

The Board approved the Minutes from the Special Board Meeting of December 14, 2023.

3B Approval of Warrants

The Board approved payment of outstanding vendor invoices:

County of Ventura IT Services	\$ 628.50
Aleshire & Wynder LLP	\$ 1,519.30

Insure Cal	\$ 2,462.42
RAMS	\$ 2,765.00
DBS&A	\$26,648.75

3C Monthly Financial Report

The Board received the monthly financial report for the Fillmore and Piru Basin Groundwater Sustainability Agency.

Director Long joined the meeting virtually requesting she participate under “good cause,” under Bill 2449, as she was traveling for business, and requested a motion to allow her virtual attendance. Director Kimball called for a motion.

Motion to approve, Director Jackson; Second, Director Fornoff. Voice vote: 5 ayes (Fornoff, Jackson, Kimball, Long and Meneghin), none opposed. Motion carries unanimously 5/0/1.

Motion to approve Consent Calendar, Director Jackson; second, Director Fornoff. Roll call vote: 5 ayes (Fornoff, Jackson, Kimball, Long, and Meneghin); none opposed. Motion carries unanimously 5/0/1.

4. INFORMATIONAL ITEMS

4A Santa Clara River Conservancy

Information

The Board received a presentation from Shawn Kelly providing an orientation on the Santa Clara River Conservancy’s mission, goals, projects, and programs.

5. MOTION ITEMS

5A Waiver of Late Fees and Interest for Sespe Agricultural Water

Motion

The Board approved waiving the late fees and interest in the amount of \$1,455.75 for Sespe Agricultural Water.

Motion to approve, Director Jackson; second, Director Fornoff. Roll call vote: 5 ayes (Fornoff, Jackson, Kimball, Long, and Meneghin); none opposed. Motion carries unanimously 5/0/1.

5B Development of Well Permitting Review Process in Compliance with California Executive Orders N-7-22 and N-3-23

Motion

The Board received a presentation from Daniel B. Stephens and Associates, legal counsel, and staff regarding the development of the Agency’s Well Permitting Review Process and provided comments and direction.

The Board, staff and public all made comments and discussed the draft procedure.

6. FUTURE TOPICS FOR BOARD DISCUSSION

No items were mentioned.

7. ADJOURNMENT 6:13pm

Chair Long adjourned the meeting at 6:13 p.m. to the next **Regular Board Meeting** on Thursday, **February 15, 2024**, or call of the Chair.

I certify that the above is a true and correct copy of the minutes of the Special Fillmore and Piru Basins Groundwater Sustainability Agency’s Board of Directors meeting of January 18, 2024.

ATTEST: _____
Kelly Long, Chair, FPBGSA Board of Directors

ATTEST: _____
Eva Ibarra, Clerk of the Board

Check Detail Report
February 2024

ACCOUNT	TRANSACTION ID	DATE	TRANSACTION TYPE	NUM	NAME	DESCRIPTION	CLR	AMOUNT
Bank of the Sierra								
	17422							
Bank of the Sierra	17422	02/08/2024	Bill Payment (Check)	11214	County of Ventura IT Services Department	--	Uncleared	-\$628.50
Bank of the Sierra	17422	02/08/2024	Bill Payment (Check)	11214	County of Ventura IT Services Department	--	--	-\$628.50
	17423							
Bank of the Sierra	17423	02/08/2024	Bill Payment (Check)	11213	Rogers, Anderson, Malody & Scott, LLP	--	Uncleared	-\$2,755.00
Bank of the Sierra	17423	02/08/2024	Bill Payment (Check)	11213	Rogers, Anderson, Malody & Scott, LLP	--	--	-\$2,755.00
	17424							
Bank of the Sierra	17424	02/08/2024	Bill Payment (Check)	11212	United Water Conservation District	--	Uncleared	-\$41,711.84
Bank of the Sierra	17424	02/08/2024	Bill Payment (Check)	11212	United Water Conservation District	--	--	-\$41,711.84
	17425							
Bank of the Sierra	17425	02/08/2024	Bill Payment (Check)	11211	Aleshire & Wynder LLP	--	Uncleared	-\$1,932.30
Bank of the Sierra	17425	02/08/2024	Bill Payment (Check)	11211	Aleshire & Wynder LLP	--	--	-\$1,932.30
	17426							
Bank of the Sierra	17426	02/08/2024	Bill Payment (Check)	11210	Daniel B Stephens & Associates, Inc.	--	Uncleared	-\$12,239.75
Bank of the Sierra	17426	02/08/2024	Bill Payment (Check)	11210	Daniel B Stephens & Associates, Inc.	--	--	-\$12,239.75

Fillmore and Piru Basins, GSA

Budget vs. Actuals: FY_2023_2024 - FY24 P&L

July 2023 - January 2024

	JUL - SEP, 2023		OCT - DEC, 2023		JAN 2024		TOTAL	
	ACTUAL	BUDGET	ACTUAL	BUDGET	ACTUAL	BUDGET	ACTUAL	BUDGET
Income								
40001 Groundwater Extraction Charge	-165.60	0.00	-4,050.48	0.00	1.18	0.00	\$ -4,214.90	\$0.00
41000 Grant Revenue							\$0.00	\$0.00
41001 State Grants		23,750.00		23,750.00		0.00	\$0.00	\$47,500.00
Total 41000 Grant Revenue		23,750.00		23,750.00		0.00	\$0.00	\$47,500.00
47000 Other Revenue							\$0.00	\$0.00
47001 Late Fees	10,968.50	0.00	5,128.81	0.00	-380.01	0.00	\$15,717.30	\$0.00
47012 Returned Check Charges		0.00		0.00		0.00	\$0.00	\$0.00
Total 47000 Other Revenue	10,968.50	0.00	5,128.81	0.00	-380.01	0.00	\$15,717.30	\$0.00
Total Income	\$10,802.90	\$23,750.00	\$1,078.33	\$23,750.00	\$ -378.83	\$0.00	\$11,502.40	\$47,500.00
GROSS PROFIT	\$10,802.90	\$23,750.00	\$1,078.33	\$23,750.00	\$ -378.83	\$0.00	\$11,502.40	\$47,500.00
Expenses								
52200 Professional Services	0.00						\$0.00	\$0.00
52240 Prof Svcs - IT Consulting		446.25	628.50	446.25	628.50	148.75	\$1,257.00	\$1,041.25
52250 Prof Svcs - Groundwtr/GSP Prep							\$0.00	\$0.00
52251 Prof Svcs - UWCD GW Services		9,999.99		9,999.99	3,673.57	3,333.33	\$3,673.57	\$23,333.31
52252 Prof Svcs - GSP Consultant	6,092.50	123,750.00	26,648.75	123,750.00	12,239.75	41,250.00	\$44,981.00	\$288,750.00
Total 52250 Prof Svcs - Groundwtr/GSP Prep	6,092.50	133,749.99	26,648.75	133,749.99	15,913.32	44,583.33	\$48,654.57	\$312,083.31
52270 Prof Svcs - Accounting		6,352.50	7,365.00	6,352.50	17,092.58	2,117.50	\$24,457.58	\$14,822.50
52275 Prof Svcs - Admin/Clerk of Bd		6,562.50	6,562.50	6,562.50	5,184.98	2,187.50	\$5,184.98	\$15,312.50
52280 Prof Svcs - Executive Director		14,472.21	14,472.21	14,472.21	15,786.69	4,824.07	\$15,786.69	\$33,768.49
52290 Prof Svcs - Other		5,250.00	5,250.00	5,250.00	342.12	1,750.00	\$342.12	\$12,250.00
Total 52200 Professional Services	6,092.50	166,833.45	34,642.25	166,833.45	54,948.19	55,611.15	\$95,682.94	\$389,278.05
52500 Legal Fees							\$0.00	\$0.00
52501 Legal Counsel	3,181.23	9,999.99	1,519.30	9,999.99	1,932.30	3,333.33	\$6,632.83	\$23,333.31
Total 52500 Legal Fees	3,181.23	9,999.99	1,519.30	9,999.99	1,932.30	3,333.33	\$6,632.83	\$23,333.31
53000 Office Expenses		500.01		500.01		166.67	\$0.00	\$1,166.69
53010 Public Information		249.99		249.99	152.00	83.33	\$152.00	\$583.31
53020 Office Supplies		249.99		249.99	206.57	83.33	\$206.57	\$583.31
53026 Postage & Mailing		249.99		249.99	734.65	83.33	\$734.65	\$583.31
53040 Membership Dues	135.00		135.00				\$270.00	\$0.00
53060 Computer Software					1,080.00		\$1,080.00	\$0.00
53110 Travel & Training		500.01		500.01	120.08	166.67	\$120.08	\$1,166.69
Total 53000 Office Expenses	135.00	1,749.99	135.00	1,749.99	2,293.30	583.33	\$2,563.30	\$4,083.31
53500 Insurance							\$0.00	\$0.00
53510 Liability Insurance		0.00	2,462.42	2,625.00		0.00	\$2,462.42	\$2,625.00
Total 53500 Insurance		0.00	2,462.42	2,625.00		0.00	\$2,462.42	\$2,625.00
70130 Bank Service Charges		0.00		0.00		0.00	\$0.00	\$0.00
80000 AR Write-Offs - Bad Debt Exp. Purchases			1.47			93.60	\$93.60	\$0.00
Total Expenses	\$9,408.73	\$178,583.43	\$38,760.44	\$181,208.43	\$59,267.39	\$59,527.81	\$107,436.56	\$419,319.67
NET OPERATING INCOME	\$1,394.17	\$ -154,833.43	\$ -37,682.11	\$ -157,458.43	\$ -59,646.22	\$ -59,527.81	\$ -95,934.16	\$ -371,819.67
NET INCOME	\$1,394.17	\$ -154,833.43	\$ -37,682.11	\$ -157,458.43	\$ -59,646.22	\$ -59,527.81	\$ -95,934.16	\$ -371,819.67

Fillmore and Piru Basins, GSA

Balance Sheet

As of January 31, 2024

	TOTAL
ASSETS	
Current Assets	
Bank Accounts	
10000 Bank of the Sierra	1,181,244.35
Total Bank Accounts	\$1,181,244.35
Accounts Receivable	
11000 Accounts Receivable	310,822.02
Total Accounts Receivable	\$310,822.02
Other Current Assets	
12000 Undeposited Funds	0.00
12900 Clearing Account	0.00
Total Other Current Assets	\$0.00
Total Current Assets	\$1,492,066.37
TOTAL ASSETS	\$1,492,066.37
LIABILITIES AND EQUITY	
Liabilities	
Current Liabilities	
Accounts Payable	
20000 Accounts Payable	59,267.39
Total Accounts Payable	\$59,267.39
Other Current Liabilities	
20001 Advance from County of Ventura	0.00
California Department of Tax and Fee Administration Payable	0.00
Out Of Scope Agency Payable	0.00
Total Other Current Liabilities	\$0.00
Total Current Liabilities	\$59,267.39
Total Liabilities	\$59,267.39
Equity	
32000 Retained Earnings	1,528,733.14
Net Income	-95,934.16
Total Equity	\$1,432,798.98
TOTAL LIABILITIES AND EQUITY	\$1,492,066.37



Item No. **4A Motion**

DATE: February 7, 2024 (for February 15, 2024, meeting)

TO: Board of Directors

VIA: Anthony A. Emmert, Executive Director

FROM: United Water Conservation District Finance Staff

SUBJECT: **Waiver of Late Fees and Interest for Ignacio Lomeli**

RECOMMENDED ACTION

The Board will consider waiving late fees and interest in the amount of \$1,327.41 for Ignacio Lomeli.

DISCUSSION

Ignacio Lomeli did not receive the statements and invoices associated with his pumping, due to the Agency having an incorrect mailing address in its customer database. Mr. Lomeli approached the Agency, provided a correct mailing address, paid all open invoices, and formally requested that the Agency waive the late fees and interest in the amount of \$1,327.41.

As Mr. Lomeli is current with the Agency, staff recommends the Board approve his request to waive its late fees and interest.

FISCAL IMPACT

Waiving late fees and interest will result in less revenue received by the Agency in the amount of \$1,327.41. However, late fees and interest are not budgeted by the Agency and waiving the fees will not materially negatively impact the Agency’s financial position.

ATTACHMENTS

None

Proposed Motion:		
Motion to waive late fees and interest totaling \$1,327.41 for Ignacio Lomeli.		
1 st : Director _____	2 nd : Director _____	
Voice/Roll call vote:		
Director Fornoff:	Director Jackson:	Director Kimball:
Director Long:	Director Mendez:	Director Meneghin:



Item No. **4B Motion**

DATE: February 8, 2024 (for February 15, 2024, meeting)

TO: Board of Directors

FROM: Anthony A. Emmert, Executive Director

SUBJECT: **Amendment of Groundwater Sustainability Plans in Response to Findings and Comments from California Department of Water Resources**

RECOMMENDED ACTION

The Board will receive a presentation from staff summarizing the findings, comments and recommendations received from the California Department of Water Resources regarding its Sustainable Groundwater Management Act review of the Agency’s Fillmore Basin Groundwater Sustainability Plan and Piru Basin Groundwater Sustainability Plan and provide comments and direction.

DISCUSSION

On December 18, 2021, the Fillmore and Piru Basins Groundwater Sustainability Agency (Agency) adopted groundwater sustainability plans (GSPs) for the Fillmore subbasin and Piru subbasin, and subsequently submitted them to the California Department of Water Resources (DWR) for review and approval, as per the Sustainable Groundwater Management Act (SGMA). As per SGMA, the DWR has two years to review the GSPs.

On January 18, 2024, the DWR transmitted its findings and recommendations to the Agency (see attachments). DWR determined that the two GSPs were incomplete, pursuant to Section 355.2(e)(2) of the GSP regulations. The two areas the DWR determined to be deficient were: 1) sustainable groundwater management criteria (undesirable results, minimum thresholds, and effects) associated with groundwater levels, and 2) must set preliminary sustainable management criteria for depletions of interconnected surface water associated with groundwater use.

The Agency has 180 days to address the deficiencies and resubmit the GSPs to DWR, no later than July 16, 2024. After receiving the letters, Agency staff has coordinated with DWR SGMA staff regarding the process, schedule, expectations, and resources available for amendment of its GSPs, and plans to meet with DWR staff on an ongoing basis. The first technical meeting will be held the week of February 18, 2024. DWR recommended that the Agency’s Board consider including a subset of its members to participate in select technical meetings, along with its staff and consultants. If desired, this could be accomplished by the establishment of an ad hoc committee. See Agenda Item 4C.

Documents required for submittal will be “red lines” and “clean” revisions of its GSPs. There will be insufficient time to perform groundwater modeling scenarios. Where possible, Agency staff and consultants plan to utilize the technical information and exhibits that the Board considered during the initial development of the GSPs. To meet the July 16, 2024, deadline, the Agency will need to adopt the amended documents during a noticed public hearing at its June 20, 2024, meeting. The Agency will also

need to notify the County of Ventura and City of Fillmore of its intent to amend its GSPs at least 90 days prior to the public hearing. The Agency plans to do so by March 22, 2024.

FISCAL IMPACT

The Agency’s Fiscal Year 2023-2024 Budget includes sufficient funds to amend its GSPs.

ATTACHMENTS

Letter from DWR regarding Fillmore Subbasin Groundwater Sustainability Plan

Letter from DWR regarding Piru Subbasin Groundwater Sustainability Plan

DWR Frequently Asked Questions: Incomplete Determinations & Next Steps

Proposed Motion:

Provide comments and direction to staff regarding amendment of the groundwater sustainability plans.

1st: Director _____

2nd: Director _____

Voice/Roll call vote:

Director Fornoff:

Director Jackson:

Director Kimball:

Director Long:

Director Mendez:

Director Meneghin:



CALIFORNIA DEPARTMENT OF WATER RESOURCES

SUSTAINABLE GROUNDWATER MANAGEMENT OFFICE

715 P Street, 8th Floor | Sacramento, CA 95814 | P.O. Box 942836 | Sacramento, CA 94236-0001

January 18, 2024

Tony Emmert
Fillmore and Piru Basins GSA
PO Box 1110
Fillmore, CA 93016
tonye@unitedwater.org

RE: Santa Clara River Valley – Fillmore Subbasin - 2022 Groundwater Sustainability Plan

Dear Tony Emmert,

The Department of Water Resources (Department) has evaluated the groundwater sustainability plan (GSP or Plan) submitted for the Santa Clara River Valley – Fillmore Subbasin. The Department has determined that the Plan is “incomplete” pursuant to Section 355.2(e)(2) of the GSP Regulations.

The Department based its incomplete determination on recommendations from the Staff Report, included as an enclosure to the attached Statement of Findings, which describes that the Subbasin’s Plan does not satisfy the objectives of the Sustainable Groundwater Management Act (SGMA) nor substantially comply with the GSP Regulations. The Staff Report also provides corrective actions which the Department recommends the Subbasin’s groundwater sustainability agency (GSA) review while determining how to address the deficiencies.

The Subbasin’s GSA has 180 days, the maximum allowed by the GSP Regulations, to address the identified deficiencies. Where addressing the deficiencies requires modification of the Plan, the GSA must adopt those modifications into the GSP and all applicable coordination agreement materials, or otherwise demonstrate that those modifications are part of the Plan before resubmitting it to the Department for evaluation no later than July 16, 2024. The Department understands that much work has occurred to advance sustainable groundwater management since the GSA submitted the GSP in January 2022. To the extent to which those efforts are related or responsive to the Department’s identified deficiencies, we encourage you to document that as part of your Plan resubmittal. The Department prepared a [Frequently Asked Questions](#) document to provide general information and guidance on the process of addressing deficiencies in an “incomplete” determination.

Department staff will work expeditiously to review the revised components of your Plan resubmittal. If the revisions sufficiently address the identified deficiencies, the Department will determine that the Plan is “approved”. In that scenario, Department staff

will identify additional recommended corrective actions that the GSA should address early in implementing the GSP (i.e., no later than the first required periodic evaluation). Among other items, those corrective actions will recommend the GSA provide more detail on their plans and schedules to address data gaps. Those recommendations will call for significantly expanded documentation of the plans and schedules to implement specific projects and management actions. Regardless of those recommended corrective actions, the Department expects the first periodic evaluations, required no later than January 2027 – one-quarter of the way through the 20-year implementation period – to document significant progress toward achieving sustainable groundwater management.

If the Subbasin's GSA cannot address the deficiencies identified in this letter by July 16, 2024, then the Department, after consultation with the State Water Resources Control Board, will determine the GSP to be "inadequate". In that scenario, the State Water Resources Control Board may identify additional deficiencies that the GSAs would need to address in the state intervention processes outlined in SGMA.

Please contact Sustainable Groundwater Management staff by emailing sgmps@water.ca.gov if you have any questions related to the Department's assessment or implementation of your GSP.

Thank You,

Paul Gosselin

Paul Gosselin
Deputy Director
Sustainable Groundwater Management

Attachment:

1. Statement of Findings Regarding the Determination of Incomplete Status of the Santa Clara River Valley – Fillmore Subbasin Groundwater Sustainability Plan

**STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES**

**STATEMENT OF FINDINGS REGARDING THE
DETERMINATION OF INCOMPLETE STATUS OF THE
SANTA CLARA RIVER VALLEY – FILLMORE SUBBASIN
GROUNDWATER SUSTAINABILITY PLAN**

The Department of Water Resources (Department) is required to evaluate whether a submitted groundwater sustainability plan (GSP or Plan) conforms to specific requirements of the Sustainable Groundwater Management Act (SGMA or Act), is likely to achieve the sustainability goal for the Subbasin, and whether the GSP adversely affects the ability of an adjacent basin or subbasin to implement its GSP or impedes achievement of sustainability goals in an adjacent basin or subbasin. (Water Code § 10733.) The Department is directed to issue an assessment of the GSP within two years of its submission. (Water Code § 10733.4.) This Statement of Findings explains the Department's decision regarding the submitted Plan by the Fillmore and Piru Basins Groundwater Sustainability Agency (GSA or Agency) for the Santa Clara River Valley – Fillmore Subbasin (No. 4-004.05).

Department management has reviewed the enclosed Staff Report, which recommends that the identified deficiencies should preclude approval of the GSP. Based on its review of the Staff Report, Department management is satisfied that staff have conducted a thorough evaluation and assessment of the Plan and concurs with, and hereby adopts, staff's recommendation and all the corrective actions provided. The Department thus determines the Plan Incomplete based on the staff assessments and recommendations. In particular, the Department finds:

A. The GSA should modify its sustainable management criteria and must provide a more detailed explanation and justification regarding the selection of the sustainable management criteria for groundwater levels, particularly the undesirable results and minimum thresholds, and the effects of those criteria on the interests of beneficial uses and users of groundwater. The minimum thresholds should indicate a depletion of supply at a given location that may lead to undesirable results. Department staff recommend the GSA consider and address the following:

1. The GSA should revise the GSP to sufficiently and clearly explain the undesirable results that the GSA aims to avoid and what it considers to be a significant and unreasonable level of impact, such as a number or percentage of wells going dry. In support of said explanation, the GSP should clearly discuss and disclose the anticipated impacts on beneficial uses and users of groundwater in the Subbasin.

Statement of Findings

Santa Clara River Valley – Fillmore Subbasin (No. 4-004.05)

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2. The GSA should revise the minimum thresholds and explain how the minimum threshold groundwater levels are consistent with avoiding undesirable results the GSA aims to avoid. If, for example, the GSA seeks to avoid domestic wells going dry, the GSP should explain how the minimum threshold at each representative well will avoid impact to nearby domestic and other production wells. The GSP should also explain how the Agency has determined that basin conditions at minimum threshold water level conditions will avoid undesirable results for other sustainability indicators.
 3. Provide an evaluation of how minimum thresholds may affect the interests of beneficial uses and users of groundwater or land uses and property interests.¹ Identify the number and location of wells that may be negatively affected when minimum thresholds are reached. Compare well infrastructure for all well types in the Subbasin with minimum thresholds at nearby, suitably representative, monitoring sites. Document all assumptions and steps clearly so that it will be understood by readers of the GSP. Include maps of potentially affected well locations, identify the number of potentially affected wells by well type, and provide a supporting discussion of the effects.
- B. The GSA must set preliminary sustainable management criteria for depletions of interconnected surface water associated with groundwater use, as required by the GSP Regulations,² based on best available information and science. The GSA should evaluate and disclose, sufficiently and thoroughly, the potential effects of the Plan's sustainable management criteria for depletions of interconnected surface water on beneficial uses of the interconnected surface water and on groundwater uses and users.

¹ 23 CCR § 354.28 (b)(4).

² 23 CCR §§ 354.26, 354.28, 354.30.

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Based on the above, the GSP submitted by the Agency for the Santa Clara River Valley – Fillmore Subbasin is determined to be incomplete because the GSP does not satisfy the requirements of SGMA, nor does it substantially comply with the GSP Regulations. The corrective actions provided in the Staff Report are intended to address the deficiencies that, at this time, preclude approval. The Agency has up to 180 days to address the deficiencies outlined above and detailed in the Staff Report. Once the Agency resubmits its Plan, the Department will review the revised GSP to evaluate whether the deficiencies were adequately addressed. Should the Agency fail to take sufficient actions to correct the deficiencies identified by the Department in this assessment, the Department shall disapprove the Plan if, after consultation with the State Water Resources Control Board, the Department determines the Plan inadequate pursuant to 23 CCR § 355.2(e)(3)(C).

Signed:



Karla Nemeth, Director
Date: January 18, 2024

Enclosure: Groundwater Sustainability Plan Assessment Staff Report – Santa Clara River Valley – Fillmore Subbasin

State of California
Department of Water Resources
Sustainable Groundwater Management Program
Groundwater Sustainability Plan Assessment
Staff Report

Groundwater Basin Name: Santa Clara River Valley – Fillmore Subbasin (No. 4-004.05)
Submitting Agency: Fillmore and Piru Basins Groundwater Sustainability Agency
Submittal Type: Initial GSP Submission
Submittal Date: January 26, 2022
Recommendation: Incomplete
Date: January 18, 2024

The Sustainable Groundwater Management Act (SGMA)¹ allows for any of the three following planning scenarios: a single groundwater sustainability plan (GSP) developed and implemented by a single groundwater sustainability agency (GSA); a single GSP developed and implemented by multiple GSAs; and multiple GSPs implemented by multiple GSAs and coordinated pursuant to a single coordination agreement.² Here, as presented in this staff report, a single GSP covering the entire basin was adopted and submitted to the Department of Water Resources (Department) for review.³

The Fillmore and Piru Basins Groundwater Sustainability Agency (the GSA) jointly submitted the Fillmore Basin Groundwater Sustainability Plan (GSP or Plan) to the Department for evaluation and assessment as required by SGMA and the GSP Regulations.⁴ The GSP covers the entire Santa Clara River Valley – Fillmore Subbasin (Subbasin) for the implementation of SGMA.

Evaluation and assessment by the Department is based on whether an adopted and submitted GSP, either individually or in coordination with other adopted and submitted GSPs, complies with SGMA and substantially complies with the GSP Regulations. Department staff base their assessment on information submitted as part of an adopted GSP, public comments submitted to the Department, and other materials, data, and reports that are relevant to conducting a thorough assessment. Department staff have evaluated the GSP and have identified deficiencies that staff recommend should preclude its approval.⁵ In addition, consistent with the GSP Regulations, Department staff have

¹ Water Code § 10720 *et seq.*

² Water Code § 10727.

³ Water Code §§ 10727(b)(1), 10733.4; 23 CCR § 355.2.

⁴ 23 CCR § 350 *et seq.*

⁵ 23 CCR §355.2(e)(2).

provided corrective actions⁶ that the GSAs should review while determining how and whether to address the deficiencies. The deficiencies and corrective actions are explained in greater detail in Section 3 of this staff report and are generally related to the need to define sustainable management criteria in the manner required by SGMA and the GSP Regulations.

This assessment includes four sections:

- **Section 1 – Evaluation Criteria**: Describes the legislative requirements and the Department’s evaluation criteria.
- **Section 2 – Required Conditions**: Describes the submission requirements, GSP completeness, and basin coverage required for a GSP to be evaluated by the Department.
- **Section 3 – Plan Evaluation**: Provides a detailed assessment of identified deficiencies in the GSP. Consistent with the GSP Regulations, Department staff have provided corrective actions for the GSA to address the deficiencies.
- **Section 4 – Staff Recommendation**: Provides staff's recommendation regarding the Department’s determination.

⁶ 23 CCR §355.2(e)(2)(B).

1 EVALUATION CRITERIA

The Department evaluates whether a Plan conforms to the statutory requirements of SGMA⁷ and is likely to achieve the basin’s sustainability goal.⁸ To achieve the sustainability goal, the Plan must demonstrate that implementation will lead to sustainable groundwater management, which means the management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results.⁹ Undesirable results are required to be defined quantitatively by the GSAs overlying a basin and occur when significant and unreasonable effects for any of the applicable sustainability indicators are caused by groundwater conditions occurring throughout the basin.¹⁰ The Department is also required to evaluate whether the Plan will adversely affect the ability of an adjacent basin to implement its groundwater sustainability program or achieve its sustainability goal.¹¹

For a Plan to be evaluated by the Department, it must first be determined that it was submitted by the statutory deadline¹² and that it is complete and covers the entire basin.¹³ Additionally, for those GSAs choosing to develop multiple GSPs, the Plan submission must include a coordination agreement.¹⁴ The coordination agreement must explain how the multiple GSPs in the basin have been developed and implemented utilizing the same data and methodologies and that the elements of the multiple GSPs are based upon consistent interpretations of the basin’s setting. If these required conditions are satisfied, the Department evaluates the Plan to determine whether it complies with SGMA and substantially complies with the GSP Regulations.¹⁵ As stated in the GSP Regulations, “[s]ubstantial compliance means that the supporting information is sufficiently detailed and the analyses sufficiently thorough and reasonable, in the judgment of the Department, to evaluate the Plan, and the Department determines that any discrepancy would not materially affect the ability of the Agency to achieve the sustainability goal for the basin, or the ability of the Department to evaluate the likelihood of the Plan to attain that goal.”¹⁶

When evaluating whether the Plan is likely to achieve the sustainability goal for the basin, Department staff review the information provided for sufficiency, credibility, and consistency with scientific and engineering professional standards of practice.¹⁷ The Department’s review considers whether there is a reasonable relationship between the

⁷ Water Code §§ 10727.2, 10727.4, 10727.6.

⁸ Water Code § 10733(a).

⁹ Water Code § 10721(v).

¹⁰ 23 CCR § 354.26.

¹¹ Water Code § 10733(c).

¹² 23 CCR § 355.4(a)(1).

¹³ 23 CCR §§ 355.4(a)(2), 355.4(a)(3).

¹⁴ 23 CCR § 357.4.

¹⁵ 23 CCR § 350 *et seq.*

¹⁶ 23 CCR § 355.4(b).

¹⁷ 23 CCR § 351(h).

information provided by the GSAs and the assumptions and conclusions presented in the Plan, including: whether the interests of the beneficial uses and users of groundwater in the basin have been considered; whether sustainable management criteria and projects and management actions described in the Plan are commensurate with the level of understanding of the basin setting; and whether those projects and management actions are feasible and likely to prevent undesirable results.¹⁸ The Department also considers whether the GSAs have the legal authority and financial resources necessary to implement the Plan.¹⁹

To the extent overdraft is present in a basin, the Department evaluates whether the Plan provides a reasonable assessment of the overdraft and includes reasonable means to mitigate it.²⁰ When applicable, the Department will assess whether coordination agreements have been adopted by all relevant parties and satisfy the requirements of SGMA and the GSP Regulations.²¹ The Department also considers whether the Plan provides reasonable measures and schedules to eliminate identified data gaps.²² Lastly, the Department's review considers the comments submitted on the Plan and evaluates whether the GSAs have adequately responded to the comments that raise credible technical or policy issues with the Plan.²³

The Department is required to evaluate the Plan within two years of its submittal date and issue a written assessment.²⁴ The assessment is required to include a determination of the Plan's status.²⁵ The GSP Regulations provide three options for determining the status of a Plan: approved,²⁶ incomplete,²⁷ or inadequate.²⁸

Even when the Department determines a Plan is approved, indicating that it satisfies the requirements of SGMA and is in substantial compliance with the GSP Regulations, the Department may still recommend corrective actions.²⁹ Recommended corrective actions are intended to facilitate progress in achieving the sustainability goal within the basin and the Department's future evaluations, and to allow the Department to better evaluate whether implementation of the Plan adversely affects adjacent basins. While the issues addressed by the recommended corrective actions in an approved Plan do not, at the time the determination was made, preclude its approval, the Department recommends that the issues be addressed to ensure the Plan's implementation continues to be consistent with SGMA and the Department is able to assess progress in achieving the

¹⁸ 23 CCR §§ 355.4(b)(1), (3), (4) and (5).

¹⁹ 23 CCR § 355.4(b)(9).

²⁰ 23 CCR § 355.4(b)(6).

²¹ 23 CCR § 355.4(b)(8).

²² 23 CCR § 355.4(b)(2).

²³ 23 CCR § 355.4(b)(10).

²⁴ Water Code § 10733.4(d); 23 CCR § 355.2(e).

²⁵ Water Code § 10733.4(d); 23 CCR § 355.2(e).

²⁶ 23 CCR § 355.2(e)(1).

²⁷ 23 CCR § 355.2(e)(2).

²⁸ 23 CCR § 355.2(e)(3).

²⁹ Water Code § 10733.4(d).

basin’s sustainability goal.³⁰ Unless otherwise noted, the Department proposes that recommended corrective actions be addressed by the submission date for the first periodic assessment.³¹

After review of the Plan, Department staff may conclude that the information provided is not sufficiently detailed, or the analyses not sufficiently thorough and reasonable, to evaluate whether it is likely to achieve the sustainability goal for the basin. If the Department determines the deficiencies precluding approval may be capable of being corrected by the GSAs in a timely manner,³² the Department will determine the status of the Plan to be incomplete. A Plan deemed incomplete may be revised and resubmitted to the Department for reevaluation of whether all deficiencies have been addressed and incorporated into the Plan within 180 days after the Department makes its incomplete determination. The Department will review the revised Plan to evaluate whether the identified deficiencies were sufficiently addressed. Depending on the outcome of that evaluation, the Department may determine the resubmitted Plan is approved. Alternatively, the Department may find a formerly deemed incomplete GSP is inadequate if, after consultation with the State Water Resources Control Board, it determines that the GSAs have not taken sufficient actions to correct any identified deficiencies.³³

The staff assessment of the Plan involves the review of information presented by the GSAs, including models and assumptions, and an evaluation of that information based on scientific reasonableness. In conducting its assessment, the Department does not recalculate or reevaluate technical information provided in the Plan or perform its own geologic or engineering analysis of that information. The recommendation to approve a Plan does not signify that Department staff, were they to exercise the professional judgment required to develop a Plan for the basin, would make the same assumptions and interpretations as those contained in the Plan, but simply that Department staff have determined that the assumptions and interpretations relied upon by the submitting GSAs are supported by adequate, credible evidence, and are scientifically reasonable.

Lastly, the Department’s review and assessment of an approved Plan is a continual process. Both SGMA and the GSP Regulations provide the Department with the ongoing authority and duty to review the implementation of the Plan.³⁴ Also, GSAs have an ongoing duty to reassess their GSPs, provide annual reports to the Department, and, when necessary, update or amend their GSPs.³⁵ The passage of time or new information may make what is reasonable and feasible at the time of this review to not be so in the future. The emphasis of the Department’s periodic reviews will be to assess the GSA’s progress toward achieving the basin’s sustainability goal and whether implementation of

³⁰ Water Code § 10733.8.

³¹ 23 CCR § 356.4.

³² 23 CCR § 355.2(e)(2)(B)(i).

³³ 23 CCR § 355.2(e)(3)(C).

³⁴ Water Code § 10733.8; 23 CCR § 355.6.

³⁵ Water Code §§ 10728, 10728.2.

the Plan adversely affects the ability of GSAs in adjacent basins to achieve their sustainability goals.

2 REQUIRED CONDITIONS

A GSP, to be evaluated by the Department, must be submitted within the applicable statutory deadline.³⁶ The GSP must also be complete and must, either on its own or in coordination with other GSPs, cover the entire basin. If a GSP is determined to be incomplete, Department staff may require corrective actions that address minor or potentially significant deficiencies identified in the GSP. The GSAs in a basin, whether developing a single GSP covering the basin or multiple GSPs, must sufficiently address those required corrective actions within the time provided, not to exceed 180 days, for the GSP to be reevaluated by the Department and potentially approved.

2.1 SUBMISSION DEADLINE

SGMA required basins categorized as high- or medium-priority as of January 1, 2017 and to submit a GSP no later than January 31, 2022.³⁷

The GSA submitted the Fillmore Subbasin GSP to the Department on January 26, 2022, in compliance with the statutory deadline.

2.2 COMPLETENESS

GSP Regulations specify that the Department shall evaluate a GSP if that GSP is complete and includes the information required by SGMA and the GSP Regulations.³⁸

The GSA submitted an adopted GSP for the entire Subbasin. Department staff found the Fillmore Subbasin GSP to be complete and include the required information, sufficient to warrant an evaluation by the Department. Therefore, the Department posted the GSP to its website on February 7, 2022.

2.3 BASIN COVERAGE

A GSP, either on its own or in coordination with other GSPs, must cover the entire basin.³⁹ A GSP that intends to cover the entire basin may be presumed to do so if the basin is fully contained within the jurisdictional boundaries of the submitting GSAs.

The GSP intends to manage the entire Fillmore Subbasin and the jurisdictional boundaries of the submitting GSA appear to cover the entire Subbasin.

³⁶ Water Code § 10720.7.

³⁷ Water Code § 10720.7(a)(2).

³⁸ 23 CCR § 355.4(a)(2).

³⁹ Water Code § 10727(b); 23 CCR § 355.4(a)(3).

3 PLAN EVALUATION

As stated in Section 355.4 of the GSP Regulations, a basin “shall be sustainably managed within 20 years of the applicable statutory deadline consistent with the objectives of the Act.” The Department’s assessment is based on a number of related factors including whether the elements of a GSP were developed in the manner required by the GSP Regulations, whether the GSP was developed using appropriate data and methodologies and whether its conclusions are scientifically reasonable, and whether the GSP, through the implementation of clearly defined and technically feasible projects and management actions, is likely to achieve a tenable sustainability goal for the basin.

Department staff have identified deficiencies in the GSP, the most serious of which preclude staff from recommending approval of the GSP at this time. Department staff believe the GSA may be able to correct the identified deficiencies within 180 days. Consistent with the GSP Regulations, Department staff are providing corrective actions related to the deficiencies, detailed below, including the general regulatory background, the specific deficiency identified in the GSP, and the specific actions to address the deficiency.

3.1 DEFICIENCY 1. THE GSP DOES NOT ESTABLISH SUSTAINABLE MANAGEMENT CRITERIA FOR CHRONIC LOWERING OF GROUNDWATER LEVELS IN A MANNER SUBSTANTIALLY COMPLIANT WITH THE GSP REGULATIONS.

3.1.1 Background

It is up to the GSA to define undesirable results and describe the effect of undesirable results on the beneficial uses and users of groundwater.⁴⁰ From this definition, the GSA establishes minimum thresholds, which are quantitative values that represent groundwater conditions at representative monitoring sites that, when exceeded individually or in combination with minimum thresholds at other monitoring sites, may cause the basin to experience undesirable results.⁴¹ Put another way, the minimum thresholds represent conditions that, if not exceeded, should prevent the basin from experiencing the undesirable results identified by the GSA. Minimum thresholds for chronic lowering of groundwater levels are the groundwater elevation indicating a depletion of supply at a given location that may lead to undesirable results.⁴² Quantitative values for minimum thresholds should be supported by information and criteria relied upon to establish and justify the minimum threshold,⁴³ and a quantitative description of

⁴⁰ 23 CCR § 354.26 (b)(3), § 354.28 (b)(4).

⁴¹ 23 CCR § 354.28, DWR Best Management Practices for the Sustainable Management of Groundwater: Sustainable Management Criteria (DRAFT), November 2017.

⁴² 23 CCR § 354.28 (c)(1).

⁴³ 23 CCR § 354.28 (b)(1).

how conditions at minimum thresholds may affect the interests of beneficial uses and users of groundwater.⁴⁴

3.1.2 Deficiency

Department staff believe that the GSP contains flaws that do not sufficiently comply with the GSP Regulations and must be addressed to consider beneficial uses and users in the Subbasin. The GSP's presentation of undesirable results is unspecific and indeterminate regarding the number or depth of dry wells that are considered significant and unreasonable. The GSA's decision to establish minimum thresholds at the lowest possible elevation in each representative monitoring well, the bottom of well perforations, is technically flawed and would render the GSA unable to monitor groundwater levels if the minimum thresholds were exceeded during Plan implementation. The GSP has failed to provide information about how the proposed minimum thresholds indicate a depletion of supply that would lead to undesirable results. The selected minimum thresholds appear arbitrary and not supported by historical or projected groundwater levels. Also, the GSP fails to describe why the minimum thresholds, as proposed, are completely disconnected from the projected future water levels that the GSA anticipates will be experienced in the Subbasin. The GSP's approach is problematic because most of the selected minimum thresholds⁴⁵ are hundreds of feet lower than historical low water levels and deeper than many domestic well depths identified in the GSP,⁴⁶ which means this Plan would allow an unknown number of production wells to go dry with constituting an undesirable result.

3.1.3 Deficiency Details

Based on its review, Department staff conclude the Plan has not defined sustainable management criteria for chronic lowering of groundwater levels in a manner required by SGMA and the GSP Regulations. Generally, the GSP does not provide clear descriptions of what constitutes undesirable results and does not establish its minimum thresholds with consideration of the interests of beneficial uses and users and sufficient supporting information. The lack of this information limits Department staff's ability to evaluate whether the criteria are reasonable or whether the GSA plans to operate the Subbasin to avoid undesirable results.⁴⁷

The GSP provided minimum thresholds that are not related to a depletion of supply and were not developed with consideration of beneficial uses and users. Rather, the GSP states that it selected these minimum thresholds to "maximize the operational flexibility of the basins"⁴⁸ by selecting the bottom of the screened interval of the monitoring well.⁴⁹ Because of this approach, the GSA would not be able to monitor groundwater levels in a

⁴⁴ 23 CCR § 354.28 (b)(4).

⁴⁵ Fillmore GSP, Table 3.5-3, p. 135.

⁴⁶ Fillmore GSP, Figure 2.1-4, p. 168.

⁴⁷ 23 CCR §§ 354.28 (b)(1), 354.28 (b)(2), 354.28 (b)(3), 354.28 (b)(4), 354.28 (c)(1).

⁴⁸ Fillmore GSP, Appendix J, Section 5, p. 1517.

⁴⁹ Fillmore GSP, Section 3.3.1, p. 115; Appendix J, Section 3.3.3, p. 1509.

representative monitoring well when groundwater levels drop below minimum thresholds, which is technically flawed and would limit the GSA’s capability to manage the Subbasin.

GSP Regulations require that GSAs define undesirable results caused by the chronic lowering of groundwater levels by identifying a significant and unreasonable depletion of supply that is present when an undesirable result occurs.⁵⁰ The GSP describes an undesirable result as: “groundwater level declines that result in...: loss of ability to pump groundwater from water wells..., die-off of riparian vegetation... due to groundwater levels declines below the critical water level... attributable to groundwater pumping.”⁵¹ The GSP also restates the undesirable result in Appendix J: “The undesirable results to be avoided for this sustainability indicator have two segments: the loss of the ability to pump groundwater from the existing well network (Table 3-1 and Figure 3-3) and significant and unreasonable GDE vegetation die-off due to implementation of the GSP.”⁵² The GSP states that an undesirable result would occur “when groundwater elevations drop below the bottom of well perforations (i.e., screen) in 25 percent of the representative monitoring sites...”⁵³

Department staff have identified flaws with how the GSA has defined undesirable results. To begin, the Plan’s definition of undesirable results is unspecific and does not specify the number of dry wells that are considered significant and unreasonable,⁵⁴ yet the GSP considers it acceptable to dewater wells that are shallower than 100 feet deep.⁵⁵ Staff conclude the GSP uses undefined qualifying language that renders the meaning of its description of undesirable results indeterminate. In other words, the GSA has not made it clear whether dewatering one well, wells shallower than 100 feet deep, or more wells, including those deeper than 100 feet, are considered significant and unreasonable effects of lowering of groundwater levels in the Subbasin.

Additionally, the Plan defines undesirable results as a function of minimum threshold conditions necessary to reasonably satisfy beneficial uses and users of groundwater, but does not explain how they were determined. This is compounded by the fact that the Plan does not demonstrate how or whether the interests of those beneficial uses and users were considered. As a result, it would not be possible for staff to determine whether it was appropriate to the needs of beneficial uses and users in the Subbasin, as determined by the GSA. The Plan’s quantification of undesirable results as 25 percent or more of the representative monitoring wells in the Subbasin fall below their minimum groundwater elevation threshold levels is unsatisfactory because the Plan does not explain why this threshold would avoid effects the GSA has determined to be significant and unreasonable.

⁵⁰ 23 CCR § 354.26 (a).

⁵¹ Fillmore GSP, Section 3.2.2, p. 111.

⁵² Fillmore GSP, Appendix J, Section 3.3.1, p. 1505.

⁵³ Fillmore GSP, Section 3.2.3.1, p. 112.

⁵⁴ Fillmore GSP, Section 3.2.2, p. 111.

⁵⁵ Fillmore GSP, Section 3.3.1, p. 115.

Department staff conclude the GSA must reevaluate and clearly define and provide its rationale for when undesirable results occur in the Subbasin, based on a thorough consideration of the interests of beneficial uses and users of groundwater, as required by the GSP Regulations ([see Corrective Action 1a](#)).

GSP regulations require GSAs to provide the information and criteria relied upon to establish and justify the minimum thresholds.⁵⁶ The GSP discusses minimum thresholds in Section 3.3.1,⁵⁷ however Department Staff note that the discussion in Section 3.3.1 is focused on a model evaluation of future conditions and does not discuss the criteria used to select the GSP's minimum thresholds. The GSP provides additional discussion of sustainable management criteria in Appendix J, and indicates minimum thresholds were set at the base of the screen in each representative monitoring well,⁵⁸ but does not provide further details about the criteria. Further, the GSP fails to describe why the minimum thresholds, as proposed, are completely disconnected from the projected future water levels that the GSA anticipates will be experienced in the Subbasin. Because of this lack of clear criteria Staff conclude the GSP has not adequately provided the information and criteria used to establish this minimum threshold.⁵⁹ Staff recommend the GSA clearly describe and document each step of its process to develop minimum thresholds, and provide tables, figures, maps, and supporting data as necessary to fully explain all steps used to develop the criteria ([See Corrective Action 1b](#)).

Furthermore, GSP Regulations require GSAs to consider how conditions at minimum thresholds may affect the interests of beneficial uses and users of groundwater.⁶⁰ The GSP evaluated well infrastructure and projected conditions, but did not evaluate well infrastructure at minimum thresholds. The GSP uses a numerical model to project future groundwater conditions and compares those conditions to the Subbasin's well infrastructure, and states that the groundwater model predicts that future low groundwater level conditions will not result in wells going dry.⁶¹ The GSP does not indicate the relationship between projected groundwater levels and minimum thresholds.

The GSP does include a qualifying statement that the GSA considers it acceptable to dewater wells that are shallower than 100 feet deep,⁶² and indicates that wells less than 100 feet deep are most susceptible to dewatering.⁶³ However, the GSP does not provide any estimate of how many wells are shallower than 100 feet and apparently acceptable to dewater. The GSP then sets minimum thresholds⁶⁴ for 9 of the 12 representative monitoring sites over 200 feet deep below ground surface. These values are lower than

⁵⁶ 23 CCR § 354.28 (b)(1).

⁵⁷ Fillmore GSP, Section 3.3.1, pp. 115-116.

⁵⁸ Fillmore GSP, Appendix J, Section 3.3.1.1, p. 1505.

⁵⁹ 23 CCR 354.28 (b)(1).

⁶⁰ 23 CCR § 354.28 (b)(4).

⁶¹ Fillmore GSP, Section 3.2.3.2, p. 112.

⁶² Fillmore GSP, Section 3.3.1, p. 115.

⁶³ Fillmore GSP, Appendix J, Figure 3-9, p. 1535.

⁶⁴ Fillmore GSP, Table 3.5-3, p. 135; Appendix K – Appendix A, pp. 1728-1844.

the historical low water level measurements⁶⁵ in each respective well by 147 to 374 feet. The GSP does not describe how lowering groundwater levels by hundreds of feet may impact beneficial uses and users and staff are concerned that the selected minimum thresholds would allow an unknown number of production wells to go dry because they appear to be deeper than many domestic well depths identified in the GSP⁶⁶. Staff are also concerned that basin conditions at groundwater level minimum thresholds may lead to undesirable results for other sustainability indicators.

Department Staff conclude that the forecast analysis of impacts to beneficial uses and users provided in the GSP based on future conditions is not sufficient because the GSP sets minimum thresholds hundreds of feet below the modeled future conditions. The GSA must directly evaluate the effects on beneficial uses and users in the basin at the minimum threshold conditions. The GSA must identify the number, location, depths, and percentage of all wells that may be impacted at the proposed minimum thresholds and explain how the interests of beneficial uses and users were considered (see [Corrective Action 1c](#)).

3.1.4 Corrective Action 1

The GSA should modify its sustainable management criteria and must provide a more detailed explanation and justification regarding the selection of the sustainable management criteria for groundwater levels, particularly the undesirable results and minimum thresholds, and the effects of those criteria on the interests of beneficial uses and users of groundwater. The minimum thresholds should indicate a depletion of supply at a given location that may lead to undesirable results.⁶⁷ Department staff recommend the GSA consider and address the following:

- a. The GSA should revise the GSP to sufficiently and clearly explain the undesirable results that the GSA aims to avoid. The GSA should sufficiently and clearly explain what it considers to be a significant and unreasonable level of impact, such as a number or percentage of wells going dry. In support of the explanation, the GSP should clearly discuss and disclose the potential effects on uses and users of drinking water wells and all other beneficial uses and users of groundwater in the Subbasin.
- b. The GSA should revise the minimum thresholds and must explain how the minimum threshold groundwater levels are consistent with avoiding undesirable results the GSA aims to avoid. If, for example, the GSA seeks to avoid domestic wells going dry, the GSP should explain how the minimum threshold at each representative well will avoid impact to nearby domestic and other production wells. The GSP should also explain how the Agency has determined that basin

⁶⁵ Fillmore GSP, Appendix K – Appendix A, pp. 1728-1844.

⁶⁶ Fillmore GSP, Figure 2.1-4, p. 168.

⁶⁷ 23 CCR § 354.28 (c)(1).

conditions at minimum threshold water level conditions will avoid undesirable results for other sustainability indicators.

- c. Provide an evaluation of how minimum thresholds may affect the interests of beneficial uses and users of groundwater or land uses and property interests.⁶⁸ Identify the number and location of wells that may be negatively affected when minimum thresholds are reached. Compare well infrastructure for all well types in the Subbasin with minimum thresholds at nearby, suitably representative, monitoring sites. Document all assumptions and steps clearly so that it will be understood by readers of the GSP. Include maps of potentially affected well locations, identify the number of potentially affected wells by well type, and provide a supporting discussion of the effects.

3.2 DEFICIENCY 2. THE GSP DOES NOT SET SUSTAINABLE MANAGEMENT CRITERIA FOR DEPLETIONS OF INTERCONNECTED SURFACE WATER.

3.2.1 Background

SGMA identifies six effects of groundwater conditions occurring throughout the basin that GSAs must evaluate to achieve sustainable groundwater management. The GSP Regulations refer to these effects as sustainability indicators, which are chronic lowering of groundwater levels, reduction of groundwater storage, seawater intrusion, degraded water quality, land subsidence, and depletions of interconnected surface water.⁶⁹ Generally, when any of these effects are “significant and unreasonable,” as defined in SGMA, they are referred to as “undesirable results.”⁷⁰ SGMA requires GSAs to sustainably manage groundwater, which requires GSAs to avoid undesirable results for any sustainability indicator during the planning and implementation horizon.⁷¹ For each sustainability indicator, GSAs must develop sustainable management criteria, describe the process used to develop those criteria, and establish a monitoring network to adequately monitor conditions.⁷² SGMA identifies undesirable results related to depletions of interconnected surface water as those “that have significant and unreasonable adverse impacts on beneficial uses of the surface water.”⁷³

The GSP Regulations state that if a GSA is able to demonstrate that undesirable results related to one or more sustainability indicators are not present and are not likely to occur in the basin, the GSA is not required to develop sustainable management criteria for those indicators.⁷⁴ Absent a conclusive explanation of why a sustainability indicator is

⁶⁸ 23 CCR 354.28 (b)(4).

⁶⁹ 23 CCR § 351(ah).

⁷⁰ Water Code § 10721(x).

⁷¹ Water Code §§ 10721(v), 10721(r).

⁷² 23 CCR §§ 354.22, 354.32.

⁷³ Water Code § 10721(x)(6).

⁷⁴ 23 CCR §§ 354.22, 354.26 (d), 354.28 (e).

inapplicable, the Department assumes all sustainability indicators apply.⁷⁵ Demonstration of non-applicability of sustainability indicators must be supported by best available information and science and should be provided in descriptions throughout the GSP (e.g., information describing basin setting, discussion of the interests of beneficial users and uses of groundwater).⁷⁶

The Department's assessment of a GSP's likelihood to achieve its sustainability goal for its basin is based, in part, on whether a GSP provides sufficiently detailed and reasonable supporting information and analysis for all applicable indicators. The GSP Regulations require the Department to evaluate whether establishment of sustainable management criteria is commensurate with the level of understanding of the basin setting.⁷⁷

3.2.2 Deficiency

The GSA presents conclusive evidence that interconnected surface waters and beneficial uses and users of surface water exist in the Subbasin. However, the GSA chose to not develop sustainable management criteria for this sustainability indicator by claiming that there are no significant and unreasonable effects of depletions of interconnected surface water (i.e., undesirable results are not present and are not likely to occur). Department staff believe that the GSA's determination that undesirable results for depletions of interconnected surface water are not present and not likely to occur is inaccurate, not supported by best available information and science, and lacks consideration of all beneficial uses and users. Thus, the GSA's decision to not establish sustainable management criteria for depletions of interconnected surface water in this Subbasin does not comply with the GSP Regulations, and could potentially adversely impact beneficial uses and users of surface water due to groundwater pumping during Plan implementation.

3.2.3 Deficiency Details

The GSP identifies interconnected surface water being present in the Subbasin and estimates the amount of depletion due to pumping.⁷⁸ The GSP identifies groundwater discharge areas near the Subbasin boundaries along the Santa Clara River and states that "during dry periods, rising groundwater near the [sub]basin boundaries keep reaches of the Santa Clara River flowing".⁷⁹ The GSP acknowledges data gap regarding the "extent and timing of interconnectedness" along Sespe Creek and the central portion of the Santa Clara River.⁸⁰ The GSP also identifies recharge areas where surface water infiltrates to contribute recharge to the groundwater system,⁸¹ and provides a map identifying stream channel recharge areas and agricultural return flow areas that recharge

⁷⁵ DWR Best Management Practices for the Sustainable Management of Groundwater: Sustainable Management Criteria (DRAFT), November 2017.

⁷⁶ 23 CCR §§ 355.4 (b)(1), 355.4 (b)(4).

⁷⁷ 23 CCR § 355.4 (b)(3).

⁷⁸ Fillmore GSP, Section 2.2.2.7, pp. 85-87; Figure 2.2-27, p. 204.

⁷⁹ Fillmore GSP, Section 2.2.1.5.6, p. 65.

⁸⁰ Fillmore GSP, Section 2.2.2.7, p. 86.

⁸¹ Fillmore GSP, Section 2.2.1.5.4, p. 63.

groundwater.⁸² The GSP estimates that more groundwater discharges to surface water in wet periods, and more surface water recharges the basin during dry periods.⁸³ The GSP also describes beneficial uses and users of surface water in the Subbasin, which includes freshwater habitat, migration habitat, wetlands, and habitat for endangered species.⁸⁴ Based on this information, Department staff believe that the GSP provides sufficient evidence that both interconnected surface water and beneficial uses and users of surface water are present in the Subbasin.

Regardless of the GSA's clear identification of the presence of interconnected surface water in the Subbasin, the GSP does not establish sustainable management criteria for depletions of interconnected surface water because "the Agency does not consider depletions of interconnected surface water [causing] a significant and unreasonable effect."⁸⁵ For example, the GSP considered loss of the *O. mykiss* (known as steelhead or rainbow trout)⁸⁶ species of fish's rearing and spawning habitat as an undesirable result, but provides alternative reasons for not managing depletions due to pumping (such as variability of flows in the Subbasin, a lack of instream flow requirements from other regulatory entities, and other factors) and claims that *O. mykiss* only use the Santa Clara River when it is fully connected with surface water flow.⁸⁷ Department Staff note that the reasoning provided (fish will use the river when its surface water flow is fully connected), is an indicator of a beneficial use or user being affected by conditions (i.e., stream depletion due to pumping) in the Subbasin. Staff also note that the GSP lacks sufficient consideration on the beneficial use of surface water of fish migration, and the reasoning regarding the lack of beneficial uses of surface water by *O. mykiss* fish is flawed because it contradicts with best available information and science, including those presented in other parts of the GSP⁸⁸. For example, the GSP's basin setting section acknowledges beneficial users of surface water in the Subbasin which includes Southern California steelhead,⁸⁹ describes the critical habit for Southern California steelhead,⁹⁰ and lists the existing habitat management and special-status species recovery plans in the Fillmore and Piru Subbasins, including the Southern California Steelhead Recovery Plan.⁹¹ Staff further note that the GSA has not explained how it determined that impacts to other beneficial uses and users of surface water were not considered as undesirable results of depletions of interconnected surface water, such as impacts to wetland habitat and impacts to surface water diversions by water rights holders. Department staff conclude that the GSA does not sufficiently demonstrate that significant and unreasonable effects

⁸² Fillmore GSP, Figure 2.2-10, p. 187.

⁸³ Fillmore GSP, Section 2.2.3.3.2, p. 98.

⁸⁴ Fillmore GSP, Section 2.2.1.5.6, pp. 65-66.

⁸⁵ Fillmore GSP, Section 3.2.1, p. 110.

⁸⁶ Fillmore GSP, Appendix D, p. 382.

⁸⁷ Fillmore GSP, Section 3.2.1, p. 110.

⁸⁸ Fillmore GSP, Section 2.2.1.5.6, pp. 65-66; Section 2.2.2.8, pp. 88-89; Appendix D, pp. 322-466.

⁸⁹ Fillmore GSP, Section 2.2.1.5.6, pp. 65-66.

⁹⁰ Fillmore GSP, Table 2.2-7, p. 89; Figure 2.2-31, p. 208.

⁹¹ Fillmore GSP, Section 2.2.2.8, p. 89.

of stream depletion due to pumping on beneficial uses of surface water are not present and are not likely to occur in the Subbasin.

The GSP also reasons that “[u]ndesirable results related to surface water depletions were considered significant, yet not unreasonable, because natural climate variability (i.e., [prolonged] droughts) is a significant cause of depleted surface waters (i.e., dry streams), that are not eliminated with pumping reductions (Appendix J). Climate conditions are considered to have a more significant impact on surface water flows than groundwater pumping.”⁹² However, climate variability does not negate the presence of historical or future impacts of groundwater pumping on surface water depletions, and the impacts of pumping on beneficial uses and users of surface water, such as Southern California steelhead, are generally most severe during dry periods.⁹³ In fact, the basin setting section of the GSP acknowledges historical impacts of pumping by stating that “[t]he diversion of surface water and pumping of groundwater resources of the Santa Clara Valley River Basin since the late 1800s has resulted in streamflow depletion (Hanson et al., 2003)”⁹⁴. Moreover, the analysis and discussions of stream depletion in Appendix J⁹⁵ focuses on flow rates at the rising groundwater areas along the Santa Clara River but neglects potential impacts to beneficial uses and users such as special-status fish and water rights holders in this and downstream subbasins especially during dry periods. Therefore, the GSP has not sufficiently and thoroughly considered all beneficial uses and users of surface water in its evaluation of undesirable results.

Department staff conclude that interconnected surface water and beneficial uses of surface water exist in the Subbasin, and the GSA’s decision to not develop sustainable management criteria for depletions of interconnected surface water is incompliant with GSP regulations.⁹⁶ Therefore, the GSA must establish initial sustainable management criteria for depletions of interconnected surface water as required by GSP Regulations to manage the sustainability indicator (See [Corrective Action 2](#)). Department staff also conclude that the GSA’s determination that undesirable results for depletions of interconnected surface water are not present and are not likely to occur is flawed, not supported by best available information and science, and lacks consideration of all beneficial uses and users of surface water.

Department staff understand that estimating the location, quantity, and timing of stream depletion due to ongoing, subbasin-wide pumping is a complex task and that developing suitable tools may take additional time; however, it is critical for the Department’s ongoing and future evaluations of whether GSP implementation is on track to achieve sustainable groundwater management. The Department plans to provide guidance on methods and approaches to evaluate the rate, timing, and volume of depletions of interconnected

⁹² Fillmore GSP, Section 3.2.2, p. 111.

⁹³ NOAA’s National Marine Fisheries Service comments on the Groundwater Sustainability Plan for the Fillmore Subbasin, April 19, 2022, pp. 2 and 12-13.

⁹⁴ Fillmore GSP, Section 2.2.2.7, p. 86.

⁹⁵ Fillmore GSP, Appendix J, Sections 3.6 - 3.6.2.2, pp. 1513-1515.

⁹⁶ 23 CCR § 354.28 (e).

surface water and support for establishing specific sustainable management criteria in the near future. This guidance is intended to assist GSAs to sustainably manage depletions of interconnected surface water. Department staff recommend that the GSA anticipate updating its sustainable management criteria for interconnected surface water after the guidance is released, as part of its next periodic update.

3.2.4 Corrective Action 2

The GSA must set preliminary sustainable management criteria for depletions of interconnected surface water associated with groundwater use, as required by the GSP Regulations,⁹⁷ based on best available information and science. The GSA should evaluate and disclose, sufficiently and thoroughly, the potential effects of the Plan's sustainable management criteria for depletions of interconnected surface water on beneficial uses of the interconnected surface water and on groundwater uses and users.

4 STAFF RECOMMENDATION

Department staff believe that the deficiencies identified in this assessment should preclude approval of the GSP for the Santa Clara River Valley – Fillmore Subbasin. Department staff recommend that the GSP be determined incomplete.

⁹⁷ 23 CCR §§ 354.26, 354.28, 354.30.



CALIFORNIA DEPARTMENT OF WATER RESOURCES

SUSTAINABLE GROUNDWATER MANAGEMENT OFFICE

715 P Street, 8th Floor | Sacramento, CA 95814 | P.O. Box 942836 | Sacramento, CA 94236-0001

January 18, 2024

Tony Emmert
Fillmore and Piru Basins
PO Box 1110
Fillmore, CA 93016
tonye@unitedwater.org

RE: Santa Clara River Valley – Piru Subbasin - 2022 Groundwater Sustainability Plan

Dear Tony Emmert,

The Department of Water Resources (Department) has evaluated the groundwater sustainability plan (GSP or Plan) submitted for the Santa Clara River Valley – Piru Subbasin. The Department has determined that the Plan is “incomplete” pursuant to Section 355.2(e)(2) of the GSP Regulations.

The Department based its incomplete determination on recommendations from the Staff Report, included as an enclosure to the attached Statement of Findings, which describes that the Subbasin’s Plan does not satisfy the objectives of the Sustainable Groundwater Management Act (SGMA) nor substantially comply with the GSP Regulations. The Staff Report also provides corrective actions which the Department recommends the Subbasin’s groundwater sustainability agency (GSA) review while determining how to address the deficiencies.

The Subbasin’s GSA has 180 days, the maximum allowed by the GSP Regulations, to address the identified deficiencies. Where addressing the deficiencies requires modification of the Plan, the GSA must adopt those modifications into the GSP and all applicable coordination agreement materials, or otherwise demonstrate that those modifications are part of the Plan before resubmitting it to the Department for evaluation no later than July 16, 2024. The Department understands that much work has occurred to advance sustainable groundwater management since the GSA submitted the GSP in January 2022. To the extent to which those efforts are related or responsive to the Department’s identified deficiencies, we encourage you to document that as part of your Plan resubmittal. The Department prepared a [Frequently Asked Questions](#) document to provide general information and guidance on the process of addressing deficiencies in an “incomplete” determination.

Department staff will work expeditiously to review the revised components of your Plan resubmittal. If the revisions sufficiently address the identified deficiencies, the Department will determine that the Plan is “approved”. In that scenario, Department staff will identify additional recommended corrective actions that the GSA should address

early in implementing the GSP (i.e., no later than the first required periodic evaluation). Among other items, those corrective actions will recommend the GSA provide more detail on their plans and schedules to address data gaps. Those recommendations will call for significantly expanded documentation of the plans and schedules to implement specific projects and management actions. Regardless of those recommended corrective actions, the Department expects the first periodic evaluations, required no later than January 2027 – one-quarter of the way through the 20-year implementation period – to document significant progress toward achieving sustainable groundwater management.

If the Subbasin's GSA cannot address the deficiencies identified in this letter by July 16, 2024, then the Department, after consultation with the State Water Resources Control Board, will determine the GSP to be "inadequate". In that scenario, the State Water Resources Control Board may identify additional deficiencies that the GSAs would need to address in the state intervention processes outlined in SGMA.

Please contact Sustainable Groundwater Management staff by emailing sgmps@water.ca.gov if you have any questions related to the Department's assessment or implementation of your GSP.

Thank You,

Paul Gosselin
Paul Gosselin
Deputy Director
Sustainable Groundwater Management

Attachment:

1. Statement of Findings Regarding the Determination of Incomplete Status of the Santa Clara River Valley – Piru Subbasin Groundwater Sustainability Plan

**STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES**

**STATEMENT OF FINDINGS REGARDING THE
DETERMINATION OF INCOMPLETE STATUS OF THE
SANTA CLARA RIVER VALLEY – PIRU SUBBASIN
GROUNDWATER SUSTAINABILITY PLAN**

The Department of Water Resources (Department) is required to evaluate whether a submitted groundwater sustainability plan (GSP or Plan) conforms to specific requirements of the Sustainable Groundwater Management Act (SGMA or Act), is likely to achieve the sustainability goal for the Subbasin, and whether the GSP adversely affects the ability of an adjacent basin or subbasin to implement its GSP or impedes achievement of sustainability goals in an adjacent basin or subbasin. (Water Code § 10733.) The Department is directed to issue an assessment of the GSP within two years of its submission. (Water Code § 10733.4.) This Statement of Findings explains the Department's decision regarding the submitted Plan by the Fillmore and Piru Basins Groundwater Sustainability Agency (GSA or Agency) for the Santa Clara River Valley – Piru Subbasin (No. 4-004.06).

Department management has reviewed the enclosed Staff Report, which recommends that the identified deficiencies should preclude approval of the GSP. Based on its review of the Staff Report, Department management is satisfied that staff have conducted a thorough evaluation and assessment of the Plan and concurs with, and hereby adopts, staff's recommendation and all the corrective actions provided. The Department thus determines the Plan Incomplete based on the staff assessments and recommendations. In particular, the Department finds:

A. The GSA should modify its sustainable management criteria and must provide a more detailed explanation and justification regarding the selection of the sustainable management criteria for groundwater levels, particularly the undesirable results and minimum thresholds, and the effects of those criteria on the interests of beneficial uses and users of groundwater. The minimum thresholds should indicate a depletion of supply at a given location that may lead to undesirable results. Department staff recommend the GSA address the following:

1. The GSA should revise the GSP to sufficiently and clearly explain the undesirable results that the GSA aims to avoid and what it considers to be a significant and unreasonable level of impact, such as a number or percentage of wells going dry. In support of said explanation, the GSP should clearly discuss and disclose the anticipated impacts on beneficial uses and users of groundwater in the Subbasin.

2. The GSA should revise the minimum thresholds and explain how the minimum threshold groundwater levels are consistent with avoiding undesirable results the GSA aims to avoid. If, for example, the GSA seeks to avoid domestic wells going dry, the GSP should explain how the minimum threshold at each representative well will avoid impact to nearby domestic and other production wells. The GSP should also explain how the Agency has determined that basin conditions at minimum threshold water level conditions will avoid undesirable results for other sustainability indicators.
 3. Provide an evaluation of how minimum thresholds may affect the interests of beneficial uses and users of groundwater or land uses and property interests.¹ Identify the number and location of wells that may be negatively affected when minimum thresholds are reached. Compare well infrastructure for all well types in the Subbasin with minimum thresholds at nearby, suitably representative, monitoring sites. Document all assumptions and steps clearly so that it will be understood by readers of the GSP. Include maps of potentially affected well locations, identify the number of potentially affected wells by well type, and provide a supporting discussion of the effects.
- B. The GSA must set preliminary sustainable management criteria for depletions of interconnected surface water associated with groundwater use, as required by the GSP Regulations,² based on best available information and science. The GSA should evaluate and disclose, sufficiently and thoroughly, the potential effects of the Plan's sustainable management criteria for depletions of interconnected surface water on beneficial uses of the interconnected surface water and on groundwater uses and users.

¹ 23 CCR § 354.28 (b)(4).


² 23 CCR §§ 354.26, 354.28, 354.30.

Statement of Findings
Santa Clara River Valley – Piru Subbasin (No. 4-004.06)

January 18, 2024

Based on the above, the GSP submitted by the Agency for the Santa Clara River Valley – Piru Subbasin is determined to be incomplete because the GSP does not satisfy the requirements of SGMA, nor does it substantially comply with the GSP Regulations. The corrective actions provided in the Staff Report are intended to address the deficiencies that, at this time, preclude approval. The Agency has up to 180 days to address the deficiencies outlined above and detailed in the Staff Report. Once the Agency resubmits its Plan, the Department will review the revised GSP to evaluate whether the deficiencies were adequately addressed. Should the Agency fail to take sufficient actions to correct the deficiencies identified by the Department in this assessment, the Department shall disapprove the Plan if, after consultation with the State Water Resources Control Board, the Department determines the Plan inadequate pursuant to 23 CCR § 355.2(e)(3)(C).

Signed:



Karla Nemeth, Director
Date: January 18, 2024

Enclosure: Groundwater Sustainability Plan Assessment Staff Report – Santa Clara River Valley – Piru Subbasin

State of California
Department of Water Resources
Sustainable Groundwater Management Program
Groundwater Sustainability Plan Assessment
Staff Report

Groundwater Basin Name: Santa Clara River Valley – Piru Subbasin (No. 4-004.06)
Submitting Agency: Fillmore and Piru Basins Groundwater Sustainability Agency
Submittal Type: Initial GSP Submission
Submittal Date: January 26, 2022
Recommendation: Incomplete
Date: January 18, 2024

The Sustainable Groundwater Management Act (SGMA)¹ allows for any of the three following planning scenarios: a single groundwater sustainability plan (GSP) developed and implemented by a single groundwater sustainability agency (GSA); a single GSP developed and implemented by multiple GSAs; and multiple GSPs implemented by multiple GSAs and coordinated pursuant to a single coordination agreement.² Here, as presented in this staff report, a single GSP covering the entire basin was adopted and submitted to the Department of Water Resources (Department) for review.³

The Fillmore and Piru Basins Groundwater Sustainability Agency (the GSA) jointly submitted the Piru Basin Groundwater Sustainability Plan (GSP or Plan) to the Department for evaluation and assessment as required by SGMA and the GSP Regulations.⁴ The GSP covers the entire Santa Clara River Valley – Piru Subbasin (Subbasin) for the implementation of SGMA.

Evaluation and assessment by the Department is based on whether an adopted and submitted GSP, either individually or in coordination with other adopted and submitted GSPs, complies with SGMA and substantially complies with the GSP Regulations. Department staff base their assessment on information submitted as part of an adopted GSP, public comments submitted to the Department, and other materials, data, and reports that are relevant to conducting a thorough assessment. Department staff have evaluated the GSP and have identified deficiencies that staff recommend should preclude its approval.⁵ In addition, consistent with the GSP Regulations, Department staff have

¹ Water Code § 10720 *et seq.*

² Water Code § 10727.

³ Water Code §§ 10727(b)(1), 10733.4; 23 CCR § 355.2.

⁴ 23 CCR § 350 *et seq.*

⁵ 23 CCR §355.2(e)(2).

provided corrective actions⁶ that the GSAs should review while determining how and whether to address the deficiencies. The deficiencies and corrective actions are explained in greater detail in Section 3 of this staff report and are generally related to the need to define sustainable management criteria in the manner required by SGMA and the GSP Regulations.

This assessment includes four sections:

- **Section 1 – Evaluation Criteria**: Describes the legislative requirements and the Department’s evaluation criteria.
- **Section 2 – Required Conditions**: Describes the submission requirements, GSP completeness, and basin coverage required for a GSP to be evaluated by the Department.
- **Section 3 – Plan Evaluation**: Provides a detailed assessment of identified deficiencies in the GSP. Consistent with the GSP Regulations, Department staff have provided corrective actions for the GSA to address the deficiencies.
- **Section 4 – Staff Recommendation**: Provides staff's recommendation regarding the Department’s determination.

⁶ 23 CCR §355.2(e)(2)(B).

1 EVALUATION CRITERIA

The Department evaluates whether a Plan conforms to the statutory requirements of SGMA⁷ and is likely to achieve the basin’s sustainability goal.⁸ To achieve the sustainability goal, the Plan must demonstrate that implementation will lead to sustainable groundwater management, which means the management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results.⁹ Undesirable results are required to be defined quantitatively by the GSAs overlying a basin and occur when significant and unreasonable effects for any of the applicable sustainability indicators are caused by groundwater conditions occurring throughout the basin.¹⁰ The Department is also required to evaluate whether the Plan will adversely affect the ability of an adjacent basin to implement its groundwater sustainability program or achieve its sustainability goal.¹¹

For a Plan to be evaluated by the Department, it must first be determined that it was submitted by the statutory deadline¹² and that it is complete and covers the entire basin.¹³ Additionally, for those GSAs choosing to develop multiple GSPs, the Plan submission must include a coordination agreement.¹⁴ The coordination agreement must explain how the multiple GSPs in the basin have been developed and implemented utilizing the same data and methodologies and that the elements of the multiple GSPs are based upon consistent interpretations of the basin’s setting. If these required conditions are satisfied, the Department evaluates the Plan to determine whether it complies with SGMA and substantially complies with the GSP Regulations.¹⁵ As stated in the GSP Regulations, “[s]ubstantial compliance means that the supporting information is sufficiently detailed and the analyses sufficiently thorough and reasonable, in the judgment of the Department, to evaluate the Plan, and the Department determines that any discrepancy would not materially affect the ability of the Agency to achieve the sustainability goal for the basin, or the ability of the Department to evaluate the likelihood of the Plan to attain that goal.”¹⁶

When evaluating whether the Plan is likely to achieve the sustainability goal for the basin, Department staff review the information provided for sufficiency, credibility, and consistency with scientific and engineering professional standards of practice.¹⁷ The Department’s review considers whether there is a reasonable relationship between the

⁷ Water Code §§ 10727.2, 10727.4, 10727.6.

⁸ Water Code § 10733(a).

⁹ Water Code § 10721(v).

¹⁰ 23 CCR § 354.26.

¹¹ Water Code § 10733(c).

¹² 23 CCR § 355.4(a)(1).

¹³ 23 CCR §§ 355.4(a)(2), 355.4(a)(3).

¹⁴ 23 CCR § 357.4.

¹⁵ 23 CCR § 350 *et seq.*

¹⁶ 23 CCR § 355.4(b).

¹⁷ 23 CCR § 351(h).

information provided by the GSAs and the assumptions and conclusions presented in the Plan, including: whether the interests of the beneficial uses and users of groundwater in the basin have been considered; whether sustainable management criteria and projects and management actions described in the Plan are commensurate with the level of understanding of the basin setting; and whether those projects and management actions are feasible and likely to prevent undesirable results.¹⁸ The Department also considers whether the GSAs have the legal authority and financial resources necessary to implement the Plan.¹⁹

To the extent overdraft is present in a basin, the Department evaluates whether the Plan provides a reasonable assessment of the overdraft and includes reasonable means to mitigate it.²⁰ When applicable, the Department will assess whether coordination agreements have been adopted by all relevant parties and satisfy the requirements of SGMA and the GSP Regulations.²¹ The Department also considers whether the Plan provides reasonable measures and schedules to eliminate identified data gaps.²² Lastly, the Department's review considers the comments submitted on the Plan and evaluates whether the GSAs have adequately responded to the comments that raise credible technical or policy issues with the Plan.²³

The Department is required to evaluate the Plan within two years of its submittal date and issue a written assessment.²⁴ The assessment is required to include a determination of the Plan's status.²⁵ The GSP Regulations provide three options for determining the status of a Plan: approved,²⁶ incomplete,²⁷ or inadequate.²⁸

Even when the Department determines a Plan is approved, indicating that it satisfies the requirements of SGMA and is in substantial compliance with the GSP Regulations, the Department may still recommend corrective actions.²⁹ Recommended corrective actions are intended to facilitate progress in achieving the sustainability goal within the basin and the Department's future evaluations, and to allow the Department to better evaluate whether implementation of the Plan adversely affects adjacent basins. While the issues addressed by the recommended corrective actions in an approved Plan do not, at the time the determination was made, preclude its approval, the Department recommends that the issues be addressed to ensure the Plan's implementation continues to be consistent with SGMA and the Department is able to assess progress in achieving the

¹⁸ 23 CCR §§ 355.4(b)(1), (3), (4) and (5).

¹⁹ 23 CCR § 355.4(b)(9).

²⁰ 23 CCR § 355.4(b)(6).

²¹ 23 CCR § 355.4(b)(8).

²² 23 CCR § 355.4(b)(2).

²³ 23 CCR § 355.4(b)(10).

²⁴ Water Code § 10733.4(d); 23 CCR § 355.2(e).

²⁵ Water Code § 10733.4(d); 23 CCR § 355.2(e).

²⁶ 23 CCR § 355.2(e)(1).

²⁷ 23 CCR § 355.2(e)(2).

²⁸ 23 CCR § 355.2(e)(3).

²⁹ Water Code § 10733.4(d).

basin's sustainability goal.³⁰ Unless otherwise noted, the Department proposes that recommended corrective actions be addressed by the submission date for the first periodic assessment.³¹

After review of the Plan, Department staff may conclude that the information provided is not sufficiently detailed, or the analyses not sufficiently thorough and reasonable, to evaluate whether it is likely to achieve the sustainability goal for the basin. If the Department determines the deficiencies precluding approval may be capable of being corrected by the GSAs in a timely manner,³² the Department will determine the status of the Plan to be incomplete. A Plan deemed incomplete may be revised and resubmitted to the Department for reevaluation of whether all deficiencies have been addressed and incorporated into the Plan within 180 days after the Department makes its incomplete determination. The Department will review the revised Plan to evaluate whether the identified deficiencies were sufficiently addressed. Depending on the outcome of that evaluation, the Department may determine the resubmitted Plan is approved. Alternatively, the Department may find a formerly deemed incomplete GSP is inadequate if, after consultation with the State Water Resources Control Board, it determines that the GSAs have not taken sufficient actions to correct any identified deficiencies.³³

The staff assessment of the Plan involves the review of information presented by the GSAs, including models and assumptions, and an evaluation of that information based on scientific reasonableness. In conducting its assessment, the Department does not recalculate or reevaluate technical information provided in the Plan or perform its own geologic or engineering analysis of that information. The recommendation to approve a Plan does not signify that Department staff, were they to exercise the professional judgment required to develop a Plan for the basin, would make the same assumptions and interpretations as those contained in the Plan, but simply that Department staff have determined that the assumptions and interpretations relied upon by the submitting GSAs are supported by adequate, credible evidence, and are scientifically reasonable.

Lastly, the Department's review and assessment of an approved Plan is a continual process. Both SGMA and the GSP Regulations provide the Department with the ongoing authority and duty to review the implementation of the Plan.³⁴ Also, GSAs have an ongoing duty to reassess their GSPs, provide annual reports to the Department, and, when necessary, update or amend their GSPs.³⁵ The passage of time or new information may make what is reasonable and feasible at the time of this review to not be so in the future. The emphasis of the Department's periodic reviews will be to assess the GSA's progress toward achieving the basin's sustainability goal and whether implementation of

³⁰ Water Code § 10733.8.

³¹ 23 CCR § 356.4.

³² 23 CCR § 355.2(e)(2)(B)(i).

³³ 23 CCR § 355.2(e)(3)(C).

³⁴ Water Code § 10733.8; 23 CCR § 355.6.

³⁵ Water Code §§ 10728, 10728.2.

the Plan adversely affects the ability of GSAs in adjacent basins to achieve their sustainability goals.

2 REQUIRED CONDITIONS

A GSP, to be evaluated by the Department, must be submitted within the applicable statutory deadline.³⁶ The GSP must also be complete and must, either on its own or in coordination with other GSPs, cover the entire basin. If a GSP is determined to be incomplete, Department staff may require corrective actions that address minor or potentially significant deficiencies identified in the GSP. The GSAs in a basin, whether developing a single GSP covering the basin or multiple GSPs, must sufficiently address those required corrective actions within the time provided, not to exceed 180 days, for the GSP to be reevaluated by the Department and potentially approved.

2.1 SUBMISSION DEADLINE

SGMA required basins categorized as high- or medium-priority as of January 1, 2017 and to submit a GSP no later than January 31, 2022.³⁷

The GSA submitted the Piru Subbasin GSP to the Department on January 26, 2022, in compliance with the statutory deadline.

2.2 COMPLETENESS

GSP Regulations specify that the Department shall evaluate a GSP if that GSP is complete and includes the information required by SGMA and the GSP Regulations.³⁸

The GSA submitted an adopted GSP for the entire Subbasin. Department staff found the Piru Subbasin GSP to be complete and include the required information, sufficient to warrant an evaluation by the Department. Therefore, the Department posted the GSP to its website on February 7, 2022.

2.3 BASIN COVERAGE

A GSP, either on its own or in coordination with other GSPs, must cover the entire basin.³⁹ A GSP that intends to cover the entire basin may be presumed to do so if the basin is fully contained within the jurisdictional boundaries of the submitting GSAs.

The GSP intends to manage the entire Piru Subbasin and the jurisdictional boundaries of the submitting GSA appear to cover the entire Subbasin.

³⁶ Water Code § 10720.7.

³⁷ Water Code § 10720.7(a)(2).

³⁸ 23 CCR § 355.4(a)(2).

³⁹ Water Code § 10727(b); 23 CCR § 355.4(a)(3).

3 PLAN EVALUATION

As stated in Section 355.4 of the GSP Regulations, a basin “shall be sustainably managed within 20 years of the applicable statutory deadline consistent with the objectives of the Act.” The Department’s assessment is based on a number of related factors including whether the elements of a GSP were developed in the manner required by the GSP Regulations, whether the GSP was developed using appropriate data and methodologies and whether its conclusions are scientifically reasonable, and whether the GSP, through the implementation of clearly defined and technically feasible projects and management actions, is likely to achieve a tenable sustainability goal for the basin.

Department staff have identified deficiencies in the GSP, the most serious of which preclude staff from recommending approval of the GSP at this time. Department staff believe the GSA may be able to correct the identified deficiencies within 180 days. Consistent with the GSP Regulations, Department staff are providing corrective actions related to the deficiencies, detailed below, including the general regulatory background, the specific deficiency identified in the GSP, and the specific actions to address the deficiency.

3.1 DEFICIENCY 1. THE GSP DOES NOT ESTABLISH SUSTAINABLE MANAGEMENT CRITERIA FOR CHRONIC LOWERING OF GROUNDWATER LEVELS IN A MANNER SUBSTANTIALLY COMPLIANT WITH THE GSP REGULATIONS.

3.1.1 Background

It is up to the GSA to define undesirable results and describe the effect of undesirable results on the beneficial uses and users of groundwater.⁴⁰ From this definition, the GSA establishes minimum thresholds, which are quantitative values that represent groundwater conditions at representative monitoring sites that, when exceeded individually or in combination with minimum thresholds at other monitoring sites, may cause the basin to experience undesirable results.⁴¹ Put another way, the minimum thresholds represent conditions that, if not exceeded, should prevent the basin from experiencing the undesirable results identified by the GSA. Minimum thresholds for chronic lowering of groundwater levels are the groundwater elevation indicating a depletion of supply at a given location that may lead to undesirable results.⁴² Quantitative values for minimum thresholds should be supported by information and criteria relied upon to establish and justify the minimum threshold,⁴³ and a quantitative description of

⁴⁰ 23 CCR § 354.26 (b)(3), § 354.28 (b)(4).

⁴¹ 23 CCR § 354.28, DWR Best Management Practices for the Sustainable Management of Groundwater: Sustainable Management Criteria (DRAFT), November 2017.

⁴² 23 CCR § 354.28 (c)(1).

⁴³ 23 CCR § 354.28 (b)(1).

how conditions at minimum thresholds may affect the interests of beneficial uses and users of groundwater.⁴⁴

3.1.2 Deficiency

Department staff believe that the GSP contains flaws that do not sufficiently comply with the GSP Regulations and must be addressed to consider beneficial uses and users in the Subbasin. The GSP's presentation of undesirable results is unspecific and indeterminate regarding the number or depth of dry wells that are considered significant and unreasonable. The GSA's decision to establish minimum thresholds at the lowest possible elevation in each representative monitoring well, the bottom of well perforations, is technically flawed and would render the GSA unable to monitor groundwater levels if the minimum thresholds were exceeded during Plan implementation. The GSP has failed to provide information about how the proposed minimum thresholds indicate a depletion of supply that would lead to undesirable results. The selected minimum thresholds appear arbitrary and not supported by historical or projected groundwater levels. Also, the GSP fails to describe why the minimum thresholds, as proposed, are completely disconnected from the projected future water levels that the GSA anticipates will be experienced in the Subbasin. The GSP's approach is problematic because most of the selected minimum thresholds⁴⁵ are hundreds of feet lower than historical low water levels and deeper than many domestic well depths identified in the GSP,⁴⁶ which means this Plan would allow an unknown number of production wells to go dry with constituting an undesirable result.

3.1.3 Deficiency Details

Based on its review, Department staff conclude the Plan has not defined sustainable management criteria for chronic lowering of groundwater levels in a manner required by SGMA and the GSP Regulations. Generally, the GSP does not provide clear descriptions of what constitutes undesirable results and does not establish its minimum thresholds with consideration of the interests of beneficial uses and users and sufficient supporting information. The lack of this information limits Department staff's ability to evaluate whether the criteria are reasonable or whether the GSA plans to operate the Subbasin to avoid undesirable results.⁴⁷

The GSP provided minimum thresholds that are not related to a depletion of supply and were not developed with consideration of beneficial uses and users. Rather, the GSP states that it selected these minimum thresholds to "maximize the operational flexibility of the basins"⁴⁸ by selecting the bottom of the screened interval of the monitoring well.⁴⁹ Because of this approach, the GSA would not be able to monitor groundwater levels in a

⁴⁴ 23 CCR § 354.28 (b)(4).

⁴⁵ Piru GSP, Table 3.5-3, p. 133.

⁴⁶ Piru GSP, Figure 2.1-4, p. 165.

⁴⁷ 23 CCR §§ 354.28 (b)(1), 354.28 (b)(2), 354.28 (b)(3), 354.28 (b)(4), 354.28 (c)(1).

⁴⁸ Piru GSP, Appendix J, Section 5, p. 1513.

⁴⁹ Piru GSP, Section 3.3.1, p. 113; Appendix J, Section 3.3.3, p. 1505.

representative monitoring well when groundwater levels drop below minimum thresholds, which is technically flawed and would limit the GSA’s capability to manage the Subbasin.

GSP Regulations require that GSAs define undesirable results caused by the chronic lowering of groundwater levels by identifying a significant and unreasonable depletion of supply that is present when an undesirable result occurs.⁵⁰ The GSP describes an undesirable result as: “groundwater level declines that result in...: loss of ability to pump groundwater from water wells..., die-off of riparian vegetation... due to groundwater levels declines below the critical water level... attributable to groundwater pumping.”⁵¹ The GSP also restates the undesirable result in Appendix J: “The undesirable results to be avoided for this sustainability indicator have two segments: the loss of the ability to pump groundwater from the existing well network (Table 3-1 and Figure 3-3) and significant and unreasonable GDE vegetation die-off due to implementation of the GSP.”⁵² The GSP states that an undesirable result would occur “when groundwater elevations drop below the bottom of well perforations (i.e., screen) in 25 percent of the representative monitoring sites...”⁵³

Department staff have identified flaws with how the GSA has defined undesirable results. To begin, the Plan’s definition of undesirable results is unspecific and does not specify the number of dry wells that are considered significant and unreasonable,⁵⁴ yet the GSP considers it acceptable to dewater wells that are shallower than 100 feet deep.⁵⁵ Staff conclude the GSP uses undefined qualifying language that renders the meaning of its description of undesirable results indeterminate. In other words, the GSA has not made it clear whether dewatering one well, wells shallower than 100 feet deep, or more wells, including those deeper than 100 feet, are considered significant and unreasonable effects of lowering of groundwater levels in the Subbasin.

Additionally, the Plan defines undesirable results as a function of minimum threshold conditions necessary to reasonably satisfy beneficial uses and users of groundwater, but does not explain how they were determined. This is compounded by the fact that the Plan does not demonstrate how or whether the interests of those beneficial uses and users were considered. As a result, it would not be possible for staff to determine whether it was appropriate to the needs of beneficial uses and users in the Subbasin, as determined by the GSA. The Plan’s quantification of undesirable results as 25 percent or more of the representative monitoring wells in the Subbasin fall below their minimum groundwater elevation threshold levels is unsatisfactory because the Plan does not explain why this threshold would avoid effects the GSA has determined to be significant and unreasonable.

⁵⁰ 23 CCR § 354.26 (a).

⁵¹ Piru GSP, Section 3.2.2, p. 109.

⁵² Piru GSP, Appendix J, Section 3.3.1, p. 1501.

⁵³ Piru GSP, Section 3.2.3.1, p. 110.

⁵⁴ Piru GSP, Section 3.2.2, p. 109.

⁵⁵ Piru GSP, Section 3.3.1, p. 114.

Department staff conclude the GSA must reevaluate and clearly define and provide its rationale for when undesirable results occur in the Subbasin, based on a thorough consideration of the interests of beneficial uses and users of groundwater, as required by the GSP Regulations ([see Corrective Action 1a](#)).

GSP regulations require GSAs to provide the information and criteria relied upon to establish and justify the minimum thresholds.⁵⁶ The GSP discusses minimum thresholds in Section 3.3.1,⁵⁷ however Department Staff note that the discussion in Section 3.3.1 is focused on a model evaluation of future conditions and does not discuss the criteria used to select the GSP's minimum thresholds. The GSP provides additional discussion of sustainable management criteria in Appendix J, and indicates minimum thresholds were set at the base of the screen in each representative monitoring well,⁵⁸ but does not provide further details about the criteria. Further, the GSP fails to describe why the minimum thresholds, as proposed, are completely disconnected from the projected future water levels that the GSA anticipates will be experienced in the Subbasin. Because of this lack of clear criteria Staff conclude the GSP has not adequately provided the information and criteria used to establish this minimum threshold.⁵⁹ Staff recommend the GSA clearly describe and document each step of its process to develop minimum thresholds, and provide tables, figures, maps, and supporting data as necessary to fully explain all steps used to develop the criteria ([see Corrective Action 1b](#)).

Furthermore, GSP Regulations require GSAs to consider how conditions at minimum thresholds may affect the interests of beneficial uses and users of groundwater.⁶⁰ The GSP evaluated well infrastructure and projected conditions, but did not evaluate well infrastructure at minimum thresholds. The GSP uses a numerical model to project future groundwater conditions and compares those conditions to the Subbasin's well infrastructure, and states that the groundwater model predicts that future low groundwater level conditions will not result in wells going dry.⁶¹ The GSP does not indicate the relationship between projected groundwater levels and minimum thresholds.

The GSP does include a qualifying statement that the GSA considers it acceptable to dewater wells that are shallower than 100 feet deep,⁶² and indicates that wells less than 100 feet deep are most susceptible to dewatering.⁶³ However, the GSP does not provide any estimate of how many wells are shallower than 100 feet and apparently acceptable to dewater. The GSP then sets minimum thresholds⁶⁴ for 6 of the 8 representative monitoring sites over 250 feet deep below ground surface. These values are lower than

⁵⁶ 23 CCR § 354.28 (b)(1).

⁵⁷ Piru GSP, Section 3.3.1, pp. 113-114.

⁵⁸ Piru GSP, Appendix J, Section 3.3.1.1, p. 1501.

⁵⁹ 23 CCR 354.28 (b)(1).

⁶⁰ 23 CCR § 354.28 (b)(4).

⁶¹ Piru GSP, Section 3.2.3.2, p. 110.

⁶² Piru GSP, Section 3.3.1, p. 114.

⁶³ Piru GSP, Appendix J, Figure 3-9, p. 1531.

⁶⁴ Piru GSP, Table 3.5-3, p. 133; Appendix K – Appendix A, pp. 1724-1840.

the historical low water level measurements⁶⁵ in each respective well by 145 to 356 feet. The GSP does not describe how lowering groundwater levels by hundreds of feet may impact beneficial uses and users and staff are concerned that the selected minimum thresholds would allow an unknown number of production wells to go dry because they appear to be deeper than many domestic well depths identified in the GSP⁶⁶. Staff are also concerned that basin conditions at groundwater level minimum thresholds may lead to undesirable results for other sustainability indicators.

Department Staff conclude that the forecast analysis of impacts to beneficial uses and users provided in the GSP based on future conditions is not sufficient because the GSP sets minimum thresholds hundreds of feet below the modeled future conditions. The GSA must directly evaluate the effects on beneficial uses and users in the basin at the minimum threshold conditions. The GSA must identify the number, location, depths, and percentage of all wells that may be impacted at the proposed minimum thresholds and explain how the interests of beneficial uses and users were considered ([see Corrective Action 1c](#)).

3.1.4 Corrective Action 1

The GSA should modify its sustainable management criteria and must provide a more detailed explanation and justification regarding the selection of the sustainable management criteria for groundwater levels, particularly the undesirable results and minimum thresholds, and the effects of those criteria on the interests of beneficial uses and users of groundwater. The minimum thresholds should indicate a depletion of supply at a given location that may lead to undesirable results.⁶⁷ Department staff recommend the GSA consider and address the following:

- a. The GSA should revise the GSP to sufficiently and clearly explain the undesirable results that the GSA aims to avoid. The GSA should sufficiently and clearly explain what it considers to be a significant and unreasonable level of impact, such as a number or percentage of wells going dry. In support of the explanation, the GSP should clearly discuss and disclose the potential effects on uses and users of drinking water wells and all other beneficial uses and users of groundwater in the Subbasin.
- b. The GSA should revise the minimum thresholds and must explain how the minimum threshold groundwater levels are consistent with avoiding undesirable results the GSA aims to avoid. If, for example, the GSA seeks to avoid domestic wells going dry, the GSP should explain how the minimum threshold at each representative well will avoid impact to nearby domestic and other production wells. The GSP should also explain how the Agency has determined that basin

⁶⁵ Piru GSP, Appendix K – Appendix A, pp. 1724-1840.

⁶⁶ Piru GSP, Figure 2.1-4, p. 165.

⁶⁷ 23 CCR § 354.28 (c)(1).

conditions at minimum threshold water level conditions will avoid undesirable results for other sustainability indicators.

- c. Provide an evaluation of how minimum thresholds may affect the interests of beneficial uses and users of groundwater or land uses and property interests.⁶⁸ Identify the number and location of wells that may be negatively affected when minimum thresholds are reached. Compare well infrastructure for all well types in the Subbasin with minimum thresholds at nearby, suitably representative, monitoring sites. Document all assumptions and steps clearly so that it will be understood by readers of the GSP. Include maps of potentially affected well locations, identify the number of potentially affected wells by well type, and provide a supporting discussion of the effects.

3.2 DEFICIENCY 2. THE GSP DOES NOT SET SUSTAINABLE MANAGEMENT CRITERIA FOR DEPLETIONS OF INTERCONNECTED SURFACE WATER.

3.2.1 Background

SGMA identifies six effects of groundwater conditions occurring throughout the basin that GSAs must evaluate to achieve sustainable groundwater management. The GSP Regulations refer to these effects as sustainability indicators, which are chronic lowering of groundwater levels, reduction of groundwater storage, seawater intrusion, degraded water quality, land subsidence, and depletions of interconnected surface water.⁶⁹ Generally, when any of these effects are “significant and unreasonable,” as defined in SGMA, they are referred to as “undesirable results.”⁷⁰ SGMA requires GSAs to sustainably manage groundwater, which requires GSAs to avoid undesirable results for any sustainability indicator during the planning and implementation horizon.⁷¹ For each sustainability indicator, GSAs must develop sustainable management criteria, describe the process used to develop those criteria, and establish a monitoring network to adequately monitor conditions.⁷² SGMA identifies undesirable results related to depletions of interconnected surface water as those “that have significant and unreasonable adverse impacts on beneficial uses of the surface water.”⁷³

The GSP Regulations state that if a GSA is able to demonstrate that undesirable results related to one or more sustainability indicators are not present and are not likely to occur in the basin, the GSA is not required to develop sustainable management criteria for those indicators.⁷⁴ Absent a conclusive explanation of why a sustainability indicator is

⁶⁸ 23 CCR 354.28 (b)(4).

⁶⁹ 23 CCR § 351(ah).

⁷⁰ Water Code § 10721(x).

⁷¹ Water Code §§ 10721(v), 10721(r).

⁷² 23 CCR §§ 354.22, 354.32.

⁷³ Water Code § 10721(x)(6).

⁷⁴ 23 CCR §§ 354.22, 354.26 (d), 354.28 (e).

inapplicable, the Department assumes all sustainability indicators apply.⁷⁵ Demonstration of non-applicability of sustainability indicators must be supported by best available information and science and should be provided in descriptions throughout the GSP (e.g., information describing basin setting, discussion of the interests of beneficial users and uses of groundwater).⁷⁶

The Department's assessment of a GSP's likelihood to achieve its sustainability goal for its basin is based, in part, on whether a GSP provides sufficiently detailed and reasonable supporting information and analysis for all applicable indicators. The GSP Regulations require the Department to evaluate whether establishment of sustainable management criteria is commensurate with the level of understanding of the basin setting.⁷⁷

3.2.2 Deficiency

The GSA presents conclusive evidence that interconnected surface waters and beneficial uses and users of surface water exist in the Subbasin. However, the GSA chose to not develop sustainable management criteria for this sustainability indicator by claiming that there are no significant and unreasonable effects of depletions of interconnected surface water (i.e., undesirable results are not present and are not likely to occur). Department staff believe that the GSA's determination that undesirable results for depletions of interconnected surface water are not present and not likely to occur is inaccurate, not supported by best available information and science, and lacks consideration of all beneficial uses and users. Thus, the GSA's decision to not establish sustainable management criteria for depletions of interconnected surface water in this Subbasin does not comply with the GSP Regulations, and could potentially adversely impact beneficial uses and users of surface water due to groundwater pumping during Plan implementation.

3.2.3 Deficiency Details

The GSP identifies interconnected surface water being present in the Subbasin and estimates the amount of depletion due to pumping.⁷⁸ The GSP identifies a groundwater discharge area near the western Subbasin boundary along the Santa Clara River and states that "during most climate conditions, rising groundwater near the western [sub]basin boundary keeps this reach of the Santa Clara River flowing".⁷⁹ The GSP acknowledges data gap regarding the "extent and timing of interconnectedness" along Piru Creek and central and eastern portions of the Santa Clara River.⁸⁰ The GSP also identifies recharge areas where surface water infiltrates to contribute recharge to the groundwater system,⁸¹ and provides a map identifying stream channel recharge areas

⁷⁵ DWR Best Management Practices for the Sustainable Management of Groundwater: Sustainable Management Criteria (DRAFT), November 2017.

⁷⁶ 23 CCR §§ 355.4 (b)(1), 355.4 (b)(4).

⁷⁷ 23 CCR § 355.4 (b)(3).

⁷⁸ Piru GSP, Section 2.2.2.7, pp. 81-83; Figure 2.2-26, p. 200.

⁷⁹ Piru GSP, Section 2.2.1.5.6, p. 62.

⁸⁰ Piru GSP, Section 2.2.2.7, p. 83.

⁸¹ Piru GSP, Section 2.2.1.5.4, pp. 60-61.

and agricultural return flow areas that recharge groundwater.⁸² The GSP estimates that more surface water recharges groundwater than groundwater discharges to the surface in the Subbasin.⁸³ The GSP also describes beneficial uses and users of surface water in the Subbasin, which includes freshwater habitat, migration habitat, wetlands, and habitat for endangered species.⁸⁴ Based on this information, Department staff believe that the GSP provides sufficient evidence that both interconnected surface water and beneficial uses and users of surface water are present in the Subbasin.

Regardless of the GSA's clear identification of the presence of interconnected surface water in the Subbasin, the GSP does not establish sustainable management criteria for depletions of interconnected surface water because "the Agency does not consider depletions of interconnected surface water [causing] a significant and unreasonable effect."⁸⁵ For example, the GSP considered loss of the *O. mykiss* (known as steelhead or rainbow trout)⁸⁶ species of fish's rearing and spawning habitat as an undesirable result, but provides alternative reasons for not managing depletions due to pumping (such as variability of flows in the Subbasin, a lack of instream flow requirements from other regulatory entities, and other factors) and claims that *O. mykiss* only use the Santa Clara River when it is fully connected with surface water flow.⁸⁷ Department Staff note that the reasoning provided (fish will use the river when its surface water flow is fully connected), is an indicator of a beneficial use or user being affected by conditions (i.e., stream depletion due to pumping) in the Subbasin. Staff also note that the GSP lacks sufficient consideration on the beneficial use of surface water of fish migration, and the reasoning regarding the lack of beneficial uses of surface water by *O. mykiss* fish is flawed because it contradicts with best available information and science, including those presented in other parts of the GSP⁸⁸. For example, the GSP's basin setting section acknowledges beneficial users of surface water in the Subbasin which includes Southern California steelhead,⁸⁹ describes the critical habit for Southern California steelhead,⁹⁰ and lists the existing habitat management and special-status species recovery plans in the Fillmore and Piru Subbasins, including the Southern California Steelhead Recovery Plan.⁹¹ Staff further note that the GSA has not explained how it determined that impacts to other beneficial uses and users of surface water were not considered as undesirable results of depletions of interconnected surface water, such as impacts to wetland habitat and impacts to surface water diversions by water rights holders. Department staff conclude that the GSA does not sufficiently demonstrate that significant and unreasonable effects

⁸² Piru GSP, Figure 2.2-9, p. 183.

⁸³ Piru GSP, Section 2.2.3.3.2, p. 95.

⁸⁴ Piru GSP, Section 2.2.1.5.6, pp. 62-63.

⁸⁵ Piru GSP, Section 3.2.1, p. 108.

⁸⁶ Piru GSP, Appendix D, p. 378.

⁸⁷ Piru GSP, Section 3.2.1, p. 108.

⁸⁸ Piru GSP, Section 2.2.1.5.6, pp. 62-63; Section 2.2.2.8, pp. 85-86; Appendix D, pp. 318-462.

⁸⁹ Piru GSP, Section 2.2.1.5.6, pp. 62-63.

⁹⁰ Piru GSP, Table 2.2-7, p. 85; Figure 2.2-30, p. 204.

⁹¹ Piru GSP, Section 2.2.2.8, p. 86.

of stream depletion due to pumping on beneficial uses of surface water are not present and are not likely to occur in the Subbasin.

The GSP also reasons that “[u]ndesirable results related to surface water depletions were considered significant, yet not unreasonable, because natural climate variability (i.e., [prolonged] droughts) is a significant cause of depleted surface waters (i.e., dry streams), that are not eliminated with pumping reductions (Appendix J). Climate conditions are considered to have a more significant impact on surface water flows than groundwater pumping.”⁹² However, climate variability does not negate the presence of historical or future impacts of groundwater pumping on surface water depletions, and the impacts of pumping on beneficial uses and users of surface water, such as Southern California steelhead, are generally most severe during dry periods.⁹³ In fact, the basin setting section of the GSP acknowledges historical impacts of pumping by stating that “[t]he diversion of surface water and pumping of groundwater resources of the Santa Clara Valley River Basin since the late 1800s has resulted in streamflow depletion (Hanson et al., 2003)”.⁹⁴ Moreover, the analysis and discussions of stream depletion in Appendix J⁹⁵ focuses on flow rates at the rising groundwater areas along the Santa Clara River but neglects potential impacts to beneficial uses and users such as special-status fish and water rights holders in this and downstream subbasins especially during dry periods. Therefore, the GSP has not sufficiently and thoroughly considered all beneficial uses and users of surface water in its evaluation of undesirable results.

Department staff conclude that interconnected surface water and beneficial uses of surface water exist in the Subbasin, and the GSA’s decision to not develop sustainable management criteria for depletions of interconnected surface water is incompliant with GSP regulations.⁹⁶ Therefore, the GSA must establish initial sustainable management criteria for depletions of interconnected surface water as required by GSP Regulations to manage the sustainability indicator ([see Corrective Action 2](#)). Department staff also conclude that the GSA’s determination that undesirable results for depletions of interconnected surface water are not present and are not likely to occur is flawed, not supported by best available information and science, and lacks consideration of all beneficial uses and users of surface water.

Department staff understand that estimating the location, quantity, and timing of stream depletion due to ongoing, subbasin-wide pumping is a complex task and that developing suitable tools may take additional time; however, it is critical for the Department’s ongoing and future evaluations of whether GSP implementation is on track to achieve sustainable groundwater management. The Department plans to provide guidance on methods and approaches to evaluate the rate, timing, and volume of depletions of interconnected

⁹² Piru GSP, Section 3.2.2, p. 109.

⁹³ NOAA’s National Marine Fisheries Service comments on the Groundwater Sustainability Plan for the Piru Subbasin, April 19, 2022, pp. 2 and 12-13.

⁹⁴ Piru GSP, Section 2.2.2.7, p. 82.

⁹⁵ Piru GSP, Appendix J, Sections 3.6 - 3.6.2.2, pp. 1509-1511.

⁹⁶ 23 CCR § 354.28 (e).

surface water and support for establishing specific sustainable management criteria in the near future. This guidance is intended to assist GSAs to sustainably manage depletions of interconnected surface water. Department staff recommend that the GSA anticipate updating its sustainable management criteria for interconnected surface water after the guidance is released, as part of its next periodic update.

3.2.4 Corrective Action 2

The GSA must set preliminary sustainable management criteria for depletions of interconnected surface water associated with groundwater use, as required by the GSP Regulations,⁹⁷ based on best available information and science. The GSA should evaluate and disclose, sufficiently and thoroughly, the potential effects of the Plan's sustainable management criteria for depletions of interconnected surface water on beneficial uses of the interconnected surface water and on groundwater uses and users.

4 STAFF RECOMMENDATION

Department staff believe that the deficiencies identified in this assessment should preclude approval of the GSP for the Santa Clara River Valley – Piru Subbasin. Department staff recommend that the GSP be determined incomplete.

⁹⁷ 23 CCR §§ 354.26, 354.28, 354.30.



CALIFORNIA DEPARTMENT OF WATER RESOURCES SUSTAINABLE GROUNDWATER MANAGEMENT OFFICE

Frequently Asked Questions: Incomplete Determinations & Next Steps

Purpose

The purpose of this document is to answer questions about groundwater sustainability plan (GSP) assessments and help guide groundwater sustainability agencies (GSAs) through the process following the issuance of an incomplete GSP determination.

Intended Audience

The intended audience of this document are GSAs in groundwater basins who received an incomplete determination for their GSPs.

1. What does an incomplete determination mean?

An incomplete determination means the deficiencies identified in a GSP were significant enough to preclude its approval. Once the incomplete determination is released, the GSAs have up to 180 days to address the deficiencies. Should the deficiencies be sufficiently corrected and the Department of Water Resources (DWR) determines the GSP approved, there may be additional recommended corrective actions to be addressed in the GSP's next periodic update.

2. Can a meeting be requested to clarify and discuss the incomplete determination?

Meetings are conducted at the request of GSAs and should follow a GSA-prepared agenda to assure that DWR staff are focused on addressing the GSA's top priorities. For those basins that chose to submit multiple GSPs covering the basin, the basin's Point of Contact should initiate meetings with DWR staff.

3. Who should the GSAs contact to set up meetings with DWR?

Each basin has a DWR Point of Contact who will assist in setting up meetings. You can find your basin's Point of Contact here: [Assistance and Engagement \(ca.gov\)](https://www.water.ca.gov/assistance-and-engagement). Please email your Point of Contact to set up a meeting with DWR staff.

4. How many meetings can a GSA request?

One or two meetings may be conducted with DWR staff to discuss the GSA's understanding of the deficiencies. These meetings are intended to allow the basin's GSAs to develop a focused scope of work to correct the deficiencies within 180 days. Following these initial meetings, GSAs may schedule one or two check-in meetings with DWR staff

Frequently Asked Questions: Incomplete Determinations & Next Steps

before submitting revised materials. These meetings should focus on progress and methodologies to address deficiencies and presentation of specific local challenges.

5. Will DWR let the GSAs know if their actions to modify the GSP will be sufficient?

Similar to the preparation of the submitted GSP, DWR staff will not provide a preliminary evaluation of written or revised documents intended to modify a GSP. However, DWR staff can discuss general approaches to address those deficiencies and provide feedback on the methodology used, and data relied upon, to support improved basinwide analyses.

6. How can a GSA correct the deficiencies identified in a GSP that has been determined incomplete by DWR?

The incomplete determination contains the deficiencies that DWR decided were significant enough to preclude its approval. The GSAs must address the deficiencies in a coordinated manner, consider the corrective actions, and make it clear that the corrections are part of the adopted GSP and will be incorporated into its implementation. GSAs must work locally to address the deficiencies openly and transparently. Incorporation of public input and participation is encouraged.

7. What materials does the GSA need to resubmit for DWR to review and reevaluate?

All documents provided to DWR must be uploaded to the SGMA Portal as part of the resubmission package within 180 days of the GSP's incomplete determination. The documents include, at minimum, the following:

- DWR requests both a clean version and a redline strikeout version of the corrected GSP be provided to help expedite its review of the changes and updates.
- The GSP Elements Guide should be updated and included to help DWR staff locate the changes addressing the deficiencies.
- The revised and resubmitted information should clearly state that the modifications are part of the adopted GSP and will be implemented accordingly.
- If the amended GSP has been readopted, the information supporting the readoption must also be uploaded to the SGMA Portal.
- If a coordination agreement is part of the basin's GSP and any information in that agreement has been modified, then the new coordination agreement, signed by all GSAs in the basin, must be uploaded to the SGMA Portal.

8. What is the timeline and method for submitting a corrected GSP that was initially issued an incomplete determination?

Following the release of a GSP's incomplete determination, the GSAs will have up to 180 days to submit the required information that addresses the identified deficiencies. GSAs must submit corrected GSPs to DWR on the SGMA Portal.

Frequently Asked Questions: Incomplete Determinations & Next Steps

9. How should the GSAs adopt a corrected GSP?

The GSA's legal counsel should consider if readoption of the GSP is necessary under the authorities granted to the GSA during the initial GSP development. If a GSP must be readopted, the GSA may do so following a public hearing held at least 90 days after providing notice to cities and counties within the GSP area (see California Water Code §10728.4). This notification can be made very early in the process in anticipation that the GSP's revisions will be adopted within the 180-day period allowed to address the GSP's deficiencies.

10. After submittal of a corrected GSP, what is the timeline for DWR to review the GSP's adequacy?

There is no specific statutory timeline for DWR to complete its review of responses to an incomplete determination. However, once the GSA submits its corrected GSP, DWR staff will work expeditiously to review the corrected GSP and determine if the GSP is either approved or inadequate. DWR will host a public comment period on the resubmitted GSP for consideration in its reevaluation and reassessment.

11. What happens if a GSA cannot correct deficiencies within 180 days?

If a GSA does not submit a corrected GSP within 180 days, or DWR determines that the corrected GSP does not sufficiently address the previously defined deficiencies, DWR will enter into consultation with the State Water Resources Control Board prior to determining a GSP inadequate. The State Water Resources Control Board can step in using a process called State intervention, which is described in detail under SGMA Chapter 11 (California Water Code §10735 *et seq.*). For additional questions on State Intervention, please contact the State Water Resources Control Board at: SGMA@waterboards.ca.gov.



Item No. **4C Motion**

DATE: February 9, 2024 (for February 15, 2024, meeting)

TO: Board of Directors

FROM: Anthony A. Emmert, Executive Director

SUBJECT: **Formation of Ad Hoc Committee for Amendment of Groundwater Sustainability Plans**

RECOMMENDED ACTION

The Board will consider forming an Ad Hoc Committee for Amendment of Groundwater Sustainability Plans.

DISCUSSION

The California Department of Water Resources (DWR) has found that including representatives of a groundwater sustainability agency’s (GSA) board of directors in technical meetings has been helpful in the process of expeditiously amending groundwater sustainability plans (GSPs) that it has determined to be incomplete. Staff anticipates holding several daytime technical meetings with DWR over the next two to three months to develop potential amendments to the Agency’s GSPs. If the Board would like to delegate some of its members to participate in these technical meetings, the appropriate mechanism to do so would be to appoint an ad hoc committee.

FISCAL IMPACT

None

ATTACHMENTS

None

Proposed Motion:		
Motion to appoint up to three of its directors to serve on an Ad Hoc Committee for Amendment of its Groundwater Sustainability Plans.		
1 st : Director _____	2 nd : Director _____	
Voice/Roll call vote:		
Director Fornoff:	Director Jackson:	Director Kimball:
Director Long:	Director Mendez:	Director Meneghin:



Item No. **4D Motion**

DATE: **February 7, 2024 (for February 15, 2024 meeting)**

TO: **Board of Directors**

FROM: **Anthony Emmert, Executive Director**

SUBJECT: **Annual Reports to Department of Water Resources**

RECCOMENDATION:

The Board will receive a presentation from Daniel B. Stephens & Associates summarizing the Water Year 2023 Annual Reports to the California Department of Water Resources for the Fillmore Basin and Piru Basin and provide comments and direction.

BACKGROUND

The Sustainable Groundwater Management Act (SGMA) requires that groundwater sustainability agencies such as the Fillmore and Piru Basins Groundwater Sustainability Agency (Agency) produce and submit annual reports for each groundwater basin to the California Department of Water Resources (DWR) by April 1 of each year. SGMA also requires that groundwater sustainability agencies update and keep current their public databases of groundwater information. The Agency’s groundwater sustainability consultant Daniel B. Stephens and Associates (DBS&A) has prepared annual reports for both the Fillmore basin and the Piru basin that conform to the requirements of SGMA and has updated the Agency’s database of groundwater information. DBS&A will provide the Board with an overview of the two reports. Prior to April 1, 2024, the Agency will upload the reports to the DWR SGMA portal.

FISCAL IMPACT

None.

ATTACHMENTS Fillmore Annual Report
 Piru Annual Report

<p>Proposed Motion:</p> <p style="text-align: center;">Provide comments and direction to staff and consultants on the Annual Reports to the Department of Water Resources.</p>			
1 st : Director _____	2 nd : Director _____		
Voice/Roll call vote:	Director Fornoff:	Director Jackson:	Director Kimball:
	Director Long:	Director Mendez:	Director Meneghin:

Fillmore Groundwater Subbasin Annual Report Water Year 2023

Submitted to



California Department of
Water Resources

Submitted by



Prepared by



3916 State Street, Garden Suite

Santa Barbara, CA 93105

www.dbstephens.com

Project# DB23.1279.00

April 1, 2024

Certification

This report was prepared in accordance with generally accepted professional hydrogeologic principles and practices. This report makes no other warranties, either expressed or implied as to the professional advice or data included in it. This report has not been prepared for use by parties or projects other than those named or described herein. It may not contain sufficient information for other parties or purposes.

DANIEL B. STEPHENS & ASSOCIATES, INC.

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Date signed:

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Acronyms and Abbreviations

<u>Acronym</u>	<u>Definition</u>
AF	acre-feet
AFY	acre-feet per year
Ag	agriculture
amsl	above mean sea level
Basin	Fillmore subbasin of the Santa Clara River Valley basin
CCR	California Code of Regulations
CIMIS	California Irrigation Management Information System
DBS&A	Daniel B. Stephens & Associates, Inc.
DWR	[CA] Department of Water Resources
FPBGSA	Fillmore and Piru Basins Groundwater Sustainability Agency
FT	feet
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
MO	Measureable Objective
MT	Minimum Threshold
RMP	Representative Monitoring Point
SGMA	Sustainable Groundwater Management Act
SMC	Sustainable Management Criteria
SWRCB	State Water Resources Control Board
United	United Water Conservation District
WLE	water level elevation
WY	water year

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Executive Summary

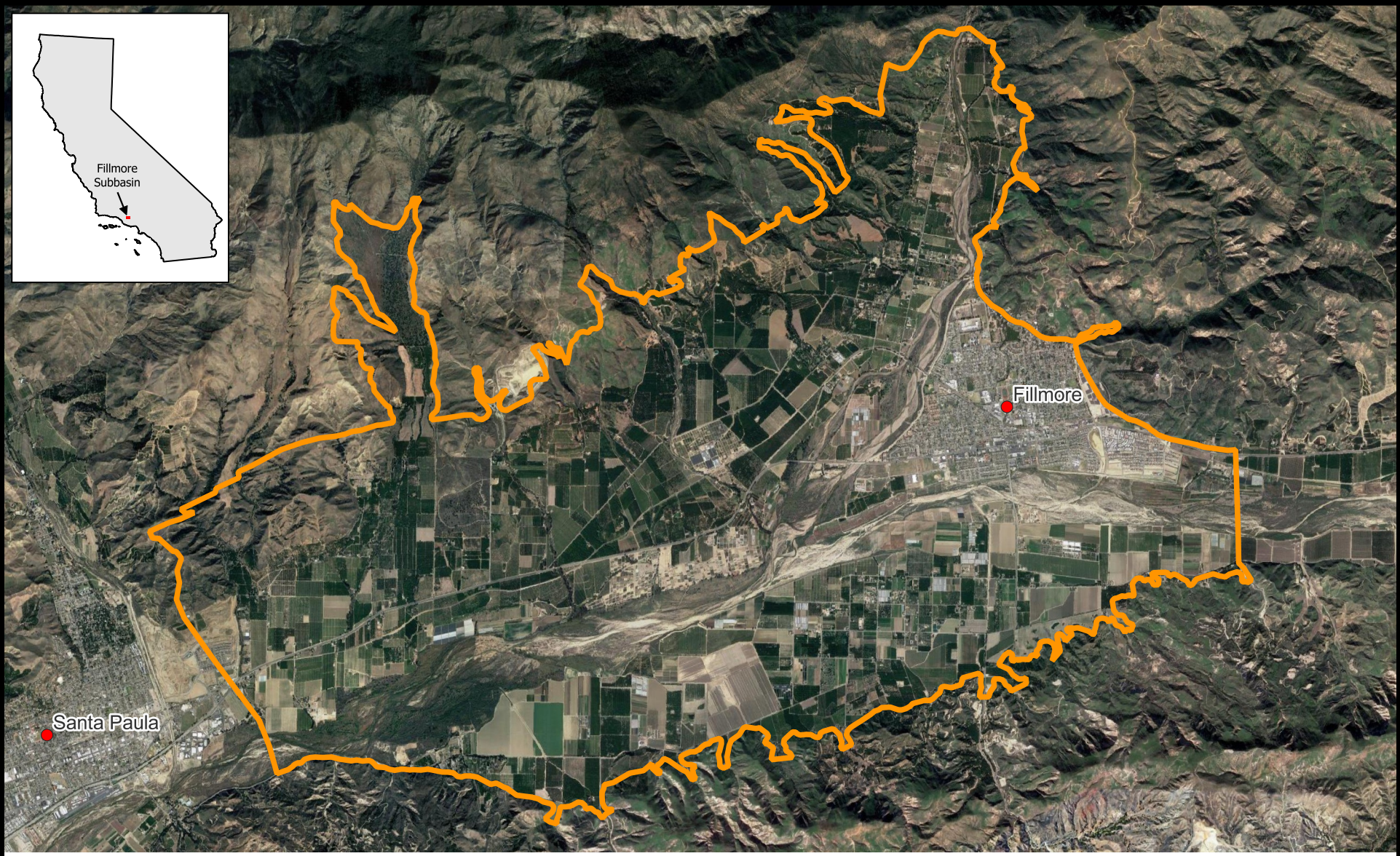
Water year (WY) 2023 was a wet year for California which broke drought conditions that have persisted throughout the state for the previous three years. Precipitation measured at the CIMIS Moorpark station (#217) was 29.74 in, or 150% of the annual average of 19.81 in from WY 2015-2022. Recharge entering the aquifer system increased groundwater levels in the Basin by an average of 19.06 ft from October 2022 to October 2023. Groundwater in storage increased by an estimated 34,149 AF acre-ft (AF). Groundwater extractions and surface water diversions were estimated to be 33,467 AF and 153 AF, respectively, totaling 33,620 AF of water used beneficially in the basin during WY 2023. Although the Fillmore subbasin was not selected for a Round 2 GSP Implementation Grant award, GSP implementation activities that move the subbasin towards established sustainability goals have continued. These include supporting the Cienega Springs Restoration Project as a Drought Refuge; annual evaluation and reporting of subsidence; ongoing research into improving monitoring networks for groundwater dependent ecosystems (GDEs) and groundwater-surface-water (GW-SW) interactions; consideration and discussions of updates to the well permit application review workflow; development of a groundwater export policy; and maintenance of the database management system (DMS).

On January 18, 2024 DWR notified the FPBGSA that the Fillmore subbasin GSP was determined to be incomplete. This was largely due to insufficient justification of proposed minimum thresholds for reductions of groundwater in storage and depletions of interconnected surface water. The FPBGSA and their consulting team are working on addressing these deficiencies and resubmitting an updated version of the GSP to DWR by July 16, 2024 (180 days from notification).

1. Introduction



The Fillmore Subbasin (the Basin) is managed with the adjacent Piru Subbasin by the Fillmore and Piru Basins Groundwater Sustainability Agency (the Agency). Following the submittal of the Fillmore Subbasin Groundwater Sustainability Plan (GSP) on January 31st, 2022, the Agency is required to submit an annual report for the preceding Water Year (October 1st through September 30th) to DWR by April 1st (23 CCR §356.2). These annual reports provide a summary of hydrologic conditions and water use in the Basin (Figure 1) using observed data from monitoring networks and/or estimated using best available methods. This annual report

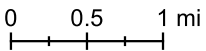
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Source: <https://gis.water.ca.gov>

Explanation

 Groundwater Basin Boundary
  City



FILLMORE SUBBASIN ANNUAL REPORT
Location Map



01/30/2024
 a Geo-Logic Company
 DB23.1279

Figure 1

provides a summary of Basin water use and changes in groundwater storage during the period from October 1, 2022 to September 30th, 2023, and provides context for Basin conditions relative to the sustainable management criteria developed for the Basin. This report has been prepared in accordance with the requirements for annual reports as identified in the Sustainable Groundwater Management Act (SGMA). More detailed analysis and discussion of long-term hydrologic trends will be included in the periodic evaluation of the GSP the Agency is required to perform at least every five years (23 CCR §356.4).

For additional clarification or more detailed information on the basin plan area or conditions, please refer to the Fillmore Subbasin GSP. As acknowledged by the Department of Water Resources, it is important to note that there are still some data gaps and missing information as the Agency continues to gather information for better analysis and decisions.

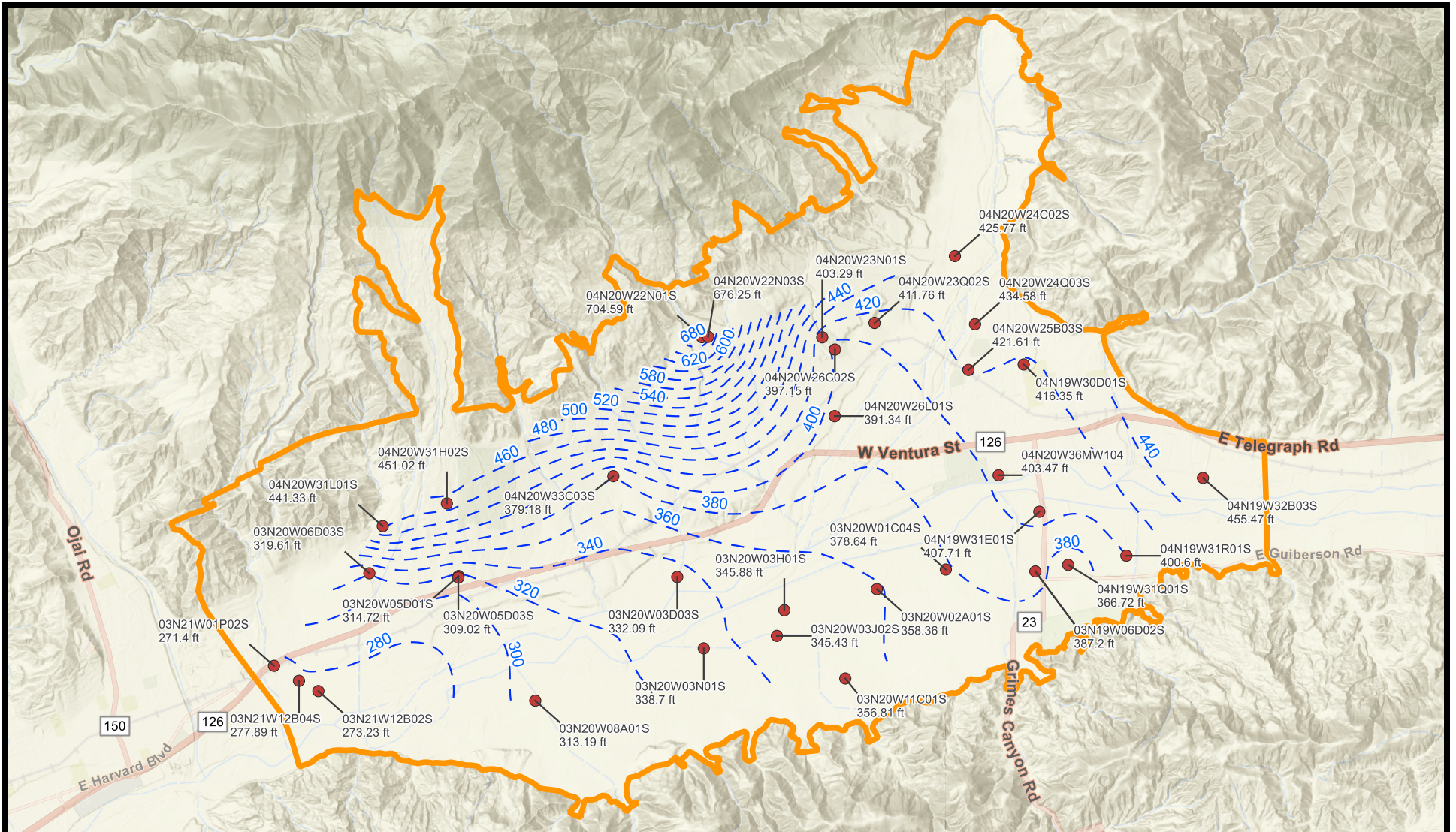
2. Groundwater Elevations

Groundwater elevation contour maps for the spring and fall of 2023 are shown in Figure 2 and Figure 3, respectively. These maps depict the seasonal high (spring) and low (fall) water level elevations in the Basin. Spring and fall water level elevations are defined as observations within a 50-day period centered on April 1st or October 1st. If a well has multiple observations within this period, then the value collected nearest to April 1st or October 1st is used. The Basin is conceptualized as a single aquifer, and therefore subsetting water level data by well screen depth was not required.

Observed spring groundwater elevations (Figure 2) ranged from 271.40 to 704.59 ft above mean sea level (amsl), with an average elevation of 391.22 ft amsl. Fall groundwater elevations (Figure 3) ranged from 270.54 to 711.69 ft amsl, with an average elevation of 407.07 ft amsl. Flow is generally from east to west, but is influenced by recharge along the margins of the valley and drawdown in the vicinity of high-capacity irrigation wells. Observed groundwater elevation changes from Fall 2022 to Fall 2023 ranged from +4.65 to +38.20 ft, with an average change of +19.06 ft.

Hydrographs for representative monitoring points (RMPs) in the Basin are shown in Figure 4 (a-d). Groundwater levels at all RMPs are near or above their respective measurable objectives. Water levels in 04N20W36MW104, which were within 1.5 ft of the minimum threshold in November 2022, fully recovered above the measurable objective.

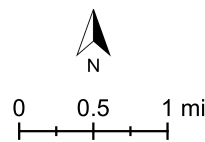
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Source: <https://fillmore-piru.gladata.com/>

Explanation

- Well Name
- - - Groundwater Elevation (ft amsl)
- - - Water Level Contour (ft amsl)
- Groundwater Basin Boundary

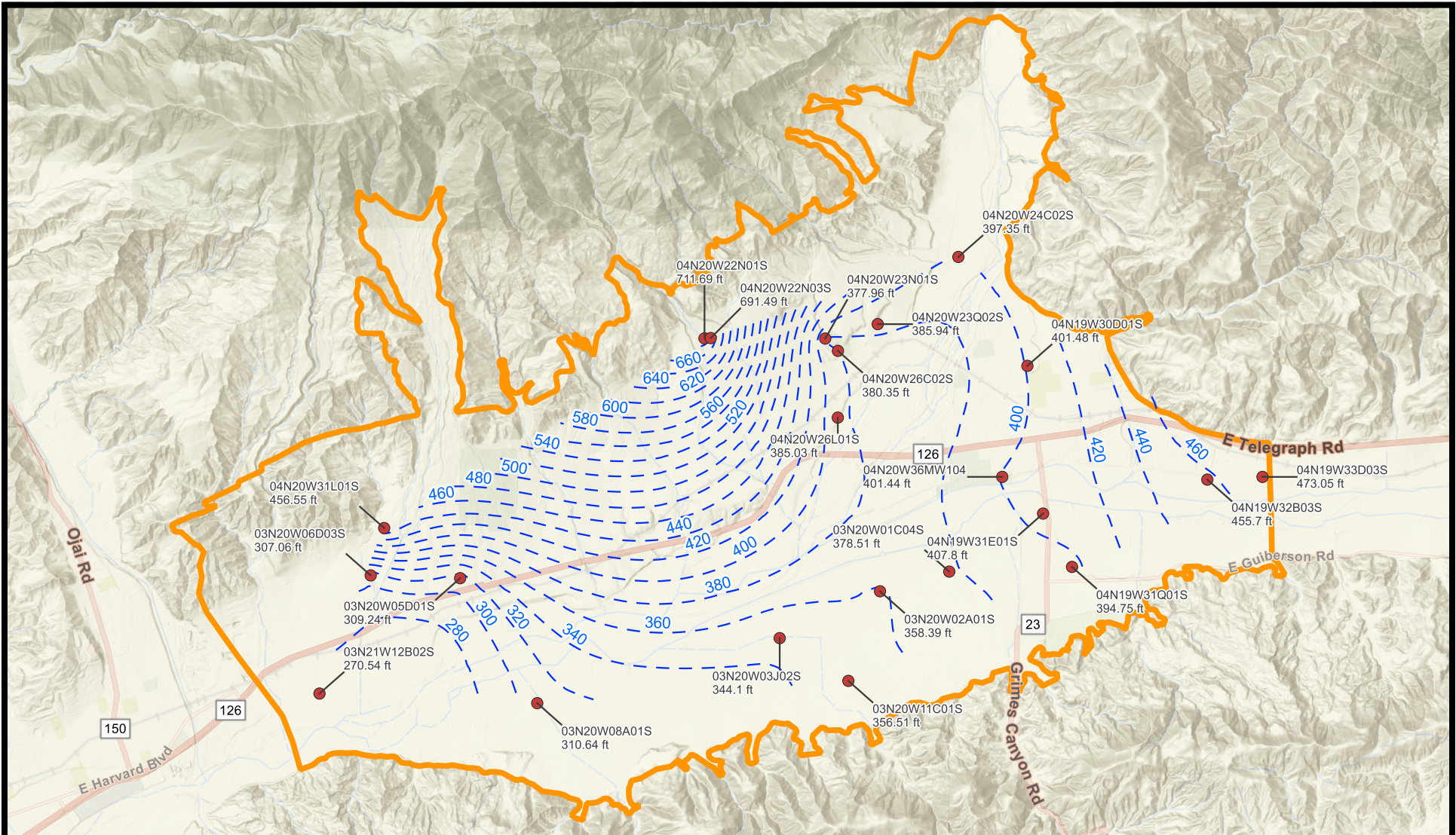


FILLMORE SUBBASIN ANNUAL REPORT
Groundwater Elevation Contours
Spring 2023



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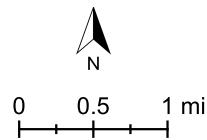
Figure 2



Source: <https://fillmore-piru.gladata.com/>

Explanation

- Well Name
- - - Groundwater Elevation (ft amsl)
- - - Water Level Contour (ft amsl)
- Groundwater Basin Boundary

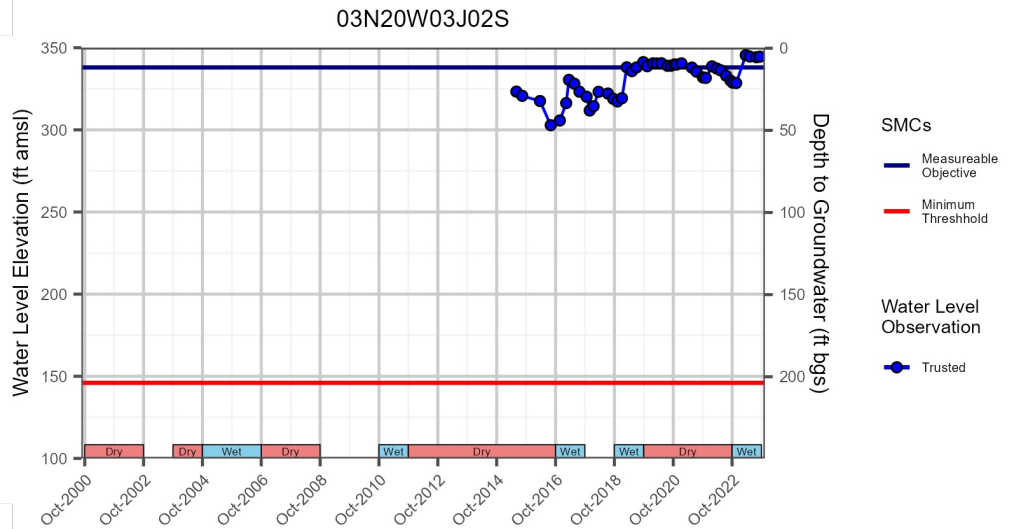
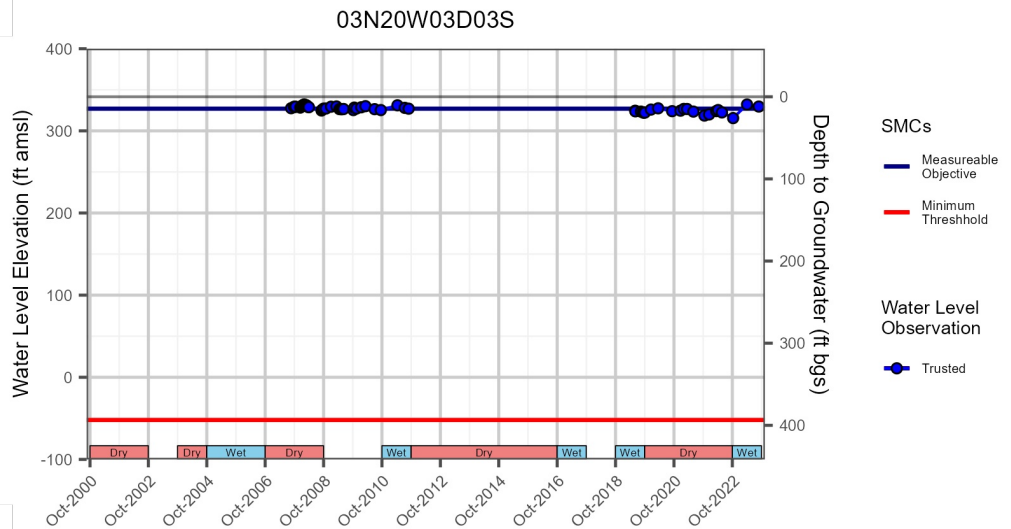
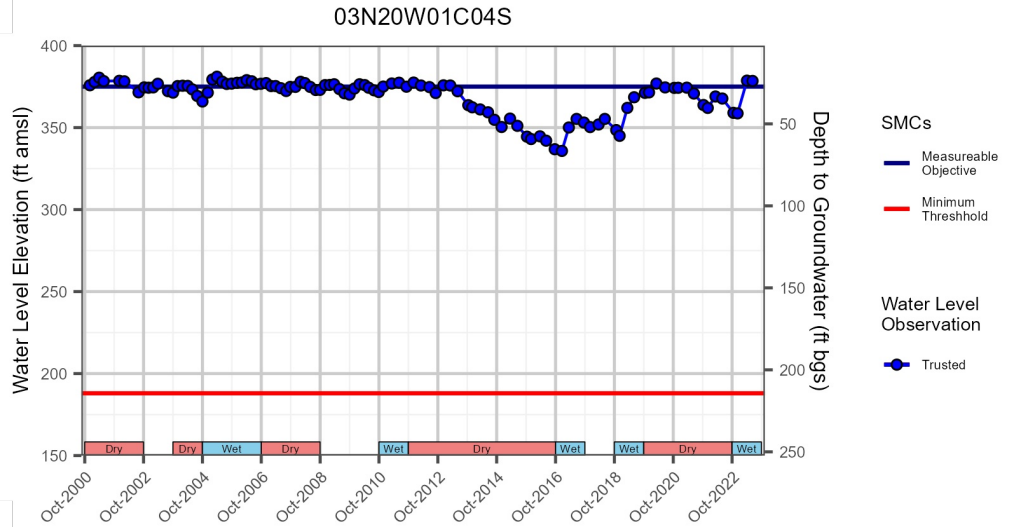


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Groundwater Elevation Contours
Fall 2023



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 DB23.1279

Figure 3

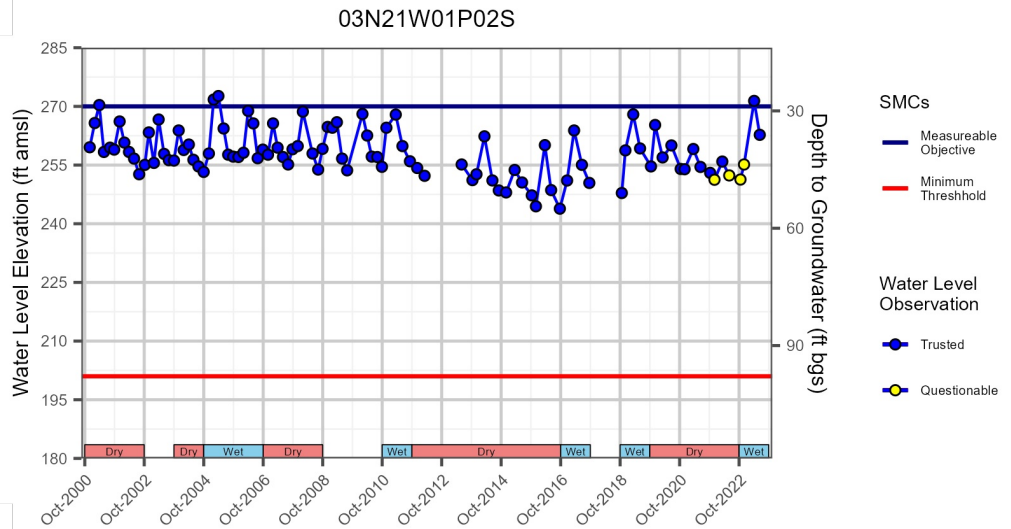
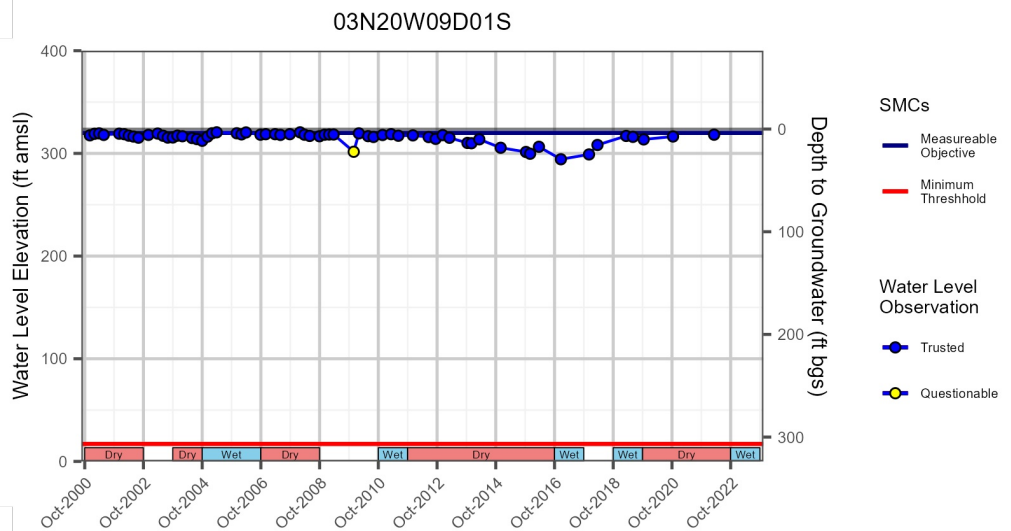
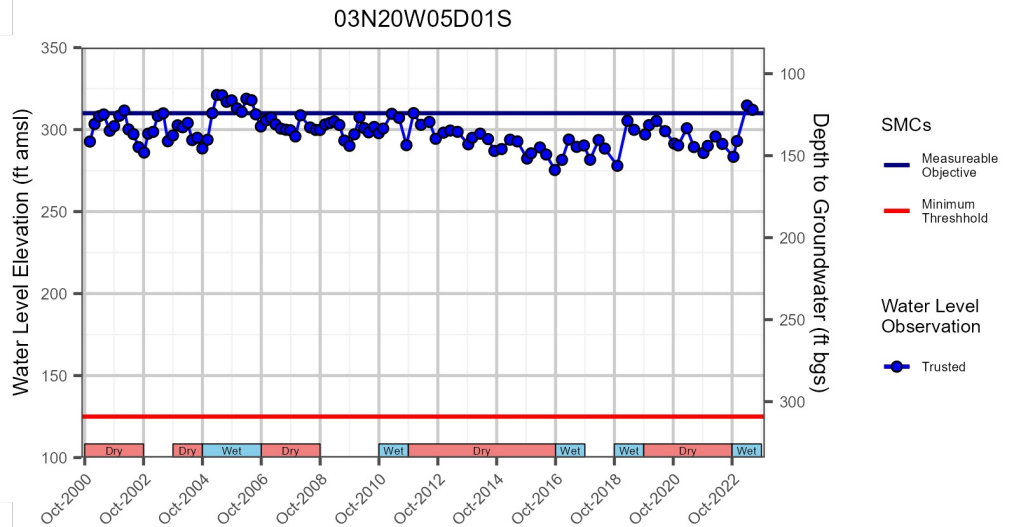


Notes:

1. Red and blue colored bars at bottom of graph indicate dry/critical and wet water year types, respectively, from San Joaquin Valley Water Year Hydrologic Classification Indices.
2. Well location indicated by reference image to left of hydrograph.



FILLMORE SUBBASIN ANNUAL REPORT
Representative Monitoring Points
Hydrographs

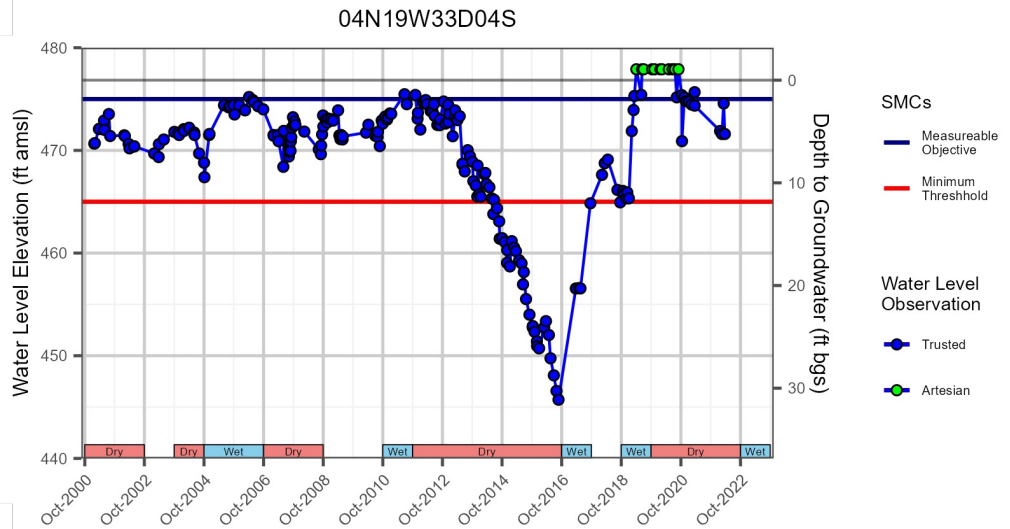
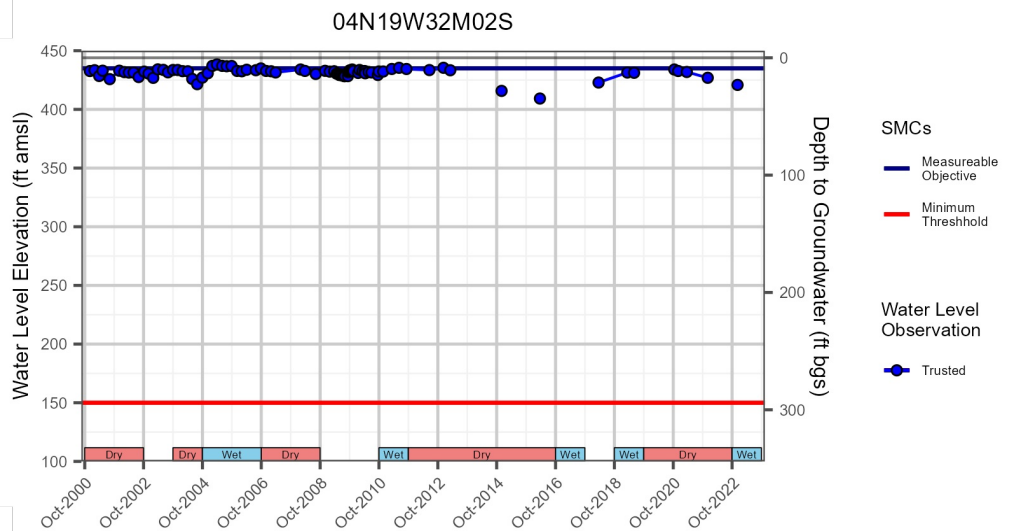
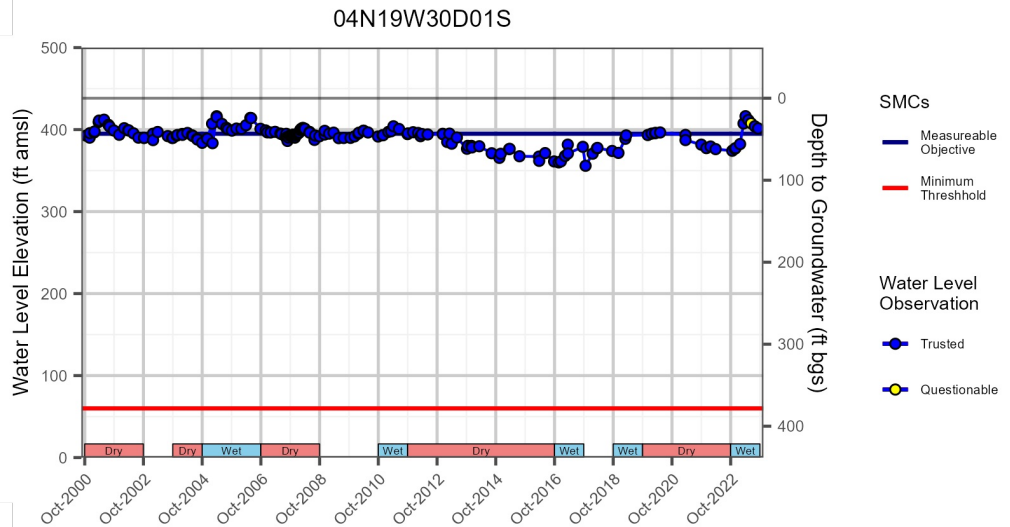


Notes:

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2. Well location indicated by reference image to left of hydrograph.



FILLMORE SUBBASIN ANNUAL REPORT
**Representative Monitoring Points
 Hydrographs**

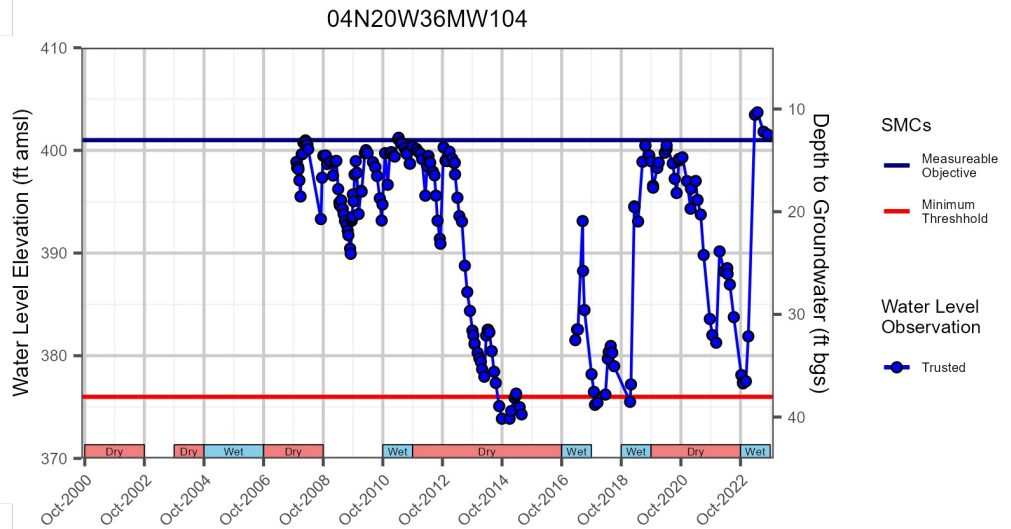
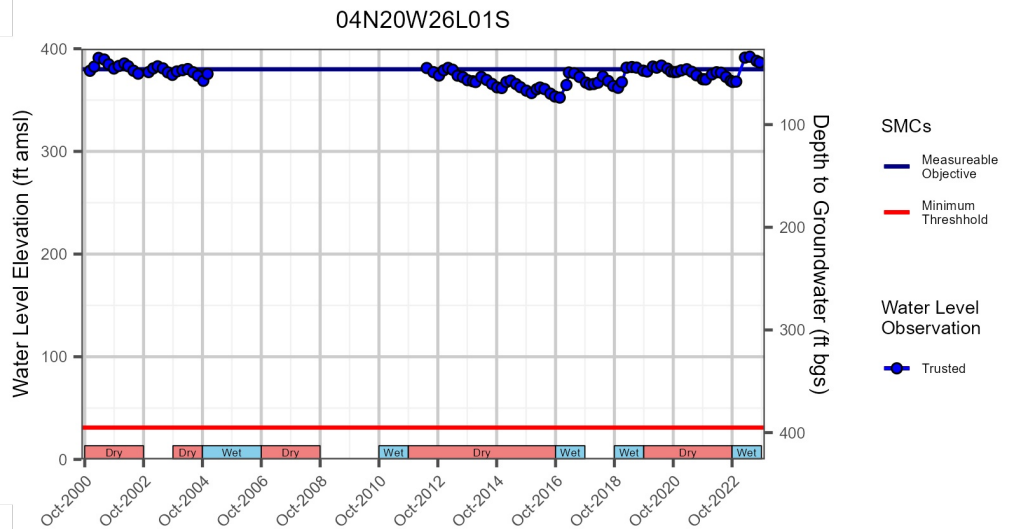
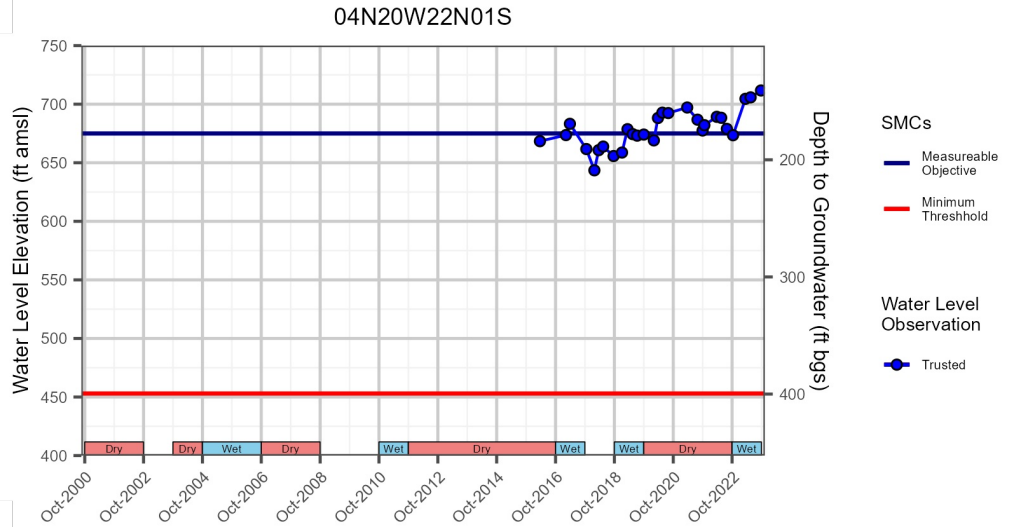


Notes:

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2. Well location indicated by reference image to left of hydrograph.



FILLMORE SUBBASIN ANNUAL REPORT
**Representative Monitoring Points
 Hydrographs**



Notes:

1. Red and blue colored bars at bottom of graph indicate dry/critical and wet water year types, respectively, from San Joaquin Valley Water Year Hydrologic Classification Indices.
2. Well location indicated by reference image to left of hydrograph.



FILLMORE SUBBASIN ANNUAL REPORT Representative Monitoring Points Hydrographs

3. Groundwater Extractions

Groundwater pumpers that produce groundwater from the Basin pay United Water Conservation District (UWCD) an extraction fee based on the number of acre-ft they pump. Prior to 2022, this was reported on a 6-month basis (reporting to UWCD twice per calendar year). Period 1 covers January through June, and period 2 covers July through December of each year. A description of the historical groundwater extraction monitoring in Fillmore Basin is provided in Section 3.5.1.4 of the Fillmore Subbasin GSP. To better comply with SGMA reporting requirements, the Agency is requesting growers voluntarily report groundwater extractions on a quarterly (3-month) basis.

Groundwater pumpers are required to self-report groundwater extractions by well to UWCD using one of three methods: domestic multiplier, electrical meter (based on Southern California Edison efficiency testing), or water flow meter. For non-reporters, an estimate from historical usage is entered in the groundwater production database for accounting and basin volume calculation purposes. For wells with water meters, reporting typically involves filing out a form and submitting an accompanying photograph of the digital totalizer reading. The extent to which "smart meters" or automated (advanced) metering infrastructure (AMI) technology is used by individual well owners to quantify their groundwater production is unknown in the Fillmore Basin. There is not currently a mechanism by which well owners can automatically report groundwater production from their water meters to UWCD or the Agency. De minimis domestic pumping can be reported to UWCD using a multiplier of 0.2 AF per person in a household per 6-month period with a minimum of 0.5 AF (e.g., if there are 1 or 2 people reporting domestic usage on a well, then 0.5 AF minimum is assessed). De minimis pumpers (extractors) that have a meter on their well discharge have the option of calculating their usage based on the meter reading which may show less than 0.5 AF usage, and are billed based on actual usage.

Estimated groundwater extractions for WY 2023 grouped by water use sector and measurement method are shown in Table 1. Pumping from October through December 2022 was estimated for wells that did not report quarterly by scaling the reported volumes from period 2 of that year by the fraction of reference ET from the Moorpark¹ CIMIS station (#217) that occurred during that time. Using this method, an estimated 2,102 AF (32%) of 2022 period 2 (July - December) groundwater pumping occurred during WY 2023. Due to the timing of the 6-month

¹ The Santa Paula CIMIS station (#198) was previously used but became inactive in July 2023. DBS&A is currently investigating options for re-establishing a CIMIS station in the Santa Clara River Valley.

Table 1. Groundwater Extractions

Sector	Method	GW Extraction Volume (AF)	Accuracy (%)	Range (AF)
Agriculture	Electrical Efficiency	10,407	± 20	8,326 - 12,489
	Water Meter	21,070	± 5	20,017 - 22,124
Agriculture Subtotal		31,477		28,343 - 34,613
Domestic, Municipal and Industrial	Domestic	98	± 20	78 - 117
	Electrical Efficiency	71	± 20	57 - 85
	Water Meter	1,821	± 5	1,730 - 1,912
Domestic, Municipal and Industrial Subtotal		1,990		1,865 - 2,114
Total		33,467		30,208 - 36,727

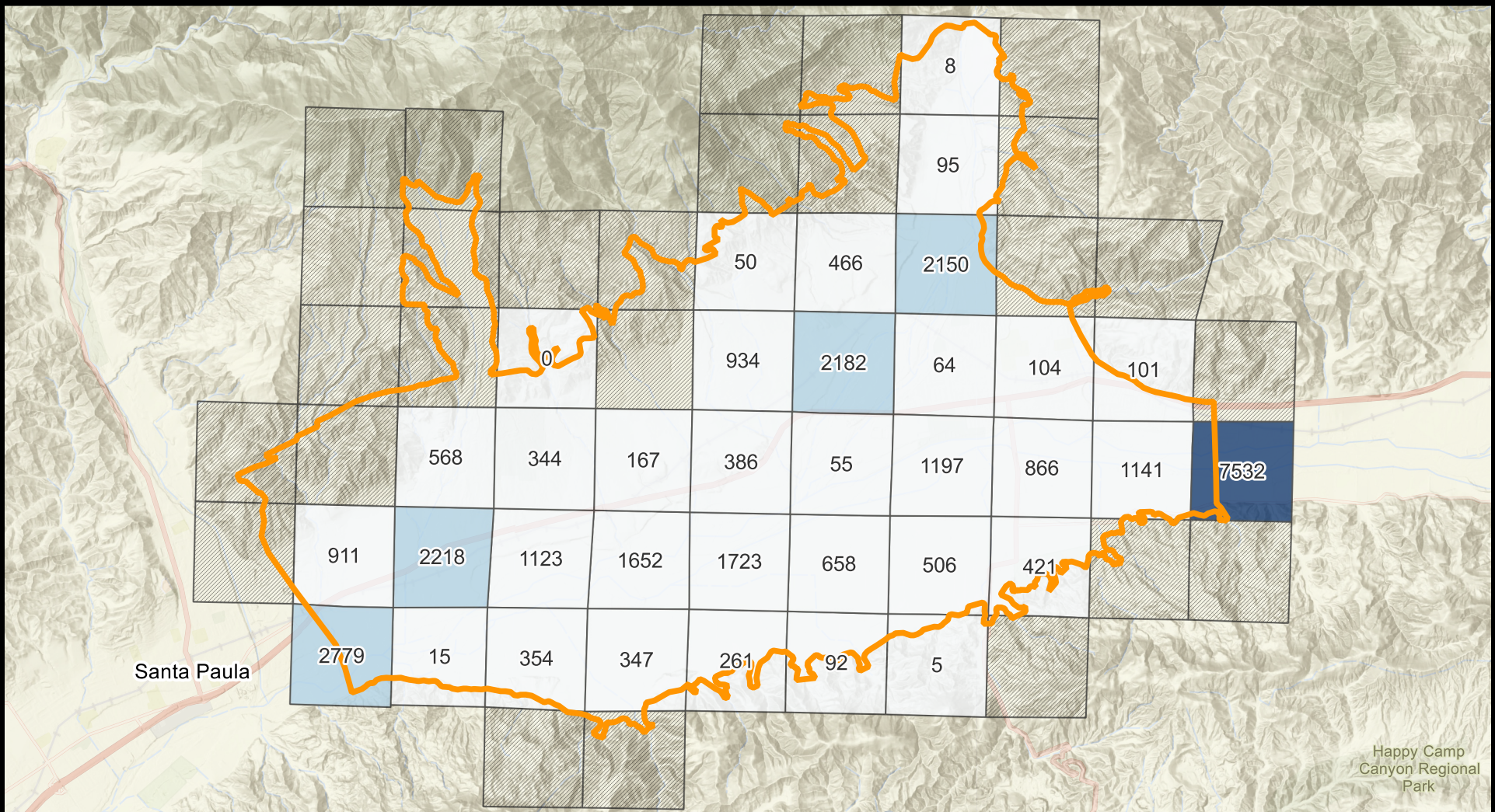
measurement and billing cycle described above, only voluntarily reported quarterly extractions during period 2 (July - December) of 2023 were available at the time this annual report was developed. Voluntarily reported extractions for July through September 2023 were estimated to represent approximately 63% of total extractions during that period using the complete 2022 period 1 (January - June) data set for reference. The difference between the reported and estimated total extraction volume was assigned to wells that did not voluntarily report using proportions obtained from the complete 2023 period 1 (January - June) data set.

Groundwater pumping aggregated within each public land survey (PLSS) section (1 mi²) shows the spatial distribution of agricultural (Figure 5), domestic, municipal & industrial (Figure 6), and total (Figure 7) groundwater extractions within the Basin. Groundwater pumping totaled approximately 33,467 AF, with agricultural beneficial uses accounting for about 94% of total groundwater extractions for WY 2023.

4. Surface Water Supply

Surface water used in the Basin grouped by source and measurement method is summarized in Table 2. All surface water diversions are used beneficially for agricultural irrigation. Not all

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Source: <https://fillmore-piru.gladata.com>

Explanation

- Extraction Volume (AF)
 - 4,000 - 6,000
 - 6,000 - 8,000
 - 0 - 2,000
 - 2,000 - 4,000
- No Extractions
- Groundwater Basin Boundary

Notes:

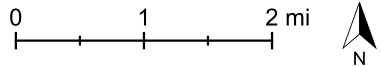
1. Estimated extraction volumes aggregated by public land survey system section.
2. Labels indicate estimated extraction volume in acre-ft (AF).
3. Agricultural groundwater extractions totaled 31,477 AF



FILLMORE SUBBASIN ANNUAL REPORT

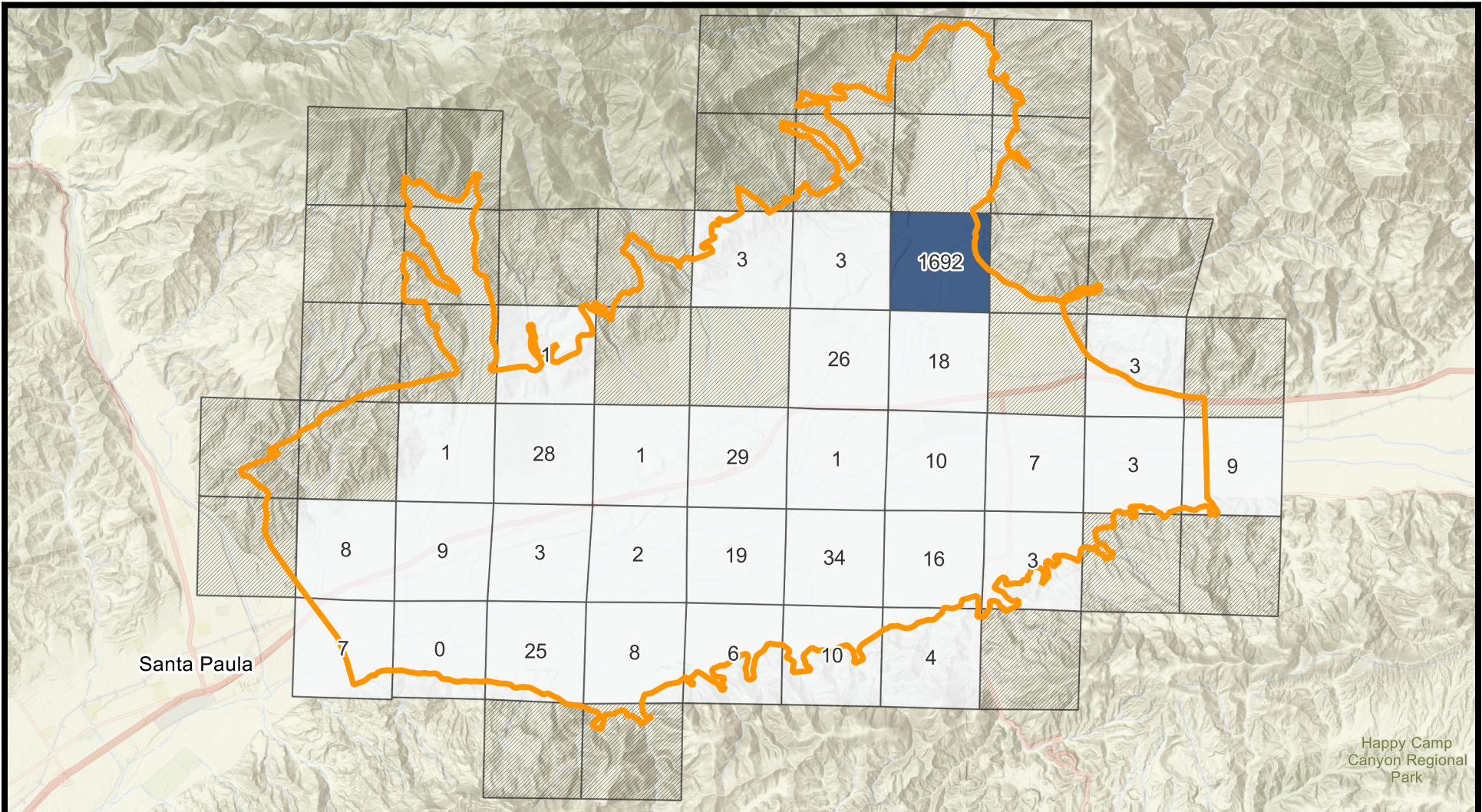
Estimated Groundwater Extractions WY 2023

Agricultural



02/06/2024 DB23.1279

Figure 5



Source: <https://fillmore-piru.gladata.com>

Explanation

- Extraction Volume (AF)
 - 1,000 - 1,500
 - 1,500 - 2,000
 - No Extractions
 - 0 - 500
 - 500 - 1,000
 - Groundwater Basin Boundary

Notes:

1. Estimated extraction volumes aggregated by public land survey system section.
2. Labels indicate estimated extraction volume in acre-ft (AF).
3. Domestic, municipal, and industrial extractions totaled 1,990 AF



FILLMORE SUBBASIN ANNUAL REPORT

Estimated Groundwater Extractions WY 2023
Domestic, Municipal, and Industrial



02/08/2024

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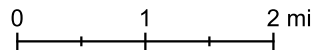
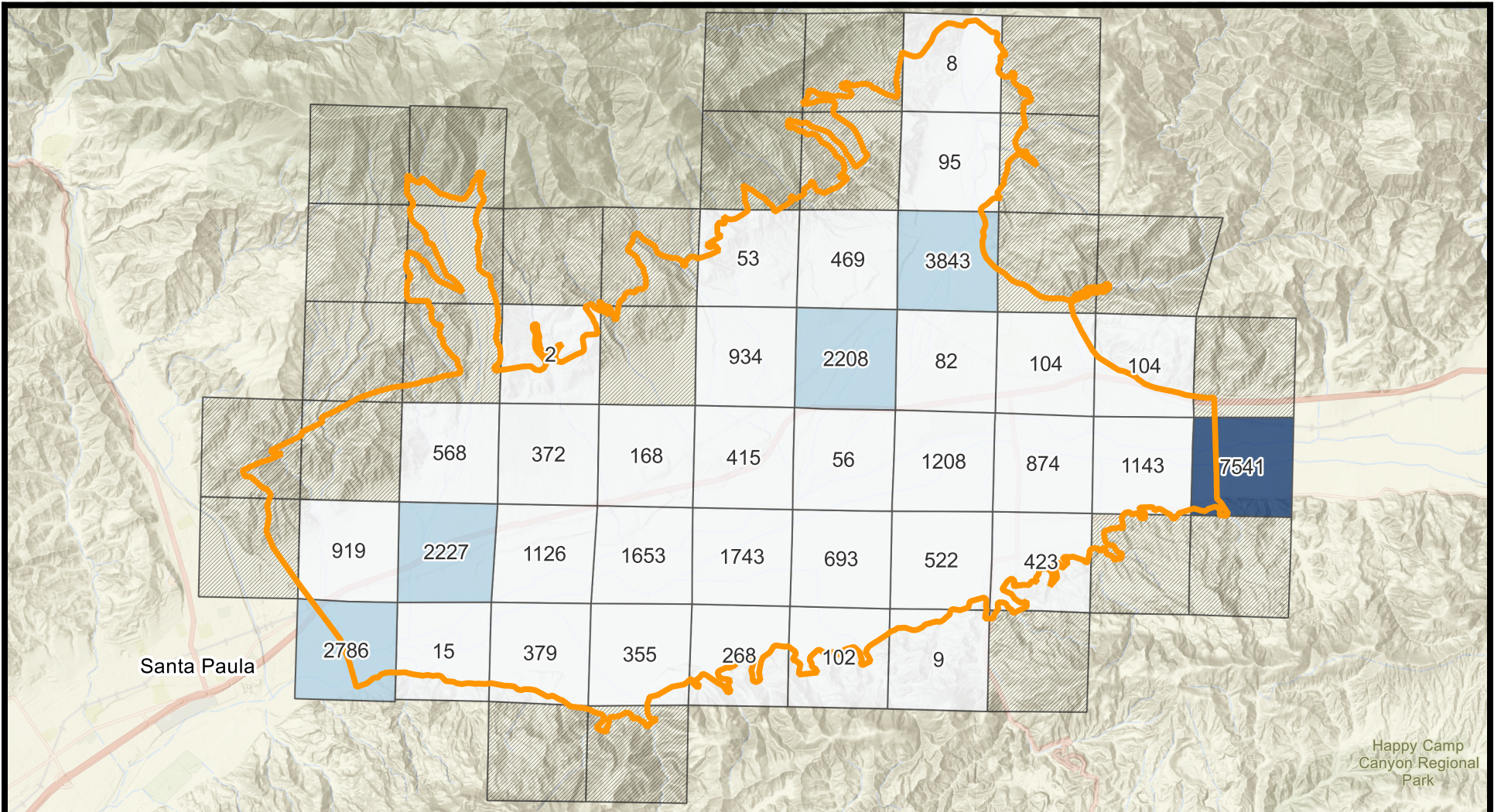


Figure 6



Source: <https://fillmore-piru.gladata.com>

Explanation

- Extraction Volume (AF)
 - 4,000 - 6,000
 - 6,000 - 8,000
 - 0 - 2,000
 - 2,000 - 4,000
 - No Extractions
 - Groundwater Basin Boundary

Notes:

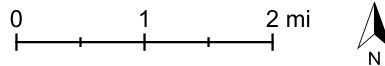
1. Estimated extraction volumes aggregated by public land survey system section.
2. Labels indicate estimated extraction volume in acre-ft (AF).
3. Fillmore subbasin groundwater extractions totaled 33,467 AF



FILLMORE SUBBASIN ANNUAL REPORT

Estimated Groundwater Extractions WY 2023

Total



02/06/2024

DB23.1279

Figure 7

Table 2. Surface Water Use

Source	Method	Annual Volume Used (AF)	Accuracy (%)	Range (AF)
Local Supplies	Estimated from previously reported diversions	135	± 33	90 - 179
	Weir	18	± 5	17 - 19
Total		153		107 - 198

diversions for WY 2023 were reported to the State Water Resources Control Board (SWRCB) at the time this report was written. Unreported diversion volumes were estimated by averaging reported diversion volumes for the previous five years (WY 2018 through WY 2022). Total surface water used in the Basin during WY 2023 was estimated to be 153 AF.

5. Total Water Use

Total water use in the Basin grouped by water use sector and measurement method is shown in Table 3. Total water volume used in the Basin during WY 2023 was estimated to be 33,620 AF.

6. Change in Groundwater Storage

Change in groundwater storage for WY 2023 was estimated using differences in water level elevations from Fall 2022 to Fall 2023. Observed differences in water levels were interpolated to a 65x65 ft (20x20 m) grid using the universal kriging method. Volume was calculated by multiplying the area of each cell by the estimated change in water level and vertically integrated aquifer storage coefficient for each respective cell. The vertically integrated aquifer storage coefficients were calculated as the thickness weighted average of each model grid cell in the UWCD groundwater model, and ranged from 0.08 to 0.13. The total change in storage for the Basin was calculated by summing the estimated change in volume for all cells and then multiplying by a scaling factor of 1.35. The scaling factor accounts for the interpolation area not covering the entire area where pumping is known to occur in the Basin due to the location of, and data availability from, monitoring wells. It is defined as the ratio of the area within the groundwater basin boundary area and a half-mile radius of each production well to the water

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Table 3. Total Water Use

Sector	Method	Total Annual Volume (AF)	Accuracy (%)	Range (AF)
Agriculture	Electrical Efficiency	10,407	± 20	8,326 - 12,489
	Estimated from previously reported diversions	135	± 33	90 - 179
	Water Meter	21,070	± 5	20,017 - 22,124
	Weir	18	± 5	17 - 19
Agriculture Subtotal	-	31,630	-	28,450 - 34,811
Domestic, Municipal, and Industrial	Domestic	98	± 20	78 - 117
	Electrical Efficiency	71	± 20	57 - 85
	Water Meter	1,821	± 5	1,730 - 1,912
Domestic, Municipal, and Industrial	-	1,990	-	1,865 - 2,114
Total		33,620		30,315 - 36,925

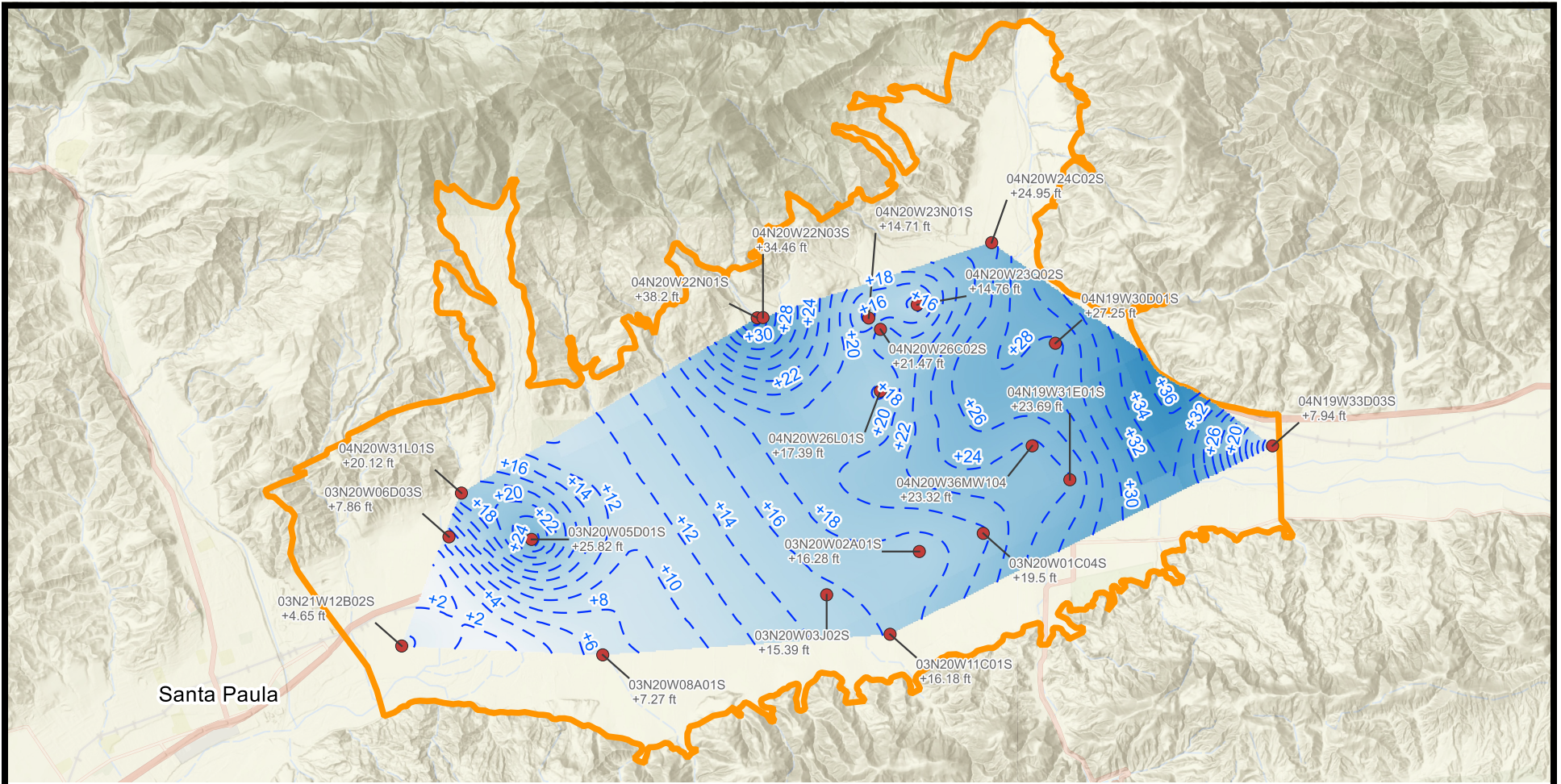
level change interpolation area. This assumes that water level changes in areas of the basin with no observations are similar to those with observations.

A map of the change in storage for WY 2023 with contour lines showing water level differences is shown in Figure 8. Estimated total change in storage for WY 2023 is +34,149 AF, which is expected due to exceptionally wet conditions. Figure 9 shows annual groundwater pumping and change in storage, along with cumulative storage since WY 2000. Current storage condition relative to WY 1988 is -32,775 AF.

7. Progress Towards GSP Implementation

The Fillmore Subbasin GSP provided seven Projects or Management Actions that the FPBGSA Board of Directors would implement or consider implementing to facilitate the maintenance of sustainable conditions in the basin (see Section 4 of the GSP). The FPBGSA completed Projects #2 and #3 in WY 2022, and have continued work on Projects #1 and #7 as well as items not included in the GSP. The remaining Project or Management Actions (Projects #4-7 detailed in

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Source: <https://fillmore-piru.gladata.com>

Explanation

- Estimated Groundwater Storage Change (AF)
 - +0.5
 - 0.5
- Well Name
- Change in Water Level (ft)
- Water Level Elevation Change Contour (ft)
- Groundwater Basin Boundary

Notes:

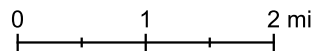
1. Storage change estimated by interpolating changes in observed water levels to a 65 x 65 ft grid and multiplying by the vertically integrated aquifer storage coefficient for each grid cell.
2. Vertically integrated aquifer storage coefficient calculated as the thickness weighted average of aquifer storage coefficients for each model layer used in the United groundwater model.
3. Estimated WY 2023 total groundwater storage change is +34,149 AF.



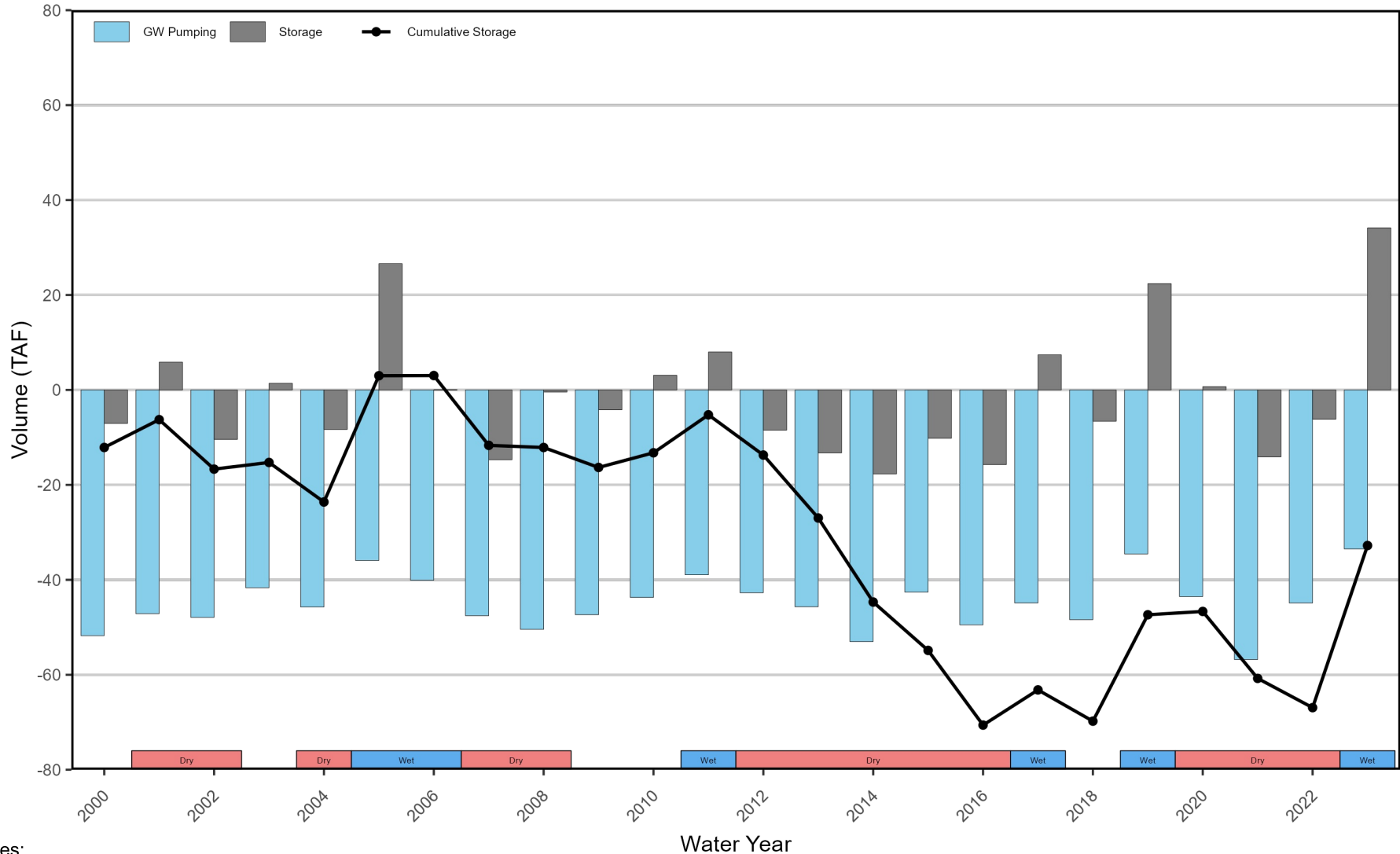
FILLMORE SUBBASIN ANNUAL REPORT
**Estimated Change in Groundwater in Storage
 WY 2023**



01/30/2024 DB23.1279



Annual Groundwater Pumping and Change in Storage



Notes:

1. Negative GW pumping values indicate extractions from groundwater aquifer.
2. Positive storage values indicate increasing groundwater levels.
3. Change in storage volumes estimated from water level data for WY 2020-2023.
4. Red and blue colored bars at bottom of graph indicate dry/critical and wet water year types, respectively, from San Joaquin Valley Water Year Hydrologic Classification Indices.



FILLMORE SUBBASIN ANNUAL REPORT
Groundwater Pumping and Change in Storage
WY 2000-2023



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Figure 9

the GSP) have yet to be discussed by the FPBGSA Board of Directors. These projects or management actions will be considered by the Board of Directors over the next year and it is anticipated that more substantive updates will be included in future Annual Reports. Below is a description of activities related to each project that occurred during WY 2023.

7.1 Project #1: Supporting the Cienega Springs Restoration Project as a Drought Refuge

Since submittal of the GSP to the California Department of Water Resources (DWR), staff and the consultant team for the FPBGSA have had limited additional discussions/meetings with representatives from California Department of Fish and Wildlife (CDFW) and researchers from University of California, Santa Barbara (UCSB) to further explore how the mitigative actions proposed in the GSP might be implemented.

The discussions with CDFW to date have focused on:

- Refining the mitigative project description
- Identifying which land parcels in the restoration project area would most benefit from receiving supplemental waters during a drought
- Exploring possible existing deep groundwater wells in proximity to the site that could be used as a water source; and
- Discussing the practicality and potential benefits of including adjacent land parcels owned by The Nature Conservancy (TNC) into the mitigation plan.

Ongoing action items with respect to this management action include:

- Establish communication with TNC to determine their interest in participating in the mitigation program
- Field verification of the operational condition of potential existing wells that are candidates to supply the supplement water
- Contact well/land owners to determine their willingness to allow access to their well(s) and establish terms of an access agreement
- Preparation of a Mitigation Plan that will detail, for example:
 - Triggers for starting and stopping the delivery of the supplemental waters
 - Quantities of supplemental water to be supplied
 - Source(s) of the supplemental water

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- Parties responsible for conveyance of the supplemental water from the source to the desired land parcel
- Responsible parties for making decisions regarding the beneficial use of the water
- Cost reimbursement and extraction fee waiver mechanisms for use of existing wells owned by others
- Vegetative monitoring protocols to document the success of the mitigation program.

In addition, the Mitigation Plan will estimate the cost to the FPBGSA for the implementation of the mitigative actions.

7.2 Project #7: Subsidence Infrastructure Vulnerability Evaluation

The FPBGSA contracted DBS&A to prepare an updated land subsidence evaluation (<https://bit.ly/3lbFkJ8>) that included an evaluation of InSAR data sets, Continuous Global Positioning Station (CGPS) data, a comparison of water levels v. estimated historical low water levels, and review of water levels and the Subsidence Minimum Threshold established in the GSP. Additional monitoring locations for land displacement measured remotely via satellite (InSAR) were selected based on proximity to critical infrastructure that may be negatively impacted by subsidence (e.g., bridges, railroads). The update concluded that no net subsidence has been observed since InSAR data became available in June 2015, therefore no further infrastructure vulnerability evaluations are planned. The FPBGSA will continue the annual subsidence data review and reporting.

7.3 Improvement of Groundwater Dependent Ecosystem and Groundwater-Surface-Water Interactions Monitoring Networks

DBS&A have had discussions with the FPBGSA Board of Directors regarding monitoring GW-SW interactions and the GDE monitoring network. In certain areas of the Fillmore and Piru Groundwater Basins, ephemeral groundwater discharges to surface flow. Measuring these interactions can be important for quantifying groundwater flow rates into surface water.

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DBS&A has begun evaluating techniques for gathering additional information regarding surface water – groundwater interactions near the prominent GDEs. A promising evaluative technique requires measuring groundwater temperature differentials to determine rising groundwater flux in areas near the prominent GDEs. Thermal probes have been used to determine groundwater infiltration rates in previous studies (e.g., Racz et al, 2011; Schmidt et al, 2011). A similar method can be used to determine rising groundwater flux. Design of the temperature measurement array (e.g., up to 20 locations in a 300 by 300 ft grid) and the equipment required to implement the temperature monitoring program is currently in development.

7.4 Update to Well Permitting Application Review Workflow

The FPBGSA has had extensive discussions about their role in the well permit application review process under Executive Order N-3-23 ([EO N-3-23](#)). While the goal of the FPBGSA is to develop a review policy that is simple, fair, and transparent, this issue is complicated by the need for coordination with Ventura County, lack of specificity in the EO, and legal concerns. It is anticipated that a new workflow for reviewing well permit applications will be adopted in WY 2024.

7.5 Development of Groundwater Export Policy

The FPBGSA is developing a groundwater export policy for the Fillmore and Piru basins to help maintain groundwater sustainability in the basins and keep beneficial uses local. Implementation of a groundwater export policy can help the GSA effectively manage groundwater in the Fillmore basin. Three policy options will be presented to the board, and it is anticipated a final policy decision will be made during water year 2024.

7.6 DMS Maintenance

The FPBGSA has continued to maintain and update the Fillmore and Piru DMS (<https://fillmore-piru.gladata.com>), which provides stakeholders access to all available groundwater data in the subbasin using a user-friendly, map-based web interface. Groundwater levels are typically uploaded bi-annually, coincident with the July 1 and December 31 reporting dates set by DWR. Water quality and well production data are uploaded annually, coincident with GSP annual report preparation.

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Piru Groundwater Subbasin Annual Report Water Year 2023

Submitted to



California Department of
Water Resources

Submitted by



Prepared by



3916 State Street, Garden Suite

Santa Barbara, CA 93105

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Project# DB23.1279.00

April 1, 2024

Certification

This report was prepared in accordance with generally accepted professional hydrogeologic principles and practices. This report makes no other warranties, either expressed or implied as to the professional advice or data included in it. This report has not been prepared for use by parties or projects other than those named or described herein. It may not contain sufficient information for other parties or purposes.

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Acronyms and Abbreviations

<u>Acronym</u>	<u>Definition</u>
AF	acre-feet
AFY	acre-feet per year
Ag	agriculture
amsl	above mean sea level
Basin	Piru subbasin of the Santa Clara River Valley basin
CCR	California Code of Regulations
CIMIS	California Irrigation Management Information System
DBS&A	Daniel B. Stephens & Associates, Inc.
DWR	[CA] Department of Water Resources
FPBGSA	Fillmore and Piru Basins Groundwater Sustainability Agency
FT	feet
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
MO	Measureable Objective
MT	Minimum Threshold
RMP	Representative Monitoring Point
SGMA	Sustainable Groundwater Management Act
SMC	Sustainable Management Criteria
SWRCB	State Water Resources Control Board
United	United Water Conservation District
WLE	water level elevation
WY	water year (October 1 - September 30)

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Executive Summary

Water year (WY) 2023 was a wet year for California which broke drought conditions that have persisted throughout the state for the previous three years. Precipitation measured at the CIMIS Moorpark station (#217) was 29.74 in, or 150% of the annual average of 19.81 in from WY 2015-2022. Recharge entering the aquifer system increased groundwater levels in the Basin by an average of 19.06 ft from October 2022 to October 2023. Groundwater in storage increased by an estimated 34,149 AF acre-ft (AF). Groundwater extractions and surface water diversions were estimated to be 33,467 AF and 153 AF, respectively, totaling 33,620 AF of water used beneficially in the basin during WY 2023. Although the Piru subbasin was not selected for a Round 2 GSP Implementation Grant award, GSP implementation activities that move the subbasin towards established sustainability goals have continued. These include ongoing research into improving monitoring networks for groundwater dependent ecosystems (GDEs) and groundwater-surface-water (GW-SW) interactions; consideration and discussions of updates to the well permit application review workflow; annual evaluation and reporting of subsidence; development of a groundwater export policy; and maintenance of the database management system (DMS).

On January 18, 2024 DWR notified the FPBGSA that the Piru subbasin GSP was determined to be incomplete. This was largely due to insufficient justification of proposed minimum thresholds for reductions of groundwater in storage and depletions of interconnected surface water. The FPBGSA and their consulting team are working on addressing these deficiencies and resubmitting an updated version of the GSP to DWR by July 16, 2024 (180 days from notification).

1. Introduction

The Piru Subbasin (the Basin) is managed with the adjacent Fillmore Subbasin by the Fillmore and Piru Basins Groundwater Sustainability Agency (the Agency). Following the submittal of the Piru Subbasin Groundwater Sustainability Plan (GSP) on January 31, 2022, the Agency is required to submit an annual report for the preceding Water Year (October 1 through September 30) to DWR by April 1 (23 CCR §356.2). These annual reports provide a summary of hydrologic conditions and water use in the Basin (Figure 1) using observed data from monitoring networks and/or estimated using best available methods. This annual report provides a summary of Basin water use and changes in groundwater storage during the period from October 1, 2022 to September 30, 2023, and provides context for Basin conditions relative to the sustainable

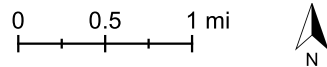
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Source: <https://gis.water.ca.gov>

Explanation

 Groundwater Basin Boundary



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Location Map



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Figure 1

management criteria developed for the Basin. This report has been prepared in accordance with the requirements for annual reports as identified in the Sustainable Groundwater Management Act (SGMA). More detailed analysis and discussion of long-term hydrologic trends will be included in the periodic evaluation of the GSP the Agency is required to perform at least every five years (23 CCR §356.4).

For additional clarification or more detailed information on the basin plan area or conditions, please refer to the Piru Subbasin GSP. As acknowledged by the Department of Water Resources, it is important to note that there are still some data gaps and missing information as the Agency continues to gather information for better analysis and decisions.

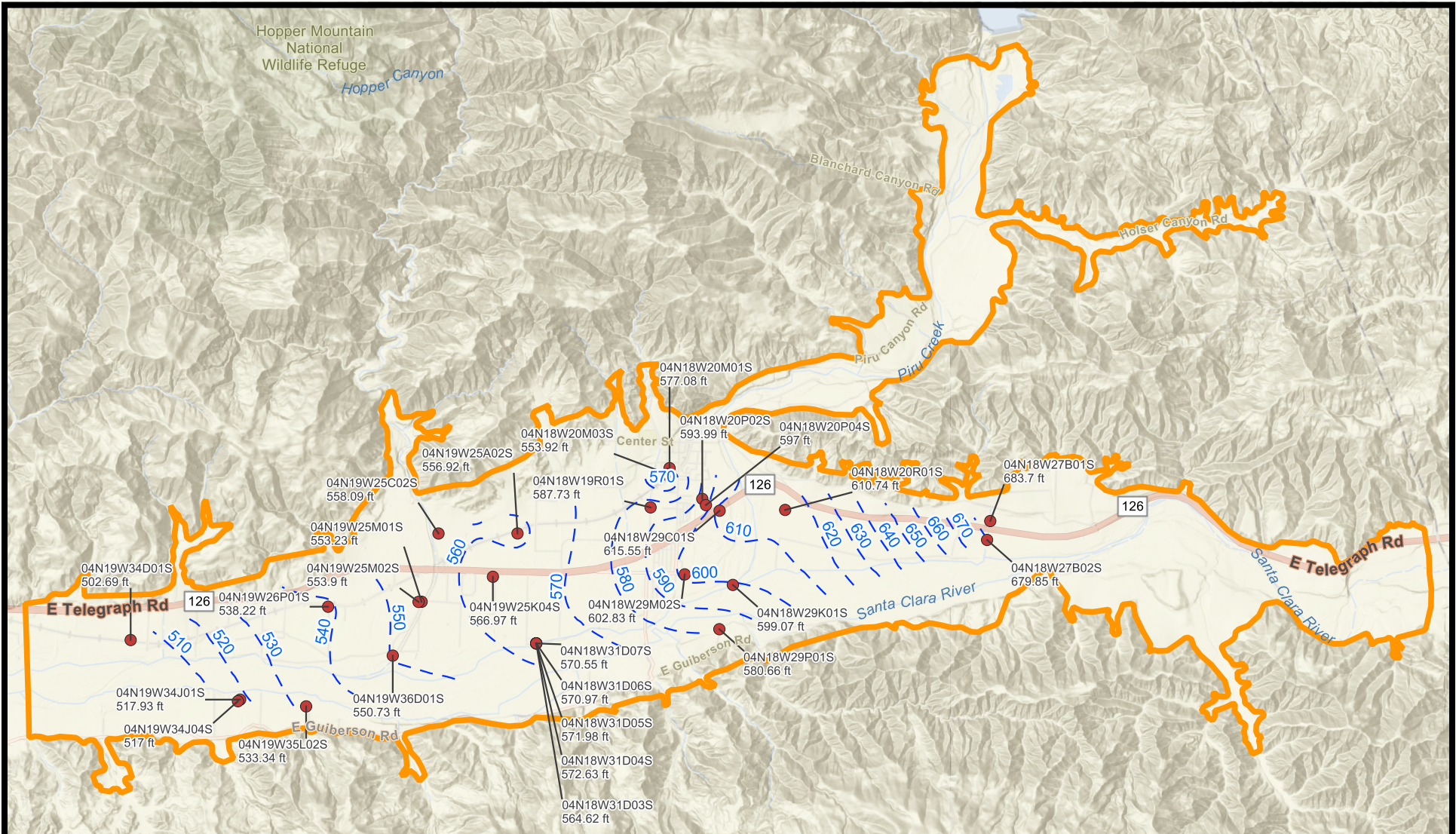
2. Groundwater Elevations

Groundwater elevation contour maps for the spring and fall of 2023 are shown in Figure 2 and Figure 3, respectively. These maps depict the seasonal high (Spring) and low (Fall) water level elevations in the Basin. Spring and Fall water level elevations are defined as observations within a 40 day period centered on April 1st or October 1st. If a well has multiple observations within this period, then the value collected nearest to April 1st or October 1st is used unless otherwise noted. The Basin is conceptualized as a single aquifer, and therefore subsetting water level data by well screen depth was not required.

Observed spring groundwater elevations (Figure 2) ranged from 502.69 to 683.70 ft above mean sea level (amsl), with an average elevation of 574.35 ft amsl. Fall groundwater elevations (Figure 3) ranged from 517.15 to 685.82 ft amsl, with an average elevation of 590.88 ft amsl. Flow is generally from east to west, but is influenced by recharge along the margins of the valley and drawdown in the vicinity of high-capacity irrigation wells. Observed groundwater elevation changes from Fall 2022 to Fall 2023 ranged from +27.34 to +120.96 ft with an average change of +68.95 ft.

Hydrographs for representative monitoring points (RMPs) in the Basin are shown in Figure 4 (a-c). Groundwater levels at all RMPs are near or above their respective measurable objectives. Water levels in 04N19W36D01S, which had the lowest water levels at the end of WY 2022 and came within 8 ft of the minimum threshold, fully recovered above the measurable objective.

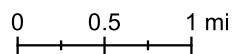
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Source: <https://fillmore-piru.gladata.com>

Explanation

- Well Name
- Groundwater Basin Boundary
- Water Level Contour (ft amsl)



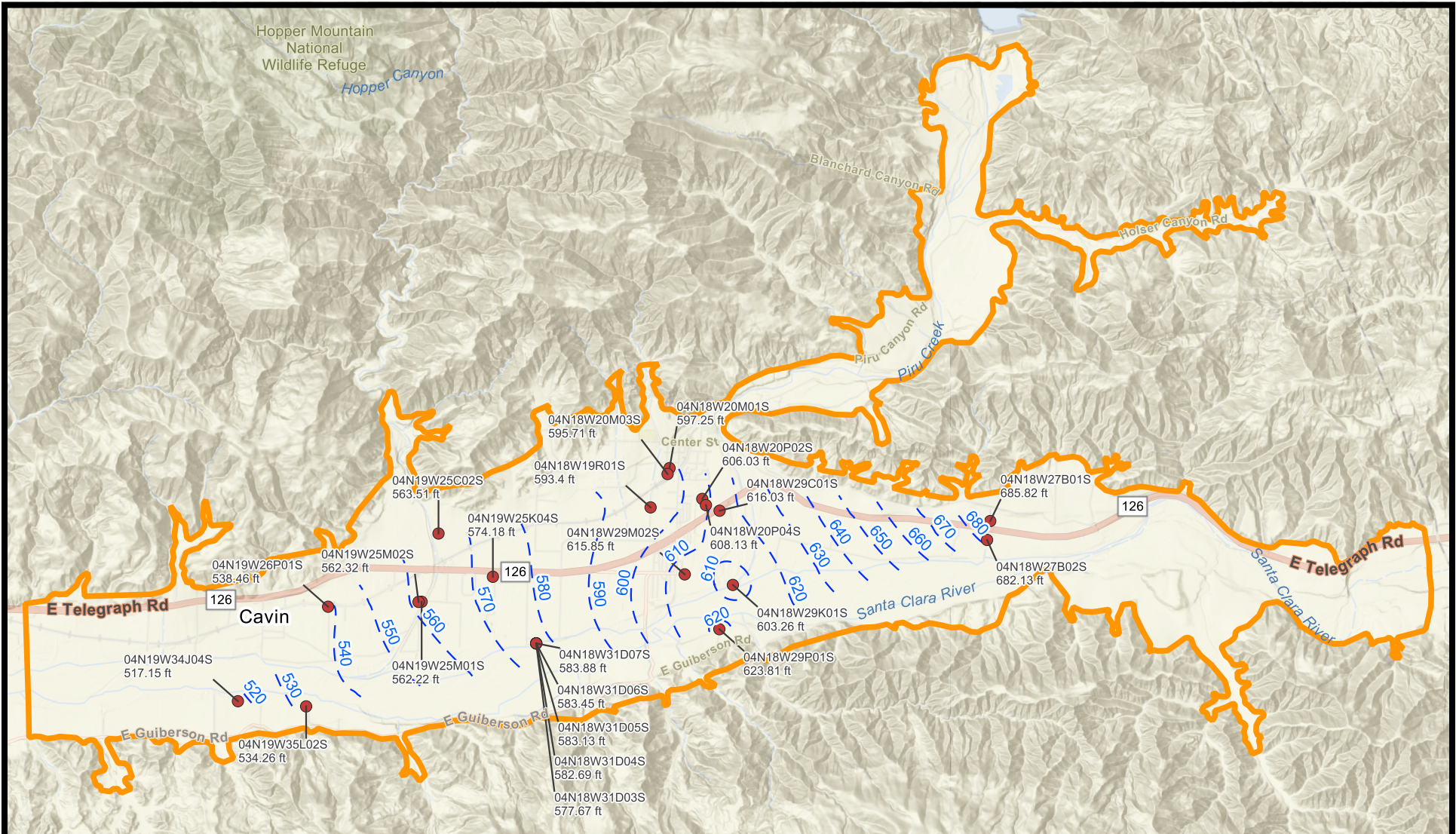
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PIRU SUBBASIN ANNUAL REPORT
Groundwater Elevation Contours
Spring 2023

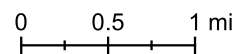
Figure 2



Source: <https://fillmore-piru.gladata.com>

Explanation

- Well Name
Groundwater Elevation (ft amsl)
- Water Level Contour (ft amsl)
- Groundwater Basin Boundary



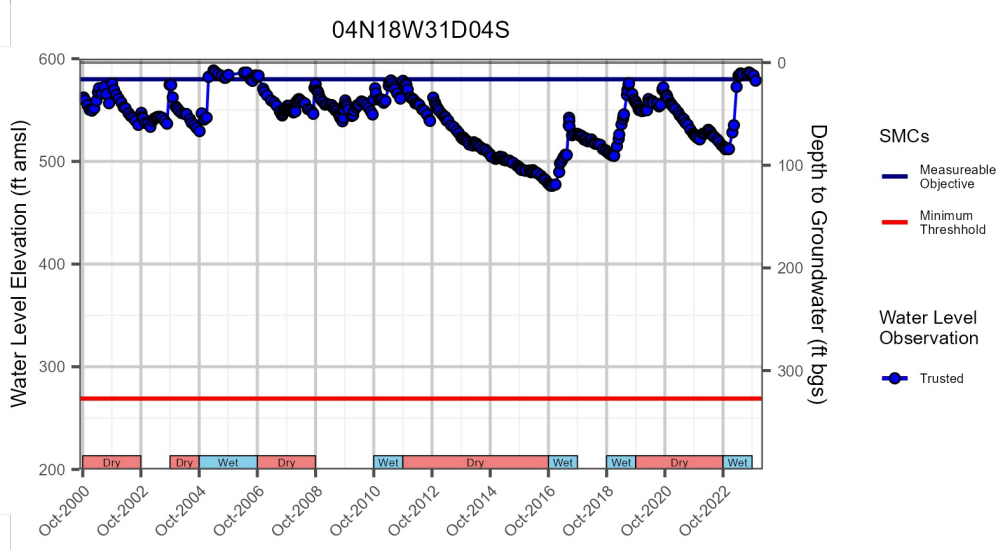
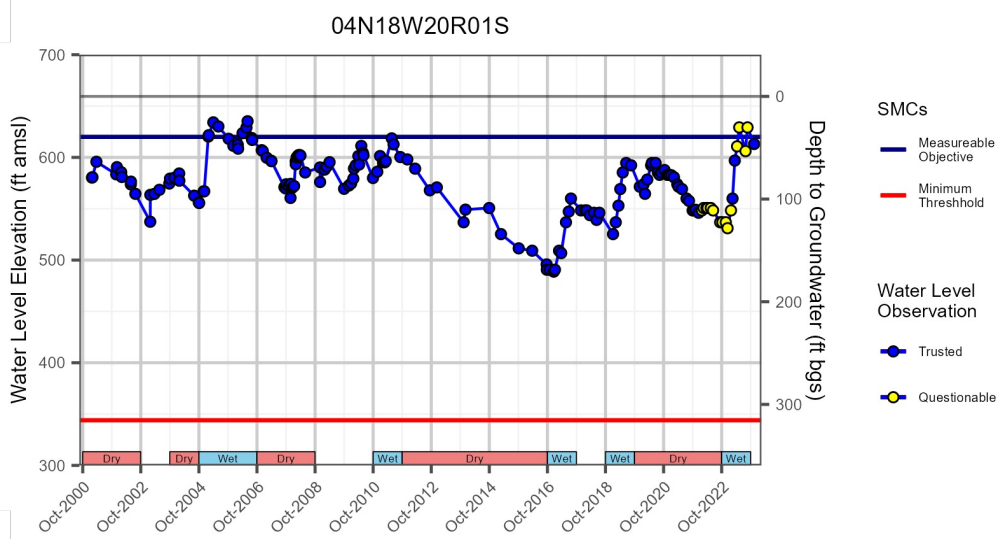
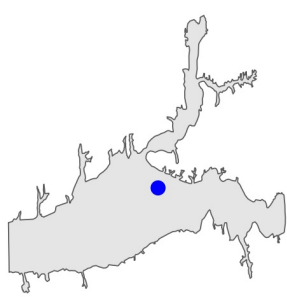
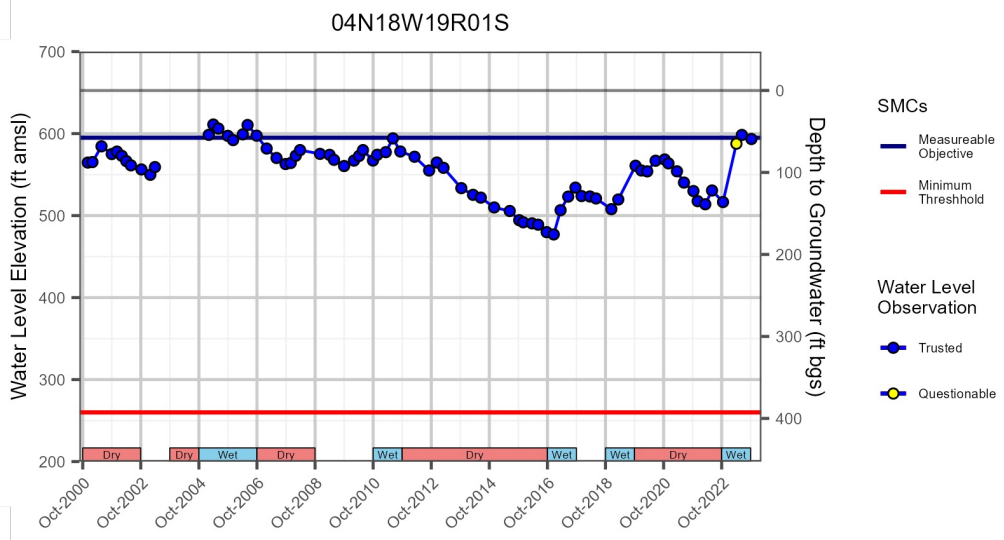
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Groundwater Elevation Contours
Fall 2023

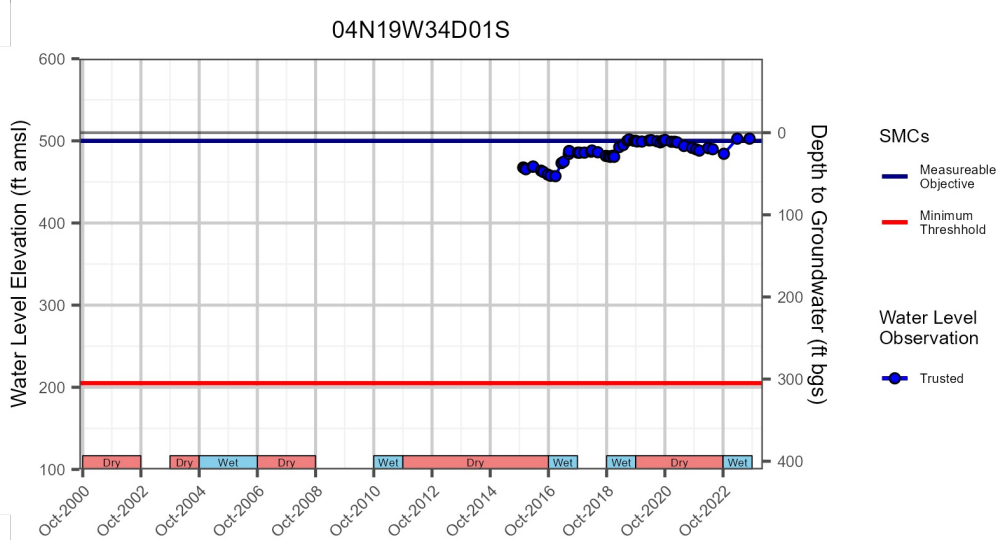
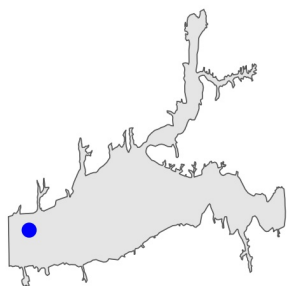
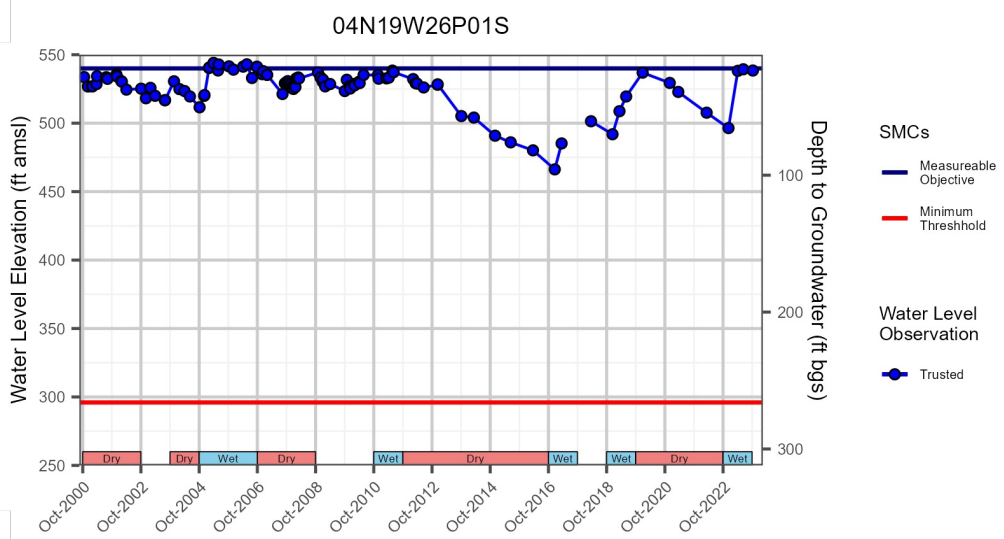
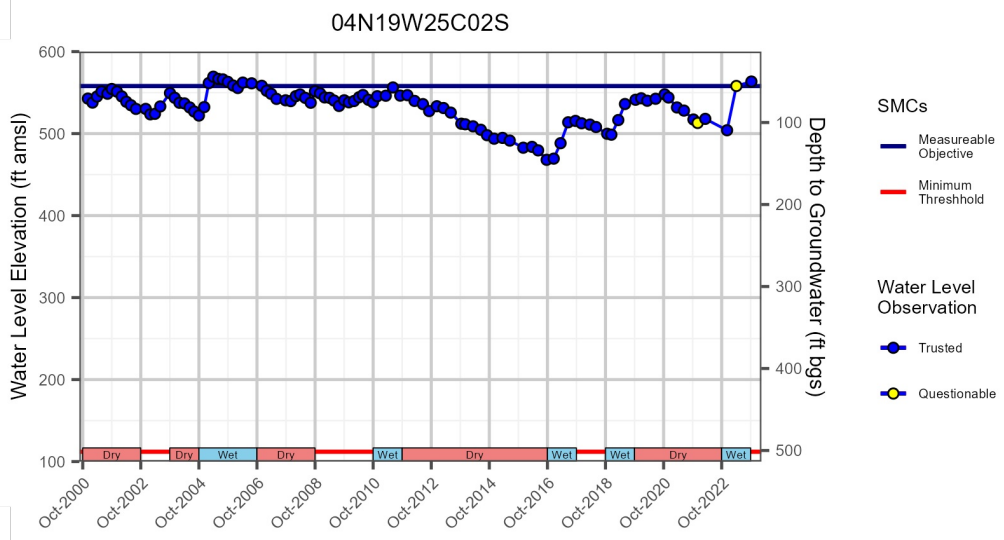
Figure 3



- Notes:
1. Red and blue colored bars at bottom of graph indicate dry/critical and wet water year types, respectively, from San Joaquin Valley Water Year Hydrologic Classification Indices.
 2. Well location indicated by reference image to left of hydrograph.



PIRU SUBBASIN ANNUAL REPORT
**Representative Monitoring Points
 Hydrographs**

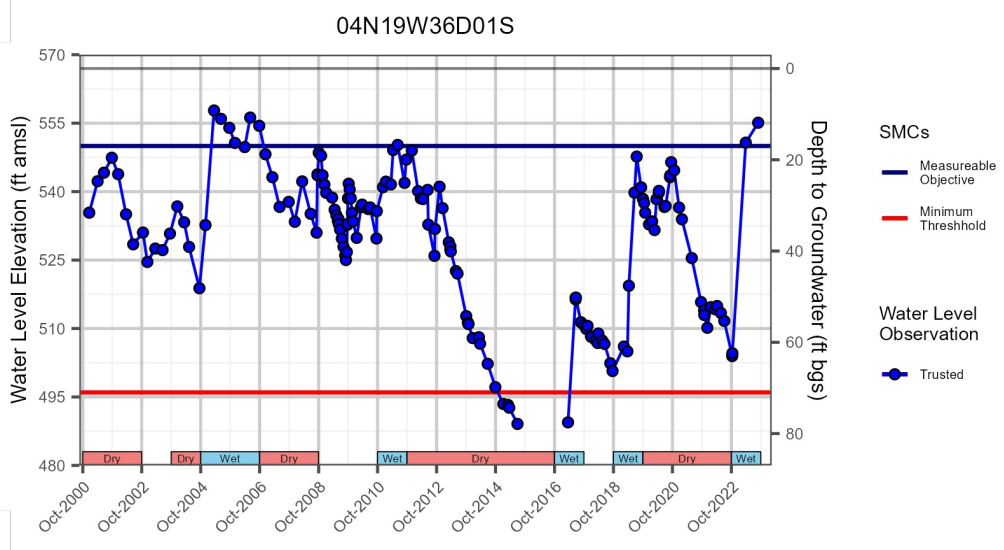
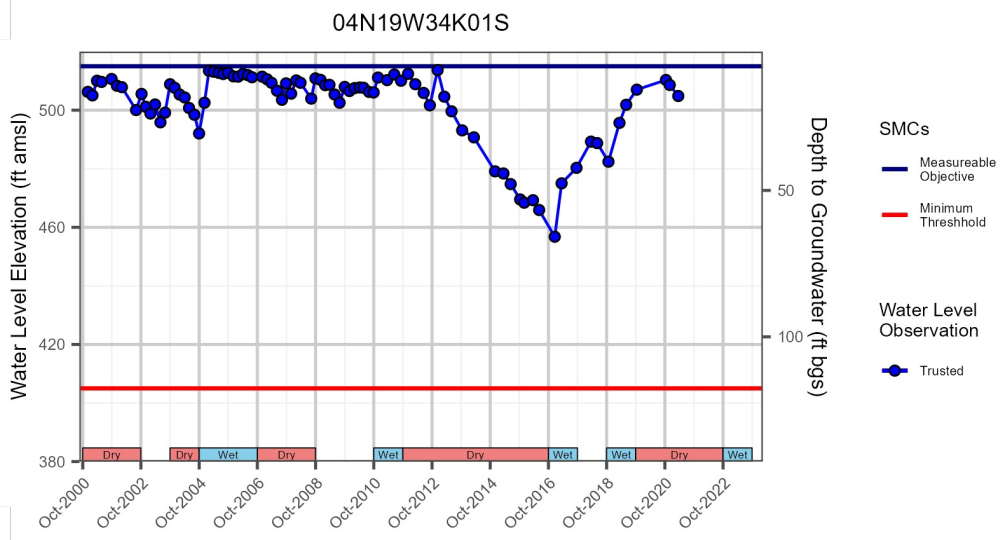


- Notes:**
1. Red and blue colored bars at bottom of graph indicate dry/critical and wet water year types, respectively, from San Joaquin Valley Water Year Hydrologic Classification Indices.
 2. Well location indicated by reference image to left of hydrograph.



PIRU SUBBASIN ANNUAL REPORT
Representative Monitoring Points
Hydrographs

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- Notes:
1. Red and blue colored bars at bottom of graph indicate dry/critical and wet water year types, respectively, from San Joaquin Valley Water Year Hydrologic Classification Indices.
 2. Well location indicated by reference image to left of hydrograph.



PIRU SUBBASIN ANNUAL REPORT
**Representative Monitoring Points
 Hydrographs**

3. Groundwater Extractions

Groundwater pumpers that produce groundwater from the Basin pay United Water Conservation District (UWCD) and the Agency an extraction fee based on the number of acre-ft they pump. Prior to 2022, this was reported on a 6-month basis (reporting to UWCD twice per calendar year). Period 1 covers January through June, and period 2 covers July through December of each year. A description of the historical groundwater extraction monitoring in Piru Basin is provided in Section 3.5.1.4 of the Piru Subbasin GSP. To better comply with SGMA reporting requirements, the Agency is requesting growers voluntarily report groundwater extractions on a quarterly (3-month) basis.

Groundwater pumpers are required to self-report groundwater extractions by well to UWCD using one of three methods: domestic multiplier, electrical meter (based on Southern California Edison efficiency testing), or water flow meter. For non-reporters, an estimate from historical usage is entered in the groundwater production database for accounting and basin volume calculation purposes. For wells with water meters, reporting typically involves filing out a form and submitting an accompanying photograph of the digital totalizer reading. The extent to which "smart meters" or automated (advanced) metering infrastructure (AMI) technology is used by individual well owners to quantify their groundwater production is unknown in the Piru Basin. There is not currently a mechanism by which well owners can automatically report groundwater production from their water meters to UWCD or the Agency. De minimis domestic pumping can be reported to UWCD using a multiplier of 0.2 AF per person in a household per 6-month period with a minimum of 0.5 AF (e.g., if there are 1 or 2 people reporting domestic usage on a well, then 0.5 AF minimum is assessed). De minimis pumpers (extractors) that have a meter on their well discharge have the option of calculating their usage based on the meter reading which may show less than 0.5 AF usage, and are billed based on actual usage.

Estimated groundwater extractions for WY 2023 grouped by water use sector and measurement method are shown in Table 1. Pumping from October through December 2022 was estimated for wells that did not report quarterly by scaling the reported volumes from period 2 of that year by the fraction of reference ET from the Moorpark CIMIS station that occurred during that time. Using this method, an estimated 536 AF (32%) of 2022 period 2 (July - December) groundwater pumping occurred during WY 2023. Due to the timing of the 6-month measurement and billing cycle described above, only voluntarily reported quarterly extractions during period 2 (July - December) of 2023 were available at the time this annual report was developed. Voluntarily reported extractions for July through September 2023 were estimated to represent

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Table 1. Groundwater Extractions

Sector	Method	GW Extraction Volume (AF)	Accuracy (%)	Range (AF)
Agriculture	Electrical Efficiency	1,993	± 20	1,595 - 2,392
	Water Meter	5,171	± 5	4,912 - 5,429
Agriculture Subtotal		7,164		6,507 - 7,821
Domestic, Municipal, and Industrial	Domestic	21	± 20	17 - 25
	Electrical Efficiency	9	± 20	7 - 11
	Water Meter	587	± 5	558 - 617
Domestic, Municipal, and Industrial Subtotal		617		582 - 653
Total		7,781		7,089 - 8,474

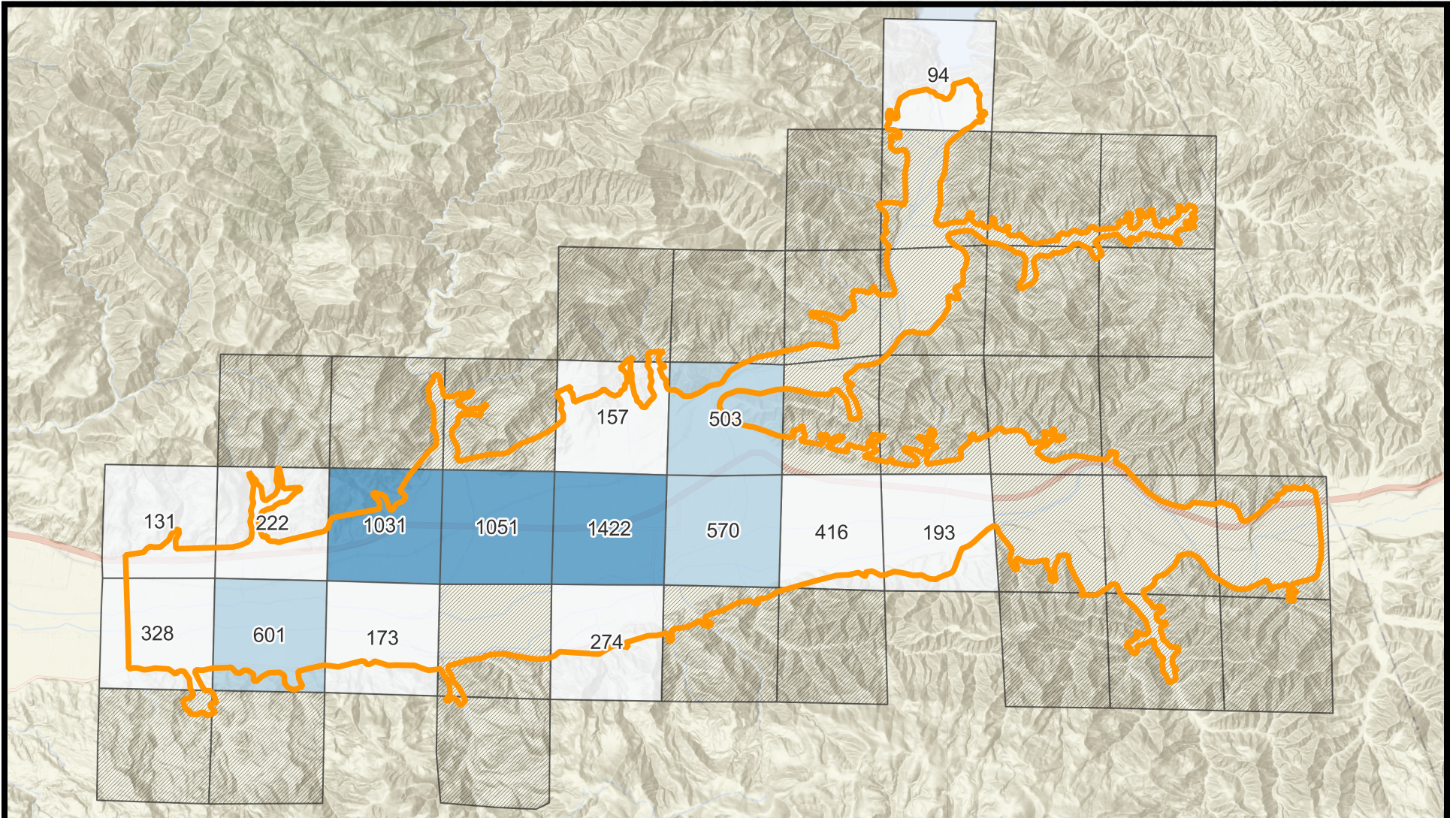
approximately 45% of total extractions during that period using the complete 2023 period 1 (January - June) data set for reference. The difference between the reported and estimated total extraction volume was assigned to wells that did not voluntarily report using proportions obtained from the complete 2023 period 1 (January - June) data set.

Groundwater pumping within each public land survey (PLSS) section (1 mi²) shows the spatial distribution of agricultural (Figure 5), municipal & industrial (Figure 6), and total (Figure 7) groundwater extractions within the Basin. Groundwater pumping totaled approximately 7,781 AF, with agricultural beneficial uses accounting for about 92% of total groundwater extractions for WY 2023.

4. Surface Water Supply

Surface water used in the Basin grouped by source and measurement method is summarized in Table 2. All surface water diversions are used beneficially for agricultural irrigation. Not all diversions for WY 2023 were reported to the State Water Resources Control Board (SWRCB) at the time this report was written. Unreported diversion volumes were estimated by averaging reported diversion volumes for the previous five years (WY 2018 through WY 2022). Total surface water used in the Basin during WY 2023 was estimated to be 2,015 AF.

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Source: <https://fillmore-piru.gladata.com>

Explanation

- Extraction Volume (AF)
 - 500 - 1,000
 - 1,000 - 1,500
 - 1,500 - 2,000
- No Extractions
- 0 - 500
- Groundwater Basin Boundary

Notes:

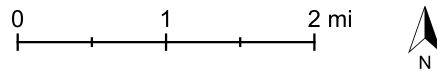
1. Estimated extraction volumes aggregated by public land survey system section.
2. Labels indicate estimated extraction volume in acre-ft (AF).
3. Agricultural groundwater extractions totaled 7,164 AF



PIRU SUBBASIN ANNUAL REPORT

Estimated Groundwater Extractions WY 2023

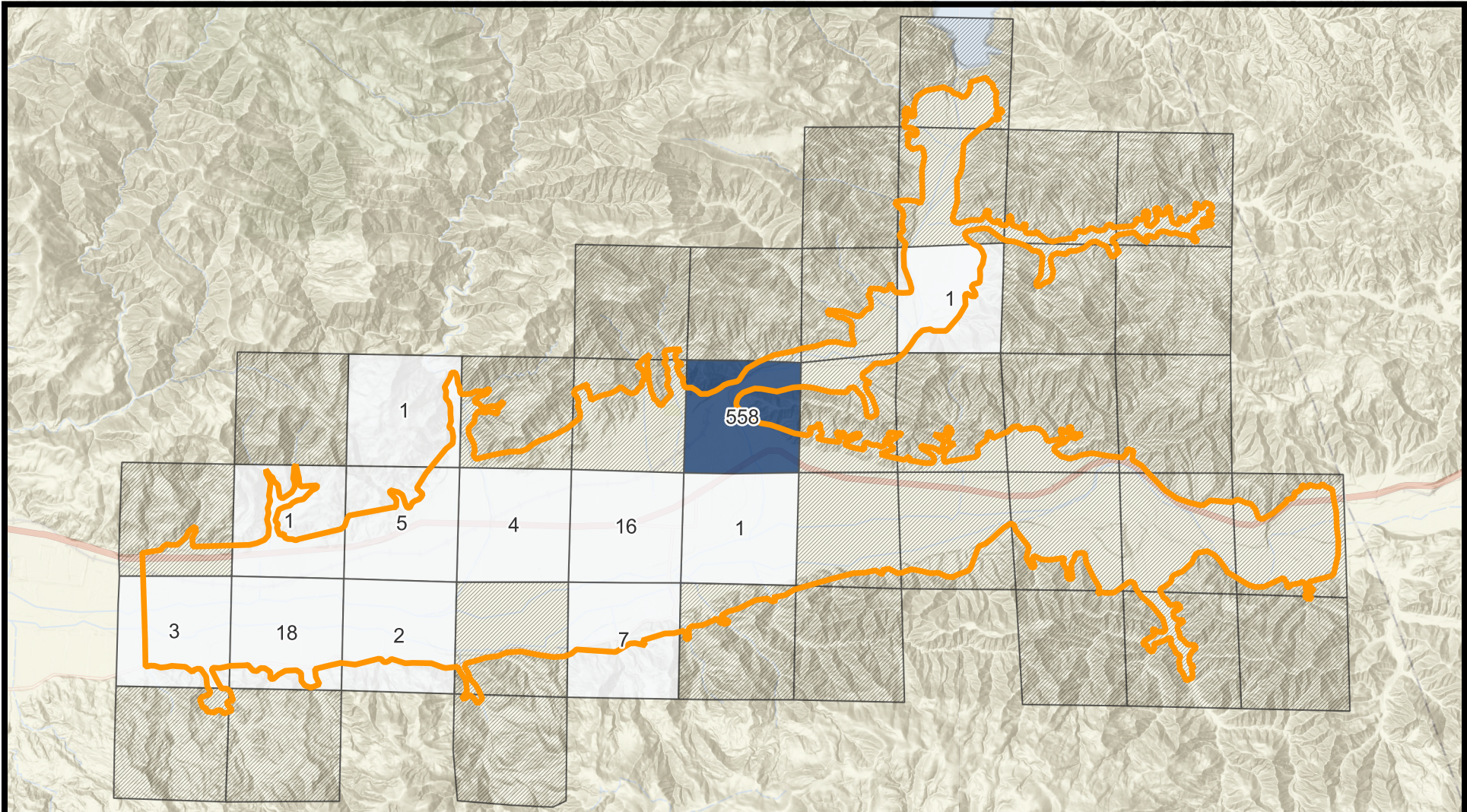
Agricultural



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Figure 5



Source: <https://fillmore-piru.gladata.com>

Explanation

- Extraction Volume (AF)
 - 200 - 400
 - 400 - 600
 - 0 - 200
- No Extractions
- Groundwater Basin Boundary

Notes:

1. Estimated extraction volumes aggregated by public land survey system section.
2. Labels indicate estimated extraction volume in acre-ft (AF).
3. Domestic, municipal, and industrial groundwater extractions totaled 617 AF.



PIRU SUBBASIN ANNUAL REPORT

**Estimated Groundwater Extractions WY 2023
Domestic, Municipal, and Industrial**



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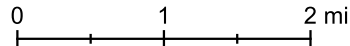
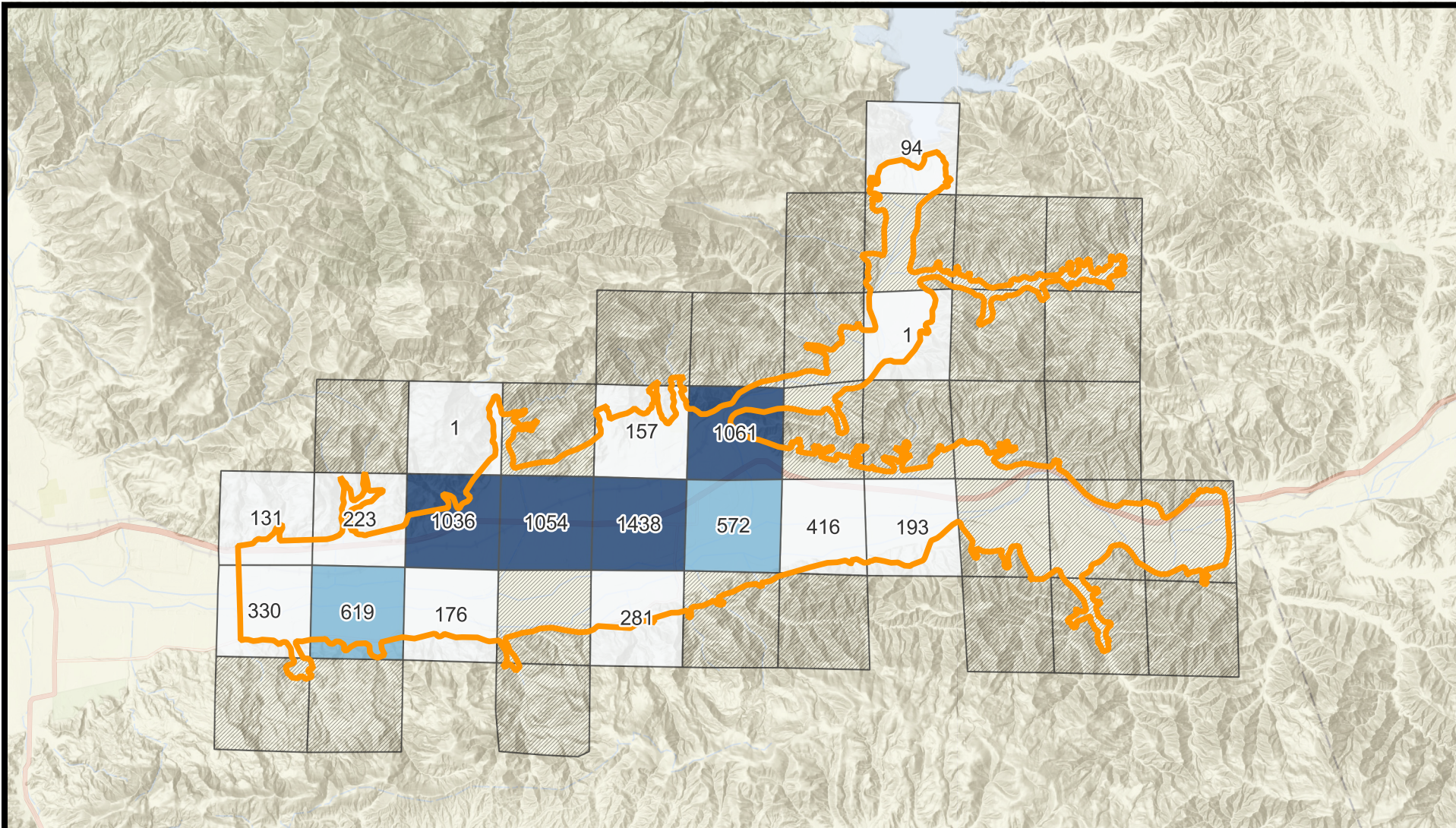


Figure 6



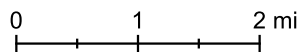
Explanation

- Extraction Volume (AF)
 - 500 - 1000
 - 1000 - 1500
 - 0 - 500
- No Extractions
- Groundwater Basin Boundary

Notes:

1. Estimated extraction volumes aggregated by public land survey system section.
2. Labels indicate estimated extraction volume in acre-ft (AF).
3. Piru subbasin groundwater extractions totaled 7,781 AF.

Source: <https://fillmore-piru.gladata.com/>



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PIRU SUBBASIN ANNUAL REPORT
Estimated Groundwater Extractions WY 2023
Total

Figure 7

Table 2. Surface Water Use

Surface Water Source	Method	Annual Volume Used (AF)	Accuracy (%)	Range (AF)
	Water Meter	915	± 5	869 - 961
Local Supplies (AF)	Estimated from previously reported diversions	1,100	± 33	737 - 1,463
Total		2,015		1,606 - 2,424

5. Total Water Use

Total water use in the Basin grouped by water use sector and measurement method is shown in Table 3. Total water volume used in the Basin during WY 2023 was estimated to be 9,796 AF.

6. Change in Groundwater Storage

Change in groundwater storage for WY 2023 was estimated using differences in water level elevations from Fall 2022 to Fall 2023. Observed differences in water levels were interpolated to a 65x65 ft (20x20 m) grid using the universal kriging method. Volume was calculated by multiplying the area of each cell by the estimated change in water level and vertically integrated aquifer storage coefficient for each respective cell. The vertically integrated aquifer storage coefficients were calculated as the thickness weighted average of each model grid cell in the UWCD groundwater model, and ranged from 0.09 to 0.15. The total change in storage for the Basin was calculated by summing the estimated change in volume for all cells and then multiplying by a scaling factor of 2.38. The scaling factor accounts for the interpolation area not covering the entire area where pumping is known to occur in the Basin due to the location and data availability of monitoring wells. It is defined as the ratio of the area within the groundwater basin boundary area and a half-mile radius of each production well to the water level change interpolation area. This assumes that water level changes in areas of the basin with no observations are similar to those with observations.

A map of the change in storage for WY 2023 with contour lines showing water level differences is shown in Figure 8. Estimated total change in storage for WY 2023 is +50,703 AF, which is

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Table 3. Total Water Use

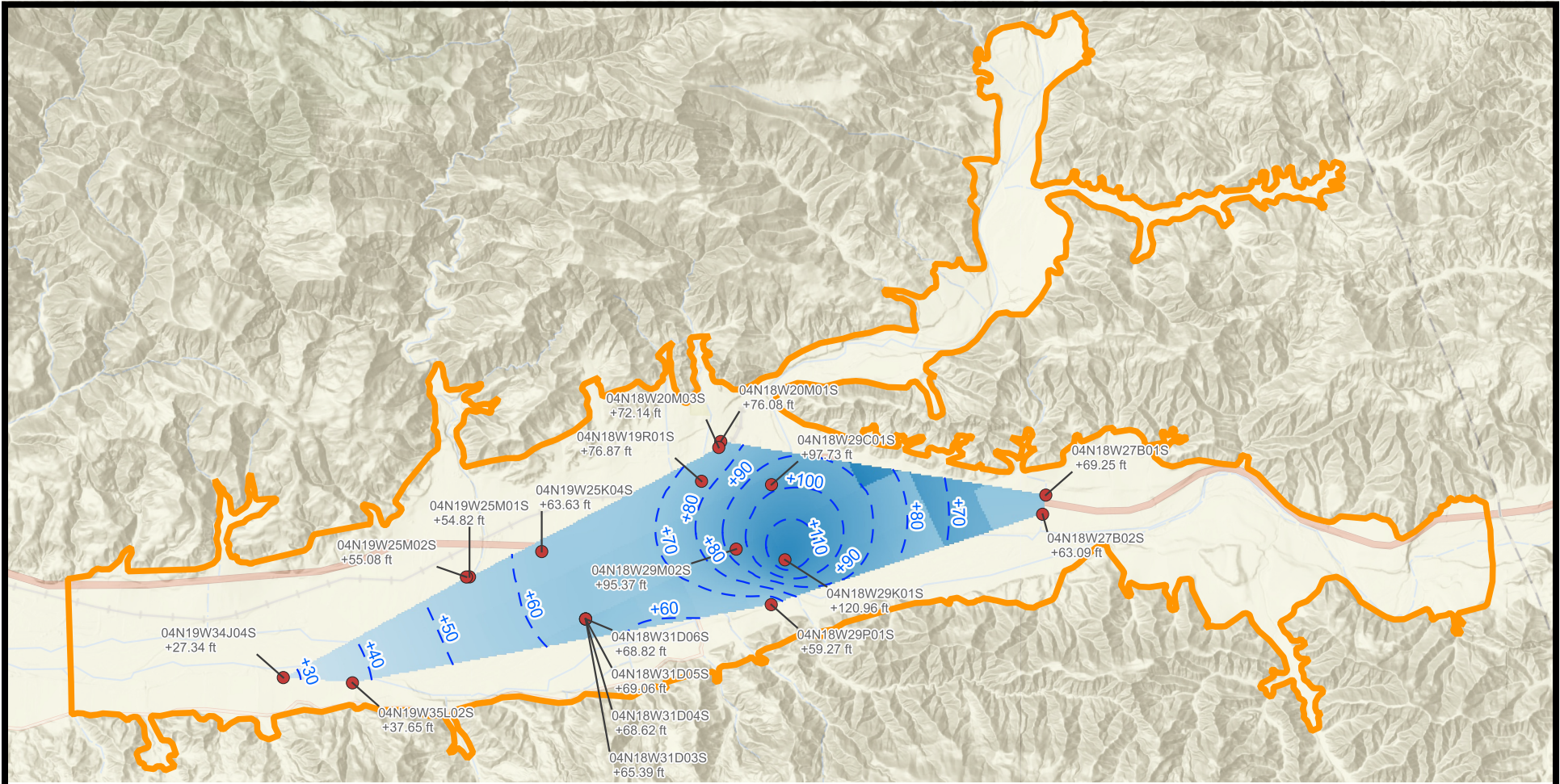
Sector	Method	Total Annual Volume (AF)	Accuracy (%)	Range (AF)
Agriculture	Electrical Efficiency	1,993	± 20	1,595 - 2,392
	Estimated from previously reported diversions	1,100	± 33	737 - 1,463
	Water Meter	6,086	± 5	5,781 - 6,390
Agriculture Subtotal		9,179	-	8,113 - 10,245
Domestic, Municipal, and Industrial	Domestic	21	± 20	17 - 25
	Electrical Efficiency	9	± 20	7 - 11
	Water Meter	587	± 5	558 - 617
Domestic, Municipal, and Industrial Subtotal		617	-	582 - 653
Total		9,796		8,695 - 10,898

expected due to exceptionally wet conditions. Figure 9 shows annual groundwater pumping and change in storage, along with cumulative storage since WY 2000. Current storage condition relative to WY 1988 is +18,123 AF.

7. Progress Towards GSP Implementation

The Piru Subbasin GSP provided seven Projects or Management Actions that the FPBGSA Board of Directors would implement or consider implementing to facilitate the maintenance of sustainable conditions in the basin (see Section 4 of the GSP). The FPBGSA completed Projects #2 and #3 in WY 2022, and have continued work on Projects #1 and #7. The remaining Project or Management Actions (Projects #4 - #6 detailed in the GSP) have yet to be discussed by the FPBGSA Board of Directors. These projects or management actions will be considered by the Board of Directors over the next year and it is anticipated that more substantive updates will be included in future Annual Reports. Below is a description of activities related to each project that occurred during WY 2023.

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Explanation

- Estimated Groundwater Storage Change (AF)
 - +1.5
 - 1.5
- Monitoring Well
- Water Level Elevation Change Contour (ft)
- Groundwater Basin Boundary

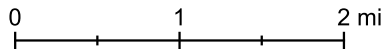
Notes:

1. Storage change estimated by interpolating changes in observed water levels to a 65 x 65 ft grid and multiplying by the vertically integrated aquifer storage coefficient for each grid cell.
2. Vertically integrated aquifer storage coefficient calculated as the thickness weighted average of aquifer storage coefficients for each model layer used in the United groundwater model.
3. Estimated WY 2023 total groundwater storage change is +50,703 AF.



PIRU SUBBASIN ANNUAL REPORT

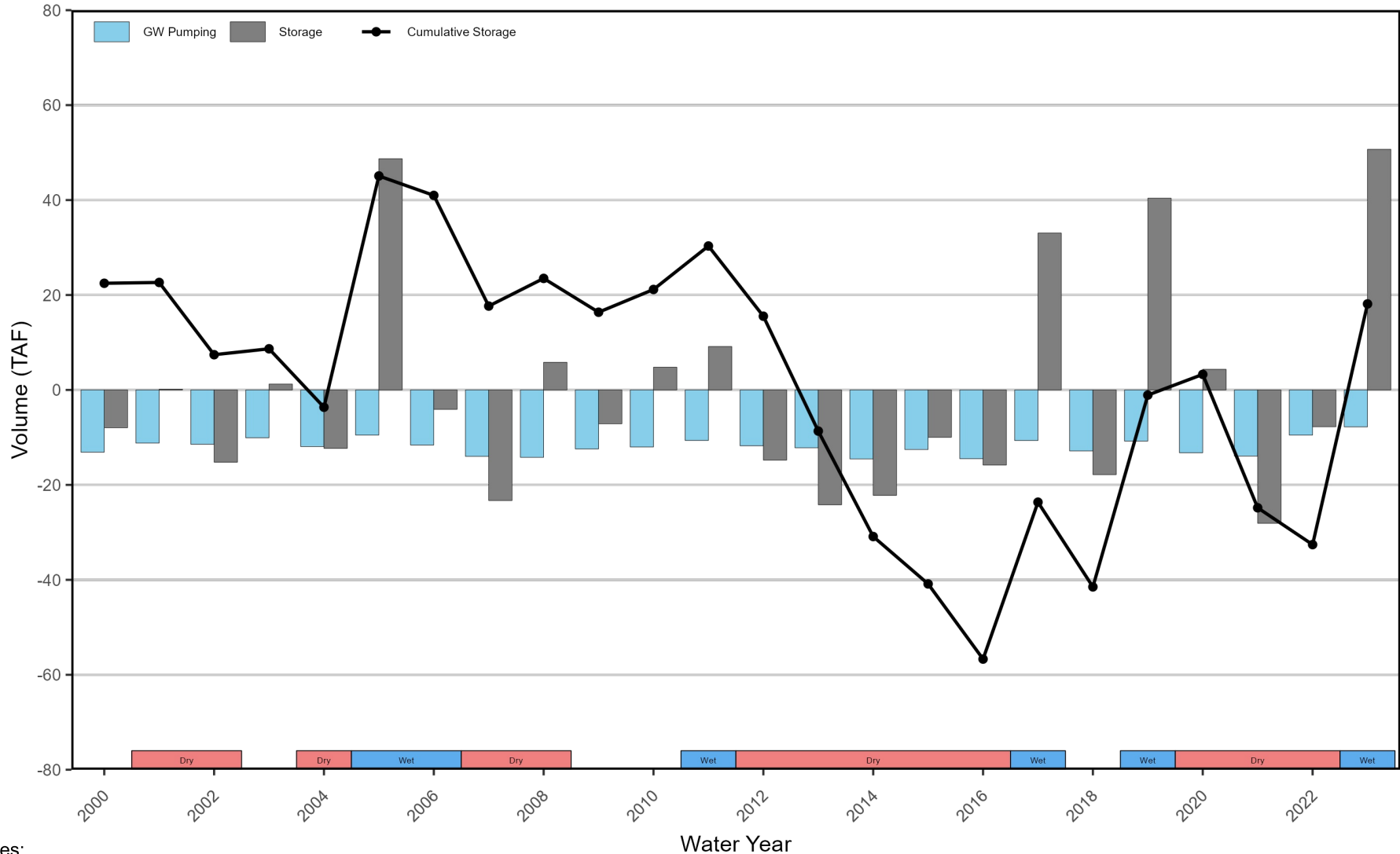
**Estimated Change in Groundwater in Storage
WY 2023**



a Geo-Logic Company
DB23.1279

02/02/2024

Annual Groundwater Pumping and Change in Storage



- Notes:
1. Negative GW pumping values indicate extractions from groundwater aquifer.
 2. Positive storage values indicate increasing groundwater levels.
 3. Change in storage volumes estimated from water level data for WY 2021-2023.
 4. Red and blue colored bars at bottom of graph indicate dry/critical and wet water year types, respectively, from San Joaquin Valley Water Year Hydrologic Classification Indices.



PIRU SUBBASIN ANNUAL REPORT
Groundwater Pumping and Change in Storage
WY 2000-2023

7.1 Project #1: Supporting the Cienega Springs Restoration Project as a Drought Refuge

Since submittal of the GSP to the California Department of Water Resources (DWR), staff and the consultant team for the FPBGSA have had limited additional discussions/meetings with representatives from California Department of Fish and Wildlife (CDFW) and researchers from University of California, Santa Barbara (UCSB) to further explore how the mitigative actions proposed in the GSP might be implemented.

The discussions with CDFW to date have focused on:

- Refining the mitigative project description
- Identifying which land parcels in the restoration project area would most benefit from receiving supplemental waters during a drought
- Exploring possible existing deep groundwater wells in proximity to the site that could be used as a water source; and
- Discussing the practicality and potential benefits of including adjacent land parcels owned by The Nature Conservancy (TNC) into the mitigation plan.

Ongoing action items with respect to this management action include:

- Establish communication with TNC to determine their interest in participating in the mitigation program
- Field verification of the operational condition of potential existing wells that are candidates to supply the supplement water
- Contact well/land owners to determine their willingness to allow access to their well(s) and establish terms of an access agreement
- Preparation of a Mitigation Plan that will detail, for example:
 - Triggers for starting and stopping the delivery of the supplemental waters
 - Quantities of supplemental water to be supplied
 - Source(s) of the supplemental water
 - Parties responsible for conveyance of the supplemental water from the source to the desired land parcel
 - Responsible parties for making decisions regarding the beneficial use of the water

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- Cost reimbursement and extraction fee waiver mechanisms for use of existing wells owned by others
- Vegetative monitoring protocols to document the success of the mitigation program.

In addition, the Mitigation Plan will estimate the cost to the FPBGSA for the implementation of the mitigative actions.

7.2 Project #7: Subsidence Infrastructure Vulnerability Evaluation

The FPBGSA contracted DBS&A to prepare an updated land subsidence evaluation (<https://bit.ly/3lbFKJ8>) that included an evaluation of InSAR data sets, Continuous Global Positioning Station (CGPS) data, a comparison of water levels v. estimated historical low water levels, and review of water levels and the Subsidence Minimum Threshold established in the GSP. Additional monitoring locations for land displacement measured remotely via satellite (InSAR) were selected based on proximity to critical infrastructure that may be negatively impacted by subsidence (e.g., bridges, railroads). The update concluded that no net subsidence has been observed since InSAR data became available in June 2015, therefore no further infrastructure vulnerability evaluations are planned. The FPBGSA will continue the annual subsidence data review and reporting.

7.3 Improvement of Groundwater Dependent Ecosystem and Groundwater-Surface-Water Interactions Monitoring Networks

DBS&A have had discussions with the FPBGSA Board of Directors regarding monitoring GW-SW interactions and the GDE monitoring network. In certain areas of the Fillmore and Piru Groundwater Basins, ephemeral groundwater discharges to surface flow. Measuring these interactions can be important for quantifying groundwater flow rates into surface water.

DBS&A has begun evaluating techniques for gathering additional information regarding surface water – groundwater interactions near the prominent GDEs. A promising evaluative technique requires measuring groundwater temperature differentials to determine rising groundwater flux in areas near the prominent GDEs. Thermal probes have been used to determine groundwater infiltration rates in previous studies (e.g., Racz et al, 2011; Schmidt et al, 2011). A similar method

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can be used to determine rising groundwater flux. Design of the temperature measurement array (e.g., up to 20 locations in a 300 by 300 ft grid) and the equipment required to implement the temperature monitoring program is currently in development.

7.4 Update to Well Permitting Application Review Workflow

The FPBGSA has had extensive discussions about their role in the well permit application review process under Executive Order N-3-23 ([EO N-3-23](#)). While the goal of the FPBGSA is to develop a review policy that is simple, fair, and transparent, this issue is complicated by the need for coordination with Ventura County, lack of specificity in the EO, and legal concerns. It is anticipated that a new workflow for reviewing well permit applications will be adopted in WY 2024.

7.5 Development of Groundwater Export Policy

The FPBGSA is developing a groundwater export policy for the Fillmore and Piru basins to help maintain groundwater sustainability in the basins and keep beneficial uses local. Implementation of a groundwater export policy can help the GSA effectively manage groundwater in the Piru basin. Three policy options will be presented to the board, and it is anticipated a final policy decision will be made during water year 2024.

7.6 DMS Maintenance

The FPBGSA has continued to maintain and update the Fillmore and Piru DMS (<https://fillmore-piru.gladata.com>), which provides stakeholders access to all available groundwater data in the subbasin using a user-friendly, map-based web interface. Groundwater levels are typically uploaded bi-annually, coincident with the July 1 and December 31 reporting dates set by DWR. Water quality and well production data are uploaded annually, coincident with GSP annual report preparation.

8. References

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