



YSGA BOARD OF DIRECTORS MEETING

October 27, 2023

Agenda

- 1. Call to Order and Determination of Quorum**
2. Public Forum
3. Report of the Chair and Executive Officer
4. CONSIDERATION - Approval of Draft YSGA Focus Areas Map and Public Review
5. Next Meeting - November 20, 2023
6. Adjournment

Agenda

1. Call to Order and Determination of Quorum
- 2. Public Forum**
3. Report of the Chair and Executive Officer
4. CONSIDERATION - Approval of Draft YSGA Focus Areas Map and Public Review
5. Next Meeting - November 20, 2023
6. Adjournment

Agenda

1. Call to Order and Determination of Quorum
2. Public Forum
- 3. Report of the Chair and Executive Officer**
4. CONSIDERATION - Approval of Draft YSGA Focus Areas Map and Public Review
5. Next Meeting - November 20, 2023
6. Adjournment



Celebrating the life of



MICHAEL H. HALL

JULY 18, 1968 - OCTOBER 11, 2023

OCTOBER

SATURDAY

28

1:00 PM

CONAWAY RANCH
45332 COUNTY ROAD 25
WOODLAND, CA 95776

Come ready to share your favorite
memories of Mikey





Welcome New Directors

- **Mary Vixie Sandy** (Yolo County, District 3 Supervisor)
- **Andrew Fulks** (UC Davis, Assistant Director of the Arboretum and Public Garden and Director of the Putah Creek Riparian Reserve)

Yolo Subbasin GSP Receives Approval from DWR



On October 26, 2023, the California Department of Water Resources (DWR) released its determination for the Yolo Subbasin GSP, approving the plan and recommending corrective actions to be implemented prior to the 2027 GSP update. DWR's statement of findings regarding the approval of the Yolo Subbasin GSP under SGMA can be read [here](#).

The YSGA is grateful to everyone who was involved in the development of the GSP, and looks forward to implementing the now-approved plan to achieve groundwater sustainability in the Yolo Subbasin.

Incorporating the needs of groundwater-dependent ecosystems into SGMA Implementation

Partnership between YSGA, The Nature Conservancy, and Audubon

GDE Identification & Monitoring

Provide technical assistance to incorporate GDE considerations under SGMA. Increase our understanding of significant and unreasonable impacts to GDEs.

Outcomes

- Ecological thresholds for groundwater management.
- Technical assistance on projects and management actions that address ecosystem needs.

Watershed Group Engagement

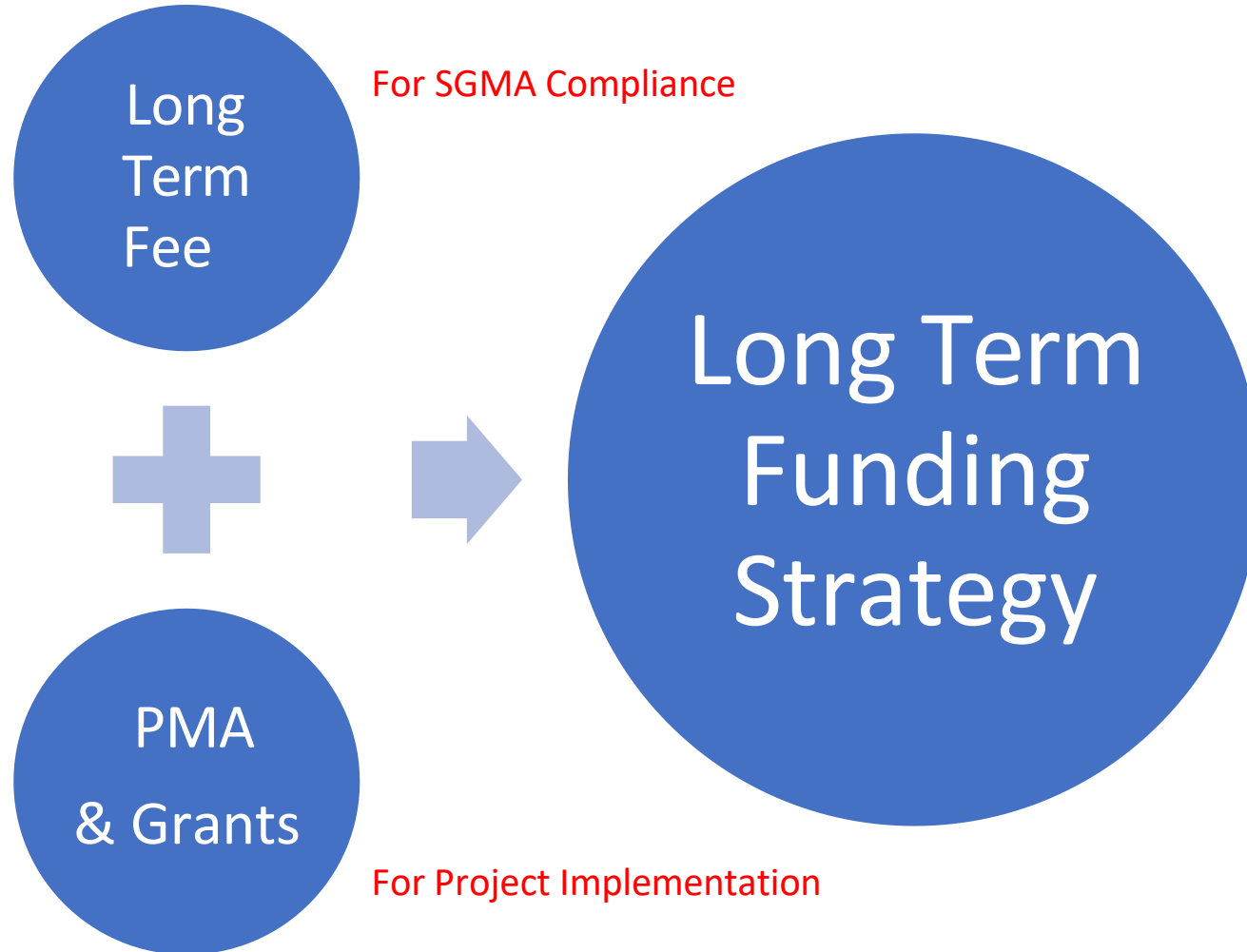
Coordinate engagement of community environmental stakeholders. Build technical knowledge among local watershed groups.

Outcomes

- Develop workshops with local stakeholders, provide support for GSP engagement.
- Increase capabilities for stakeholder integration at the subbasin scale.



YSGA – Long Term Funding Strategy



- Ad Hoc Finance/Governance Committee met October 25
- Legal Counsel support on summary of decisions
- Requesting member agency Board discussions

WaterSMART Applied Science Grant Proposal

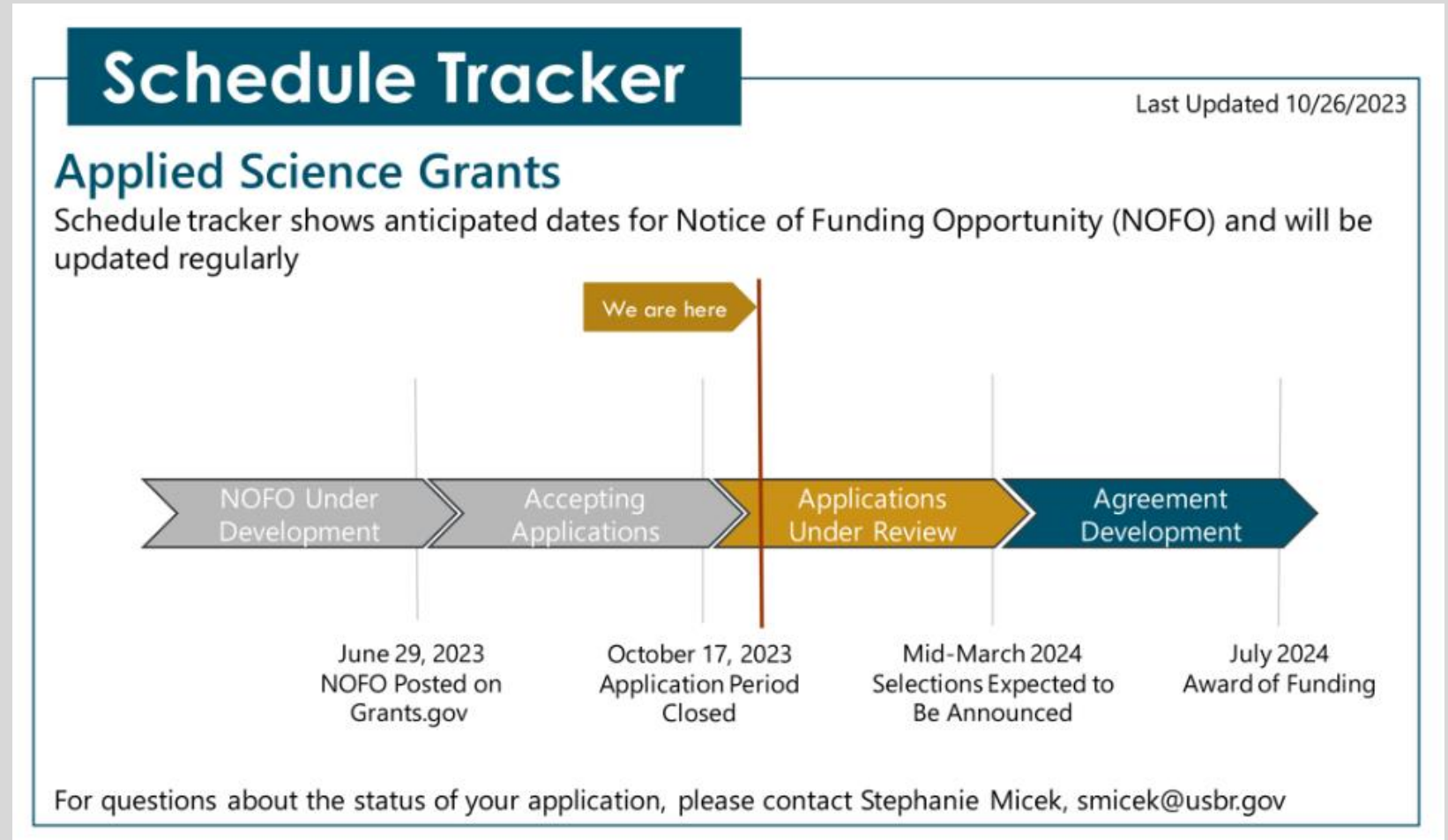
Builds on SGMA Implementation Grant funding & SEI's work with State Water Board

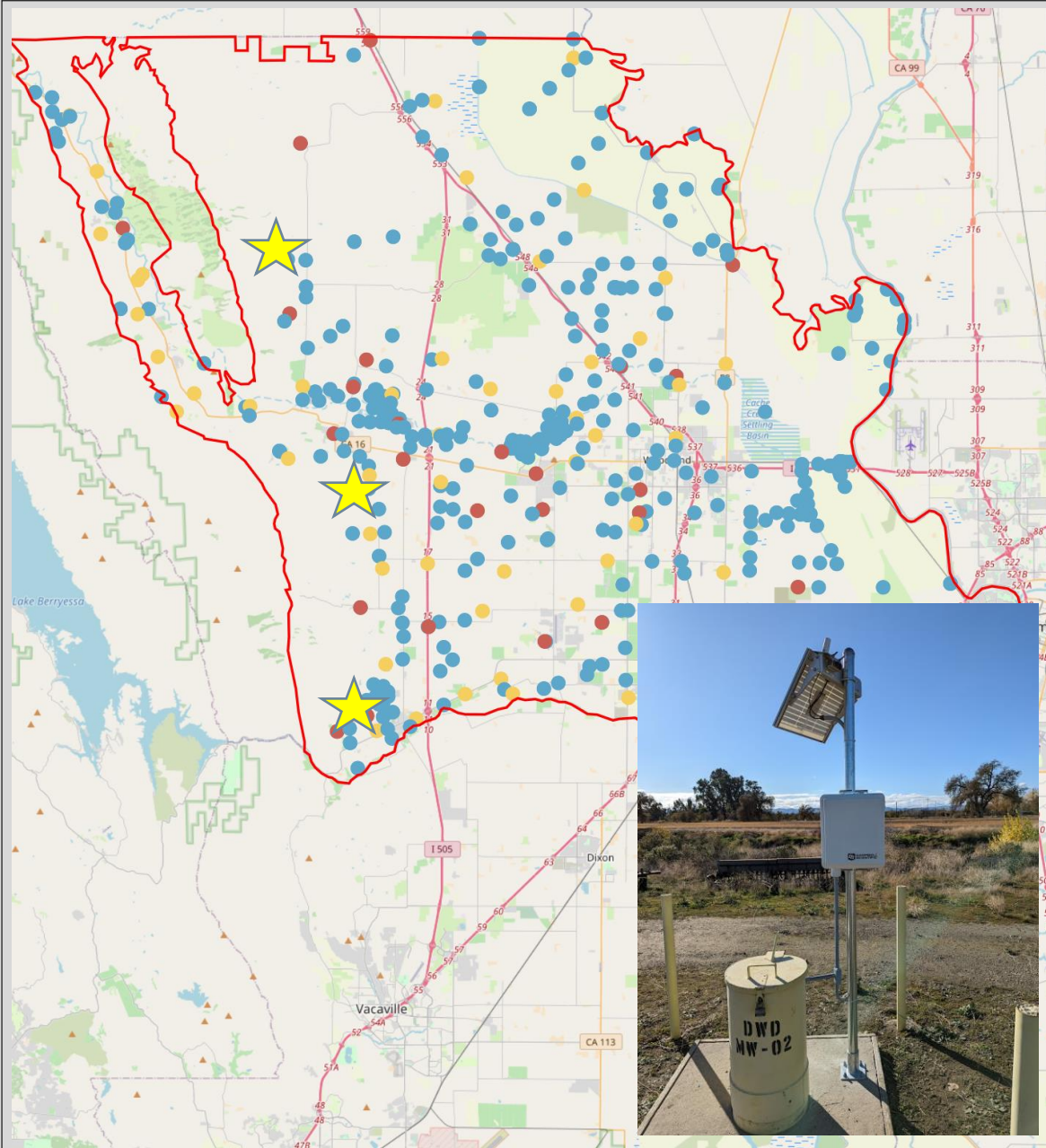
1. Improvements to the Yolo Subbasin Groundwater Model
2. Develop and Model Projects and Management Actions to Support Policy Decisions
3. Develop a Seasonal Forecasting Platform
4. Improve Data Management and Public Data Access

Requested \$400k; SGMA Imp. & YSGA Cost Share

WaterSMART Applied Science Grant Proposal

- \$4-5M available
- 10-15 awards





DWR's Technical Support Services (TSS)

- 3 dedicated multi-completion monitoring wells to be drilled by DWR's TSS program
- Real-time monitoring to be installed
- Focused in areas of special concern and data gap areas
- Well depths approx. 1,000 feet
- All wells completed and estimated to be online by January 2024

Farming for Our Future: Sharing Solutions to Climate Change from the Fields

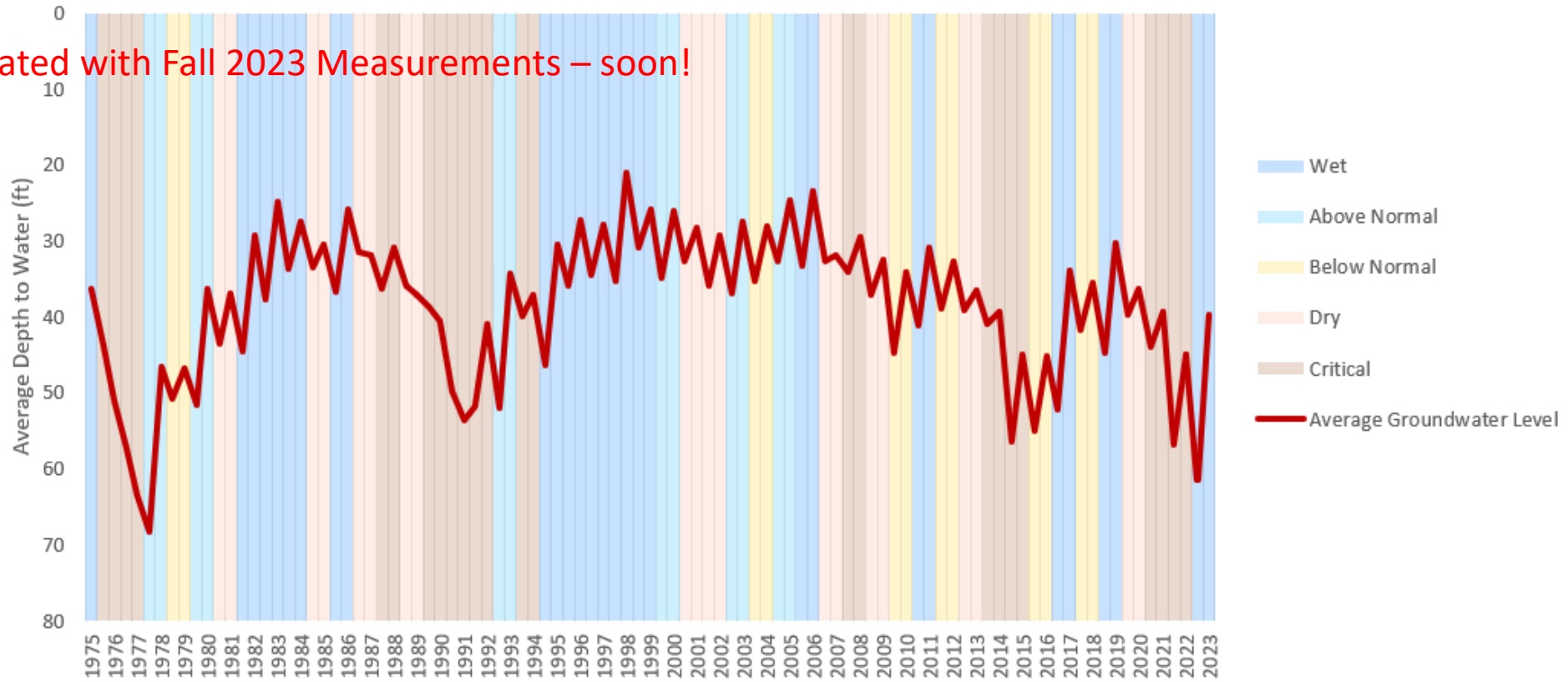
With the need to address climate change, drought, and groundwater sustainability more crucial than ever, this campaign is built around a series of high-end videos that showcase water conservation, sustainable groundwater use, and climate mitigation practices and philosophies being undertaken by rural landowners in Yolo County. The approach is "farmer-to-farmer," with an emphasis on innovative and creative problem-solving and new ideas.

Collaborative Effort including:

- Center for Land Based Learning
- Yolo County Resource Conservation District (YCRCD)
- Good Humus Produce & the Hungry Hollow Watershed Stakeholders
- Community Alliance with Family Farmers (CAFF)
- Carbon Cycle Institute (CCI)
- Yolo Subbasin Groundwater Agency (YSGA)
- Yolo County Flood Control and Water Conservation District (YCFCWCD)
- Public Health Branch of the Yolo County Health & Human Services Agency
- Professor Neal Williams (UC Davis)

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

To be updated with Fall 2023 Measurements – soon!



Mid-March 2021 Average Depth to Water ~ 39 feet
 Mid-August 2021 Average Depth to Water ~ 57 feet
 Early March 2022 Average Depth to Water ~ 45 feet
 September 2022 Average Depth to Water ~62 feet
 April 2023 Average Depth to Water ~ 40 feet

Of Note:

1977-78 Recovery from Fall to Spring ~21 feet
 2016-17 Recovery from Fall to Spring ~ 18 feet
 2022-23 Recovery from Fall to Spring ~22 feet

Agenda

1. Call to Order and Determination of Quorum
2. Public Forum
3. Report of the Chair and Executive Officer
4. **CONSIDERATION - Approval of Draft YSGA Focus Areas Map and Public Review**
5. Next Meeting - November 20, 2023
6. Adjournment



Yolo Subbasin Groundwater Agency

YSGA BOARD MEETING

OCTOBER 27, 2023

Agenda

DRAFT FOCUS AREAS MAPPING

DISCUSSION AND NEXT STEPS

Focus Areas Mapping

- Focus Areas analysis prompted by:
 - Requirements of Executive Order (EO) N-3-23
 - Concerns over declining groundwater levels in domestic wells
- Purpose:
 - Identify areas where a hydrogeologist report is needed to support YSGA's written verification of new well permits pursuant to EO N-3-23.
- Objective:
 - Delineate Focus Areas using best available groundwater data.
- Request to the YSGA Board:
 - Approve draft Focus Areas Map and initiate public comment review process.

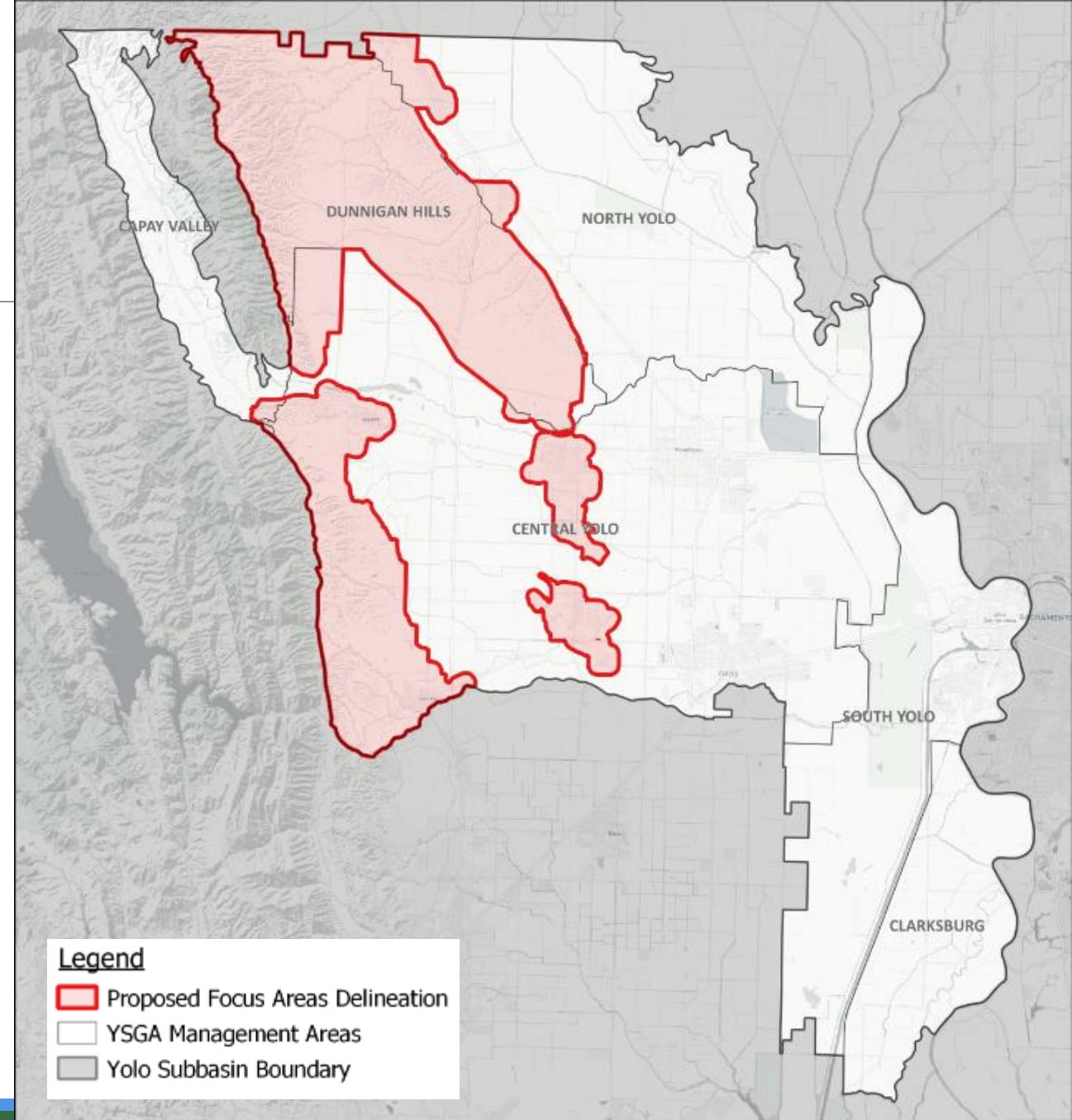
Feedback to Date

- Focus on groundwater level decline as basis for delineation
- Revise map using Fall 2023 conditions
- Avoid dependence on single data points
- Consider geology more explicitly
- Consider renaming “Areas of Special Concern” to “Focus Areas”
- Land subsidence will be considered in the future
- Consider exemption for small wells (i.e., stockwatering)

Draft "Focus Areas" Delineation

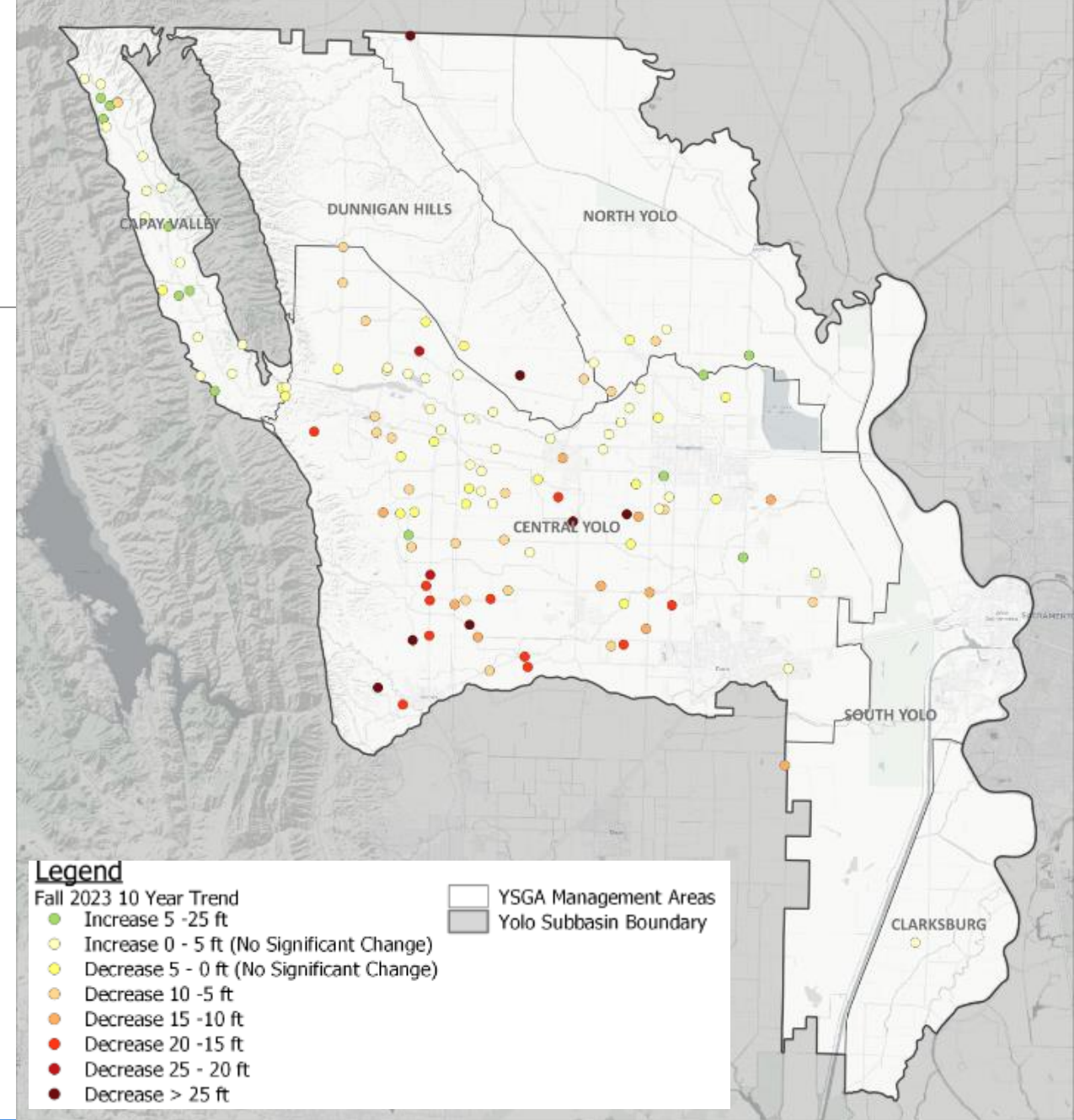
- Basis for Delineation
 - Levels below defined MTs
 - Levels with 10-year decline > 25 feet
 - Low recharge potential
 - Limited groundwater data
 - Reported dry wells and citizen concerns
 - High domestic well densities
 - Small water systems
 - 2,000-foot buffer added near high densities of domestic wells & small water systems

Supporting information on following slides



Levels with 10-year Decrease > 25 feet

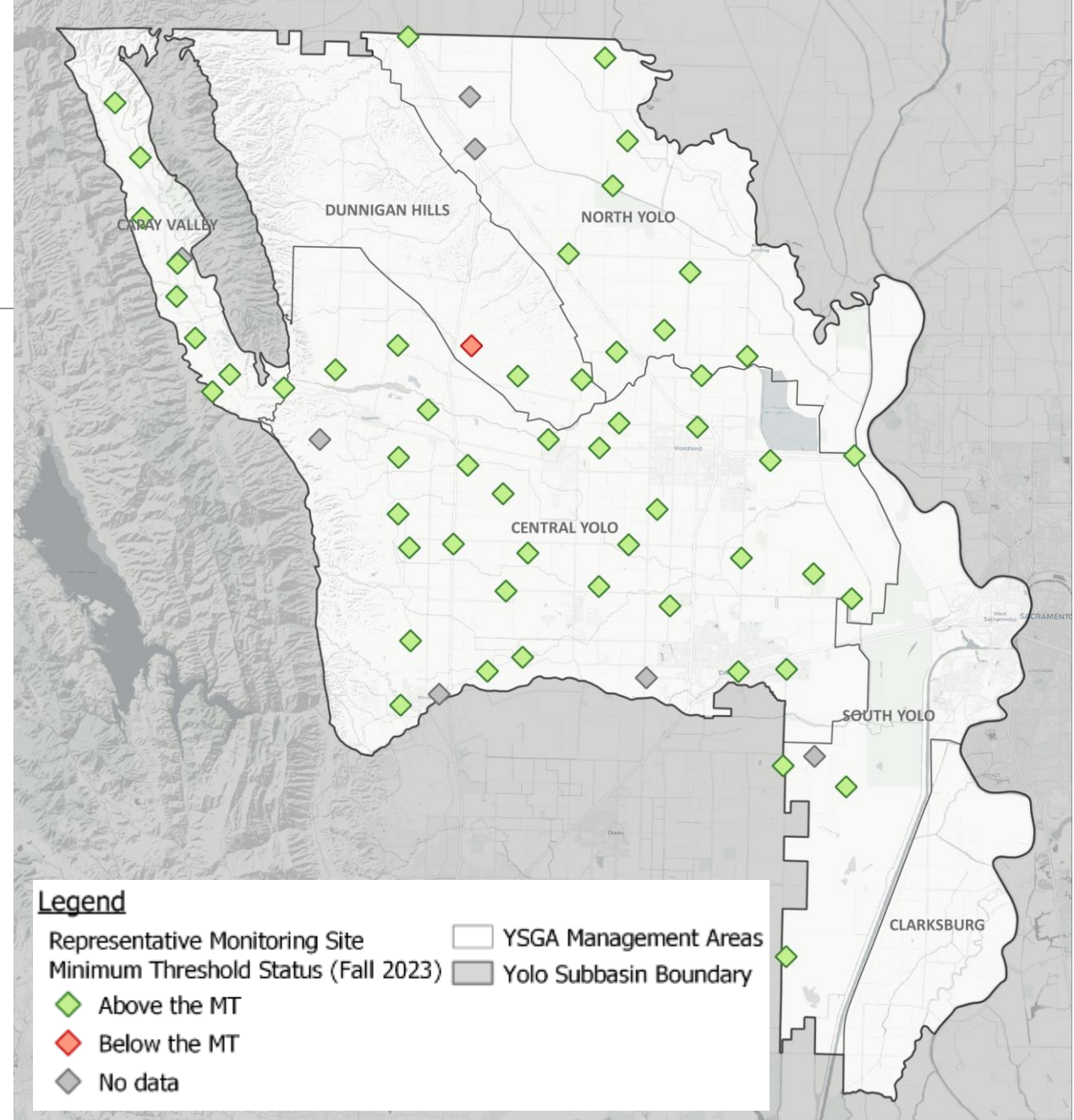
Fall 2013 to Fall 2023 water level trends in Yolo Subbasin monitoring wells.



Levels Below the Defined MTs

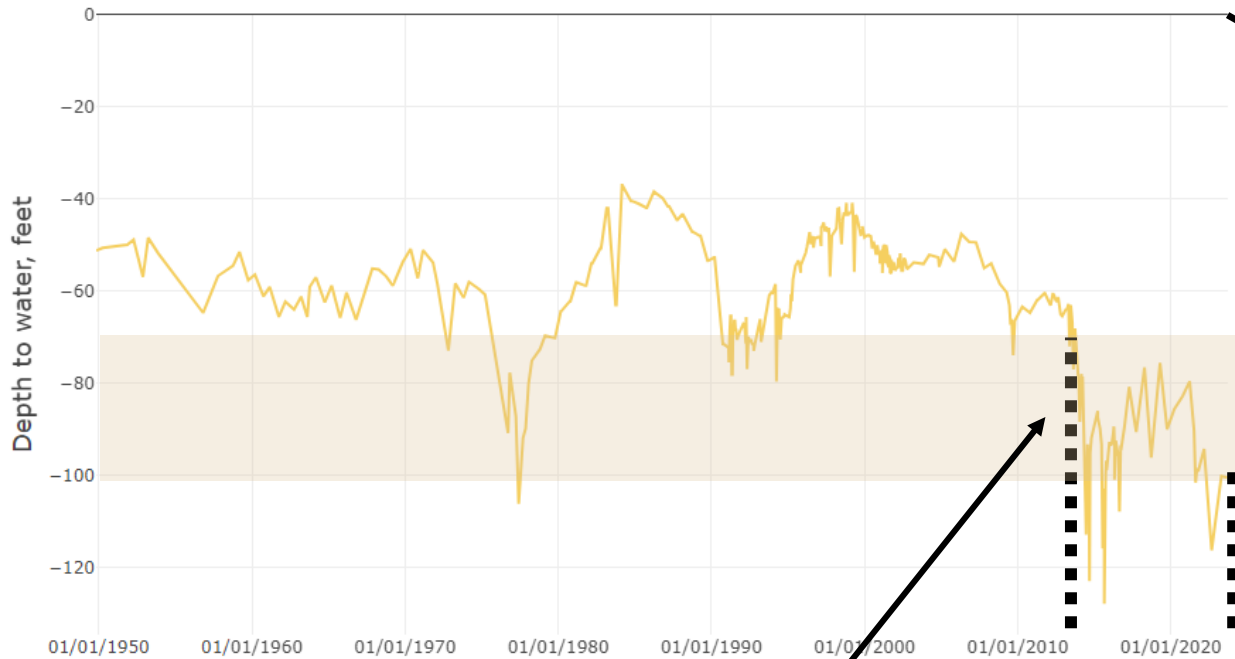
Fall 2023 water levels in Representative Groundwater Monitoring Network wells:

- 62 Representative Monitoring Wells
- 7 wells have not yet been measured for Fall 2023
- 1 well had depth to water (0.77 ft below its MT)
- All other wells had depth to water above their MT

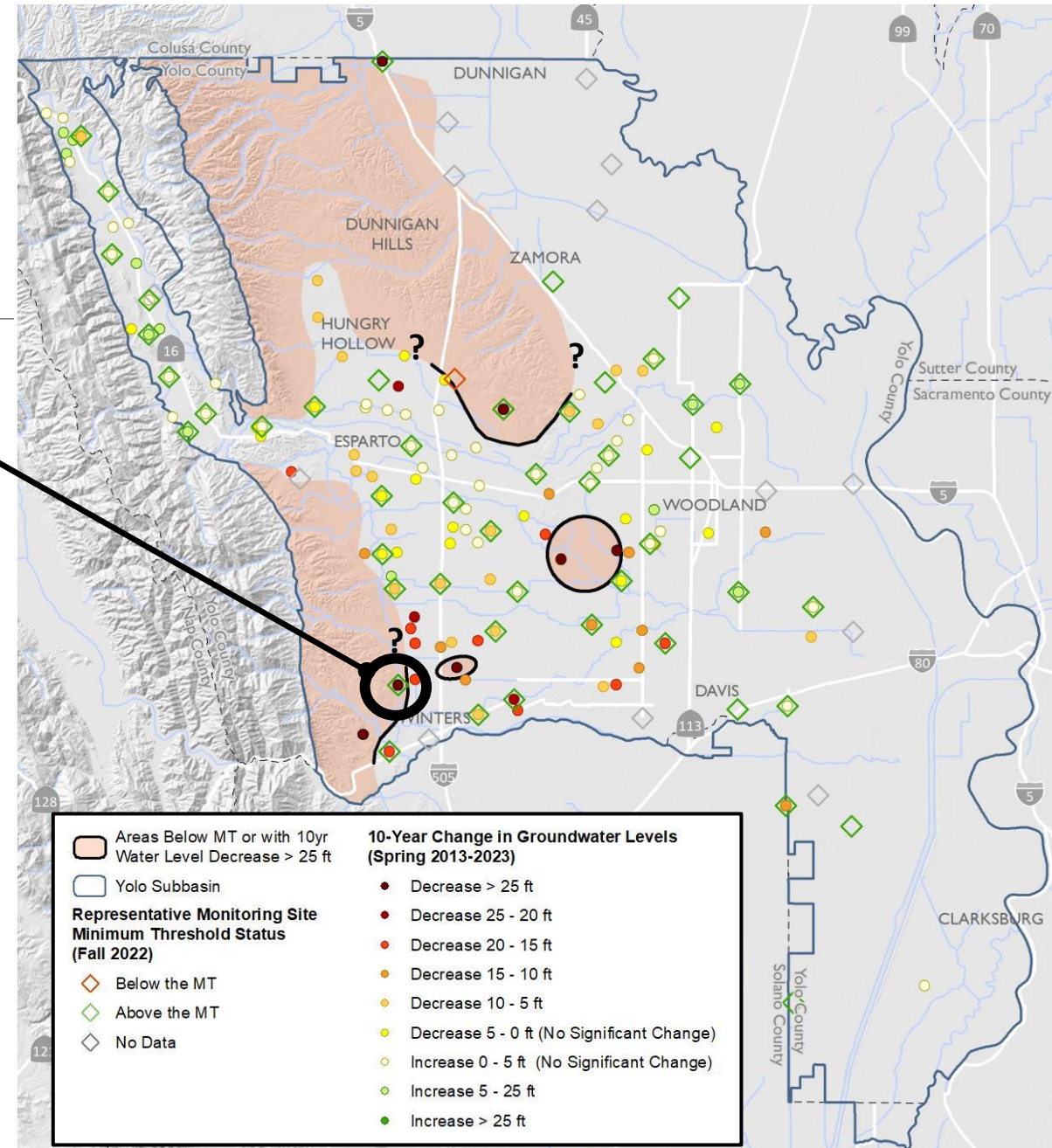


Fall 2023

Hydrograph of 08N01W09C001M

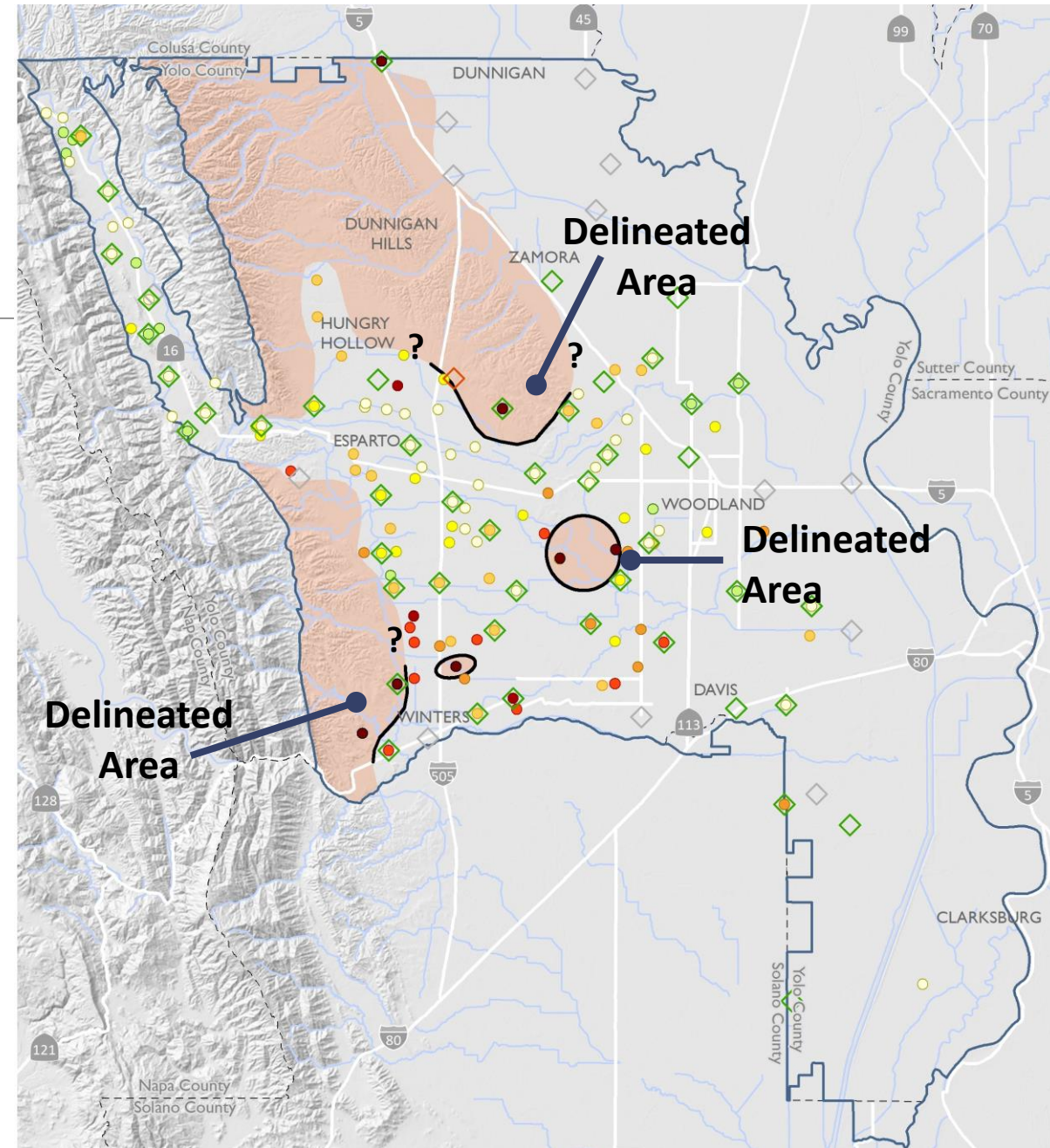


Approximate 30-foot water level decline from Fall 2013 to Fall 2023



Initial Delineation

- Levels below the MTs (Fall 2023)
- Levels with 10-year decrease > 25 feet (Fall 2013-2023)



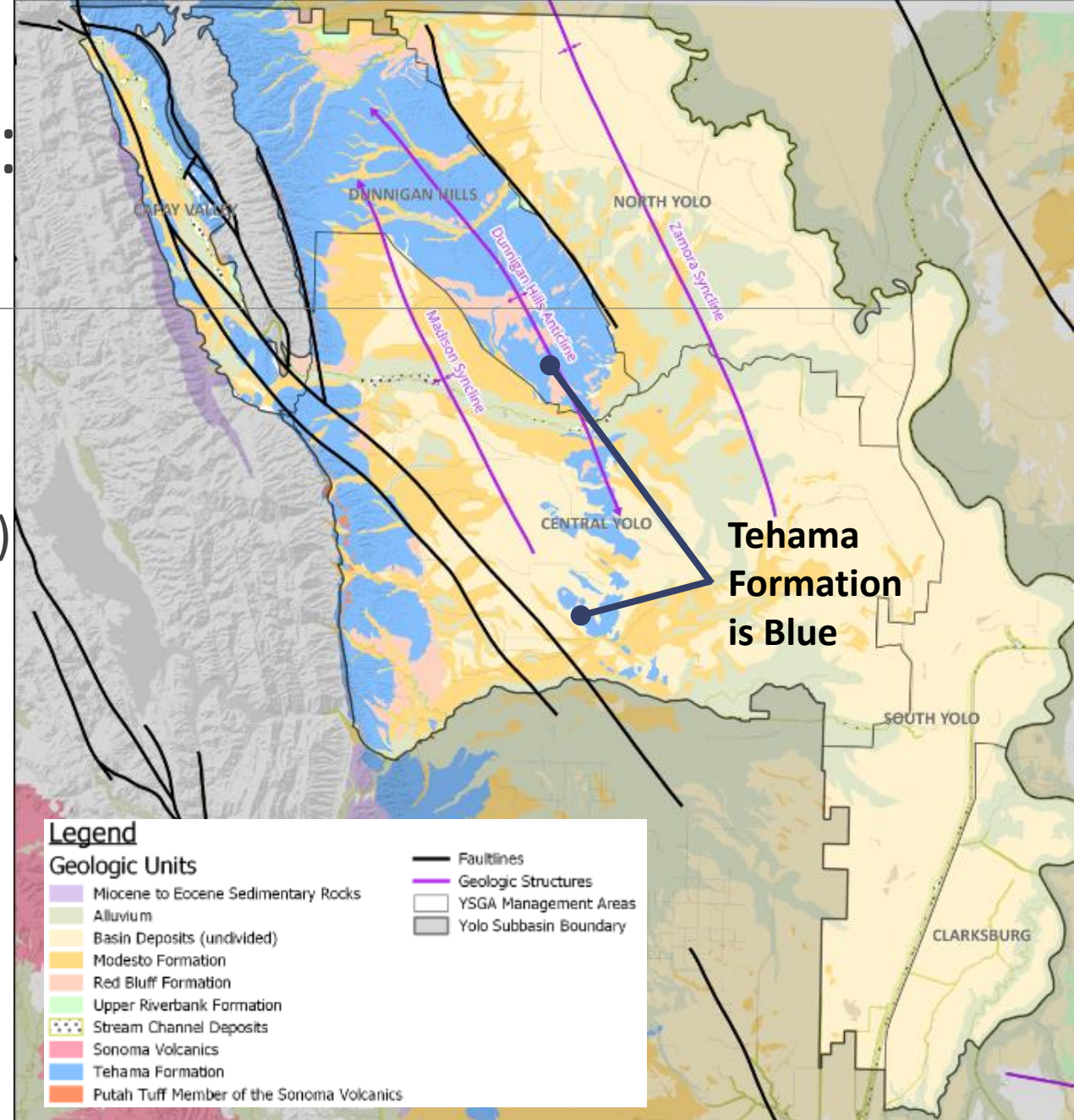
Additional Data Used to Refine Focus Areas Delineation

- Geology & Topography: areas with low recharge potential
- Areas with limited groundwater data
- Concerns from residents
- Dry well reports
- Small water systems & domestic well density

Low Recharge Potential: Geology

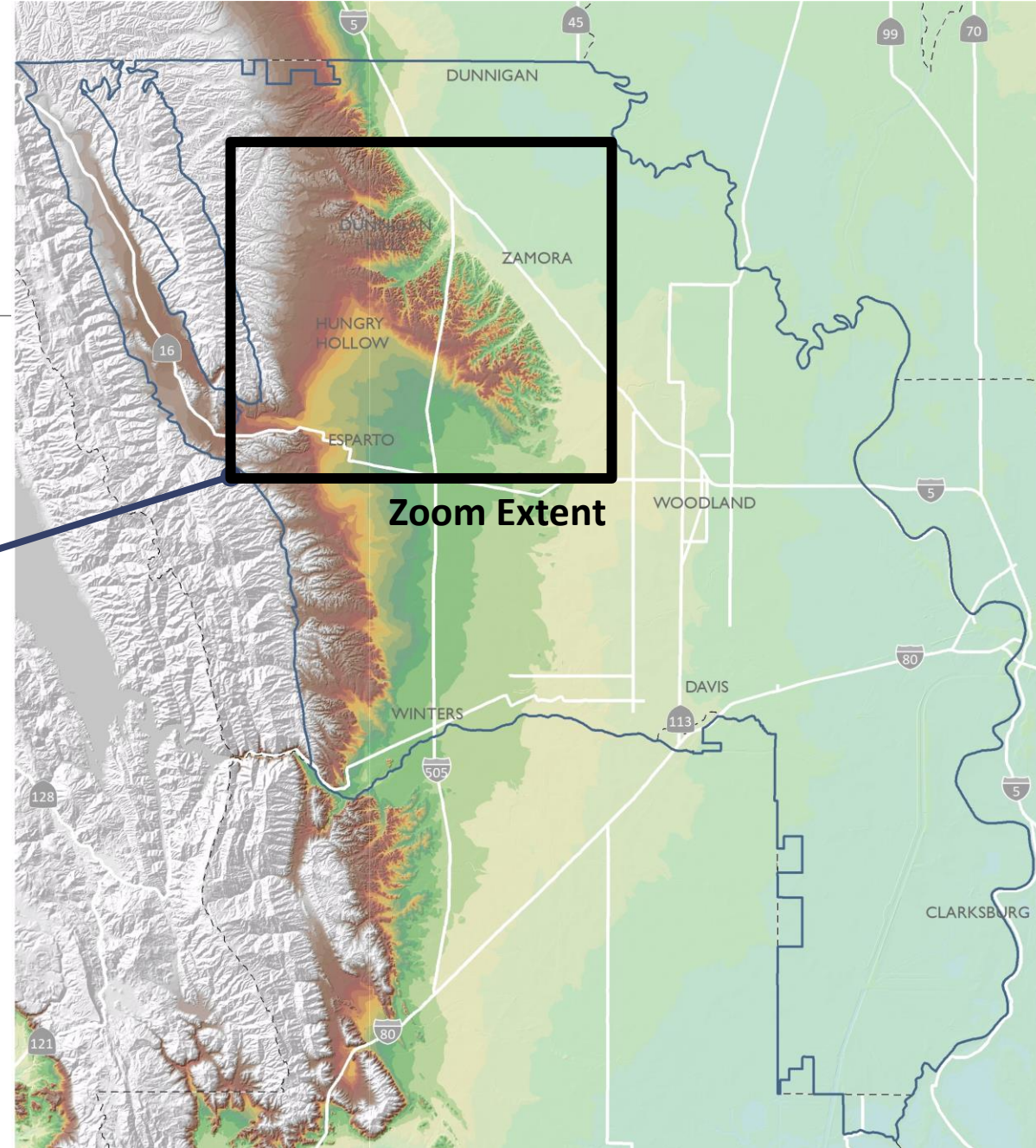
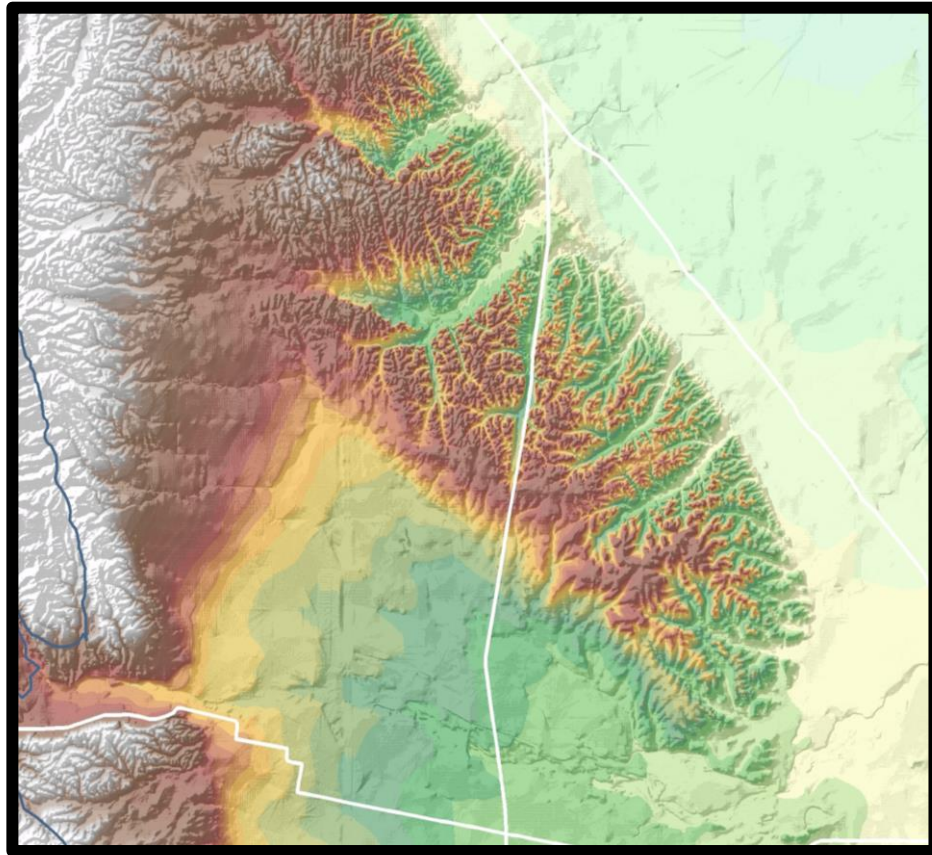
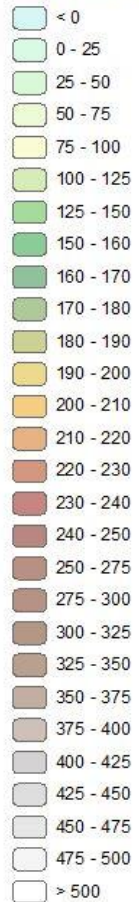
Outcrop of Tehama Formation:

- Dunnigan Hills Management Area (MA)
- Plainfield Ridge
- Western edge of Central Yolo MA



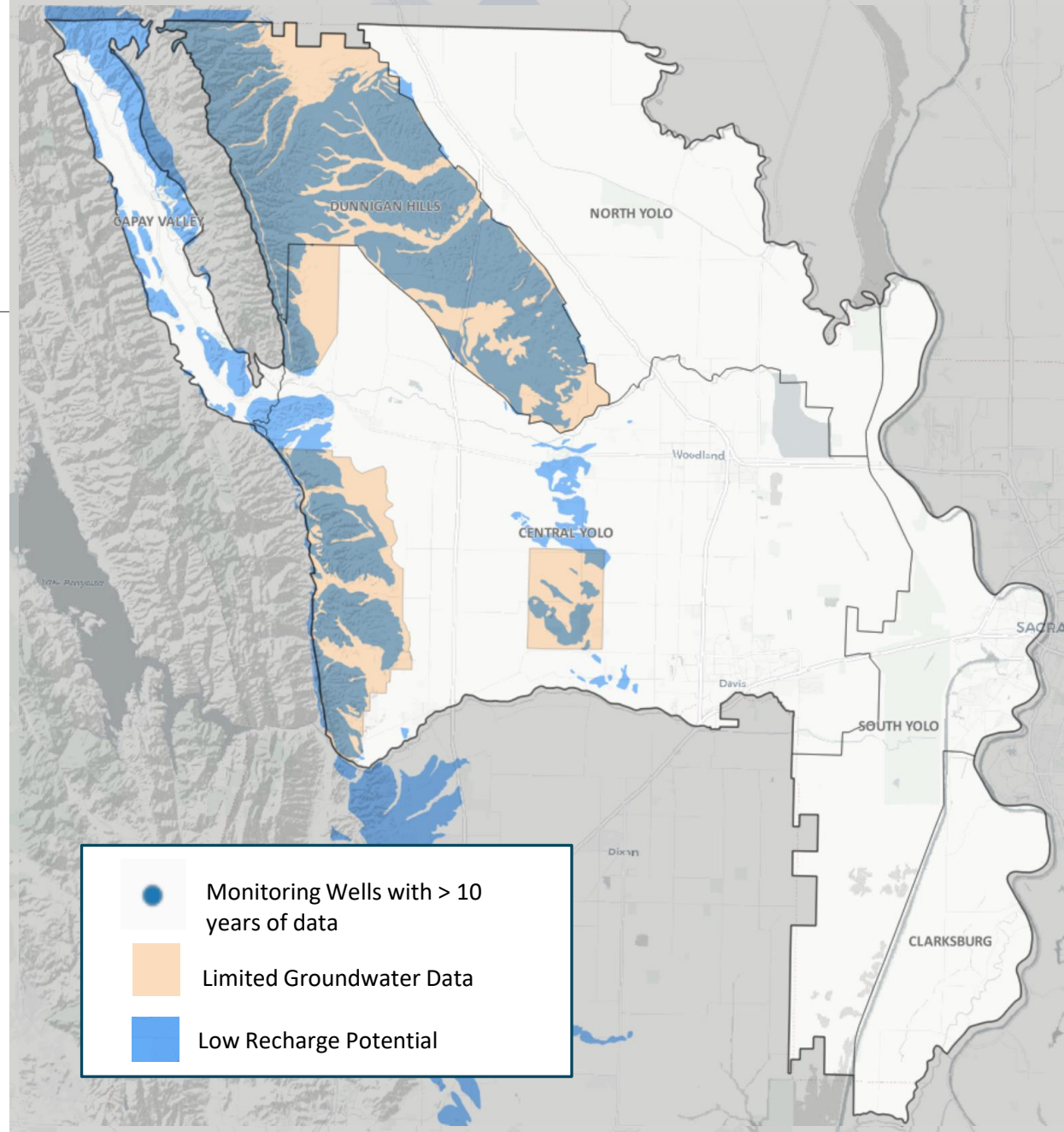
Low Recharge Potential: Terrain

Land Elevation (feet)



Limited Groundwater Data

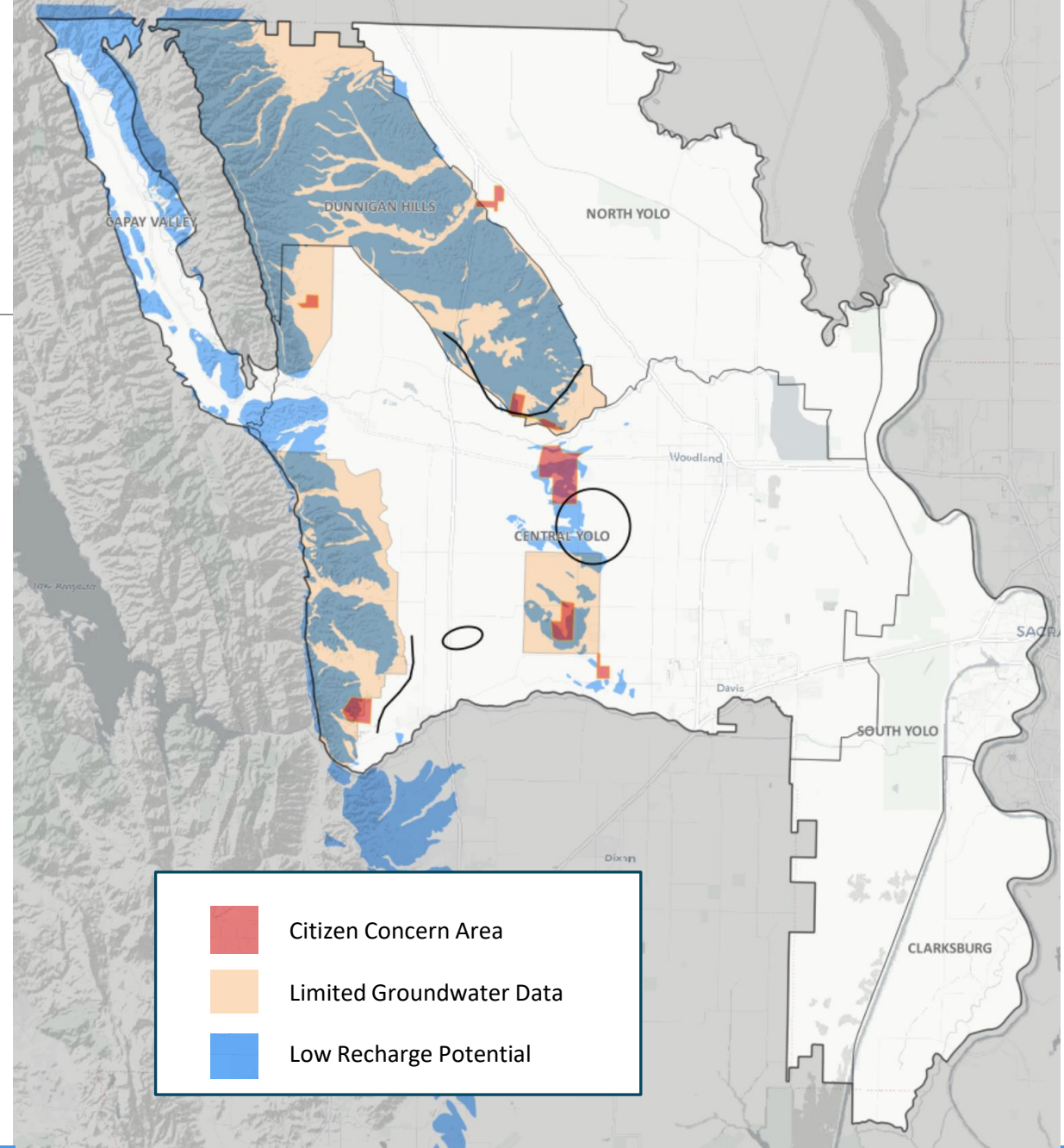
1. Dunnigan Hills Management Area (MA)
2. Central Yolo MA west of Winters Canal
3. Road 95 by Yolo County Airport
4. Data gaps along eastern edge of Subbasin – OK (known stable groundwater levels)



Citizen Concerns

Areas where citizens have expressed concern to the YSGA & County:

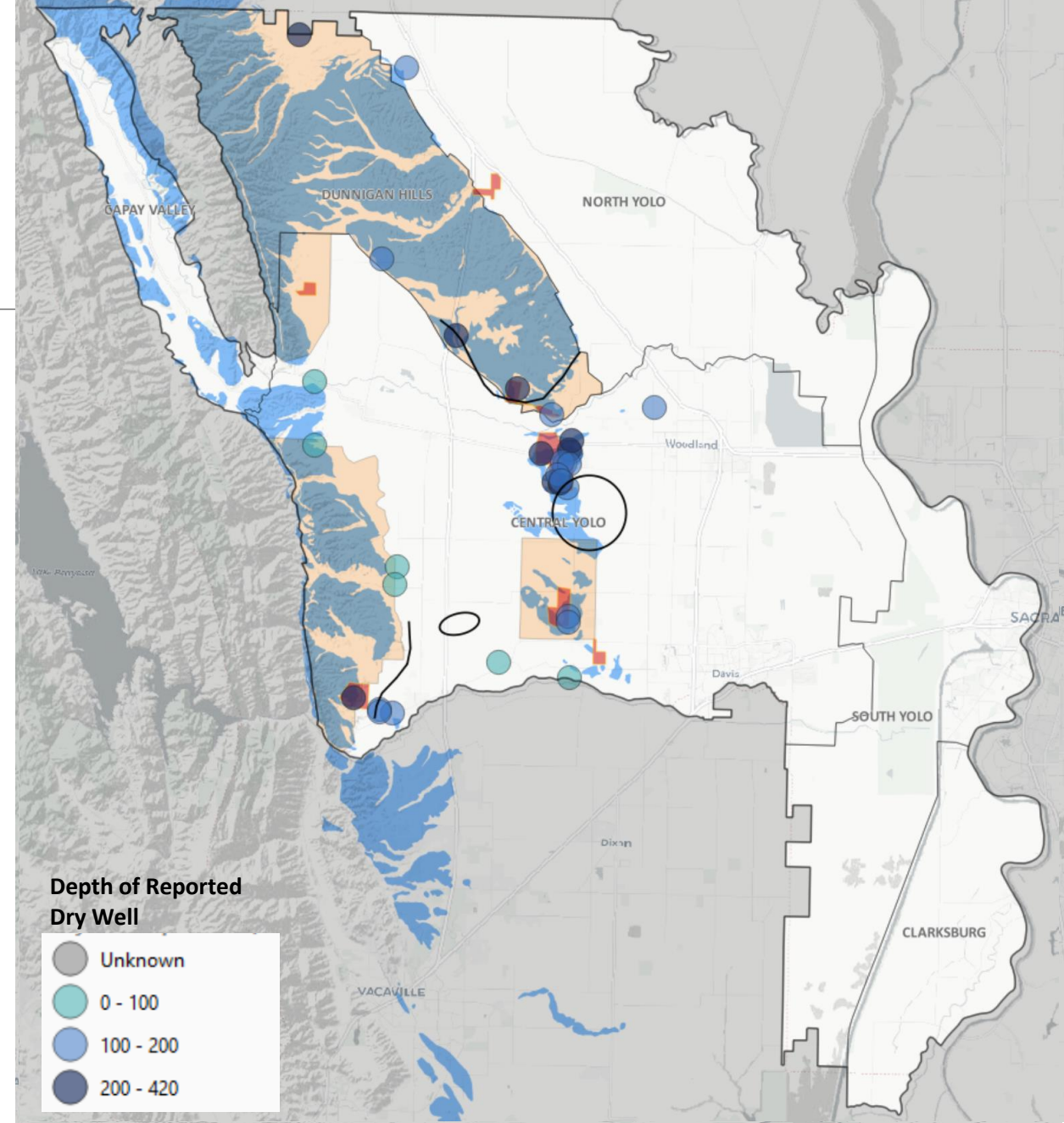
1. Road 84A & 84B
2. Golden Bear Estates
3. Road 20 & 92C
4. Monument Hills/Hillcrest
5. West Plainfield/Corcoran Hill Ln
6. Cassidy Lane
7. Zamora



Reported Dry Wells

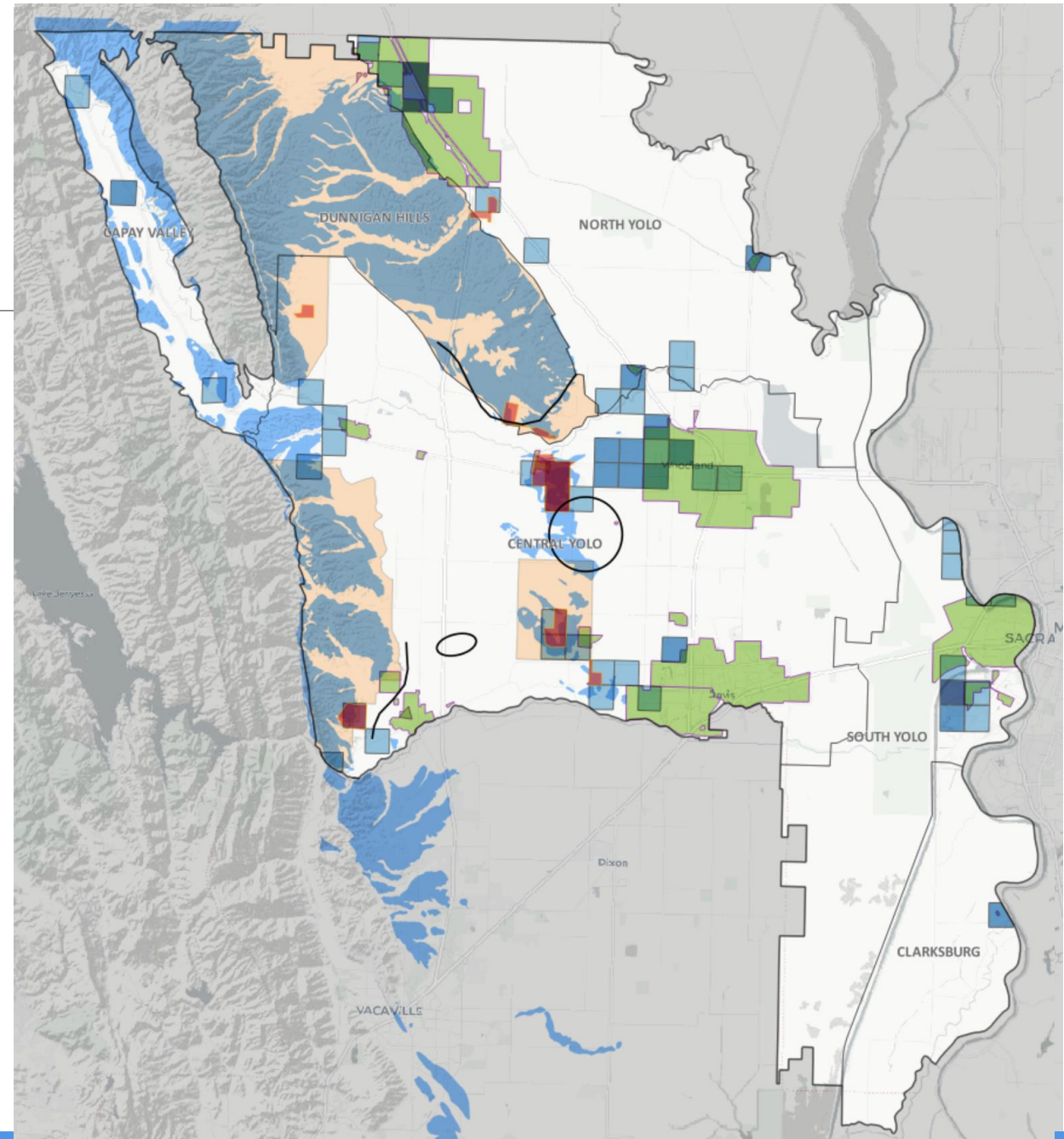
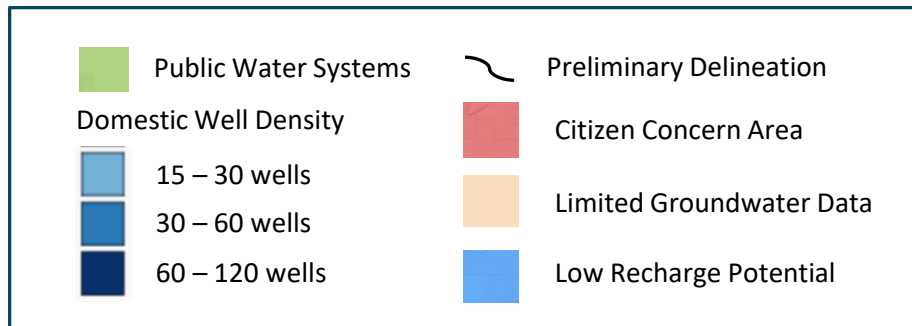
Dry domestic wells reported to Yolo OES in 2021-2022 drought period:

- Remove reports resolved by lowering pump
- Remove wells with unknown depth (but noted for further investigation)
- Remove wells that have total depths shallower than historic low groundwater level (Fall 1977, where data is available)
- Remove wells where water levels have recovered



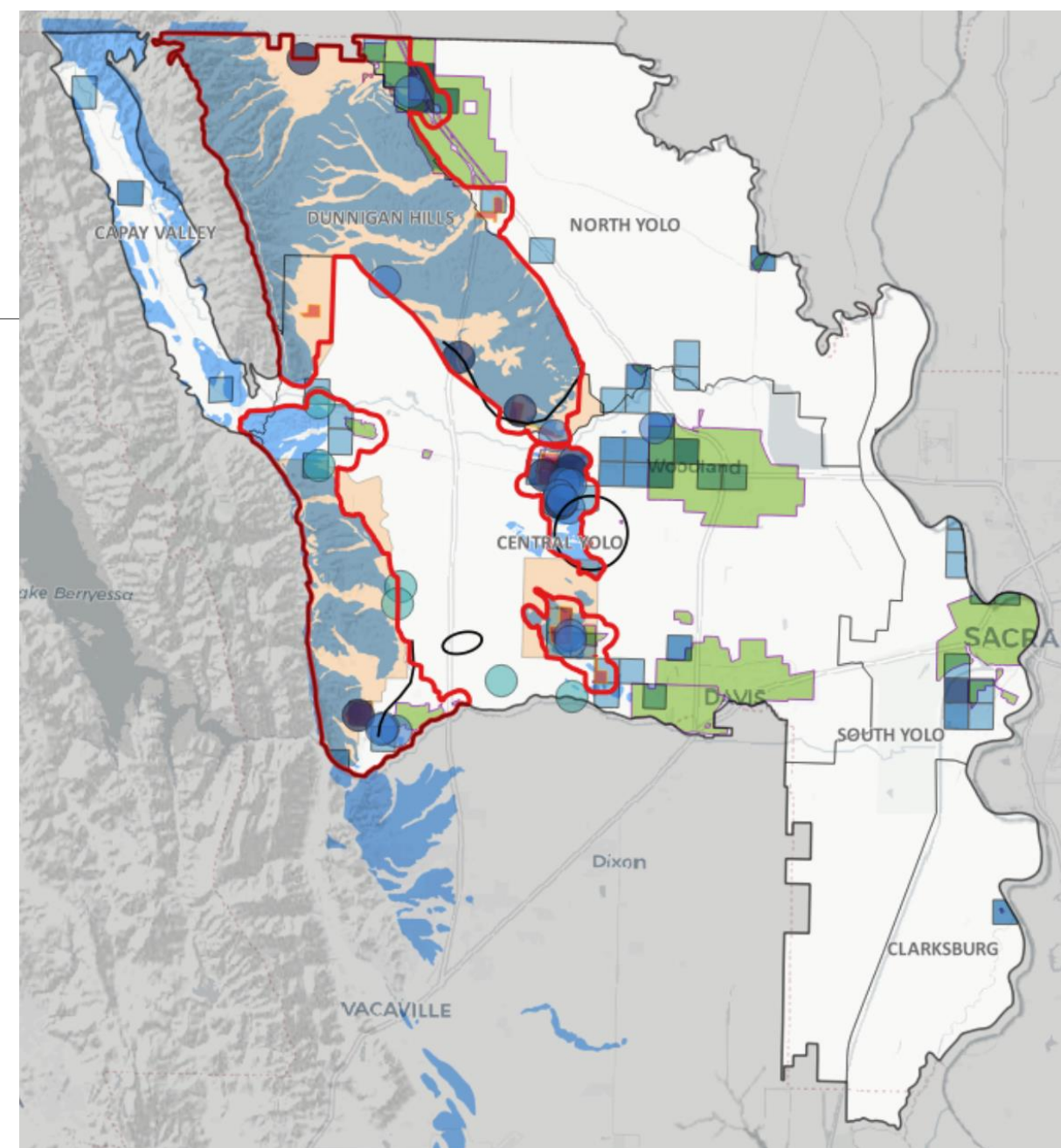
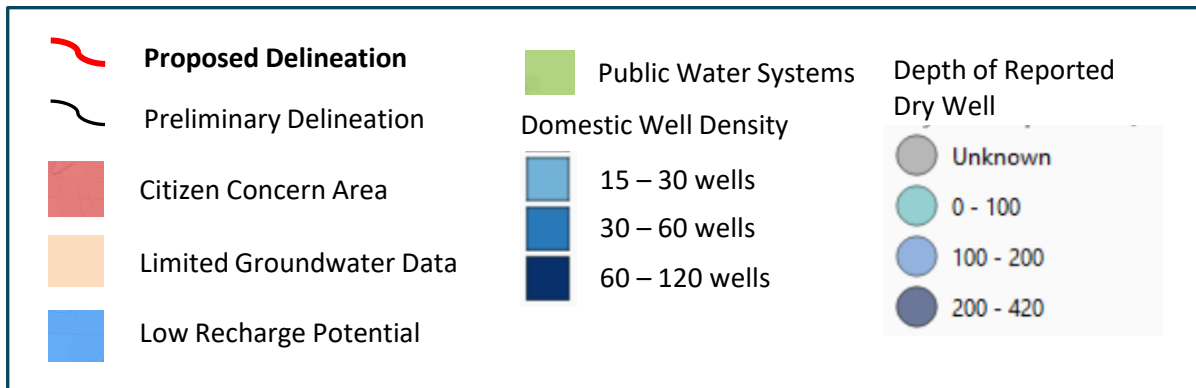
Small Water Systems & Domestic Well Density

1. Dunnigan
2. Zamora
3. Yolo
4. West of Woodland
5. Madison
6. Esparto & Capay
7. Winters, Golden Bear, & El Rio Villa
8. West of Davis
9. Binning Tract & North Davis Meadows



Adjustments

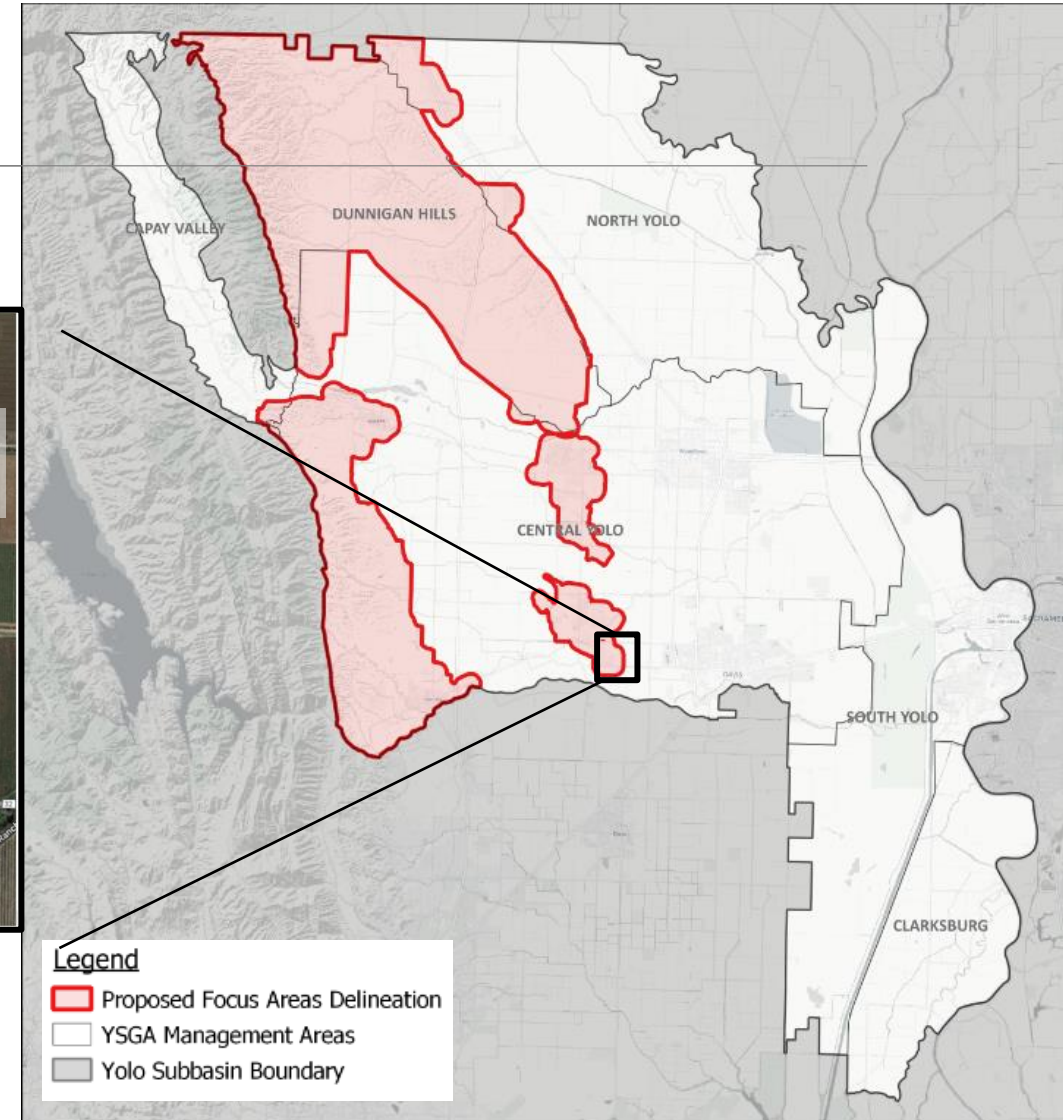
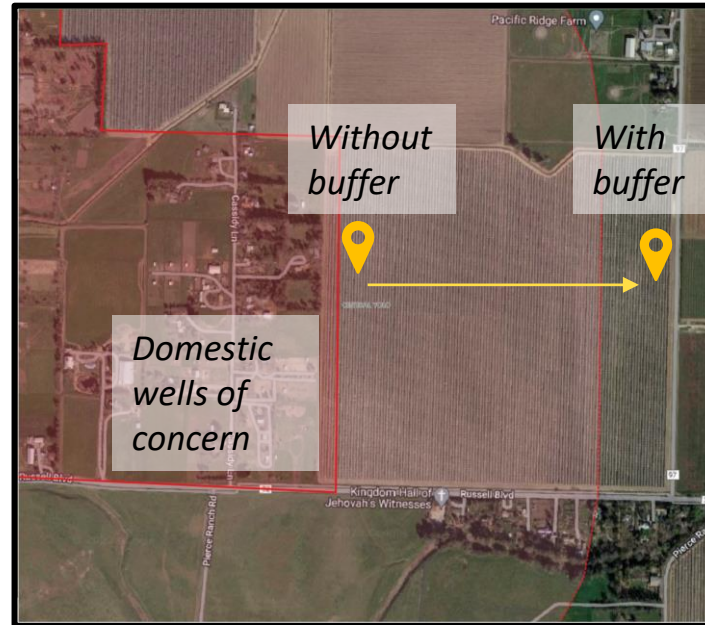
- Refine preliminary delineation based on proximity to:
 - Areas with low recharge potential
 - Areas with limited groundwater data
 - Concerns from residents
 - Dry well reports
 - Small water systems & domestic well density
- Outline areas where multiple factors overlap



Additional Protection of Domestic Wells

2,000-foot buffer around areas with high densities of domestic wells

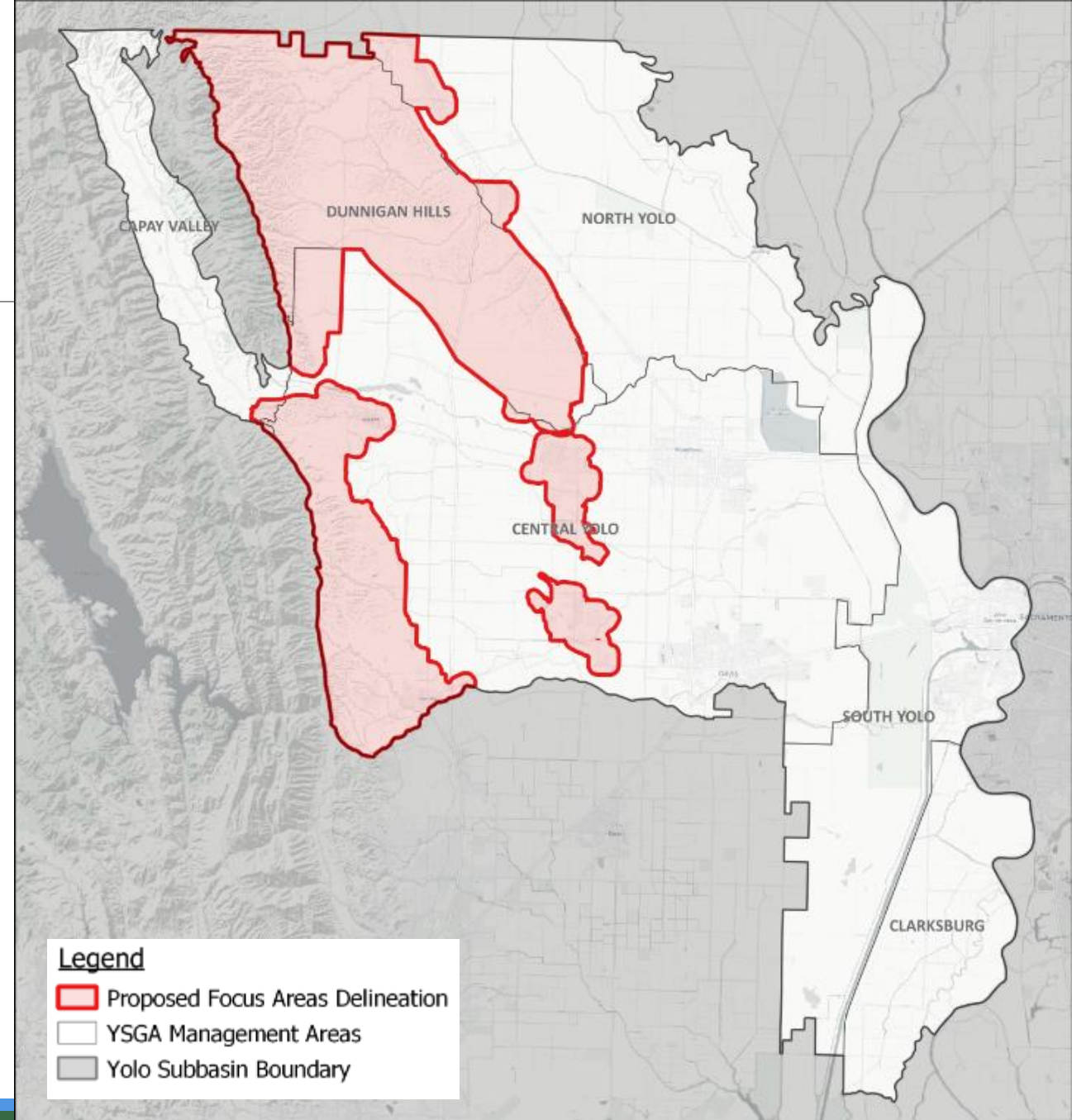
- Provides additional protection adjacent to rural neighborhoods
- Based on County's setback requirements for wells proposing < 2,000 gpm



Draft "Focus Areas" Delineation

- Basis for Delineation
 - Levels below defined MTs
 - Levels with 10-year decline > 25 feet
 - Low recharge potential
 - Limited groundwater data
 - Reported dry wells and citizen concerns
 - High domestic well densities
 - Small water systems
 - 2,000-foot buffer added near areas where high densities of domestic wells exist

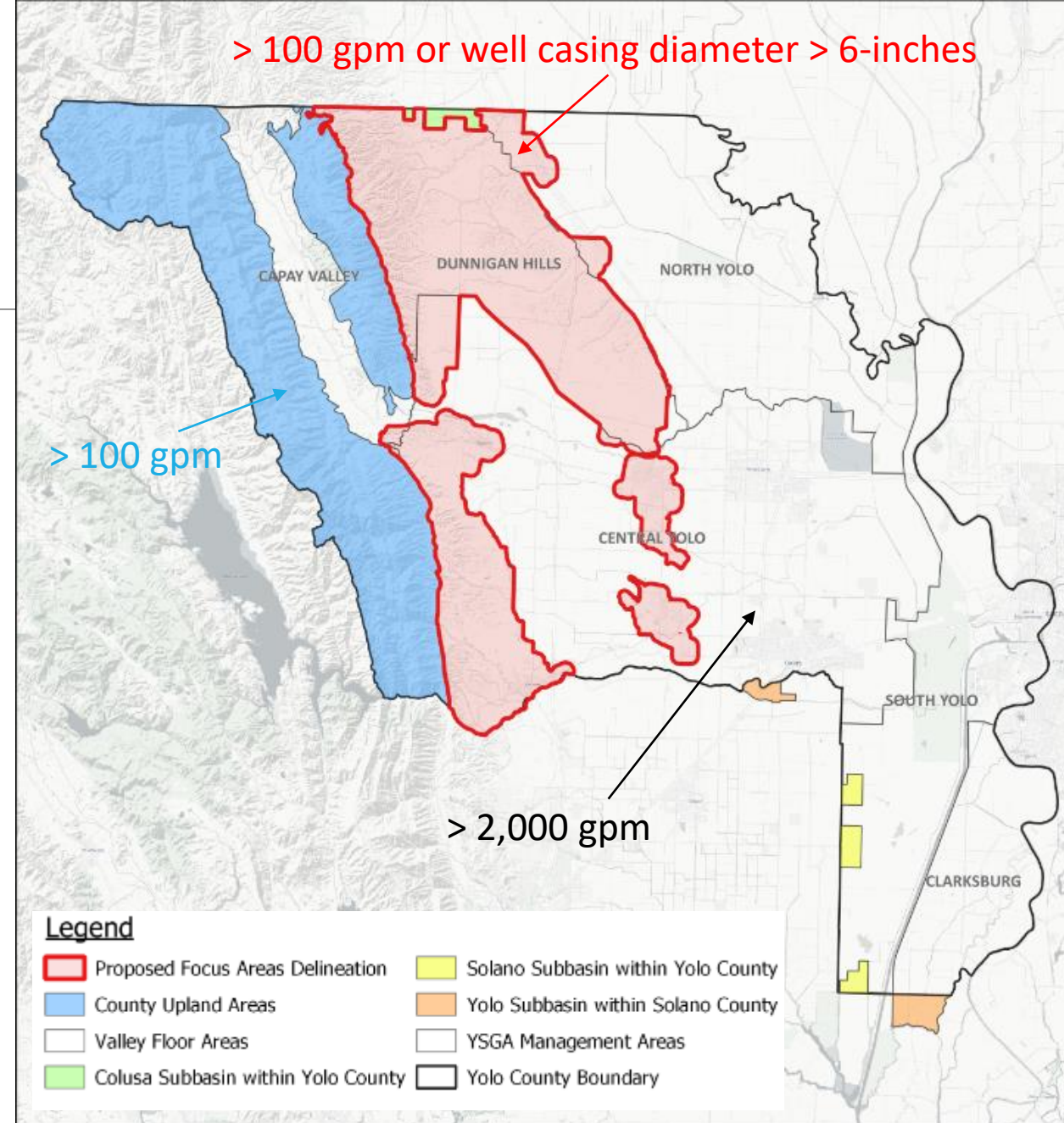
Suggested to be updated on an annual basis based on hydrologic conditions at the end of the water year.



Current County Policy & YSGA Overlap

- The County has developed minimum separation distances based on proposed new wells* pumping capacity where a Hydrogeologist Report is required to *verify* that the well would be compliant with Executive Order N-7-22 Section 9A and 9B
 - Proposed Focus Areas delineation
 - Upland areas (blue areas)
 - Valley Floor areas (white/clear areas)
 - Orange areas are subject to YSGA + Solano County permitting requirements
 - Yellow areas are subject to Solano Subbasin GSA + Yolo County permitting requirements
 - Green areas are subject to Colusa Groundwater Authority + Yolo County permitting requirements

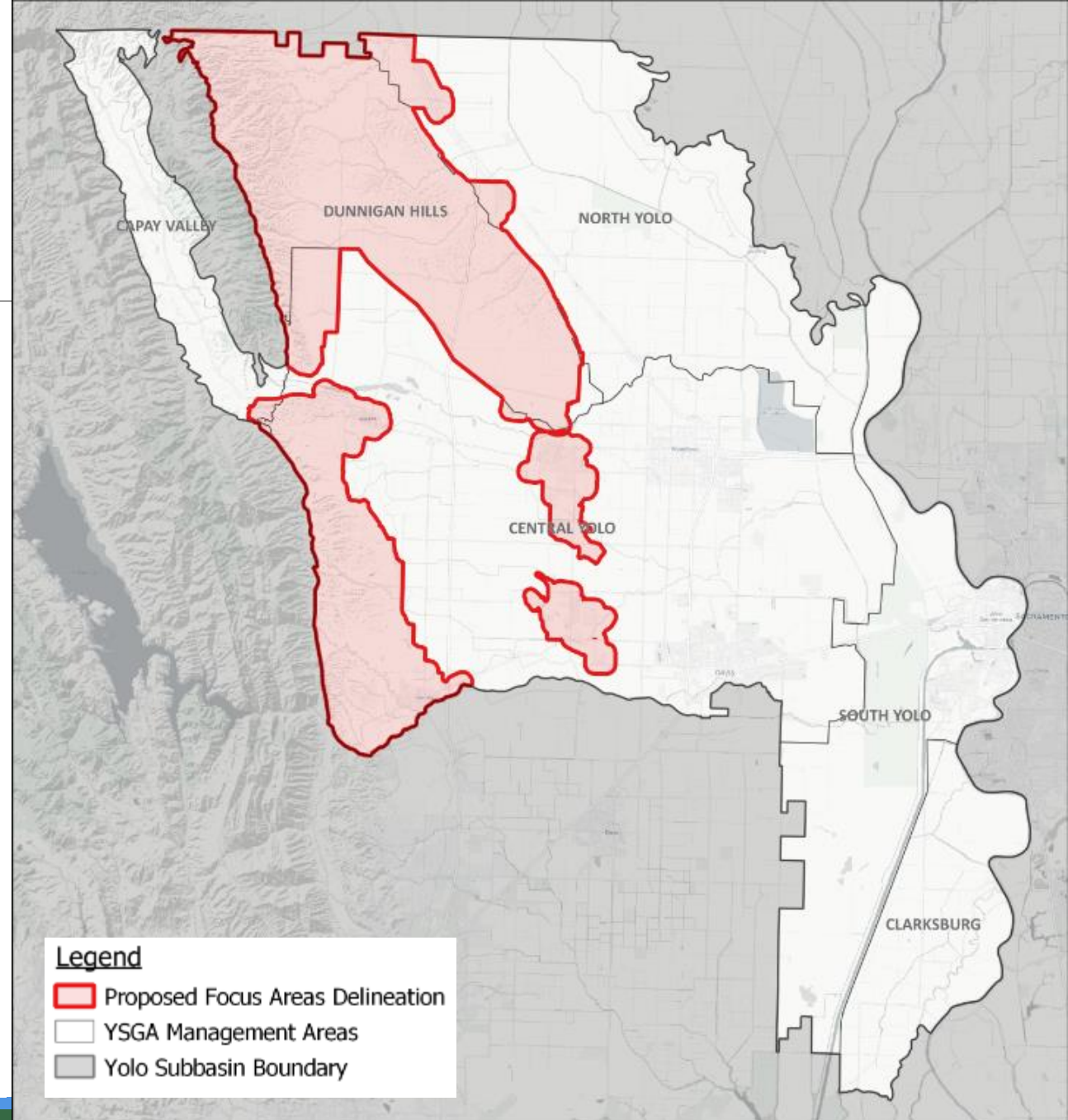
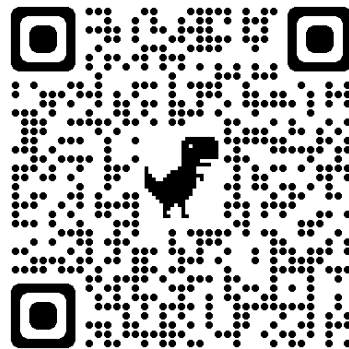
*or proposed alteration of an existing well



Discussion and Next Steps

Discussion

- Questions/Comments on the Draft Focus Areas Delineation Map?
- Public Comment Process



Public Review Process

- Public Review Process of Focus Areas Map and TM: 10/31 - 11/14
- Update to County at Board of Supervisors 11/7 Meeting (Moratorium ends 11/10)

Preparation for 11/20 Board Meeting

- YSGA DCPC Meeting to discuss standardized criteria for Hydrogeology Reports:
 - Propose updated YSGA well permitting forms
 - Define standardized criteria for well permittees to prepare hydrogeologist reports. These may include
 - (1) Property Owner Information
 - (2) Location of Proposed Well
 - (3) Description of Proposed Well
 - (4) Design of Proposed Well
 - (5) Hydrogeologic Evaluation
 - (6) Impact Assessment
 - (7) Hydrogeologist Report Findings
 - Define evaluation criterion for evaluating hydrogeologist reports
 - Define additional requirements to comply with the EO related to the Focus Areas delineation (i.e., borehole geophysical log and 'as built')

Items at 11/20 Board Meeting

- Presentation of Public Comments received and state of Focus Areas Map (potentially adopt "Final" map)
 - Draft Technical Memorandum of standardized criteria for Hydrogeology Reports
 - Draft of updated Well Permit Procedures for Board review
-
- Announce Public Review Process of TM standardized criteria for Hydrogeology Reports: 11/22-12/6 (*estimated*)

December 2023/January 2024

- Hydrogeology Reports: Incorporate Final Revisions for "Acceptance" by YSGA BOD at *Special* December meeting or January meeting
 - Final *Draft* Technical Memorandum of Standardized Criteria for Hydrogeology Reports
- Final updated Well Permit Procedures for Board review

Agenda

1. Call to Order and Determination of Quorum
2. Public Forum
3. Report of the Chair and Executive Officer
4. CONSIDERATION - Approval of Draft YSGA Focus Areas Map and Public Review
- 5. Next Meeting - November 20, 2023**
6. Adjournment

Agenda

1. Call to Order and Determination of Quorum
2. Public Forum
3. Report of the Chair and Executive Officer
4. CONSIDERATION - Approval of Draft YSGA Focus Areas Map and Public Review
5. Next Meeting - November 20, 2023
- 6. Adjournment**