



# YSGA BOARD OF DIRECTORS MEETING

March 18, 2024

# Agenda

- 1. Call to Order and Determination of Quorum**
2. Adding Items to the Posted Agenda
3. Public Forum
4. CONSIDERATION - Consent Items
5. Report of the Chair and Executive Officer
6. PRESENTATION - GSA Authority
7. CONSIDERATION - 2-Tier Well Permit Review Procedures
8. Member's Reports and Future Agenda Items
9. Next Meeting - May 20, 2024
10. Adjournment

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# Consideration: Consent Items

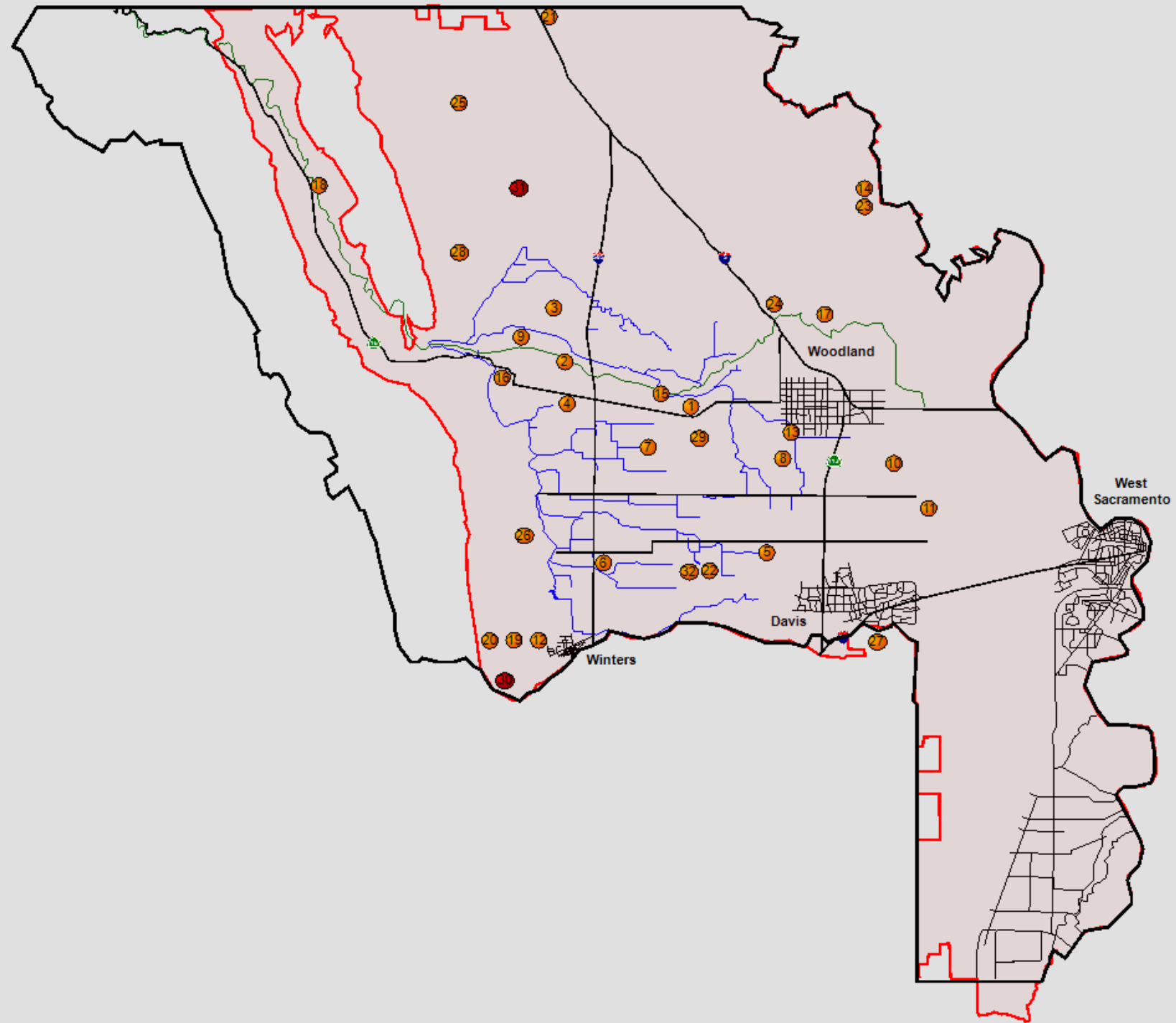
- a) Approve January 22, 2024 Board of Directors Meeting Minutes
- b) Receive Fiscal Year 23/24 Financial Statements: 1/17/24 - 3/11/24
- c) Receive minutes of Executive Committee: 1/12/24
- d) Authorize Entering into Contract with Frame Surveying and Mapping

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

# Well Monitoring

Continuous



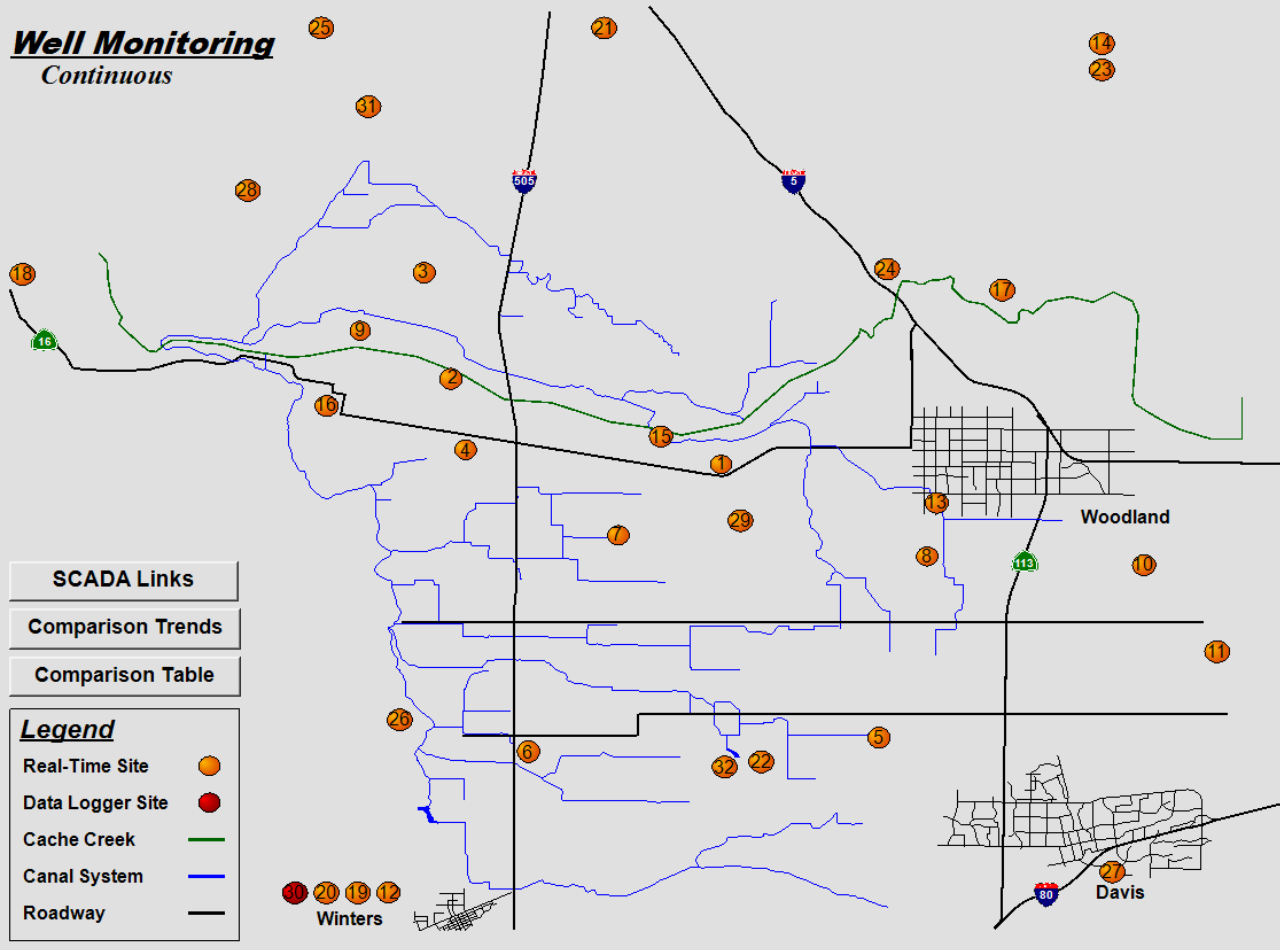
- SCADA Links
- Comparison Trends
- Comparison Table

**Legend**

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

# Well Monitoring

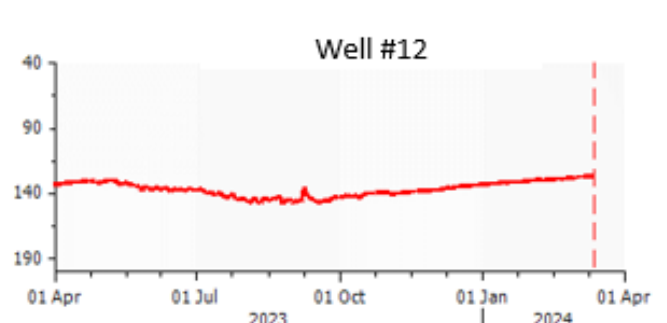
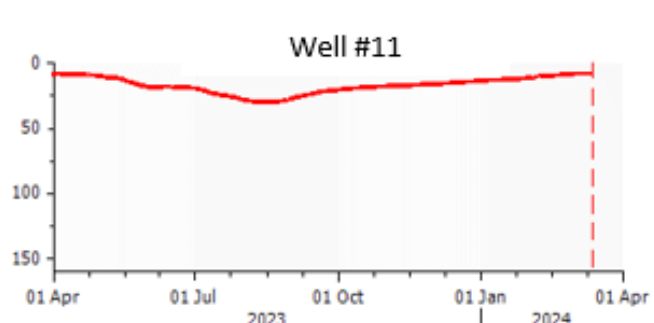
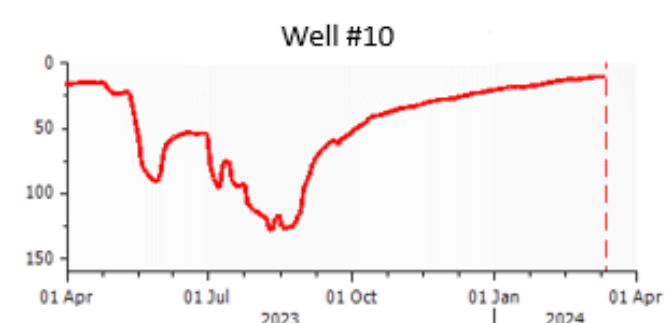
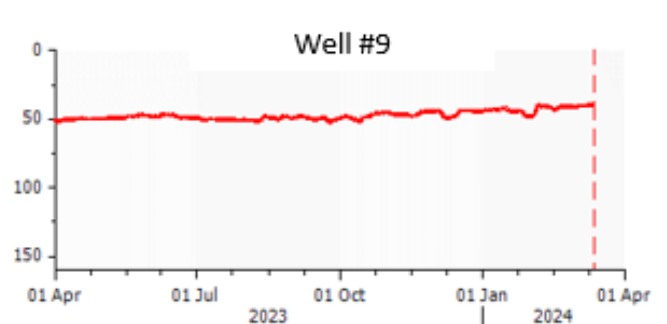
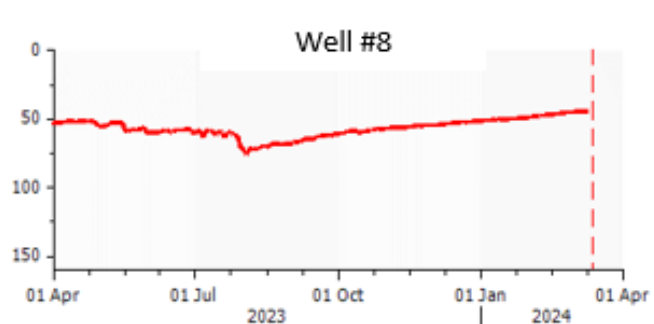
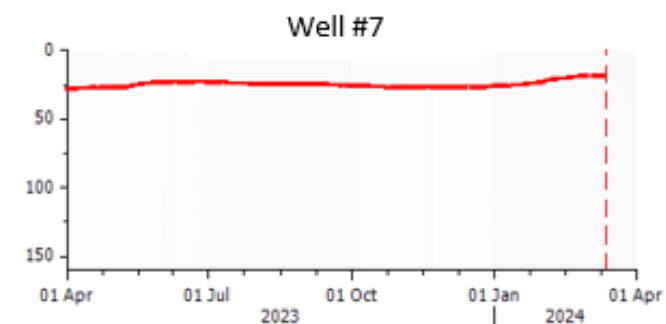
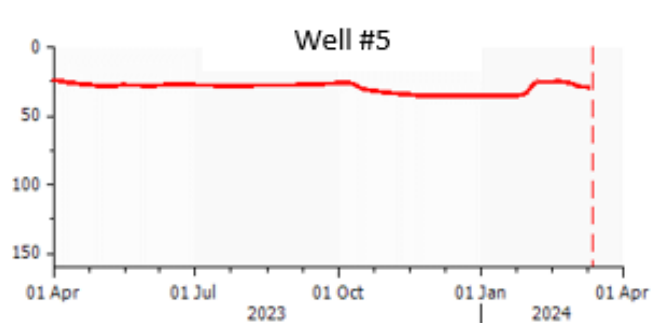
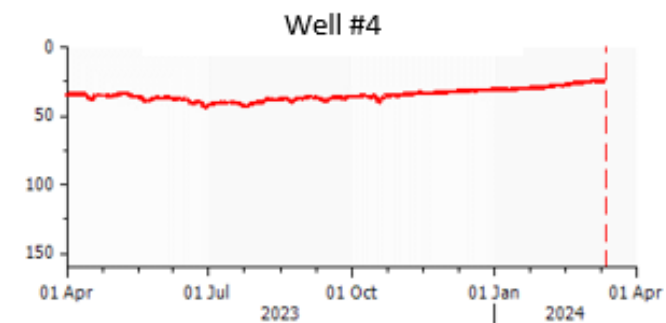
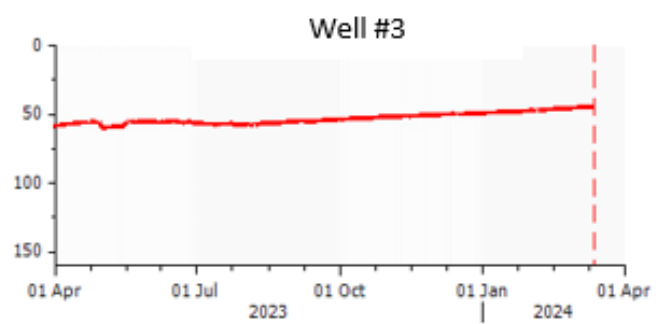
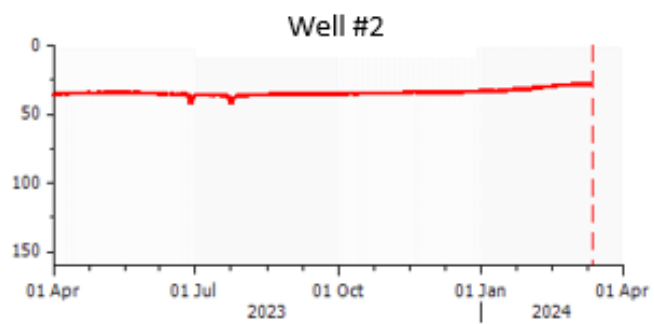
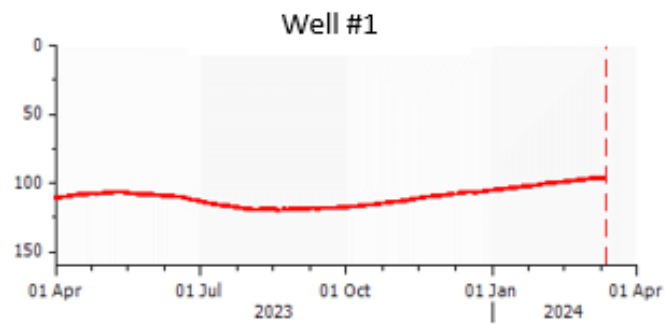
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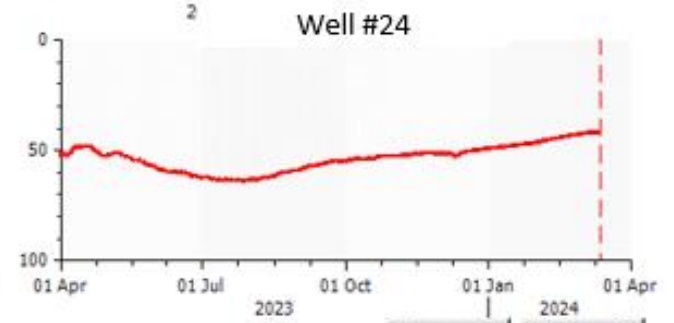
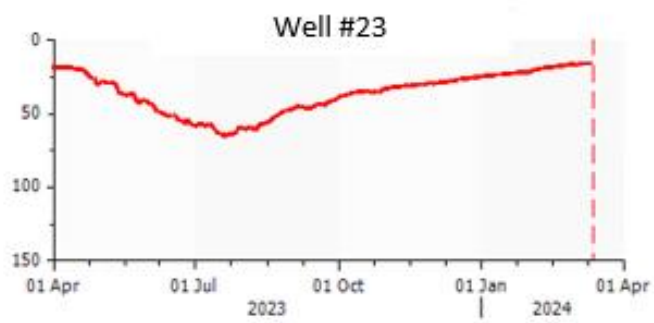
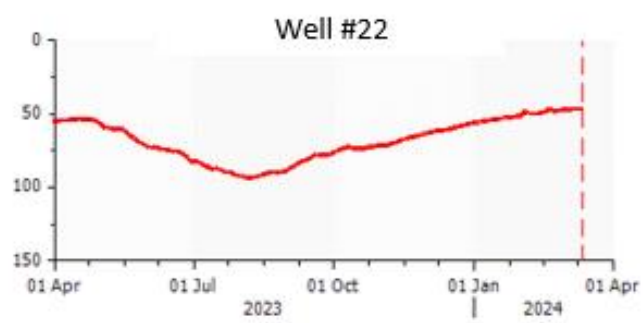
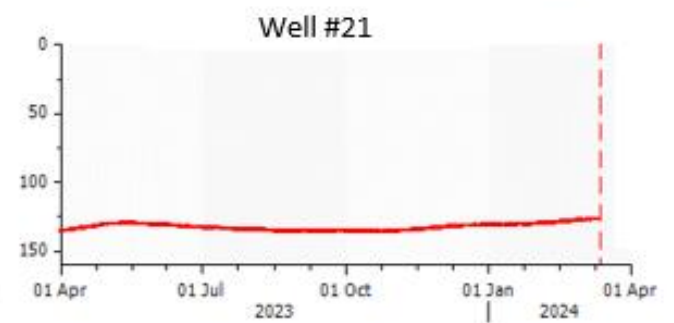
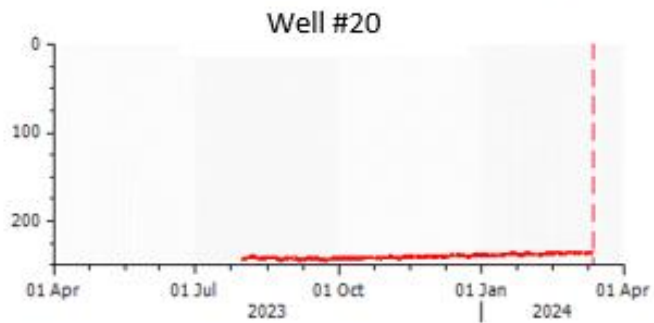
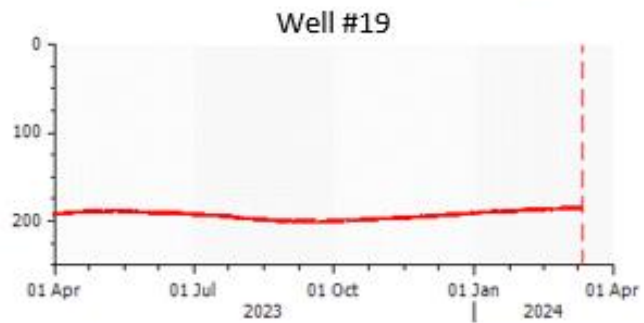
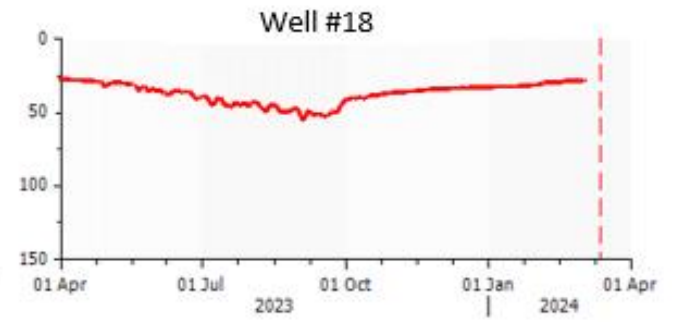
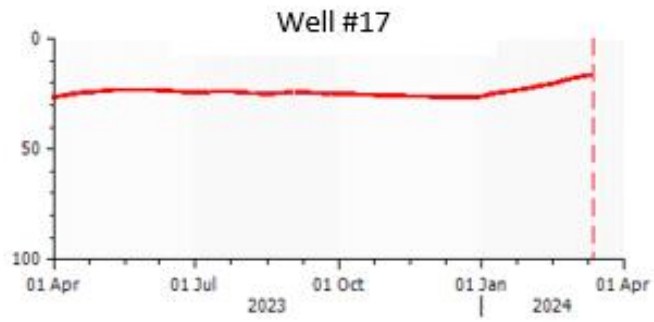
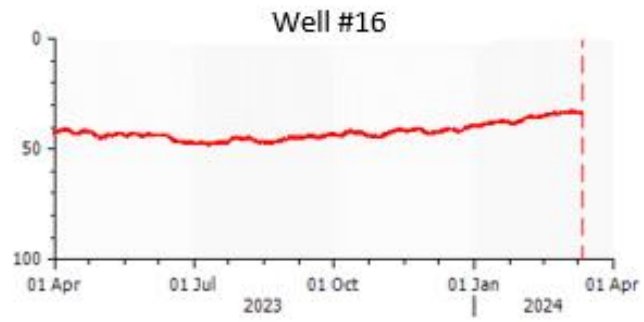
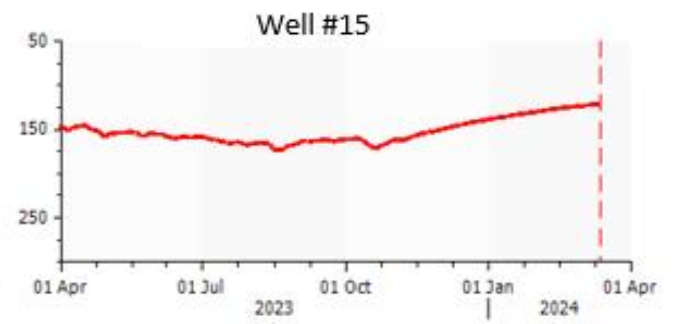
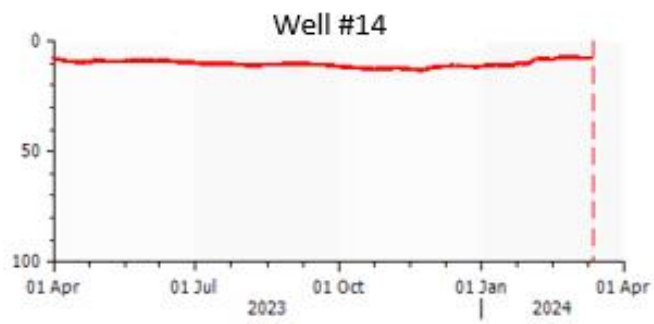
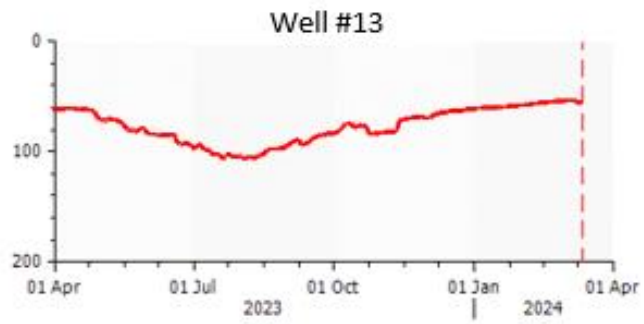


# Well Monitoring

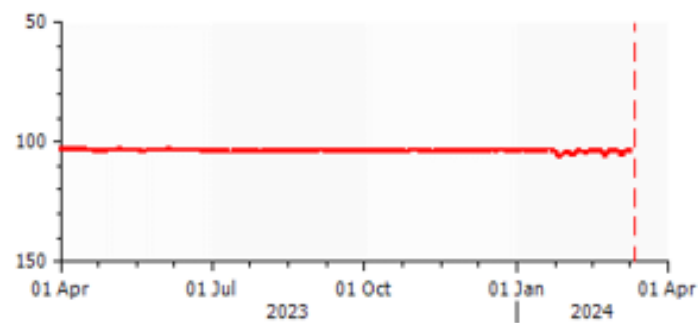
Depth to Water Historical Comparison  
(Daily Average DTW in feet)

Well	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Δ 2023 - 2024	Δ 2015 - 2024
1.	77.1	79.1	79.7	92.4	100.4	102.9	89.9	88.6	90.4	87.1	95.7	113.5	113.4	95.9	17.5	4.5
2.	28.6	29.7	40.5	35.9	38.9	39.4	23.7	30.2	24.3	30.2	32.3	37.5	38.2	27.5	10.7	11.4
3.	41.8	39.4	40.5	50.6	59.6	58.5	38.3	40.0	37.5	40.3	44.8	60.9	61.6	43.7	17.9	15.9
4.	24.5	25.9	27.9	31.4	38.8	38.5	21.1	26.9	18.9	28.3	35.7	39.1	37.2	24.6	12.6	14.2
5.		21.4	22.8	29.8	29.0	37.9	17.0	28.3	9.4	23.0	30.2	37.9	27.5	29.3	-1.8	-3
6.		37.3	37.6	44.8	53.0	52.4	27.0	36.0	20.7	36.8	50.0	60.6	47.4	36.4	11.0	16.6
7.				32.0	32.0	33.2	16.4	21.0	15.0	20.1	26.9	33.8	30.7	18.6	12.1	13.4
8.				49.5	60.6	62.1	45.1	42.9	36.7	41.4	48.0	63.2	56.3	44.1	12.1	16.4
9.				49.0	56.8	56.8	37.4	40.5	34.1	41.8	48.5	54.6	54.6	39.5	15.1	17.4
10.					25.4	25.2	11.8	13.0	7.4	14.5	19.7	30.7	18.3	9.9	8.4	15.5
11.					11.4	10.9	5.6	8.6	5.5	9.8	13.0	15.2	9.0	7.9	1.1	3.5
12.									113.2	106.8	118.3	132.4	135.1	126.1	9.1	
13.								60.1	46.0	53.9	61.3	75.9	65.1	55.6	9.5	
14.									7.3	10.0	10.1	11.2	8.2	8.2	.0	
15s.									33.2	37.0	45.6	44.0	40.1	34.9	5.2	
15d.									104.1	110.7	128.8	161.5	150.5	120.2	30.3	
16.									33.2	34.5	36.5	47.2	46.2	33.2	13.0	
17.										20.7	26.9	30.6	28.8	15.8	13.0	
18.										33.3	42.1	39.4	29.2	28.0	1.2	
19.										165.5	175.0	187.8	193.9	184.3	9.6	
20.														236.4		
21.											127.3	136.2	137.8	125.8	12.0	
22.												68.9	57.6	46.2	11.5	
23.												41.3	21.6	17.3	4.3	
24.												65.6	55.6	41.5	14.1	
25.													102.8	103.9	-1.1	
26.													101.5	73.2	28.2	
27.													42.7	41.7	1.1	
28.													143.8			
29.													82.2			
30.													113.8			
31.													210.2	190.8	20.1	
32.														105.7		

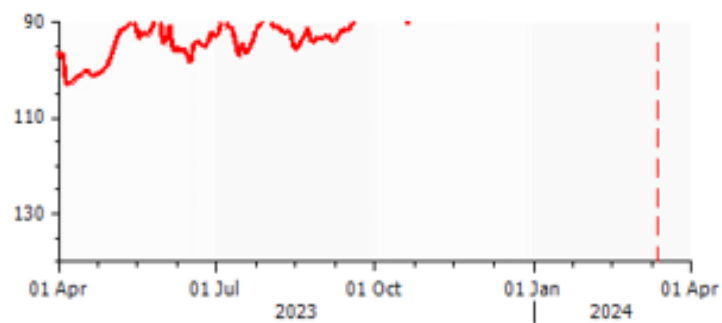




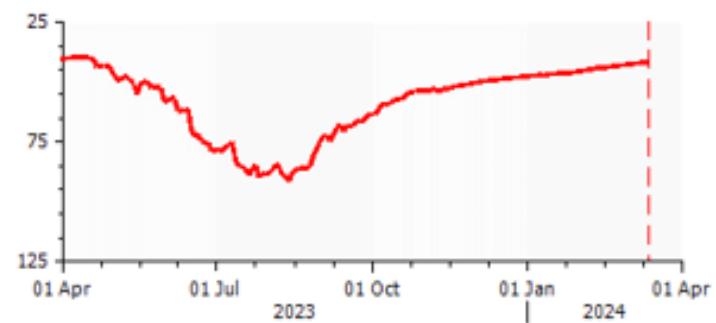
Well #25



Well #26



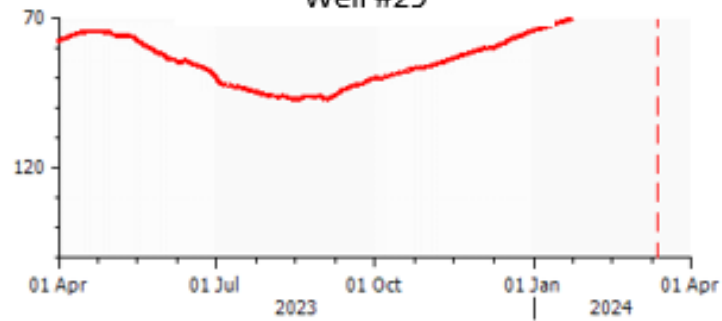
Well #27



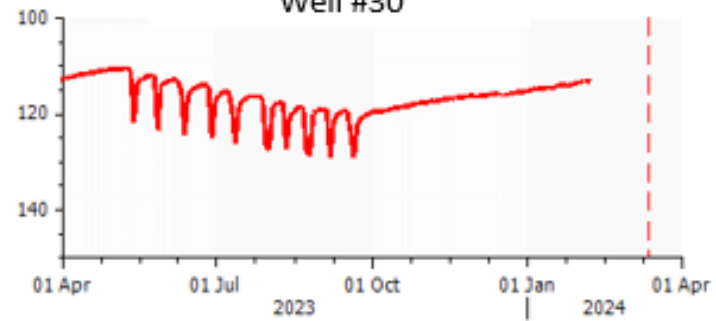
Well #28



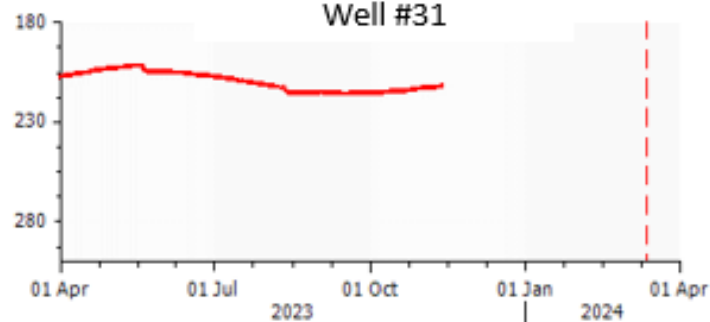
Well #29



Well #30

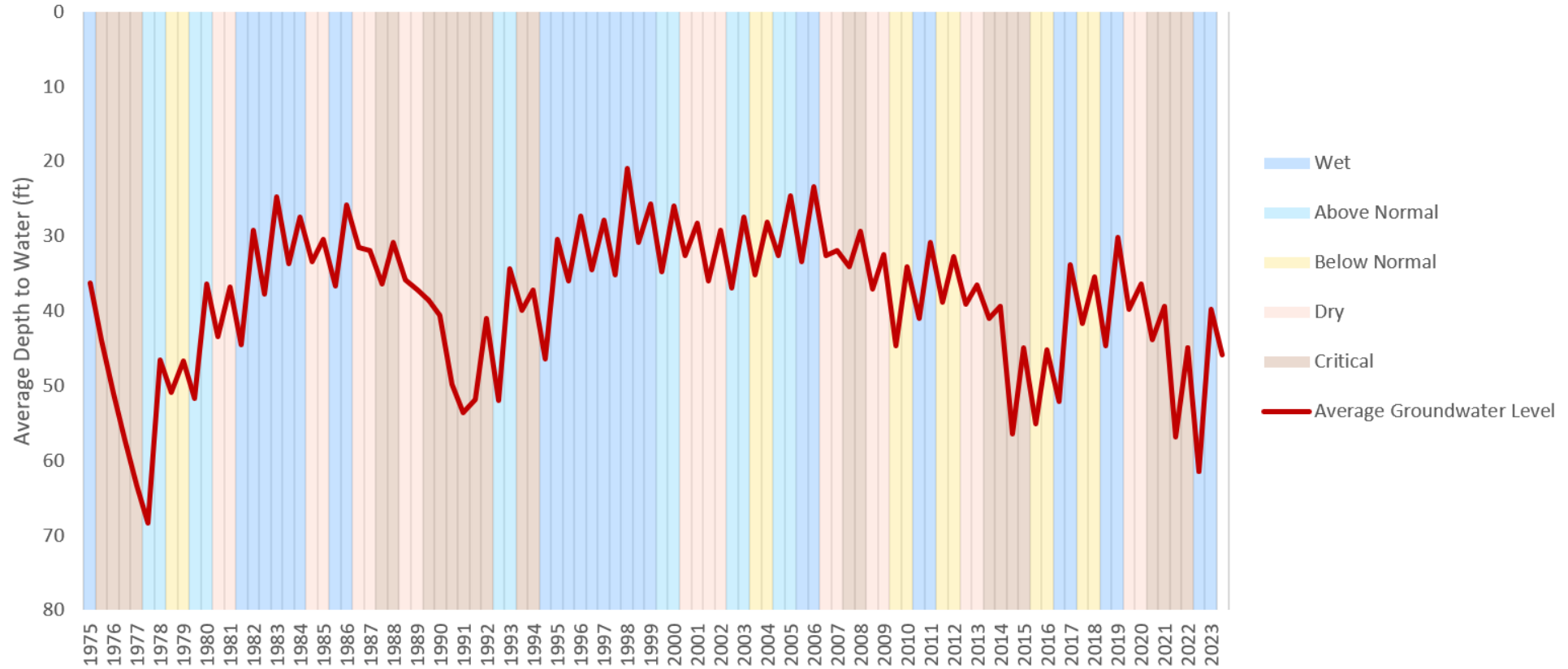


Well #31





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



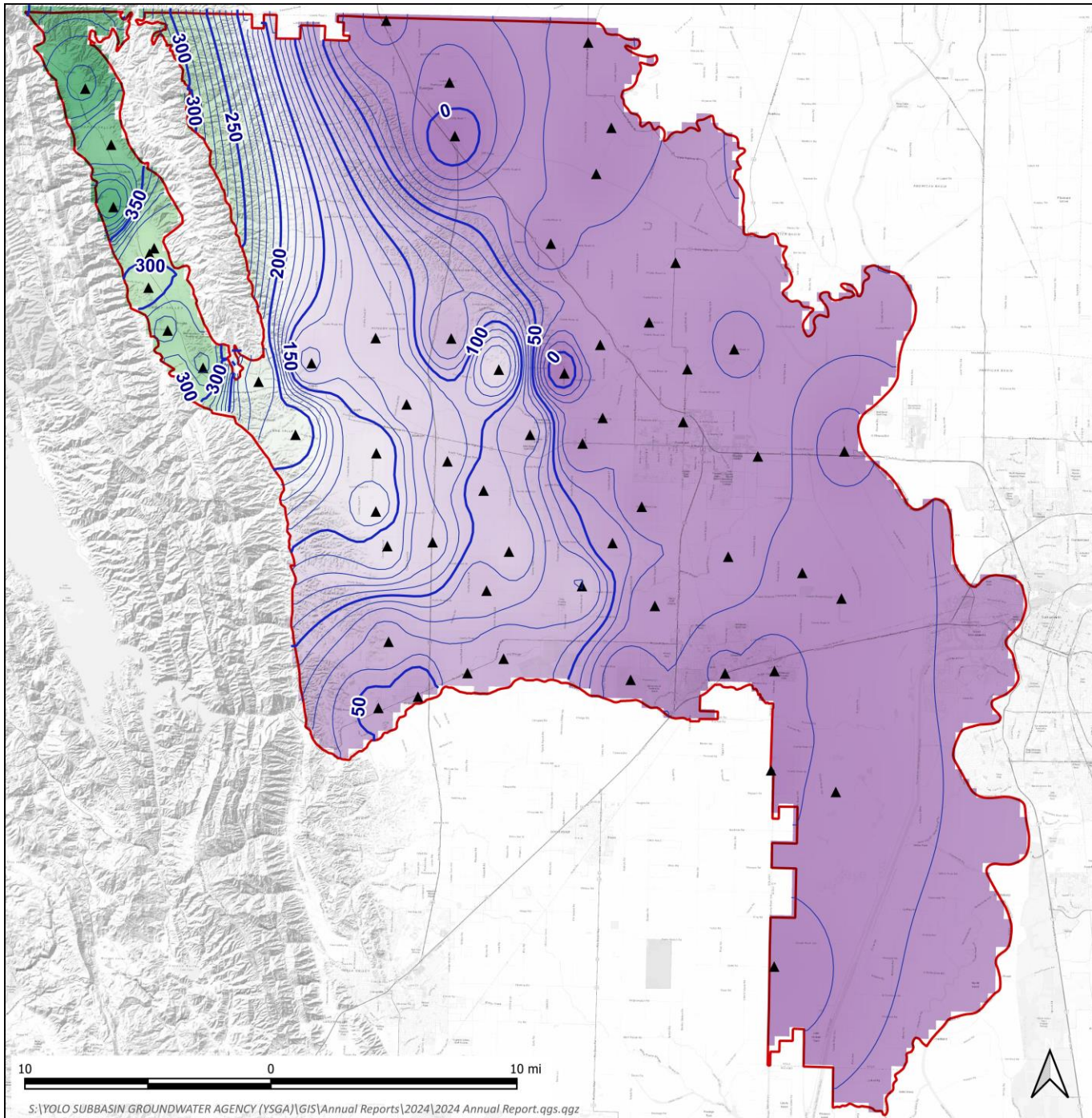
September 2022 Average Depth to Water ~ 62 feet

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

# *Draft* Water Year 2023 Annual Report



# GROUNDWATER ELEVATION SPRING 2023

Interpolated Groundwater Elevation  
Feet MSL

- ▲ Representative Monitoring Well
  - ▭ Yolo Subbasin Boundary
  - Major
  - Minor
- Groundwater Elevation
- +394 ft
  - 7 ft

CRS: NAD83 / California Albers



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**YOLO SUBBASIN GSP  
ANNUAL REPORT 2024**



# GROUNDWATER ELEVATION FALL 2023

Interpolated Groundwater Elevation  
Feet MSL

Representative Monitoring Well

Yolo Subbasin Boundary

Groundwater Elevation Contours

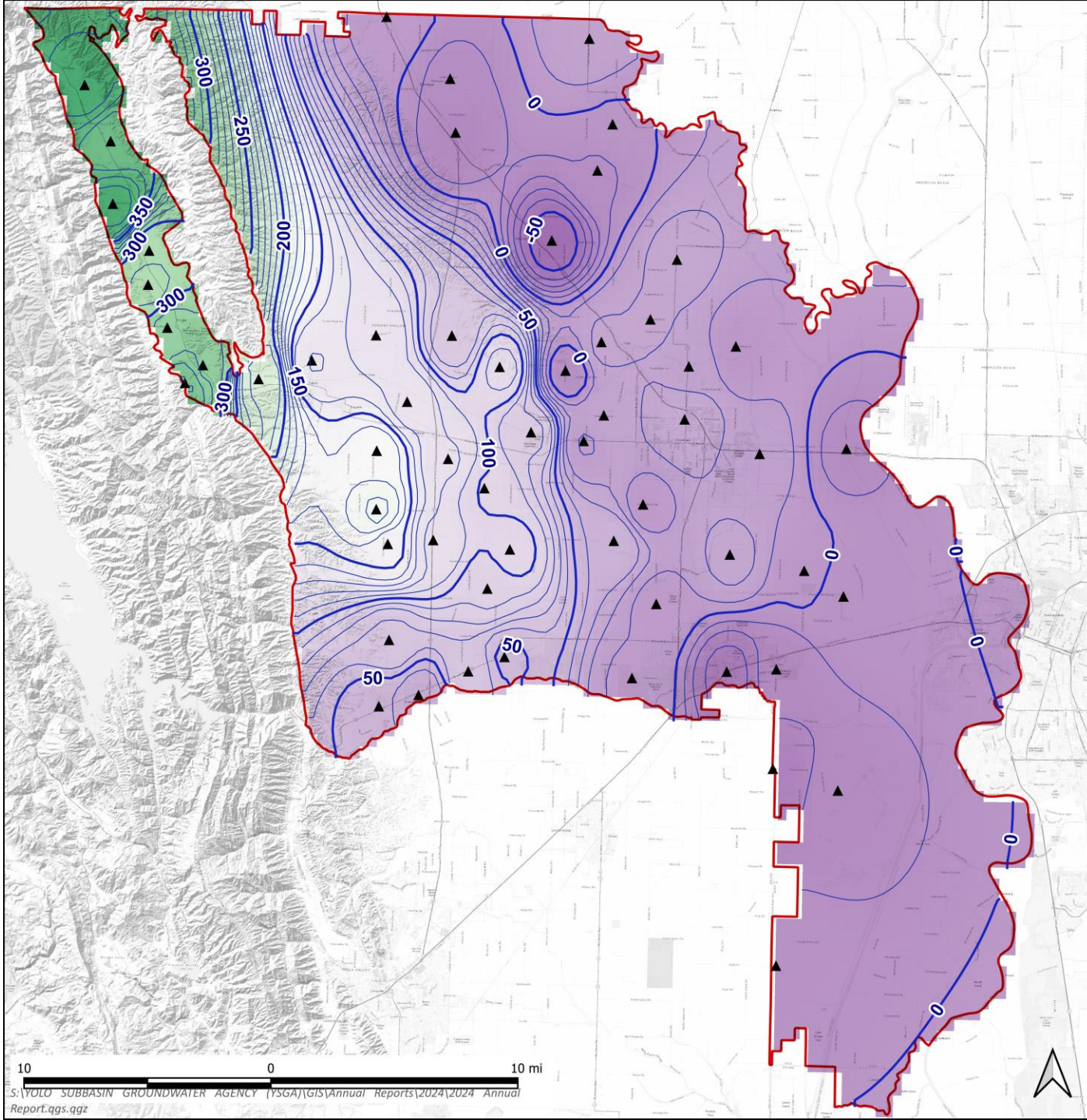
Minor

Major

Groundwater Elevation

386 ft

-56 ft



CRS: NAD83 / California Albers



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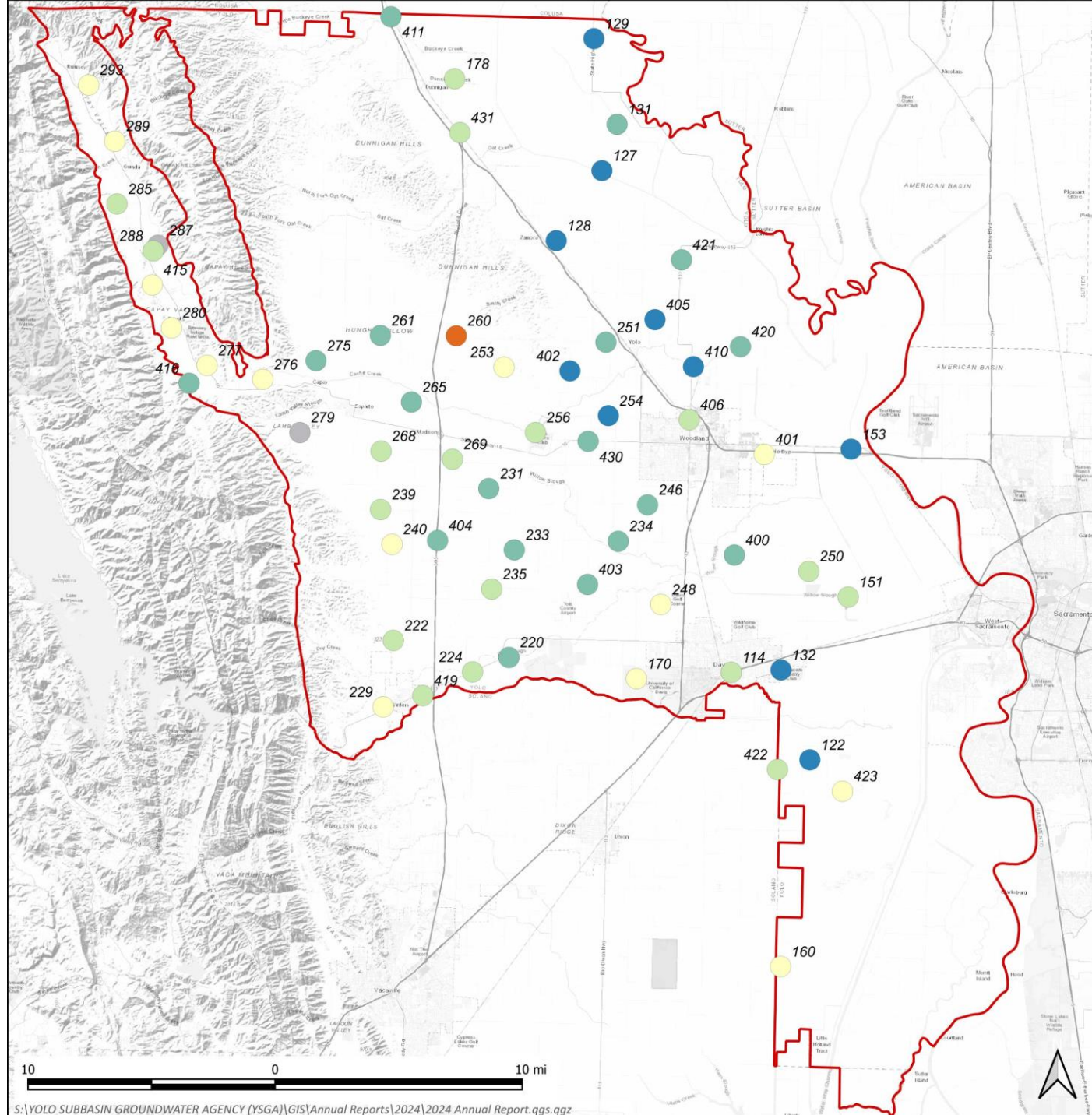
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# GROUNDWATER LEVELS MINIMUM THRESHOLD EVALUATION

Fall 2023 Representative Wells  
Groundwater Elevation



Yolo Subbasin Boundary

Management Areas

Distance to Minimum Threshold

Below MT

< 15 ft. above MT

15 - 30 ft. above MT

30 - 60 ft. above MT

> 60 ft. above MT

No Measurement

CRS: NAD83 / California Albers

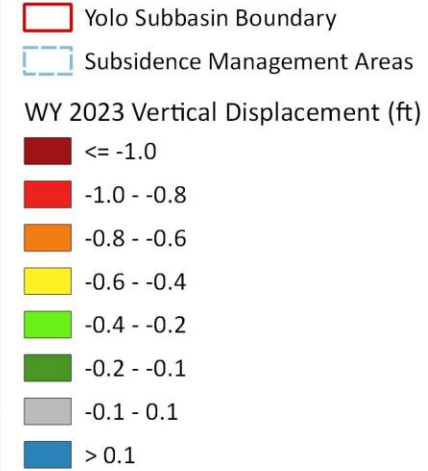
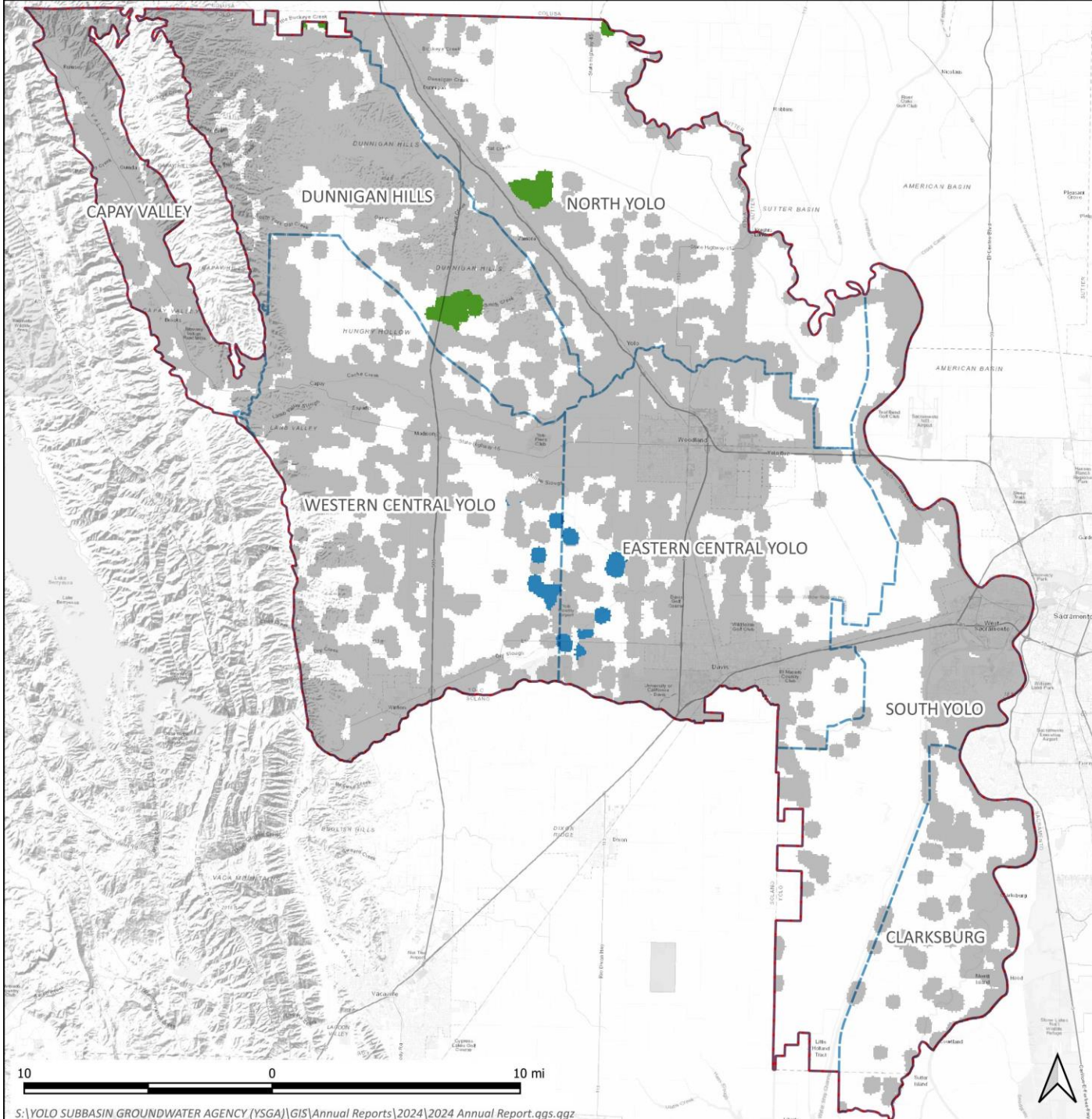


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GROUNDWATER AGENCY  
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# VERTICAL DISPLACEMENT WATER YEAR 2023

InSAR Vertical Displacement  
Oct. 2022 - Oct. 2023



SOURCE: DWR TreAltamira InSAR Data  
CRS: NAD83 / California Albers

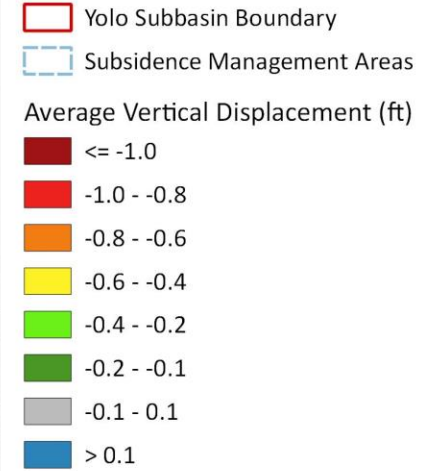
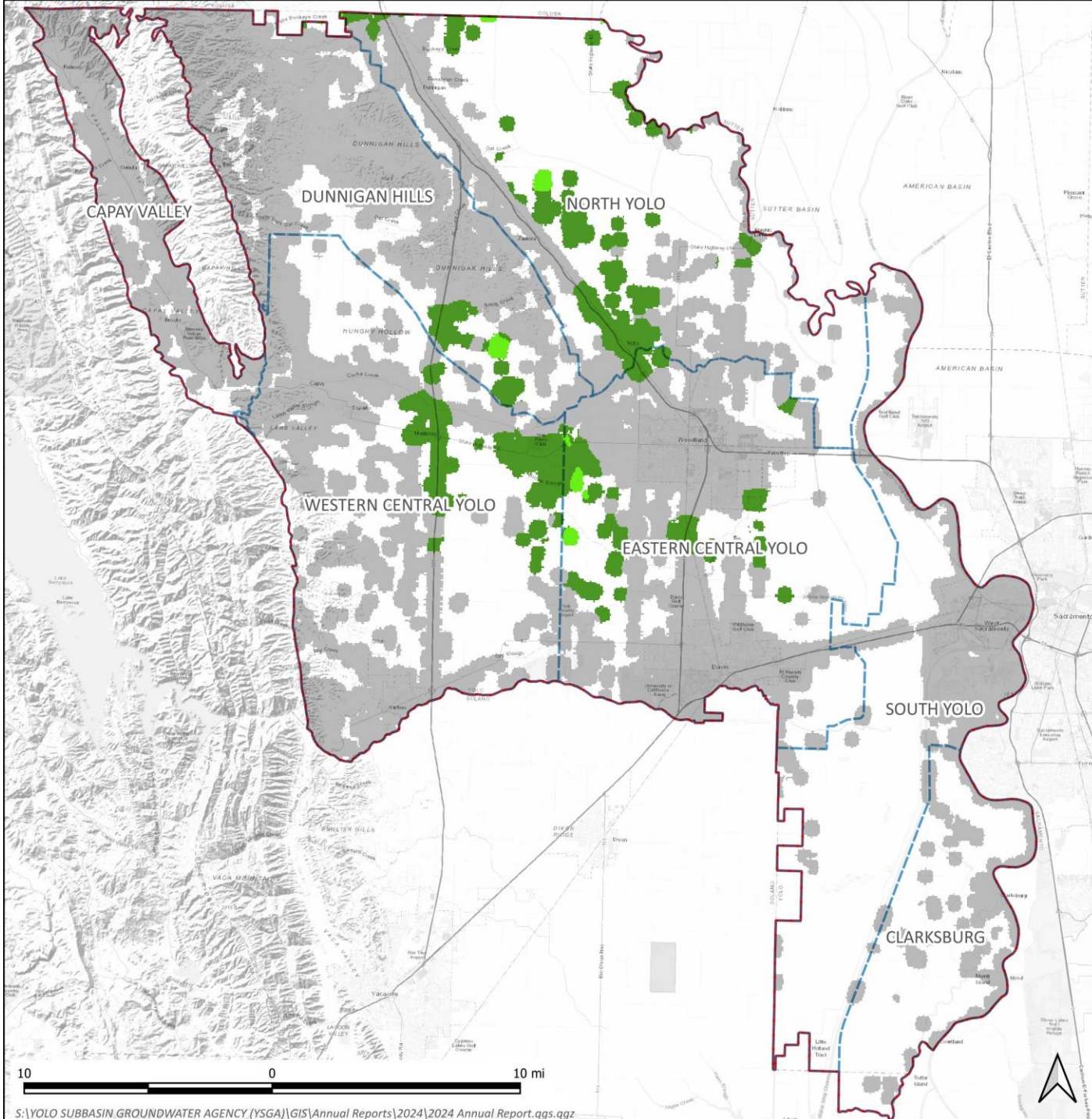


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# VERTICAL DISPLACEMENT 3 YEAR AVERAGE

InSAR Vertical Displacement  
Oct. 2020 - Oct. 2023



SOURCE: DWR TreAltamira InSAR Data  
CRS: NAD83 / California Albers

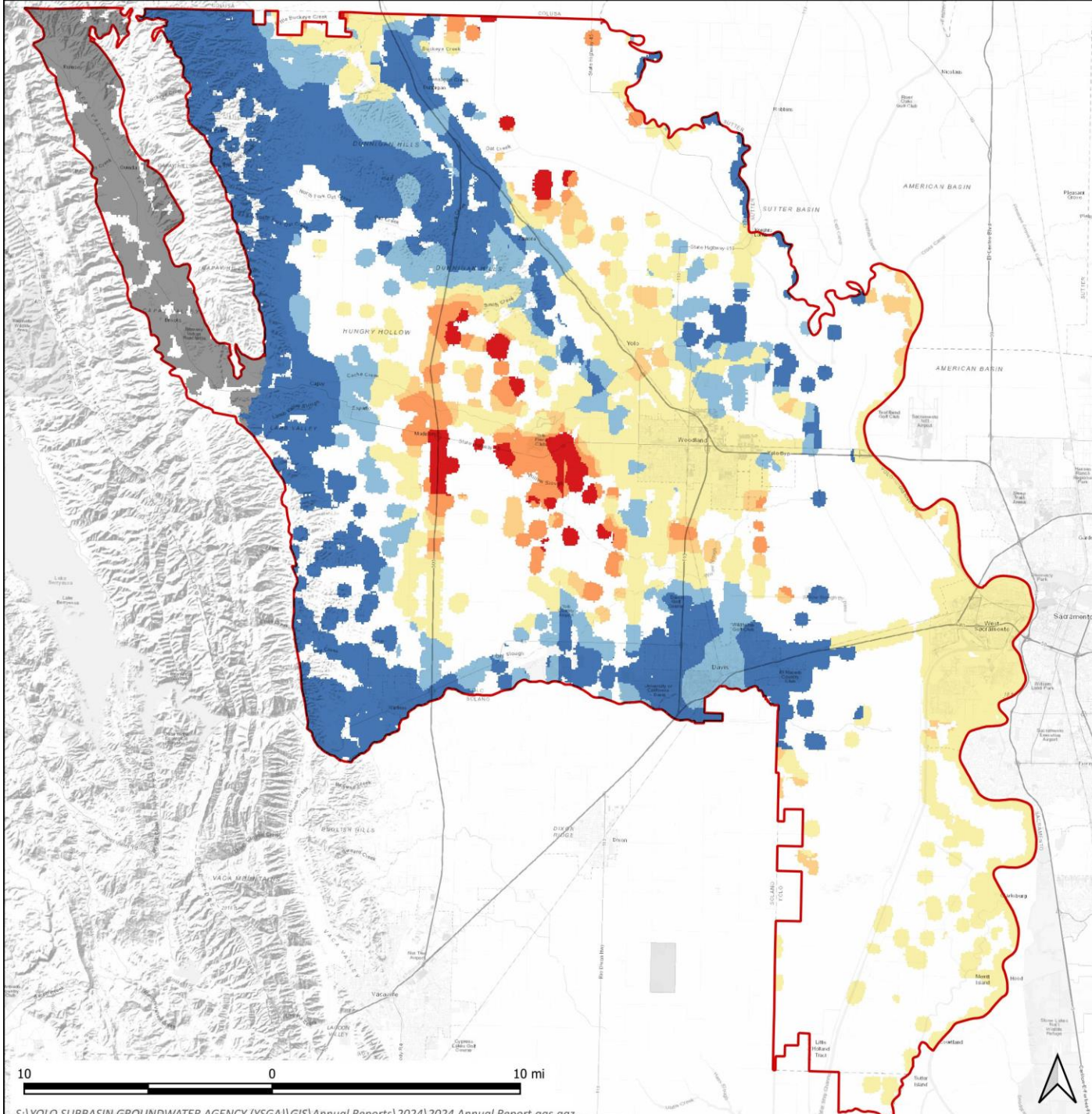











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# LAND SUBSIDENCE MEASURABLE OBJECTIVE EVALUATION

InSAR Vertical Displacement  
3-Year Average, WY 2021-2023



-  Yolo Subbasin Boundary
-  Subsidence Management Areas
- Distance to Measurable Objective  
Inches/year
-  > 1" below MO
-  0.5" to 1" below MO
-  0.25" to 0.5" below MO
-  Within 0.25" of MO
-  0.25 to 0.5" above MO
-  > 0.5" above MO
-  Capay Valley - no MO established

SOURCE: DWR TreAltamira InSAR Data  
CRS: NAD83 / California Albers

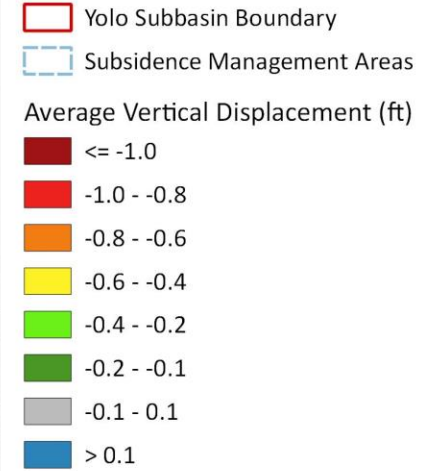
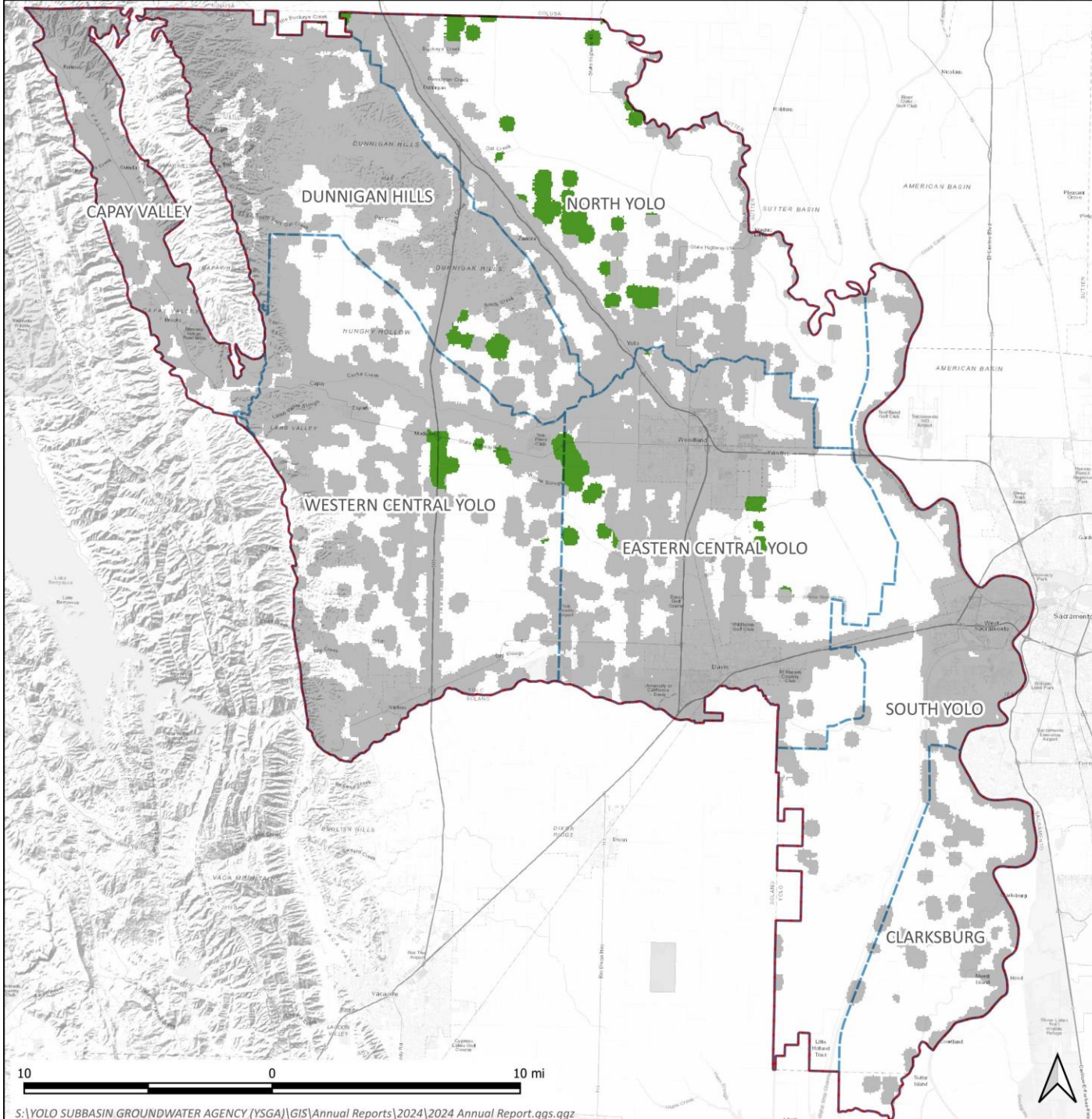


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# VERTICAL DISPLACEMENT 5 YEAR AVERAGE

InSAR Vertical Displacement  
Oct. 2018 - Oct. 2023



SOURCE: DWR TreAltamira InSAR Data  
CRS: NAD83 / California Albers

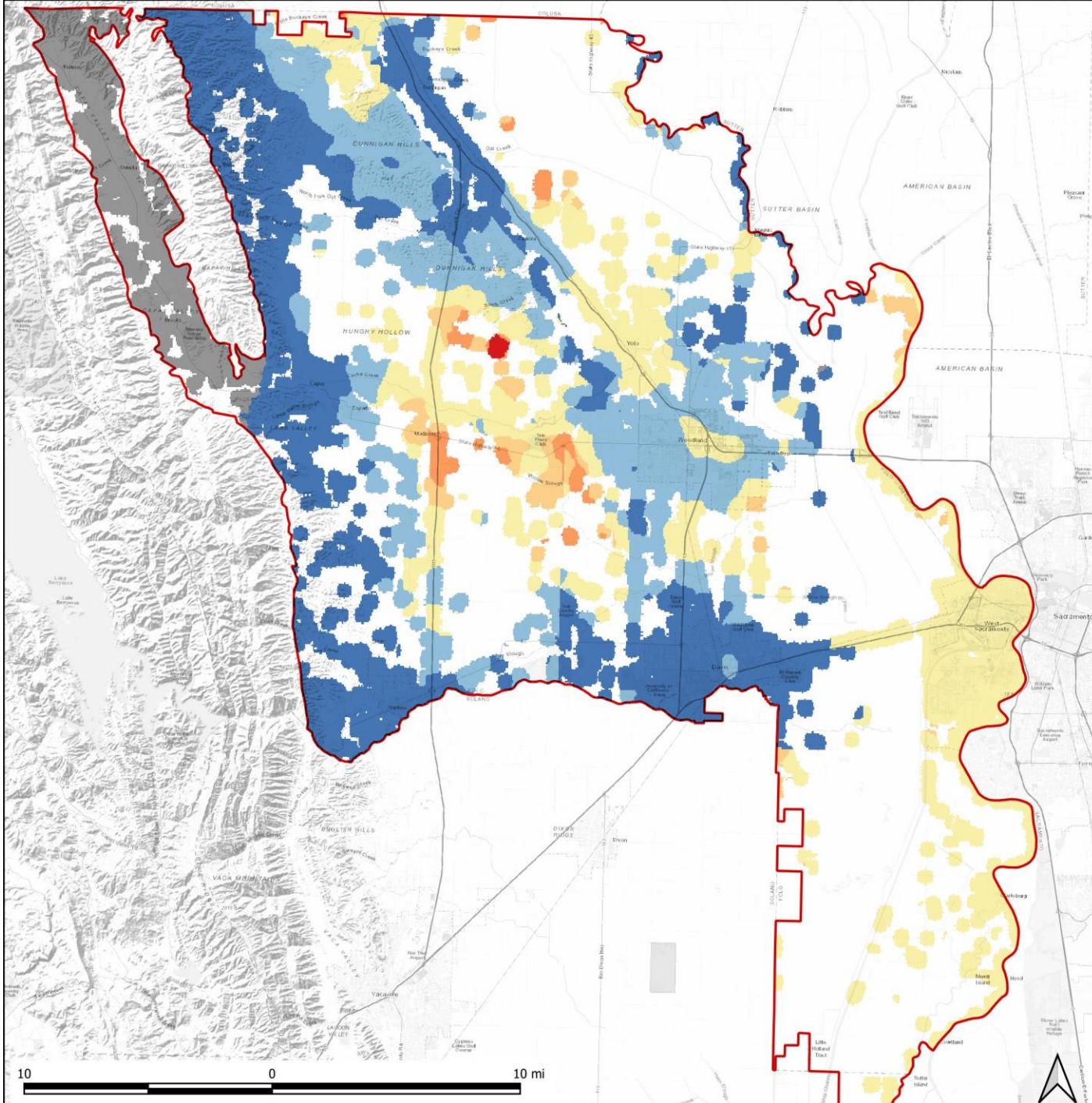


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# LAND SUBSIDENCE MINIMUM THRESHOLD EVALUATION

InSAR Vertical Displacement  
5-Year Average, WY 2019-2023



Yolo Subbasin Boundary

Subsidence Management Areas

Distance to Minimum Threshold  
Inches/year

> 1" below MT

0.5" to 1" below MT

0.25" to 0.5" below MT

Within 0.25" of MT

0.25 to 0.5" above MT

> 0.5" above MT

Capay Valley - no MT established

SOURCE: DWR TreAltamira InSAR Data  
CRS: NAD83 / California Albers

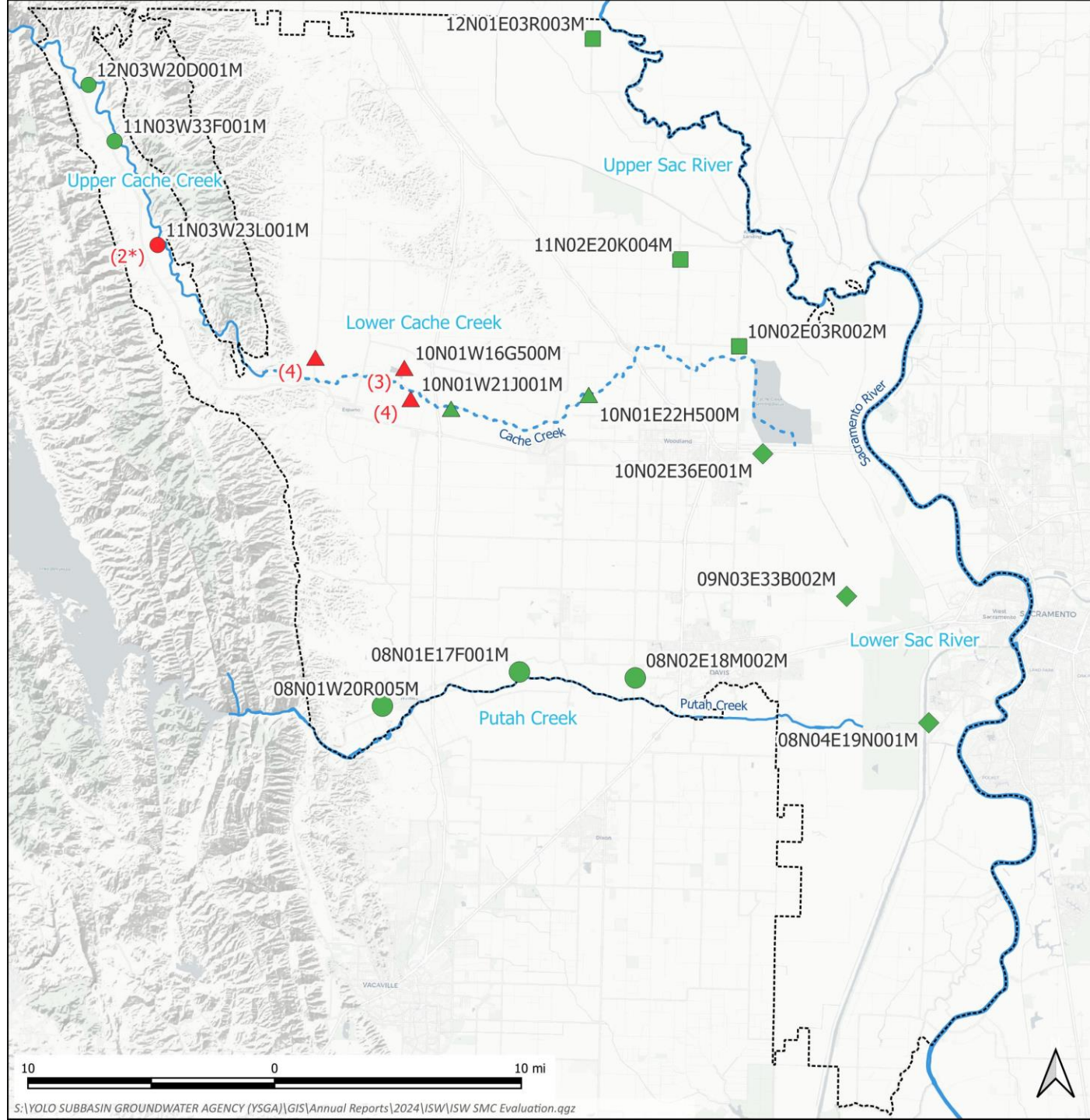


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GROUNDWATER AGENCY  
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# INTERCONNECTED SURFACE WATERS MINIMUM THRESHOLD EVALUATION

Fall 2023 Groundwater Elevations



--- Yolo Subbasin Boundary

Minimum Threshold Status

■ Exceeding (# of consecutive years)

■ Not Exceeding

ISW Management Zone Wells

▲ Lower Cache Creek

○ Upper Cache Creek

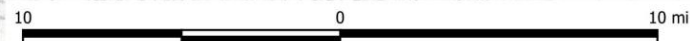
◇ Lower Sac River

□ Upper Sac River

○ Putah Creek

\*11N03W23L001M was not measured in Fall 2023

CRS: NAD83 / California Albers

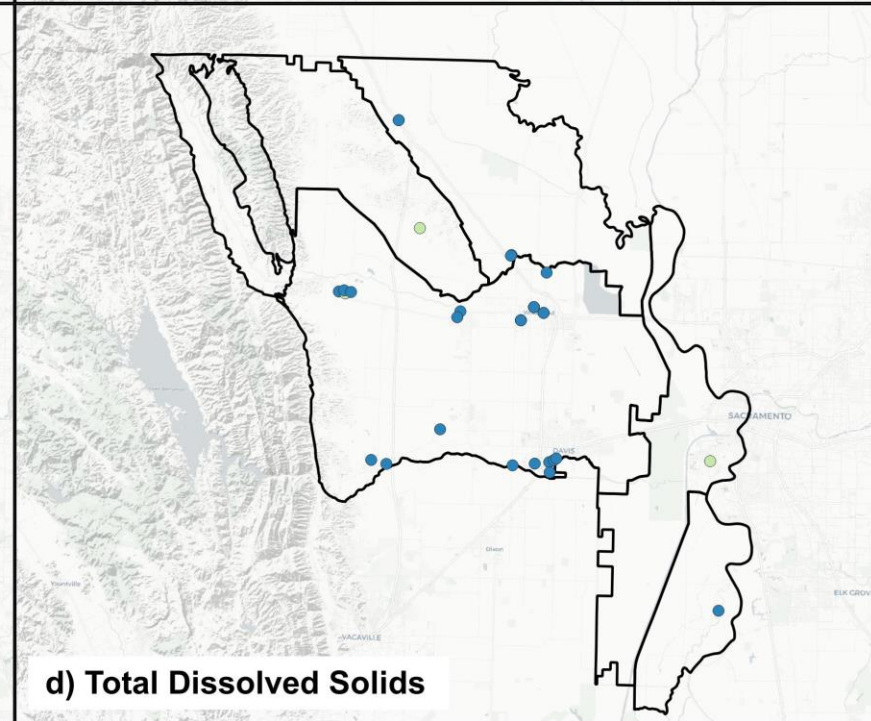
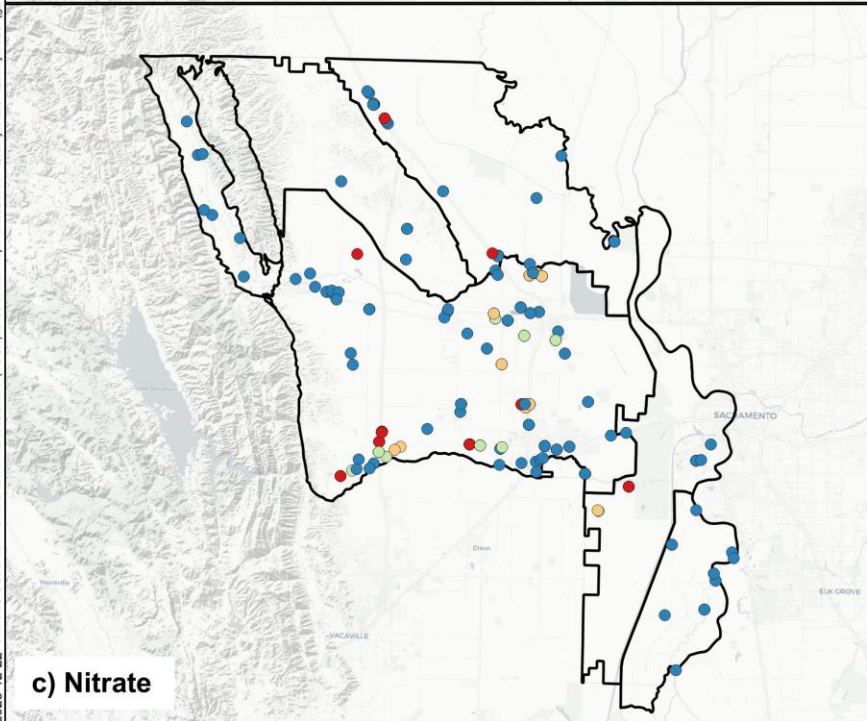
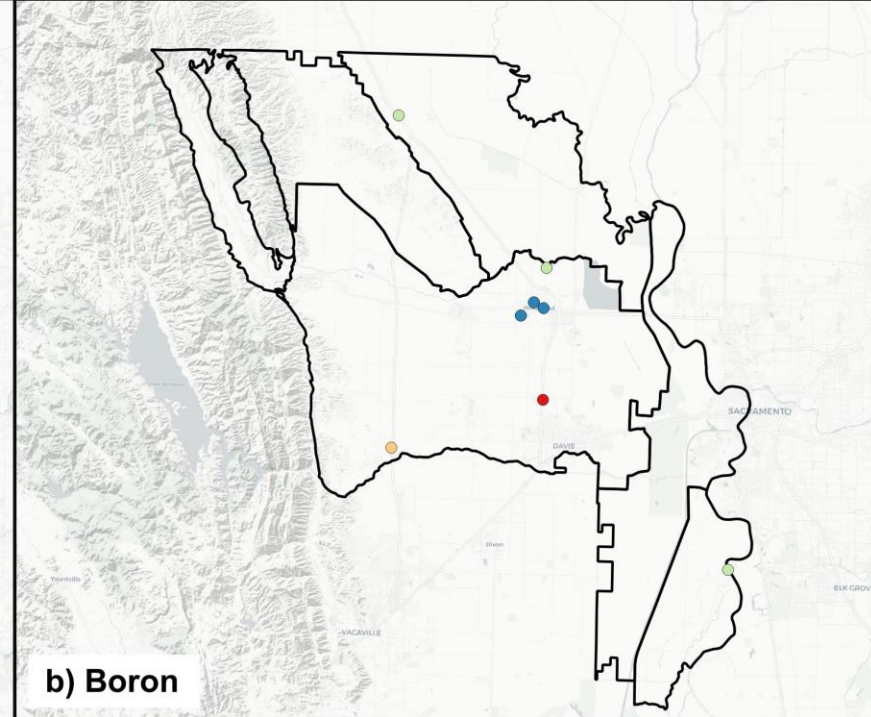
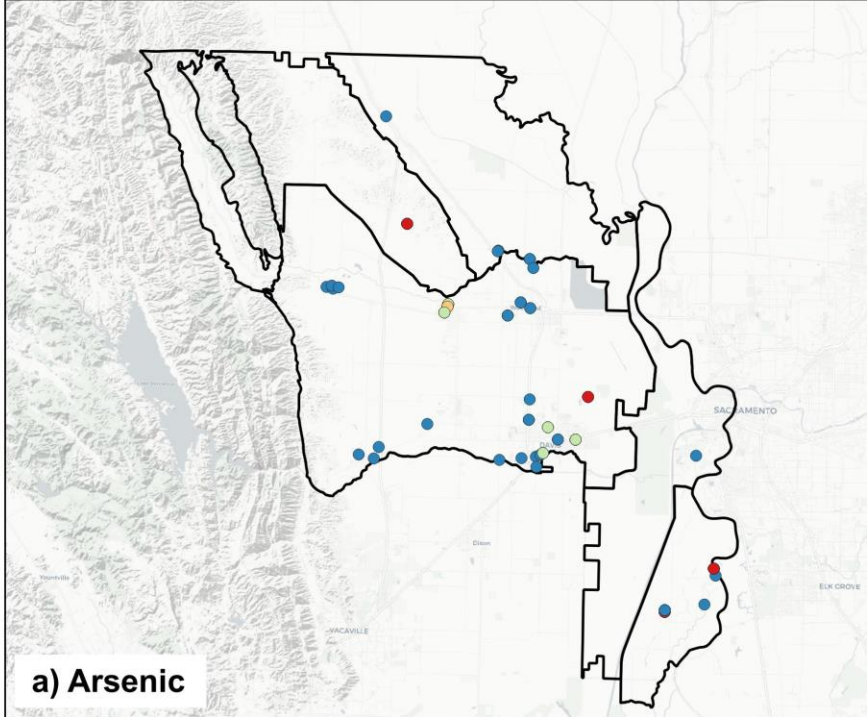




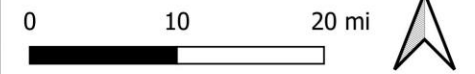
# WATER QUALITY

Arsenic, Boron, Nitrate, and TDS  
Measurements taken in 2023

- |                             |                         |
|-----------------------------|-------------------------|
| a) Arsenic, $\mu\text{g/L}$ | b) Boron, $\text{mg/L}$ |
| ● 0 - 5                     | ● 0 - 0.1               |
| ● 5 - 7.5                   | ● 0.1 - 0.4             |
| ● 7.5 - 10                  | ● 0.4 - 1               |
| ● >10                       | ● >1                    |
| c) Nitrate, $\text{mg/L}$   | d) TDS, $\text{ppm}$    |
| ● 0 - 5                     | ● 0 - 500               |
| ● 5 - 7.5                   | ● 500 - 750             |
| ● 7.5 - 10                  | ● 750 - 1000            |
| ● >10                       | ● >1000                 |
- YSGA Management Areas



SOURCE: CA SWRCB GAMA  
Groundwater Information System  
Dataset  
CRS: NAD83 / California Albers



YOLO SUBBASIN  
GROUNDWATER AGENCY  
**YOLO SUBBASIN GSP  
ANNUAL REPORT 2024**

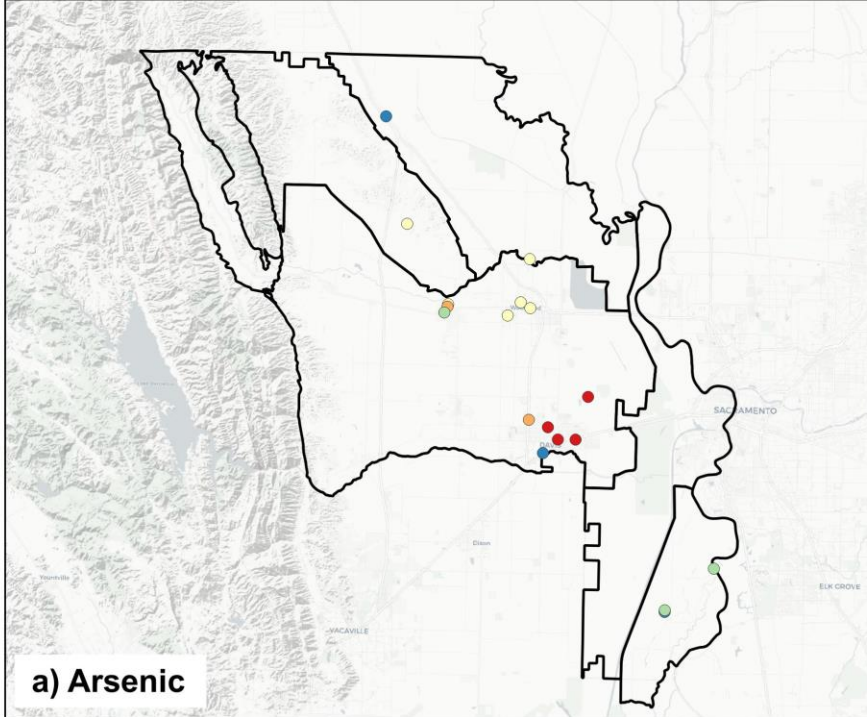
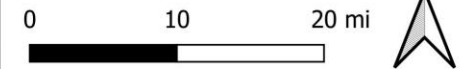


# WATER QUALITY, PERCENT CHANGE

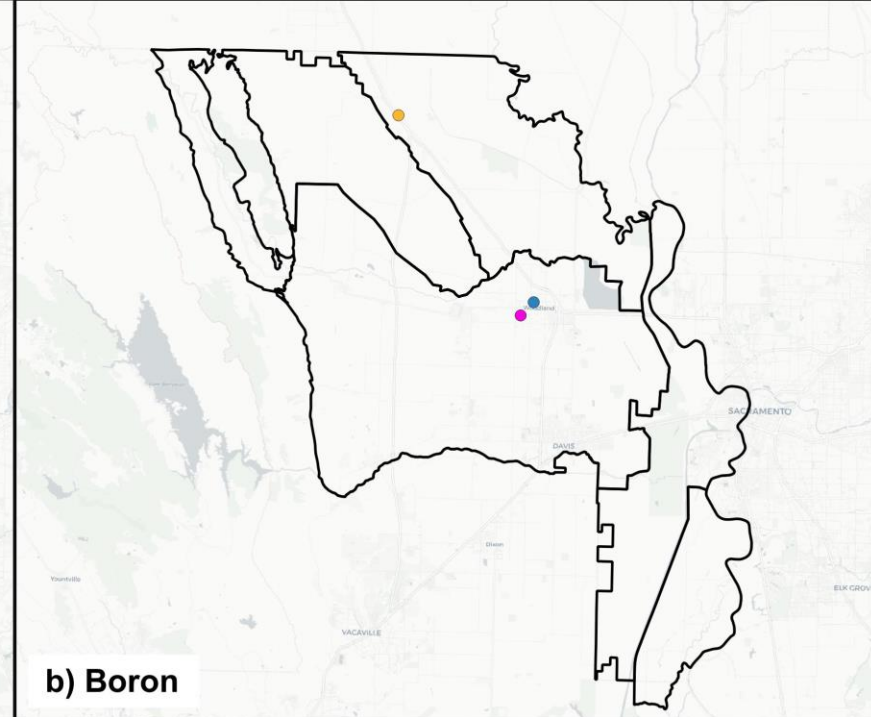
Percent change in Arsenic, Boron, Nitrate, and TDS measurements taken between 2021-2023

- a) Arsenic % change
    - -35% to -25%
    - -25% to 0%
    - no change
    - 0 to +25%
    - +25% to +60%
  - b) Boron % change
    - -71% to -5%
    - -5% to 0%
    - 0% to +5%
    - 340%
  - c) Nitrate % change
    - -75% to -25%
    - -25% to -5%
    - -5% to +5%
    - +5% to +25%
    - +25% to +100%
    - >100%
  - d) TDS % change
    - -63% to -25%
    - -25% to -5%
    - -5% to +5%
    - +5% to +25%
    - +25% to +48%
- YSGA Management Areas

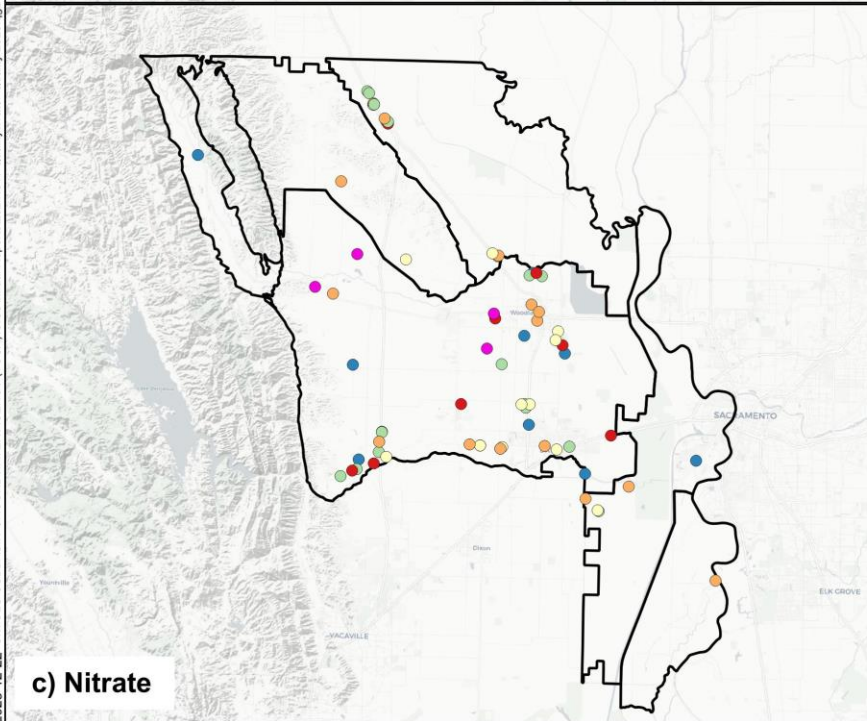
SOURCE: CA SWRCB GAMA  
Groundwater Information System  
Dataset  
CRS: NAD83 / California Albers



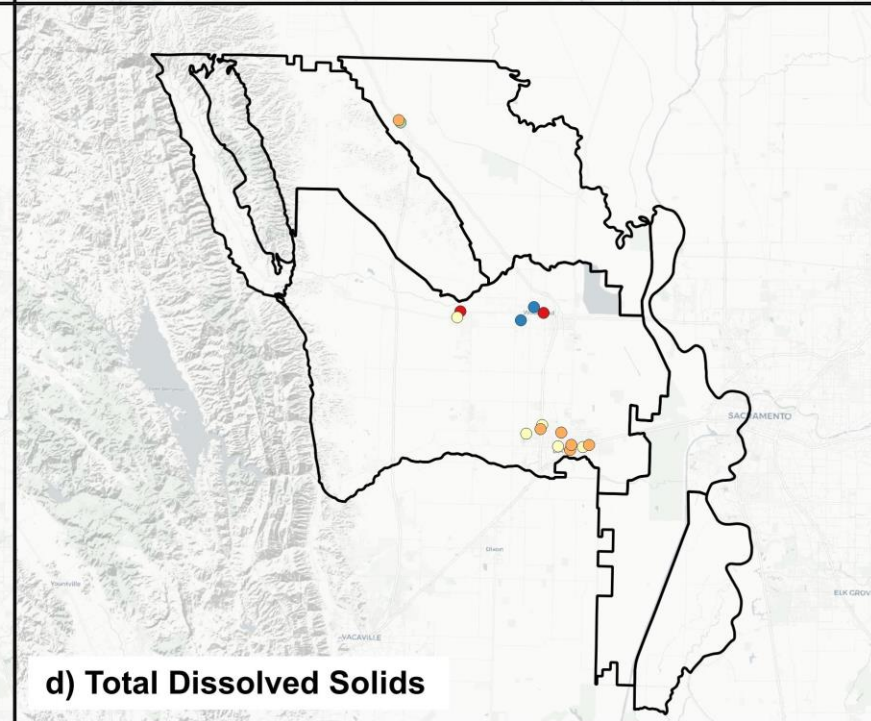
**a) Arsenic**



**b) Boron**



**c) Nitrate**

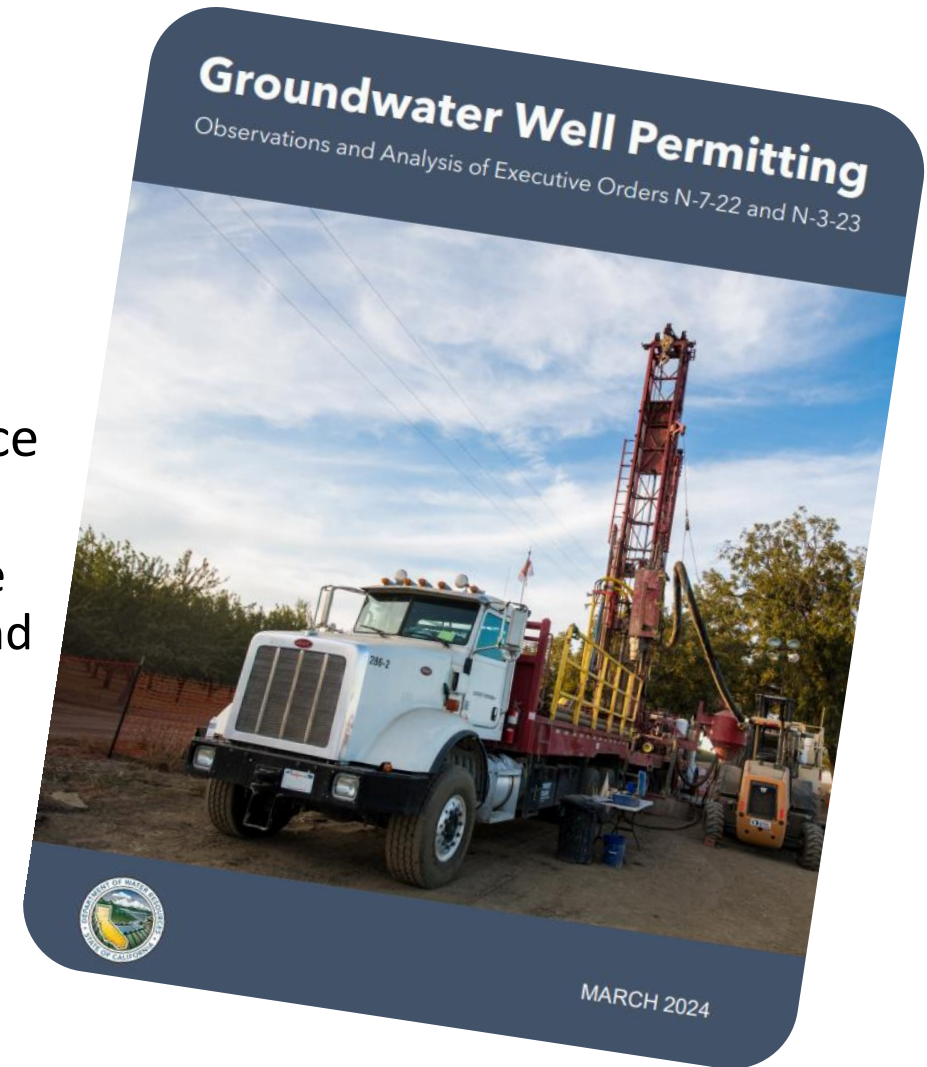


**d) Total Dissolved Solids**



# Groundwater Well Permitting: DWR Recommendations

- Statutory provisions should be enacted that provides public disclosure of applications
- Statutorily set well spacing and well depth standards to reduce future impacts to community supplies and domestic wells
  - The prohibition of new well permits in areas where subsidence impacts are occurring will minimize or eliminate subsidence and impacts to critical infrastructure



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- 6. PRESENTATION - GSA Authority**
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# GSA AUTHORITY

## Tools, Rules & Legal Principles for the Implementation of a Groundwater Sustainability Plan

Rebecca R. A. Smith  
Downey Brand LLP  
[rsmith@downeybrand.com](mailto:rsmith@downeybrand.com)



# Fundamental Principles

## ***Sustainability***

Basins "must be managed sustainably for long-term reliability and multiple economic, social and environmental benefits for current and future beneficial uses." §113

## ***No alteration of water rights***

"Nothing in this part, or in any groundwater management plan adopted pursuant to this part, determines or alters surface water rights or groundwater rights under common law or any provision of law that determines or grants surface water rights." § 10720.5(b)

## ***Local Primacy, with State backstop***

Management "is best achieved locally through the development, implementation, and updating of plans and programs based on the best available science." §113.

# The Regulatory Framework

## Step 1: Establishment of Groundwater Sustainability Agency

- GSAs must be formed across the basin by June 30, 2017.
- If no GSA by June 30, 2017, County is the GSA by default.
- If no GSA or alternative plan by deadline, basin is at risk of being designated "probationary" by SWRCB

## Step 2: Adoption of a Groundwater Sustainability Plan

- Each medium/high priority basin must be covered by a GSP by the statutory deadline (2020/2022)
- Basins may be covered by multiple coordinated GSPs
- If no GSP or approved alternative covers the entire basin, basin is at risk of being designated "probationary" by SWRCB

## Step 3: Attainment of Sustainability Goal

- Basin must be sustainably managed within 20 years of plan implementation
- Plans must be designed to achieve and maintain their designated sustainability goals over a 50-year planning and implementation horizon

# Boiling Down the Requirements

Basins subject to SGMA...

- ▶ Must be managed under a GSP or coordinated GSPs;
- ▶ That are implemented by one or more GSAs;
- ▶ To achieve the sustainability goals of the basin

...by the statutory deadline.

# Role of the Groundwater Sustainability Agency

- ▶ The GSA is responsible for developing and implementing the GSP for the basin.
  - ▶ Sustainability Goals
  - ▶ Minimum Thresholds
  - ▶ Measurable Objectives

# Implementing the GSP

The GSP sets a sustainability goal that:

1. Culminates in the absence of undesirable results in the basin by 2040 (critically overdrafted) or 2042 (medium/high priority basins).
2. Maintains sustainability in the basin through the planning and implementation horizon.

# Implementing the GSP

Through the GSP, the GSA must establish **Measurable Objectives**, including interim milestones in increments of 5 years to:

- Achieve the sustainability goal within the statutory deadline.
- Continue to manage the basin sustainably over the planning and implementation horizon.

# Implementing the GSP

GSP sets minimum thresholds for certain sustainability indicators:

- Chronic lowering of groundwater levels
- Reduction of groundwater storage
- Seawater Intrusion
- Degraded water quality
- Land subsidence
- Depletion of interconnected surface water

Minimum thresholds quantify groundwater conditions at a monitoring site. When the minimum threshold for a sustainability indicator is exceeded, an undesirable result occurs.

→ See GSP Regs §§ 354.22-28; Water Code § 10721(w)

# SGMA's Tools for GSAS

## Two Important Caveats:

- The GSA's authorities are meant to be exercised in coordination with other local water and land use planning efforts.
- SGMA is an addition to, not a limitation on, the authority granted to a local agency under any other law:
  - *The local agency may use the local agency's authority under any other law to apply and enforce any requirements of this part, including, but not limited to, the collection of fees. [Water Code § 10726.8(a)]*



# SGMA's Tools for GSAs

- ▶ Investigatory authority to prepare plan, and to monitor compliance and enforcement. §10725.4
- ▶ May require registration of groundwater extraction facilities, and may impose measurement requirements. §§ 10725.6, 10725.8 (*but see de minimus exception*)
- ▶ May impose spacing requirements on new groundwater well construction and impose "reasonable operating regulations on existing groundwater wells to minimize well interference, including requiring extractors to operate on a rotation basis." §10726.4(a)(1)
- ▶ May control groundwater extractions by "regulating, limiting, or suspending" extractions from individual wells or wells in the aggregate. §10726.4(a)(2)

# SGMA's Tools for GSAs

- ▶ Investigatory authority to prepare plan, and to monitor compliance and enforcement. §10725.4
- ▶ May require that every groundwater extraction facility be measured by a device satisfactory to the GSA (§10725.9(a))
- ▶ May require registration of groundwater extraction facilities, and may impose measurement requirements. §§ 10725.6, 10725.8 (*but see de minimus exception*)
- ▶ May impose spacing requirements on new wells and may impose "reasonable operating regulations on existing groundwater wells to minimize well interference, including requiring extractors to operate on a rotation basis." (§10726.4(a)(1))

# SGMA's Tools for GSAs

- ▶ May regulate groundwater extractions from individual groundwater wells or extractions from groundwater wells in the aggregate. (§10726.4(a)(2))
- ▶ May regulate "construction of new groundwater wells, enlargement of existing groundwater wells, or reactivation of abandoned groundwater wells, or otherwise establish[] groundwater extraction allocations." (§10726.4(a)(2))
- ▶ May regulate groundwater extractions from individual groundwater wells or extractions from groundwater wells in the aggregate. (§10726.4(a)(2))
- ▶ May impose fees, including:
  - ▶ Fees to develop or implement the plan Water Code § 10730, 10730.2
  - ▶ (Meter installation cost recovery fee - Water Code § 10725.8(b))
  - ▶ Fees on other state and local governments - Water Code § 10726.8(d)
  - ▶ Fees and penalties for violation of GSA ordinances

# GSA Verifications: Another Piece of the Puzzle

The Executive Orders require that, before a well permit can issue (for covered applications), the GSA must issue a written verification 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”

**GSA does not waive its enforcement authority/responsibility under the GSP by issuing a point-in-time verification.**

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Questions?



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# Consideration: 2-Tier Well Permit Review Procedures

## a) **Update on *Draft* 2-Tier Well Permit Review Process**

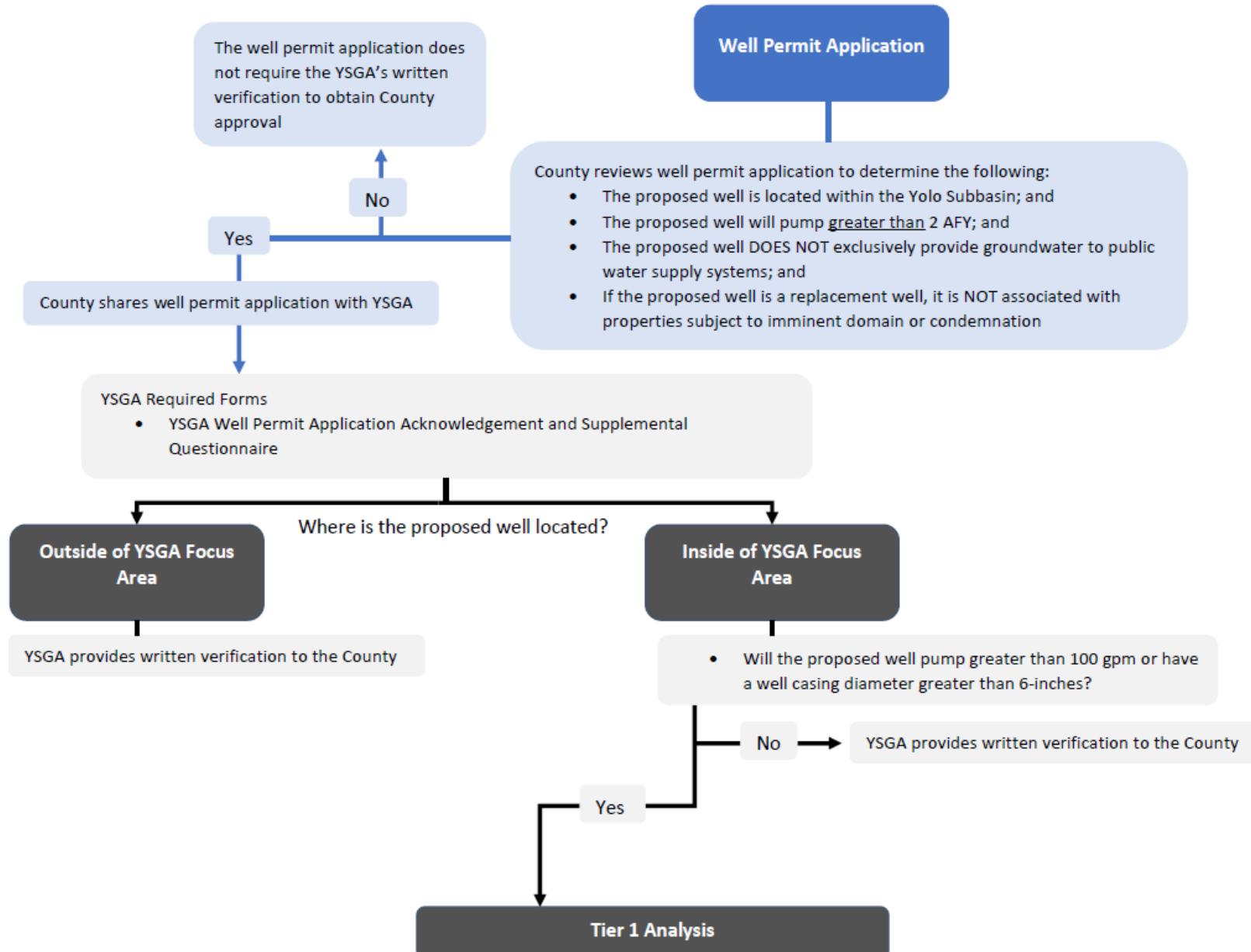
b) Approve Updated Well Permitting Procedures and Public Comment Period for Draft Technical Memorandum and Focus Areas Map

# Background

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- YSGA Board direction to YSGA staff on January 22, 2024
  - Draft the TM for the 2-tiered evaluation approach and outline Tier 1 and Tier 2 requirements
  - Clearly delineate the reasoning for an application to move from Tier 1 to 2
  - Authorized DCPC to proceed with finalizing the Well Permit Review Procedures and providing clearance for YSGA staff to post the TM for public review

# Tiered Well Application Review Process





# Tiered Well Application Review Process



## Tier 1 Analysis

### YSGA Required Forms

- Tier 1 Analysis Form

Determine if any of the following are identified of concern:

- Anticipated impacts on groundwater levels at neighboring wells and groundwater storage.
- Anticipated conjunctive use.
- Anticipated impacts on nearby interconnected surface waters.
- Anticipated impacts on Total Dissolved Solids (TDS) concentrations in the target aquifer(s).
- Anticipated impacts to land subsidence

Yes

No

YSGA provides written verification to the County

## Tier 2 Analysis

# Tiered Well Application Review Process

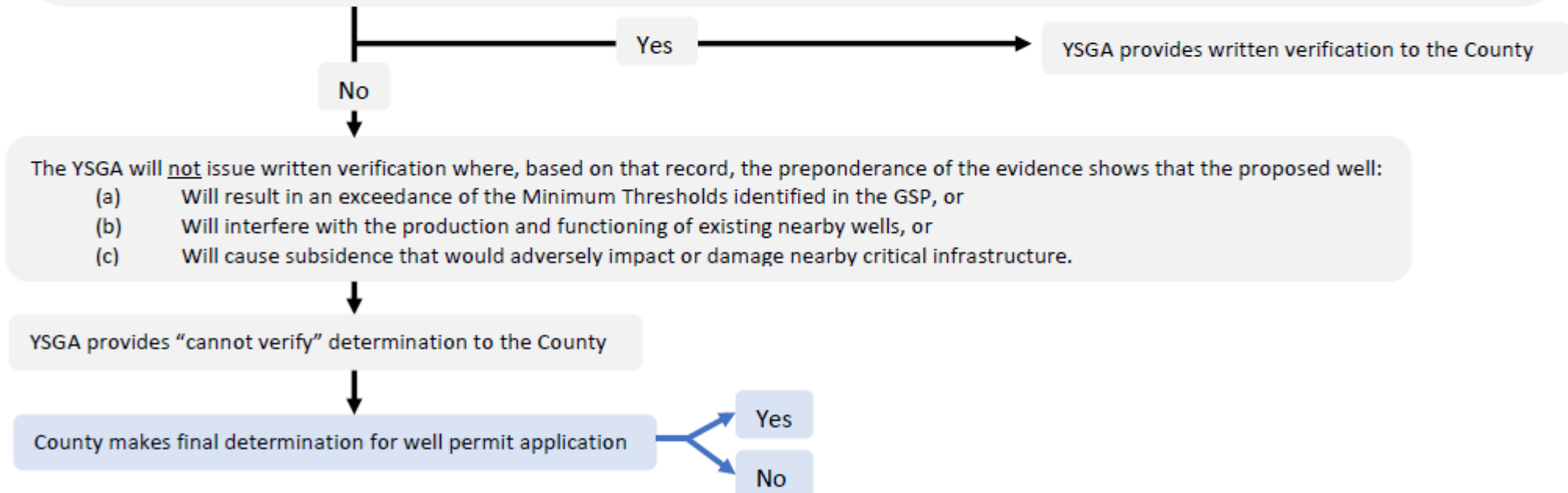
## Tier 2 Analysis

YSGA Required Forms/Reports Completed by PG or CHG licensed in California

- Tier 2 Analysis Form and Hydrogeologist Report

### Review Process

- YSGA will review the Tier 2 Analysis Form and Hydrogeologist Report to check that concerns identified in the Tier 1 Analysis have been fully addressed and all required information is provided.
- Evaluate the findings of the hydrogeologist report to verify the following is true:
  - The well or alteration to an existing well is not inconsistent with any sustainable management plan in the adopted YSGA GSP.
  - The well or alteration to an existing well will not decrease the likelihood of achieving a sustainability goal for the basin.
  - The well or alteration to an existing well will not interfere with the production and functioning of existing nearby wells.
  - The well or alteration to an existing well will not cause subsidence that would adversely impact or damage nearby infrastructure.

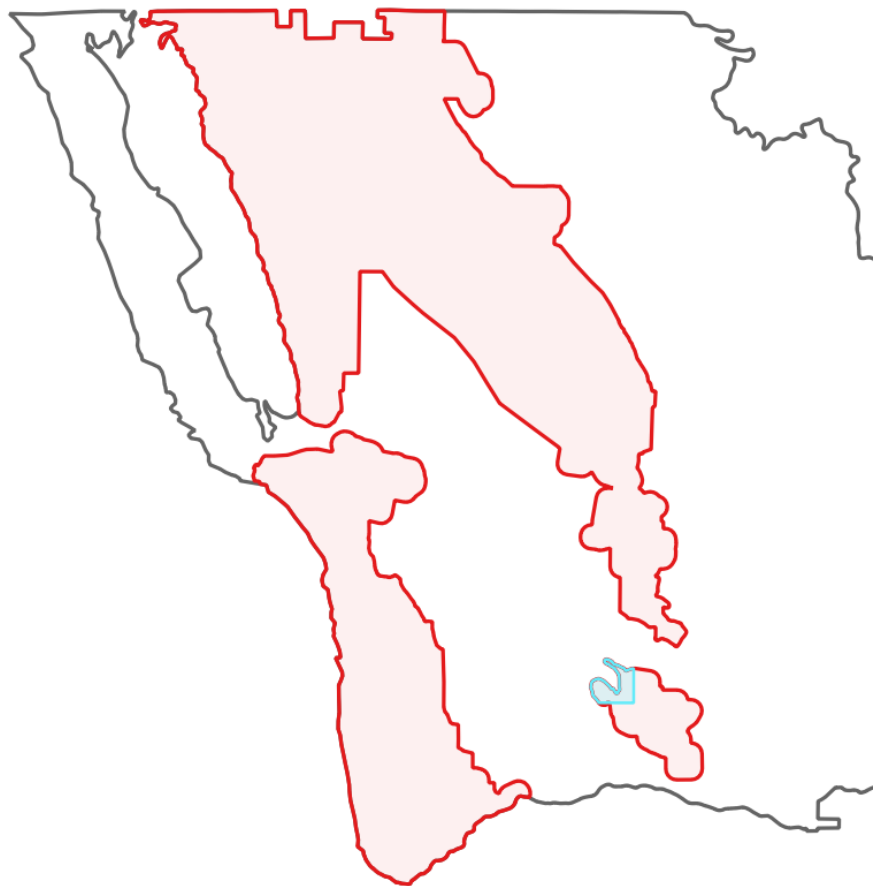




# Tier 1 Analysis

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- Tier 1 Analysis Form to be completed by applicant
- YSGA determines if any of the following concerns:
  - Anticipated impacts on groundwater levels at neighboring wells and groundwater storage
    - Will factor in anticipated conjunctive use
  - Anticipated impacts on nearby interconnected surface waters
  - Anticipated impacts on Total Dissolved Solids (TDS) concentrations in the target aquifer(s)
  - Anticipated impacts to land subsidence

# Hypothetical Example 1 - Central Yolo



 Hypothetical Example Area  
 Focus Areas



# Hypothetical Example 1 - Central Yolo

- Hypothetical well located within the blue zone
- 400 feet deep with 10 in. casing
- Applicant proposes to pump 400 GPM
- Property has historically used groundwater
- Connected to surface water supplies via YCFC&WCD

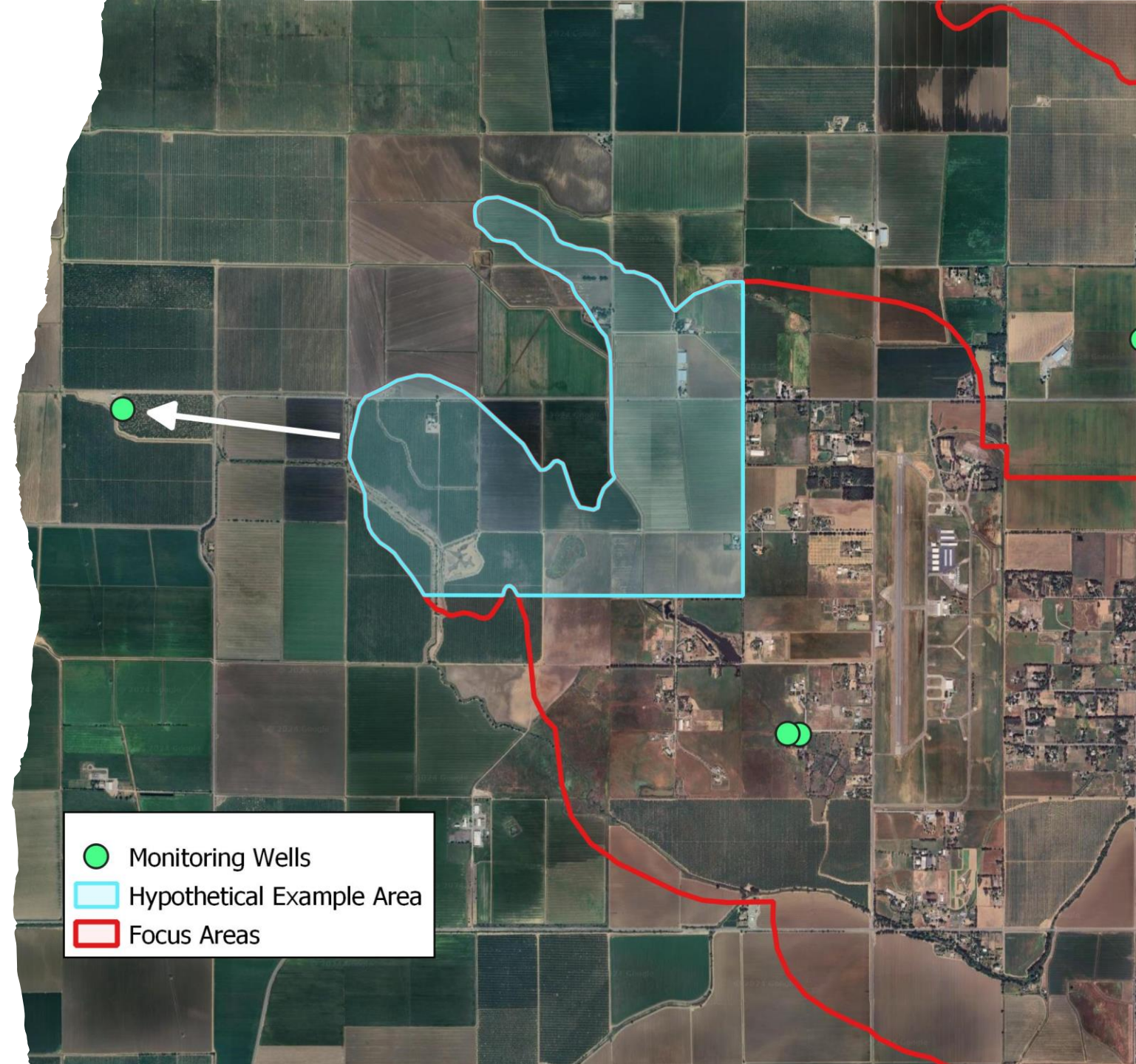


 Hypothetical Example Area  
 Focus Areas



# Hypothetical Example 1 - Tier 1 Analysis Results

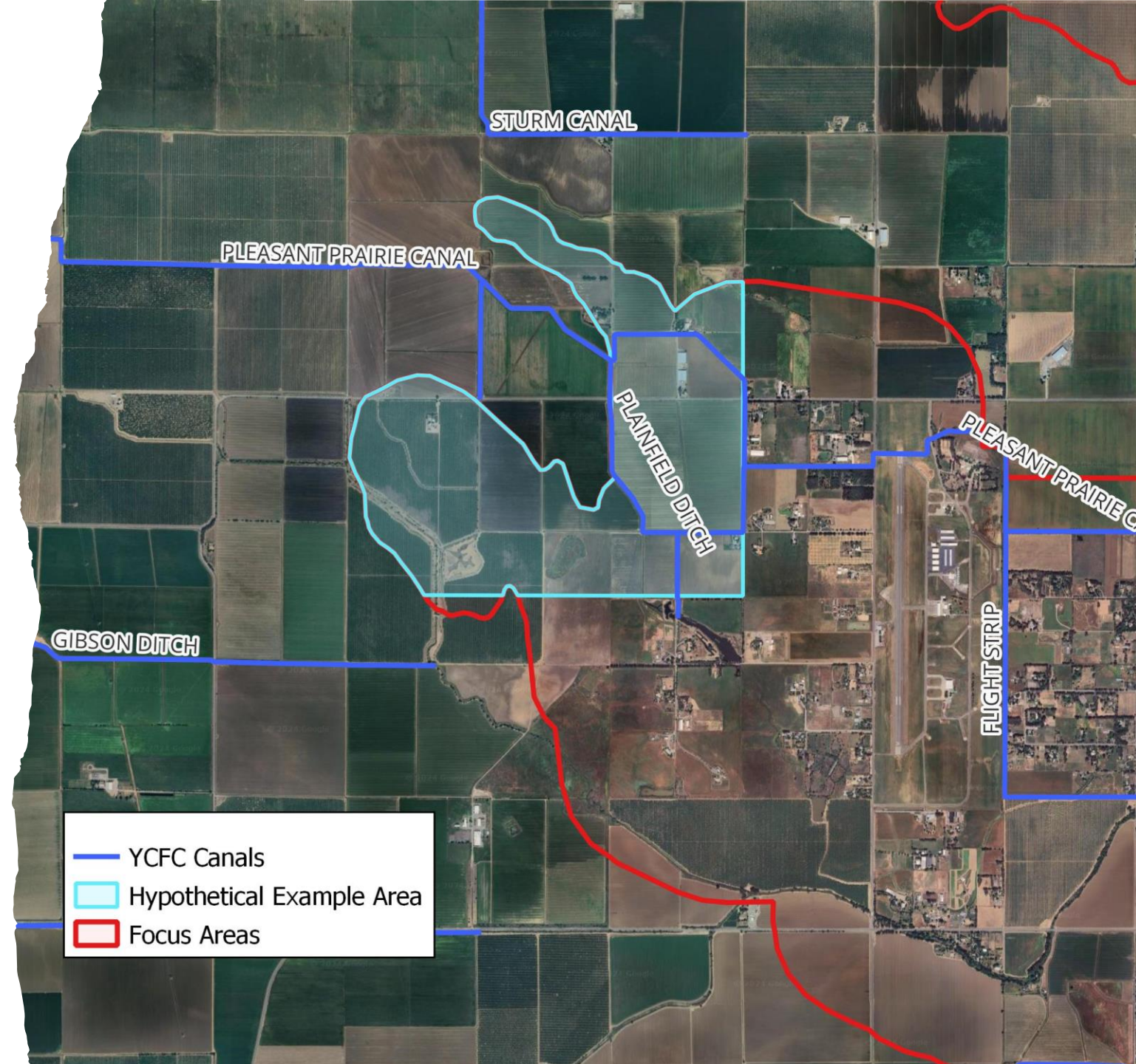
- Groundwater levels: Operation of the new well will not lower nearby RMWs below the minimum threshold





# Hypothetical Example 1 - Tier 1 Analysis Results

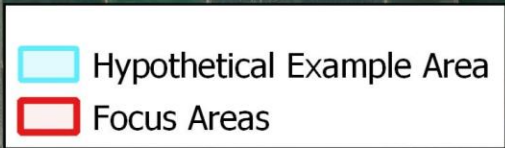
- Conjunctive use: YCFC surface water utilized when available





# Hypothetical Example 1 - Tier 1 Analysis Results

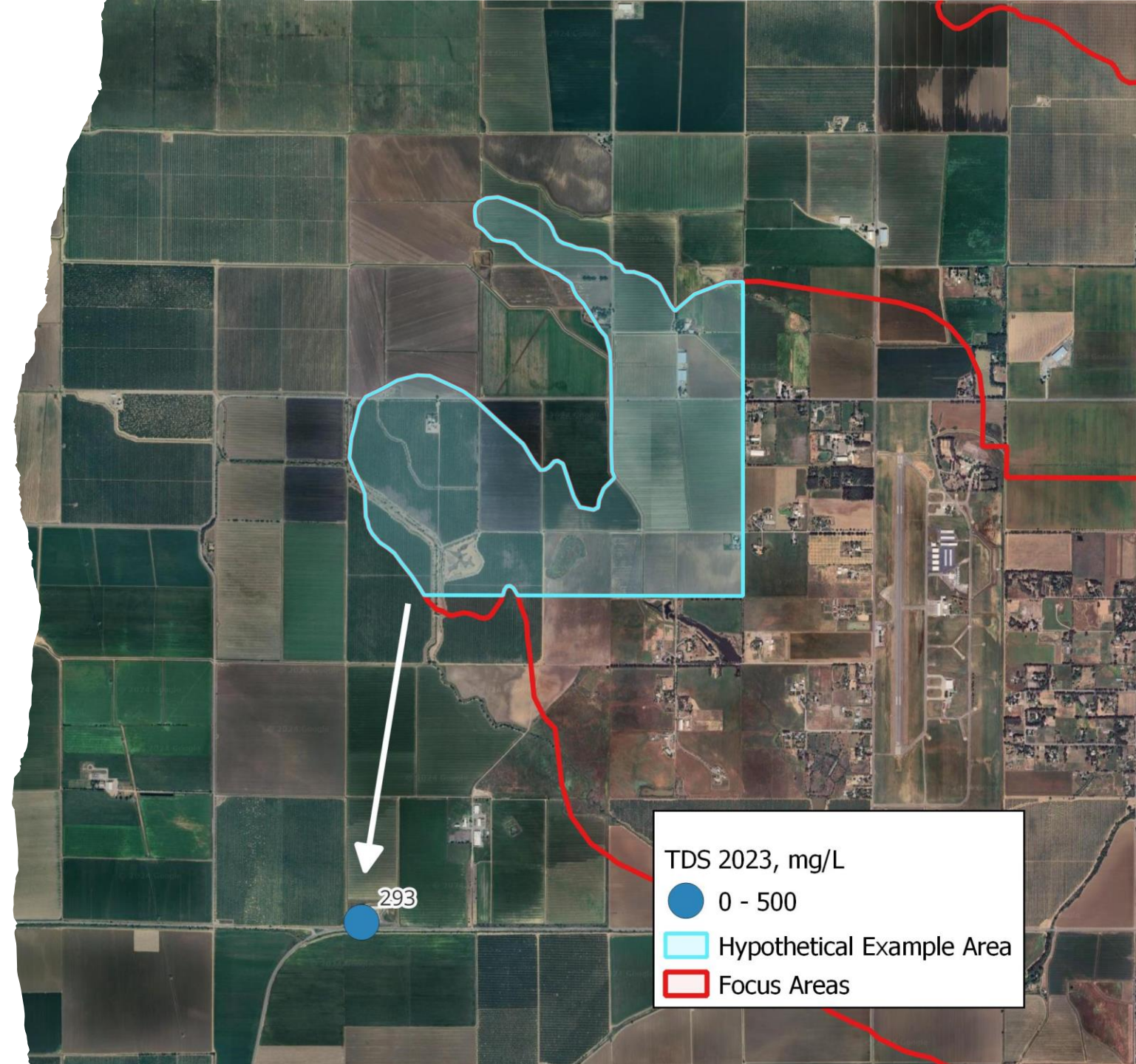
- Interconnected surface waters: no ISW within 2,000 feet





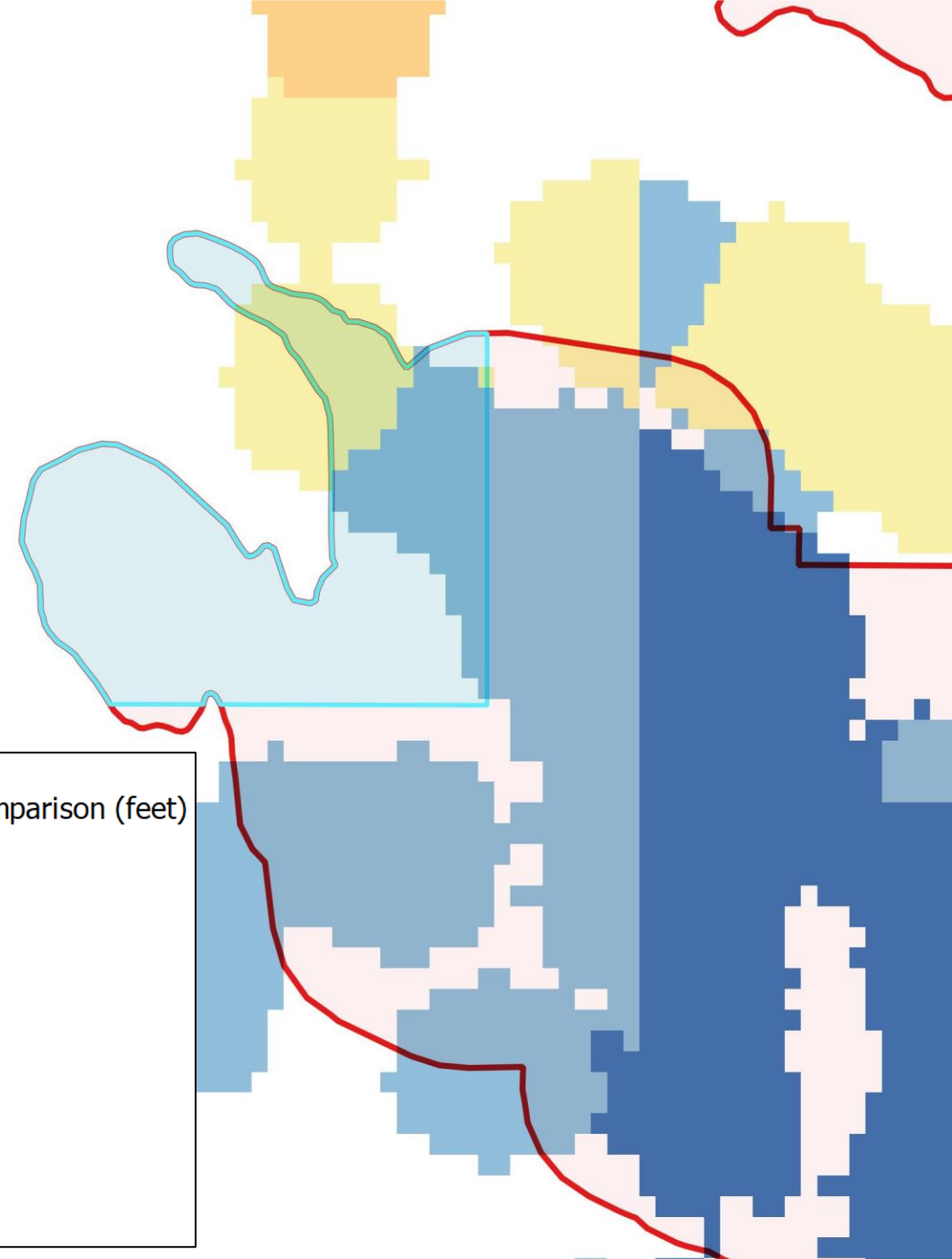
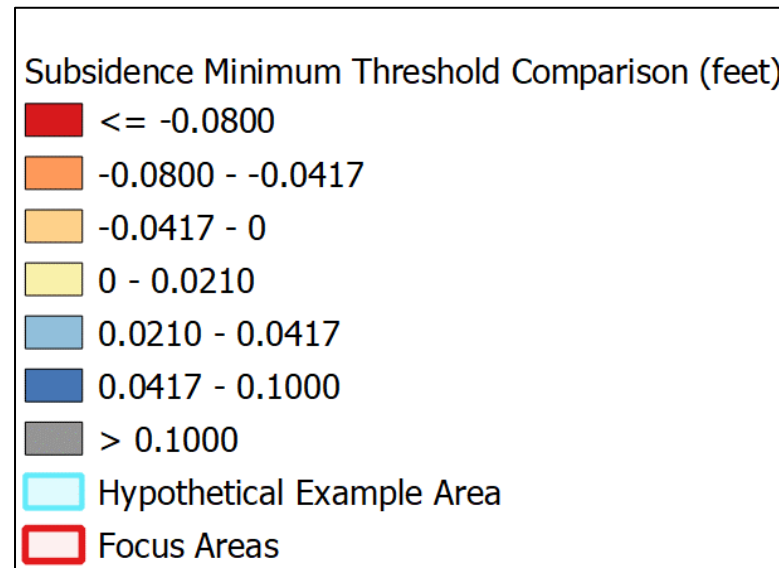
# Hypothetical Example 1 - Tier 1 Analysis Results

- Water quality: Proposed well is not in an area with known/historical elevated TDS



# Hypothetical Example 1 - Tier 1 Analysis Results

- Subsidence: Well is not in an area experiencing subsidence





# Hypothetical Example 1 - Tier 1 Analysis Results

- Groundwater levels: Operation of the new well will not lower nearby RMWs below the minimum threshold
- Conjunctive use: YCFC surface water utilized when available
- Interconnected surface waters: no ISW within 2,000 feet
- Water quality: Proposed well is not in an area with known/historical elevated TDS
- Subsidence: Well is not in an area experiencing subsidence

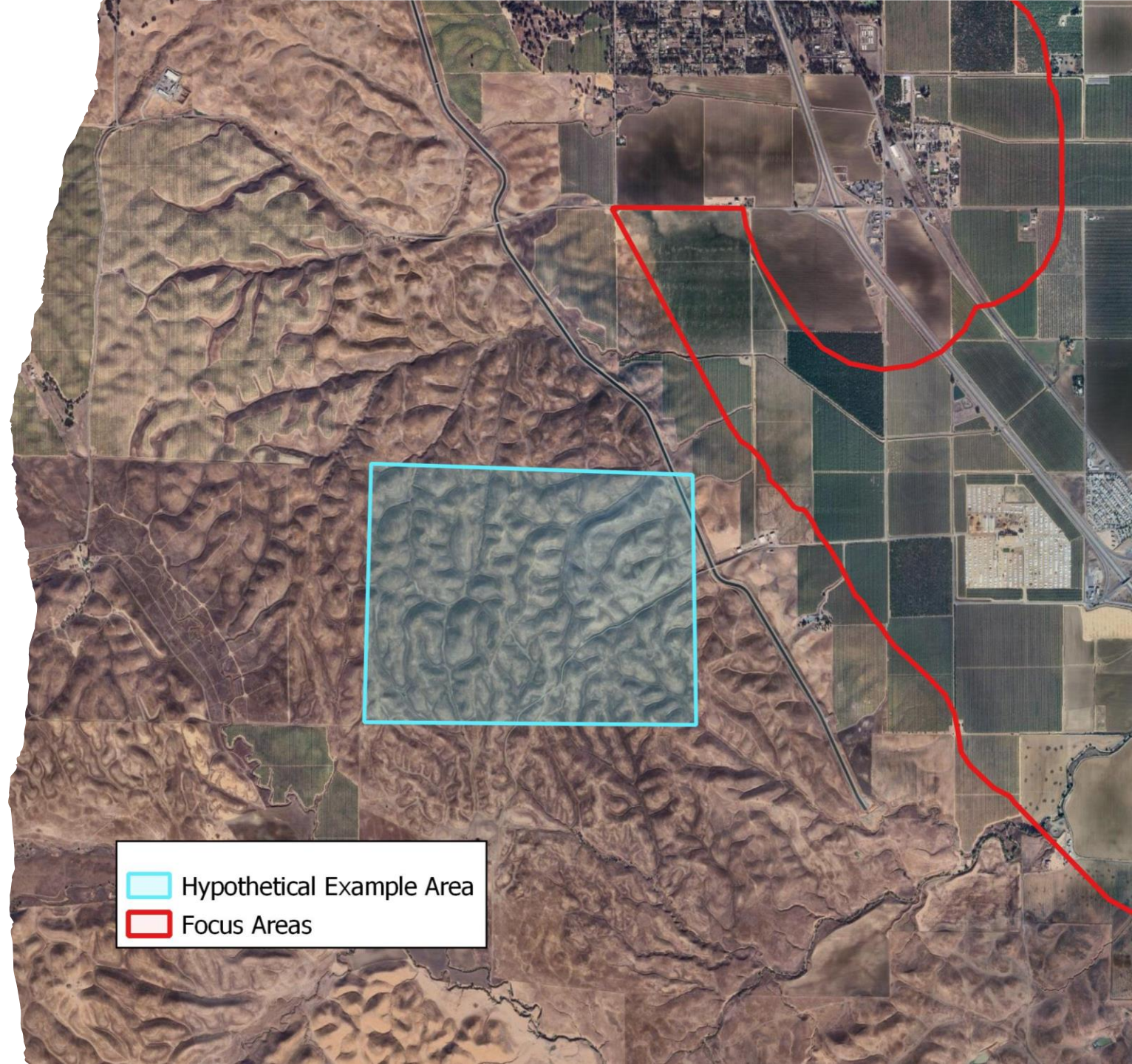
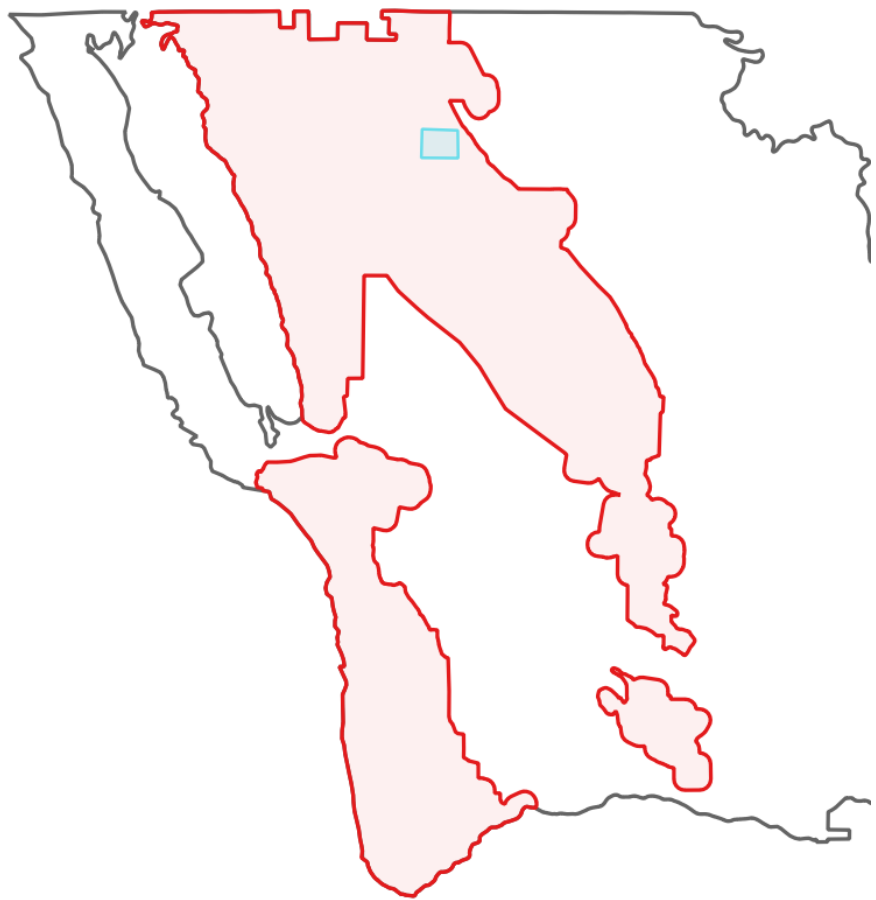
**Determination: Proposed well clears Tier 1 analysis and written verification is issued by YSGA**





 Hypothetical Example Area  
 Focus Areas



# Hypothetical Example 2 - Data Gap Area

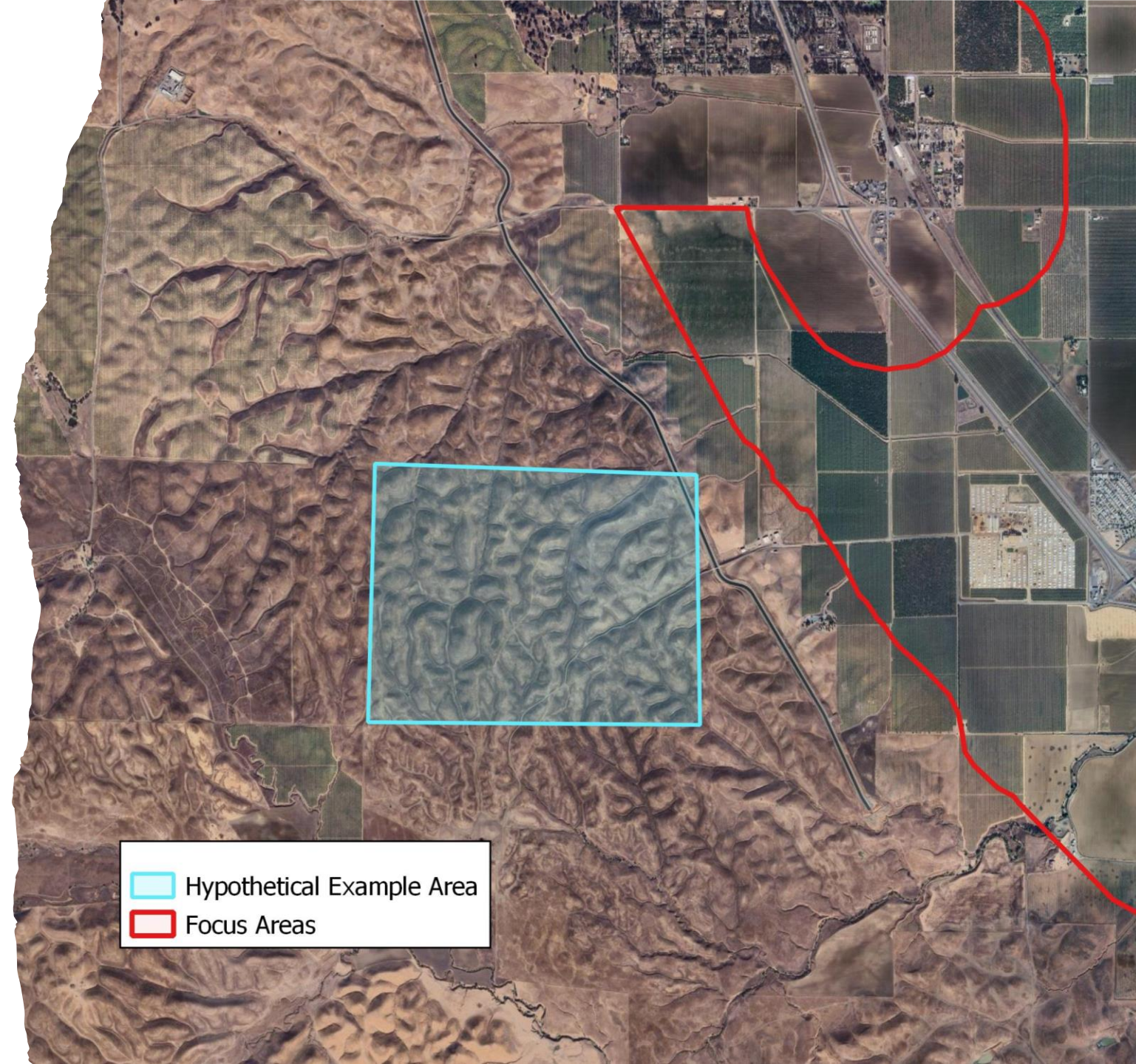



 Hypothetical Example Area  
 Focus Areas



## Hypothetical Example 2 - Data Gap Area

- Hypothetical well located within the blue square
- 1,000 feet deep with 16 in. casing
- Applicant proposes to pump 1200 GPM
- No historic groundwater use on the property
- No surface water connection

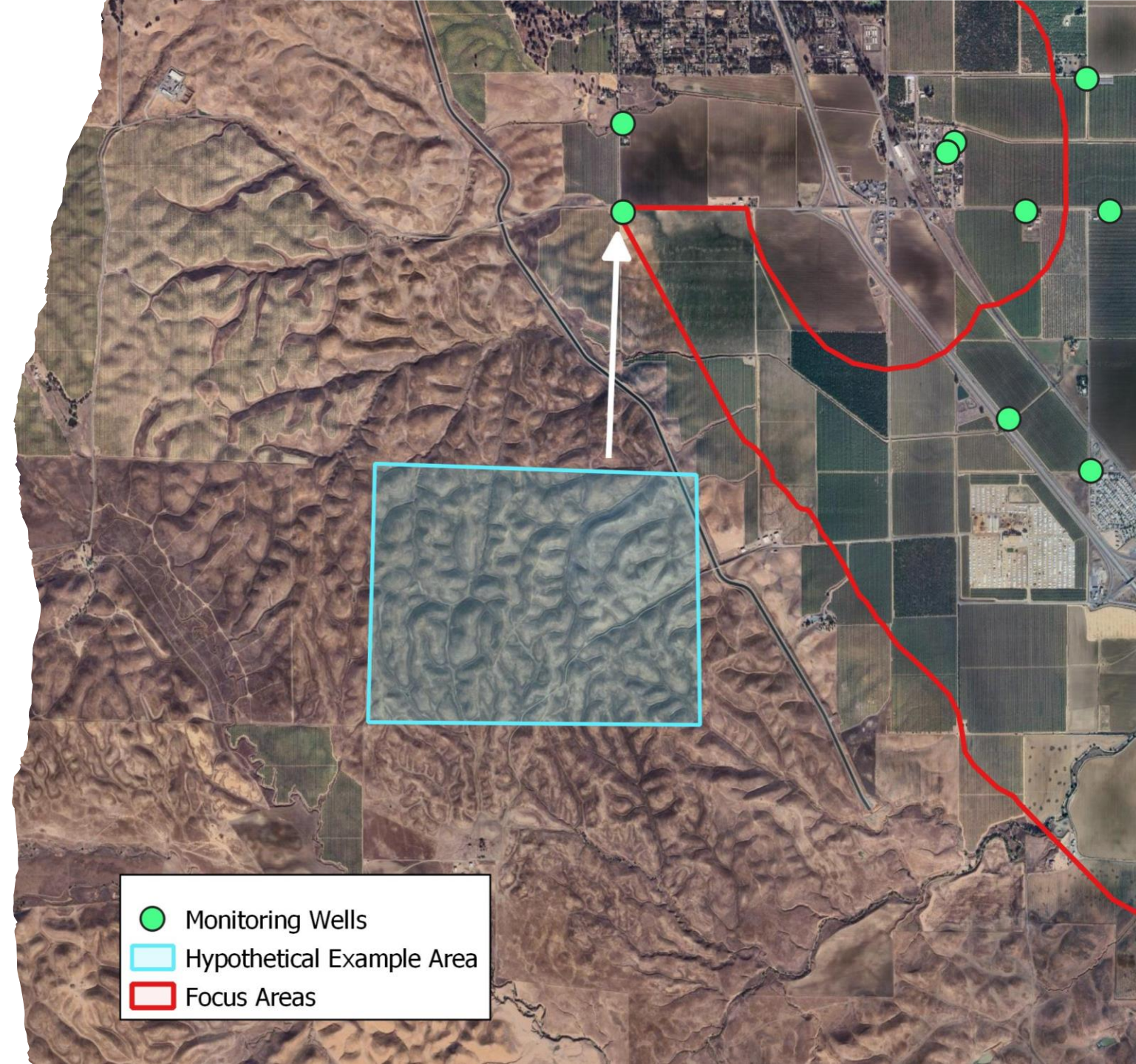


 Hypothetical Example Area  
 Focus Areas



## Hypothetical Example 2 - Tier 1 Analysis Results

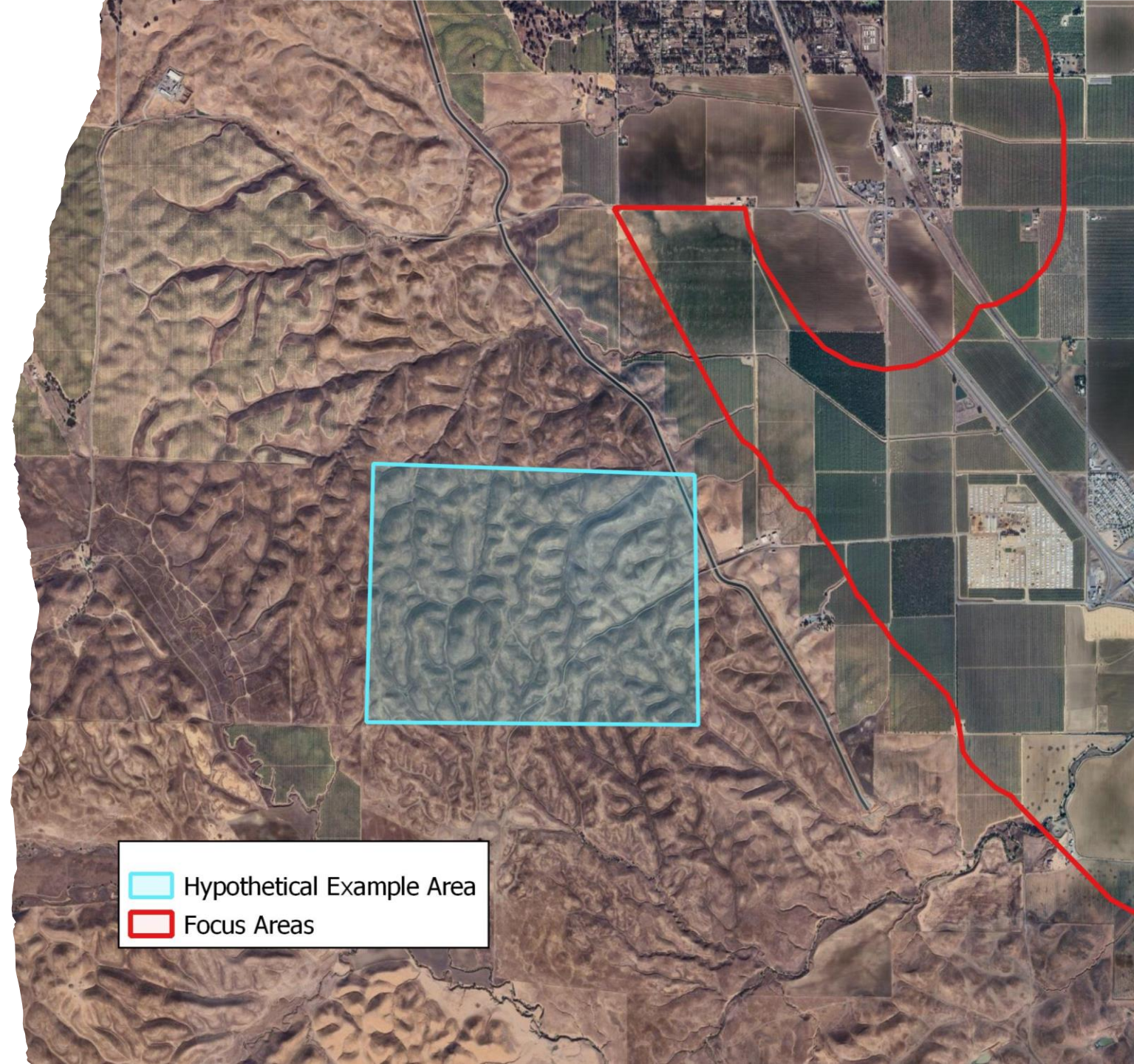
- Groundwater levels: operation would result in >10% decline at nearest monitoring well





## Hypothetical Example 2 - Tier 1 Analysis Results

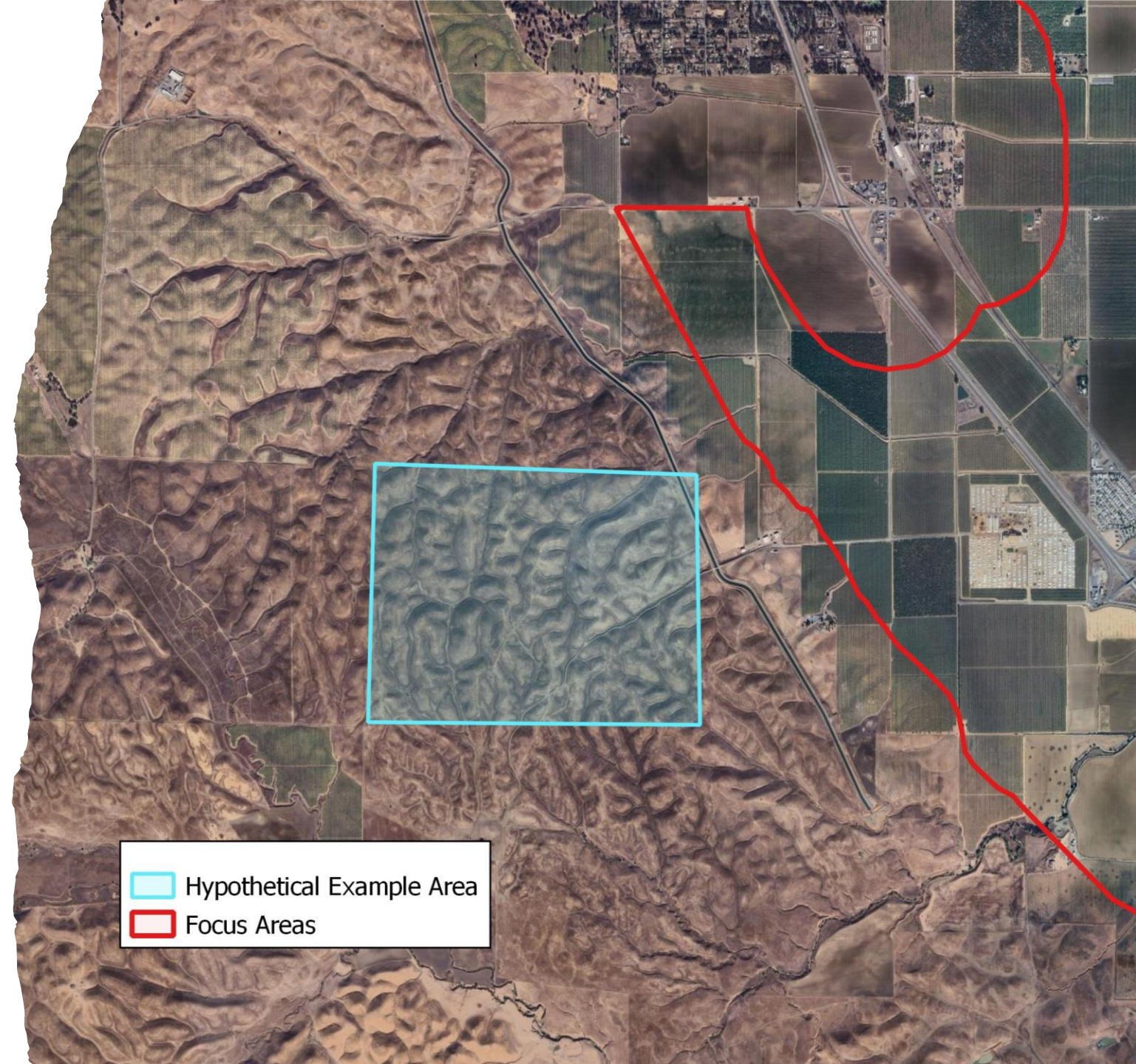
- Conjunctive use: no surface water connection





## Hypothetical Example 2 - Tier 1 Analysis Results

- Interconnected surface waters:  
no ISW within 2,000 feet

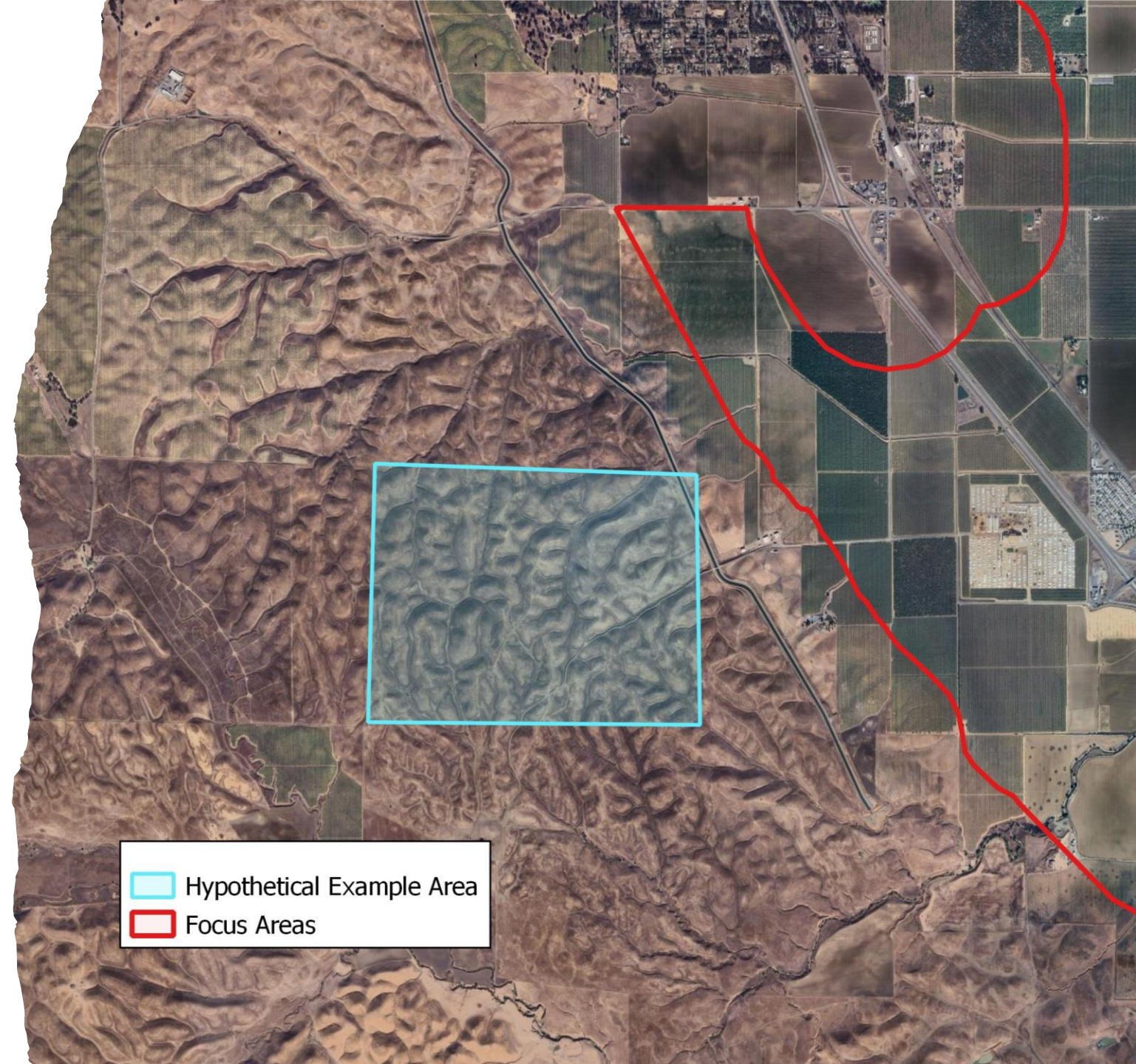


 Hypothetical Example Area  
 Focus Areas



## Hypothetical Example 2 - Tier 1 Analysis Results

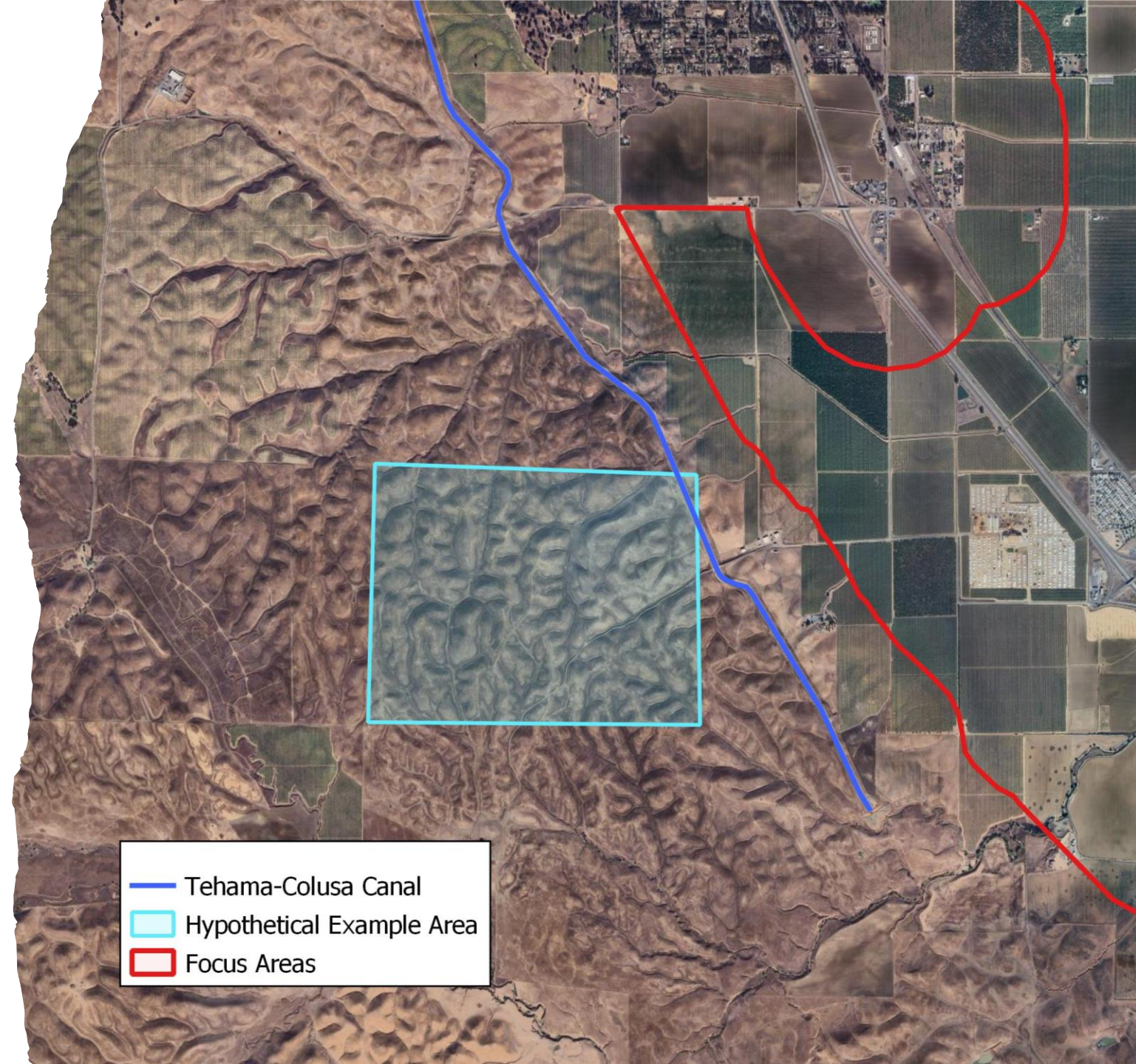
- Water quality: Well operation likely to lead to TDS migration from the deep aquifer





## Hypothetical Example 2 - Tier 1 Analysis Results

- Subsidence: Critical infrastructure (TC canal) is within 2,000 feet and subsidence conditions would need to be investigated

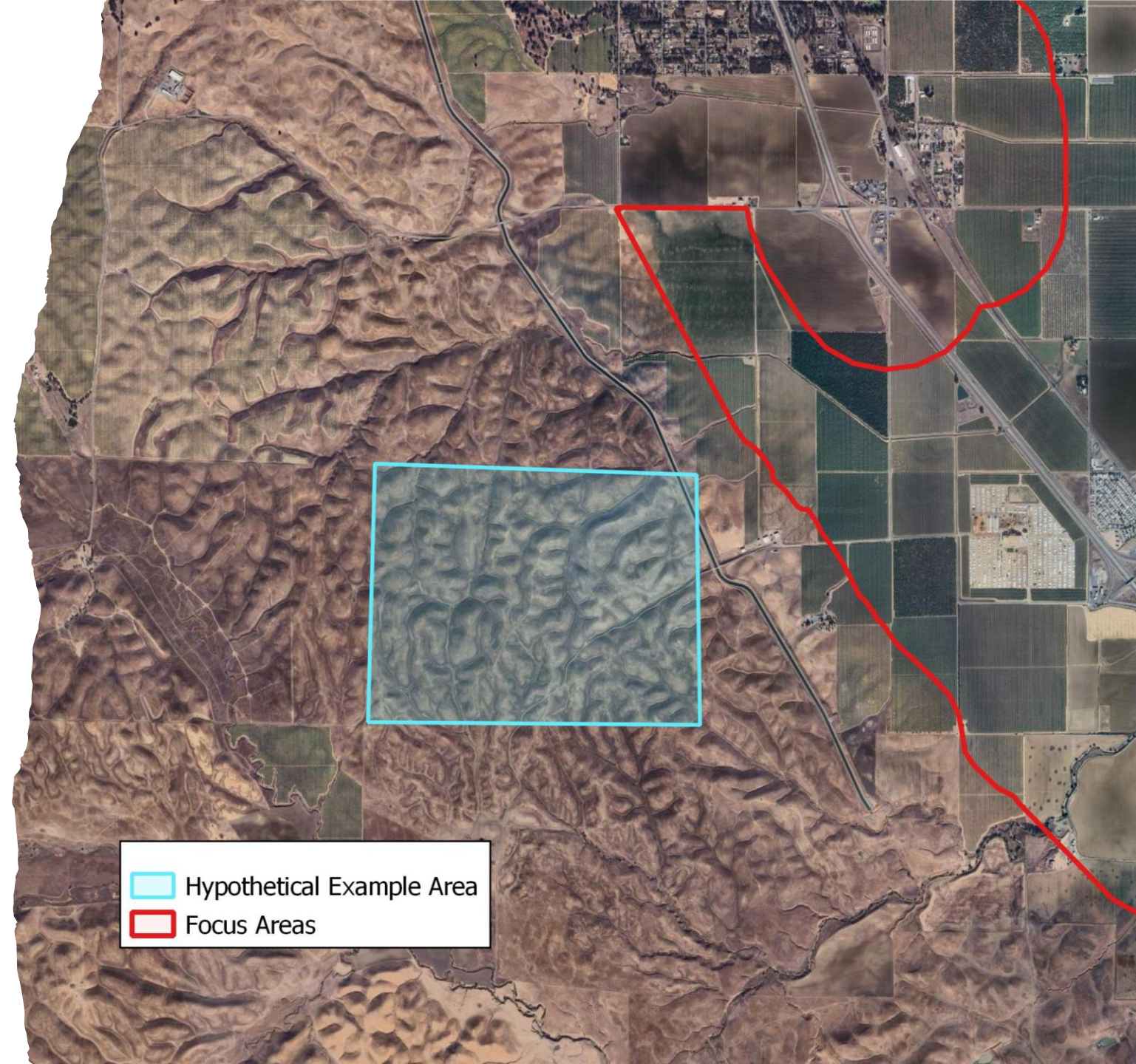




## Hypothetical Example 2 - Tier 1 Analysis Results

- Groundwater levels: operation would result in >10% decline at nearest monitoring well
- Conjunctive use: no surface water connection
- Interconnected surface waters: no ISW within 2,000 feet
- Water quality: Well operation likely to lead to TDS migration from the deep aquifer
- Subsidence: Critical infrastructure (TC canal) is within 2,000 feet

**Determination: Groundwater levels, water quality, and subsidence indicators warrants Tier 2 analysis**

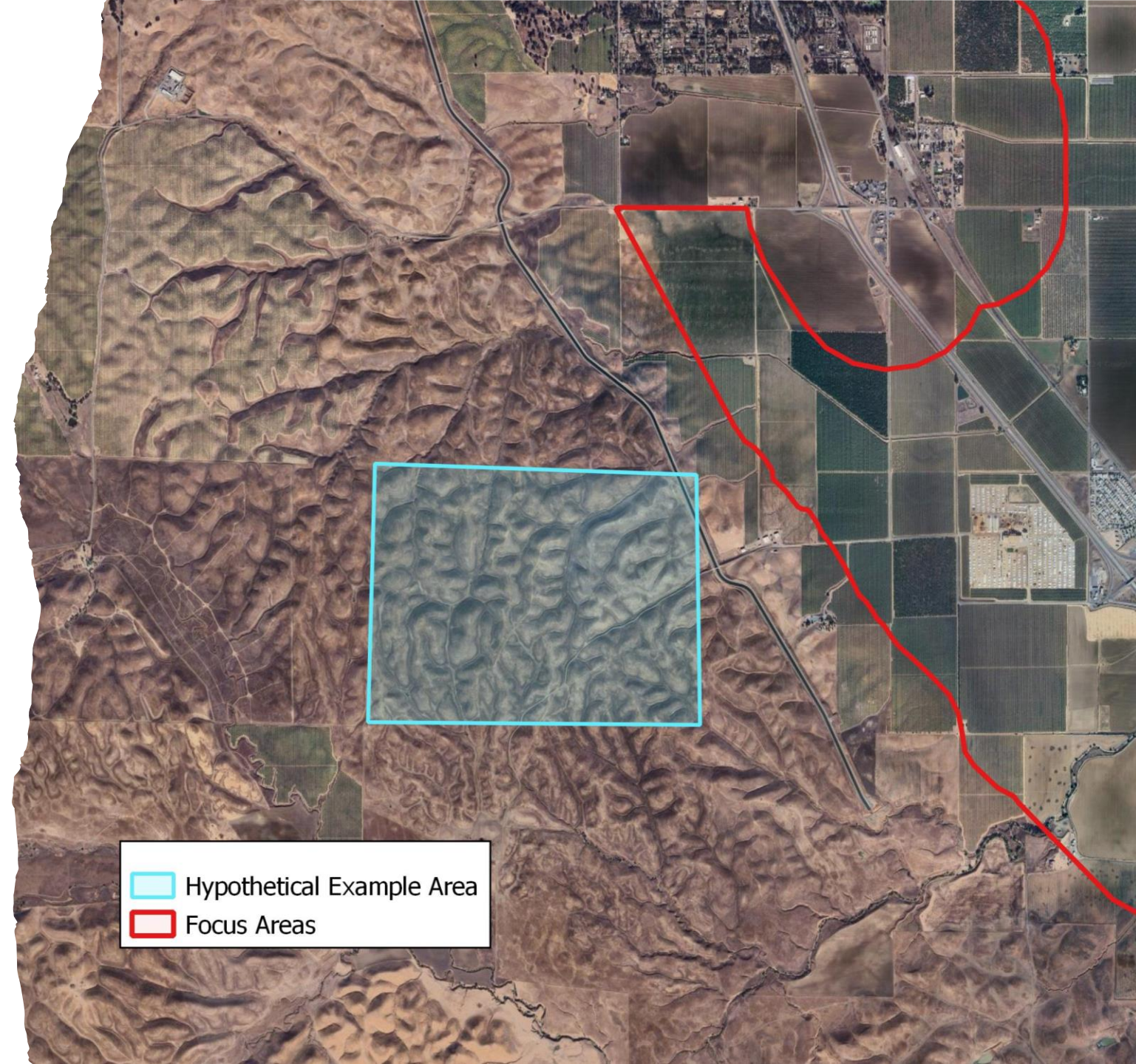


 Hypothetical Example Area  
 Focus Areas



## Hypothetical Example 2 - Tier 2 Analysis

- If the prepared HR provides evidence that alleviates the concerns around groundwater levels, water quality, and subsidence that arose in Tier 1, the YSGA will issue written verification of the well application.
- If one or more indicators remain a concern to the YSGA, the YSGA will document these concerns and request a meeting with the well applicant to discuss options to bring the well into compliance with the EO.



 Hypothetical Example Area  
 Focus Areas



# Other Requirements

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- Geophysical logs for wells and borings exceeding 200 feet in depth within the Yolo Subbasin (including outside of the Focus Areas) within 30 calendar days of conducting the geophysical logging. Benefit: better understand the subsurface geology where the well will be extracting from.
- Final 'as built' well construction diagram produced by a C-57 well drilling contractor, PG, or CHG prepared using the well diagram template in Appendix J. Benefit: better understand the wells construction once completed.
- Completed DWR Well Completion Report signed by applicant's C-57 well drilling contractor. Benefit: verify the well construction matches what was proposed by the applicant. The County may choose to take action if there is a discrepancy (i.e. casing diameter deviates from what was proposed).

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**Any questions on material covered so far?**

# Discussion and Next Steps

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- Public Review Process (March 19-April 2): assuming BOD approval of Procedures
- Updated County TM / Coordination with the County
- County Board of Supervisors Meeting: April 9, 2024



# Consideration: 2-Tier Well Permit Review Procedures

- a) Update on *Draft* 2-Tier Well Permit Review Process
- b) Approve Updated Well Permitting Procedures and Public Comment Period for Draft Technical Memorandum and Focus Areas Map**

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