



Yolo Subbasin Groundwater Agency Board of Directors Meeting Agenda

**Monday, November 20, 2023
3:00 p.m. to 5:00 p.m.**

Woodland Police Department
1000 Lincoln Ave, Woodland, CA 95695

The public may participate in the meeting remotely via Zoom using the following information:

Please join my meeting from your computer, tablet or smartphone.

<https://us06web.zoom.us/j/7847507621>

You can also dial in using your phone.

United States: +1 669 444 9171

Access Code: 784 750 7621

NOTICE TO PUBLIC

Public documents relating to any open session item listed on this agenda that are distributed to all or most of the members of the Board of Directors less than 72 hours before the meeting are available for public inspection in the customer service area of the Yolo Subbasin Groundwater Agency's Administrative Office at 34274 State Highway 16, Woodland 95695. The full agenda packet can also be found on www.yologroundwater.org.

In compliance with the Americans with Disability Act, if you have a disability and need a disability-related modification or accommodation to participate in this meeting please contact YSGA office at (530) 662-3211. Requests must be made as early as possible, and at least one full business day before the start of the meeting.

All items on the agenda will be open for public comment before final action is taken. Speakers are requested to restrict comments to the item as it appears on the agenda and stay within a three-minute time limit. The Chair has the discretion of limiting the total time for an item. Comments may also be submitted via email to info@yolosga.org prior to the meeting or via teleconference chat during the meeting.

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- 3:00** **1. CALL TO ORDER AND DETERMINATION OF QUORUM**
- 3:05** **2. ADDING ITEMS TO THE POSTED AGENDA** -- In order to add an agenda item, it must fit into one of the following categories: a) A majority determination that an emergency (as designed by the Brown Act) exists; or b) A 4/5ths determination that the need to take action arose subsequent to the agenda being posted.
- 3:08** **3. PUBLIC FORUM** -- The Public may address the Yolo Subbasin Groundwater Agency Board of Directors on any item of interest not appearing on the agenda that is within the subject matter of the YSGA.

- 3:10** **4.** **CONSIDERATION: CONSENT ITEMS**, pages 3 to 27
- a. Adopt 2024 Board of Directors Meeting Dates: 1/22, 3/18, 5/20, 7/15, 9/16, and 11/18/24
 - b. Approve September 18 Regular and October 27, 2023 Special Board of Directors Meeting Minutes, pages 4-14
 - c. Receive Fiscal Year 23/24 Financial Statements: 9/16-11/17/23, pages 15-22
 - d. Receive minutes of Executive Committee: 8/21, 9/28, and 10/23, pages 23-27
- 3:15** **5.** **REPORT OF THE CHAIR AND EXECUTIVE OFFICER**, pages 28 to 40
Executive Officer report on activities since last Board meeting.
- 3:25** **6.** **CONSIDERATION: FISCAL YEAR 2023/24 BUDGET: AMENDMENT, PAYMENTS, AND ENTERING INTO CONTRACTS**, pages 41 to 99
- a. Adopt Fiscal Year 2023/2024 Budget Amendment #1, pages 45-46
 - b. Approve Payment of Bills, pages 47-77
 - c. Authorize Project Initiation and Private Job Work Orders for Instrumentation of Multi-Completion Monitoring Wells, pages 78-86
 - d. Authorize Entering into Contract with Stockholm Environment Institute for Updating the YSGA Model, pages 87-99
- 3:50** **7.** **CONSIDERATION: WELL PERMIT REVIEW PROCEDURES**, pages 100 to 189
- a. Update on Draft Well Permit Review Procedures, pages 102-104
 - b. Adopt Focus Areas Map and Approve Public Comment Period for Draft Hydrogeology Report Criteria, pages 105-191
- 4:50** **8.** **MEMBERS' REPORTS AND FUTURE AGENDA ITEMS** -- Yolo Subbasin Groundwater Agency Members are invited to briefly report on current issues and recommended topics for future Yolo Subbasin Groundwater Agency Board of Directors meetings.
- 4:55** **9.** **NEXT MEETING** – January 22, 2024
- 5:00** **10.** **ADJOURNMENT**

Consideration of items not on the posted agenda includes items in the following categories: 1) majority determination that an emergency (as defined by the Brown Act) exists; or 2) a 4/5ths determination that the need to take action arose subsequent to posting of the agenda. I declare under penalty of perjury that the foregoing agenda was posted by November 17, 2023 and made available to the public during normal business hours at the following location: Woodland Police Department at 1100 Lincoln Avenue, Woodland 95695 and YSGA's office at 34274 State Highway 16, Woodland 95695.

Kristin Sicke, Executive Officer



Yolo Subbasin Groundwater Agency

Board of Directors Meeting Minutes

Monday, September 18, 2023

3:00 p.m. to 5:00 p.m.

**Woodland Police Department
1000 Lincoln Ave, Woodland, CA 95695
And via Zoom**

- 1. CALL TO ORDER and DETERMINATION OF QUORUM:** Meeting called to order at 3:01 p.m. by Lee Smith, Vice Chair.
Executive Officer Sicke conducted a roll call and determined a quorum was present.

The following Board members and (alternates) were in attendance:

City of Davis: Bapu Vaitla (*Item 4-end*)
City of West Sacramento: Verna Sulpizio-Hull
City of Winters: (Kurt Balasek)
City of Woodland: Tania Garcia-Cadena (*Item 4-end*)
Dunnigan Water District: David Schaad, (Bill Vanderwaal)
Esparto CSD: (Manuel Quintana*)
Madison CSD: Leo Refsland
Reclamation District (RD) 108: (Bill Vanderwaal)
RD 307: James Johas
RD 537: Tom Ramos
RD 730: Jim Heidrick
RD 765: David Dickson, Jr.
RD 787: Roger Cornwell
RD 999: Tom Slater
RD 1600: Michele Clark*
Rumsey Water Users Association: Ken Muller
Yocha Dehe Wintun Nation: Marc Fawns
Yolo County: Jim Provenza
Yolo County Flood Control and Water Conservation District (YCFC&WCD): Tom Barth,
(Kristin Sicke)
Cal Am Water – Dunnigan: Evan Jacobs
Yolo County Farm Bureau: Lee Smith, (Denise Sagara)
Environmental Representative: Ann Brice

Absent: RD 150, RD 2035, Colusa Drain Mutual Water Company

*remote attendance, member was non-voting

**remote attendance, member provided just cause pursuant to AB 2449

2. ADDING ITEMS TO THE POSTED AGENDA: Nothing to add.

3. PUBLIC FORUM:

Ben King, farmer from Colusa County, commented about groundwater contaminated by mercury at the Colusa and Sacramento National Wildlife Refuges. He has been researching these issues and submitted several references to Kristin.

Craig Riddle, California Rice Commission, commented on a recently released report about opportunities for Groundwater Sustainability Agency collaboration on conjunctive use approaches to integrated water management. Craig will send the report to Kristin.

4. CONSIDERATION: CONSENT ITEMS

- a) Approve June 19, 2023 Regular YSGA Board of Directors Meeting Minutes
- b) Receive Fiscal Year 2022/2023 End Financial Statements
- c) Receive Fiscal Year 2023/2024 Financial Statements: 7/1-9/15/23
- c) Receive minutes of Executive Committee: 5/30 and 7/24/23
- d) Approve Payment of Bills in Approved Fiscal Year 2022/2023 Budget

Action: Approve item a) as presented.

Motion: Dunnigan Water District (Schaad)

Second: City of Winters (Balasek)

Discussion: No further discussion.

Vote: Approved unanimously (roll call attached)

Action: Approve item e) as presented.

Motion: RD 787 (Cornwell)

Second: City of Davis (Vaitla)

Discussion: No further discussion.

Vote: Approved unanimously (roll call attached)

5. REPORT OF THE CHAIR AND EXECUTIVE OFFICER

The Executive Officer reported the following:

DWR announced the final awards for the SGMA Implementation Grant solicitation. The YGSA will receive \$7.91 million, funding six of the nine submitted components. The July update to the InSAR subsidence data was released and shows that the rate of subsidence has slowed. Staff will work to schedule a ground-based survey as soon as possible. Consero has finalized the YSGA Grant Strategy, provided with the agenda packet. The three new multi-completion wells from DWR's Technical Support Services contract are drilled and will be instrumented with real-time monitoring equipment this fall. According to the real-time network, groundwater levels are on average 22 feet higher than this time last year and 16 feet higher than this date in 2015. Fall measurements of the entire network are being taken this week and will be reported at the next regularly scheduled Board meeting.

6. PRESENTATION: UPDATE FROM LSCE ON FEE STUDY DEVELOPMENT

Jack DeBra, LSCE, gave an overview of the fee study development process and next steps. The slides were included with the agenda packet.

Sulpizo-Hull: Suggested calculating the per-owner cost of the proposed fees. Asked how many owners are within the grey area. Major landowners should be focused on in outreach efforts.

Schaad: Asked whether an agency could opt out of the membership fees and have its land assessed along with the grey area. Further discussion about whether agencies will keep paying membership fees is needed.

Barth: Asked about the Prop 218 vs Prop 26 processes. Jacque recommended Prop 218 because Prop 26 requires additional action.

Ben King, public, expressed his concern with the assessment process. Agencies need to consider voting rights, benefits of assessment, and equity issues.

Smith: Asked how landowners in a district but not taking district water would be assessed.

Provenza: The assessment could be difficult to pass because grey area landowners don't have an entity they are used to dealing with.

Barth: Suggested that governance structure should be addressed before fee structure.

The Board directed Kristin to focus on the governance structure before the fee study process. Outreach will be postponed until JPA membership contributions are decided upon.

7. CONSIDERATION: ADOPT RESOLUTION 23-01 DIRECTING THE PREPARATION AND IMPLEMENTATION OF UPDATED WELL PERMIT REVIEW PROCEDURES

Kristin provided an update on Yolo County Board of Supervisors actions. On July 11, the Board of Supervisors directed staff to return with options for consideration, including a moratorium on new wells in areas of special concern. The YSGA Ad Hoc Drought Contingency Planning Committee (DCPC) met on July 26 and August 23 to review the YSGA process for mapping areas of special concern. Kristin provided an overview of the factors being considered in the mapping process. The DCPC is scheduled to meet next week to review the map progress, with the intention to provide a draft map for approval at a special Board of Directors meeting in October. The map will be used to support revised YSGA well permit verification criteria. At the September 12 meeting, the Board of Supervisors decided to enact a 45-day moratorium in Central Yolo, North Yolo, and Dunnigan Management Areas starting on September 26.

Kristin reviewed the contents of the draft Resolution with input from Rebecca Smith.

Public comment: Ben King commented that Glenn County enacted a well moratorium. He commented that the Yolo minimum thresholds for water quality are significantly lower than those for Colusa, and the monitoring network is lacking. He recommended monitoring for pH, TDS, and hexavalent chromium. Jenny Scheer noted the issue of CEQA compliance and advised that the State is revising their well standards.

Action: Approve item a) as presented.

Motion: City of Winters (Balasek)

Second: RD 787 (Cornwell)

Discussion: No further discussion.

Vote: Approved unanimously (roll call attached)

8. CONSIDERATION – WATERSMART APPLIED SCIENCE GRANT APPLICATION

a. Adopt Resolution No. 23-02 Directing and Authorizing the Executive Officer to Prepare and Submit a WaterSMART Applied Science Grant Application

b. Approve Letter of Support for the Groundwater Recharge Data Sharing and Modeling Improvements Project

Action: Approve item a) as presented.

Motion: YCFC&WCD (Barth)

Second: City of Winters (Balasek)

Discussion: No further discussion.

Vote: Approved unanimously (roll call attached)

Action: Approve item b) as presented.

Motion: City of Winters (Balasek)

Second: RD 765 (Dickson)

Discussion: No further discussion.

Vote: Motion passed (roll call attached).

11. MEMBERS' REPORTS AND FUTURE AGENDA ITEMS:

Nothing to report.

12. NEXT MEETING – Special Meeting in October – TBD. Next regular meeting on November 20, 2023.

13. ADJOURNMENT – Vice Chair Lee adjourned the meeting at 5:00 p.m.

Respectfully submitted,



Kristin Sicke, Executive Officer

ROLL CALL YSGA Board of Directors									
	Agency	Name	Board/ Alternate	ATTENDANCE	VOTE - ITEM 4a	VOTE - ITEM 4d	VOTE - ITEM 7	VOTE - ITEM 8a	VOTE - ITEM 8b
1	City of Davis	Bapu Vaitla	Board	X <i>(item 4-end)</i>	Aye	Aye	Aye	Aye	Aye
		Stan Gryczko	Alternate						
		Richard Tsai	Alternate						
2	City of West Sacramento	Verna Sulpizio Hull	Board	X	Aye	Aye	Aye	Aye	Aye
3	City of Winters	Carol Scianna	Board						
		Kurt Balasek	Alternate	X	Aye	Aye	Aye	Aye	Aye
		Wade Cowan	Alternate						
4	City of Woodland	Mayra Vega	Board						
		Tania Garcia-Cadena	Alternate	X <i>(item 4-end)</i>	Absent	Absent	Aye	Aye	Aye
5	Dunnigan Water District	David Schaad	Board	X	Aye	Aye	Aye	Aye	Aye
		Bill Vanderwaal	Alternate	X					
6	Esparto CSD	Charles Schaupp	Board						
		Manuel Quintana	Alternate	X*	Absent	Absent	Absent	Absent	Absent
7	Madison CSD	Leo Refsland	Board	X	Aye	Aye	Aye	Aye	Aye
8	RD 108	Hilary Reinhard	Board						
		Bill Vanderwaal	Alternate	X	Aye	Aye	Aye	Aye	Aye
9	RD 150	Warren Bogle	Board	Absent	Absent	Absent	Absent	Absent	Absent
10	RD 307	James Johas	Board	X	Aye	Aye	Aye	Aye	Aye
		Karen Chesnut	Alternate						
11	RD 537	Tom Ramos	Board	X	Aye	Aye	Aye	Aye	Aye
12	RD 730	Jim Heidrick	Board	X	Aye	Aye	Aye	Aye	Aye
13	RD 765	David Dickson, Jr.	Board	X	Aye	Aye	Aye	Aye	Aye
		Doug Dickson, Sr.	Alternate						
14	RD 787	Roger Cornwell	Board	X	Aye	Aye	Aye	Aye	Aye
		Dominic Bruno	Alternate						
15	RD 999	Tom Slater	Board	X	Aye	Aye	Aye	Aye	Aye
16	RD 1600	Michele Clark	Board	X*	Absent	Absent	Absent	Absent	Absent
17	RD 2035	Kyriakos Tsakopoulos	Board	Absent	Absent	Absent	Absent	Absent	Absent
		Mike Hall	Alternate						
18	Rumsey Water Users Association	Ken Muller	Board	X	Aye	Aye	Aye	Aye	Aye
19	Yocha Dehe Wintun Nation	Marc Fawns	Board	X	Aye	Aye	Aye	Aye	Aye
		Jim Ethers	Alternate						
20	Yolo County	Jim Provenza	Board	X	Abstain	Aye	Aye	Aye	Aye
21	YCFC&WCD	Tom Barth	Board	X	Aye	Aye	Aye	Aye	Aye
		Kristin Sicke	Alternate	X					
22	UC Davis	Camille Kirk	Board	Absent	Absent	Absent	Absent	Absent	Absent
		Kelli O'Day	Alternate						
23	Cal Am Water - Dunnigan	Evan Jacobs	Board	X	Aye	Aye	Aye	Aye	Aye
		Audie Foster	Alternate						
24	Colusa Drain MWC	Lynnel Pollock	Board	Absent	Absent	Absent	Absent	Absent	Absent
		Jim Wallace	Alternate						
25	Yolo County Farm Bureau	Lee Smith	Board	X	Aye	Aye	Aye	Aye	Aye
		Denise Sagara	Alternate	X					
26	Environmental Rep.	Ann Brice	Board	X	Aye	Aye	Aye	Aye	Aye

*remote attendance, member was non-voting

**remote attendance, member provided just cause pursuant to AB 2449



Yolo Subbasin Groundwater Agency

SPECIAL Board of Directors Meeting Minutes

Friday, October 27, 2023

1:00 p.m. to 3:00 p.m.

**Woodland Police Department
1000 Lincoln Ave, Woodland, CA 95695
And via Zoom**

- 1. CALL TO ORDER and DETERMINATION OF QUORUM:** Meeting called to order at 1:02 p.m. by Lee Smith, Vice Chair.
Executive Officer Sicke conducted a roll call and determined a quorum was present.

The following Board members and (alternates) were in attendance:

City of Davis: Bapu Vaitla

City of Winters: Carol Scianna (Kurt Balasek)

City of Woodland: Tania Garcia-Cadena

Dunnigan Water District: David

Reclamation District (RD) 108: Roger Cornwell

RD 537: Tom Ramos

RD 765: David Dickson, Jr. (*Item 4 – end*)

RD 787: Roger Cornwell (*nonvoting*) (Dominic Bruno*)

RD 999: Tom Slater

RD 1600: Michele Clark

Yocha Dehe Wintun Nation: Marc Fawns

Yolo County: Mary Vixie Sandy

Yolo County Flood Control and Water Conservation District (YCFC&WCD): Tom Barth,
(Kristin Sicke)

Cal Am Water – Dunnigan: Evan Jacobs (*Item 4 – end*)

Colusa Drain Mutual Water Company: Lynnel Pollock**

Yolo County Farm Bureau: Lee Smith, (Denise Sagara*)

Absent: **City of West Sacramento**, Esparto CSD, Madison CSD, RD 150, RD 730, RD 787, RD 2035, Rumsey Water Users Association, Environmental Representative

*remote attendance, member was non-voting

**remote attendance, member provided just cause pursuant to AB 2449

- 2. PUBLIC FORUM:** Nothing to report.

3. EXECUTIVE OFFICER UPDATE

Kristin Sicke, Executive Officer, provided the following updates:

- Director Mike Hall of RD 2035 passed away unexpectedly on October 11. A service will be held on

October 28 at Conaway Ranch.

- The Board welcomed new directors Andrew Fulks (UC Davis) and Mary Vixie Sandy (Yolo County).
- The Yolo Subbasin GSP was approved by DWR on October 26. DWR recommended corrective actions to be implemented prior to the 2027 GSP update.
- TNC and Audubon reached out to YSGA staff to further partnership on GDE identification, monitoring, and watershed group engagement. TNC and Audubon staff will begin reaching out to YSGA Directors to gain support and input.
- The Ad Hoc Finance Committee met on October 25 to discuss the next steps in considering the governance and funding structure of the YSGA. Legal counsel will provide a summary of decisions to be made by individual agency boards.
- YSGA staff worked with SEI and Consero to apply to the USBR WaterSMART Applied Science Grant Program. Award announcements are expected in Spring 2024.
- DWR is working with staff to drill and instrument three multi-completion wells along the west side of the Subbasin as part of the Technical Support Services program. The wells are drilled and expected to be fully online in early 2024.
- YSGA staff are participating in the filming of a video series *Farming for Our Future: Sharing Solutions to Climate Change from the Fields*.
- Fall measurements of the monitoring network are complete, and an update on groundwater levels throughout the Subbasin will be available soon.
- A check signing for the SGMA Implementation Grant award will be held before the YSGA Board Meeting on November 20. All Directors are invited to attend.

4. CONSIDERATION: APPROVAL OF DRAFT YSGA FOCUS AREAS MAP AND PUBLIC REVIEW

West Yost and YSGA staff explained the process for creating the draft focus areas map. The map was developed in collaboration with the Ad Hoc Drought Contingency Planning Committee and incorporates feedback from committee members. Staff requested the Board approve the draft Focus Areas map and begin the public comment period, which will be open from October 31 – November 14. The County Board of Supervisors will meet on November 7 and receive an update from the YSGA on progress made towards updating the well permit procedures. At the November 20 YSGA Board of Directors meeting, staff will present public comments received and the Board will consider adoption of the final map. Drafts of the Hydrogeology Reports Technical Memo and updated well permit procedures will also be provided at the November 20 regularly scheduled Board meeting.

Public Comment:

- Matt Lohse expressed concerns about the validity of data collected at his monitoring well and the cost of completing a hydrogeology report if he wants to plant trees on his property. Also commented that additional data such as irrigated acreage and whether or not a parcel has received surface water in the last 5 years should be considered in this delineation. Additionally asked why data has not been acquired from well drillers.
- Michael Jarred asked about the Citizen Concern delineation, and whether the line was just drawn around the concerned citizen's property or if there was a buffer added. Sarah clarified that the buffer

is added in the final delineation.

- Johnny Darosa asked whether it is required to report lowering the pump bowls, Sarah clarified that none of the dry well reporting is mandatory.
- Jackie Lundy asked about the size of the buffer area, Sarah clarified that the buffer is 2,000 feet, equal to the county's maximum setback distance.
- Ben King suggested the YSGA require water quality measurements upon construction of new wells. He also suggested that the YSGA consider water quality interaction at Knights Landing as Sites Reservoir conveyance may result in the co-mingling of water sources.

Board Discussion:

- Director Jacobs: Inquired about whether subsidence data will be considered in this process. Erik Cadaret of West Yost responded that subsidence will be considered in future iterations.
- Director Vaitla: Asked about wells northeast of Winters that are near the 25-foot decline threshold but not included in the delineation. Erik responded that the 25-foot decline threshold was most correlated with citizen concerns, but that the public comment period would be helpful in further refining the boundaries where necessary.
- Director Fulks: Asked whether the YSGA has projections for future demand on the aquifer that would be helpful in evaluating new well permits. Sicke responded that the 2016 land use was held constant in the GSP for future projections, but that the YSGA would be updating land use projections as part of the 2027 GSP Update.
- Director Barth: Commented that he sees this evolving into a process similar to what the cities require for new development in that the developer must demonstrate that there is adequate water supply in the area to support the proposed development.

Action: Approve the draft Focus Areas Map to begin the public review process

Motion: YCFCWCD (Barth)

Second: RD 108 (Cornwell)

Discussion: No further discussion.

Vote: Approved unanimously (roll call attached)

5. NEXT MEETING – Next regular meeting on November 20, 2023.

6. ADJOURNMENT – Vice Chair Lee adjourned the meeting at 2:35 p.m.

Respectfully submitted,



Kristin Sicke, Executive Officer

YSGA Board of Directors MEETING ROLL CALL

ROLL CALL YSGA Board of Directors					
	Agency	Name	Board/ Alternate	ATTENDANCE	VOTE - ITEM 4
1	City of Davis	Bapu Vaitla	Board	X	Aye
		Stan Gryczko	Alternate		
		Richard Tsai	Alternate		
2	City of West Sacramento	Verna Sulpizio Hull	Board	Absent	Absent
3	City of Winters	Carol Scianna	Board	X	Aye
		Kurt Balasek	Alternate	X	
		Wade Cowan	Alternate		
4	City of Woodland	Mayra Vega	Board		
		Tania Garcia-Cadena	Alternate	X	Aye
5	Dunnigan Water District	David Schaad	Board	X	Aye
		Bill Vanderwaal	Alternate		
6	Esparto CSD	Manuel Quintana	Board	Absent	Absent
			Alternate		
7	Madison CSD	Leo Refsland	Board	Absent	Absent
8	RD 108	Roger Cornwell	Board	X	Aye
		Bill Vanderwaal	Alternate		
9	RD 150	Warren Bogle	Board	Absent	Absent
10	RD 307	James Johas	Board	Absent	Absent
		Karen Chesnut	Alternate		
11	RD 537	Tom Ramos	Board	X	Aye
12	RD 730	Jim Heidrick	Board	Absent	Absent
13	RD 765	David Dickson, Jr.	Board	X <i>(Item 4 - end)</i>	Aye
		Doug Dickson, Sr.	Alternate		
14	RD 787	Roger Cornwell	Board	X <i>(nonvoting)</i>	Absent
		Dominic Bruno	Alternate	X*	
15	RD 999	Tom Slater	Board	X	Aye
16	RD 1600	Michele Clark	Board	X	Aye
17	RD 2035	Kyriakos Tsakopoulos	Board	Absent	Absent
			Alternate		
18	Rumsey Water Users Association	Ken Muller	Board	Absent	Absent
19	Yocha Dehe Wintun Nation	Marc Fawns	Board	X	Aye
		Jim Etters	Alternate		
20	Yolo County	Mary Vixie Sandy	Board	X	Aye
21	YCFC&WCD	Tom Barth	Board	X	Aye
		Kristin Sicke	Alternate	X	
22	UC Davis	Andrew Fulks	Board	X	Aye
		Kelli O'Day	Alternate		
23	Cal Am Water - Dunnigan	Evan Jacobs	Board	X <i>(Item 4 - end)</i>	Aye
		Audie Foster	Alternate		
24	Colusa Drain MWC	Lynnel Pollock	Board	X**	Aye
		Jim Wallace	Alternate		
25	Yolo County Farm Bureau	Lee Smith	Board	X	Aye
		Denise Sagara	Alternate	X*	
26	Environmental Rep.	Ann Brice	Board	Absent	Absent

*remote attendance, member was non-voting

**remote attendance, member provided just cause pursuant to AB 2449

YSGA Board of Directors MEETING ROLL CALL

Agency	Name	Attendance
<i>OTHER YSGA STAFF:</i>		
Executive Officer	Kristin Sicke	X
Legal Counsel	Rebecca Smith	X
YSGA Staff	Sarah Leicht	X
YSGA Staff	Nathan Fisher	X
<i>PUBLIC AND AGENCY STAFF:</i>		
	Ricardo Amon	X
	Anthony Endow	X
West Yost	Anna Reimer	X
	Grant Davids	X
Yolo County	Elisa Sabatini	X
	Nailah Souder	X
Yolo County	Jianmin Huang	X
	Matt Frank	X
	Brian Hauss	X
	Linda Bell	X
	John Fawcett	X
	Claire Main	X
	Trey Strickland	X
Yolo County	Kimberley Hood	X
	Savanna Sanders	X
	Susan Millsap	X
YCFCWCD	Jim Mayer	X
Yolo County	April Meneghetti	X
West Yost	Erik Cadaret	X
LSCE	Nick Watterson	X
	Johnny Darosa	X
	Jackie Lundy	X
	Ben King	X
	Michael Jarrod	X
	Matt Lohse	X
	Rod Schaffer	X

Yolo Subbasin Groundwater Agency

Balance Sheet

As of November 17, 2023

	<u>Nov 17, 23</u>
ASSETS	
Current Assets	
Checking/Savings	
1000 · 1st Northern-Checking	41,800.95
1010 · 1st Northern-Savings	5,669.05
1020 · Yolo County Treasury	<u>1,291,127.98</u>
Total Checking/Savings	1,338,597.98
Accounts Receivable	
1100 · Accounts Receivable	<u>32,054.32</u>
Total Accounts Receivable	<u>32,054.32</u>
Total Current Assets	<u>1,370,652.30</u>
TOTAL ASSETS	<u>1,370,652.30</u>
LIABILITIES & EQUITY	
Liabilities	
Current Liabilities	
Accounts Payable	
2000 · Accounts Payable	<u>151,672.66</u>
Total Accounts Payable	<u>151,672.66</u>
Total Current Liabilities	<u>151,672.66</u>
Total Liabilities	151,672.66
Equity	
3000 · Unassigned Fund Balance	-24,000.00
3010 · Nonspendable Fund Balance	492.00
3300 · Assigned Fund Balance	24,000.00
3200 · Retained Earnings	943,164.79
Net Income	<u>275,322.85</u>
Total Equity	<u>1,218,979.64</u>
TOTAL LIABILITIES & EQUITY	<u>1,370,652.30</u>

Yolo Subbasin Groundwater Agency

Budget vs Actual

July 1 through November 17, 2023

	Jul 1 - Nov 17, 23	Budget	% of Budget
Ordinary Income/Expense			
Income			
4000 · Member Contributions-Municipal	160,000.00	160,000.00	100.0%
4100 · Member Contributions-Rural	237,841.50	257,842.00	92.2%
4200 · Member Contributions-Affiliates	65,170.00	65,170.00	100.0%
4600 · Direct Contributions - IRWM Fee	7,157.57	7,157.00	100.0%
4700 · Well Permitting Regulatory Fees	2,472.00	10,000.00	24.7%
4900 · Interest Income	1.43	12,000.00	0.0%
Total Income	472,642.50	512,169.00	92.3%
Expense			
5100 · Bank & Other Fees	25.00	1,500.00	1.7%
5300 · Insurance-General & Auto	592.25	2,500.00	23.7%
5500 · Membership Dues	21,500.00	25,000.00	86.0%
7000 · Admin. Expenses	562.45	5,000.00	11.2%
7100 · Project Mgmt-SGMA Implementatio	66,560.06	260,000.00	25.6%
7125 · Buckeye Creek Recharge Project	0.00	8,863.00	0.0%
7200 · Consultant Services	44,117.50	200,000.00	22.1%
7300 · Legal Services	7,540.50	20,000.00	37.7%
7350 · Audit Services - Financial	7,800.00	15,300.00	51.0%
7400 · GSP - Related Consultant Costs	39,058.09	75,000.00	52.1%
7600 · YC Groundwater Monitor Program	8,230.00	90,000.00	9.1%
7700 · GSP Verif in Well Permit Review	1,333.80	10,000.00	13.3%
Total Expense	197,319.65	713,163.00	27.7%
Net Ordinary Income	275,322.85	-200,994.00	-137.0%
Net Income	275,322.85	-200,994.00	-137.0%

Yolo Subbasin Groundwater Agency
Statement of Cash Flows
 July 1 through November 17, 2023

	Jul 1 - Nov 17, 23
OPERATING ACTIVITIES	
Net Income	275,322.85
Adjustments to reconcile Net Income to net cash provided by operations:	
1100 · Accounts Receivable	-32,054.32
1150 · Prepaid Insurance	492.25
2000 · Accounts Payable	55,780.45
Net cash provided by Operating Activities	299,541.23
Net cash increase for period	299,541.23
Cash at beginning of period	1,039,056.75
Cash at end of period	1,338,597.98

Yolo Subbasin Groundwater Agency

Profit & Loss

July 1 through November 17, 2023

	Jul 23	Aug 23	Sep 23	Oct 23	Nov 1 - 17, 23	TOTAL
Ordinary Income/Expense						
Income						
4000 · Member Contributions-Municipal	160,000.00	0.00	0.00	0.00	0.00	160,000.00
4100 · Member Contributions-Rural	237,841.50	0.00	0.00	0.00	0.00	237,841.50
4200 · Member Contributions-Affiliates	65,170.00	0.00	0.00	0.00	0.00	65,170.00
4600 · Direct Contributions - IRWM Fee	0.00	0.00	0.00	0.00	7,157.57	7,157.57
4700 · Well Permitting Regulatory Fees	350.00	22.00	1,750.00	0.00	350.00	2,472.00
4900 · Interest Income	0.00	0.00	1.43	0.00	0.00	1.43
Total Income	463,361.50	22.00	1,751.43	0.00	7,507.57	472,642.50
Expense						
5100 · Bank & Other Fees	0.00	0.00	0.00	0.00	25.00	25.00
5300 · Insurance-General & Auto	492.25	100.00	0.00	0.00	0.00	592.25
5500 · Membership Dues	0.00	0.00	0.00	0.00	21,500.00	21,500.00
7000 · Admin. Expenses	15.84	3.15	496.51	46.95	0.00	562.45
7100 · Project Mgmt-SGMA Implementatio	591.25	0.00	65,968.81	0.00	0.00	66,560.06
7200 · Consultant Services	11,751.25	14,912.50	11,877.50	5,576.25	0.00	44,117.50
7300 · Legal Services	500.00	685.50	6,355.00	0.00	0.00	7,540.50
7350 · Audit Services - Financial	7,800.00	0.00	0.00	0.00	0.00	7,800.00
7400 · GSP - Related Consultant Costs	0.00	0.00	0.00	0.00	39,058.09	39,058.09
7600 · YC Groundwater Monitor Program	0.00	0.00	8,230.00	0.00	0.00	8,230.00
7700 · GSP Verif in Well Permit Review	0.00	0.00	1,333.80	0.00	0.00	1,333.80
Total Expense	21,150.59	15,701.15	94,261.62	5,623.20	60,583.09	197,319.65
Net Ordinary Income	442,210.91	-15,679.15	-92,510.19	-5,623.20	-53,075.52	275,322.85
Net Income	442,210.91	-15,679.15	-92,510.19	-5,623.20	-53,075.52	275,322.85

**Yolo Subbasin Groundwater Agency
A/P Aging Summary
As of November 17, 2023**

	<u>Current</u>	<u>1 - 30</u>	<u>31 - 60</u>	<u>61 - 90</u>	<u>> 90</u>	<u>TOTAL</u>
Richardson & Company LLP	7,800.00	0.00	0.00	0.00	7,500.00	15,300.00
Solano County Water Agency	21,500.00	0.00	0.00	0.00	0.00	21,500.00
West Yost	39,058.09	0.00	0.00	0.00	0.00	39,058.09
Yolo County Flood Control & WCD	75,814.57	0.00	0.00	0.00	0.00	75,814.57
TOTAL	<u>144,172.66</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>7,500.00</u>	<u>151,672.66</u>

**Yolo Subbasin Groundwater Agency
Transaction List by Date
November 10 - 17, 2023**

Type	Date	Num	Name	Memo	Account	Cir	Split	Amount
Nov 10 - 17, 23								
Deposit	11/13/2023			Deposit	1020 · Yolo County Treasury		-SPLIT-	9,670.00
Bill Pmt -Check	11/15/2023	303	Consero Solutions	Oct SGA Work & Subcontracted EEC Services	1000 · 1st Northern-Checking		2000 · Accounts Payable	-5,356.25
Bill Pmt -Check	11/15/2023	304	Downey Brand LLP	Services rendered through September 30, 2023	1000 · 1st Northern-Checking		2000 · Accounts Payable	-6,355.00
Bill Pmt -Check	11/15/2023	305	LedgerPro Bookkeeping	Bookkeeping services provided in October	1000 · 1st Northern-Checking		2000 · Accounts Payable	-220.00
Bill Pmt -Check	11/15/2023	306	Yolo County Flood Control & WCD	September & October Copies & Postage	1000 · 1st Northern-Checking		2000 · Accounts Payable	-261.50
Bill	11/15/2023	2054878	West Yost	Professional services from July 8, 2023 to August 4, 2023	2000 · Accounts Payable		7400 · GSP - Related Consultant Costs	-8,597.93
Bill	11/15/2023	2055182	West Yost	Professional services from August 5, 2023 to September 8...	2000 · Accounts Payable		7400 · GSP - Related Consultant Costs	-21,766.57
Bill	11/15/2023	2055608	West Yost	Professional services from September 9, 2023 to October ...	2000 · Accounts Payable		7400 · GSP - Related Consultant Costs	-8,693.59
Bill	11/15/2023	IRWMP 2023-2...	Solano County Water Agency	IRWMP 2023-2024	2000 · Accounts Payable		5500 · Membership Dues	-21,500.00
Invoice	11/15/2023	2023-28	Water Resources Association	Board Approved Close and Transfer - Not Yet Complete	1100 · Accounts Receivable		4600 · Direct Contributions - IRWM Fee	7,157.57
Nov 10 - 17, 23								

Yolo Subbasin Groundwater Agency Open Invoices As of November 17, 2023

Type	Date	Num	P. O. #	Name	Terms	Due Date	Aging	Open Balance
Colusa Drain Mutual Water Comany								
Invoice	07/07/2023	2023-6		Colusa Drain Mutual Water Comany	50% Invoice Due ...	01/27/2024		5,000.00
Total Colusa Drain Mutual Water Comany								5,000.00
Madison Community Service District								
Invoice	07/07/2023	2023-11		Madison Community Service District	Net 30	08/06/2023	103	5,000.00
Total Madison Community Service District								5,000.00
Reclamation District 150								
Invoice	07/07/2023	2023-27		Reclamation District 150	Net 30	08/06/2023	103	2,146.50
Total Reclamation District 150								2,146.50
Reclamation District 1600								
Invoice	07/07/2023	2023-14		Reclamation District 1600	50% Invoice Due ...	01/27/2024		1,731.00
Total Reclamation District 1600								1,731.00
Reclamation District 2035								
Invoice	07/07/2023	2023-16		Reclamation District 2035	50% Invoice Due ...	01/27/2024		9,500.00
Total Reclamation District 2035								9,500.00
Reclamation District 537								
Invoice	07/07/2023	2023-17		Reclamation District 537	50% Invoice Due ...	01/27/2024		1,519.25
Total Reclamation District 537								1,519.25
Water Resources Association								
Invoice	11/15/2023	2023-28		Water Resources Association		11/30/2023		7,157.57
Total Water Resources Association								7,157.57
TOTAL								32,054.32

Yolo Subbasin Groundwater Agency Upcoming Cash Requirements

As of November 17, 2023

Type	Date	Num	Name	Memo	Due Date	Aging	Open Balance
Current							
Bill	11/15/2023	2054878	West Yost	Professional services from July 8, 2023 to August 4, 2023	11/25/2023		8,597.93
Bill	11/15/2023	2055182	West Yost	Professional services from August 5, 2023 to September 8, 2023	11/25/2023		21,766.57
Bill	11/15/2023	2055608	West Yost	Professional services from September 9, 2023 to October 6, 2023	11/25/2023		8,693.59
Bill	09/30/2023	2023.0930	Yolo County Flood Control & WCD	Expenses 07/01/2023 - 09/30/2023	11/30/2023		75,814.57
Bill	11/15/2023	IRWMP 2023-2024	Solano County Water Agency	IRWMP 2023-2024	12/15/2023		21,500.00
Bill	#####	FY2023	Richardson & Company LLP	Audit services not to exceed \$7,800.00 for FY 2023	12/31/2023		7,800.00
Total Current							144,172.66
1 - 30							
Total 1 - 30							
31 - 60							
Total 31 - 60							
61 - 90							
Total 61 - 90							
> 90							
Bill	#####	FY2022	Richardson & Company LLP	Audit services for FY2022 not to exceed \$7,500	06/30/2023	140	7,500.00
Total > 90							7,500.00
TOTAL							151,672.66

Current Cash Balance {Checking Only}	41,800.95
<i>Richardson invoices not yet received - Audit not yet complete Dated to reflect consistency with reporting years</i>	(94,571.71)
Desired Reserve in Checking/Savings (Per Assigned Fund Balance)	24,000.00
Ending Cash Reserve or (Transfer Needed)	(118,571.71)

Yolo Subbasin Groundwater Agency
MINUTES of Executive Committee (EC) Meeting
August 21, 2023, 12:00 p.m. – 1:00 p.m.
Hosted at YCFC&WCD Headquarters
34274 State Highway 16, Woodland

Present: Lee Smith, Dave Schaad, Kristin Sicke, Dotty Pritchard, Kurt Balasek, Elisa Sabatini (phone), Sarah Leicht, Nathan Fisher

1. **Call to Order:** Meeting was called to order by Lee Smith at 12:02 pm.
2. **Adding Items to the Posted Agenda:** Nothing to add.
3. **Public Comment:** No comments.
4. **Administrative Items** (Sicke):
 - a) July 24, 2023 meeting minutes were approved.
 - b) Reviewed financials: FY 2023-2024: 7/20 – 8/18/23: Financials were provided with the agenda packet. A budget amendment will be brought to the Board in September to correct the audit charges.
 - c) Payments to approve: Payments were provided with the agenda packet.

David Schaad moved to approve administrative item a), which was seconded by Kurt Balasek and approved unanimously. David Schaad moved to approve administrative item c), which was seconded by Kurt Balasek and approved unanimously.

5. **Update on YSGA GSP Implementation Actions:** Discussion Item (Sicke)
 - a) Water Conditions Update: Kristin provided an update on current groundwater level conditions. Groundwater levels are showing good recovery from drought conditions.
 - b) Grant Funding Opportunities: Staff are working with Consero to track funding opportunities. The application to the ICARP Regional Resilience Grant has been postponed until next year. In the meantime, elements of the proposal will be included in the County’s climate planning process and other grant solicitations. Staff are also planning to apply to the upcoming WaterSMART program solicitation.
 - c) Ad Hoc Drought Contingency Planning Committee: The Committee is scheduled to meet on August 23 to discuss the work put forth by West Yost and YSGA staff towards mapping Areas of Special Concern. EC members requested the map be sent out ahead of the meeting if possible. The EC discussed the policy development process and whether the map should be distributed for public comment. The EC suggested data gaps be created as a separate map from areas of special concern, because it may be easier to achieve consensus on those areas.
 - d) Ad Hoc Committee for Reconsideration of Expense Allocation: Kristin presented a draft 5-year GSA budget and outreach timeline prepared by LSCE. The EC recommended that the fee study cover more than 5 years if possible, and discussed the outreach strategy to minimize conflict.
6. **September 18, 2023 Board of Directors *Draft* Agenda Items** (Sicke)
 - a) Consent Items
 - i. Financials
 - ii. Approval of Payments
 - iii. Meetings Minutes
 - b) Gary Sandy Honorary Resolution
 - c) Resolution Acknowledging Helen Thomson’s Contributions to Groundwater
 - d) NCWA Update on Water Legislation and Regulatory Issues
 - e) DWR Update
 - f) Report of Chair and Executive Officer
 - g) GSP Implementation Update
 - i. Groundwater Conditions
 - ii. Grant Funding Opportunities Update
 - iii. Update on Fee Study Process
 - h) Closed Session Items

**Yolo Subbasin Groundwater Agency
MINUTES of Executive Committee (EC) Meeting
August 21, 2023, 12:00 p.m. – 1:00 p.m.
Hosted at YCFC&WCD Headquarters
34274 State Highway 16, Woodland**

- i) Areas of Special Concern and Well Permitting Update

The agenda is likely too long, and items h) and i) will be moved to a special meeting if needed. Kristin will work with Dotty to plan items b) and c).

7. Other Updates & Future Executive Committee Agenda Items: Nothing to report.

8. Next Executive Committee Meeting Date: September 27 or 28, 2023.

9. Adjourned at 12:58 pm.

Respectfully submitted,



Kristin Sicke
Executive Officer

Yolo Subbasin Groundwater Agency
MINUTES of Executive Committee (EC) Meeting
September 28, 2023, 12:00 p.m. – 1:00 p.m.
Hosted at YCFC&WCD Headquarters
34274 State Highway 16, Woodland

Present: Lee Smith, Dave Schaad, Kristin Sicke, Dotty Pritchard, Kurt Balasek, Elisa Sabatini (phone), Sarah Leicht, Nathan Fisher

1. **Call to Order:** Meeting was called to order by Lee Smith at 12:02 pm.
2. **Adding Items to the Posted Agenda:** Nothing to add.
3. **Public Comment:** No comments.
4. **Administrative Items** (Sicke):
 - a) August 21, 2023 meeting minutes were approved.
 - b) Reviewed financials: FY 2023-2024: 8/18 – 9/15/23: Financials were provided with the agenda packet.
 - c) Payments to approve: Payments were provided with the agenda packet.

David Schaad moved to approve administrative item a), which was seconded by Kurt Balasek and approved unanimously. David Schaad moved to approve administrative item c), which was seconded by Kurt Balasek and approved unanimously. Kristin clarified the reasons for the post due invoices for YCFCWCD and Richardson and Co.

5. **Update on YSGA GSP Implementation Actions:** Discussion Item (Sicke)
 - a) Water Conditions Update: Kristin provided an update on current groundwater level conditions. The initial fall measurements show significant recovery and very limited drawdown.
 - b) Grant Funding Opportunities: Staff are preparing an application for the USBR Applied Science Grant. The ICARP Regional Resilience Grant will be tabled for next year.
 - c) Ad Hoc Drought Contingency Planning Committee: The Executive Committee discussed the slides sent out for the Ad Hoc Drought Contingency Planning Committee later today.
 - d) Ad Hoc Committee for Reconsideration of Expense Allocation: The Committee discussed the governance issue brought up at the Board of Directors meeting.
6. **Other Updates & Future Executive Committee Agenda Items:** Nothing to report.
7. **Next Executive Committee Meeting Date:** October 19, 2023.
8. **Adjourned** at 12:58 pm.

Respectfully submitted,



Kristin Sicke
Executive Officer

Yolo Subbasin Groundwater Agency
MINUTES of Executive Committee (EC) Meeting
October 19, 2023, 12:00 p.m. – 1:00 p.m.
Hosted at YCFC&WCD Headquarters
34274 State Highway 16, Woodland

Present: Lee Smith, Dave Schaad, Kristin Sicke, Dotty Pritchard, Kurt Balasek, Elisa Sabatini, Sarah Leicht, Nathan Fisher

1. **Call to Order:** Meeting was called to order by Lee Smith at 12:00 pm.
2. **Adding Items to the Posted Agenda:** Kristin Sicke added one bill to the payments to approve table – LedgerPro Bookkeeping for bookkeeping services provided in September 2023 in the amount of \$420.
3. **Public Comment:** No comments.
4. **Administrative Items (Sicke):**
 - a) *September 28, 2023 meeting minutes* were approved.
 - b) *Reviewed financials: FY 2023-2024: 9/15 – 10/16/23:* Financials were provided with the agenda packet.
 - c) *Payments to approve:* Payments were provided with the agenda packet, including the verbal addition of approving LedgerPro Bookkeeping invoice for September services in the amount of \$420.

Kurt Balasek moved to approve administrative items a) and c) which was seconded by David Schaad and approved unanimously.

5. **Update on YSGA GSP Implementation Actions:** Discussion Item (Sicke)
 - a) *Water Conditions Update:* There are still some representative wells missing from the fall measurements. Kristin provided an update on the average groundwater levels from the YCFC&WCD monitoring network.
 - b) *Grant Funding Opportunities:* The USBR Applied Science Grant has been submitted and the announcement of award is expected in Spring 2024. Consero will begin working to prioritize additional projects and help Kristin establish Management Area Advisory Committees.
 - c) *Ad Hoc Drought Contingency Planning Committee:* The Executive Committee discussed the slides sent out for the Ad Hoc Drought Contingency Planning Committee scheduled for later today.
 - d) *Ad Hoc Committee for Reconsideration of Expense Allocation:* Kristin had a recent conversation with Rebecca Smith. The Ad Hoc Committee has a meeting next Wednesday (11/25) to start discussing governance.
6. **October 27, 2023 Special Board of Directors Meeting Draft Agenda Items**
 - a) Executive Officer Update – TNC Partnership. The Committee provided feedback to work out a scope in writing and consider executing an informal agreement.
 - b) Consideration: Approval of *Draft YSGA Areas of Special Concern Map & Public Review*
 - c) Brief Review of Hydrogeology Report Standardized Criteria

7. **Other Updates & Future Executive Committee Agenda Items:** Mary Vixie Sandy will resume the District 3 position as Supervisor until the March 2024 election. Lee requested a presentation from Legal Counsel on the YSGA's authority as a GSA.

Yolo Subbasin Groundwater Agency
MINUTES of Executive Committee (EC) Meeting
October 19, 2023, 12:00 p.m. – 1:00 p.m.
Hosted at YCFC&WCD Headquarters
34274 State Highway 16, Woodland

8. **Next Executive Committee Meeting Date:** November 14, 2023 at 1:00 pm.

9. **Adjourned** at 12:58 pm.

Respectfully submitted,



Kristin Sicke
Executive Officer

Date: November 16, 2023
To: YSGA Board of Directors
From: Kristin Sicke, Executive Officer
Subject: Report of the Executive Officer

Recommendation

For informational purposes only. No Board action required.

Background

Following is an update to the Board of Directors of the YSGA on activities and issues related to the ongoing implementation of the Sustainable Groundwater Management Act (SGMA). This report should be considered as a summary document so that Board members and other interested parties can quickly read about the general activities taking place between YSGA Board meetings. Board members should feel free to contact me at any time for more detail or with ideas and/or questions that they might have regarding the program.

Since the September 18, 2023 meeting of the YSGA Board of Directors the following activities have taken place.

Program Administration

Three meetings were held by the YSGA Executive Committee (EC) on September 28, October 19, and November 14, 2023. The EC, consisting of Lee Smith, David Schaad, Kurt Balasek, Mary Vixie Sandy, and Executive Officer Kristin Sicke, discussed logistical issues related to YSGA administration and the implementation of the Groundwater Sustainability Plan (GSP). The Committee discussed administrative items along with the ongoing development of the Focus Areas map and Hydrogeologist Report requirements, potential approaches to the YSGA fee study and how it may impact YSGA governance, and grant funding opportunities.

The YSGA *Ad Hoc Drought Contingency Planning Committee* met on September 28 and October 19, 2023 to review progress made by YSGA staff and West Yost to develop the Focus Areas map and discuss the hydrogeologist report requirements. Additionally, YSGA staff participated in the Yolo County Board of Supervisors meetings on September 26 and November 7 to communicate the YSGA's progress on updating procedures for written verification letters to the County's Environmental Health Division and to present the draft Focus Areas map to the Board of Supervisors.

YSGA staff continue to coordinate with stakeholders and to schedule and participate in community meetings for ensuring successful outreach during GSP implementation. Staff also continue to communicate with Solano Subbasin GSA, N. American Subbasin, Sutter Subbasin, and Colusa Groundwater Authority on data/information sharing and project opportunities, as well as other GSAs and Counties on their well permitting activities.

The Yolo Groundwater website <http://yologroundwater.org> was updated as needed. A calendar of current events is posted to the website.

Program Implementation

- GSP Public Outreach
 - Ongoing correspondence with concerned stakeholders, well drillers, and well applicants to answer questions about SGMA and the revised well permitting process.
- Projects and Management Actions
 - Coordinated with Yolo County in the well permitting process in accordance with Executive Orders N-7-22 and N-3-23
 - Received approved well permits not subject to the County's 45-day temporary well moratorium and reviewed pending well permits from Yolo County's Environmental Health Division
- Data Management/Website Updates
 - Met with Websoft developers to discuss feasibility of potential updates to the WRID and yologroundwater.org websites
- Monitoring Network
 - YSGA staff sent out letters to landowners in data gap areas to gauge interest in joining the YSGA's voluntary monitoring network. Staff have visited four of these wells thus far and hope to continue to hear back from more landowners.
 - Three new monitoring wells have been added to the monitoring network, all of which are within the draft Focus Areas delineation:
 - 08N01E04D500M, a 500-foot real-time monitoring well located off County Road 95 near the Yolo County Airport
 - 11N01W12F500M, a 280-foot domestic well located near Zamora
 - 09N01W30Q500M, a 700-foot ag well located off County Road 29 at the base of the foothills, with groundwater level data going back to when it was drilled in 2015.
 - Continued to provide water level readings for domestic well owners
 - Continued implementation of citizen science program for individual well monitoring
- Areas of Special Concern
 - Participated in various meetings with West Yost to review the process for developing the draft map of the Focus Areas and the draft hydrogeologist report guidelines.
 - The draft Focus Areas map was approved by the YSGA Board of Directors at a special meeting on October 27, 2023. The public comment period for the Focus Areas map opened on October 31 and ran for two weeks until closing on November 14, 2023.
 - Developing work plan with [DIG IN](#) to assist with Hungry Hollow Area outreach and communication using the [facilitation support services from DWR](#)
- Drought Response
 - Worked with Yolo County OES to continue coordinated water delivery to households with dry wells

Program Outreach

Staff participated in a number of meetings/workshops/discussions related to SGMA and groundwater recharge and protection, which include the following:

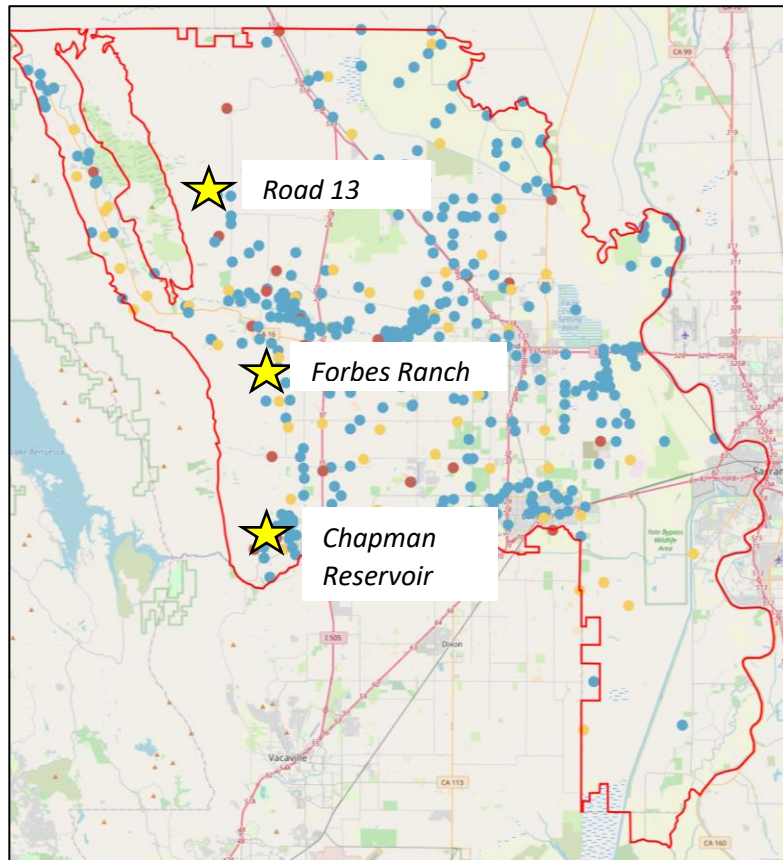
1. Meeting with Dunnigan Water District to Coordinate on Monitoring Network Enhancements (September 20; Sicke, Leicht, and Fisher)
2. Meeting with Yolo County to Discuss the Drought Resilience Plan (SB 552) (September 20; Sicke and Leicht; Sabatini)

3. Well Moratorium Briefings with County Supervisors (September 21 and 25, October 27, November 1 and 6; Sicke; Sabatini)
4. Participated in ACWA Board Meetings (September 29 and November 17; Sicke)
5. Participated in Coordination Meetings with Yolo County Staff to Discuss Well Permitting (September 22, September 29, October 6, October 13, October 27, and November 3; Sicke)
6. Participated in the Yolo County Board of Supervisors Meetings (September 26 and November 7; Sicke)
7. Participated in Steering Committee Meetings with Yolo RCD, Center for Land-Based Learning, CAFF, and Bright Coast Productions for the Farming for Our Future video series (September 28 and October 18; Fisher)
8. Hosted YSGA Executive Committee Meetings (September 28, October 19, and November 14; Directors Balasek, Schaad, Vixie Sandy, and Smith; Sicke, Leicht, and Fisher; Sabatini)
9. Hosted YSGA Ad Hoc Drought Contingency Planning Committee (September 28, October 19; Committee members; Sicke, Leicht, and Fisher; Sabatini)
10. Participated in Groundwater Accounting & Data Reporting Pilot meetings (October 3, November 16; Sicke, Leicht, and Fisher)
11. Meeting with City of Winters to Discuss Grant Opportunities (October 10; Sicke, Leicht, and Fisher)
12. Meetings with The Nature Conservancy to explore methodology to improve monitoring of groundwater dependent ecosystems and interconnected surface water (October 13, November 9; Sicke, Leicht, and Fisher)
13. Meeting with Annie Main to Discuss Well Permitting Procedures (October 18; Sicke)
14. Participated in NCWA Sacramento Valley Celebration (October 19; Directors Barth, Cornwell, Reinhard, Smith, and Vanderwaal; Sicke)
15. Represented Yolo County in Westside Sacramento IRWM Coordinating Committee Meetings (October 19 and November 8; Leicht)
16. Participated in ACWA State Legislative Committee (October 20; Sicke)
17. Hosted YSGA Ad Hoc Committee for Reconsideration of Voting Structure and Expense Allocation Meeting (October 25; Committee Members; Sicke, Leicht, and Fisher)
18. Participated in Lake County Judges Breakfast (October 26; Sicke)
19. Participated in Inter-basin Coordination Meeting with Solano Subbasin GSA (November 1; Sicke, Leicht, and Fisher)
20. YSGA staff and West Yost met with County staff and LSCE to communicate progress made on defining areas of special concern (November 1; Sicke, Leicht, and Fisher)
21. Met with SWRCB to discuss Clean/Drinking Water SRF funding opportunities (November 2; Fisher)
22. Staff participated in a preliminary meeting for the formation of a Cache Creek Watershed Group (November 2; Director Fawns; Sicke and Fisher)
23. Meeting with Eaton Drilling to Discuss YSGA's Draft Focus Areas Map (November 2; Sicke)
24. Participated in the 2023 Flood-MAR Forum (November 7; Sicke)
25. Participated in DWR'S 2023 Fall GSA Forum to Discuss Well Permitting Compliance with Governor's Executive Orders (November 9; Sicke)
26. Participated in Central Valley Regional Water Board and NCWA Meeting to Discuss Yolo Subbasin (pre-2016 Bulletin 118 Revisions) Nitrate Notice to Comply in State's Nitrate Control Program (November 14; Director Sagara; Sicke)
27. Participated in Coordination Meeting with Sustainable Conservation to Discuss Groundwater Recharge Technical Support Available (November 15; Sicke)
28. Staff completed the Stanford Online Course: Harnessing the Power of Geophysical Imaging to Recharge California's Groundwater (Leicht and Fisher)

Other Items of Note

On Thursday, October 26, the Department of Water Resources released its [determination for the Yolo Subbasin GSP](#), approving the plan and recommending corrective actions to be implemented prior to the 2027 GSP update. The recommended corrective actions mainly focus on revisions to the sustainable management criteria for the chronic lowering of groundwater levels, degradation of water quality, land subsidence, and interconnected surface water. There were also recommended corrections for the groundwater level and water quality monitoring networks. Staff will work to address these comments and incorporate the necessary revisions in the 2027 GSP update.

The three multi-completion monitoring wells requested through DWR's Technical Support Services have been drilled along the western side of the Subbasin. The wells have a total of 11 completions at different depths between them (with a total well depth of 1,000 feet). Staff are working with DWR to procure real-time monitoring equipment and expect to have the wells online (at sgma.yologroundwater.org) by the end of the year.



The State Water Board released the Draft 2023 Bay-Delta Staff Report for public comments until January 19, 2024, which can be accessed at the following link:
https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/staff_report.html.

The Sites Reservoir Project has been certified as an infrastructure project by the Governor under Senate Bill No. 149, which requires Sites Project Authority as the lead agency under CEQA to issues a public notice of the certification: <https://sitesproject.org/environmental-review/>.

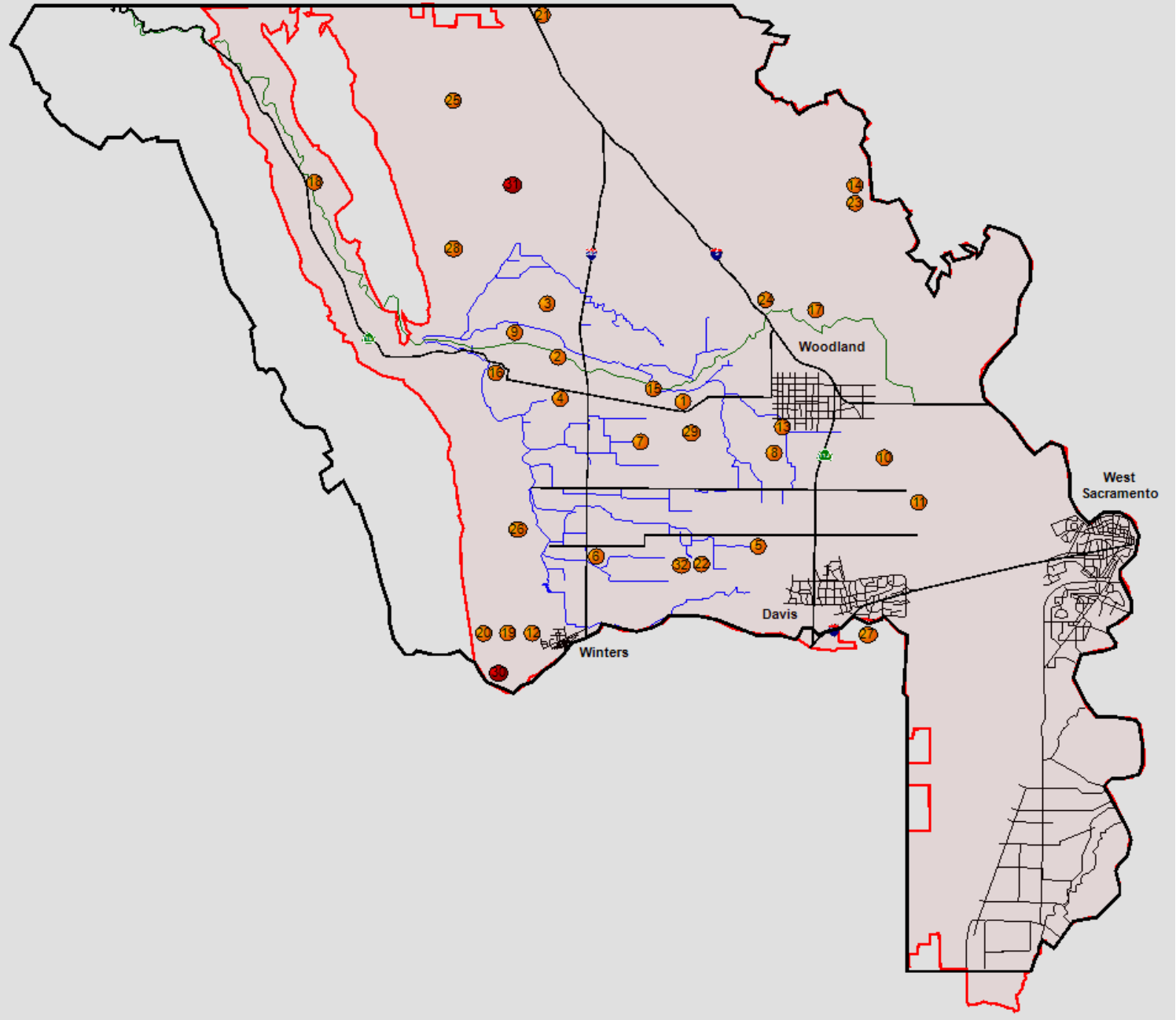
Current Groundwater Conditions

Groundwater levels are continuing to level out as harvest season wraps up. When compared to last year's elevations (as shown on the historical depth to water table below), this November's water levels are on average 20 feet higher. When compared to 2015 elevations, this November's groundwater levels are on average 15 feet higher.

Included below are the following graphics that illustrate the current groundwater conditions and monitoring efforts.

1. A location map of the 31 real-time monitoring locations currently operating in the Yolo Subbasin (Well 30 is continuous datalogger sites).
2. A table showing historical groundwater elevations on a specific date (November 15, 2023 in this example).
3. A tiled hydrograph of the real-time monitoring wells illustrating depth to water for November 15, 2022 to November 15, 2023.
4. The fall 2023 hydrograph of average groundwater levels based on 62 monitored wells throughout the Yolo Subbasin (the Representative Monitoring Wells). These measurements are normally taken twice annually, once in the spring when groundwater levels are at their highest and again in the fall when groundwater levels are at their lowest.

Well Monitoring
Continuous



SCADA Links

Comparison Trends

Comparison Table

Legend

- Real-Time Site
- Data Logger Site
- YSGA
- County

Well Monitoring

Depth to Water Historical Comparison
(Daily Average DTW in feet)

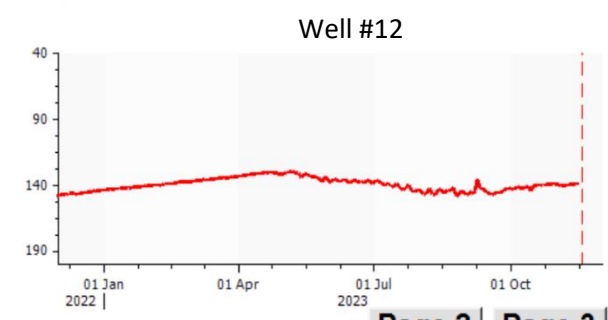
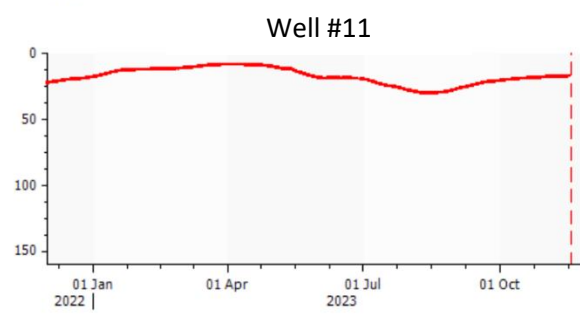
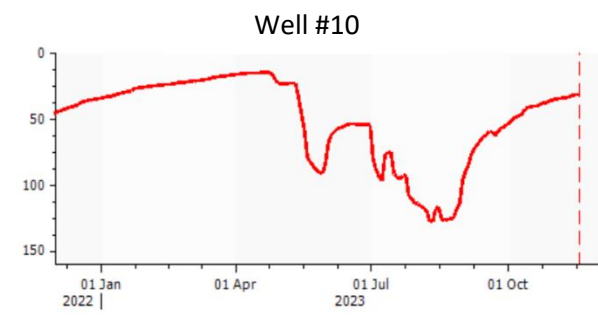
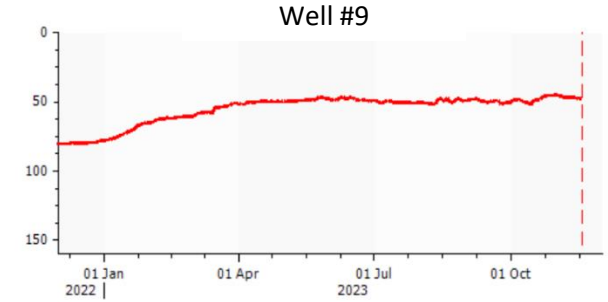
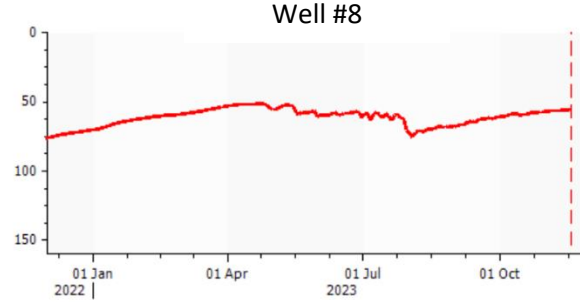
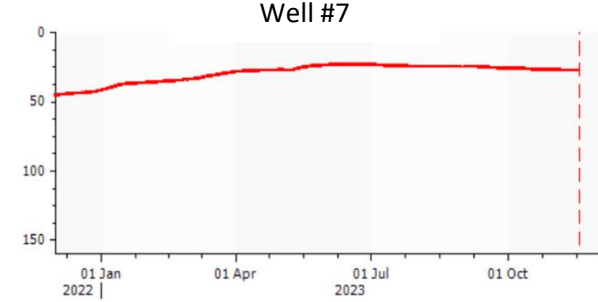
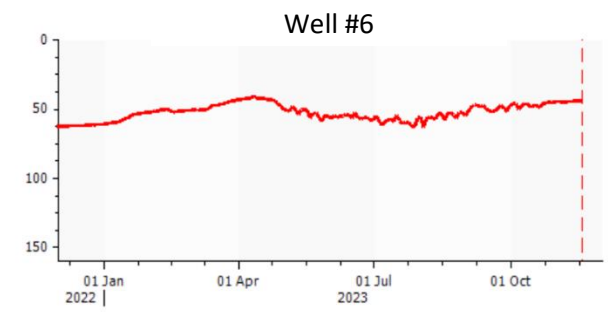
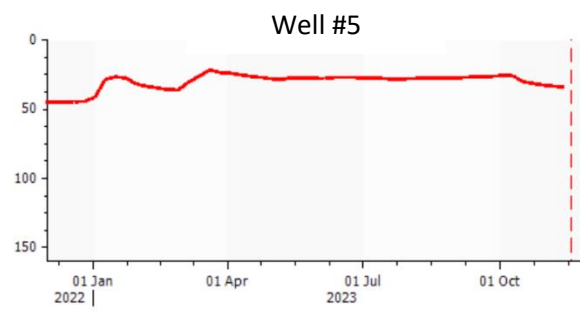
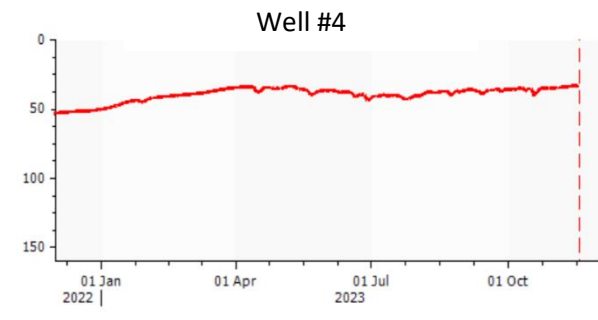
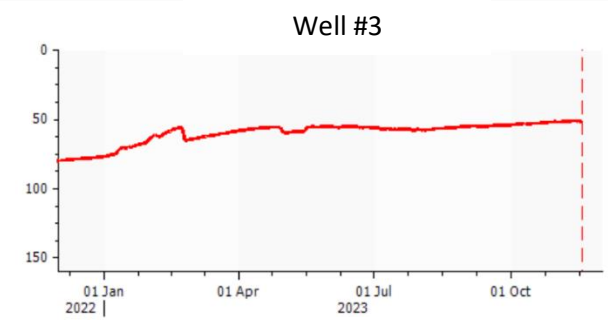
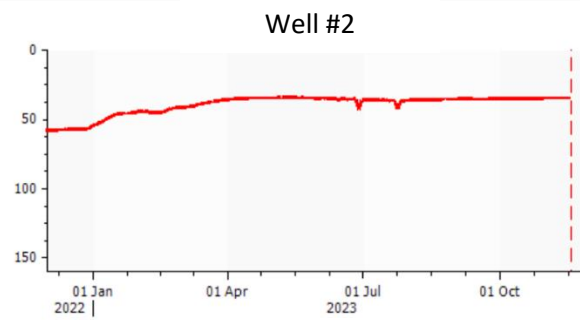
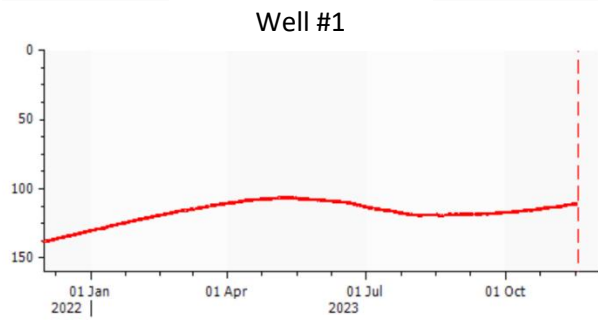
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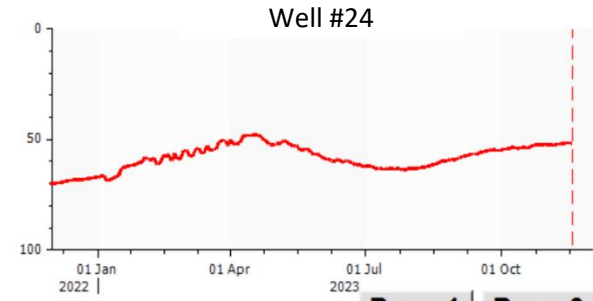
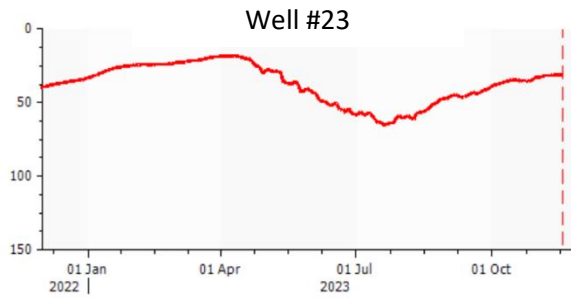
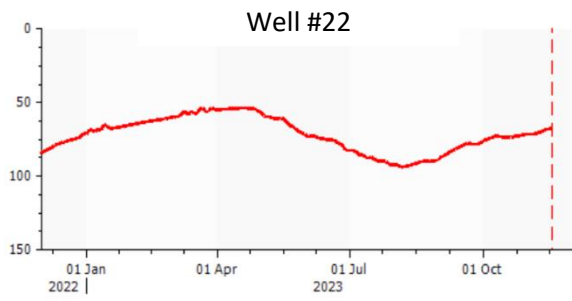
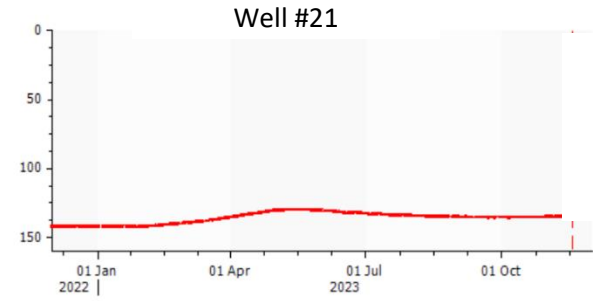
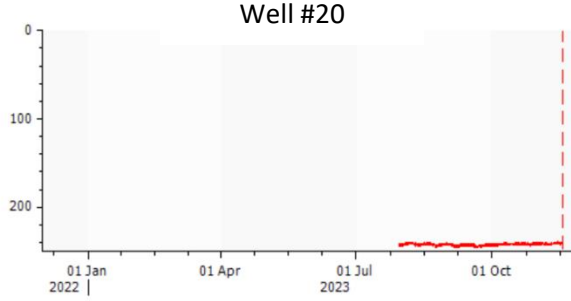
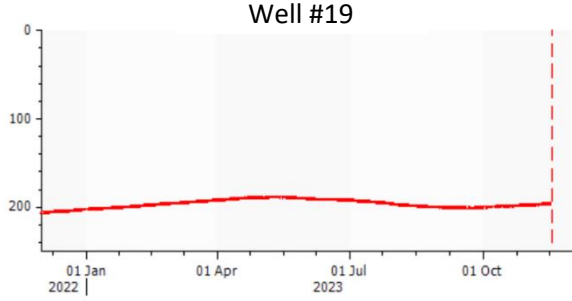
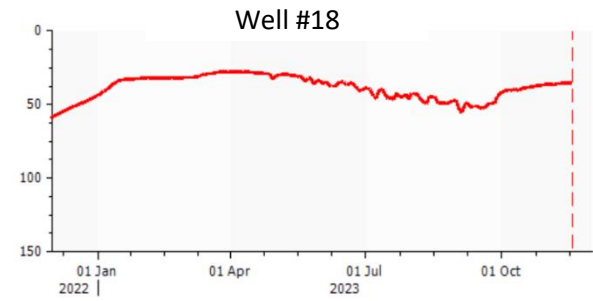
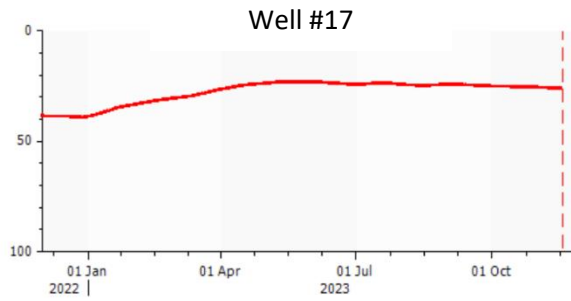
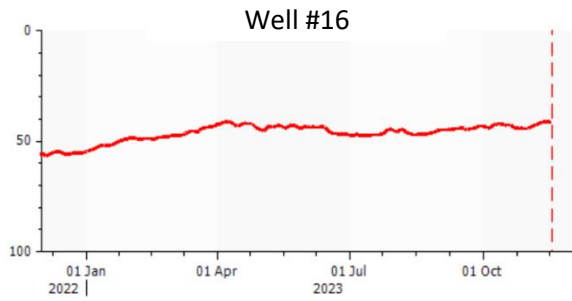
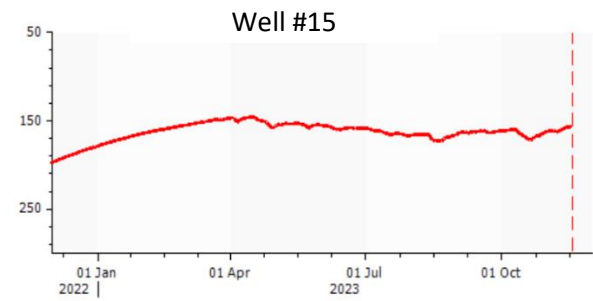
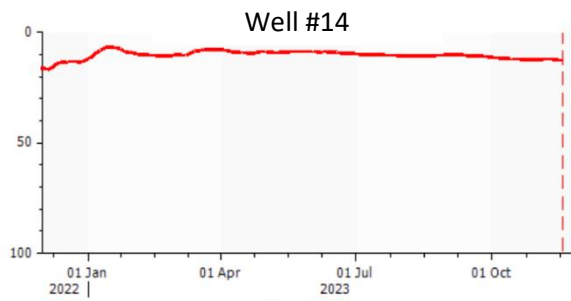
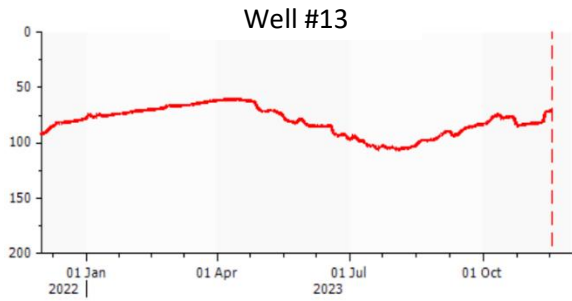
Well Map

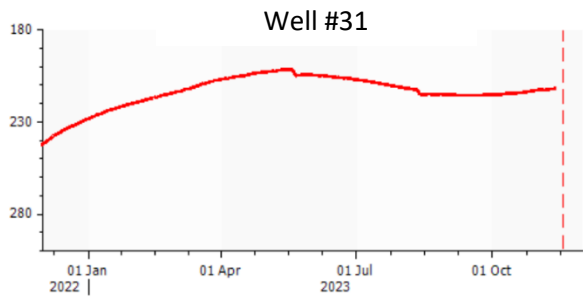
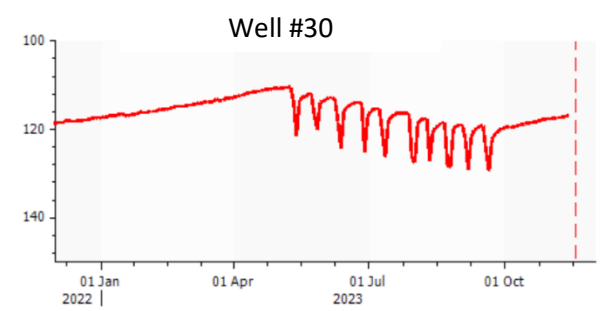
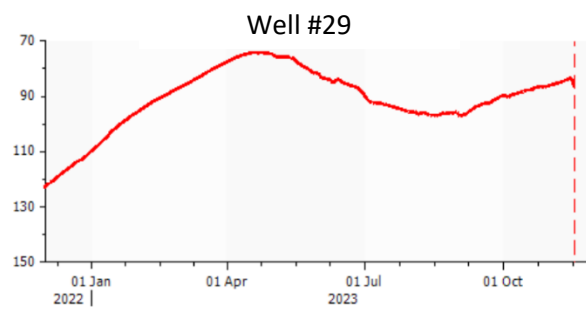
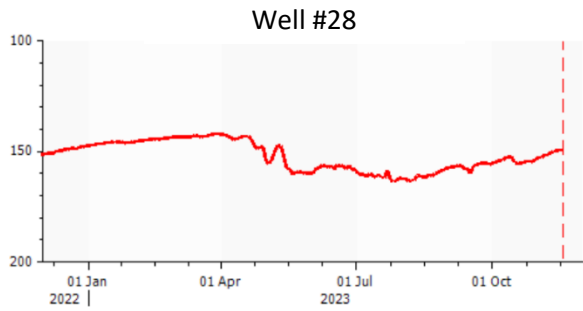
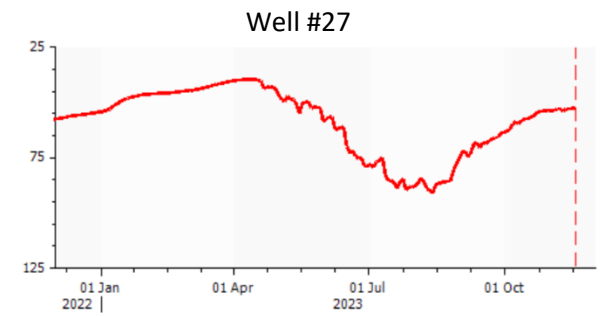
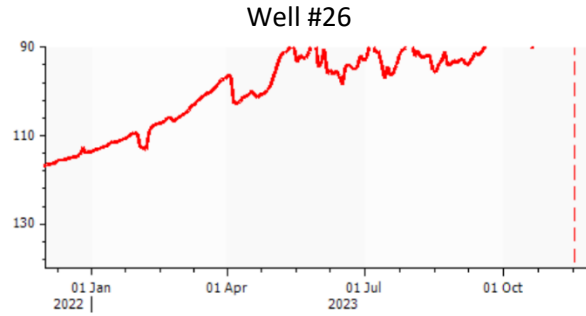
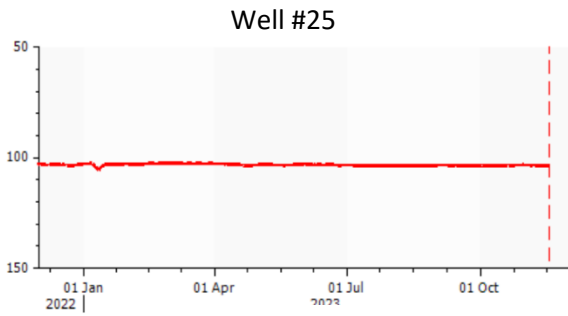
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11/15

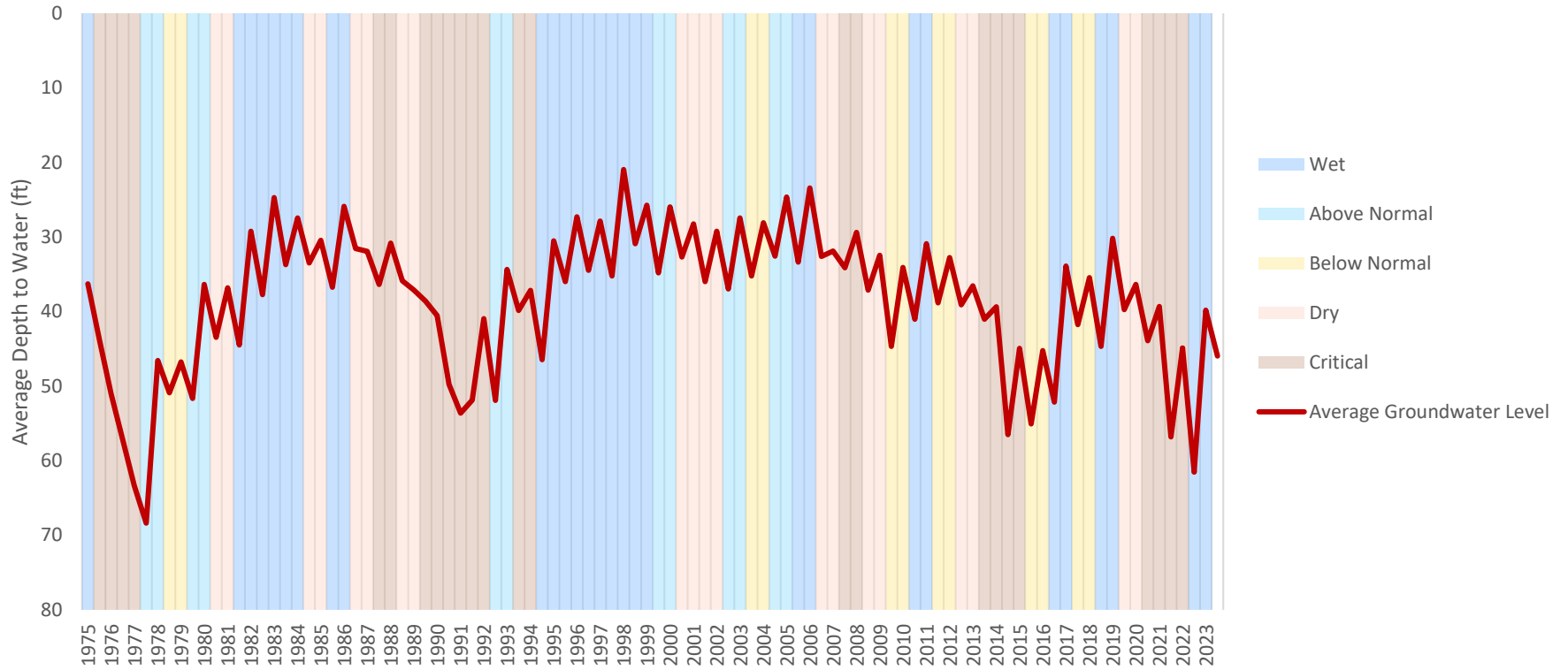
Well	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Δ 2022 - 2023	Δ 2015 - 2023
1.	89.3	85.4	90.9	101.8	123.6	127.3	113.1	103.6	112.8	103.2	112.2	137.5	142.8	112.4	30.4	14.9
2.	33.9	29.9	46.9	37.4	52.9	50.7	39.2	30.8	32.6	31.5	32.6	44.7	57.8	34.2	23.7	16.5
3.	46.0	38.4	43.5	51.1	74.7	70.5	56.1	39.7	43.5	39.7	43.6	65.7	82.3	51.3	31.1	19.3
4.	31.3	26.9	28.1	33.5	49.0	48.4	35.9	27.3	29.4	27.9	32.2	43.8	54.2	33.3	21.0	15.2
5.		19.6		27.4	36.2	39.3	37.2	24.8	26.6	20.7	28.8	37.4	44.5	34.1	10.4	5.3
6.		31.2	38.7	44.9	55.1	57.0	43.0	31.0	39.3	33.7	39.3	51.9	64.9	44.0	20.9	13.0
7.				40.0	40.0	44.1	28.0	21.8	24.8	21.7	29.9	41.1	46.2	26.8	19.4	17.2
8.				51.9	72.4	73.3	66.4	49.5	54.3	43.0	52.5	68.5	76.3	56.4	19.9	16.9
9.					76.3	72.5	56.5	41.1	44.7	43.9	45.9	67.0	81.0	48.1	32.8	24.4
10.					48.8	55.3	38.3	24.7	44.2	25.8	42.2	41.5	47.9	31.6	16.3	23.7
11.					22.7	22.4	16.6	12.9	18.2	14.5	19.9	19.6	23.3	16.8	6.5	5.6
12.										118.6	128.9	138.6	150.0	138.7	11.2	
13.								67.1	70.1	57.8	75.8	83.2	95.2	71.8	23.4	
14.									12.5	12.0	14.5	14.1	17.7	12.5	5.2	
15s.									41.9	38.5	47.6	48.8	50.0	39.3	10.6	
15d.									146.3	136.0	160.7	191.0	212.1	157.2	54.9	
16.									41.9	39.2	38.0	45.2	56.7	41.0	15.7	
17.										21.3	25.6	33.7	38.2	25.8	12.4	
18.										49.3	59.0	65.9	69.8	35.4	34.4	
19.										176.1	185.0	197.8	209.3	196.1	13.1	
20.														241.0		
21.											128.6	138.3	141.8	134.4	7.4	
22.												78.3	92.7	68.8	23.9	
23.												41.0	47.6	31.4	16.2	
24.													71.8	51.6	20.2	
25.													102.9	103.5	-.5	
26.													120.4	86.9	32.4	
27.													60.1	52.9	7.1	
28.													155.0	150.3	4.7	
29.													130.0	84.3	45.7	
30.													119.4	117.0	2.4	
31.													263.8	211.8	52.0	
32.														132.4		







Yolo Subbasin Average Groundwater Representative Wells - Depth by Season (62 Wells)



September 2022 Average Depth to Water ~ 62 feet
October 2023 Average Depth to Water ~ 46 feet

Of Note:

- Fall 1975 to Fall 1977 Drawdown ~ 25 feet
- 2014 Drawdown from Spring to Fall ~ 17 feet
- 2019 Drawdown from Spring to Fall ~ 9.5 ft
- 2022 Drawdown from Spring to Fall ~ 17 feet
- 2023 Drawdown from Spring to Fall ~ 6 feet

Executive Order N-7-22 and N-3-23 Well Permitting Update

Pursuant to paragraph 9 of [Executive Order N-7-22](#) and [Executive Order N-3-23](#), YSGA must review certain well permit applications covered by the Executive Orders, and provide written verification to the County's Environmental Health Division that the proposed well application is consistent with the Yolo Subbasin GSP before the County may issue a permit.

YSGA staff has continued to work with Yolo County's Environmental Health (YCEH) Division and assisted in the development of a questionnaire form requesting additional data and information from the permit applicant to ensure appropriate evaluation consistent paragraph 9 requirements. YSGA staff reviewed YCEH's draft Technical Memorandum for implementing a temporary agricultural well permitting procedure that considers the appropriate setbacks to ensure nearby wells are not impacted. The final YCEH Technical Memorandum was released on December 14, 2022 and can be reviewed [here](#).

As of November 15, 2023 and since April 1, 2022:

- 80 well permit applications have been transferred from YCEH for YSGA written verification
- 3 applications were revised to Domestic Wells
- 1 well permit application was technically located in the Solano Subbasin (outside of the Yolo Subbasin, but in the County boundaries)
- Of the 76 relevant well permit applications
 - ✓ 23 replacement well permits have received YSGA written verification
 - 1 replacement well was then revised to a new well and re-introduced into the queue
 - ✓ 29 new well permit applications have received YSGA written verification
 - ✓ 23 new well permit applications are currently in the queue
 - 8 applications pending receipt of a completed questionnaire from the applicant
 - 15 applicants submitted completed questionnaires and are currently under review
 - Of the permits under review, 10 are located within a proposed Focus Area

**Yolo Subbasin Groundwater Agency Board of Directors
Meeting Agenda Report**

MEETING DATE: November 20, 2023

AGENDA ITEM NO. 6

SUBJECT: Consideration: Fiscal Year 2023/24 Budget: Approve Amendment, Payments, and Entering into Contracts

INITIATED OR BOARD

INFORMATION

REQUESTED BY: STAFF

ACTION: MOTION

OTHER _____

RESOLUTION

ATTACHMENT YES NO

BACKGROUND

a. Adopt Fiscal Year 2023/2024 Budget Amendment #1

YSGA staff are requesting an amendment to the Fiscal Year 2023/2024 Budget, and will provide additional details relating to the two items summarized below:

- i. To properly book Audit expenses for Fiscal Year 2022/2023, which were accidentally applied to Fiscal Year 2023/2024 Budget, the Audit expenses line item is now \$7,800.
- ii. To account for the Westside IRWM annual membership dues that are now the responsibility of the YSGA, which were inadvertently absent from the Fiscal Year 2023/2024 Budget, the Membership expenses line item is now \$25,000. In 2021, prior to WRA dissolution, the WRA pre-paid Westside IRWM membership dues for two consecutive years, and there are approximately \$7,157 remaining in the WRA accounts to assist in paying this year's IRWM dues.

b. Approve Payment of Bills

- i. YCFC&WCD Labor and Benefit Reimbursement (July – September 2023)
Requesting approval to reimburse the YCFC&WCD for Administrative and Technical Support Services provided during July 1 and September 30, 2023 (backup detail is attached for review).
- ii. Westside IRWM Membership Invoice for 2023/24
As discussed above, prior to WRA, the YSGA agreed to resume Integrated Regional Water Management planning responsibilities and entered into the Westside IRWM MOU.

iii. West Yost Invoice for Professional Services (July – September 2023)

c. *Authorize Project Initiation and Private Job Work Orders for Instrumentation of Multi-Completion Monitoring Wells*

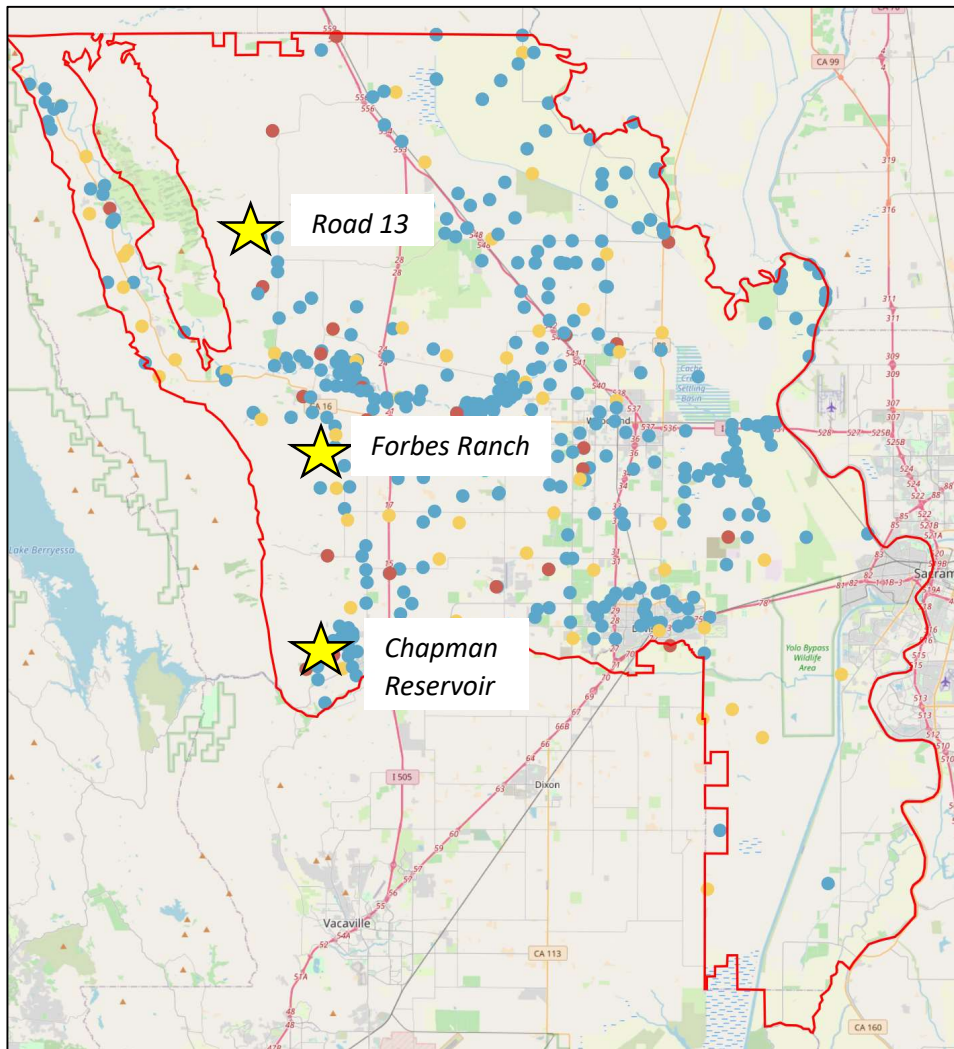
In May 2023, the Executive Officer executed an agreement with the California Department of Water Resources for the construction of three multi-completion monitoring wells in the Yolo Subbasin under the Technical Support Services Program. The three wells are sited at [Chapman Reservoir](#), [Forbes Ranch](#), and [County Road 13](#). All three sites have been constructed and are ready for the installation of real-time monitoring equipment.

The entire project has an estimated total cost of \$942,126; \$899,685 of which is being funded by DWR, as shown in the table below:

Budget Category	DWR Contribution	GSA Contribution	Totals
1 – Site Clearances	\$26,000	\$2,172	\$28,172
2 – Permitting	\$12,000	\$2,654	\$14,654
3 – Construction Activities	\$817,643	\$1,225	\$818,868
4 – Data Collection	\$10,000	\$28,890	\$38,890
5 – Other Field Activities	\$26,042	\$7,500	\$33,542
6 – Final Reporting	\$8,000	\$0	\$8,000
TOTALS	\$899,685	\$42,441	\$942,126

The installation of real-time monitoring equipment is expected to cost approximately \$47,670; including \$31,685 in labor and equipment funded by the YSGA and \$15,985 in equipment provided by DWR. The labor and equipment funded by the YSGA will allow the wells to be incorporated into the real-time monitoring network through YCFC&WCD’s existing SCADA network, using staff expertise and more robust technology than can be provided by DWR. YCFC&WCD has offered a private job proposal to perform the work for YSGA on a time and materials basis not to exceed \$31,685.

Authorization of the attached Private Job Work Orders will authorize the Executive Officer to *reimburse YCFC&WCD up to \$31,685 for labor and equipment to complete instrumentation of the well sites*. If authorized, funds will be expended from the YSGA Groundwater Monitoring Program budget line item; as of September 30, 2023, \$8,230 of the budgeted \$90,000 in the adopted Fiscal Year 2023/2024 Budget has been expended.



d. *Authorize Entering into Contract with Stockholm Environment Institute for Updating the YSGA Model*

The YSGA received funding through DWR’s SGMA Implementation Grant to improve the YSGA’s groundwater model. Stockholm Environment Institute (SEI) developed the YSGA Model, and staff have been in communication with SEI regarding model updates funded through the DWR grant. Activities to be completed under this contract include preparation of 2023, 2024, and 2025 Annual Reports; development of future land use change scenarios; modeling of projects and management actions; and development of a Hungry Hollow area water budget. Work under the contract will not exceed **\$474,000, which will be fully funded by the SGMA Implementation Grant.**

RECOMMENDATION

- a. Recommend adoption of FY 2023/24 Budget Amendment #1.

- b. Recommend approval of payment of bills.
- c. The Executive Committee recommends Board of Directors to authorize the Executive Officer to authorize three Private Job Work Orders with the Yolo County Flood Control & Water Conservation District (YCFC&WCD) for the completion of the multi-completion monitoring wells known as the Chapman Well, Forbes Well, and Road 13 Well projects.
- d. Recommend entering into a contract with Stockholm Environment Institute for Updating the YSGA Model.

**Yolo Subbasin Groundwater Agency
July 1, 2023 to June 30, 2024**

**Amendment #1 to Annual Fiscal Year Budget for Fiscal Year 2023-24
Proposed for Adoption at the November 20, 2023 Board of Directors Meeting**

	FY 2023-2024 Adopted 6/19/23	FY 2023-2024 Proposed 11/20/23
Revenue	FY2023-2024	FY2023-2024
City of Davis	40,000	40,000
City of West Sacramento	40,000	40,000
City of Woodland	40,000	40,000
City of Winters	20,000	20,000
Yocha Dehe Wintun Nation	10,000	10,000
Esparto Community Services District	5,000	5,000
Madison Community Services District	5,000	5,000
Subtotal Municipal Agencies Revenue	\$160,000	\$160,000
Yolo County Flood Control & WCD (200,000 acres)	100,000	100,000
Yolo County (White Areas) (160,000 acres)	40,000	40,000
Direct Contributions (White Areas) (40,000 acres)	20,000	20,000
Other Contributions from Rural Agencies ¹	40,000	40,000
Dunnigan Water District (10,700 acres)	5,350	5,350
Reclamation District 108 (23,200 acres)	11,600	11,600
Reclamation District 150 (4,293 acres)	2,147	2,147
Reclamation District 307 (5,941 acres)	2,971	2,971
Reclamation District 537 (6,077 acres)	3,039	3,039
Reclamation District 730 (4,498 acres)	2,249	2,249
Reclamation District 765 (1,400 acres)	700	700
Reclamation District 787 (9,400 acres)	4,700	4,700
Reclamation District 999 (25,250 acres)	12,625	12,625
Reclamation District 1600 (6,924 acres)	3,462	3,462
Reclamation District 2035 (18,000 acres)	9,000	9,000
Subtotal Rural Agencies Revenue	\$257,842	\$257,842
University of California, Davis	40,000	40,000
Colusa Drain Mutual Water Company	10,000	10,000
California American Water Company - Dunnigan	5,000	5,000
Rumsey Water Users Association	170	170
Yolo County Farm Bureau (private pumpers)	10,000	10,000
Environmental Party Representative (Ann Brice)	0	0
Subtotal Affiliated Parties Revenue	\$65,170	\$65,170
Interest Income	12,000	12,000
WRA Funds Transfer for Westside IRWM Dues	0	7,157
Well Permitting Procedures - Regulatory Fee ²	10,000	10,000
Subtotal Other Revenue	\$22,000	\$29,157
Retained earnings (QuickBooks) ³	\$748,254	\$748,254
TOTAL REVENUE	\$1,253,266	\$1,260,423

EXPENDITURES	FY2023-2024	FY2023-2024
Bank & Other Fees	1,500	1,500
Insurance - General & Auto	2,500	2,500
Membership Dues ⁴	3,000	25,000
Administrative Expenses (Copies, Postage, Website and DMS Hosting) ⁵	5,000	5,000
Project Management, SGMA Implementation (YCFC&WCD) ⁶	260,000	260,000
GSP Verification in Well Permitting Review (YCFC&WCD Project Management) ⁷	10,000	10,000
Administrative Expenses Related to Buckeye Creek Recharge Project ⁸	8,863	8,863
Consultant Services ⁹	200,000	200,000
GSP-Related Consultant costs ¹⁰	75,000	75,000

**Yolo Subbasin Groundwater Agency
July 1, 2023 to June 30, 2024**

**Amendment #1 to Annual Fiscal Year Budget for Fiscal Year 2023-24
Proposed for Adoption at the November 20, 2023 Board of Directors Meeting**

51	Legal Services	20,000	20,000
52	Audit Service - Financial ¹¹	15,300	7,800
53	Groundwater Monitoring Program (Includes Real-time Groundwater Monitoring Sensors)	90,000	90,000
54	TOTAL EXPENDITURES	\$691,163	\$705,663
55			
56	Net Income (Estimated)	\$562,103	\$554,760

- 57 1 - RD 108, RD 787, RD 2035, and YCFC&WCD (\$10,000 each)
- 58 2 - Estimated reimbursement for YSGA's review of new well permit applications and well permitting procedures and written verification process.
- 59 3 - Estimated net income by June 30, 2023.
- 60 4 - Westside IRWM Annual Dues for 2023/2024, which will be partially reimbursed by remaining funds in WRA's account (see line item 36 on the revenue table).
- 61 5 - Administrative expenses related to copy and postage machine use at YCFC&WCD offices, along with website hosting and DMS expenses for continuing electronic reporting and data collection process for groundwater monitoring program.
- 62 6 - YCFC&WCD Project Management, SGMA Implementation - Technical and Administrative Services: Assumes 2.09 FTE for Water Resource Technician positions (monitoring program and administrative and technical services) and 0.20 FTE for Executive Officer position. Includes cost that was historically classified as "Yolo County Groundwater Monitoring Program" that was billed by YCFC&WCD to WRA and then transferred to YSGA.
- 63 7 - YCFC&WCD Project Management: Projected expenses related to providing GSP written verification for well permitting process. Assumes 0.10 FTE for Water Resources Technician position and 0.05 FTE for Executive Officer position.
- 64 8 - At the October 11, 2021 Special Board meeting, the Directors authorized \$10,000 of YSGA funds to be expended towards funding the administrative and monitoring tasks related to *Buckeye Creek Recharge Project*. It is estimated that as of June 30, 2023, approximately \$8,800 remains.
- 65 9 - Consultant services related to grant writing services, well permitting, and GSP implementation.
- 66 10 - Estimated cost for consultant assistance related to implementing the GSP.
- 67 11 - Estimated fees for FY 2023/2024 Audit; the FY 2023/2023 fees have been booked in the previous FY.
FTE = Full Time Equivalent

**YOLO COUNTY FLOOD CONTROL &
WATER CONSERVATION DISTRICT**

34274 State Highway 16
Woodland, CA 95695-9371

* * *
(530) 662-0265

INVOICE # 2023.0930

DATE: 9/30/2023

Yolo Subbasin Groundwater Agency
34274 State Highway 16
Woodland, CA 95776

INVOICE

Yolo County Flood Control & WCD Expenses 07/01/2023 - 09/30/2023

<u>YCFC Labor Costs</u>	<u>Hourly Billing Rate</u>	<u>Hours</u>	<u>Cost Code</u>	<u>Amount</u>
Kristin Sicke	\$140.40	151.0	7100	\$ 21,200.40
Sarah Leicht	\$52.12	426.0	7100	\$ 22,203.12
Nathan Fisher	\$43.88	514.3	7100	\$ 22,565.29
Kristin Sicke	\$140.40	9.5	7700	\$ 1,333.80
Total Labor		1100.8		\$ 67,302.61

Expenses

06/28/23	GIS Cloud, Inc. - 10 GB Storage (06/28/23-07/28/23)	7600	\$ 25.00
07/28/23	GIS Cloud, Inc. - 10 GB Storage (07/28/23-08/28/23)	7600	\$ 25.00
08/28/23	GIS Cloud, Inc. - 10 GB Storage (08/28/23-09/28/23)	7600	\$ 25.00
07/15/23	GIS Cloud, Inc. - Map Editor (07/15/23-08/15/23)	7600	\$ 55.00
08/15/23	GIS Cloud, Inc. - Map Editor (08/15/23-09/15/23)	7600	\$ 55.00
09/15/23	GIS Cloud, Inc. - Map Editor (09/15/23-10/15/23)	7600	\$ 55.00
07/03/23	GIS Cloud, Inc. - Mobile Data Collection (07/03/23-08/03/23)	7600	\$ 40.00
08/03/23	GIS Cloud, Inc. - Mobile Data Collection (08/03/23-09/03/23)	7600	\$ 40.00
09/03/23	GIS Cloud, Inc. - Mobile Data Collection (09/03/23-10/03/23)	7600	\$ 40.00
06/14/23	ZOOM One Pro- (06/14/23-07/13/23)	7000	\$ 15.99
07/14/23	ZOOM One Pro- (07/14/23-08/13/23)	7000	\$ 15.99
08/14/23	ZOOM One Pro- (08/14/23-09/13/23)	7000	\$ 15.99
09/14/23	ZOOM One Pro- (09/14/23-10/13/23)	7000	\$ 15.99
06/15/23	Nugget Market - Get Well Card (Sandy)	7000	\$ 5.07
06/19/23	Nugget Market - Sandwiches - YSGA Board Meeting	7000	\$ 18.97
07/24/23	Nugget Market - Sandwiches	7000	\$ 62.34
08/21/23	Nugget Market - Sandwiches	7000	\$ 81.62
09/13/23	Stanford Center for Professional Development - K. Sicke	7000	\$ 50.00
07/01/23	Websoft Developers, Inc. - Facilities Map (07/01/23-6/30/24)	7600	\$ 7,500.00
07/05/23	Websoft Developers, Inc. - Update RDS Server	7600	\$ 370.00
Total Expenses			\$ 8,511.96

7000 Sub-Total	\$ 281.96
7100 Sub-Total	\$ 65,968.81
7600 Sub-Total	\$ 8,230.00
7700 Sub-Total	\$ 1,333.80
	<u>\$ 75,814.57</u>

TOTAL REIMBURSEMENT REQUESTED \$ 75,814.57

Receipt

GIS Cloud, Inc.

Invoice number 18604D4-0201
Receipt number 2628-7691
Date paid June 28, 2023
Payment method Mastercard - 1158

GIS Cloud, Inc.
+1 917-675-4856

Bill to
sleicht@yolosga.org

\$25.00 paid on June 28, 2023

Description	Qty	Unit price	Amount
Other Storage 10 GB Jun 28 – Jul 28, 2023	1	\$25.00	\$25.00
Subtotal			\$25.00
Total			\$25.00
Amount paid			\$25.00

OK _____ GL# 56971.20

JOB# _____

PO# _____

Receipt

GIS Cloud, Inc.

Invoice number 18604D4-0204
Receipt number 2787-9042
Date paid July 28, 2023
Payment method Mastercard - 1158

GIS Cloud, Inc.
+1 917-675-4856

Bill to
sleicht@yolosga.org

\$25.00 paid on July 28, 2023

Description	Qty	Unit price	Amount
Other Storage 10 GB Jul 28 – Aug 28, 2023	1	\$25.00	\$25.00

Subtotal	\$25.00
Total	\$25.00
Amount paid	\$25.00

OK  GL# 56971.20
JOB# _____
PO# _____

Receipt

GIS Cloud, Inc.

Invoice number 18604D4-0207
Receipt number 2297-8609
Date paid August 28, 2023
Payment method Mastercard - 1158

GIS Cloud, Inc.
+1 917-675-4856

Bill to
sleicht@yolosga.org

\$25.00 paid on August 28, 2023

Description	Qty	Unit price	Amount
Other Storage 10 GB Aug 28 – Sep 28, 2023	1	\$25.00	\$25.00
Subtotal			\$25.00
Total			\$25.00
Amount paid			\$25.00

Receipt

GIS Cloud, Inc.


Invoice number 18604D4-0203
Receipt number 2728-2714
Date paid July 15, 2023
Payment method Mastercard - 1158

GIS Cloud, Inc.
+1 917-675-4856

Bill to
sleicht@yolosga.org

\$55.00 paid on July 15, 2023

Description	Qty	Unit price	Amount
Map Editor Jul 15 – Aug 15, 2023	1	\$55.00	\$55.00
Subtotal			\$55.00
Total			\$55.00
Amount paid			\$55.00

OK  GL# 56971.20
JOB# _____
PO# _____

Receipt

GIS Cloud, Inc.

Invoice number 18604D4-0206
Receipt number 2567-6721
Date paid August 15, 2023
Payment method Mastercard - 1158

GIS Cloud, Inc.
+1 917-675-4856

Bill to
sleicht@yolosga.org

\$55.00 paid on August 15, 2023

Description	Qty	Unit price	Amount
Map Editor Aug 15 – Sep 15, 2023	1	\$55.00	\$55.00
Subtotal			\$55.00
Total			\$55.00
Amount paid			\$55.00

Receipt

GIS Cloud, Inc.

Invoice number 18604D4-0209
Receipt number 2785-4084
Date paid September 15, 2023
Payment method Mastercard - 1158

GIS Cloud, Inc.
+1 917-675-4856

Bill to
sleicht@yolosga.org

\$55.00 paid on September 15, 2023

Description	Qty	Unit price	Amount
Map Editor Sep 15 – Oct 15, 2023	1	\$55.00	\$55.00
		Subtotal	\$55.00
		Total	\$55.00
		Amount paid	\$55.00

Receipt

GIS Cloud, Inc.

Invoice number 18604D4-0202
Receipt number 2311-4328
Date paid July 3, 2023
Payment method Mastercard - 1158

GIS Cloud, Inc.
+1 917-675-4856

Bill to
sleicht@yolosga.org

\$40.00 paid on July 3, 2023

Description	Qty	Unit price	Amount
Mobile Data Collection Jul 3 – Aug 3, 2023	2	\$20.00	\$40.00
Subtotal			\$40.00
Total			\$40.00
Amount paid			\$40.00

OK _____ GL# 5691620

JOB# _____

PO# _____

Receipt

GIS Cloud, Inc.

Invoice number 18604D4-0205
Receipt number 2418-7665
Date paid August 3, 2023
Payment method Mastercard - 1158

GIS Cloud, Inc.
+1 917-675-4856

Bill to
sleicht@yolosga.org

\$40.00 paid on August 3, 2023

Description	Qty	Unit price	Amount
Mobile Data Collection Aug 3 – Sep 3, 2023	2	\$20.00	\$40.00
Subtotal			\$40.00
Total			\$40.00
Amount paid			\$40.00

OK YSG GL# 56971.20
JOB# _____
PO# _____

Receipt

GIS Cloud, Inc.

Invoice number 18604D4-0208
Receipt number 2594-2735
Date paid September 3, 2023
Payment method Mastercard - 1158

GIS Cloud, Inc.
+1 917-675-4856

Bill to
sleicht@yolosga.org

\$40.00 paid on September 3, 2023

Description	Qty	Unit price	Amount
Mobile Data Collection Sep 3 – Oct 3, 2023	2	\$20.00	\$40.00
Subtotal			\$40.00
Total			\$40.00
Amount paid			\$40.00

Invoice



Zoom Video Communications Inc.
55 Almaden Blvd, 6th Floor
San Jose, CA 95113

Invoice Date: Jun 14, 2023
Invoice #: INV206443034
Payment Terms: Due Upon Receipt
Due Date: Jun 14, 2023
Account Number: 5067856282
Currency: USD
Payment Method: MasterCard *****1158
Account Information: Yolo Subbasin Groundwater Agency

Federal Employer ID Number: 61-1648780

Purchase Order Number:

Tax Exempt Certificate ID:

Zoom W-9

Sold To Address: 34274 State Highway 16,
Woodland, California 95695
United States

info@yolosga.org

Bill To Address: 34274 State Highway 16,
Woodland, California 95695
United States

info@yolosga.org

OK _____ GL# 56971.20

JOB# _____

PO# _____

Charge Details

CHARGE DESCRIPTION	SUBSCRIPTION PERIOD	SUBTOTAL	TAXES, FEES & SURCHARGES	TOTAL
Charge Name: Zoom One Pro Monthly				
Quantity: 1 Unit Price: \$15.99	Jun 14, 2023 - Jul 13, 2023	\$15.99	\$0.00	\$15.99
			Subtotal	\$15.99
			Total (Including Taxes, Fees & Surcharges)	\$15.99
			Invoice Balance	\$0.00

CHARGE NAME	TAX, FEE OR SURCHARGE NAME	JURISDICTION	CHARGE AMOUNT	TAX, FEE OR SURCHARGE AMOUNT
Total (Including Taxes, Fees & Surcharges)				\$0.00

Transactions

Invoice Total	\$15.99
---------------	---------

TRANSACTION DATE	TRANSACTION NUMBER	TRANSACTIONTYPE	DESCRIPTION	APPLIED AMOUNT
Jun 14, 2023	P-242593613	Payment		\$-15.99
Invoice Balance				\$0.00

Need help understanding your invoice?

[CLICK HERE](#)

Standard Pro and Standard Biz are now called Zoom One Pro and Zoom One Business. Please note that your Services will remain the same and that this name change does not change the price of your current subscription.

This plan includes products with monthly and/or yearly subscription periods. The subscription period for each plan, and the total charge, \$15.99 (plus applicable taxes and regulatory fees), per subscription period for that product are set out above in the Charge Details section. Unless you cancel, your subscription(s) will auto-renew each subscription period and each subscription period thereafter, at the price(s) listed above (plus any taxes and regulatory fees applicable at the time of renewal) and your payment method on file at zoom.us/billing will be charged. You can cancel auto-renewal anytime, but you must cancel by the last day of your current subscription period to avoid being charged for the next subscription period. You will not be able to cancel your "base plan" (Zoom Meetings, Zoom Phone, or Zoom Rooms) without first canceling all other subscriptions in your plan. If you cancel, you will not receive a refund for the remainder of your then-current subscription period. You can cancel by navigating to zoom.us/billing and clicking "Cancel Subscription," clicking through the prompts, and then clicking to confirm cancellation. Should Zoom change its pricing, it will provide you with notice, and you may be charged the new price for subsequent subscription.

Zoom Phone services provided by Zoom Voice Communications, Inc. Rates, terms and conditions for Zoom Phone services are set by Zoom Voice Communications, Inc

Invoice



Zoom Video Communications Inc.
55 Almaden Blvd, 6th Floor
San Jose, CA 95113

Invoice Date: Jul 14, 2023
Invoice #: INV210599280
Payment Terms: Due Upon Receipt
Due Date: Jul 14, 2023
Account Number: 5067856282
Currency: USD
Payment Method: MasterCard *****1158
Account Information: Yolo Subbasin Groundwater Agency

Federal Employer ID Number: 61-1648780

Purchase Order Number:

Tax Exempt Certificate ID:

Zoom W-9

Sold To Address: 34274 State Highway 16,
Woodland, California 95695
United States

info@yolosga.org

Bill To Address: 34274 State Highway 16,
Woodland, California 95695
United States

info@yolosga.org

OK VYS GL# 56971.20
JOB# _____
PO# _____

Charge Details

CHARGE DESCRIPTION	SUBSCRIPTION PERIOD	SUBTOTAL	TAXES, FEES & SURCHARGES	TOTAL
Charge Name: Zoom One Pro Monthly Quantity: 1 Unit Price: \$15.99	Jul 14, 2023 - Aug 13, 2023	\$15.99	\$0.00	\$15.99
			Subtotal	\$15.99
			Total (Including Taxes, Fees & Surcharges)	\$15.99
			Invoice Balance	\$0.00

Invoice



Zoom Video Communications Inc.
55 Almaden Blvd, 6th Floor
San Jose, CA 95113

Invoice Date: Aug 14, 2023
 Invoice #: INV214833952
 Payment Terms: Due Upon Receipt
 Due Date: Aug 14, 2023
 Account Number: 5067856282
 Currency: USD
 Payment Method: MasterCard *****1158
 Account Information: Yolo Subbasin Groundwater Agency

Federal Employer ID Number: 61-1648780

Purchase Order Number:

Tax Exempt Certificate ID:

Zoom W-9

Sold To Address: 34274 State Highway 16,
Woodland, California 95695
United States

info@yolosga.org

Bill To Address: 34274 State Highway 16,
Woodland, California 95695
United States

info@yolosga.org

Charge Details

CHARGE DESCRIPTION	SUBSCRIPTION PERIOD	SUBTOTAL	TAXES, FEES & SURCHARGES	TOTAL
Charge Name: Zoom One Pro Monthly Quantity: 1 Unit Price: \$15.99	Aug 14, 2023 - Sep 13, 2023	\$15.99	\$0.00	\$15.99
			Subtotal	\$15.99
			Total (Including Taxes, Fees & Surcharges)	\$15.99
			Invoice Balance	\$0.00

CHARGE NAME	TAX, FEE OR SURCHARGE NAME	JURISDICTION	CHARGE AMOUNT	TAX, FEE OR SURCHARGE AMOUNT
Total (Including Taxes, Fees & Surcharges)				\$0.00

Transactions

Invoice Total	\$15.99
---------------	---------

TRANSACTION DATE	TRANSACTION NUMBER	TRANSACTION TYPE	DESCRIPTION	APPLIED AMOUNT
Aug 14, 2023	P-253720844	Payment		\$-15.99
Invoice Balance				\$0.00

Need help understanding your invoice?

[CLICK HERE](#)

Standard Pro and Standard Biz are now called Zoom One Pro and Zoom One Business. Please note that your Services will remain the same and that this name change does not change the price of your current subscription.

This plan includes products with monthly and/or yearly subscription periods. The subscription period for each plan, and the total charge, \$15.99 (plus applicable taxes and regulatory fees), per subscription period for that product are set out above in the Charge Details section. Unless you cancel, your subscription(s) will auto-renew each subscription period and each subscription period thereafter, at the price(s) listed above (plus any taxes and regulatory fees applicable at the time of renewal) and your payment method on file at zoom.us/billing will be charged. You can cancel auto-renewal anytime, but you must cancel by the last day of your current subscription period to avoid being charged for the next subscription period. You will not be able to cancel your "base plan" (Zoom Meetings, Zoom Phone, or Zoom Rooms) without first canceling all other subscriptions in your plan. If you cancel, you will not receive a refund for the remainder of your then-current subscription period. You can cancel by navigating to zoom.us/billing and clicking "Cancel Subscription," clicking through the prompts, and then clicking to confirm cancellation. Should Zoom change its pricing, it will provide you with notice, and you may be charged the new price for subsequent subscription.

Zoom Phone services provided by Zoom Voice Communications, Inc. Rates, terms and conditions for Zoom Phone services are set by Zoom Voice Communications, Inc

Invoice



Zoom Video Communications Inc.
55 Almaden Blvd, 6th Floor
San Jose, CA 95113

Invoice Date: Sep 14, 2023
Invoice #: INV219067691
Payment Terms: Due Upon Receipt
Due Date: Sep 14, 2023
Account Number: 5067856282
Currency: USD
Payment Method: MasterCard *****1158
Account Information: Yolo Subbasin Groundwater Agency

Federal Employer ID Number: 61-1648780

Purchase Order Number:

Tax Exempt Certificate ID:

Zoom W-9

Sold To Address: 34274 State Highway 16,
Woodland, California 95695
United States

info@yolosga.org

Bill To Address: 34274 State Highway 16,
Woodland, California 95695
United States

info@yolosga.org

OK _____ GL# 56971.20

JOB# _____

PO# _____

Charge Details

Charge Description	Subscription Period	Subtotal	Taxes, Fees & Surcharges	Total
Charge Name: Zoom One Pro Monthly Quantity: 1 Unit Price: \$15.99	Sep 14, 2023 - Oct 13, 2023	\$15.99	\$0.00	\$15.99
			Subtotal	\$15.99
			Total (Including Taxes, Fees & Surcharges)	\$15.99
			Invoice Balance	\$0.00

SICKE CC 56971.20



Sandy
Get
well
card

Woodland, California
(530) 662-5479
www.nuggetmarket.com

06/15/2023 12:16:20
Mastercard Entry Method: Chip
CARD #: XXXXXXXXXXXX1158
PURCHASE - APPROVED
AUTH CODE:01587E

Mode: Issuer
AID: A0000000041010
TVR: 0400008000
IAD: 0110A000032200000000000000000000
000FF
TSI: E800
ARC: 00
TC: 59FFEE8A1356141C
MID: 000000 TID: 001 SEQ: 041965

Total: USD\$ 5.07

GEN MDSE
CARDS RPG EVERYDAY \$4.69 T
SUB TOTAL \$4.69
TOTAL TAX \$0.38
TOTAL \$5.07

BALANCE DUE \$5.07
Master Card \$5.07
Auth Code = 01587E
CHANGE \$0.00

Total number of items sold = 1

STORE:00001 REGISTER:004 CASHIER:9248
TICKET#:5333 15JUN2023 12:16:22

* Thank ;

SICKE CC 56971



YSGA
BOD
Mtg.

Davis, California
(530) 750-3800
www.nuggetmarket.com

06/19/2023 12:56:53
Mastercard Entry Method: Chip
CARD #: XXXXXXXXXXXX1158
PURCHASE - APPROVED
AUTH CODE:01947E

Mode: Issuer
AID: A0000000041010
TVR: 0400008000
IAD: 0110A0000322000000000000000000
000FF
TSI: E800
ARC: 00
TC: 37720505A2ADC3F5
MID: 000000 TID: 001 SEQ: 041087

Total: USD\$ 18.97

BAKERY
SLTD CRML CRISPY CKY \$5.99 N F
SNCKRDL CKY 12 CI \$6.99 N F

GROCERY
TATE'S CHCLT CHP CK S \$5.99 N F
You saved \$1.00

SUB TOTAL \$18.97
TOTAL TAX \$0.00
TOTAL \$18.97

BALANCE DUE \$18.97
Master Card \$18.97
Auth Code = 01947E
CHANGE \$0.00

Your Savings Today!
TOTAL DISCOUNTS 1 -\$1.00

Total number of items sold = 3

CARD NO 42000143363

STORE:00012 REGISTER:004 CASHIER:2880
TICKET#:4194 19JUN2023 12:56:55

* Thank you for shopping with us! *

56971-5400

Kjg



Woodland, California
(530) 662-5479
www.nuggetmarket.com

07/24/2023
Mastercard
CARD #: XXXXXXXXXXXX1158
PURCHASE - APPROVED
AUTH CODE: 02461E
Entry Method: Chip
11:47:07

Mode: Issuer
AID: A0000000041010
TVR: 0400008000
IAD: 0110A000032200000000000000000000
GOODFF
TSI: E800
ARC: 00
TC: 00
MID: 000000 TID: C857F38647207612
001 SEQ: 068150

Total: USD\$ 62.34

KITCHEN
BYO \$9.99 COLD \$9.99 N F
BYO \$9.99 COLD \$9.99 N F
BYO \$9.99 COLD \$9.99 N F
BYO \$9.99 HOT \$9.99 T
BYO \$9.99 HOT \$9.99 T
BYO \$9.99 HOT \$9.99 T

SUB TOTAL \$59.94
TOTAL TAX \$2.40
TOTAL \$62.34

BALANCE DUE \$62.34
Master Card \$62.34
Auth Code = 02461E
CHANGE \$0.00

Total number of items sold = 6

STORE:00001 REGISTER:006 CASHIER:4474
TICKET#:5706 24JUL2023 11:47:09

* Thank you for shopping with us *

569711 - 7000



Woodland, California
(530) 662-5479
www.nuggetmarket.com

08/21/2023 11:35:29
Mastercard Entry Method: Chip
CARD #: XXXXXXXXXXXX1158
PURCHASE - APPROVED
AUTH CODE:02121E

Mode: Issuer
AID: A0000000041010
TVR: 0400008000
IAD: 0110A0000322000000000000000000
000FF
TSI: E800
ARC: 00
TC: C563674F520COAA9
MID: 000000 TID: 001 SEQ: 052946

Total: USD\$ 81.62

GENERAL STORE
PAPER BAG FEE \$0.10 N

KITCHEN
BYO \$9.99 COLD \$9.99 N F
BYO \$9.99 COLD \$9.99 N F
BYO \$9.99 COLD \$9.99 N F
BYO \$9.99 COLD \$9.99 N F
BYO \$9.99 COLD \$9.99 N F
BYO \$9.99 COLD \$9.99 N F
BYO \$9.99 HOT \$9.99 T
BYO \$9.99 HOT \$9.99 T

SUB TOTAL \$80.02
TOTAL TAX \$1.60
TOTAL \$81.62

BALANCE DUE \$81.62
Master Card \$81.62
Auth Code = 02121E
CHANGE \$0.00

Total number of items sold = 9

STORE:00001 REGISTER:005 CASHIER:3376
TICKET#:4394 21AUG2023 11:35:30

* Thank you for shopping with us! *

SICKE CC

KPS

Stanford Center for Professional Development

Stanford University
P.O. Box 20142
Stanford, California 94309

56971-

RECEIPT

Kristin Sicke
Student Number: X746570

Transaction Basket:
Date:

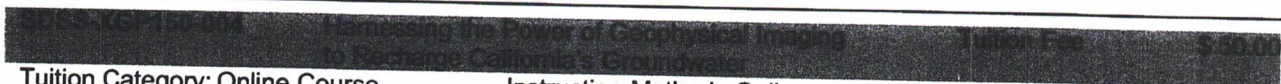
1134532
13/Sep/2023 03:59 PM

Page 1 of 1

SELECTED ITEMS:

Refer to Account Activity page for payment details

Course Enrollments



Tuition Category: Online Course

Instruction Method: Online,
self-paced

Units:

Course Schedule:

Sub-total: \$ 50.00
TOTAL: \$ 50.00

TOTAL SELECTED: \$ 50.00

ACCOUNT ACTIVITY:

Current Payment / (Refund)

MasterCard *****1158 \$ 50.00

Total Current Payment / (Refund): \$ 50.00

TOTAL PAYMENTS / (REFUNDS): \$ 50.00

Remit to Address

Kristin Sicke
34274 State Highway 16
Davis, CA 95695



INVOICE

Websoft Developers, Inc.
2020 RESEARCH PARK DR STE 140
DAVIS, California 95618-6150

Krs

BALANCE DUE \$7,500.00

Yolo County Flood Control & Water Conservation District

Attn: Sarah Leicht

56971²⁰-7600

ENTERED

JUL - 7 2023

BY: *[Signature]*

Invoice#	INV-000485
Invoice Date	07/01/2023
Terms	Due on Receipt
Due Date	07/01/2023

We have a new mailing address:
PO Box 4008
Davis, CA 95617

#	ITEM & DESCRIPTION	AMOUNT
1	FacilitiesMap Term: 7/1/2023 - 6/30/2024	\$7,500.00 1.00 x 7,500.00
	Sub Total	7,500.00
	Total	\$7,500.00
	Balance Due	\$7,500.00



INVOICE

Websoft Developers, Inc.
2020 RESEARCH PARK DR STE 140
DAVIS, California 95618-6150

KJS

BALANCE DUE \$370.00

Yolo County Flood Control & Water Conservation District

Attn: Sarah Leicht

56971.30 - 7600

Invoice#	INV-000506
Invoice Date	07/05/2023
Terms	Due on Receipt
Due Date	07/05/2023
Project Name	WRID: Support Tasks

We have a new mailing address:
PO Box 4008
Davis, CA 95617

#	TASK & DESCRIPTION	AMOUNT
1	Update RDS Server Romany Saad.	\$370.00 2.00 x 185.00
	Sub Total	370.00
	Total	\$370.00
	Balance Due	\$370.00

Sarah Leicht

From: Manoj Desai <Manoj.Desai@websoftdev.com>
Sent: Thursday, July 6, 2023 8:31 PM
To: Sarah Leicht
Subject: RE: Invoice - INV-000506 from Websoft Developers, Inc.

Sarah,

Tim reached out to us. Apparently a new server was put up and we had to move our software that looks at the real time database and it took a few hours.

Thanks,



Manoj Desai, P.E.
PRESIDENT
Websoft Developers, Inc.
manoj.desai@websoftdev.com

P: (530) 759-8754 x210 | **D:** (530) 618-8759 | **F:** (530) 759-0923
MobileMMS Maintenance Management Solutions by Websoft Developers, Inc.
www.websoftdev.com

Exciting news! You can effortlessly respond to USA tickets from MobileMMS. Contact us for more info.

From: Sarah Leicht <sleicht@yolosga.org>
Sent: Thursday, July 6, 2023 1:34 PM
To: Manoj Desai <Manoj.Desai@websoftdev.com>
Subject: RE: Invoice - INV-000506 from Websoft Developers, Inc.

Hi Manoj,

Can you explain this task for our reporting purposes? I'm not familiar with it.
Thanks!

Sarah Leicht
Water Resources Technician
Yolo Subbasin Groundwater Agency
YCFC & WCD
530-515-1635

From: Account Receivable <ar@websoftdev.com>
Sent: Wednesday, July 5, 2023 1:46 AM
To: Sarah Leicht <sleicht@yolosga.org>
Cc: manoj.desai@websoftdev.com
Subject: Invoice - INV-000506 from Websoft Developers, Inc.

You don't often get email from ar@websoftdev.com. [Learn why this is important](#)

Solano County Water Agency



810 VACA VALLEY PARKWAY, SUITE 203
 VACAVILLE, CA 95688
 PHONE: (707) 451-6090
 FAX: (707) 451-6099

INVOICE

INVOICE #: IRWMP 23/24
 INVOICE DATE: Nov 3, 2023

REC'D NOV - 6 2023

Bill To:

Water Resources Assoc. of Yolo Cou
 Attn: Donna Gentile
 34274 State Highway 16
 Woodland, CA 95695

Ship to:

Water Resources Assoc. of Yolo Cou
 Attn: Donna Gentile
 P.O. Box 8624
 Woodland, CA 95776

Customer ID	Customer PO	Payment Terms	Due Date
WRA30		Net 30 Days	12/3/23

Quantity	Description	Unit Price	Amount
	PREPAYMENT OF OPERATING BUDGET FOR ADMINISTRATION OF WESTSIDE IRWMP BY 2023/2024		21,500.00

Subtotal	21,500.00
Sales Tax	
Total Invoice Amount	21,500.00
Payment/Credit Applied	
TOTAL	21,500.00



Remit Payment To:
 PO Box 2158
 Davis, CA 95617

July 31, 2023

Invoice Number: 2054878

Kristin Sicke Executive Officer Yolo Subbasin Groundwater Agency 34274 State Highway 16 Woodland, CA 95695	Client Project: WY Project No: 1105-80-23-01 Contract Amount: 69,600.00 Job Name: Hydrogeologic Support Services
------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------

Professional Services from July 8, 2023 to August 4, 2023

Previously Billed :	0.00
Total This Period :	8,597.93
Total Amount Billed to Date including This Invoice :	8,597.93
Amount Remaining in Contract :	61,002.07

Professional Personnel

	Hours	Rate	Amount
Principal Eng/Scientist/Geologist II Loy, Kenneth	5.50	288.00	1,584.00
Senior Engineer/Scientist/Geologist I Cadaret, Erik	6.50	244.00	1,586.00
Associate Eng/Scientist/Geologist II Cadaret, Erik	8.75	217.00	1,898.75
Reimer, Anna	6.50	217.00	1,410.50
Associate Eng/Scientist/Geologist I Reimer, Anna	8.00	204.00	1,632.00
Totals	35.25		8,111.25
Total Labor			8,111.25

Direct Costs/Invoice Adjustments

Technology and Communication Costs		486.68	
Total Direct Costs/Invoice Adjustments		486.68	486.68
	Total this Invoice		\$8,597.93

Description of Services:

Task 1

Kickoff meeting with YSGA staff; Reviewed available data with YSGA staff at YSGA office.

Task 2

Reviewed GSP and well permitting laws and regulations; Attended Drought Ad hoc meeting; Prepared outline for hydrogeologist report guidelines and well permitting updates; Prepared draft hydrogeologist report guidelines and well permitting update TM; Attended check in meetings with YSGA staff on hydrogeologist report guidelines.

Task 3

Reviewed and assisted YSGA staff in preparing GIS data and draft AOC maps.

Please direct questions to:

Project Manager Erik Cadaret
Principal Samantha Adams

SSA



Remit Payment To:
 PO Box 2158
 Davis, CA 95617

August 31, 2023

Invoice Number: 2055182

Kristin Sicke	Client Project:	
Executive Officer	WY Project No:	1105-80-23-01
Yolo Subbasin Groundwater Agency	Contract Amount:	69,600.00
34274 State Highway 16	Job Name:	Hydrogeologic Support Services
Woodland, CA 95695		

Professional Services from August 5, 2023 to September 8, 2023

Previously Billed :	8,597.93
Total This Period :	21,766.57
Total Amount Billed to Date including This Invoice :	30,364.50
Amount Remaining in Contract :	39,235.50

Professional Personnel

	Hours	Rate	Amount
Principal Eng/Scientist/Geologist II			
Loy, Kenneth	23.00	288.00	6,624.00
Senior Engineer/Scientist/Geologist II			
Yarborough, Sean	1.00	255.00	255.00
Senior Engineer/Scientist/Geologist I			
Cadaret, Erik	15.50	244.00	3,782.00
Associate Eng/Scientist/Geologist II			
Reimer, Anna	45.50	217.00	9,873.50
Totals	85.00		20,534.50
Total Labor			20,534.50

Direct Costs/Invoice Adjustments

Technology and Communication Costs		1,232.07	
Total Direct Costs/Invoice Adjustments		1,232.07	1,232.07
	Total this Invoice		\$21,766.57

Description of Services:

Task 1

Work completed for this task included preparing and submitting invoice.

Task 2

Work completed for this task included attending check in meeting on status hydrogeologist report.

Task 3

Work completed for this task included attending check in meetings, preparing for and presenting to the YSGA DCP Ad-hoc, reviewing available data for AOSC mapping analysis, preparing draft AOSC maps, and communications with YSGA staff.

Outstanding Invoices

Number	Date	Balance
2054878	7/31/2023	8,597.93
Total		8,597.93

Please direct questions to:

Project Manager Erik Cadaret
Principal Samantha Adams

AM



Remit Payment To:
 PO Box 2158
 Davis, CA 95617

September 30, 2023

Invoice Number: 2055608

Kristin Sicke Executive Officer Yolo Subbasin Groundwater Agency 34274 State Highway 16 Woodland, CA 95695	Client Project: WY Project No: 1105-80-23-01 Contract Amount: 69,600.00 Job Name: Hydrogeologic Support Services
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Professional Services from September 9, 2023 to October 6, 2023

Previously Billed :	30,364.50
Total This Period :	8,693.59
Total Amount Billed to Date including This Invoice :	39,058.09
Amount Remaining in Contract :	30,541.91

Professional Personnel

	Hours	Rate	Amount
Principal Eng/Scientist/Geologist II Loy, Kenneth	12.00	288.00	3,456.00
Senior Engineer/Scientist/Geologist I Cadaret, Erik	11.00	244.00	2,684.00
Associate Eng/Scientist/Geologist II Reimer, Anna	9.50	217.00	2,061.50
Totals	32.50		8,201.50
Total Labor			8,201.50

Direct Costs/Invoice Adjustments

Technology and Communication Costs	492.09	
Total Direct Costs/Invoice Adjustments	492.09	492.09
Total this Invoice		\$8,693.59

Description of Services:

Task 1
 Work completed for this task included preparing and submitting invoice.

Task 2
 No work completed for this task.

Task 3
 Work completed for this task included attending check in meetings, preparing for and presenting to the YSGA DCP Ad-hoc, reviewing available data for AOSC mapping analysis, preparing draft AOSC maps, and communications with YSGA staff.

Project	1105-80-23-01	Hydrogeologic Support Services	Invoice	2055608
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Outstanding Invoices

Number	Date	Balance
2054878	7/31/2023	8,597.93
2055182	8/31/2023	21,766.57
Total		30,364.50

Please direct questions to:

Project Manager Erik Cadaret
Principal Samantha Adams



**Yolo County Flood Control & Water Conservation District
Project INITIATION & COST ESTIMATE Form**

Project Name: Road 13 Well Real-Time Monitoring Installation
Date of Form Submittal: 11/7/2023
Project Requested by: Tim Ireland
Project Location: End of CR13, 1/4 mile South
Job Number: _____

Project Type (check all that apply):

- Facilities
- Operation & Maintenance
- Water & Environmental Resources
- Engineering
- Administration

- Large Capital
- Small Capital
- Expense

- Construction
- Study

Project to be Performed by:

- District staff
- External consultant/contractor
- Combination of District staff and external consultant/contractor

Project Manager: Tim Ireland
Consultant Contact: _____
Contractor Contact: _____

Est. Total Project Cost: \$11,065.00
Cost Share to bill: _____
Est. Project Schedule: _____

Project Description:

Build and install solar powered monitoring system for the existing multi-completion monitoring well at the West end of CR13. This project will be completed by YCFCWCD staff for YSGA in partnership with DWR. DWR's Technical Support Services (TSS) funded the installation of the monitoring well and will also fund and purchase three well level sensors and one radio system for this project.

Road 13 Well Real-Time Monitoring Well Installation

11/7/2023

Parts and Labor Estimate for Installing Solar Powered Real-Time Well Monitoring Site

Item Description	YSGA Quantity	DWR Quantity	Unit Price	YSGA Total	DWR Total	Total
Electrical Panel						
Custom Built Electrical Panel by BAT Electric in 2018 (from inventory)	1	0	\$3,130	\$3,130	\$0	\$3,130
Power System (spare parts)						
140 Watt, 12v Solar Panel (Ameresco BSP140-12)	1	0	\$233	\$233	\$0	\$0
Solar Panel Mount (Tamarack UNI-SP/01A)	1	0	\$82	\$82	\$0	\$0
Solar Panel Mount Knee Brace (Tamarack SP-KNBR-001)	1	0	\$64	\$64	\$0	\$0
100 AH Sealed Battery	1	0	\$333	\$333	\$0	\$0
Radio System						
Trio-Q Radio (Schneider-Electric TBURQR4HH-F00E2L00)	0	1	\$1,710	\$0	\$1,710	\$1,710
Yagi Antenna (Schneider-Electric TBUMANTY-06-4CM)	0	1	\$447	\$0	\$447	\$447
10ft Coaxial Cable (Schneider-Electric TBUMRFANT-10F3M-A)	0	1	\$105	\$0	\$105	\$105
3ft Coaxial Jumper (Schneider-Electric TBUMRFJP-N-N-1M)	0	1	\$93	\$0	\$93	\$93
Surge Arrestor (Schneider-Electric TBUMLT-ARRES-TYPEA)	0	1	\$162	\$0	\$162	\$162
Water Level Sensors						
Level Sensor for 0-200ft H2O, 300ft Cord (Keller Acculevel 0507.01107.051327.13)	0	1	\$1,020	\$0	\$1,020	\$1,020
Level Sensor for 0-200ft H2O, 350ft Cord (Keller Acculevel 0507.01107.051329.13)	0	1	\$1,103	\$0	\$1,103	\$1,103
Level Sensor for 0-200ft H2O, 400ft Cord (Keller Acculevel 0507.01107.051331.13)	0	1	\$1,185	\$0	\$1,185	\$1,185
Sensor Sink Weight (Keller 900001.0033)	0	3	\$28	\$0	\$84	\$84
Equipment Pole, Grounding and Conduit						
Ground Rod, Ground Clamp and #6 Stranded Conductor	1	0	\$50	\$50	\$0	\$50
Radio Mast	1	0	\$150	\$150	\$0	\$150
Equipment Pole with Base	1	0	\$150	\$150	\$0	\$150
Equipment Enclosure Mount (custom)	1	0	\$100	\$100	\$0	\$100
Concrete	1	0	\$20	\$20	\$0	\$20
Conduit and fittings	1	0	\$150	\$150	\$0	\$150
Equipment						
Pickup Truck	7	0	\$42	\$294	\$0	\$294
Boom Truck	1	0	\$63	\$63	\$0	\$63
Hardware Total Estimate				\$4,463	\$5,909	\$9,658
Equipment Total				\$357	\$0	\$357
Labor Total Estimate				\$4,000	\$0	\$4,000
Labor Contingency (10%)				\$400		
Overhead (20%)				\$1,844		
Total Estimate				\$11,064	\$5,909	\$16,972



**YOLO COUNTY FLOOD CONTROL & WATER
CONSERVATION DISTRICT**

PRIVATE JOB WORK ORDER

Bill To: Yolo Subbasin Groundwater Agency
Address: 34274 Highway 16, Woodland, CA 95695
Phone #: 530-662-3211
Project Name: Road 13 Well Real-Time Monitoring Installation
Project Location:
Private Job Number:
Project Start Date: 11/15/2023
Estimated Project Cost: \$11,065
Project Manager: Tim Ireland

Project Description:

I request the Yolo County Flood Control and Water Conservation District to Perform the following work:

Build and install solar powered monitoring system for the existing multi-completion monitoring well at the West end of CR13. This project will be completed by YCFCWCD staff for YSGA in partnership with DWR. DWR's Technical Support Services (TSS) funded the installation of the monitoring well and will also fund and purchase three well level sensors and one radio system for this project.

I AGREE TO PAY FOR THE REQUESTED WORK AS FOLLOWS:

- 50% Down Payment is required
- Final Payment when job is completed
- 30 days from billing date

Signature _____
Title _____
Date _____

Approved _____
General Manager

Accounts become delinquent 30 days from date mailed. Delinquent accounts are charged a finance charge of 1.5% per month.



**Yolo County Flood Control & Water Conservation District
Project INITIATION & COST ESTIMATE Form**

Project Name: Forbes Well Real-Time Monitoring Site Installation
Date of Form Submittal: 11/7/2023
Project Requested by: Tim Ireland
Project Location: East end of Forbes Ranch
Job Number: _____

Project Type (check all that apply):

- Facilities
- Operation & Maintenance
- Water & Environmental Resources
- Engineering
- Administration

- Large Capital
- Small Capital
- Expense

- Construction
- Study

Project to be Performed by:

- District staff
- External consultant/contractor
- Combination of District staff and external consultant/contractor

Project Manager: Tim Ireland
Consultant Contact: _____
Contractor Contact: _____

Est. Total Project Cost: \$13,185.00
Cost Share to bill: _____
Est. Project Schedule: _____

Project Description:

Build and install solar powered monitoring system for the existing multi-completion monitoring well at the East end of Forbes Ranch. This project will be completed by YCFCWCD staff for YSGA in partnership with DWR. DWR's Technical Support Services (TSS) funded the installation of the monitoring well and will also fund and purchase four well level sensors and one radio system for this project.

Forbes Well Real-Time Monitoring Well Installation

11/7/2023

Parts and Labor Estimate for Installing Solar Powered Real-Time Well Monitoring Site

Item Description	YSGA Quantity	DWR Quantity	Unit Price	YSGA Total	DWR Total	Total
Electrical Panel						
Custom Built Electrical Panel by BAT Electric	1	0	\$4,936	\$4,936	\$0	\$4,936
Power System (spare parts)						
140 Watt, 12v Solar Panel (Ameresco BSP140-12)	1	0	\$233	\$233	\$0	\$0
Solar Panel Mount (Tamarack UNI-SP/01A)	1	0	\$82	\$82	\$0	\$0
Solar Panel Mount Knee Brace (Tamarack SP-KNBR-001)	1	0	\$64	\$64	\$0	\$0
100 AH Sealed Battery	1	0	\$333	\$333	\$0	\$0
Radio System						
Trio-Q Radio (Schneider-Electric TBURQR4HH-F00E2L00)	0	1	\$1,710	\$0	\$1,710	\$1,710
Yagi Antenna (Schneider-Electric TBUMANTY-06-4CM)	0	1	\$447	\$0	\$447	\$447
10ft Coaxial Cable (Schneider-Electric TBUMRFANT-10F3M-A)	0	1	\$105	\$0	\$105	\$105
3ft Coaxial Jumper (Schneider-Electric TBUMRFJP-N-N-1M)	0	1	\$93	\$0	\$93	\$93
Surge Arrestor (Schneider-Electric TBUMLT-ARRES-TYPEA)	0	1	\$162	\$0	\$162	\$162
Water Level Sensors						
Level Sensor for 0-200ft H2O, 225ft Cord (Keller Acculevel 0507.01107.051324.13)	0	4	\$896	\$0	\$3,585	\$3,585
Sensor Sink Weight (Keller 900001.0033)	0	4	\$28	\$0	\$112	\$112
Equipment Pole, Grounding and Conduit						
Ground Rod, Ground Clamp and #6 Stranded Conductor	1	0	\$50	\$50	\$0	\$50
Radio Mast	1	0	\$150	\$150	\$0	\$150
Equipment Pole with Base	1	0	\$150	\$150	\$0	\$150
Equipment Enclosure Mount (custom)	1	0	\$100	\$100	\$0	\$100
Concrete	1	0	\$20	\$20	\$0	\$20
Conduit and fittings	1	0	\$150	\$150	\$0	\$150
Equipment						
Pickup Truck	6	0	\$42	\$252	\$0	\$252
Boom Truck	1	0	\$63	\$63	\$0	\$63
Hardware Total Estimate				\$6,269	\$6,214	\$11,770
Equipment Total				\$315	\$0	\$315
Labor Total Estimate				\$4,000	\$0	\$4,000
Labor Contingency (10%)				\$400		
Overhead (20%)				\$2,197		
Total Estimate				\$13,181	\$6,214	\$19,395



**YOLO COUNTY FLOOD CONTROL & WATER
CONSERVATION DISTRICT**

PRIVATE JOB WORK ORDER

Bill To: Yolo Subbasin Groundwater Agency
Address: 34274 Highway 16, Woodland, CA 95695
Phone #: 530-662-3211
Project Name: Forbes Well Real-Time Monitoring Installation
Project Location: East end of Forbes Ranch
Private Job Number:
Project Start Date: 11/15/2023
Estimated Project Cost: \$13,185
Project Manager: Tim Ireland

Project Description:

I request the Yolo County Flood Control and Water Conservation District to Perform the following work:

Build and install solar powered monitoring system for the existing multi-completion monitoring well at the East end of Forbes Ranch. This project will be completed by YCFCWCD staff for YSGA in partnership with DWR. DWR's Technical Support Services (TSS) funded the installation of the monitoring well and will also fund and purchase four well level sensors and one radio system for this project.

I AGREE TO PAY FOR THE REQUESTED WORK AS FOLLOWS:

- 50% Down Payment is required
- Final Payment when job is completed
- 30 days from billing date

Signature _____
Title _____
Date _____

Approved _____
General Manager

Accounts become delinquent 30 days from date mailed. Delinquent accounts are charged a finance charge of 1.5% per month.



**Yolo County Flood Control & Water Conservation District
Project INITIATION & COST ESTIMATE Form**

Project Name: Chapman Well Real-Time Monitoring Site Installation
Date of Form Submittal: 11/7/2023
Project Requested by: Tim Ireland
Project Location: Near Chapman Reservoir Outlet
Job Number: _____

Project Type (check all that apply):

- Facilities
- Operation & Maintenance
- Water & Environmental Resources
- Engineering
- Administration

- Large Capital
- Small Capital
- Expense

- Construction
- Study

Project to be Performed by:

- District staff
- External consultant/contractor
- Combination of District staff and external consultant/contractor

Project Manager: Tim Ireland
Consultant Contact: _____
Contractor Contact: _____

Est. Total Project Cost: \$7,435.00
Cost Share to bill: _____
Est. Project Schedule: 2 Weeks

Project Description:

Build and install monitoring system for the existing multi-completion monitoring well near Chapman Reservoir outlet. This monitoring system will connect to the existing SCADA site at the reservoir outlet for power and communication. This project will be completed by YCFCWCD staff for YSGA in partnership with DWR. DWR's Technical Support Services (TSS) funded the installation of the monitoring well and will also fund and purchase four well level sensors for this project.

Chapman Well Real-Time Monitoring Well Installation

11/7/2023

Parts and Labor Estimate for Installing Solar Powered Real-Time Well Monitoring Site

Item Description	YSGA Quantity	DWR Quantity	Unit Price	YSGA Total	DWR Total	Total
Electrical Panel						
Custom Built Electrical Panel by YCFCWCD	1	0	\$1,200	\$1,200	\$0	\$1,200
Water Level Sensors						
Level Sensor for 0-200ft H2O, 250ft Cord (Keller Acculevel 0507.011107.051325.13)	0	4	\$938	\$0	\$3,750	\$3,750
Sensor Sink Weight (Keller 900001.0033)	0	4	\$28	\$0	\$112	\$112
Equipment Pole, Grounding and Conduit						
Equipment Enclosure Mount (custom)	1	0	\$150	\$150	\$0	\$150
Conduit and fittings	1	0	\$150	\$150	\$0	\$150
Equipment						
Pickup Truck	7	0	\$42	\$294	\$0	\$294
Hardware Total Estimate				\$1,500	\$3,862	\$5,362
Equipment Total				\$294	\$0	\$294
Labor Total Estimate				\$4,000	\$0	\$4,000
Labor Contingency (10%)				\$400		
Overhead (20%)				\$1,239		
Total Estimate				\$7,433	\$3,862	\$11,295



**YOLO COUNTY FLOOD CONTROL & WATER
CONSERVATION DISTRICT**

PRIVATE JOB WORK ORDER

Bill To: Yolo Subbasin Groundwater Agency
Address: 34274 Highway 16, Woodland, CA 95695
Phone #: 530-662-3211
Project Name: Chapman Well Real-Time Monitoring Installation
Project Location: Near Chapman Reservoir Outlet
Private Job Number:
Project Start Date: 11/15/2023
Estimated Project Cost: \$7,435
Project Manager: Tim Ireland

Project Description:

I request the Yolo County Flood Control and Water Conservation District to Perform the following work:

Build and install monitoring system for the existing multi-completion monitoring well near Chapman Reservoir outlet. This monitoring system will connect to the existing SCADA site at the reservoir outlet for power and communication. This project will be completed by YCFCWCD staff for YSGA in partnership with DWR. DWR's Technical Support Services (TSS) funded the installation of the monitoring well and will also fund and purchase four well level sensors for this project.

I AGREE TO PAY FOR THE REQUESTED WORK AS FOLLOWS:

- 50% Down Payment is required
- Final Payment when job is completed
- 30 days from billing date

Signature _____
Title _____
Date _____

Approved _____
General Manager

Accounts become delinquent 30 days from date mailed. Delinquent accounts are charged a finance charge of 1.5% per month.

Yolo Subbasin Groundwater Agency

Services Agreement

This Agreement is entered into as of the date last signed and dated below by and between Yolo Subbasin Groundwater Agency, a public entity organized and existing under the Joint Exercise of Powers Act, Cal. Government Code § 6500 *et seq.*, a local government agency (“Agency”), and Stockholm Environment Institute, a Massachusetts based 501c3 non-profit corporation (“Contractor”) (“Contractor”), who agree as follows:

1 Scope of Work

Contractor shall perform the work and render the services described in the attached Exhibit A (the “Work”). Contractor shall provide all labor, services, equipment, tools, materials and supplies required or necessary to properly, competently and completely perform the Work. Contractor shall determine the method, details and means of doing the Work.

2 Payment

2.1 Agency shall pay to Contractor a fee based on **[check one]**:

Contractor’s time and expenses necessarily and actually expended or incurred on the Work in accordance with Contractor’s fee schedule on the attached Exhibit A.

The fee arrangement described on the attached Exhibit A.

The total fee for the Work shall not exceed \$474,000. There shall be no compensation for extra or additional work or services by Contractor unless approved in advance in writing by Agency. Contractor’s fee includes all of Contractor’s costs and expenses related to the Work.

2.2 At the end of each month, Contractor shall submit to Agency an invoice for the Work performed during the preceding month. The invoice shall include a brief description of the Work performed, the dates of Work, number of hours worked and by whom (if payment is based on time), payment due, and an itemization of any reimbursable expenditures. If the Work is satisfactorily completed and the invoice is accurately computed, Agency shall pay the invoice within 30 days of its receipt.

3 Term

3.1 This Agreement shall take effect on the above date and continue in effect until completion of the Work, unless sooner terminated as provided below. Time is of the essence in this Agreement. If Exhibit A includes a Work schedule or deadline, then Contractor shall complete the Work in accordance with the specified schedule or deadline, which may be extended by Agency by written agreement for good cause shown by Contractor. If Exhibit A does not include a Work schedule or deadline, then Contractor shall perform the Work diligently and as expeditiously as possible, consistent with the professional skill and care appropriate for the orderly progress of the Work.

3.2 This Agreement may be terminated at any time by Agency upon 10 days advance written notice to Contractor. In the event of such termination, Contractor shall be fairly compensated for all work performed to the date of termination as calculated by Agency based on the above fee and payment provisions. Compensation under this section shall not include any termination-related expenses, cancellation or demobilization charges, or lost profit associated with the expected completion of the Work or other such similar payments relating to Contractor's claimed benefit of the bargain.

4 Performance of Work by Contractor

4.1 Contractor represents that it is specially trained and experienced, and possesses the skill, ability, knowledge and certification, to competently perform the Work provided by this Agreement. Agency has relied upon Contractor's training, experience, skill, ability, knowledge and certification as a material inducement to enter into this Agreement. All Work performed by Contractor shall be in accordance with applicable legal requirements and shall meet the standard of care and quality ordinarily to be expected of competent professionals in Contractor's field.

4.2 The following individuals are designated as key personnel and are considered to be essential to the successful performance of the work hereunder: **Vishal Mehta and Chuck Young**. Contractor agrees that these individuals may not be removed from the Work or replaced without compliance with the following sections:

4.2.1 If one or more of the key personnel, for whatever reason, becomes, or is expected to become, unavailable for work under this contract for a continuous period exceeding 30 work days, or is expected to devote substantially less effort to the work than indicated in the proposal or initially anticipated, Contractor shall immediately notify Agency and shall, subject to Agency's concurrence, promptly replace the personnel with personnel of at least substantially equal ability and qualifications.

4.2.2 Each request for approval of substitutions shall be in writing and shall contain a detailed explanation of the circumstances necessitating the proposed substitutions. The request shall also contain a complete resume for the proposed substitute and other information requested or needed by Agency to evaluate the proposed substitution. Agency shall evaluate Contractor's request and Agency shall promptly notify Contractor of its decision in writing.

5 Conflict of Interest

Contractor (including principals, associates and professional employees) represents and acknowledges that (a) it does not now have and shall not acquire any direct or indirect investment, interest in real property or source of income that would be affected in any manner or degree by the performance of Contractor's services under this agreement, and (b) no person having any such interest shall perform any portion of the Work. The parties agree that Contractor is not a designated employee within the meaning of the Political Reform Act and Agency's conflict of interest code because Contractor will perform the Work independent of the control and direction of the Agency or of any Agency official, other than normal contract monitoring, and Contractor possesses no authority with respect to any Agency decision beyond the rendition of information, advice, recommendation or counsel.

6 Contractor Records

6.1 Contractor shall keep and maintain all ledgers, books of account, invoices, vouchers, canceled checks, and other records and documents evidencing or relating to the Work and invoice preparation and support for a minimum period of three years (or for any longer period required by law) from the date of final payment to Contractor under this Agreement. Agency may inspect and audit such books and records, including source documents, to verify all charges, payments and reimbursable costs under this Agreement.

6.2 In accordance with California Government Code section 8546.7, the parties acknowledge that this Agreement, and performance and payments under it, are subject to examination and audit by the California State Auditor for three years following final payment under the Agreement.

7 Ownership of Documents

All works of authorship and every report, study, spreadsheet, worksheet, plan, design, blueprint, specification, drawing, map, photograph, computer model, computer disk, magnetic tape, CAD data file, computer software and any other document or thing prepared, developed or created by Contractor under this Agreement and provided to Agency (“Work Product”) shall be the property of Agency, and Agency shall have the rights to use, modify, reuse, reproduce, publish, display, broadcast and distribute the Work Product and to prepare derivative and additional documents or works based on the Work Product without further compensation to Contractor or any other party. Contractor may retain a copy of any Work Product and use, reproduce, publish, display, broadcast and distribute any Work Product and prepare derivative and additional documents or works based on any Work Product; provided, however, that Contractor shall not provide any Work Product to any third party without Agency’s prior written approval, unless compelled to do so by legal process. If any Work Product is copyrightable, Contractor may copyright the same, except that, as to any Work Product that is copyrighted by Contractor, Agency reserves a royalty-free, nonexclusive and irrevocable license to use, reuse, reproduce, publish, display, broadcast and distribute the Work Product and to prepare derivative and additional documents or works based on the Work Product. If Agency reuses or modifies any Work Product for a use or purpose other than that intended by the scope of work under this Agreement, then Agency shall hold Contractor harmless against all claims, damages, losses and expenses arising from such reuse or modification. For any Work Product provided to Agency in paper format, upon request by Agency at any time (including, but not limited to, at expiration or termination of this Agreement), Contractor agrees to provide the Work Product to Agency in a readable, transferable and usable electronic format generally acknowledged as being an industry-standard format for information exchange between computers (e.g., Word file, Excel spreadsheet file, AutoCAD file).

8 Confidentiality of Information

8.1 To the maximum extent allowed by applicable law, Contractor shall keep in strict confidence all confidential, privileged, trade secret, and proprietary information, data and other materials in any format generated, used or obtained by the Agency or created by Contractor in connection with the performance of the Work under this Agreement (the “Confidential Material”). Contractor shall not use any Confidential Material for any purpose other than the performance of the Work under this Agreement, unless otherwise authorized

in writing by Agency. Contractor also shall not disclose any Confidential Material to any person or entity not connected with the performance of the Work under this Agreement, unless otherwise authorized in advance in writing by Agency. If there is a question if Confidential Material is protected from disclosure or is a public record or in the public domain, the party considering disclosure of such materials shall consult with the other party concerning the proposed disclosure.

8.2 Contractor, and its officers, employees, agents, and subcontractors, shall at all times take all steps that are necessary to protect and preserve all Confidential Material. At no time shall Contractor, or its officers, employees, agents, or subcontractors in any manner, either directly or indirectly, use for personal benefit or divulge, disclose, or communicate in any manner, any Confidential Material to any person or entity unless specifically authorized in writing by the Agency or by order of a court or regulatory entity with jurisdiction over the matter. Contractor, and its officers, employees, agents, and subcontractors shall protect the Confidential Material and treat it as strictly confidential in accordance with applicable law, Agency policies and directives, and best industry security practices and standards.

8.3 If any person or entity, other than Agency or Contractor, requests or demands, by subpoena, discovery request, California Public Records Act request or otherwise, Confidential Material or its contents, the party to whom the request is made will immediately notify the other party, so that the parties may collectively consider appropriate steps to protect the disclosure of those materials. The parties agree to take all steps reasonably necessary to preserve the confidential and privileged nature of the Confidential Material and its content. In the event that the parties cannot agree whether to oppose or comply with a disclosure demand, the opposing party may oppose the demand at its sole cost and expense, in which event the party favoring disclosure will refrain from disclosing the demanded Confidential Material until such time as a final agreement regarding disclosure is reached or, if an agreement is not reached, a judicial determination is made concerning the demand.

8.4 Unless otherwise directed in writing by the Agency, upon contract completion or termination, Contractor must destroy all Confidential Materials (written, printed and/or electronic) and shall provide a written statement to the Agency that such materials have been destroyed.

9 Compliance with Laws

9.1 General. Contractor shall perform the Work in compliance with all applicable federal, state and local laws and regulations. Contractor shall possess, maintain and comply with all federal, state and local permits, licenses and certificates that may be required for it to perform the Work. Contractor shall comply with all federal, state and local air pollution control laws and regulations applicable to the Contractor and its Work (as required by California Code of Regulations title 13, section 2022.1). Contractor shall be responsible for the safety of its workers and Contractor shall comply with applicable federal and state worker safety-related laws and regulations.

9.2 California Labor Code Compliance for Pre- and Post-Construction Related Work and Maintenance.

9.2.1 This section 9.2 applies if the Work includes either of the following:

9.2.1.1 Labor performed during the design, site assessment, feasibility study and pre-construction phases of construction, including, but not limited to, inspection and land surveying work, and labor performed during the post-construction phases of construction, including, but not limited to, cleanup work at the jobsite. (See California Labor Code section 1720(a).) If the Work includes some labor as described in the preceding sentence and other labor that is not, then this section 9.2 applies only to workers performing the pre-construction and post-construction work.

9.2.1.2 “Maintenance” work, which means (i) routine, recurring and usual work for the preservation, protection and keeping of any Agency facility, plant, building, structure, utility system or other property (“Agency Facility”) in a safe and continually usable condition, (ii) carpentry, electrical, plumbing, glazing, touchup painting, and other craft work designed to preserve any Agency Facility in a safe, efficient and continuously usable condition, including repairs, cleaning and other operations on Agency machinery and equipment, and (iii) landscape maintenance. “Maintenance” excludes (i) janitorial or custodial services of a routine, recurring or usual nature, and (ii) security, guard or other protection-related services. (See California Labor Code section 1771 and 8 California Code of Regulations section 16000.) If the Work includes some “maintenance” work and other work that is not “maintenance,” then this section 9.2 applies only to workers performing the “maintenance” work.

9.2.2 Contractor shall comply with the California Labor Code provisions concerning payment of prevailing wage rates, penalties, employment of apprentices, hours of work and overtime, keeping and retention of payroll records, and other requirements applicable to public works as may be required by the Labor Code and applicable state regulations. (See California Labor Code division 2, part 7, chapter 1 (sections 1720-1861), which is incorporated in this Agreement by this reference.) The state-approved prevailing rates of per diem wages are available at <http://www.dir.ca.gov/oprl/DPreWageDetermination.htm>. Contractor also shall comply with Labor Code sections 1775 and 1813, including provisions that require Contractor to (a) forfeit as a penalty to Agency up to \$200 for each calendar day or portion thereof for each worker (whether employed by Contractor or any subcontractor) paid less than the applicable prevailing wage rates for any labor done under this Agreement in violation of the Labor Code, (b) pay to each worker the difference between the prevailing wage rate and the amount paid to each worker for each calendar day or portion thereof for which the worker was paid less than the prevailing wage, and (c) forfeit as a penalty to Agency the sum of \$25 for each worker (whether employed by Contractor or any subcontractor) for each calendar day during which the worker is required or permitted to work more than 8 hours in any one day and 40 hours in any one calendar week in violation of Labor Code sections 1810 through 1815.

9.2.3 If the Work includes labor during pre- or post-construction phases as defined in section 9.2.1.1 above and the amount of the fee payable to Contractor under section 2 of this Agreement exceeds \$25,000, Contractor must be registered and qualified to perform public work with the Department of Industrial Relations pursuant section 1725.5 of the Labor Code.

Contractor’s Public Works Contractor Registration Number: _____

9.2.4 If the Work includes maintenance as defined in section 9.2.1.2 above and the amount of the fee payable to Contractor under section 2 of this Agreement exceeds

\$15,000, Contractor must be registered and qualified to perform public work with the Department of Industrial Relations pursuant section 1725.5 of the Labor Code.

Contractor’s Public Works Contractor Registration Number: _____

d. *Intentionally omitted.*

10 Indemnification.

10.1 Contractor shall indemnify, defend, protect, and hold harmless Agency, and its officers, board member, employees and agents (“Indemnitees”) from and against any and all claims, liability, losses, damages and expenses (including all attorney, expert witness and Contractor fees, and litigation costs) (collectively a “Claim”) that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of Contractor or its employees, agents or subcontractors in performing work or services pursuant to this Agreement. The duty to indemnify, including the duty and the cost to defend, is limited as provided in this section. However, this indemnity provision will not apply to any Claim arising from the sole negligence or willful misconduct of Agency or its employees or agents. Contractor’s obligations under this indemnification provision shall survive the termination of, or completion of Work under, this Agreement.

10.2 This section 10.2 applies if the Contractor is a “design professional” as that term is defined in Civil Code section 2782.8. If a court or arbitrator determines that the incident or occurrence that gave rise to the Claim was partially caused by the fault of an Indemnitee, then in no event shall Contractor’s total costs incurred pursuant to its duty to defend Indemnitees exceed Contractor’s proportionate percentage of fault as determined by a final judgment of a court or final decision of arbitrator.

11 Insurance

Types & Limits. Contractor at its sole cost and expense shall procure and maintain for the duration of this Agreement the following types and limits of insurance:

<i>Type</i>	<i>Limits</i>	<i>Scope</i>
Commercial general liability	\$1,000,000 per occurrence & \$2,000,000 aggregate	at least as broad as Insurance Services Office (ISO) Commercial General Liability Coverage (Occurrence Form CG 00 01) including products and completed operations, property damage, bodily injury, personal and advertising injury
Automobile liability	\$1,000,000 per accident	at least as broad as ISO Business Auto Coverage (Form CA 00 01)
Workers’ compensation	Statutory limits	
Employers’ liability	\$1,000,000 per accident	

Professional liability*	\$1,000,000 per claim	
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*Required only if Contractor is a licensed engineer, land surveyor, geologist, architect, doctor, attorney or accountant.

11.1 **Other Requirements.** The general and automobile liability policy(ies) shall be endorsed to name Agency, its officers, employees, volunteers and agents as additional insureds regarding liability arising out of the Work. Contractor’s coverage shall be primary and apply separately to each insurer against whom claim is made or suit is brought, except with respect to the limits of the insurer’s liability. Agency's insurance or self-insurance, if any, shall be excess and shall not contribute with Contractor's insurance. Each insurance policy shall be endorsed to state that coverage shall not be canceled, except after 30 days (10 days for non-payment of premium) prior written notice to Agency. Insurance is to be placed with admitted insurers with a current A.M. Best’s rating of A:VII or better unless otherwise acceptable to Agency. Workers’ compensation insurance issued by the State Compensation Insurance Fund is acceptable. Contractor agrees to waive subrogation that any insurer may acquire from Contractor by virtue of the payment of any loss relating to the Work. Contractor agrees to obtain any endorsement that may be necessary to implement this subrogation waiver. The workers’ compensation policy must be endorsed to contain a subrogation waiver in favor of Agency for the Work performed by Contractor.

11.2 **Proof of Insurance.** Upon request, Contractor shall provide to Agency the following proof of insurance: (a) certificate(s) of insurance evidencing this insurance; and (b) endorsement(s) on ISO Form CG 2010 (or insurer’s equivalent), signed by a person authorized to bind coverage on behalf of the insurer(s), and certifying the additional insured coverage.

12 General Provisions

12.1 **Entire Agreement; Amendment.** The parties intend this writing to be the sole, final, complete, exclusive and integrated expression and statement of the terms of their contract concerning the Work. This Agreement supersedes all prior oral or written negotiations, representations, contracts or other documents that may be related to the Work, except those other documents (if any) that are expressly referenced in this Agreement. This Agreement may be amended only by a subsequent written contract approved and signed by both parties.

12.2 **Independent Contractor.** Contractor’s relationship to Agency is that of an independent contractor. All persons hired by Contractor and performing the Work shall be Contractor’s employees or agents. Contractor and its officers, employees and agents are not Agency employees, and they are not entitled to Agency employment salary, wages or benefits. Contractor shall pay, and Agency shall not be responsible in any way for, the salary, wages, workers’ compensation, unemployment insurance, disability insurance, tax withholding, and benefits to and on behalf of Contractor’s employees. Contractor shall, to the fullest extent permitted by law, indemnify Agency, and its officers, employees, volunteers and agents from and against any and all liability, penalties, expenses and costs resulting from any adverse determination by the federal Internal Revenue Service, California Franchise Tax Board, other federal or state agency, or court concerning Contractor’s independent contractor status or employment-related liability.

12.3 **Subcontractors.** No subcontract shall be awarded nor any subcontractor engaged by Contractor without Agency's prior written approval. Contractor shall be responsible for requiring and confirming that each approved subcontractor meets the minimum insurance requirements specified in section 11 of this Agreement, or as approved by the Agency. Any approved subcontractor shall obtain the required insurance coverages and provide proof of same to Agency in the manner provided in section 11 of this Agreement.

12.4 **Assignment.** This Agreement and all rights and obligations under it are personal to the parties. The Agreement may not be transferred, assigned, delegated or subcontracted in whole or in part, whether by assignment, subcontract, merger, operation of law or otherwise, by either party without the prior written consent of the other party. Any transfer, assignment, delegation, or subcontract in violation of this provision is null and void and grounds for the other party to terminate the Agreement.

12.5 **No Waiver of Rights.** Any waiver at any time by either party of its rights as to a breach or default of this Agreement shall not be deemed to be a waiver as to any other breach or default. No payment by Agency to Contractor shall be considered or construed to be an approval or acceptance of any Work or a waiver of any breach or default.

12.6 **Severability.** If any part of this Agreement is held to be void, invalid, illegal or unenforceable, then the remaining parts will continue in full force and effect and be fully binding, provided that each party still receives the benefits of this Agreement.

12.7 **Governing Law and Venue.** This Agreement will be governed by and construed in accordance with the laws of the State of California. The county and federal district court where Agency's office is located shall be venue for any state and federal court litigation concerning the enforcement or construction of this Agreement.

12.8 **Notice.** Any notice, demand, invoice or other communication required or permitted to be given under this Agreement must be in writing and delivered either (a) in person, (b) by prepaid, first class U.S. mail, (c) by a nationally-recognized commercial overnight courier service that guarantees next day delivery and provides a receipt, or (d) by email with confirmed receipt. Such notices, etc. shall be addressed as follows:

Agency:

Yolo Subbasin Groundwater Agency
Attn: Kristin Sicke, Executive Officer
Yolo Subbasin Groundwater Agency, 34274 California 16, Woodland, CA 95695
E-mail: ksicke@yolosga.org

Contractor:

Stockholm Environment Institute, U.S.
Attn: Bonnie Cockman
11 Curtis Avenue, Somerville MA 02144
E-mail: bonnie.cockman@sei.org

Notice given as above will be deemed given (a) when delivered in person, (b) three days after deposited in prepaid, first class U.S. mail, (c) on the date of delivery as shown on the overnight courier service receipt, or (d) upon the sender's receipt of an email from the other party confirming the delivery of the notice, etc. Any party may change its contact information by notifying the other party of the change in the manner provided above.

12.9 **Signature Authority.** Each party warrants that the person signing this Agreement is authorized to act on behalf of the party for whom that person signs. The Parties may execute and deliver this Agreement and documents necessary to perform it, including task orders and amendments, in any number of original or facsimile counterparts. When each Party has signed and delivered at least one counterpart to the other Party, each counterpart shall be deemed an original and, taken together, the counterparts shall constitute one and the same document, which shall be binding and effective.

Yolo Subbasin Groundwater Agency:

Dated: November 21, 2023

By: _____
Kristin Sicke, Executive Officer

Stockholm Environment Institute:

Dated: _____

By: _____
Bonnie Cockman, Finance Director

Exhibit A: SCOPE OF WORK and BUDGET

Activity A: Project Management

The main tasks in this activity are the management of personnel and project schedules in order to achieve all activities under this scope of work.

SEI will work on these tasks limited to the budget of 8 person-days estimated for this, at a cost of \$10,100. Please see the budget table.

Activity B: Annual Reports

The main purpose of this activity is the provision of necessary data for the YSGA Annual Reports covering water years 2023, 2024, and 2025. Tasks include:

- (i) Collection and processing of input data provided by YSGA staff
- (ii) Model runs to update Subbasin water budget information
- (iii) Export of relevant information for inclusion in the YSGA Annual Reports

SEI will work on these tasks limited to the budget of 105 person-days estimated for this, at a cost of \$129,100. Please see the budget table.

Activity C: Outreach

The main tasks under this activity include:

- (i) Participation **in up to 3 meetings** with the Technical Advisory Committee and relevant stakeholders
- (ii) Extracting and documenting relevant information from the YSGA model

SEI will work on these tasks limited to the budget of 4 person-days, at a cost of \$4,800. Please see the budget table.

Activity D: Land Use Updates

The main tasks under this activity include:

- (i) Development of up to three future land use scenarios
- (ii) Revision of managed wetland acreage in past and future land use scenarios
- (iii) Model runs to update Subbasin water budget information under land use database changes

SEI will work on these tasks limited to the budget of 90 person-days estimated for this activity, at a cost of \$120,000. Please see the budget table.

Activity E: Comparison to Capay Valley IGSM model

The main tasks under this activity include:

- (i) Comparison of parameters and results of the Capay Valley IGSM model to the YSGA Model
- (ii) Writing of a memo identifying key differences between the models and any recommendations for future YSGA model improvements

SEI will work on these tasks limited to the budget of 20 person-days estimated for this activity, at a cost of \$24,000. Please see the budget table.

Activity E: Model Projects and Management Actions

The main tasks under this activity include modeling of up to five projects and management actions:

- (iii) Coordination with project lead agencies to collect relevant project details
- (iv) Input of project operational constraints into model
- (v) Model runs to update Subbasin water budget information under project implementation
- (vi) Presentation of results to project leads

SEI will work on these tasks limited to the budget of 35 person-days estimated for this activity, at a cost of \$42,000. Please see the budget table.

Activity F: Hungry Hollow Area Water Budget

The main tasks under this activity include:

- (i) Development of water budget specific to Hungry Hollow area

SEI will work on this task limited to the budget of 115 person-days estimated for this activity, at a cost of \$144,000. Please see the budget table.

SCHEDULE

Work will be completed between December 1, 2023 and April 30, 2026.

Expected Charge Rates

Staff/\$/day	2023	2024	2025	2026
Vishal Mehta	1208	1244	1282	1320
Charles Young	1368	1409	1451	1495
Marina Mautner	840	865	891	918
Romina Gomez	768	791	815	839
Jack Sieber	1392	1434	1477	1521
Project Scientist level staff	768	791	815	839

BUDGET

Budget Summary by Activity

	Expected Total Cost, \$				
	2023	2024	2025	2026	Total
<i>A. Project management</i>	2,000	2,931	2,546	2,623	10,100
<i>B. Annual updates</i>	12,000	43,730	43,040	30,330	129,100
<i>C. Outreach</i>	-	2,400	1,200	1,200	4,800
<i>D. Land Use</i>	-	72,000	48,000	-	120,000
<i>E. Incorporation of Capay IGSM</i>	-	24,000	-	-	24,000
<i>F. Projects and Management Actions</i>	-	16,800	20,400	4,800	42,000
<i>G. Hungry Hollow Area</i>	12,000	60,000	72,000	-	144,000
TOTAL	26,000	221,861	187,186	38,953	474,000

Estimated Person-Days by Activity

Activity	Vishal Mehta					Chuck Young					Marina Mautner				
	2023	2024	2025	2026	Total	2023	2024	2025	2026	Total	2023	2024	2025	2026	Total
<i>A. Project management</i>	2	2	2	2	8	0	0	0	0	0	0	0	0	0	0
<i>B. Annual updates</i>	5	11	10	7	32	4	16	15	10	45	0	5	5	3	13
<i>C. Outreach</i>	0	2	1	1	4	0	0	0	0	0	0	0	0	0	0
<i>D. Land Use</i>	0	29	19	0	48	26	17	0	0	42	0	0	0	0	0
<i>E. Incorporation of Capay IGSM</i>	0	4	0	0	4	10	0	0	0	10	0	6	0	0	6
<i>F. Projects and Management Actions</i>	0	3	4	1	8	0	6	7	2	15	0	5	6	1	12
<i>G. Hungry Hollow Area</i>	5	10	11	0	26	4	21	24	0	49	0	14	17	0	31

Activity	Romina Gomez					Jack Sieber					Total – All Staff				
	2023	2024	2025	2026	Total	2023	2024	2025	2026	Total	2023	2024	2025	2026	Total
<i>A. Project management</i>	0	0	0	0	0	0	0	0	0	0	2	2	2	2	8
<i>B. Annual updates</i>	0	6	5	4	14	0	0	0	0	0	9	37	35	24	105
<i>C. Outreach</i>	0	0	0	0	0	0	0	0	0	0	0	2	1	1	4
<i>D. Land Use</i>	0	0	0	0	0	0	0	0	0	0	26	45	19	0	90
<i>E. Incorporation of Capay IGSM</i>	0	0	0	0	0	0	0	0	0	0	10	9	0	0	20
<i>F. Projects and Management Actions</i>	0	0	0	0	0	0	0	0	0	0	0	14	17	4	35
<i>G. Hungry Hollow Area</i>	0	0	0	0	0	0	4	5	0	9	9	49	57	0	115

Yolo Subbasin Groundwater Agency Board of Directors
Meeting Agenda Report

MEETING DATE: November 20, 2023

AGENDA ITEM NO. 7

SUBJECT: Consideration: Well Permit Review Procedures

INITIATED OR BOARD
REQUESTED BY: STAFF
 OTHER _____

INFORMATION
 ACTION: MOTION
 RESOLUTION

ATTACHMENT YES NO

BACKGROUND

a. Update on Draft Well Permit Review Procedures

In March 2022, Governor Newsom issued [Executive Order N-7-22](#), setting certain requirements for well permit issuance in light of California’s on-going drought. The Order required, in relevant part, that before issued a well permit, the permitting authority must obtain a written verification from the Groundwater Sustainability Agency that:

- The groundwater extraction by the proposed well would not be inconsistent with any sustainable groundwater management program established in the GSP for that area; and
- The groundwater extraction by the proposed well would not decrease the likelihood of achieving a sustainability goal for the basin covered by such a plan.

Separately, the permit-issuing agency must make a determination that extraction of groundwater from the proposed well is (1) not likely to interfere with the production and functioning of existing nearby wells, and (2) not likely to cause subsidence that would adversely impact or damage nearby infrastructure. In February of this year, those requirements were extended and modified by [Executive Order N-3-23](#). These requirements do not apply to domestic wells producing less than 2 acre-feet annually; wells that will exclusively provide groundwater to public water supply system; or certain wells that are replacing facilities that had been acquired by eminent domain.

In May 2022, YSGA adopted [Resolution No. 22-01](#), authorizing the Executive Officer to develop and implement Well Permit Procedures that were consistent with the requirements of the Order.

At the September 2023 Board meeting, YSGA adopted [Resolution No. 23-01](#), directing staff to establish a timeline and general parameters for updated Well Permit Procedures to be considered and ultimately adopted by the YSGA Board. The Resolution stated that a draft map depicting regions potentially requiring specially attention (“Areas of Special Concern” and “Data Gap”

regions) would be included in the updated Well Permit Procedures, as well as a description of the characteristics meriting that special designation, and the process for including lands within these maps.

b. Adopt Focus Areas Map and Approve Public Comment Period for Draft Hydrogeology Report Criteria

At the October 27, 2023 Special Board meeting, the YSGA Board received a presentation from West Yost on the preliminary delineation of the Focus Areas along with the technical data and analysis used to create the Focus Areas Map.

A draft version of the “Focus Areas” map and the Technical Memorandum were available for public comment from October 31 thru November 14, 2023 at the following link: <https://portal.giscloud.com/map/2496272/ysga-draft-focus-areas>. The YSGA received comments from nine unique commenters and the comments are attached to this agenda item for additional review. Based on the feedback received on the draft Delineation of Focus Areas Map Technical Memorandum, it became apparent to YSGA staff that there is a desire to extend the Focus Areas public comment period to align with the *Draft Hydrogeology Report Criteria* public comment process. In response to this feedback, YSGA staff and West Yost have created a comprehensive document to facilitate better understanding of how the Focus Areas Map and the guidelines and evaluation criteria for Hydrogeology Reports will be utilized to comply with the Executive Orders.

West Yost and YSGA staff will provide a presentation summarizing comments received on the Focus Areas Map, and the next steps available for Board consideration. Additionally, West Yost and YSGA staff will provide a presentation on the proposed standardized criteria and guidelines and evaluation criteria for Hydrogeology Reports that may be required in Focus Areas and will propose a public comment process to occur November 22 to December 22, 2023. For now, YSGA staff are confident that the Focus Areas Map can be used as is to delineate areas where Hydrogeology Reports will be required based on casing diameter size and/or pumping rates to take the next step in complying with the Executive Order.

RECOMMENDATION

- a. This agenda item is for informational purposes only. No Board action is required.
- b. YSGA staff request that the Board adopt the Focus Areas Map for the YSGA staff to use to evaluate well permits that are currently pending review. YSGA staff request that the Board approve the public comment period for the *Draft Hydrogeology Report Criteria*.

**Yolo Subbasin Groundwater Agency
Policy Implementing
Well Permit Review Procedures**

Adopted _____

Executive Orders N-7-22 and N-3-23 (EOs) require that, before a well permitting authority may issue a permit for certain new or modified wells, it must receive a written verification from the Groundwater Sustainability Agency (GSA) that:

- The groundwater extraction from the proposed well “would not be inconsistent with any sustainable groundwater management program established in the Groundwater Sustainability Plan” for that area; and
- The groundwater extraction by the proposed well “would not decrease the likelihood of achieving a sustainability goal for the basin”.

YSGA is not a well-permitting authority but is the GSA for its boundaries. Accordingly, shortly after the implementation of the EOs, YSGA adopted Resolution 22-01, authorizing and directing YSGA staff to carry out the verification processes required by the EOs.

Consistent with Resolution 23-01, this Policy establishes YSGA’s standards and processes for the issuance of verifications under the Executive Orders.

1. Application of the Policy.

This Policy applies to the issuance of Verifications for well permit applications under the EOs. Domestic wells producing less than 2 acre-feet annually; wells that will exclusively provide groundwater to public water supply system; and certain wells that are replacing facilities that had been acquired by eminent domain are exempt from the verification requirements under the EOs. Those facilities are not considered in this Policy. Similarly, the EOs require that the permit-issuing agency make certain findings related to the proposed well’s likely impacts on nearby wells and structures. Applicants should refer to their relevant permitting agency for guidance related to those findings, which are outside the scope of this Policy.

2. Application Review Process.

Well applications should be submitted directly to the appropriate County permitting offices for review consistent with that County’s governing requirements. Upon receiving a covered Permit Application from the County, the Executive Officer shall conduct a preliminary review of the materials for completeness and to confirm the applicability of the EOs. Where the application materials are sufficient to support YSGA’s required EOs Verifications, a written verification will be issued and forwarded to the well-permitting authority. In some circumstances, additional

information may be required before a verification can issue. These processes are outlined in Sections 3 and 4? , below.

In all cases, YSGA staff are empowered to issue a written verification based on the standards and processes provided herein. YSGA staff may refer any application to the Drought Contingency Planning Committee or YSGA Board of Directors for further consideration and direction, consistent with the standards identified in this Policy.

A verification will not be issued where the preponderance of the evidence before the agency demonstrates either that (1) the proposed well would be inconsistent with the groundwater management program of the GSP; or (2) the proposed well or well alteration would decrease the likelihood of achieving a sustainability goal for the Yolo Subbasin. In all other cases, and in the absence of substantial evidence that the proposed well is otherwise inconsistent with the verification requirements of the EO, the verification will be forwarded to the well-permitting authority for consideration and processing.

3. Supplemental Verification Materials – Wells in Focus Areas.

YSGA has identified certain regions of the basin where, in the judgment of the agency, supplemental information should be submitted to support the EOs Verification process. These regions are depicted in **Exhibit ___** (Focus Areas Map). The process for identifying and mapping Focus Areas is detailed in **Exhibit ___**. The Focus Areas Map may be adjusted from time to time by an action of the YSGA Board, following an opportunity for public comment and review of the proposed changes.

Applications for sites located within the mapped Focus Areas shall submit additional supporting information as follows:

- a) For proposed new wells or alteration of existing wells which pump greater than 100 gpm or have a well casing diameter greater than 6 inches, the applicant shall submit a Hydrogeologist's Report prepared consistent with **Exhibit ___**.
- b) For proposed new wells or alteration of existing wells which pump less than 100 gpm or have a well casing diameter of 6 inches or less, a formal Hydrogeologist's Report is not required. Well applicants in this category are advised that, based on the specific conditions of the location and permit application, YSGA may request additional supporting information as part of the verification process.

Inclusion in a “Focus Area” is not indicative of a particular region or well operation’s overall sustainability. Rather, the Focus Areas Map identifies sites in the Yolo Subbasin where local hydrogeology, data gaps, monitoring trends, or other considerations make it prudent for the agency to collect additional information from applicants prior to issuing a verification under the EOs.

4. Hydrogeologist’s Reports.

Exhibit __ sets out the requirements for Hydrogeologist’s Reports prepared in accordance with this Policy. **Exhibit __** may be amended from time to time by an action of the Board, following an opportunity for public comment and review of the proposed changes. A permit applicant may petition the agency for a waiver from the Hydrogeologist Report requirements based on the unique circumstances surrounding that application. Such a waiver will be granted where, in the judgment of the agency, the preponderance of the evidence already before the agency supports the verification findings required by the EOs.

5. Reservation of Rights and Future Enforcement Actions.

Verifications issued under this Policy are intended to meet the procedural and substantive requirements of the EOs, based on the evidence before YSGA at the time of issuance. Verifications issued under this policy are explicitly **not** a determination of underlying water rights; nor are they prima facie evidence that a particular well’s operations are sustainable now or under future conditions. YSGA reserves all rights to carry out appropriate enforcement and implementation of its groundwater sustainability programs within the basin, including but not limited to actions involving facilities that have been the subject of verifications under this Policy.

Date	Name	Comments
11/1/2023	Charlie Schaupp	<p>That hill south of Road 14 west of 87 are not part of the Dunnigan hills aquifer. That is a separate aquifer which we call the Hungry Hollow aquifer (or the sweet spot). My family has farmed those areas for 140 years...There is a fault running NW-South East from about (Roads 85/14 to 505/19) Those two water tables, north and south of it, seem to not be interrelated. The well at 84 A and 84B (Lawhead 160) are on the Hungry Hollow aquifer... and should not be lumped into the Dunnigan Hills.</p>
11/3/2023	Scott Steward	<p>I ask the Board of Supervisors to extend the new well Moratorium another 45 days.</p> <p>The Focus Area Map (FAM) and the requirements for the Hydrogeologist Report (HR) are not complete and the public needs time to review the reports. The map and the HR requirements should be considered together, and the public should be given time for a review. The same conditions for putting the moratorium in place still exist and the information is incomplete.</p> <p>Following the September 12th Board Meeting, it occurred to several observers to ask just how many acre feet the approximate 213 new wells, issued in the last 5 years, can draw in a day, week or month or year? How many acre feet can these 213 wells draw from the aquifer in a season?</p> <p>The public should know what amount of water might be drawn from the aquifer in a season (annual draw). Please ask the YSGA, and or the County, to provide an estimate of water draw capacity of the most recent 5 years of wells already permitted. according to UC Davis large municipal and agricultural production wells, pumping rate requirements range from about 500 to 4,000 gallons per minute.</p> <p>Amateur Estimate average well pump capacity 500 gallons per minute number of wells: 213 run time per day: 8 hours run days per month: 20 days Months per year: 7 months Total acre feet drawn by the 213 wells (installed in the last 5 years) in one 7 month season: 22,000 acre feet Would the county's public benefit from knowing just what amount of water could be theoretically drawn from existing wells in a season and then use that information to inform decisions on allowing further wells? Thank your consideration of extending the moratorium and for considering asking staff and the YSGA and to calculate the draw capacity of the last 5 years of approved wells (and then perhaps all existing operational Yolo wells) as part of reports to the Board and public.</p>
11/3/2023	Annie Main	<p>The Focus Area Map (FAM) and the requirements for the Hydrogeologist Report (HR) are a package, meaning the adequacy of the map depends on the adequacy of the HR requirements which then gives the specifics for the Well Permitting Procedures. Thus, it is not appropriate to review the map by itself; the map and the HR requirements should be considered together as a coordinated package.</p> <p>Also of utmost importance is that when the standardized criteria for Hydrogeology Reports requirements are defined, the technical requirements in the HR will need to be consistent with the requirements contained in the County Health Well Interference report, as part of the public I need to be ensured this is the case.</p> <p>In view of the need to review the proposal of FA and HR and also the Well Permit Procedures for a complete understanding of all the considerations that are being incorporated, and the changes that are being made, I ask you to consider extending the Moratorium another 45 days. This will give you all adequate time to fully complete and finalize permitting criteria in conjunction with a detailed HR, have new Well Permit Procedures clearly outlined and allow enough time to digest the necessary public review.</p>
11/5/2023	Jackie Lundy	<p>Dear Board of Supervisors,</p> <p>The Focus Area Map report to the YSGA Board meeting on October 27, showed a lot of hard work in defining areas with groundwater concerns in Yolo County. The number of different variables considered was commendable. By overlaying various indicator maps, the Focus Areas became evident. The map will be most helpful in the process of protecting groundwater and moving Yolo County towards its sustainable groundwater goals.</p> <p>A number of us, who are stakeholders in this issue, exchanged comments which were highlighted in the letter to you from Annie Main last week. I strongly support all of the points in that letter, but I want to emphasize and expand on a couple of points.</p> <p>First, the map will not be the finished product we need until the requirements for the hydrogeologist report are delineated. The map and the report are a package and the requirements for the report will determine how effective the well permitting process will be.</p> <p>Second, the map and its 2,000' buffer area only outline the regions. It does not consider the capacity limitations of the underlying aquifer, a groundwater budget, crops being grown in the region, or the cumulative effects of other multiple existing wells.</p> <p>Third, there needs to be a discussion of what steps will be taken depending on what a hydrogeologist report shows. For example, will a well permit be given if the report shows it will cause a 3' drop in neighboring well? What if it shows a 30' drop? Without quantitative measures, these will be difficult situations to resolve.</p> <p>Forth, the recommendations for changing the well permit process from the County Environmental Health Department has not been presented yet. Having a coordinated effort between YSGA and Environmental Health is essential in protecting, while also utilizing, our groundwater resources. The Focus Area map, the hydrogeologist report, and the County's permit process all need to be reviewed as one package.</p> <p>Thank you for your consideration of these matters.</p> <p>I would like to add the following to my third comment. When reviewing the completed hydrogeologist report in the permit process, there needs to be an establish measure of what level of impact on nearby wells and the aquifer is acceptable.</p> <p>Two additional comments are as follows. If variances are going to be allowed as suggested, there needs to be exact criteria for why a variance is given and there needs to be a process in place for stakeholders in the region to comment on and appeal the variance.</p> <p>Finally, there should be a domestic well stakeholder area the Focus Area added to the YGSA Board. Except for going through the BOS, we have no direct input to the YGSA, but we can be dramatically impacted by YGSA decisions.</p>

Date	Name	Comments
11/8/2023	Ben King	<p>The Governor's Executive Order requires that "... groundwater extraction by the proposed well would not be inconsistent ..." with the management plan of the Yolo Subbasin GSP and "... would not decrease the likelihood of achieving a sustainability goal..." for the Yolo Subbasin. The Draft Focus Area Map materially fails to comply because it focusses only the management plan for the Lowering of Groundwater Levels Sustainability Indicator and does not comply with the management plan components relating to the Water Quality Degradation, Seawater Intrusion and Reduction of Groundwater Storage Sustainability Indicators. The Draft Focus Area Map also materially fails to comply with the Executive Order requires that a proposed new well "would not decrease the likelihood" of each of the potentially impacted Sustainability Indicators.</p> <p>The Draft Focus Area Map does well in addressing the Lowering of Groundwater Levels Sustainability Indicator since it is consistent with the related management plans of the Yolo Subbasin and the information to be requested assures that the new well "... would not decrease the likelihood..." of achieving the Lowering Groundwater Levels sustainability goal for the Yolo Subbasin GSP.</p> <p>To be consistent with the Yolo Subbasin GSP management plan and not decrease the likelihood of achieving the goals for the remaining three Sustainability Indicators there needs to be a requirement for water quality testing for new wells. Since the Yolo Subbasin GSP does not have a dedicated groundwater quality monitoring network this water quality requirement could be considered as an easily executable Project Management Action and a good way to close Data Gaps – especially in areas with sparse or no data like the Dunnigan Hills Management Area.</p> <p>TDS Levels and pH should be required for all new wells in the Yolo Subbasin. This water quality sample requirement would address the potential for Seawater Intrusion for the area of Yolo County near the Delta and monitor for artesian up coning of saline water which has been widely observed in the Sacramento Valley generally and in the Dunnigan Hills area in particular. pH is also an indicator of the potential for the hydro chemical process of redox where arsenic and manganese would be more likely to desorb into the groundwater and also a potential indicator for enhanced transmissivity of the hexavalent form of chromium which is also known to be present in the Dunnigan Hills area. (continued below)</p>
11/8/2023	Ben King	<p>(continued from previous) For other natural contaminants – the suggestion is another Focus Map which focuses on areas of concern for different natural contaminants. Two Focus Maps: 1. The Draft Focus Map and 2. Focus Map on areas of concern for specified natural contaminants as discussed below:</p> <p>Focus Area for Mercury and Sulfate water samples should be taken for new wells in the floodplains and restricted drainage areas of North Yolo and the Yolo Bypass to determine if existing groundwater has been contaminated by methyl mercury deposits from the Coast Range and to determine if future contamination is possible due to high sulfate levels in the groundwater which can occur as part of a biotic product of sulfate-reducing microorganisms that exist in anaerobic conditions that are co-determinant with areas subject to restricted drainage and elevated levels of sulfate in the groundwater.</p> <p>Focus Area for Arsenic and Manganese samples should be taken in areas where arsenic and manganese are known to exist. New wells drilled near the Wild Wings public supply system would provide important information regarding potential contamination in nearby rural wells for example. The USGS has documented arsenic contamination in a representative well in North Yolo and the southern part of the Colusa Subbasin.</p> <p>The Reduction of Groundwater Storage Sustainability Indicator is related to both the Seawater Intrusion and Water Quality Degradation Sustainability Indicators – where a new well would extract saline or water contaminated by a natural contaminant then Groundwater Storage is Reduced.</p> <p>While the Yolo Subbasin GSP does not have a water quality monitoring network or observed water quality levels in tabular form it does reference external networks and focus areas of concern in Figures 2-35, 2-36, 2-37 and a reference to the USGS GAMA network in Figure 4-3.</p> <p>Thank you for the opportunity to comment and your time and consideration.</p>
11/8/2023	Grant Davids	<ol style="list-style-type: none"> 1) The Focus Area Map (FAM) Technical Memorandum is a complicated document approximately 23 pages in length. I understand the desire to move swiftly, but two weeks is not really an adequate review period. The short review period precludes interaction among interested parties in the subbasin, the sharing of ideas, and the vetting of review comments. 2) The FAM and the (yet to be specified) requirements for the Hydrogeologist Report (HR) are a package that work together to regulate the permitting of new wells in the Yolo Subbasin. This means that the adequacy of the FAM depends on the adequacy of the HR requirements. For example: If the HR requirements are technically lax, then the FAM has little meaning. Conversely, if the HR requirements are technically rigorous, then the FAM could be part of an effective well permitting procedure. It is not appropriate to review the map by itself; the map and the HR requirements must be considered together as a coordinated package. 3) One FAM criterion is declining groundwater levels at a rate of greater than 25 feet in 10 years. If groundwater levels are persistently declining at this rate, or at any rate for that matter, what is the justification for permitting any new wells that would increase groundwater extraction? Declining groundwater levels signal that the groundwater system at that location is already out of balance and any new permitted wells and related additional pumping would only exacerbate the imbalance. The basic issue is that the FAM does not explicitly consider the groundwater budget. 4) If there are areas where a water budget analysis concludes that the groundwater system is already overdrafted, should not such areas be designated as "No New Well" areas? Logically, it is impossible for an HR to justify drilling new wells in such areas. 5) A 2000' buffer to provide additional protection of domestic wells might (but will not necessarily) provide some protection from seasonal drawdown by nearby high-volume pumping but will not protect domestic (or any other) wells from persistent water levels declines if the system is out of balance. Again, the basic issue is that the FAM does not explicitly consider the groundwater budget. 6) The proposed policy (per Slide 35 in the YSGA Board presentation, as I understand it) would allow wells up to 2000 gpm to be constructed on the valley floor without requiring a HR. Such wells could be constructed immediately adjacent to Focus Areas that are prone to water level declines, or already experiencing groundwater level declines. Basic hydrogeology says that pumping in adjacent (up to 2000 gpm) wells will likely result in change in storage in the adjoining vulnerable aquifers. 7) On p. 23 of the TM, the statement is made that: "The proposed implementation process will...address citizen concerns related to declining groundwater levels...". Whether this is true depends entirely on the requirements established for the HR, making the point above that the FAM and HR should be regarded and reviewed as a coordinated package. 8) A flow chart should be added to the TM illustrating how permits will be processed according to proposed new YSGA and County protocols. (Such a flowchart already exists but needs to be updated.)

Date	Name	Comments
11/14/2023	Shane Tucker	<p>1. The "Draft" focus areas map recently presented is a very helpful start to understanding the limited areas where annual groundwater removal may exceed its annual recharge. The map of focus areas will necessarily change as you gain more knowledge, and therefore these maps should be subject to change as more is learned and conditions change.</p> <p>Based on actual reports of dry wells and declining groundwater levels over the 10 year horizon, it appears that the only demonstrated problem areas are in low recharge zones. I was unable to locate any "demonstrated problem areas" in areas not designated as low recharge. Therefore, primary remediation/control should be on areas of low recharge.</p> <p>a.Future work should focus on accurately defining these zones and understanding sustainable extraction volumes. In some areas of the county, the transition from low recharge to adequate recharge is abrupt, not gradual. Work with landowners, well drillers, engineers familiar with well drilling in the area, can confirm.</p> <p>b.Soils reports, lack of problem reporting, evidence from existing wells, cropping history (lands historically and traditionally farmed as row crops every year generally were not located in low recharge/problem groundwater areas) etc can help better define these areas.</p> <p>c. Completion of this work is likely to show that the groundwater usage in adequate recharge areas has negligible impact on groundwater in low recharge areas, especially with respect to rural residential wells that have adequate screening setbacks.</p> <p>2.The focus areas include buffer areas that are not defined as low recharge. It appears that the purpose of including these areas is for conservatism and protection of the wells in low recharge areas. The burden of inclusion in "focus" areas for landowners is significant, both from a cost – (expensive hydrology reports often required) and a perception (included land doesn't have access to adequate groundwater to farm) is significant. Sincere efforts should be made to exclude lands which are unnecessarily included as a focus area.</p> <p>3. Years of evidence in numerous locations demonstrate that rural residential areas and ag wells can coexist in areas with adequate recharge – in fact, most of the rural alluvial plain in the county is in this state. Well drilling procedures in citizen concern areas (concentration of rural residential wells) in zones with adequate recharge should allow for new wells without individual hydro reports. Review of existing domestic/rural residential well reports should provide sufficient evidence for determining well screening setbacks (depths) and impermeable barriers (bentonite seals) which allow for ag well construction that minimize interference, without requiring hydrology reports. If ag well developer doesn't want to comply with prescriptions, then hydro report could be required.</p> <p>4.Now that the YSGA has better defined the problem areas and low recharge zones, the existing monitoring well network should be helpful in understanding how the dynamics of recharge might differ between the areas. An historical analysis of annual recharge, differentiated by whether the well is located in a low or adequate recharge area may reveal helpful data.</p> <p>I am available to speak with you as needed to provide additional information</p>
11/14/2023	Ricardo Amon	<p>I appreciate the seriousness of your efforts providing data and visual clarity, for us to understand why the Yolo subbasin must address on-going undesirable results in the focus areas of special concern.</p> <p>The aquifers in the historically unirrigated lands have been stable, until the recent unrelenting extraction of groundwater resources to grow permanent crop plantations, exclusively with pumped groundwater. The impact is evidenced with the fast lowering of water tables affecting domestic residents and small farming families. The impact is real, and the problem is not only how many wells have already been drilled, and how many more will be permitted, but more importantly, how many gallons of groundwater per minute will be pumped to grow almonds, olives, and grapes exclusively on groundwater sources.</p> <p>YSGA will have to address the on-going deterioration of several sustainable indicators with undesirable results, including DWR's "significant and unreasonable depletion of supply" impact, lowering groundwater levels. Water budgets are needed to account for extraction and potential recharge, to establish sustainable yields for the Dunnigan Hills and the Hungry Hollow aquifers and the other focus areas. Please add a requirement to install pumping monitoring equipment in new wells drilled in these areas. YSGA will also need to monitor and address undesirable water quality results that are already evident with olive trees showing signs of Boron concentrations.</p> <p>It is likely that the water budgets will show a deficit in the Dunnigan Hills and the Hungry Hollow regions, with more groundwater being pumped than replenished, undermined by the degradation of the watersheds and the limited ability to recharge these aquifers. We would ask YSGA to please bring this subject to the attention of the Yolo County Board of Supervisors, during the upcoming January 2024 meeting. They should know and understand the next level of concern that will require their attention. For them and county officials to properly address these undesirable results, which are evident above and below ground in these focus areas. The revised YSGA GSP will need to address these concerns to comply with SGMA goals.</p>

Specific Review Comments to The Draft Focus Area (FA) Report

Page 3: The Draft Focus Area (FA) report states the County retained Luhdorff and Scalmanini, Consulting Engineers (LCSE) to prepared a Tech Memo (TM) that presented modifications to the County's well permitting procedure, and included the LSCE TM in Appendix C. The Appendix C TM is dated December 2022, and is currently being updated. Should this update be mentioned in the draft report? How will the Draft FA be impacted by the revised well permitting procedures, especially in light of the Draft FA report's requirement for a Hydrogeologist Report?

Page 9: The draft report states groundwater levels from YSGA representative monitoring wells (RMWs) and other monitoring wells located within the Yolo Subbasin were reviewed to identify areas where significant declines in groundwater levels have occurred between 2013 to 2023, and where there was an exceedance of the MTs at RMWs in Fall 2023. Figure 3 shows the 10-year water level trends (Fall 2013-Fall 2023) in the available groundwater monitoring network. Figure 4 shows a map of the RMWs and corresponding MT status as of October 2023. The Draft FA report should include additional brief information on the definition/meaning of what constitutes a MT exceedance.

Page 23: The draft report states that if the proposed Focus Area delineations are adopted by the YSGA Board, a Hydrogeologist's Report (HR) must be submitted. However, the Draft FA report does not present information to be included in the Hydrogeologist Report. The Final FA report should include additional information on the HR report requirements, or at least a reference to inform the reader on where the HR requirements can be accessed and reviewed.

Page 23: The draft report states: "... if YSGA staff determines that the best available data supports a variance from the requirements staff may present the well permit application and supporting materials to the YSGA Drought Contingency and Planning Committee for further consideration and direction." Does this apply to the need for an HR report? The Draft FA report should expand on the meaning of "best available data". What factors affect the final decision to refer to the Committee? What is the rational and appropriateness of the YSGA Drought Contingency and Planning Committee to make the final decision?

General Comment:

1. Now be the best time for the YSGA to update requirements on new ag wells inside and outside the FAs. The YSGA has the regulatory authority to require new ag well owners to submit well design information and well pump station plans, and well irrigation use/production estimates. YSGA can require information on well construction (including as-builts), results of well development, water quality, and well pumping test results; and require that well pump station be equipped with water level measuring and flow meter equipment. In addition, regulations allow the YSGA to require pumpers to prepare annual statements regarding flow rate, total extraction volume, and pumping water levels. This information would be very useful in updating the GSP's groundwater model and water balance. The information could also be very useful in assessing short term and long-term pumping impacts to the basin, including the areas immediate adjacent to the FAs. Finally, the well and pumping information would also be valuable in preparing and evaluating future Hydrogeological Reports.

Kristin Sicke

From: John F <jfaw73@yahoo.com>
Sent: Wednesday, November 15, 2023 10:20 AM
To: Kristin Sicke
Subject: JF Comments on Draft FA Report
Attachments: JF Comments Draft Focus Area Report by West Yost 11 15 23.docx

You don't often get email from jfaw73@yahoo.com. [Learn why this is important](#)

Hi Kristin,

I have attached comments on the Draft FA report for your consideration.

The comments are not that significant as I thought report did a good job at taking a complex issue with many variables and coming up with a defensible focus area boundary. Like I said you could have had five different consultants look at the the same data and come up with five different FA boundaries.

A common review comment mentioned at the the last BOS meeting was that the FA report lacked information on what was to be contained in the HR and did not mention that Env Health and SGWA staff are now completing work on the Hydrogeological Report requirements and the revising/updating the County Well Permitting regulations. I was concerned when April said the Draft Well Permit Regulations are really not changing much.

Many of us will be interested in the work you are completing on defining the content of what will be required in the the HR report. Fortunately, other GSAs have prepared HRs that can be used as templates. I noticed that the HR reports cover a range from just requiring basic well information, to a more involved analyses that can even required field testing to obtain information on aquifer properties, well interference impacts etc.

Finally, I have one last general comment. I mentioned at the the last BOS meeting that now may be the best time for the YSGA to update requirements on new ag wells inside and outside the FAs. The YSGA has the regulatory authority to require new ag well owners to submit well design information and well pump station plans, and well irrigation use/production estimates. YSGA can require information on well construction (including as-builts), results of well development, water quality, and well pumping test results; and require that well pump station be equipped with water level measuring and flow meter equipment. In addition, regulations allow the YSGA to require pumpers to prepare annual statements regarding flow rate, total extraction volume, and pumping water levels. This information would be very useful in updating the GSP's groundwater model and water balance. The information could also be very useful in assessing short term and long-term pumping impacts to the basin, including the areas immediate adjacent to the FAs. Finally, the well and pumping information would also be valuable in preparing and evaluating future Hydrogeological Reports.

Unfortunately, I'm not sure if this recommendation was well received, even though the BOS said they appreciated the recommendation. I think to many, this recommendation feels too much like the heavy hand of government imposing yet more requirements on agriculture. I get this, but at the end of the day end, having more complete information is to the GSA's and the groundwater pumpers advantage. We'll all get there (having a sustainable groundwater resource) one way or another.

Thanks for the opportunity to comment,

John Fawcett
Winters, CA
Cell 530 400 2131

TECHNICAL MEMORANDUM

DATE: November 16, 2023 Project No.: 1105-80-23-01
SENT VIA: EMAIL

TO: Kristin Sicke, PE
Yolo Subbasin Groundwater Agency
34274 State Highway 16
Woodland, CA 95695

FROM: Ken Loy, PG, CHG, CEG
Erik Cadaret, PG
Anna Reimer, PG

REVIEWED BY: Andy Malone, PG

SUBJECT: Delineation of Focus Areas Map and Guidelines and Evaluation Criteria for Hydrogeologist Reports to Address Executive Orders N-7-22 Paragraph 9 and N-3-23 Paragraph 4

INTRODUCTION

West Yost prepared this Technical Memorandum (TM) for the Yolo Subbasin Groundwater Agency (YSGA) to support the development and implementation of procedures to comply with Governor's Executive Order N-7-22 (EO) issued on March 28, 2022 and Governor's Executive Order N-3-23 (EO-2) issued on February 13, 2023. The Paragraph 9 of the EO and Paragraph 4 of the EO-2 (collectively, EOs) describe requirements for permitting of new or replacement water wells.

Yolo County Community Services Department, Environmental Health Division (County) is responsible for well permitting in Yolo County. YSGA is the Groundwater Sustainability Agency (GSA) for the Yolo Subbasin and is responsible for its sustainable management in accordance with the Sustainable Groundwater Management Act (SGMA). Most of the Yolo Subbasin is within Yolo County.¹

The YSGA and the County have identified the need for certain water well applicants to provide supplemental information necessary to enable the YSGA and the County to make the determinations required by the EOs. This supplemental information must be documented in a Hydrogeologist's Report prepared by a certified professional geologist or hydrogeologist currently licensed in the State of

¹ The Yolo Subbasin extends into small areas of Solano County, including a 3.8-square-mile area bounded by Miner Slough at its southeastern corner and a 2-square-mile area of the UC Davis. (The Solano Subbasin extends into the County in three small areas (4.8 square miles, total) to the south of Davis and are related to the jurisdiction of two reclamation districts.) (Yolo Subbasin Groundwater Agency 2022 Groundwater Sustainability Plan, Yolo County, CA, adopted January 2022).

California.² A Hydrogeologist's Report may be required by the YSGA for some proposed wells if they are located in Focus Areas identified by the YSGA, or a Hydrogeologist's Report will be required by the County if an application does not meet the County's proposed minimum separation distance requirement from existing neighboring wells.³

PURPOSE AND INTENDED USE

The purpose of this TM is to document:

- Delineation of Focus Areas within the Yolo Subbasin
- Requirements and guidance for the contents of the Hydrogeologist's Report
- Criteria the YSGA and County may use to evaluate the Hydrogeologist's Report

The YSGA may evaluate a Hydrogeologist's Report according to the proposed criteria and consult with the County to support compliance with the applicable sections of the EOs by the YSGA and the County. The YSGA may contract a third-party PG or CHG to support the review Hydrogeologist Reports if the YSGA does not have a PG or CHG on staff that's qualified to review Hydrogeologist Reports upon receiving a Hydrogeologist Report associated with a well permit. This may also apply to the County if the County does not have a PG or CHG on staff that's qualified to review Hydrogeologist Reports.

Applications for wells of certain types and capacities are exempted, as described below. The proposed process may be revised based on feedback from the YSGA and County Boards, staff, stakeholders, and members of the public.

ORGANIZATION

This TM is organized in the following sections:

- Requirements and Background
- Modifications to the County Well Permitting Process
- Focus Area Requirements
- Other Requirements
- Hydrogeologist's Report Guidelines
- Hydrogeologist's Report Evaluation Criteria
- Proposed Implementation

Supporting information is provided in the following appendices:

- Appendix A – Governor's Executive Order N-7-22
- Appendix B – Governor's Executive Order N-3-23
- Appendix C – YSGA Adopted Resolution No. 22-01

² Professional geologists must be able to furnish documentation demonstrating a minimum of two years of experience designing and assessing the impacts of water wells if requested by the YSGA.

³ Certain wells are exempted, as described below.

- Appendix D – YSGA Adopted Resolution No. 22-02
- Appendix E – YSGA Agricultural Well Permit Application Acknowledgement form
- Appendix F – Supplemental Questionnaire for Agricultural Well Permit Application
- Appendix G – Yolo County Temporary Well Permitting Procedures to Address Executive Order N-7-22 Section 9⁴
- Appendix H – YSGA Adopted Resolution No. 23-01
- Appendix I – Technical Data and Methods for Delineating Focus Areas
- Appendix J - Proposed YSGA Well Permit Hydrogeologist's Report Findings Summary Form

REQUIREMENTS AND BACKGROUND

The EO and EO-2 are provided in Appendices A and B. Paragraph 4 of EO-2 replaces Paragraph 9 of the EO and defines requirements to be addressed prior to the County issuing a well permit. Paragraph 4a of EO-2 prohibits the County from issuing a permit for a new well or alteration of an existing well unless YSGA provides written verification that extraction of groundwater from the new or altered well would not:

- i. Be inconsistent with any sustainable management program in the adopted Yolo Subbasin GSP⁵
- ii. Decrease the likelihood of achieving a sustainability goal for the Yolo Subbasin.

Paragraph 4b prohibits the County from issuing a permit for a new well or alteration of an existing well without first determining that extraction of groundwater from the new or altered well is not likely to:

- i. Interfere with the production and functioning of existing nearby wells, and
- ii. Cause subsidence that would adversely impact or damage nearby infrastructure.

Paragraph 4 of EO-2 also defines exemptions. The exemptions are:

- Wells producing less than two acre-feet per year for individual domestic water use
- Public supply system wells as defined in Health & Safety Code § 116275
- Replacement wells that would produce an equivalent quantity of water as the existing well that has been acquired by eminent domain or acquired while under threat of condemnation

Since the issuance of the EOs, the YSGA has adopted two resolutions (No. 22-01, Appendix C; No. 22-02, Appendix D) that define the procedures to comply with the EO and a cost recovery fee schedule for verification and review of well permit applications related to the EO. Additionally, the YSGA has adopted a resolution (No. 23-01, Appendix H) that documents the proposed process for memorializing an update to the YSGA's procedures for complying with the EO. The YSGA has also created an Agricultural Well Application Acknowledgement form (Appendix E) that is required to be completed by well permittees to verify they acknowledge the powers the YSGA may exercise, limitations of the YSGA's verification of a well permit, and indemnify the YSGA from legal liability. The County assisted the YSGA in creating a Supplemental

⁴ LSCE, 2022, Yolo County Temporary Well Permitting Procedures to Address Executive Order N-7-22 Section 9, prepared for Yolo County Department of Community Services, Environmental Health Division, December 20, 2022.

⁵ https://www.yologroundwater.org/files/acff83c75/YoloGSP_Adopted.pdf

Questionnaire for Agricultural Well Permit Applications (Appendix F) that well permittees are required to fill out to provide additional detail for the YSGA to better understand the purpose of an existing well's proposed alteration/modification and proposed new well's construction, use, and pumping capacity.

As of October 2023, the YSGA has reviewed 73 well permit applications and provided written verification to the County for 52 of these applications. In recent years, domestic well owners in some areas of the Yolo Subbasin have expressed concerns over declining groundwater levels and dry wells, and some have reported collapsed well casings. Concerns about the permitting of agricultural wells in close proximity to domestic wells have resulted in domestic well owners speaking at County Board of Supervisors and YSGA Board of Directors meetings or writing letters to the YSGA and the County requesting greater oversight over well permitting.

MODIFICATIONS TO THE COUNTY WELL PERMITTING PROCESS

YSGA is not the well permitting authority for the groundwater basin. Still, YSGA has groundwater management responsibilities in the basin, and is required by the EOs to provide specific verifications to the County in connection with the County's well permit-issuance process. Given that relationship, YSGA is closely coordinating with the County in planning for EO compliance.

The County retained Lohdorff and Scalmanini, Consulting Engineers (LCSE) to develop modifications to the County's well permitting procedure to address the County's responsibilities under Paragraph 9b of the EO (which is now superseded by Paragraph 4b of EO-2). LCSE's TM² as adopted in December 2022, and inconsequentially revised in June 2023, is provided in Appendix G. Like the processes identified in this TM, the County well permitting process requires supplemental hydrogeologist's reports to support the County's separate findings under the EOs. Table 1 lists the County's minimum well separation distances and thresholds that would trigger a hydrogeologist report be completed by the well permittee.

Table 1. Minimum Well Separation Distances	
Pumping Capacity, gpm	Minimum Well Separation Distance, ft
Wells Within the Valley Floor Areas⁶ of the County	
< 500	250
500 – 1000	500
1000 – 1500	1000
1500 – 2000	2000
> 2000	Report Required
Wells in the Upland Areas⁷ of the County	
< 15	500
15 – 100	1000
> 100	Report Required
<i>Source: LSCE, 2022²</i>	

Under the County’s requirements, for proposed wells within the Valley Floor Areas³ with pumping capacities greater than 2,000 gallons per minute (gpm) or within the Upland Areas⁴ with pumping capacities greater than 100 gpm (Figure 2), a Hydrogeologist’s Report must be completed by a licensed professional geologist or hydrogeologist to determine if the well is unlikely to interfere with the function and operation of nearby wells and is unlikely to cause land subsidence that would adversely impact or damage nearby infrastructure.

To avoid duplication, YSGA will generally rely on the Hydrogeologist’s Report requested by the County for pumping capacities discussed above when it issues verifications regarding consistency with the basin’s sustainability goals and groundwater management programs under Paragraph 4a of EO-2. However, because these categories are not co-extensive with the findings that YSGA must make under Paragraph 4b, YSGA has identified additional criteria intended to support its issuance of verifications under EO-2.

⁶ Valley Floor Areas are designated by the County as synonymous with the Yolo Subbasin.

⁷ Upland Areas are designated by the County as areas in Yolo County but not within the Yolo Subbasin. Upland Areas are generally in the Coast Range west of the Yolo Subbasin.

FOCUS AREAS REQUIREMENTS

The YSGA retained West Yost to help delineate Focus Areas within the Yolo Subbasin **Error! Bookmark not defined.** Figure 1 shows the draft Focus Areas delineation map that was reviewed and approved for release for public comment by the YSGA Board on October 27, 2023. The YSGA delineated Focus Areas within the Yolo Subbasin where:

- Groundwater levels in Spring 2023 were below the minimum thresholds (MTs) defined in the Yolo Subbasin Groundwater sustainability Plan (GSP)
- Groundwater levels have declined more than 25 feet over 10 years (Spring 2013 – Spring 2023). Note: Two wells within the Subbasin where there was a decline of more than 25-feet over 10 years were in areas where the Tehama Formation was absent at the surface and where no other wells within the vicinity experienced the same (or greater) level of decline. These two wells were excluded at the YSGA Boards request to prevent delineation of an area around a single well point which would not appropriately represent a broader area of groundwater decline.
- Dry wells and citizen concerns are reported
- Domestic well densities are high. A 2,000-foot buffer which corresponds to the County’s maximum setback distance requirement was added around areas of domestic high well density.
- Small water systems are present
- Recharge potential is low
- Groundwater data are limited

Under the YSGA’s proposed verification process, permit applications for new wells or well alterations resulting in increases in pumping capacity would be subject to the following requirements if they are within the Focus Areas and not exempt under the EOs:

- For proposed new wells or alteration of existing wells located within Focus Areas that are not exempt from the EOs, and which pump greater than 100 gpm or have a well casing diameter greater than 6 inches, the YSGA will require a Hydrogeologist’s Report be submitted as part of the YSGA’s verification process in the County well permitting process.
- For proposed new wells or alteration of existing wells located within the Focus Areas that are not exempt from the EOs, but pump less than 100 gpm or have a well casing diameter of 6 inches or less, a Hydrogeologist’s Report is not required, but the YSGA may require additional information be submitted as part of the YSGA’s verification process in the County well permitting process.

YSGA staff created a web page⁸ that allows well permittees to look at the Focus Areas interactively and be able to zoom in or out to quickly assess if a proposed well is located within a Focus Area.

For detailed documentation describing the technical data and methods used to delineate the Focus Areas map, see Appendix I.

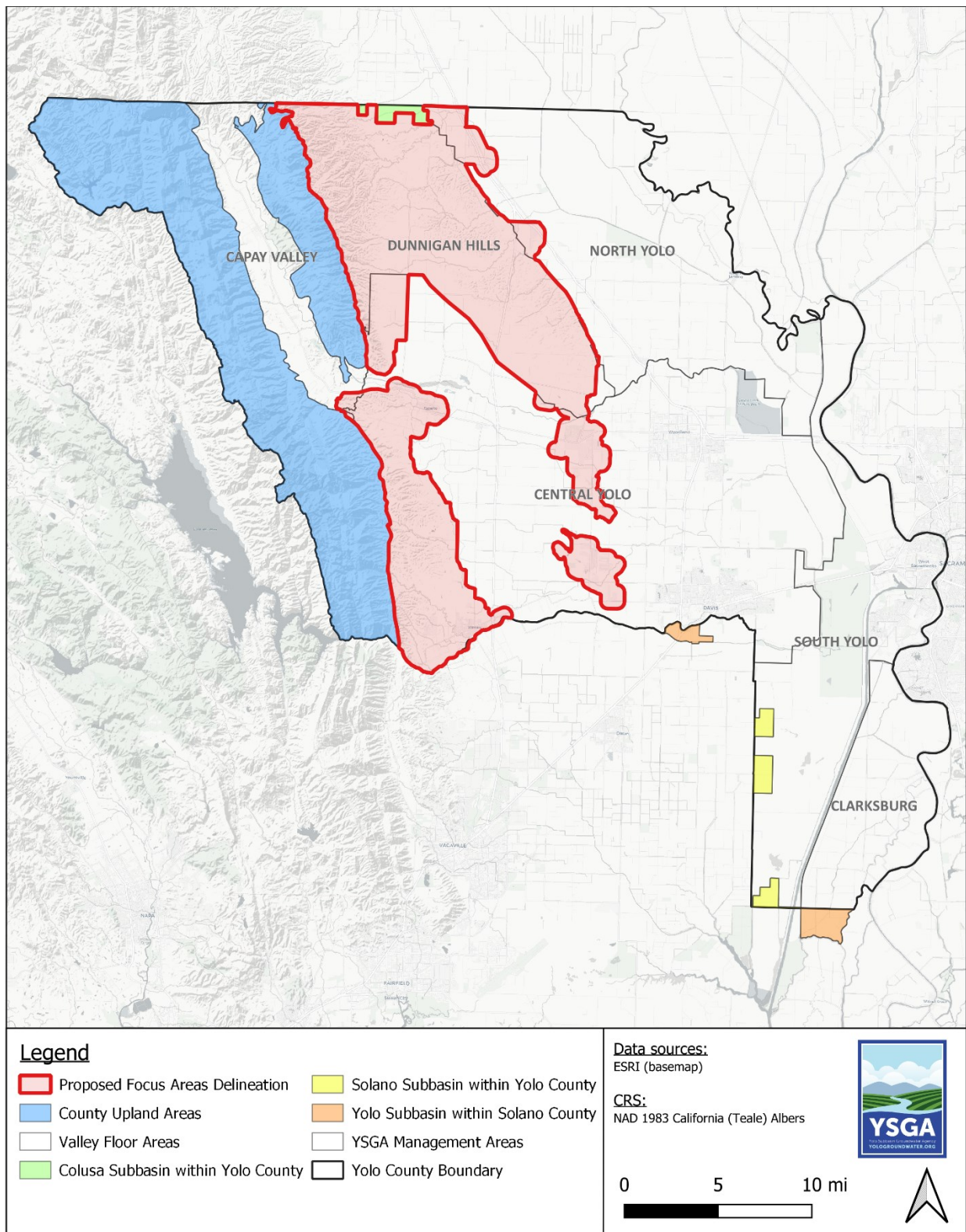


Figure 1. Proposed Delineated Focus Areas Relative to County Defined Valley Floor and Upland Areas.

OTHER REQUIREMENTS

The YSGA will require the following information for new wells or deepening of existing wells in the Yolo Subbasin:

- Geophysical logs must be submitted to the YSGA for wells and borings exceeding 200 feet in depth within the Yolo Subbasin within 30 calendar days of conducting the geophysical logging⁹. The YSGA will not use the geophysical log to dictate well design, methods for drilling, or well construction.
- Applicants required to submit a Hydrogeologist's Report must also submit the final 'as built' well construction diagram produced by a PG or CHG to YSGA. This 'as built' diagram may be prepared using the well diagram template in Appendix J.

This information will be used to verify well permit application information and develop a better understanding of the subsurface lithology of the Yolo Subbasin.

HYDROGEOLOGIST'S REPORT GUIDELINES

The proposed guidelines for the preparation of a Hydrogeologist's Report aims to make the Hydrogeologist's Report adequately detailed with the appropriate information such that the YSGA and County reviewers (or contracted third-party reviewers hired to support review of Hydrogeologist Reports) can sufficiently evaluate well permit applications that are required to comply with EO-2 Paragraph 4a and 4b. Hydrogeologist's Reports shall follow the proposed outline using the same section and subsection headers designated by a "****" symbol described in this section of the TM.

Hydrogeologist's Report Findings Summary Form

The summary form shall be filled out in its entirety to sufficiently summarize the results of the Hydrogeologist's Report to aid YSGA staff's evaluation of well permit applications. The proposed summary form is provided in Appendix J of this TM. **The Hydrogeologist's Report will be included as an attachment to this summary form.**

Cover Page

The cover page shall contain the following information:

- Site Address
- APN
- Date Submitted
- Seal and signature of a qualified Professional Geologist (PG) or Certified Hydrogeologist (CHG) registered with the state of California

⁹ Geophysical logs must include at minimum, short- and long-normal resistivity, single-point resistivity, spontaneous potential, and caliper logs.

Introduction***

The introduction section of the Hydrogeologist's Report shall contain information to familiarize the reviewer with the property owner's information, the location of the well, and a description of the proposed well project.

Property Owner Information***

Property owner information shall contain the following:

- Site Address
- Property Owner Name
- Mailing Address
- Phone Number
- Email

Location of the Proposed Well or Alteration to Existing Well***

The location of the proposed well or alteration to existing well shall contain the following information:

- Well location map that shows roads, neighboring landowners, existing water infrastructure, and wells within a 1-mile radius. Geographic information may be obtained using Google Earth, ESRI Arc Map or ArcGIS Pro, QGIS, or equivalent geographic information system software or printed map information. Neighboring well information may be obtained from multiple data sources, including DWR's Online System for Well Completion Reports (OSWCR), SWRCB GeoTracker-GAMA database, and visual verification of possible wells through Google Earth or other aerial imagery sources.
- GPS coordinates (Datum: WGS 1984) for latitude and longitude in degrees and decimal minutes to five decimal places (e.g., 38.67030, -121.87109). This information may be obtained using a smartphone or GPS device.
- Public Land Survey System (PLSS) Township Range Section and Quarter Section.
- Yolo County Assessor's parcel number (APN).

Description of the Proposed Well or Alteration to Existing Well Project***

The description in this section shall contain the following information:

- Proposed new well or alteration to existing well
- Purpose of the well
- Planned pumping capacity and operating schedule
- Project elements offsetting pumping demands (surface water diversions, recharge credits, conjunctive use, etc.)
- Permitting and construction schedule

Design of the Proposed Well or Existing Well to be Altered***

The design of the proposed well or existing well to be altered section of the Hydrogeologist's Report shall contain information to familiarize the reviewer with the design of the well. This information shall be presented in a detailed well diagram with supporting narrative text. The following information shall be included:

- Drilling and logging methods
- Depth and diameter of the conductor casing and boring
- Conductor casing sealing methods and materials
- Depth and diameter of the pilot borehole
- Depth and diameter of the final reamed borehole
- Depth, diameter, and casing material of the well casing
- Screened intervals and slot size
- Sand pack interval and grain size
- Annular seal methods and materials
- Surface completion
- Pump intake depth

Hydrogeologic Evaluation***

The hydrogeologic evaluation section of the Hydrogeologist's Report shall contain information to familiarize the reviewer with the hydrogeologic conditions within the immediate area of the proposed well project. The following information shall be included:

- Descriptions of the expected geologic formations to be encountered during drilling to an anticipated total depth.
- Description of the expected hydrogeologic unit, primary aquifers, and aquitards that are designated in the Yolo Subbasin GSP. This should also include a list of expected hydraulic parameters (i.e., transmissivity and storage coefficient) of hydrogeologic units penetrated by the well using data supported by existing published literature, including the Yolo Subbasin GSP.
- Groundwater conditions. This should be shown on a map and in tables, and include:
 - Anticipated depths to groundwater based on the historic high and low range.
 - Anticipated gradient (magnitude and direction).
 - Unconfining and confining conditions in all hydrogeologic units penetrated by the well.
 - Proximity to hydraulic barriers to groundwater flow (e.g., geologic faults or folds).
 - Proximity to surface water features and recharge boundaries (reference location map).
 - Historical measurements of subsidence and critical infrastructure within a two-mile-radius of the proposed well.
 - Nearby wells noting the total depth, screen interval depths, and pumping rates, if known.

Impact Assessment***

The impact assessment section of the Hydrogeologist's Report shall contain information on the potential impacts the well may have and if it complies with EO-2 Sections 4a and 4b relative to:

- The wells proposed pumping schedule and anticipated seasonal variations in pumping.
- If the well is located on a parcel that is part of a local surface water provider's conjunctive use program, take into account how surface water offsets pumping at the well.

The impact assessment may be completed using the following commonly used tools:

- Analytical models including Theis, Cooper-Jacob, Theis Unconfined, Hantush, Hantush and Jacob, and Moench.
- Numerical models including GSFLOW, MODFLOW, and IWFEM.

Magnitude and Extent of Drawdown***

Describe the magnitude and extent of drawdown at the proposed well primary production depth interval(s) using the following distances: 500 feet, 1,000 feet, 2,500 feet, and 1 mile. Include supporting figures, tables, calculations, and a narrative.

Anticipated Impacts to Groundwater Levels in Neighboring Wells***

Describe the anticipated groundwater level effects of the well on neighboring wells based on the primary production depth of the well and neighboring wells production depths (domestic and non-domestic wells). Include supporting figures, tables, calculations, and a narrative.

Anticipated Impacts on Groundwater Levels and Groundwater Storage***

Describe the anticipated changes to groundwater levels and groundwater storage caused by pumping the well on the nearest YSGA representative monitoring well (RMW). Address each of the Principal Aquifers noted in the GSP that apply to the screened zones of the well. Compare to the chronic lowering of groundwater levels and reduction in groundwater storage defined MTs as shown in Table 2. Include supporting figures, tables, calculations, and a narrative.

Anticipated Impacts on Nearby Interconnected Surface Waters***

Describe anticipated changes to surface water features and groundwater dependent ecosystems (GDEs) within 1,000 feet of the well and compare to the depletion of interconnected surface water MTs as shown on Table 2. Include supporting figures, tables, calculations, and a narrative.

Anticipated Impacts on Aquifer Water Quality***

Describe the potential changes in total dissolved solids (TDS) concentrations anticipated to occur as the result of changes in groundwater levels and gradients caused by pumping at the well. Address each of the Principal Aquifers noted in the GSP that apply to the screened zones of the well. Compare anticipated changes in TDS to the degraded water quality MT for TDS listed in Table 2. Include supporting figures, tables, calculations, and a narrative.

Anticipated Impacts on Land Subsidence***

Describe potential changes in the rates of inelastic land subsidence anticipated to occur as the result of changes in groundwater levels caused by the proposed pumping. Address each of the Principal Aquifers noted in the GSP that apply to the screened zones of the well. Identify critical infrastructure within a two-mile radius of the proposed well. Provide an assessment of impact of the proposed pumping on the rates of inelastic land subsidence relative to the MTs listed in Table 2 and impacts to critical infrastructure. Include supporting figures, tables, calculations, and a narrative.

Anticipated Impacts to Achieving GSP Sustainability Goals and Programs***

Describe the anticipated impacts of the proposed well on achieving the sustainability goals of the GSP and implementation of sustainability programs and management actions of the GSP as shown on Table 3. Include supporting figures, tables, calculations, and a narrative.

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Table 2. Yolo Subbasin GSP (Submitted January 2022) Sustainable Management Criteria.

Sustainable Management Criteria (SMC)	Description	Undesirable Result	Minimum Thresholds	
Chronic Lowering of Groundwater levels	The point at which significant and unreasonable impacts over the planning and implementation horizon, as determined by depth or elevation of groundwater, affect the reasonable beneficial use of, and access to, groundwater by overlying users.	Occurs when the MT criteria is exceeded in 51 percent or more of representative monitoring wells in two MAs.	Capay Valley	A well violates the minimum threshold when the groundwater elevation exceeds the historic (pre-2016) minimum elevation in the period of record of each Representative Well in two consecutive fall measurements.
			Dunnigan Hills	
			Central Yolo	
			South Yolo	A well violates the minimum threshold when the groundwater elevation exceeds the historic minimum elevation in the period of record (pre-2016) of each Representative Well plus 20 percent of the depth between the historic maximum and historic minimum elevation for the period of record (pre-2016) of the Representative Well in two consecutive fall measurements.
			North Yolo	
Clarksburg	NA due to limited data			
Reduction in Groundwater Storage	The point at which significant and unreasonable impacts over the planning and implementation horizon, as determined by the amount of groundwater storage in the Yolo Subbasin, affect the reasonable and beneficial use of, and access to, groundwater by overlying users. In the Subbasin groundwater elevations serve as a proxy for groundwater storage.	GW Levels used as proxy. See Chronic Lowering of GW Levels Undesirable Results.	Capay Valley	See Chronic Lowering of GW Levels MTs
			Dunnigan Hills	
			Central Yolo	
			South Yolo	
			North Yolo	
			Clarksburg	
Degraded Groundwater Quality	The point at which water quality is degraded to the extent of causing significant and unreasonable impacts from groundwater management actions in the Yolo Subbasin, that affect the reasonable and beneficial use of, and access to, groundwater by overlying users.	An undesirable result occurs when the MT criteria is exceeded in 50 percent or more of representative monitoring wells monitored for total dissolved solids.	Capay Valley	A representative monitoring well violates the minimum threshold when the TDS concentration exceeds 1,000 ppm over a three (3) year rolling average.
			Dunnigan Hills	
			Central Yolo	
			South Yolo	
			North Yolo	
			Clarksburg	
Land Subsidence	The point at which the rate and extent of subsidence in the Subbasin causes significant and unreasonable impacts to surface land uses or critical infrastructure.	An undesirable result occurs when the MT value is exceeded over 25 percent of the management or sub-MA in three (3) or more management or sub-MAs in the same reporting year.	Capay Valley	TBD
			Dunnigan Hills	1.8 cm/yr
			East Central Yolo	3.0 cm/yr
			West Central Yolo	1.8 cm/yr
			South Yolo	0 cm/yr
			North Yolo	3.0 cm/yr
			Clarksburg	0 cm/yr
Depletion of Interconnected Surface Water	The point at which significant and unreasonable impacts to the surface waters affect the reasonable and beneficial use of those surface waters by overlying users, including associated ecosystems.	An undesirable result occurs when the Minimum Threshold is exceeded in over 50 percent of the interconnected surface water representative monitoring wells in two (2) or more interconnected surface water MAs in the same reporting year. Note: An interconnected surface water management zone will be considered an “undesirable result watch area” when 50 percent or more of the representative monitoring wells (RMWs) in that management zone exceed their minimum threshold value.	Lower Cache Creek	The recurrence of the spring (March-May) average measurement for 1975 to present at the RMWs at least one spring in every seven (7) years.
			Upper Cache Creek	Equal to the minimum elevation for the period of record at the RMW, exceeded in 2 consecutive years.
			Putah Creek	
			Lower Sacramento River	Exceedance of the historic minimum elevation in the period of record of each RMW plus 20 percent of the depth between the historic maximum and historic minimum elevation for the period of record of the RMW in 2 consecutive years.
			Upper Sacramento River	

Table 3. Yolo Subbasin GSP (Submitted January 2022) Programs (Management Actions) and Sustainability Goals

Management Action/Project Number	Management Action/Project Name	Description	Relevant Sustainability Indicators Affected			
			Groundwater Levels	Groundwater Quality	Land Subsidence	Interconnected Surface Water-Groundwater
MA 1	Continued and Improved Groundwater Monitoring Program	Several groundwater monitoring programs exist within the Yolo Subbasin. Efforts to aggregate these monitoring programs include the Yolo County Water Resources Information Database (WRID) and DWR’s Water Data Library. The WRID also receives well water level data from the cooperating agencies, monitoring about 550 wells distributed Countywide semi-annually. Most groundwater level data received or collected in the WRID is submitted to the state’s Water Data Library. Existing programs monitor both water quality and water levels. Continuing to monitor groundwater conditions in the Yolo Subbasin is a critical component of a sustainable future. Improvements can be made to the current program by expanding monitoring efforts into data gaps, improving coordination between programs, and ensuring sustainable funding of monitoring efforts.	X	X	X	X
MA 2	Continue coordination efforts with other management and monitoring entities	Coordination efforts are ongoing related to groundwater management and monitoring in the Yolo Subbasin. Continuing these coordination efforts will yield better information and allow for a collaborative and conjunctive decision-making process. This includes evaluation of well permit applications and working with Yolo County in the well permitting process.	X	X	X	X
MA 3	Subsidence Monitoring Program	Continue to investigate subsidence and causes of subsidence in the Yolo Subbasin.			X	
MA 4	Preparedness through Increased Groundwater Recharge and Managed Aquifer Recharge Projects	This project encompasses all efforts to increase groundwater recharge in the Yolo Subbasin. This includes diversion of winter flows for groundwater recharge, increased groundwater infiltration from precipitation, aquifer storage and recovery projects, for example. Increased groundwater recharge efforts and winter diversions may result in creation of seasonal wetlands in some scenarios. YCFC&WCD proposes to divert winter flows from Cache Creek into the canal system to increase groundwater recharge. Groundwater recharge and recovery is central to good conjunctive management of surface and groundwater resources. Currently, by YCFC&WCD policy, 160 miles of surface water canals remain unlined, providing summertime groundwater recharge services that benefit the aquifer and riparian habitat. The recharged groundwater is used by beneficial users in the Subbasin. Utilizing TNC’s Multi-Benefit Recharge Project Methodology Guidance Document will help make these projects successful. Managed wetlands within the Subbasin already provide multi-benefit recharge services, and increased coordination with wetland managers will provide opportunity for information sharing and potential managed aquifer recharge projects. Additional methods of groundwater recharge that will be considered include flood water and drain flows in the Yolo Bypass, drain flows in the Colusa Basin Drain, and application of irrigation water more than crop evapotranspiration needs.	X		X	
MA 5	Conjunctive Water Use Program	This conjunctive water use project envisions using a variety of methods (recharge/recovery, off-stream storage and canal system modernization) to effectively store and conjunctively use groundwater in the District's service area. The new water that will be developed can be used to the benefit of agriculture, environmental and municipal interests. A significant amount of work has already been completed on this project including establishment of a groundwater monitoring program.	X			
MA 6	Increased outreach and information sharing of groundwater resources and knowledge within the Yolo Subbasin	Information sharing, collaboration, and communication will be an important part of groundwater sustainability in the Yolo Subbasin. This project will convey information, best practices, funding opportunities, data, and observations to as wide of a group as possible. This project relates to the Communication and Engagement Plan that the YSGA has created for the Yolo Subbasin.	X	X	X	X

Table 3. Yolo Subbasin GSP (Submitted January 2022) Programs (Management Actions) and Sustainability Goals

Management Action/Project Number	Management Action/Project Name	Description	Relevant Sustainability Indicators Affected			
			Groundwater Levels	Groundwater Quality	Land Subsidence	Interconnected Surface Water-Groundwater
MA 7	Domestic Well Impact Mitigation Program	The YSGA is working to create a domestic well impact mitigation program to mitigate any potential impacts to domestic well users. This program will identify potential funding sources for both temporary and permanent domestic water solutions in cases where domestic well users are impacted due to changing groundwater conditions as a result of groundwater management actions. The minimum thresholds and measurable objectives established in this document are generally protective of domestic well users in the Yolo Subbasin. The Domestic Well Impact Mitigation Program will provide resources and information in cases where management actions result in impacts to domestic well users.	X			
MA 8	Surface Water Monitoring Program	There is no coordinated Countywide surface water monitoring program at present. However, on-going monitoring programs are in-place on various waterways, and a large number of smaller temporary investigations have occurred over the years. These individual surface water monitoring efforts need to be consolidated to improve the value of the data for implementation of actions identified in this GSP.	X	X	X	X
MA 9	Management Consideration of Grey Areas in the Yolo Subbasin	During the formation of the GSA for the Yolo Subbasin, the eligible entities were identified based on SGMA’s definition. Irrigated areas outside of water or irrigation district service areas were known as “white areas” since they did not have an eligible entity (other than the County) to form or become a GSA. The YSGA was formed in June 2017, with Yolo County serving as a member of the JPA to cover these “white areas”. The YSGA now has the authority and responsibility for this area; however, there is still no formal mechanism for receiving revenues for SGMA implementation, which has made these areas slightly complicated, or now known as “grey areas”. There is a desire for the YSGA to work closely with landowners in these “grey areas” to assess the best solution for implementing the GSP and ensuring future sustainability. Ideas for these areas include, annexing the property into an existing irrigation or reclamation district (as an “Area B” or an Improvement District); creating or forming a new water district; or simply implementing a countywide assessment for all properties in the Yolo Subbasin.	X	X	X	X
MA 10	Coordination Efforts with Land Use Planning Entities	The YSGA and member entities will work on an as-needed basis with Yolo County and municipalities within the Yolo Subbasin to promote the sustainable use and protection of groundwater resources including GDEs and interconnected surface water bodies. These coordination efforts will include inputs to general plan updates in the future	X	X	X	X
MA 11	Continued Investigation of subsurface geology and aquifer properties in the Yolo Subbasin	There are portions of the Yolo Subbasin where the geologic properties of the aquifer are well understood. Alternatively, there are areas where geologic conditions are not well described or understood. This Management Action would work to improve geologic information in areas of the subbasin where the aquifer is poorly described. This includes looking at existing geologic cross-sections, AEM surveys, and investigation of driller's reports.	X	X	X	X
MA 12	Coordinated Response to Minimum Threshold Exceedances	The YSGA will coordinate responses to minimum threshold exceedances. When a single well minimum threshold is exceeded, the YSGA will verify the exceedance, analyze causes and trends, and evaluate mitigation. When multiple wells exceed minimum thresholds, causes and trends will be evaluated by MA entities and potential mitigation actions (projects and management actions) will be identified. When wells exceed the minimum threshold for a MA, causes and trends will be evaluated, potential mitigation actions (projects and management actions) will be evaluated and a plan for implementation will be developed. This will involve basin-wide coordination.	X	X	X	X

Table 3. Yolo Subbasin GSP (Submitted January 2022) Programs (Management Actions) and Sustainability Goals

Management Action/Project Number	Management Action/Project Name	Description	Relevant Sustainability Indicators Affected			
			Groundwater Levels	Groundwater Quality	Land Subsidence	Interconnected Surface Water-Groundwater
GSP Sustainability Goals						
<ol style="list-style-type: none"> 1. Achieve sustainable groundwater management in the Yolo Subbasin by maintaining or enhancing groundwater quantity and quality through the implementation of projects and management actions to support beneficial uses and users. 2. Maintain surface water flows and quality to support conjunctive use programs in the Subbasin that promote increased groundwater levels and improved water quality 3. Operate within the established sustainable management criteria and maintain sustainable groundwater use through continued implementation of a monitoring and reporting program 4. Maintain sustainable operations to maintain sustainability over the implementation and planning horizon 						

Conclusions***

The conclusions section of the Hydrogeologist’s Report shall include a statement that verifies (or does not verify) the well permit application complies with EO-2 Section 4a and 4b where the proposed new well or alteration to existing well would not:

- Be inconsistent with any sustainable management program in the adopted YSGA GSP, and
- Decrease the likelihood of achieving a sustainability goal for the basin.

Also, as required by the County well permitting process, the well permit application must comply with EO-2 Section 4b where the proposed well would not likely:

- Interfere with the production and functioning of existing nearby wells, and
- Cause subsidence that would adversely impact or damage nearby infrastructure.

In the event the findings from the report does not verify the well permit complies with the EOs, the well permittee is encouraged to request a consultation with YSGA and County staff to assess possible changes to well permit application to achieve compliance.

References***

The references section shall include all reference material used in the Hydrogeologist’s Report and follow APA formatting¹⁰.

Appendices***

The appendices shall include all additional attachment materials that are deemed necessary for the review of the Hydrogeologist’s Report and are referenced within the Hydrogeologist’s Report.

¹⁰<https://www.bibliography.com/apa/apa-reference-page-examples-and-format-guide/#APA%20Reference%20Page>

Hydrogeologist’s Report Evaluation Criteria

The following evaluation criteria will be used by YSGA and County staff to make determinations based on EO-2 Section 4a and 4b:

EO-2 Section 4a

1. Does the Hydrogeologist’s Report follow all guidelines outlined above in this TM, including the Hydrogeologist’s Report Findings Summary Form?
 - a. If not, document deficiencies and share with County and well permittee to amend the report and forms and resubmit for review.
2. Does the Hydrogeologist’s Report validate the information provided on the Hydrogeologist’s Report Findings Summary Form?
 - a. If not, rely on the information provided in the Hydrogeologist’s Report, document the inconsistencies, and ask the well permittee to consider revising to correct inconsistencies and resubmit for review.
3. Is the well inconsistent with the sustainable management programs described in the YSGA GSP?
 - a. If yes, prepare draft “cannot verify” letter that describes deficiencies and share with County and well permittee. Ask well permittee to consider revising well permit application to address deficiencies and resubmit application for review.
 - b. If no, prepare “verify” letter and share with County.
4. Does the proposed well decrease the likelihood of achieving the sustainability goals for the basin as described in the YSGA GSP?
 - a. If yes, prepare draft “cannot verify” letter that describes deficiencies and share with County and well permittee. Ask well permittee to consider revising well permit application to address deficiencies and resubmit application for review.
 - b. If no, prepare “verify” letter and share with County.

Sustainability Goals

1. Does the well inhibit the YSGAs ability to maintain or enhance groundwater quantity and quality through the implementation of projects and management actions to support beneficial uses and users?
2. Does the well inhibit the YSGAs ability to maintain surface water flows and quality to support conjunctive use programs in the Subbasin that promote increased groundwater levels and improved water quality?
3. Does the well inhibit the YSGAs ability to operate within the established sustainable management criteria and maintain sustainable groundwater use through continued implementation of a monitoring and reporting program?
4. Does the well inhibit the YSGAs ability to maintain sustainable operations to maintain sustainability over the implementation and planning horizon?

Sustainable Management Criteria

1. **Chronic Lowering of Groundwater Levels:** Does the well have potential to cause a YSGA Representative Monitoring Well to fall below an MO or MT?

2. **Reduction in Groundwater Storage:** Does the well cause a reduction in groundwater storage, which places the management area in deficit? If the management area is already in a deficit, does the well have the potential to further exacerbate the deficit? Note, the reduction in groundwater storage SMC is tied to chronic lowering of groundwater levels SMC and should be evaluated together.
3. **Degraded Water Quality:** Does the well cause degradation of water quality?
4. **Land Subsidence:** Does the well cause the rate or extent of subsidence in the Subbasin to have significant and unreasonable impacts to surface land uses or critical infrastructure?
5. **Depletion of Interconnected Surface Water:** Does the well cause significant and unreasonable impacts to the surface waters or affect the reasonable and beneficial use of those surface waters by overlying users, including associated ecosystems?

EO-2 Section 4b

1. Is the well likely to interfere with the production and functioning of existing nearby wells? Note: this is not solely the responsibility of the County to evaluate as it does relate to the YSGA's responsibility to sustainability manage the basin and avoid undesirable results related to the chronic lowering of water levels sustainable management criterion.
2. Is the well likely to cause subsidence that would adversely impact or damage nearby infrastructure? Note: this is not solely the responsibility of the County to evaluate as it does relate to the YSGA's responsibility to sustainability manage the basin and avoid undesirable results related to the land subsidence sustainable management criterion.

PROPOSED IMPLEMENTATION

Yolo County's well permitting process requires Hydrogeologist's Reports for proposed new wells or alteration of existing wells if they are not exempt from the EOs and fall into either of the following categories:

- Wells that are located in the Upland areas that are intended to pump greater than 100 gpm.
- Wells that are located in Valley Floor areas that pump greater than 2,000 gpm.

Hydrogeologist Reports submitted to the County in support of its well permitting process will also be available to YSGA to support its verification efforts under the EOs. This TM presented the proposed guidelines that well permittee may use to prepare Hydrogeologist Reports and evaluation criteria the YSGA and County reviewers may use to evaluate Hydrogeologist Reports to verify compliance with the EOs.

Some wells subject to the County's Hydrogeologist Report requirement will fall within YSGA's proposed Focus Areas, while others will not. If the proposed delineated Focus Areas are adopted by the YSGA Board, YSGA would require the following supporting information for new wells or well alterations within those mapped areas:

- For proposed new wells or alteration of existing wells located within Focus Areas that are not exempt from the EOs, and which pump greater than 100 gpm or have a well casing diameter greater than 6 inches, the YSGA will require a Hydrogeologist's Report be submitted as part of the YSGA's verification process in the County well permitting process.
- For proposed new wells or alteration of existing wells located within the Focus Areas that are not exempt from the EOs, but pump less than 100 gpm or have a well casing diameter of 6 inches or less, a Hydrogeologist's Report is not required, but the YSGA may require additional information be submitted as part of the YSGA's verification process in the County well permitting process.

In either circumstance, if YSGA staff determines that the best available data supports a variance from these requirements, staff may present the well permit application and supporting materials to the YSGA Drought Contingency and Planning Committee for further consideration and direction.

The delineation of Focus Areas within the Yolo Subbasin may be updated by the YSGA from time to time to adapt to changing groundwater conditions or improved data in the region. Updated Focus Area maps will be circulated for public review and comment prior to their adoption by the YSGA.

This proposed implementation process will accomplish the following:

- Enable the YSGA to fulfill its obligations defined in Paragraph 9 of the EO and Paragraph 4 of EO-2
- Address citizen concerns related to declining groundwater levels, possible interference with domestic wells, and dry wells by providing additional review
- Provide additional data to the YSGA to better understand the subsurface aquifer system and well construction information throughout the basin
- Support the YSGA in adaptively managing the Yolo Subbasin in response to changing groundwater conditions

Governor's Executive Order N-7-22

DRAFT

EXECUTIVE DEPARTMENT
STATE OF CALIFORNIA

EXECUTIVE ORDER N-7-22

WHEREAS on April 12, 2021, May 10, 2021, July 8, 2021, and October 19, 2021, I proclaimed states of emergency that continue today and exist across all the counties of California, due to extreme and expanding drought conditions; and

WHEREAS climate change continues to intensify the impacts of droughts on our communities, environment, and economy, and California is in a third consecutive year of dry conditions, resulting in continuing drought in all parts of the State; and

WHEREAS the 21st century to date has been characterized by record warmth and predominantly dry conditions, and the 2021 meteorological summer in California and the rest of the western United States was the hottest on record; and

WHEREAS since my October 19, 2021 Proclamation, early rains in October and December 2021 gave way to the driest January and February in recorded history for the watersheds that provide much of California's water supply; and

WHEREAS the ongoing drought will have significant, immediate impacts on communities with vulnerable water supplies, farms that rely on irrigation to grow food and fiber, and fish and wildlife that rely on stream flows and cool water; and

WHEREAS the two largest reservoirs of the Central Valley Project, which supplies water to farms and communities in the Central Valley and the Santa Clara Valley and provides critical cold-water habitat for salmon and other anadromous fish, have water storage levels that are approximately 1.1 million acre-feet below last year's low levels on this date; and

WHEREAS the record-breaking dry period in January and February and the absence of significant rains in March have required the Department of Water Resources to reduce anticipated deliveries from the State Water Project to 5 percent of requested supplies; and

WHEREAS delivery of water by bottle or truck is necessary to protect human safety and public health in those places where water supplies are disrupted; and

WHEREAS groundwater use accounts for 41 percent of the State's total water supply on an average annual basis but as much as 58 percent in a critically dry year, and approximately 85 percent of public water systems rely on groundwater as their primary supply; and

WHEREAS coordination between local entities that approve permits for new groundwater wells and local groundwater sustainability agencies is important to achieving sustainable levels of groundwater in critically overdrafted basins; and

WHEREAS the duration of the drought, especially following a multiyear drought that abated only five years ago, underscores the need for California to redouble near-, medium-, and long-term efforts to adapt its water management and delivery systems to a changing climate, shifting precipitation patterns, and water scarcity; and

WHEREAS the most consequential, immediate action Californians can take to extend available supplies is to voluntarily reduce their water use by 15 percent from their 2020 levels by implementing the commonsense measures identified in operative paragraph 1 of Executive Order N-10-21 (July 8, 2021); and

WHEREAS to protect public health and safety, it is critical the State take certain immediate actions without undue delay to prepare for and mitigate the effects of the drought conditions, and under Government Code section 8571, I find that strict compliance with various statutes and regulations specified in this Proclamation would prevent, hinder, or delay the mitigation of the effects of the drought conditions.

NOW, THEREFORE, I, GAVIN NEWSOM, Governor of the State of California, in accordance with the authority vested in me by the State Constitution and statutes, including the California Emergency Services Act, and in particular, Government Code sections 8567, 8571, and 8627, do hereby issue the following Order to become effective immediately:

IT IS HEREBY ORDERED THAT:

1. The orders and provisions contained in my April 21, 2021, May 10, 2021, July 8, 2021, and October 19, 2021 Proclamations remain in full force and effect, except as modified by those Proclamations and herein. State agencies shall continue to implement all directions from those Proclamations and accelerate implementation where feasible.
2. To help the State achieve its conservation goals and ensure sufficient water for essential indoor and outdoor use, I call on all Californians to strive to limit summertime water use and to use water more efficiently indoors and out. The statewide Save Our Water conservation campaign at SaveOurWater.com provides simple ways for Californians to reduce water use in their everyday lives. Furthermore, I encourage Californians to understand and track the amount of water they use and measure their progress toward their conservation goals.
3. By May 25, 2022, the State Water Resources Control Board (Water Board) shall consider adopting emergency regulations that include all of the following:
 - a. A requirement that each urban water supplier, as defined in section 10617 of the Water Code, shall submit to the Department of Water Resources a preliminary annual water supply and demand assessment consistent with section 10632.1 of the Water Code no later than June 1, 2022, and submit a final annual water

supply and demand assessment to the Department of Water Resources no later than the deadline set by section 10632.1 of the Water Code;

- b. A requirement that each urban water supplier that has submitted a water shortage contingency plan to the Department of Water Resources implement, at a minimum, the shortage response actions adopted under section 10632 of the Water Code for a shortage level of up to twenty percent (Level 2), by a date to be set by the Water Board; and
- c. A requirement that each urban water supplier that has not submitted a water shortage contingency plan to the Department of Water Resources implement, at a minimum, shortage response actions established by the Water Board, which shall take into consideration model actions that the Department of Water Resources shall develop for urban water supplier water shortage contingency planning for Level 2, by a date to be set by the Water Board.

To further conserve water and improve drought resiliency if the drought lasts beyond this year, I encourage urban water suppliers to conserve more than required by the emergency regulations described in this paragraph and to voluntarily activate more stringent local requirements based on a shortage level of up to thirty percent (Level 3).

- 4. To promote water conservation, the Department of Water Resources shall consult with leaders in the commercial, industrial, and institutional sectors to develop strategies for improving water conservation, including direct technical assistance, financial assistance, and other approaches. By May 25, 2022, the Water Board shall consider adopting emergency regulations defining "non-functional turf" (that is, a definition of turf that is ornamental and not otherwise used for human recreation purposes such as school fields, sports fields, and parks) and banning irrigation of non-functional turf in the commercial, industrial, and institutional sectors except as it may be required to ensure the health of trees and other perennial non-turf plantings.
- 5. In order to maximize the efficient use of water and to preserve water supplies critical to human health and safety and the environment, Public Resources Code, Division 13 (commencing with section 21000) and regulations adopted pursuant to that Division are hereby suspended, with respect to the directives in paragraphs 3 and 4 of this Order and any other projects and activities for the purpose of water conservation to the extent necessary to address the impacts of the drought, and any permits necessary to carry out such projects or activities. Entities that desire to conduct activities under this suspension, other than the directives in paragraphs 3 and 4 of this Order, shall first request that the Secretary of the Natural Resources Agency make a determination that the proposed activities are eligible to be conducted under this suspension. The Secretary shall use sound discretion in applying this Executive Order to ensure that the suspension serves the purpose of accelerating conservation projects that are necessary to address impacts of the drought, while at the same time

protecting public health and the environment. The entities implementing these directives or conducting activities under this suspension shall maintain on their websites a list of all activities or approvals for which these provisions are suspended.

6. To support voluntary approaches to improve fish habitat that would require change petitions under Water Code section 1707 and either Water Code sections 1425 through 1432 or Water Code sections 1725 through 1732, and where the primary purpose is to improve conditions for fish, the Water Board shall expeditiously consider petitions that add a fish and wildlife beneficial use or point of diversion and place of storage to improve conditions for anadromous fish. California Code of Regulations, title 23, section 1064, subdivisions (a)(1)(A)(i)-(ii) are suspended with respect to any petition that is subject to this paragraph.
7. To facilitate the hauling of water for domestic use by local communities and domestic water users threatened with the loss of water supply or degraded water quality resulting from drought, any ordinance, regulation, prohibition, policy, or requirement of any kind adopted by a public agency that prohibits the hauling of water out of the water's basin of origin or a public agency's jurisdiction is hereby suspended. The suspension authorized pursuant to this paragraph shall be limited to the hauling of water by truck or bottle to be used for human consumption, cooking, or sanitation in communities or residences threatened with the loss of affordable safe drinking water. Nothing in this paragraph limits any public health or safety requirement to ensure the safety of hauled water.
8. The Water Board shall expand inspections to determine whether illegal diversions or wasteful or unreasonable use of water are occurring and bring enforcement actions against illegal diverters and those engaging in the wasteful and unreasonable use of water. When access is not granted by a property owner, the Water Board may obtain an inspection warrant pursuant to the procedures set forth in Title 13 (commencing with section 1822.50) of Part 3 of the Code of Civil Procedure for the purposes of conducting an inspection pursuant to this directive.
9. To protect health, safety, and the environment during this drought emergency, a county, city, or other public agency shall not:
 - a. Approve a permit for a new groundwater well or for alteration of an existing well in a basin subject to the Sustainable Groundwater Management Act and classified as medium- or high-priority without first obtaining written verification from a Groundwater Sustainability Agency managing the basin or area of the basin where the well is proposed to be located that groundwater extraction by the proposed well would not be inconsistent with any sustainable groundwater management program established in any applicable Groundwater Sustainability Plan adopted by that Groundwater Sustainability

Agency and would not decrease the likelihood of achieving a sustainability goal for the basin covered by such a plan; or

- b. Issue a permit for a new groundwater well or for alteration of an existing well without first determining that extraction of groundwater from the proposed well is (1) not likely to interfere with the production and functioning of existing nearby wells, and (2) not likely to cause subsidence that would adversely impact or damage nearby infrastructure.

This paragraph shall not apply to permits for wells that will provide less than two acre-feet per year of groundwater for individual domestic users, or that will exclusively provide groundwater to public water supply systems as defined in section 116275 of the Health and Safety Code.

10. To address household or small community drinking water shortages dependent upon groundwater wells that have failed due to drought conditions, the Department of Water Resources shall work with other state agencies to investigate expedited regulatory pathways to modify, repair, or reconstruct failed household or small community or public supply wells, while recognizing the need to ensure the sustainability of such wells as provided for in paragraph 9.
11. State agencies shall collaborate with tribes and federal, regional, and local agencies on actions related to promoting groundwater recharge and increasing storage.
12. To help advance groundwater recharge projects, and to demonstrate the feasibility of projects that can use available high water flows to recharge local groundwater while minimizing flood risks, the Water Board and Regional Water Quality Control Boards shall prioritize water right permits, water quality certifications, waste discharge requirements, and conditional waivers of waste discharge requirements to accelerate approvals for projects that enhance the ability of a local or state agency to capture high precipitation events for local storage or recharge, consistent with water right priorities and protections for fish and wildlife. For the purposes of carrying out this paragraph, Division 13 (commencing with section 21000) of the Public Resources Code and regulations adopted pursuant to that Division, and Chapter 3 (commencing with section 85225) of Part 3 of Division 35 of the Water Code and regulations adopted pursuant thereto are hereby suspended to the extent necessary to address the impacts of the drought. This suspension applies to (a) any actions taken by state agencies, (b) any actions taken by local agencies where the state agency with primary responsibility for the implementation of the directives concurs that local action is required, and (c) permits necessary to carry out actions under (a) or (b). The entities implementing these directives shall maintain on their websites a list of all activities or approvals for which these provisions are suspended.
13. With respect to recharge projects under either Flood-Managed Aquifer Recharge or the Department of Water Resources Sustainable

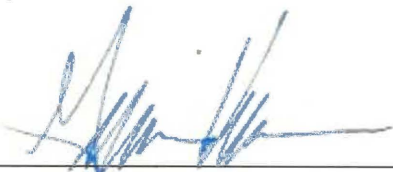
Groundwater Management Grant Program occurring on open and working lands to replenish and store water in groundwater basins that will help mitigate groundwater conditions impacted by drought, for any (a) actions taken by state agencies, (b) actions taken by a local agency where the Department of Water Resources concurs that local action is required, and (c) permits necessary to carry out actions under (a) or (b), Public Resources Code, Division 13 (commencing with section 21000) and regulations adopted pursuant to that Division are hereby suspended to the extent necessary to address the impacts of the drought. The entities implementing these directives shall maintain on their websites a list of all activities or approvals for which these provisions are suspended.

14. To increase resilience of state water supplies during prolonged drought conditions, the Department of Water Resources shall prepare for the potential creation and implementation of a multi-year transfer program pilot project for the purpose of acquiring water from willing partners and storing and conveying water to areas of need.
15. By April 15, 2022, state agencies shall submit to the Department of Finance for my consideration proposals to mitigate the worsening effects of severe drought, including emergency assistance to communities and households and others facing water shortages as a result of the drought, facilitation of groundwater recharge and wastewater recycling, improvements in water use efficiency, protection of fish and wildlife, mitigation of drought-related economic or water-supply disruption, and other potential investments to support short- and long-term drought response.

IT IS FURTHER ORDERED that as soon as hereafter possible, this Order be filed in the Office of the Secretary of State and that widespread publicity and notice be given of this Order.

This Order is not intended to, and does not, create any rights or benefits, substantive or procedural, enforceable at law or in equity, against the State of California, its agencies, departments, entities, officers, employees, or any other person.

IN WITNESS WHEREOF I have hereunto set my hand and caused the Great Seal of the State of California to be affixed this 28th day of March 2022.



GAVIN NEWSOM
Governor of California

ATTEST:

SHIRLEY N. WEBER, PH.D.
Secretary of State

Governor's Executive Order N-3-23

EXECUTIVE DEPARTMENT
STATE OF CALIFORNIA

EXECUTIVE ORDER N-3-23

WHEREAS on April 21, 2021, May 10, 2021, July 8, 2021, and October 19, 2021, I proclaimed States of Emergency due to drought conditions that continue today and exist across California; and

WHEREAS climate change continues to intensify the impacts of droughts on our communities, environment, and economy, and these impacts continue to affect groundwater basins, local water supplies, and ecosystems, resulting in continuing drought in the State; and

WHEREAS the ongoing drought continues to have significant, immediate impacts on communities with vulnerable water supplies, farms that rely on irrigation to grow food and fiber, and fish and wildlife that rely on stream flows and cool water; and

WHEREAS early, substantial rains in October and December 2021 gave way to the driest January-February-March period in over 100 years in California, leading the October 2021 to September 2022 water year to end with statewide precipitation at 76 percent of average, with statewide reservoir storage at 69 percent of average, and with Lake Oroville—the State Water Project's largest reservoir—at 64 percent of average; and

WHEREAS in January 2023, the State experienced one of the wettest three-week periods on record, yielding a snowpack that was at 205 percent of average on February 1, 2023, yet to date February has been drier than average; and

WHEREAS the current snowpack has not reduced stresses upon the State's water resources, including low storage levels, depleted aquifers, and diminished local water supplies; and

WHEREAS the State can expect continued swings between extreme wet and extreme dry periods that can present risks of severe flooding and extreme drought in the same year; and

WHEREAS California must adapt to a hotter, drier future in which a greater share of rain and snowfall during the wetter months will be absorbed by dry soils, consumed by plants, and evaporated into the air, leaving less water for communities, species, and agriculture; and

WHEREAS the frequency of hydrologic extremes experienced in the State is indicative of an overarching need to continually reexamine policies to promote resiliency in a changing climate; and

WHEREAS Californians continue to make progress conserving water, with urban water users conserving 17.1 percent statewide in December 2022 compared to December 2020 and agricultural producers continuing to invest in more efficient irrigation; and

WHEREAS despite this progress, the uncertainty of precipitation during the remainder of the winter and spring, and the potential of dry conditions next

winter and of drought conditions extending to a fifth year, make it necessary for the State to continue water-conservation measures and drought-resilience actions to extend available supplies, protect water reserves, and maintain critical flows for fish and wildlife; and

WHEREAS as directed in "California's Water Supply Strategy: Adapting to a Hotter, Drier Future," the State plans to stretch water supplies by storing, recycling, de-salting, and conserving the water it will need to keep up with the increasing pace of climate change; and

WHEREAS multiple regions of the State, such as the Klamath Basin and the Colorado River system, face severe water shortage conditions, and groundwater basins in the Central Valley continue to be depleted from years of drought and overdraft; and

WHEREAS groundwater use accounts for 41 percent of the State's total water supply on an average annual basis but as much as 58 percent in a critically dry year, and approximately 85 percent of public water systems rely on groundwater as their primary supply; and

WHEREAS capturing and storing storm and snowpack runoff underground to recharge aquifers is an important strategy to help regions stabilize water supplies in the face of hydrologic extremes; and

WHEREAS state agencies have created streamlined permitting pathways to enable groundwater recharge that augments natural aquifer recharge, while protecting the environment and other water users, but more opportunities exist to facilitate groundwater recharge; and

WHEREAS coordination between local entities that approve permits for new groundwater wells and local groundwater sustainability agencies is important to achieving sustainable levels of groundwater in critically overdrafted basins; and

WHEREAS to protect public health and safety, it is critical the State take certain immediate actions without undue delay to prepare for and mitigate the effects of the drought conditions, and under Government Code section 8571, I find that strict compliance with various statutes and regulations specified in this Order would prevent, hinder, or delay the mitigation of the effects of the drought conditions.

NOW, THEREFORE, I, GAVIN NEWSOM, Governor of the State of California, in accordance with the authority vested in me by the State Constitution and statutes, including the California Emergency Services Act, and in particular, Government Code sections 8567, 8571, and 8627, do hereby issue the following Order to become effective immediately:

IT IS HEREBY ORDERED THAT:

1. The orders and provisions contained in my State of Emergency Proclamations dated April 21, 2021, May 10, 2021, July 8, 2021, and October 19, 2021, and Executive Orders N-10-21 (July 8, 2021) and N-7-22 (March 28, 2022), remain in full force and effect, except as modified by those proclamations and orders and herein. State agencies shall

continue to implement all directions from those proclamations and orders and accelerate implementation where feasible.

2. To maximize the extent to which winter precipitation recharges underground aquifers, the Department of Water Resources, the State Water Resources Control Board (Water Board), and the Department of Fish and Wildlife shall continue to collaborate on expediting permitting of recharge projects and shall work with local water districts to facilitate recharge projects.
3. Paragraph 4 of my State of Emergency Proclamation dated May 10, 2021 and Paragraph 4 of my State of Emergency Proclamation dated July 8, 2021 are withdrawn, and each is replaced with the following text:

To ensure adequate water supplies for purposes of health, safety, the environment, or drought resilient water supplies, the Water Board shall consider modifying requirements for reservoir releases or diversion limitations in Central Valley Project or State Water Project facilities to: (i) conserve water upstream later in the year in order to protect cold water pools for salmon and steelhead, (ii) enhance instream conditions for fish and wildlife, (iii) improve water quality, (iv) protect carry-over storage, (v) ensure minimum health and safety water supplies, or (vi) provide opportunities to maintain or to expand water supplies north and south of the Delta. The Water Board shall require monitoring and evaluation of any such changes to inform future actions. For any actions taken pursuant to this paragraph and any approvals granted in furtherance of this paragraph, Water Code Section 13247 and Public Resources Code, Division 13 (commencing with Section 21000) and regulations adopted pursuant to that Division are suspended. Nothing in this Paragraph affects or limits the validity of actions already taken or ongoing under Paragraph 4 of my May 10, 2021 Proclamation or Paragraph 4 of my July 8, 2021 Proclamation.

4. Paragraph 9 of Executive Order N-7-22 is withdrawn and replaced with the following text:

To protect health, safety, and the environment during this drought emergency, a county, city, or other public agency shall not:

- a. Approve a permit for a new groundwater well or for alteration of an existing well in a basin subject to the Sustainable Groundwater Management Act and classified as medium- or high-priority without first obtaining written verification from a Groundwater Sustainability Agency managing the basin or area of the basin where the well is proposed to be located that groundwater extraction by the proposed well would not be inconsistent with any sustainable groundwater management program established in any applicable Groundwater Sustainability Plan adopted by that Groundwater Sustainability Agency and would not decrease the likelihood of achieving a sustainability goal for the basin covered by such a plan; or

- b. Issue a permit for a new groundwater well or for alteration of an existing well without first determining that extraction of groundwater from the proposed well is (1) not likely to interfere with the production and functioning of existing nearby wells, and (2) not likely to cause subsidence that would adversely impact or damage nearby infrastructure.

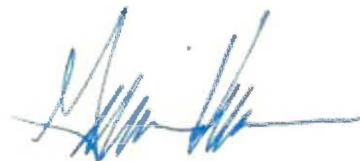
This Paragraph shall not apply to permits for wells (i) that will provide less than two acre-feet per year of groundwater for individual domestic users, (ii) that will exclusively provide groundwater to public water supply systems as defined in section 116275 of the Health and Safety Code, or (iii) that are replacing existing, currently permitted wells with new wells that will produce an equivalent quantity of water as the well being replaced when the existing well is being replaced because it has been acquired by eminent domain or acquired while under threat of condemnation.

5. No later than April 28, 2023, state agencies shall send me their recommendations for what further actions, if any, are necessary for on-going emergency drought response, and their views on whether any existing provisions in my proclamations and executive orders related to the drought emergency are no longer needed to prepare for and mitigate the effects of the drought conditions.

IT IS FURTHER ORDERED that as soon as hereafter possible, this Order be filed in the Office of the Secretary of State and that widespread publicity and notice be given of this Order.

This Order is not intended to, and does not, create any rights or benefits, substantive or procedural, enforceable at law or in equity, against the State of California, its agencies, departments, entities, officers, employees, or any other person.

IN WITNESS WHEREOF I have
hereunto set my hand and caused
the Great Seal of the State of
California to be affixed this 13th day
of February 2023.



GAVIN NEWSOM
Governor of California

ATTEST:

SHIRLEY N. WEBER, PH.D.
Secretary of State

YSGA Adopted Resolution No. 22-01

**RESOLUTION NO. 22-01
OF THE
BOARD OF DIRECTORS OF THE
YOLO SUBBASIN GROUNDWATER AGENCY**

***IN THE MATTER OF:* AN EMERGENCY RESOLUTION ESTABLISHING YOLO
SUBBASIN GROUNDWATER AGENCY’S PROCEDURES
FOR COMPLIANCE WITH EXECUTIVE ORDER N-7-22
PARAGRAPH 9 REGARDING GROUNDWATER WELL
PERMITS**

WHEREAS, the Yolo Subbasin Groundwater Agency (“YSGA”) is a joint powers authority established and existing pursuant to a Joint Exercise of Powers Agreement dated and effective June 19, 2017 and the Joint Exercise of Powers Act, Cal. Government Code section 6500 *et seq.*; and

WHEREAS, on August 29, 2014, the California Legislature passed comprehensive groundwater legislation contained in SB 1168, SB 1319 and AB 1739. Collectively, those bills, as subsequently amended, enacted the Sustainable Groundwater Management Act (“SGMA”). SGMA became effective on January 1, 2015; and

WHEREAS, pursuant to SGMA, YSGA is the Groundwater Sustainability Agency for the Yolo Subbasin of the Sacramento Valley Groundwater Basin, California Department of Water Resources Basin No. 5-21.67 (“Subbasin”); and

WHEREAS, on October 19, 2021, pursuant to Executive Order N-10-21, Governor Gavin Newsom proclaimed a State of Emergency “to exist in the State due to drought in the remaining counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego, San Francisco, and Ventura, such that the drought state of emergency is now in effect statewide”; and

WHEREAS, on March 28, 2022, Governor Newsom issued Executive Order N-7-22, which reaffirms the State of Emergency proclaimed in October 2021 and orders that said proclamation and related proclamations “remain in full force and effect”; and

WHEREAS, paragraph 9 of Executive Order N-7-22 provides:

“9. To protect health, safety, and the environment during this drought emergency, a county, city, or other public agency shall not:

a. Approve a permit for a new groundwater well or for alteration of an existing well in a basin subject to the Sustainable Groundwater Management Act and classified as medium- or high-priority without first obtaining written verification from a Groundwater Sustainability Agency managing the basin or area of the basin where the well is proposed to be located that groundwater extraction by the proposed well would not be inconsistent with any sustainable groundwater management program established in any applicable Groundwater Sustainability

Plan adopted by that Groundwater Sustainability Agency and would not decrease the likelihood of achieving a sustainability goal for the basin covered by such a plan; or

b. Issue a permit for a new groundwater well or for alteration of an existing well without first determining that extraction of groundwater from the proposed well is (1) not likely to interfere with the production and functioning of existing nearby wells, and (2) not likely to cause subsidence that would adversely impact or damage nearby infrastructure. This paragraph shall not apply to permits for wells that will provide less than two acre-feet per year of groundwater for individual domestic users, or that will exclusively provide groundwater to public water supply systems as defined in section 116275 of the Health and Safety Code.”; and

WHEREAS, in light of the State of Emergency declared pursuant to Executive Order N-10-21 and reaffirmed in Executive Order N-7-22, and in light of the directives of paragraph 9 of Executive Order N-7-22, the Board of Directors of YSGA finds and determines that it is necessary and appropriate for YSGA to develop, adopt and implement procedures for compliance with paragraph 9 of Executive Order N-10-21, as set forth in this Resolution.

NOW, THEREFORE, BE IT RESOLVED:

1. The Executive Officer and his or her designee (“Executive Officer”), of YSGA is hereby delegated full authority to develop, adopt and implement written procedures (hereinafter “Well Permit Procedures”) for YSGA compliance with paragraph 9 of Executive Order N-10-21. The Well Permit Procedures shall be consistent with the terms and conditions of this Resolution.
2. The Executive Officer of YSGA shall report in writing to the YSGA Board of Directors on a monthly basis regarding all activities and actions undertaken pursuant to the Well Permit Procedures.
3. The Well Permit Procedures and the delegation of authority contained in this Resolution shall remain in full force and effect until termination of the drought emergency described in Executive Orders N-10-21 and N-7-22.
4. In the event of any modification of paragraph 9 of Executive Order N-7-22, the YSGA Board of Directors shall consider whether modification of this Resolution or the Well Permit Procedures is warranted.
5. With respect to any request or application for alteration or replacement of an existing groundwater well within the Subbasin, for which no increase in total groundwater pumping by the altered or replaced well is contemplated, the Executive Officer, and his or her designee, shall expedite review of such request or application and shall apply a rebuttable presumption that (i) groundwater extraction by the proposed altered or replaced well would be consistent with the sustainable groundwater management program established in the YSGA Groundwater Sustainability Plan for the Subbasin; and (ii) groundwater extraction by the proposed altered or replaced well would not decrease the likelihood of achieving a sustainability goal for the Subbasin. The Executive Officer shall review all relevant evidence submitted by any interested party in connection with the request or application and shall determine whether the evidence presented is

sufficient to overcome the rebuttable presumption set forth in this paragraph 5. The Executive Officer shall then determine, based on all evidence submitted, whether the written verifications contemplated in paragraph 9.a of Executive Order N-7-22 will be made by YSGA and shall communicate such determination, in writing, promptly to the County of Yolo.

6. With respect to any request or application to approve a permit for a new groundwater well or for alteration of an existing well, in which an increase in total groundwater pumping by the altered or replaced well is contemplated, the Executive Officer shall make a preliminary determination as to whether (i) groundwater extraction by the proposed well would be inconsistent with the sustainable groundwater management program established in the Yolo Subbasin Groundwater Sustainability Plan for the Subbasin; or (ii) that groundwater extraction by the proposed well would decrease the likelihood of achieving a sustainability goal for the Subbasin. If the Executive Officer's preliminary determination is to answer either item (i) or (ii) in the affirmative, the Executive Officer shall immediately contact the County requesting additional data and information and provide the applicant with an opportunity to submit additional supporting documentation for the purpose of demonstrating that the well would address the preliminary determination stated above (i) and (ii). If additional information is submitted, the Executive Officer shall consider it fully and fairly. The Executive Officer shall then determine, based on all evidence submitted, whether the written verifications contemplated in paragraph 9.a of Executive Order N-7-22 will be made by YSGA and shall communicate such determination, in writing, promptly to the County of Yolo; *provided* that if the Executive Officer determines that (i) groundwater extraction by the proposed well would be inconsistent with the sustainable groundwater management program established in the Yolo Subbasin Groundwater Sustainability Plan for the Subbasin; or (ii) groundwater extraction by the proposed well would decrease the likelihood of achieving a sustainability goal for the Subbasin, the Executive Officer shall convene a meeting of the YSGA Ad Hoc Drought Contingency Planning Committee ("Drought Committee") to review the Executive Officer's determination and, if appropriate, recommend additional analyses to be completed by the applicant. The Drought Committee shall have full and final authority to determine the nature and scope of any additional analyses to be completed by the applicant.

7. The determinations made by the Executive Officer in accordance with paragraphs 5 and 6 of this Resolution shall be final for all purposes.

8. The Board of Directors of YSGA hereby finds that the adoption of this Resolution and the implementation of the Well Permit Procedures are exempt from the California Environmental Quality Act ("CEQA") under CEQA Guidelines sections 15261(a) and 15301 as a part of an ongoing pre-CEQA project and the continued operation of existing facilities. Furthermore, the Program is exempt under Water Code Section 1729 and as emergency projects under Public Resources Code Sections 21080(b)(3) and 21080(b)(4) and CEQA Guidelines Section 15269(c). The Executive Officer is authorized and directed to prepare and process an appropriate Notice of Exemption.

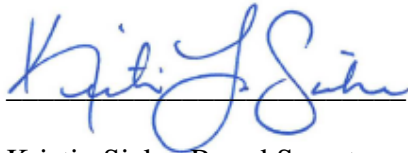
Certification of Secretary

The undersigned hereby certifies that the foregoing resolution was duly adopted by the Board of Directors of YSGA at a special meeting held on May 6, 2022, by the following vote:

AYES (15): City of Davis, City of West Sacramento, Dunnigan Water District, Madison CSD, RD 108, RD 307, RD 537, RD 730, RD 787, RD 999, Yocha Dehe Wintun Nation, Yolo County, YCFC&WCD, Cal Am Water – Dunnigan, Yolo County Farm Bureau

NOES (1): Esparto CSD

ABSENT (10): City of Winters, City of Woodland, RD 150, RD 765, RD 1600, RD 2035, Rumsey Water Users Association, UC Davis, Colusa Drain MWC, and Environmental Representative – Ann Brice



Kristin Sicke, Board Secretary

Dated: May 6, 2022

YSGA Adopted Resolution No. 22-02

**RESOLUTION NO. 22-02
OF THE
BOARD OF DIRECTORS OF THE
YOLO SUBBASIN GROUNDWATER AGENCY**

***IN THE MATTER OF:* ADOPTING A COST RECOVERY FEE SCHEDULE FOR
VERIFICATION AND REVIEW OF WELL PERMIT
APPLICATIONS PURSUANT TO EXECUTIVE ORDER N-7-22**

WHEREAS, the Yolo Subbasin Groundwater Agency (“YSGA”) is a joint powers authority established and existing pursuant to a Joint Exercise of Powers Agreement dated and effective June 19, 2017 and the Joint Exercise of Powers Act, Cal. Government Code section 6500 *et seq.*; and

WHEREAS, on August 29, 2014, the California Legislature passed comprehensive groundwater legislation contained in SB 1168, SB 1319 and AB 1739. Collectively, those bills, as subsequently amended, enacted the Sustainable Groundwater Management Act (“SGMA”). SGMA became effective on January 1, 2015; and

WHEREAS, pursuant to SGMA, YSGA is the Groundwater Sustainability Agency for the Yolo Subbasin of the Sacramento Valley Groundwater Basin, California Department of Water Resources Basin No. 5-21.67 (“Subbasin”); and

WHEREAS, on October 19, 2021, pursuant to Executive Order N-10-21, Governor Gavin Newsom proclaimed a State of Emergency “to exist in the State due to drought in the remaining counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego, San Francisco, and Ventura, such that the drought state of emergency is now in effect statewide”; and

WHEREAS, on March 28, 2022, Governor Newsom issued Executive Order N-7-22, which reaffirms the State of Emergency proclaimed in October 2021 and orders that said proclamation and related proclamations “remain in full force and effect”; and

WHEREAS, paragraph 9 of Executive Order N-7-22 imposes new review and verification requirements on the issuance of certain well permits and directs that well permitting authority may not issue a permit for well covered in the Order without first obtaining written verification from the Groundwater Sustainability Agency managing the basin regarding the proposed wells’ consistent with the Groundwater Sustainability Plan and potential impact on neighboring wells; and

WHEREAS, Yolo County is the permitting authority and the Environmental Health Division receives all well permit application requests; and

WHEREAS, consistent with the requirements of the Order, YSGA adopted Resolution No. 2022-01, directing the development of procedures to provide the necessary review and verifications to the County during the well permitting process; and

WHEREAS, the cost of providing this verification and review is approximately \$150 for each replacement well permit and \$350 for each new well permit covered under the Order; and

WHEREAS, the provision of these review and verification services are a recoverable cost of implementing this regulatory program, and the proposed fees do not exceed the cost of providing these services.

NOW, THEREFORE, BE IT RESOLVED:

1. The Board of Directors of YSGA adopts a Cost Recovery Fee schedule of \$150 per replacement well permit verification and review; and \$350 per new well permit verification and review, to be invoiced to the County in connection with each review.
2. YSGA staff shall provide regular reports on the costs of providing these review and verification services, and will provide recommendations to the Board of Directors regarding any proposed modification of the fee schedule necessary to adequately and equitably recover these costs.
3. This fee schedule applies to all projects for which verification and review by YSGA is required under the Order, effective with those projects undergoing the verification process on or after July 1, 2022.
4. The Yolo County Environmental Health Division and Board of Supervisors are authorized to include these charges in their Master Fee Schedule for purposes of accounting for and collecting charges associated with well permit issuances under the Order.
5. YSGA staff are hereby authorized and directed to take such other and further actions as may be necessary or appropriate to implement the intent and purposes of this resolution.

Certification of Secretary

The undersigned hereby certifies that the foregoing resolution was duly adopted by the Board of Directors of YSGA at a regular meeting held on June 20, 2022, by the following vote:

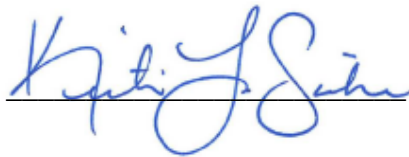
AYES: City of Davis, City of West Sacramento, City of Winters, City of Woodland, Dunnigan

Water District, RD 108, RD 150, RD 307, RD 537, RD 787, RD 999, Yocha Dehe Wintun Nation, Yolo County, Cal Am Water – Dunnigan, Colusa Drain MWC, Environmental Representative – Ann Brice

NOES: Esparto CSD

ABSENT: Madison CSD, RD 730, RD 765, RD 1600, RD 2035, Rumsey Water Users Association, UC Davis, Yolo County Farm Bureau

RECUSAL: YCFC&WCD



Kristin Sicke, Board Secretary

Dated: June 20, 2022

YSGA Agricultural Well Permit Application
Acknowledgement Form

Supplemental Questionnaire for
Agricultural Well Permit Application

Supplemental Questionnaire for Agricultural Well Permit Application

The following questions are to assist in the review of your well permit application as required by Executive Order N-7-22.

***For REPLACEMENT or MODIFICATION of Existing Wells, please answer the following six (6) questions.**

1. Will the new well be the same depth and diameter as the well that is being replaced/modified?
 Yes No
 - a. If no, what is the depth and diameter of the existing well? _____
 - b. If the new/modified well is deeper, provide a reason: _____

***Note:** To meet the definition of a replacement well, the new proposed well must have **similar construction characteristics**, such as same or smaller casing size and similar well depth etc.

2. What is the reason for the well being replaced or modified?

3. Will the replacement or modification of the well result in an increase in pumping capacity?
 Yes No
***Note:** To meet the definition of a replacement well, the new proposed well must have **similar groundwater production level**. Production well that will increase the total groundwater pumping capacity will be reviewed under the new well category.
4. Is a well abandonment application being submitted at the same time as the replacement well application?
 Yes No, thus the replacement well application *cannot* be accepted.
5. Will the replacement well be located within **100'** of the well that it is replacing?
 Yes No, thus it *does not* meet the definition of the replacement well and will be considered a new well.
6. Please provide the coordinates (latitude/longitude) for the well that is being replaced:

***For ADDITIONAL or NEW WELL Construction, please answer the following four (4) questions.**

1. Will the proposed well result in an increase in the consumptive use of groundwater?
Please explain: _____
 - a. If yes, what is the historic groundwater use on the parcel and what do you project it to be in the future? Provide supporting evidence (if available) and explain the method of estimation:

2. What is the proposed pumping capacity? _____
3. Will conjunctive use of surface water occur on the parcel? Yes No
 - a. If yes, describe the source and amount of surface water to be used: _____

4. Please provide the coordinates (latitude/longitude) for all new wells being requested:

Yolo County Temporary Well Permitting Procedures to
Address Executive Order N-7-22 Section 9



Technical Memorandum

DATE: December 20, 2022 PROJECT: 22-1-085

TO: Yolo County Department of Community Services, Environmental Health Division
Jianmin Huang
April Meneghetti
Elisa Sabatini

FROM: Luhdorff and Scalmanini, Consulting Engineers
Nick Watterson, PG, CHG
Matt Sturdivant
Vicki Kretsinger Grabert

SUBJECT: **YOLO COUNTY TEMPORARY WELL PERMITTING PROCEDURES TO ADDRESS EXECUTIVE ORDER N-7-22 SECTION 9**

1. INTRODUCTION

This Technical Memorandum (TM) was prepared for Yolo County Community Services Department, Environmental Health Division by Luhdorff and Scalmanini, Consulting Engineers to support the County's development and implementation of temporary, modified water well permitting procedures to comply with the Governor's Executive Order N-7-22 (EO) issued on March 28, 2022. Included in Section 9 of the EO are requirements that prior to issuing a new well permit, all well permit applications (with limited exceptions) must be evaluated and a determination must be made that (A) the proposed well is consistent with any applicable Groundwater Sustainability Plan (GSP) and (B) the well will not likely interfere with the operation and function of existing nearby wells or likely cause land subsidence that impacts nearby infrastructure.

- A. Section 9A of the EO specifies that well permit applications in medium or high priority groundwater basins or subbasins subject to the Sustainable Groundwater Management Act (SGMA) must be reviewed by the local Groundwater Sustainability Agency (GSA) to ensure it is consistent with the GSP for the subbasin or basin where the well is planned.
- B. Section 9B of the EO states that a permit cannot be issued without first determining that the extraction of groundwater from the proposed well is (1) not likely to interfere with the production and functioning of existing nearby wells and (2) not likely to cause subsidence that would adversely impact or damage nearby infrastructure. Yolo County is the well permitting entity for all areas of the County. This TM presents proposed modifications to the County's well permitting procedure to specifically address the County's responsibilities, as the well permitting entity, under Section 9B in the EO. The EO is included as an attachment to this TM.

2. BACKGROUND

Yolo County overlaps three groundwater subbasins of the Sacramento Valley Groundwater Basin with additional areas outside of any groundwater basin. Groundwater basins and subbasins in California have been delineated by the Department of Water Resources (DWR) to coincide with the extent of unconsolidated geologic materials of alluvial origin. The groundwater subbasins overlapping the County include the Yolo Subbasin with small areas within the Solano and Colusa Subbasins. The Yolo and Colusa Subbasins are designated as high priority subbasins by DWR and the Solano Subbasin is a medium priority subbasin. The area of the County within the Yolo, Solano, and Colusa Subbasins are referred to in this Technical Memorandum as the “Valley Floor areas” of the County. The County also includes areas in the western part of the County that are outside of any designated groundwater basin or subbasin. The areas outside of the Valley Floor areas of the County are referred to as “Upland areas” of the County in this document. **Figure 1** presents the groundwater subbasin boundaries in relation to the County and highlights the areas referred to as Valley Floor areas and Upland areas in this document.

The unconsolidated sediments that occur within the Valley Floor areas of the County have potential to store and yield large quantities of groundwater. The geologic materials in the Valley Floor areas consist primarily of unconsolidated alluvial sediments ranging from fine-grained clay to coarser-grained sands and gravels. Because these materials are unconsolidated, they also have potential to compact when the groundwater pore pressure is reduced (such as occurs when groundwater levels decline) within these materials. Most historical land subsidence and potential for future land subsidence in the County are attributable to this mechanism of compaction of unconsolidated sediments within the Valley Floor areas. The consolidated geologic materials comprising the Upland areas of the County have very little or no potential for compaction and any associated land subsidence.

The Yolo, Solano, and Colusa Subbasins have developed GSPs that address undesirable results related to sustainability indicators consisting of groundwater levels, groundwater storage, groundwater quality, land subsidence, and interconnected surface water. The GSAs within each of the three subbasins in the County are responsible for implementing the GSP covering their jurisdiction and managing groundwater in a manner that is consistent with the GSP. The GSPs have defined sustainable management criteria (SMC) including minimum thresholds, measurable objectives, and undesirable results for all applicable sustainability indicators. The GSAs in the three subbasins have the authority and responsibility to ensure groundwater management is sustainable in the subbasins and undesirable results are avoided including through implementation of management actions and projects, as needed. Management actions available for GSAs to implement could include demand management efforts such as limitations on groundwater pumping or incentives for reducing pumping and can also include augmentation of water supplies through enhanced recharge or other projects.

3. OVERVIEW OF PROCESS FOR REVIEWING WELL PERMIT APPLICATIONS FOR COMPLIANCE WITH EO N-7-22

Well permit applications will first be evaluated to determine if the proposed well is exempt from the additional EO well permitting process. Wells producing less than two acre-feet per year for individual domestic water use and public supply system wells are exempt from the EO. Monitoring wells or other wells not intended for extraction of groundwater, are also exempt from the EO well permitting procedures. As indicated in the EO, well permit applications for the construction or alteration of other types of wells with the purpose of extracting groundwater (production wells), including agricultural (irrigation) wells, are subject to the EO. In accordance with Section 9A of the EO, all new well permit applications for non-exempt wells located within the Valley Floor areas of the County will be provided to the respective GSA to complete a determination regarding whether the proposed well permit is consistent with the GSP. The County will review all non-exempt well permit applications for compliance with Section 9B.

4. WELLS EXEMPT FROM COMPLIANCE WITH EO SECTION 9B

The following are exempt from compliance with the EO well permitting process because they are explicitly exempted in the EO or because they are unlikely to interfere with the operation of nearby wells or cause land subsidence:

- Wells producing less than two acre-feet per year for individual domestic water use
- Public supply system wells as defined in Health & Safety Code § 116275
- Monitoring wells or other wells not intended for extraction of groundwater
- Replacement production wells meeting the requirements for exemption herein
- Minor alterations of production wells meeting the requirements for exemption herein.

With respect to permit applications for replacement production wells and minor alterations of production wells, additional Environmental Health well permit application requirements and review procedures for determining compliance with EO Section 9B will not be applied to such permits. The continued production of groundwater at a proposed well site in a manner consistent with previous operation of the well being replaced or modified is unlikely to interfere with the operation and function of nearby wells or cause land subsidence that impacts nearby infrastructure. The future operation of all wells within the Valley Floor areas of the County are subject to potential management actions implemented by GSAs to manage groundwater and ensure groundwater sustainability is maintained and undesirable results, including those related to land subsidence, are avoided.

Replacement Production Wells

A replacement production well is defined as a production well that is intended to replace an existing production well. A replacement well must be located within 100 feet of the well it is replacing and have similar construction characteristics (e.g., same or smaller casing size, similar proposed depth, similar screen interval) and groundwater production as the well it is replacing. Production wells that will increase total groundwater pumping relative to the well they are replacing are not exempt from the additional compliance requirements of EO Section 9B. If records of the construction details for well depth and screen interval are not available for a well being replaced, the applicant should make reasonable efforts to obtain the information through downhole investigative methods including tagging the total completed depth of the well or other methods. Replacement production wells within the Yolo Subbasin must also be reviewed by the Yolo Subbasin Groundwater Agency (YSGA) pursuant to

paragraph 5 of the YSGA's Resolution No. 22-01. Replacement wells within the Colusa and Solano Subbasins are subject to review in accordance with permitting procedures adopted by the respective GSAs for these areas. Formal abandonment and destruction of wells being replaced must be conducted within six months of the completion date (date of final inspection) of the replacement well and shall be performed in accordance with County requirements for well destructions.

Minor Production Well Alterations

Minor alterations to production wells are modifications to the well structure that are not intended to increase the discharge rate for the well or significantly alter the depth interval from which groundwater is extracted with the well. Minor alterations may include activities such as installing casing liners, patches, or other work although such work must not modify the well in a manner that increases the total groundwater pumping. Applications for permits for minor well alterations will be subject to review by the YSGA pursuant to paragraph 5 of the YSGA's Resolution No. 22-01 for wells within the Yolo Subbasin and in accordance with permitting procedures adopted by the respective GSAs in the Colusa and Solano Subbasins.

5. WELLS SUBJECT TO COMPLIANCE WITH EO SECTION 9B

Procedure to Address EO Section 9B (1): Determining Well is Not Likely to Interfere with Existing Wells

Well permit applications subject to the EO, including for new production wells (not replacement production wells, as defined on the prior page) and production wells or well alterations considered beyond the definition herein of the replacement production wells or minor well alterations, must be determined unlikely to interfere with the function and operation of existing nearby wells to comply with EO Section 9B(1). There are two ways by which an applicant can demonstrate that a proposed new well or well alteration work is unlikely to interfere with the function and operation of nearby wells: 1) meeting minimum separation distance from existing nearby wells, or 2) submitting a report by a professional geologist or hydrogeologist (licensed in the State of California) including associated information concluding that the proposed well or well alteration work will not interfere with the function and operation of nearby wells. Existing wells owned by the applicant located on the same parcel as the proposed well or on a parcel adjacent to the parcel with the proposed well are exempt from the minimum well separation distance requirement.

The County requires minimum well separation distances for ensuring proposed new wells or well alterations are unlikely to interfere with the function and operation of nearby wells. **Table 1** presents these minimum required distances from nearby active wells according to the proposed well pumping capacity and proposed well location (i.e., Valley Floor areas versus Upland areas).

Table 1. Minimum Well Separation Distances

Pumping Capacity (gallons per minute)	Minimum Well Separation Distance (feet)
<i>Wells Within the Valley Floor Areas of the County</i>	
<500	250
500-1000	500
1000-1500	1000
1500-2000	2000
>2000	Report Required
<i>Wells in the Upland Areas of the County</i>	
<15	500
15-100	1000
>100	Report Required

For proposed wells within the Valley Floor areas with engineered pumping capacities greater than 2,000 gallons per minute, a report completed by a licensed professional geologist or hydrogeologist is required to conclude the well is unlikely to interfere with the function and operation of nearby wells. For proposed wells in the Upland areas with engineered pumping capacities greater than 100 gallons per minute a report by licensed professional geologist or hydrogeologist will be required. If the location of the proposed new well or well alteration does not meet the minimum separation distances from existing wells presented in **Table 1**, the applicant may submit a report prepared by a licensed professional geologist or hydrogeologist presenting site-specific information (e.g., aquifer properties) and analyses concluding that the well is unlikely to interfere with the function and operation of nearby wells.

For all permit applications not exempt from EO Item 9B (as described above), the applicant must submit a map and list of known active wells within a radial distance equal to the minimum separation distance required for the well (as presented in **Table 1**) plus 500 feet. The map should include the proposed well site with known nearby active domestic, public supply, agricultural/irrigation, industrial, or other groundwater production wells. Active wells include wells recently operated (within last five years) as production wells and equipped with an operational pumping and discharge assembly, or wells in the process of being prepared to be operated. The table listing known nearby wells must include the well type, latitude/longitude coordinates, distance from the proposed well site (in feet), and Assessor's Parcel Number (APN). Any wells owned by the applicant should be indicated on the map and list of nearby wells. The County will review the information on nearby wells provided by the applicant in conjunction with additional review of available well location information from Environmental Health's database to confirm the minimum well separation is satisfied. However, it is the responsibility of the applicant to investigate and confirm the accuracy and completeness of the list of nearby wells.

Procedure to Address EO Section 9B (2): Determining Well is Not Likely to Cause Land Subsidence

As described above, the principal cause of land subsidence in the Valley Floor areas of the County is the regional persistent lowering of groundwater levels and associated decreases in pore pressure in the groundwater system. Such conditions are a result of the aggregate groundwater extraction by many wells and are distinct from intermittent water level changes associated with seasonal fluctuations or localized pumping influences from a given individual well. The Upland areas of the County outside of the Sacramento Valley Groundwater Basin have hydrogeologic properties that make the occurrence of land subsidence caused by groundwater pumping very unlikely because of the consolidated nature of many of the geologic materials in these areas and limited thickness of any alluvial sediments in these parts of the County. For new well permit applications in Upland areas of the County where land subsidence caused by groundwater pumping is very unlikely to occur because of the geologic setting, the well will be determined unlikely to cause land subsidence and no review of the well permit application for potential to cause land subsidence will be required.

The procedure for reviewing the compliance of new well permit applications with EO Section 9B(2) within the Valley Floor areas of the County will rely on the review of the GSA where the well is located. The GSAs are the local entities responsible for implementing the GSPs in the Valley Floor areas of the County. The GSPs include thresholds and metrics for undesirable results, including for land subsidence impacts on infrastructure. The objective of the GSPs is to avoid undesirable results. Therefore, if a well is determined to not be inconsistent with the applicable GSP, the County will consider it to be unlikely to cause land subsidence that will damage nearby infrastructure.

YSGA Adopted Resolution No. 23-01

**RESOLUTION NO. 23-01
OF THE
BOARD OF DIRECTORS OF THE
YOLO SUBBASIN GROUNDWATER AGENCY**

***IN THE MATTER OF:* A RESOLUTION DIRECTING THE PREPARATION AND
IMPEMENTATION OF UPDATED WELL PERMIT REVIEW
PROCEDURES IN THE YOLO SUBBASIN GROUNDWATER
AGENCY**

WHEREAS, Yolo Sustainable Groundwater Agency is the Groundwater Sustainability Agency (“GSA”) for the Yolo Subbasin of the Sacramento Valley Groundwater Basin, California Department of Water Resources Basin No. 5-21.67 (“Subbasin”) and in that role is responsible for implementing the Sustainable Groundwater Management Act (“SGMA”) within the Subbasin; and

WHEREAS, pursuant to Executive Orders N-10-21 and N-7-22, Governor Gavin Newsom proclaimed a statewide State of Emergency due to drought conditions, and directed GSAs and local well permitting authorities to make certain findings before issuing permits for groundwater wells subject to those Orders; and

WHEREAS, Paragraph 9 of each Order provides that a county, city, or other public agency shall not:

“Approve a permit for a new groundwater well or for alteration of an existing well in a basin subject to [SGMA] and classified as medium- or high-priority without first obtaining written verification from a Groundwater Sustainability Agency managing the basin or area of the basin where the well is proposed to be located that groundwater extraction by the proposed well would not be inconsistent with any sustainable groundwater management program established in any applicable Groundwater Sustainability Plan adopted by that Groundwater Sustainability Agency and would not decrease the likelihood of achieving a sustainability goal for the basin covered by such a plan;” and

WHEREAS, paragraph 9 further provides that a county, city, or other public agency shall not:

“Issue a permit for a new groundwater well or for alteration of an existing well without first determining that extraction of groundwater from the proposed well is (1) not likely to interfere with the production and functioning of existing nearby wells, and (2) not likely to cause subsidence that would adversely impact or damage nearby infrastructure.”; and

WHEREAS, these requirements were renewed and clarified by Executive Order N-3-23, and are currently in effect; and

WHEREAS, Yolo County Department of Environmental Health is the local agency responsible for issuing groundwater well permits under the Executive Orders; and

WHEREAS, YSGA is the Groundwater Sustainability Agency responsible for providing the County with the written verifications required by the Orders, specifically, for determining that the proposed groundwater extraction “would not be inconsistent with any sustainable groundwater

management program” in the Subbasin’s GSP and “would not decrease the likelihood of achieving a sustainability goal for the basin covered by such a plan;” and

WHEREAS, in May 2022 YSGA Board adopted Resolution No. 22-01, setting parameters for the development of Well Permit Procedures that would guide YSGA in making the findings required by Paragraph 9; and

WHEREAS, through the process of developing the Well Permit Procedures, YSGA has now identified certain areas where groundwater monitoring data is limited or incomplete (“data gap” regions), as well as areas where landowners have reported concerns regarding potentially decreasing groundwater levels (“Areas of Special Concern”); and

WHEREAS, staff require additional direction from the YSGA Board to develop a suitable review process to address these areas; and

WHEREAS, on September 12, 2023, the Yolo County Board of Supervisors announced its intention to impose 45-day moratorium on new agricultural well permits at their September 26, 2023 Board of Supervisors meeting to allow YSGA to address the Areas of Special Concern and data gaps in its Well Permit Procedures.

NOW, THEREFORE, BE IT RESOLVED:

1. As the exclusive Groundwater Sustainability Agency for the Yolo Subbasin, YSGA is responsible for and committed to achieving the sustainability goals set out in the GSP. Adoption of standardized Well Permit Procedures will support these sustainability goals, in that they will provide YSGA, permit applicants, and the public a clear framework for evaluating a permit application’s consistency with the GSP.
2. YSGA further recognizes that data gaps and localized groundwater conditions may sometimes require a specialized approach for particular portions of the basin; appropriately addressing these issues can assist the YSGA in its pursuit of basinwide sustainability.
3. YSGA staff are directed to prepare proposed Well Permit Procedures for consideration and review by the YSGA Board no later than November 20, 2023.
4. The Well Permit Procedures to be proposed to the Board will include, at a minimum:
 - An outline of the processes to be followed in YSGA’s issuance of the written verifications required by the Executive Orders.
 - A draft map depicting regions proposed to be identified as “Areas of Special Concern,” as well as a description of the characteristics that would trigger that special designation.
 - A draft map depicting regions of known gaps in groundwater monitoring data (“Data Gap Map”), identifying those portions of the basin where additional groundwater monitoring data is necessary to assist the YSGA in achieving the sustainability goals for the Subbasin.
 - Proposed standardized criteria for the hydrogeologist reports or other additional

supporting information that will be required in the “Areas of Special Concern” and “Data Gap” regions for new agricultural well permits.

- A proposed schedule for public review and comment on these materials.
5. In response to stakeholder requests and separate from the Well Permit Procedures, the *Ad Hoc Drought Contingency Planning Committee* is authorized to work with the Executive Officer and Legal Counsel to investigate the potential demand management strategies, including but not limited to voluntary allocation systems, in the designated “Areas of Special Concern.” The Committee’s findings will be reported back to the YSGA Board before the agency takes any binding action to implement such a system.
 6. No later than January 22, 2024, the Executive Officer, supported by Legal Counsel, will present a proposed structure and schedule for the implementation of Management Area Advisory Committees, which shall be tasked with providing feedback on unique regional groundwater concerns, as well as serving as a public advisory forum to inform the Board’s continued pursuit of the sustainability goals.

Certification of Secretary

The undersigned hereby certifies that the foregoing resolution was duly adopted by the Board of Directors of YSGA at a special meeting held on September 18, 2023, by the following vote:

AYES: City of Davis, City of West Sacramento, City of Winters, City of Woodland, Dunnigan Water District, Madison Community Services District, Reclamation District 108, Reclamation District 307, Reclamation District 537, Reclamation District 730, Reclamation District 765, Reclamation District 787, Reclamation District 999, Reclamation District 1600, Rumsey Water Users Association, Yocha Dehe Wintun Nation, Yolo County, Yolo County Flood Control and Water Conservation District, California American Water – Dunnigan, Yolo County Farm Bureau, and Environmental Representative – Ann Brice

NOES: None

ABSENT: Reclamation District 150, Reclamation District 2035, and Colusa Drain Mutual Water Company



Kristin Sicke, Board Secretary

Dated: September 18, 2023

Technical Data and Methods for Delineating Focus Areas

TECHNICAL DATA AND METHODS FOR DELINEATING FOCUS AREAS

This section provides an overview of the technical data and methods used to delineate Focus Areas in the Yolo Subbasin as shown on Figure 1 and how the Focus Areas are proposed to be applied in the County's well permitting process to comply with Paragraph 9 of the EO and Paragraph 4 of EO-2.

Technical Data

Technical data and information reviewed by West Yost and YSGA staff included groundwater levels, geologic and geomorphologic maps, reported citizen concerns on proximity and cumulative impact of agricultural wells to domestic wells and declining groundwater levels, domestic well density and small water systems, and reported dry wells. These data were reviewed in detail by West Yost and YSGA staff. Each data set is described in the following sections.

Appendix I

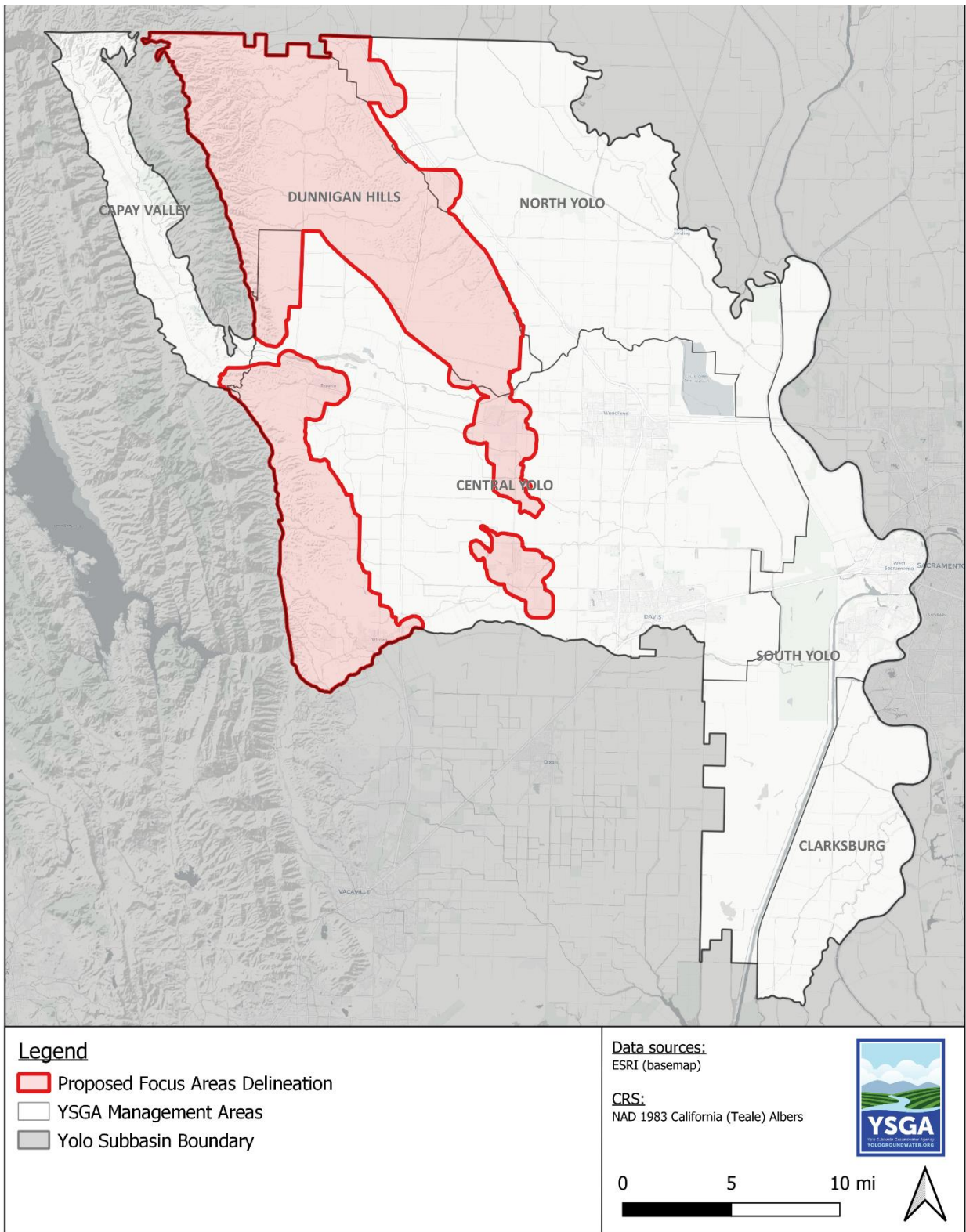


Figure 1. Proposed Delineated Focus Areas within the Yolo Subbasin.

Appendix I

Groundwater Levels and Monitoring Data

Groundwater levels from YSGA representative monitoring wells (RMWs) and other monitoring wells located within the Yolo Subbasin were reviewed to identify areas where significant declines in groundwater levels have occurred between 2013 to 2023, and where there was an exceedance of the MTs at RMWs in Fall 2023. Figure 2 shows the 10-year water level trends (Fall 2013-Fall 2023) in the available groundwater monitoring network. Figure 3 shows a map of the RMWs and corresponding MT status as of October 2023. There are some areas of the Yolo Subbasin with inadequate monitoring well density for the analysis of groundwater levels. Figure 4 illustrates the YSGA monitoring wells with at least 10 years of historic groundwater level data and highlights the areas of the Yolo Subbasin with inadequate data.

Appendix I

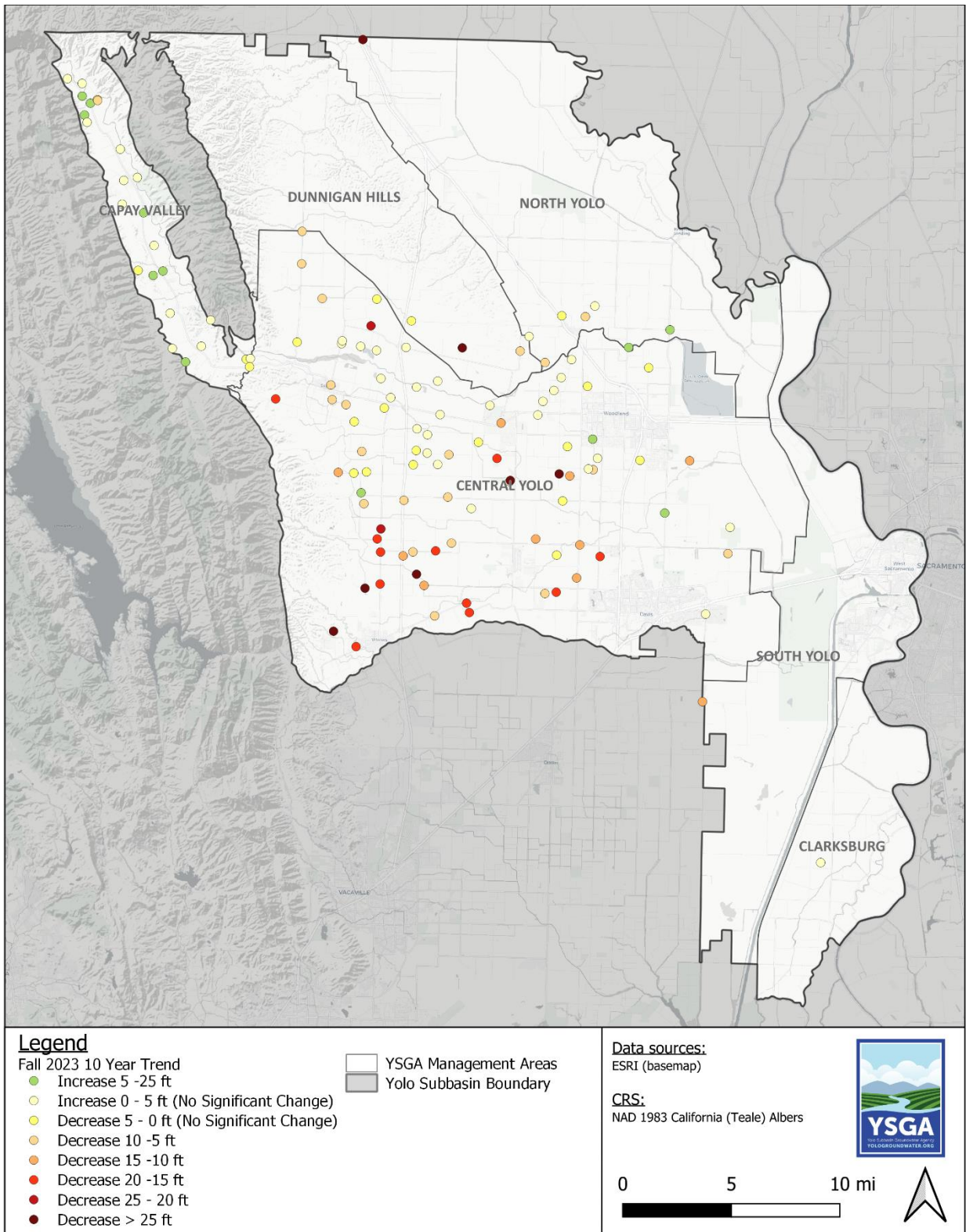


Figure 2. 10 -Year Change in Groundwater Levels from Fall 2013 to Fall 2023.

Appendix I

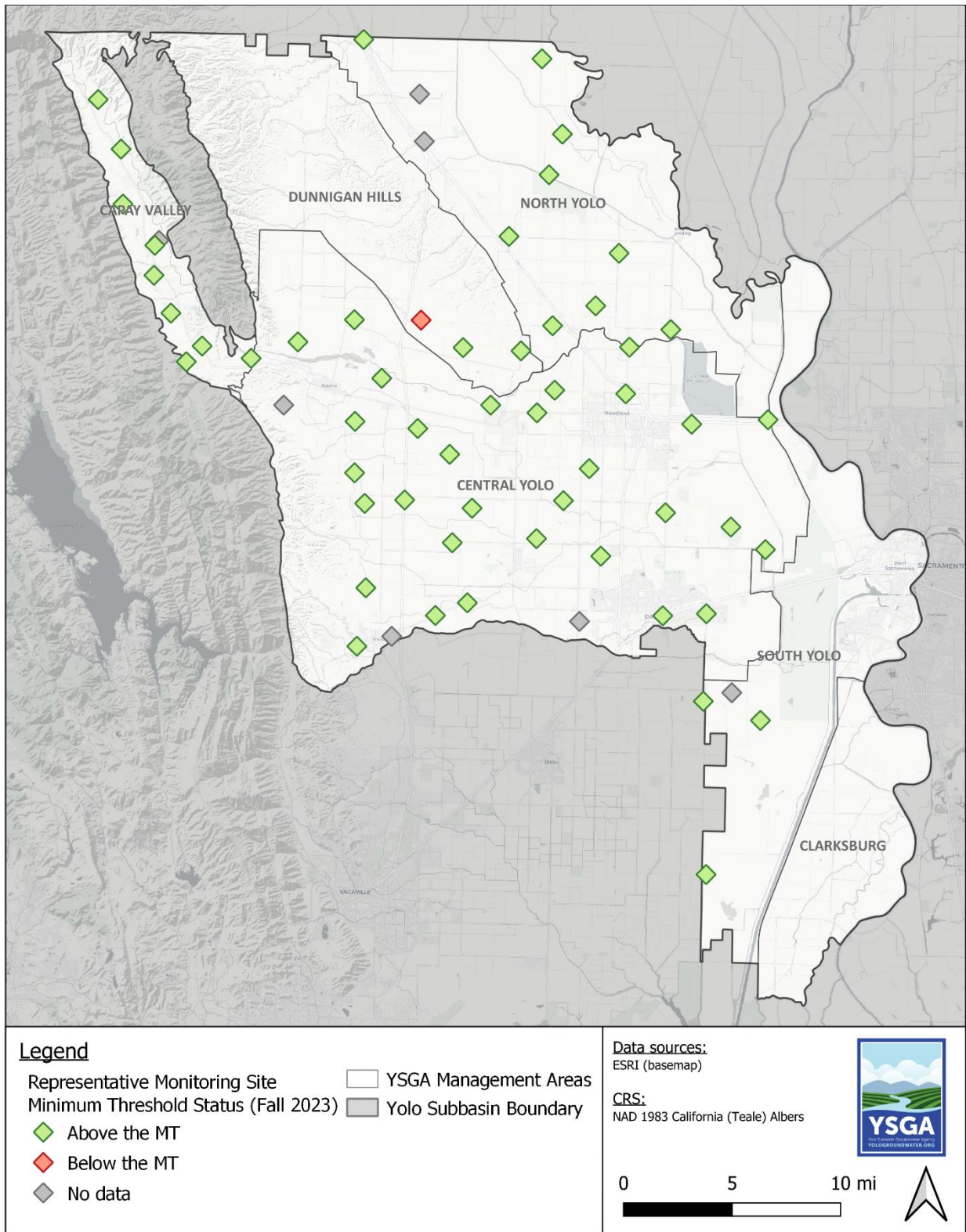


Figure 3. Representative Monitoring Wells and Minimum Threshold Status as of Fall 2023.

Appendix I

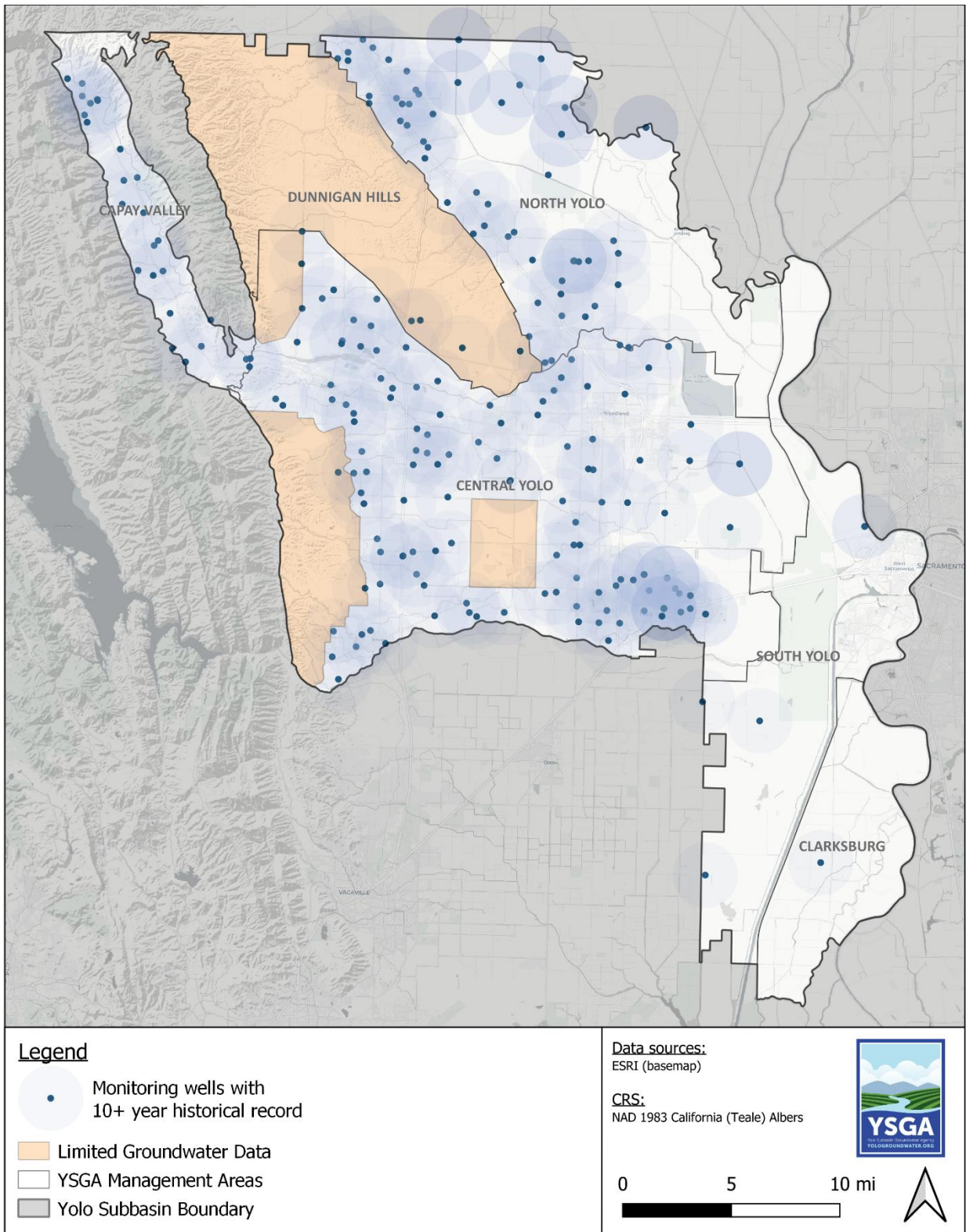


Figure 4. Areas within the Yolo Subbasin with Limited Groundwater Data.

Appendix I

Geologic and Geomorphology Maps

The Yolo Subbasin contains complex geologic and geomorphic features that affect aquifer permeability and recharge potential. Topographic, geologic, and geomorphic data were reviewed to assess the relative permeability and recharge potential throughout the Yolo Subbasin. Figures 5 and 6 show the topographic, geologic, and geomorphic features within the Subbasin. Areas where the Tehama Formation is present are typically associated with topographic highs and have low permeability and recharge potential relative to areas where younger alluvium deposits are present.

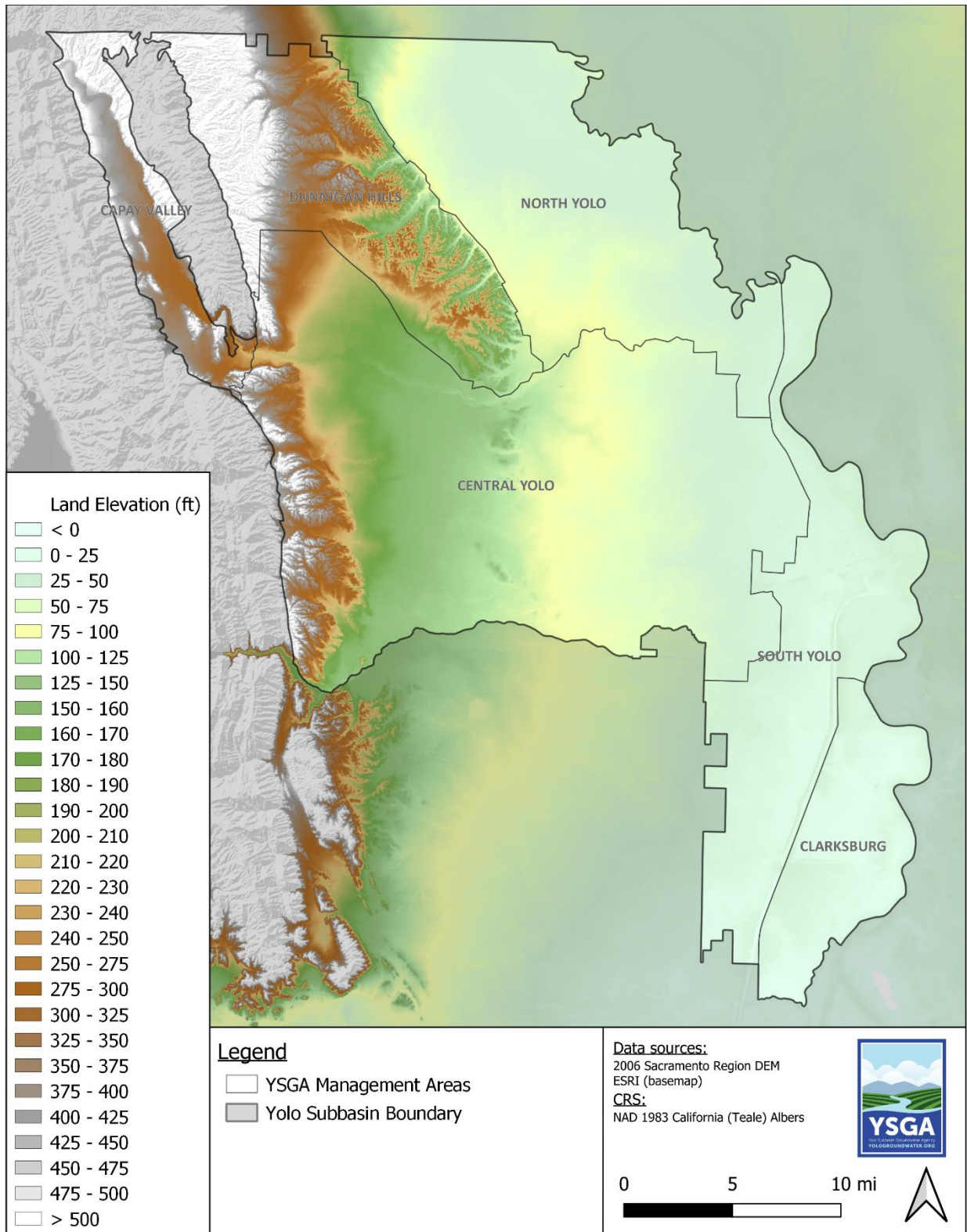


Figure 5. Topography of the Yolo Subbasin.

Appendix I

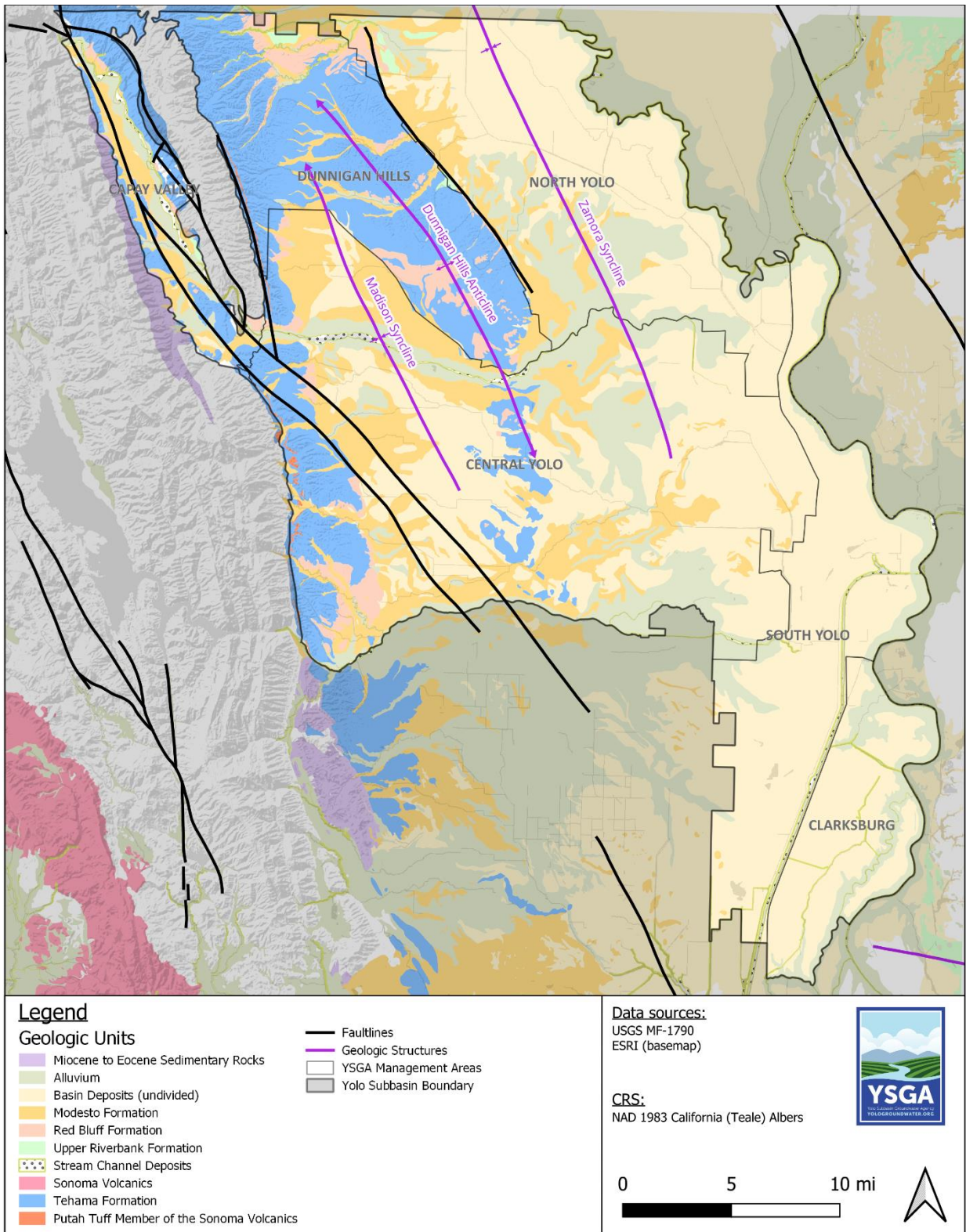


Figure 6. Geology of the Yolo Subbasin.

Appendix I

Reported Concerns on Declining Groundwater Levels

Areas where citizens have expressed concern to the YSGA & County include the following locations, shown in Figure 7 below:

1. Hungry Hollow area (County Roads 84A and 84B)
2. West of Winters (Golden Bear Estates)
3. Dunnigan Hills area (County Roads 20 and 92C)
4. Monument Hills/Hillcrest/Wild Wings CSA
5. West Plainfield/Corcoran Hill Lane
6. West of Davis (Cassidy Lane)
7. North of Zamora (County Road 91B)

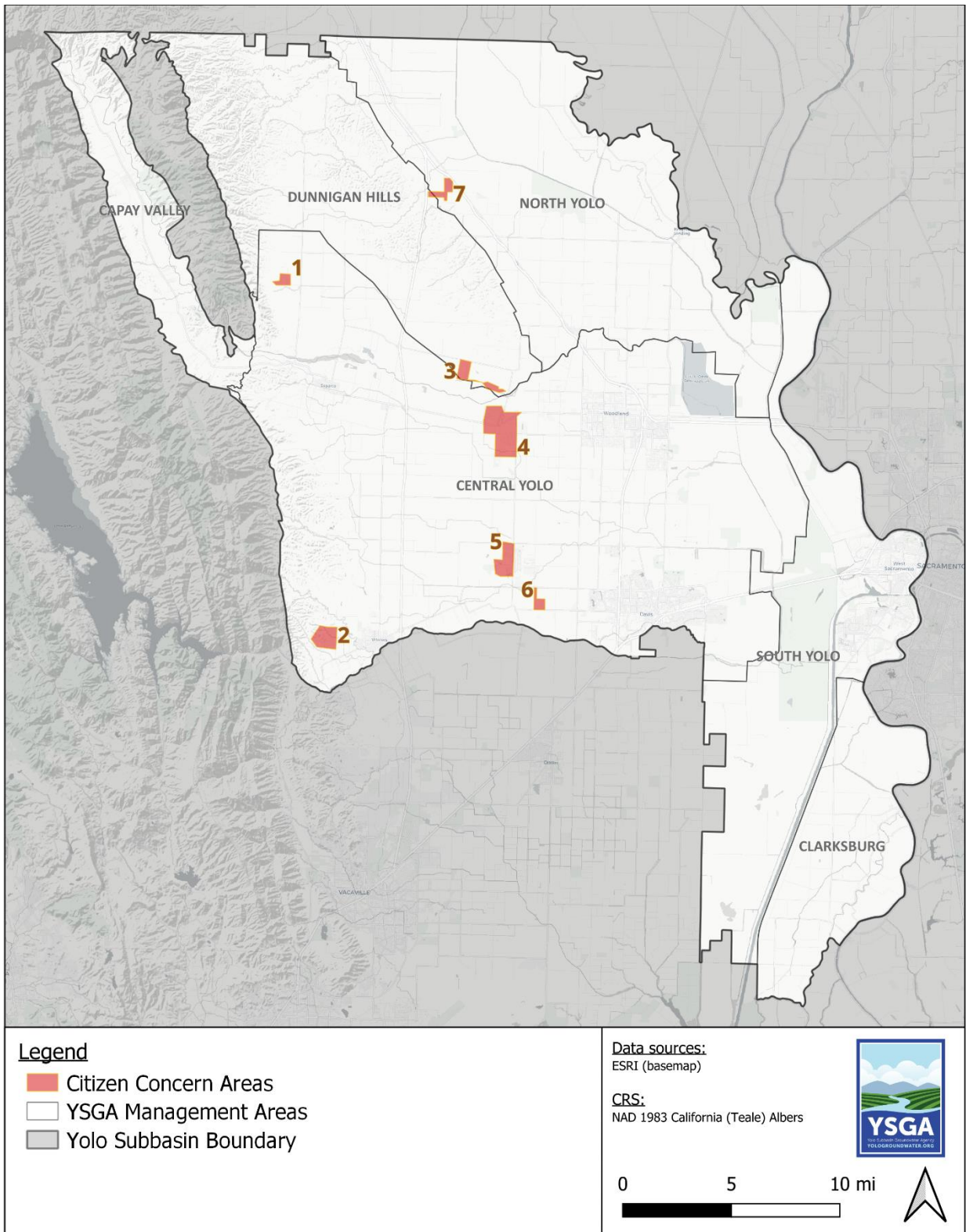


Figure 7. Citizen Concern Areas within the Yolo Subbasin.

Appendix I

Domestic Well Density and Small Water Systems

DWR's OSWCR¹ database was utilized to determine the areas within the Yolo Subbasin that contain a high density of domestic wells. Notable areas with high domestic well density include Dunnigan, Capay, and rural neighborhoods outside of Woodland, Winters, and Davis. Additionally, small public water systems were considered; notable groundwater dependent- public water systems include the City of Winters, El Rio Villa, Esparto, Wild Wings Community Service Area, and Rolling Acres Mutual Water Company. Figure 8 shows domestic well density and location of small water systems within the Yolo Subbasin.

¹ DWR Online System of Well Completion Reports (OSWCR) at <https://water.ca.gov/Programs/Groundwater-Management/Wells/Well-Completion-Reports>.

Appendix I

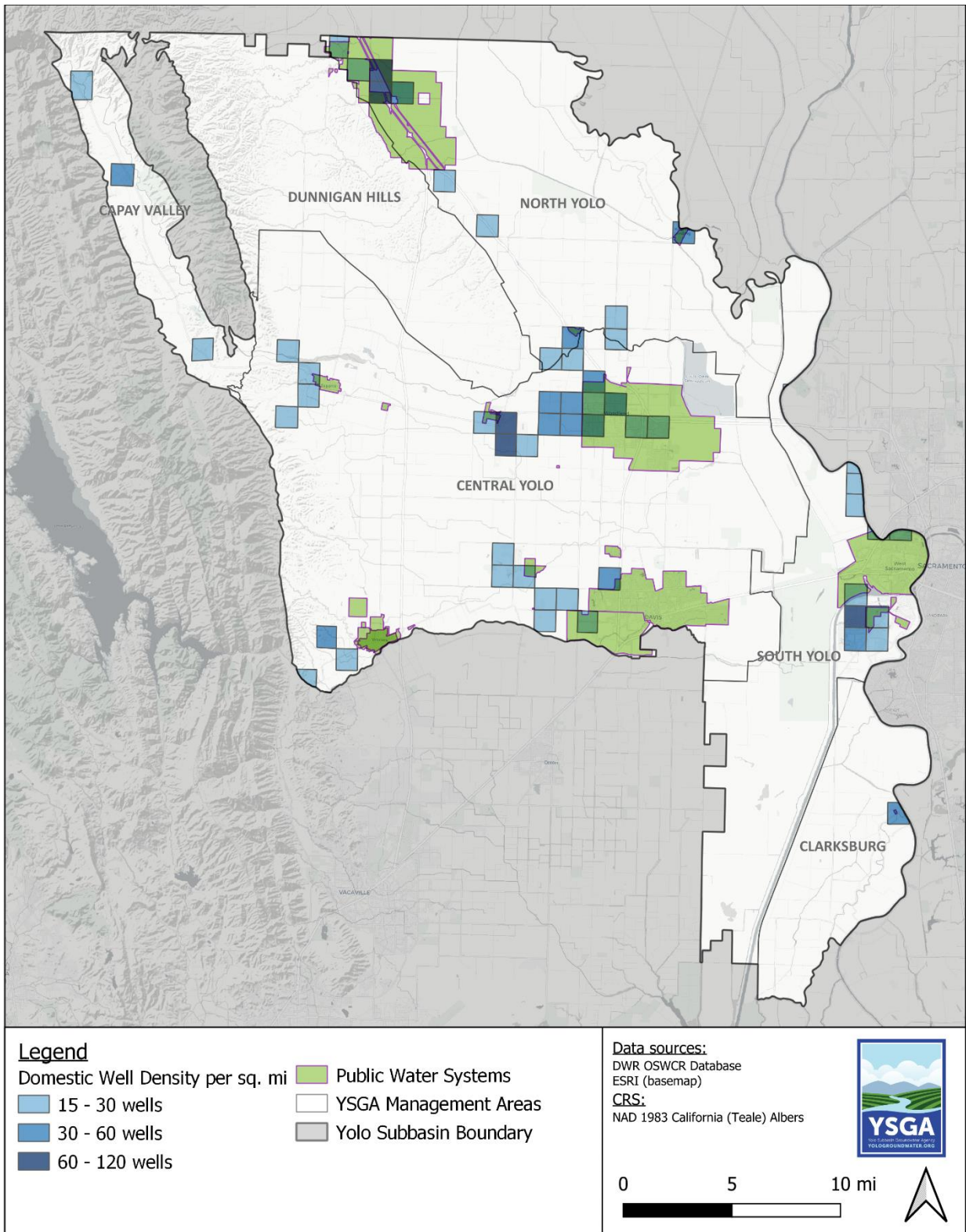


Figure 8. Domestic Well Density and Locations of Small Water Systems within the Yolo Subbasin.

Appendix I

Reported Dry Wells

During the 2021-2022 drought, the Yolo County Office of Emergency services received 54 dry domestic well reports. Dry domestic wells indicate that groundwater levels reached an all-time low over the life of the well, and therefore indicate an area of potential concern. The dry well reports shown in Figure 9 exclude reports that exhibited any of the following conditions:

- Water access was restored by lowering pump or other repair
- Wells with unknown depth
- Wells that have total depths shallower than historic low groundwater level (Fall 1977, where data is available)
- Water levels recovered sufficiently to restore well function

Appendix I

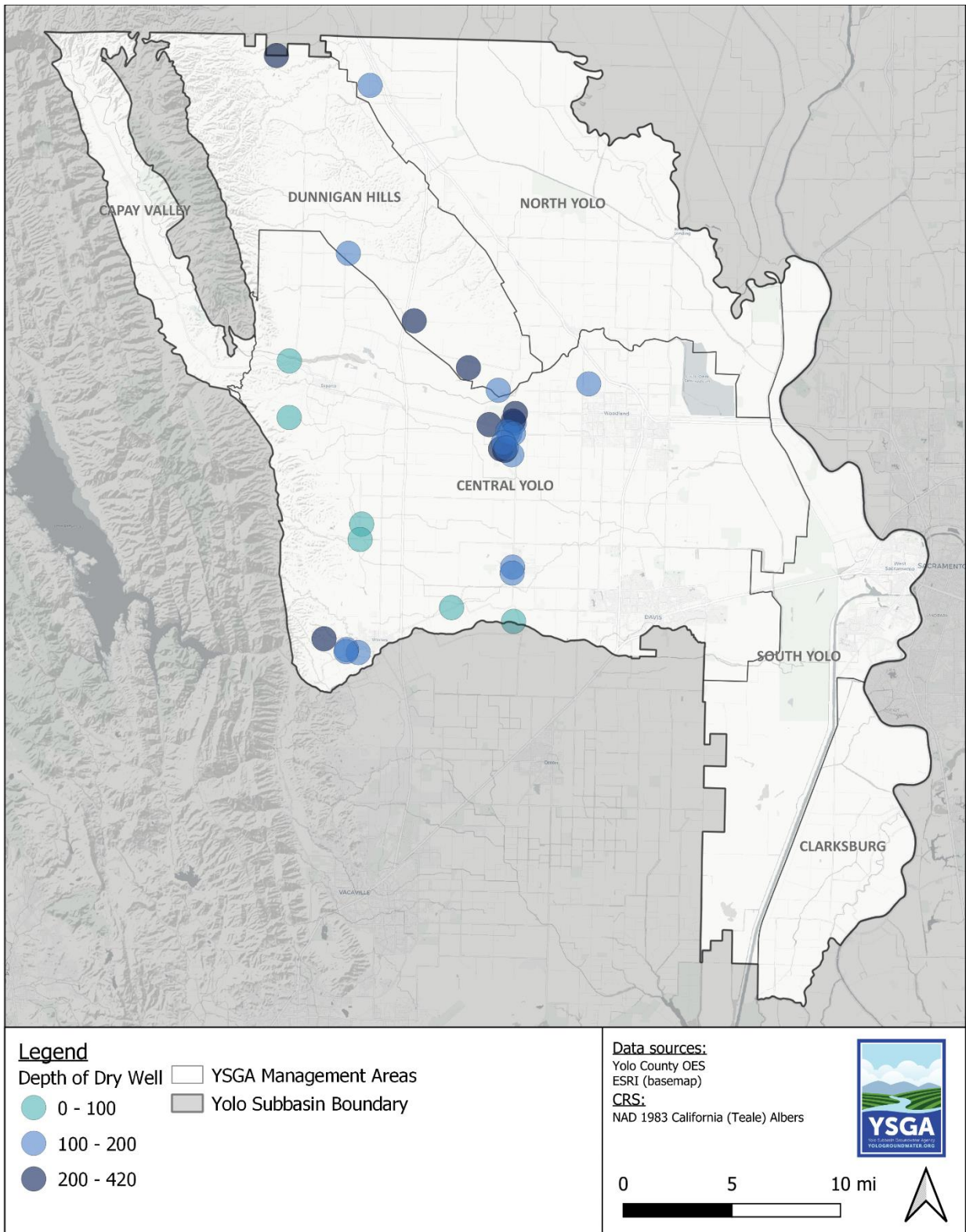


Figure 9. Location and Depth of Dry Wells within the Yolo Subbasin.

Methods for Delineating Focus Areas

Upon review of the data, West Yost worked closely with YSGA staff to delineate proposed Focus Areas. Preliminary Focus Area boundaries were identified based on the following primary factors:

- Greater than 25-foot decline in groundwater levels from 2013 to 2023 (Figure 2), or
- An exceedance of groundwater level minimum thresholds (MTs) in a representative monitoring well (RMW) that occurred in Fall 2023 (Figure 3), or
- Limited groundwater monitoring data (Figure 4), and/or
- Limited recharge potential and low permeability (Figure 6)

If the preliminary Focus Area boundaries were adjacent to or overlapping any of the below secondary factors, boundaries were expanded to include them. To account for uncertainty in coordinate accuracy of input datasets, the County's setback requirements for wells, and proximity to rural neighborhoods with high domestic well densities, a 2,000-foot buffer was added to the delineation in these areas:

- Reported concerns about declining groundwater levels in domestic wells (Figure 7), or
- Areas of dense domestic wells or groundwater dependent- small water systems (Figure 8), or
- Reported dry wells that have not experienced recovery in groundwater levels (Figure 9)

Considering these factors, the Focus Areas were delineated and shown on Figure 1.

Proposed YSGA Well Permit Hydrogeologist's Report
Findings Summary Form

YSGA Hydrogeologist Report Summary Form for Well Permit Applications

Property Owner Information

Site Address: _____

Property Owner Name:

Mailing Address (if different than site address):

Phone Number:

Email: _____

Location of Proposed Well or Alternation to Existing Well

Latitude / Longitude: _____

PLSS Range and Quarter Section: _____

APN: _____

Description of the Proposed Well or Alteration to Existing Well Project

Well permit application type (Select one): Proposed new well / Alteration to existing well

Purpose of well: _____

Planned pumping capacity and operating schedule: _____

Project elements offsetting pumping demands: _____

Permitting and construction schedule: _____

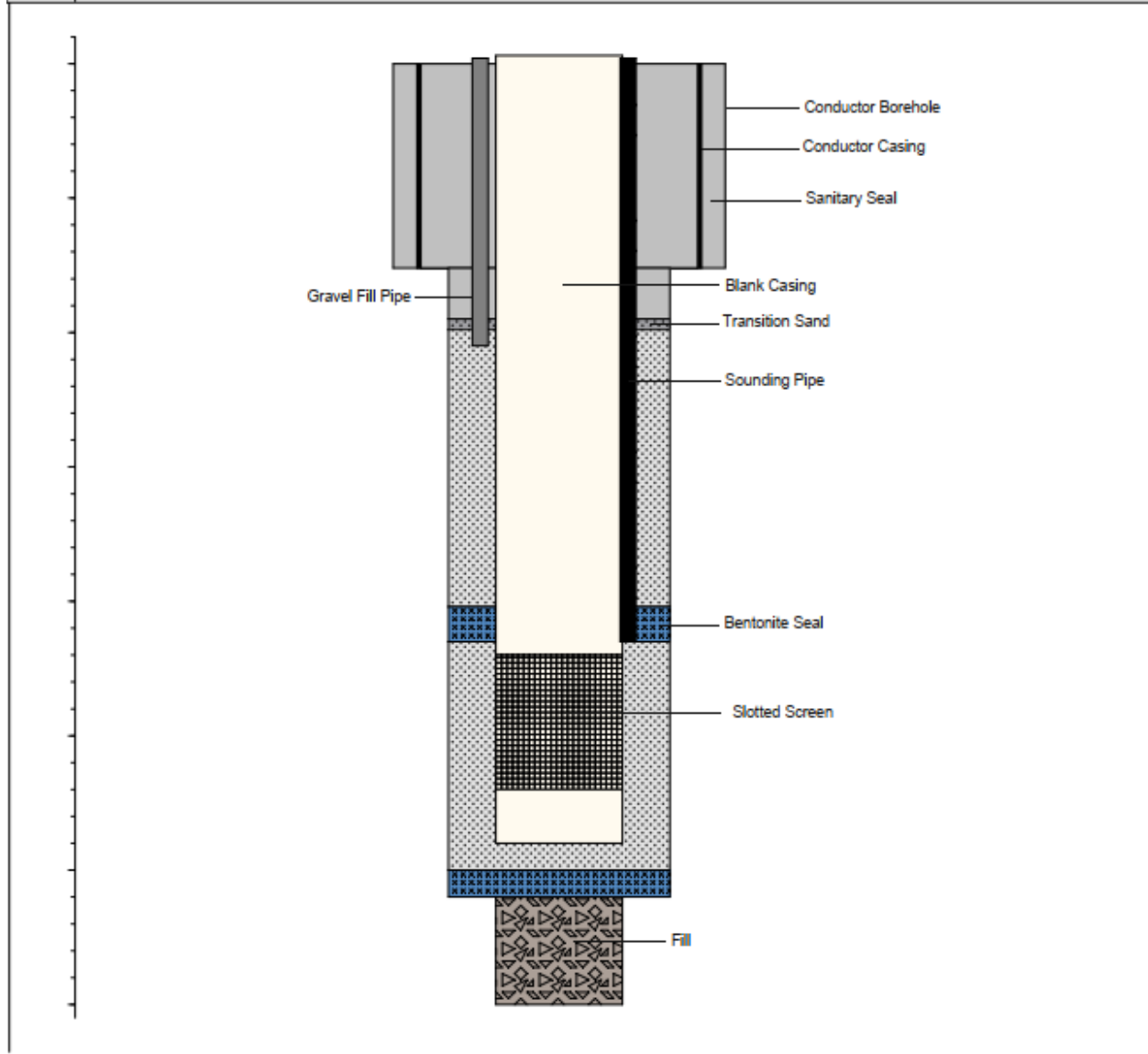
Design of the Proposed Well or Existing Well to be Altered

Well Construction Diagram Template

Depth (ft)

Instructions:

- Provide well construction details below, where applicable (Ex. Conductor Casing - 28-inch O.D. by 3/8-Inch Wall Conductor Casing, ASTM A 53, Grade B)
- Label depth scale and note depths for sanitary seal, transition sand, gravel fill pipe, screened casing, bentonite seal, blank casing, end cap, gravel pack, and total depth of well and pilot borehole.



Drilling Contractor:
 Date Started:
 Date Ended:
 Location (X & Y Coordinates):

Address:
 Owner:

Hydrogeologic Evaluation

List the geologic formations anticipated to be encountered during drilling: _____

List the hydraulic parameters of the hydrogeologic units penetrated by the well: _____

Summary of the groundwater conditions: _____

Impact Assessment

Summary descriptions for each of the following

Methods used to analyze the wells impact: _____

Magnitude and extent of drawdown in the well: _____

Anticipated impacts to groundwater levels on neighboring wells: _____

Anticipated impacts on groundwater levels and net groundwater storage: _____

Anticipated impacts to nearby interconnected surface water: _____

Anticipated impacts on aquifer water quality: _____

Anticipated impacts on land subsidence: _____

Anticipated impacts to achieve GSP sustainability goals, programs, and management actions:

Hydrogeologist Report Findings

The hydrogeologist report completed by **FIRST AND LAST NAME OF PG or CHG with COMPANY NAME** for well permit No. **XXXX** submitted by **WELL OWNER NAME** located at **ADDRESS** was evaluated for compliance with the EO N-3-23 for both Section 4A and 4B based on the YSGA's Hydrogeologist Report Guidelines and associated EO Well Permitting policies. It's my professional judgement based on the analysis completed for this well permit application that the **WELL OR WELL ALTERATION** is:

- Likely to be compliant with Section 4A
- Likely to be compliant with Section 4B
- Likely to be not compliant as originally proposed with either Section 4A or 4B of the EO and a consultation with YSGA and County staff is requested to assess possible changes to well permit application.

PG/CHG Stamp and signature

Attachment A – Hydrogeologist Report for Well Permit No. XXXX