

EKI TECHNICAL PRESENTATION #26

WHITE WOLF GSA BOARD OF DIRECTORS

7 FEBRUARY 2023



OUTLINE – AGENDA ITEM #7

- Update on Groundwater Sustainability Plan (GSP) implementation activities
- Summary of recently approved GSPs
- Projects/Management Actions (P/MAs) Committee initiation
- Round 2 Multibenefit Land Repurposing Program Grant solicitation

7a. UPDATE ON GSP IMPLEMENTATION ACTIVITIES

WATER YEAR 2022 ANNUAL REPORT

- 1 October 2021 through 30 September 2022
- Certain data and analysis required to extend from 1 January 2015 through 30 September 2022
- Currently processing all data and extending groundwater flow model
 - Awaiting forthcoming evapotranspiration data (agenda item #9) to finalize extension and associated estimates of agricultural pumping and change in groundwater storage

GROUNDWATER ELEVATION CONTOUR MAPS

Figure 2. Groundwater Elevations, Fall 2021

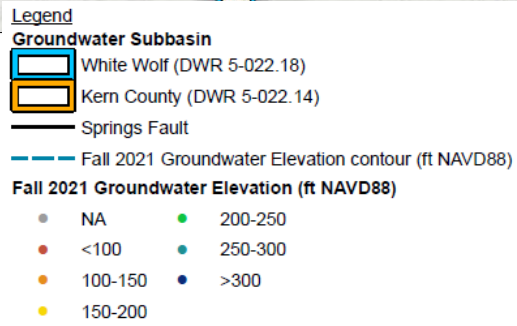
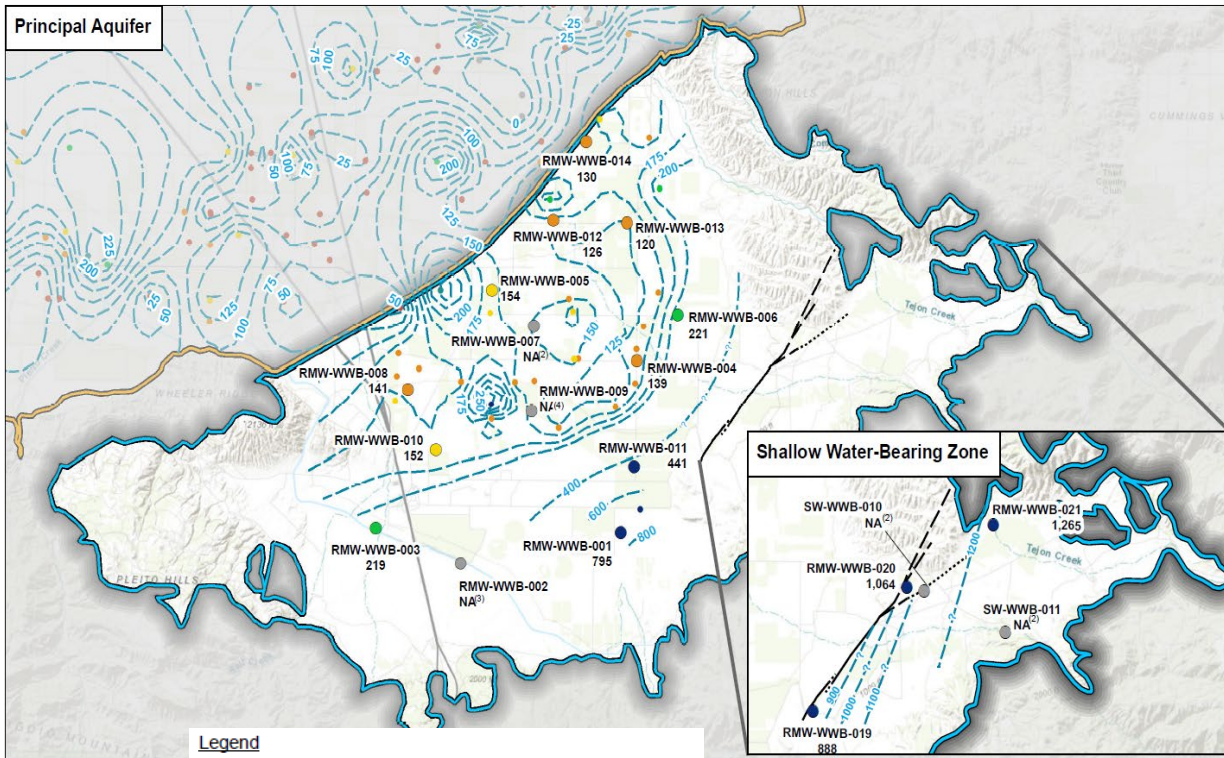
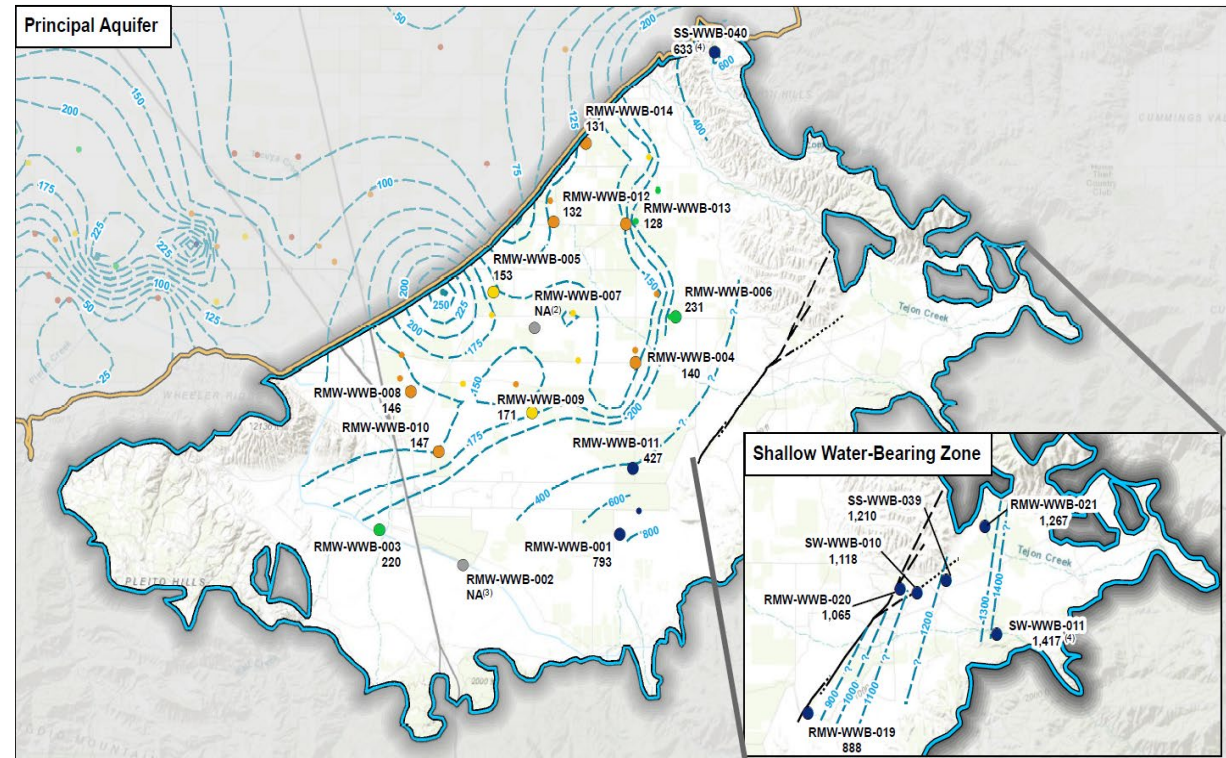
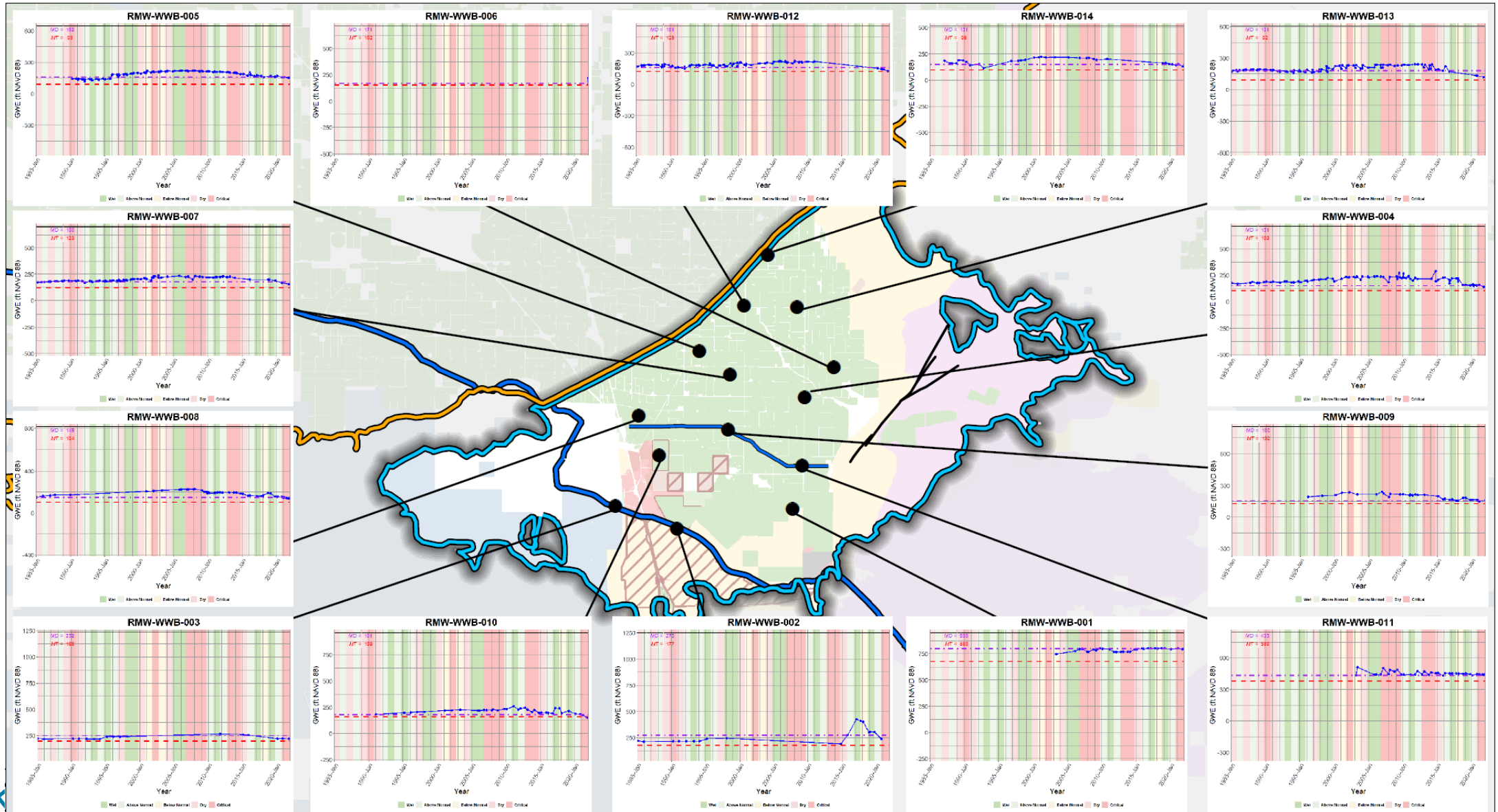


Figure 3. Groundwater Elevations, Spring 2022



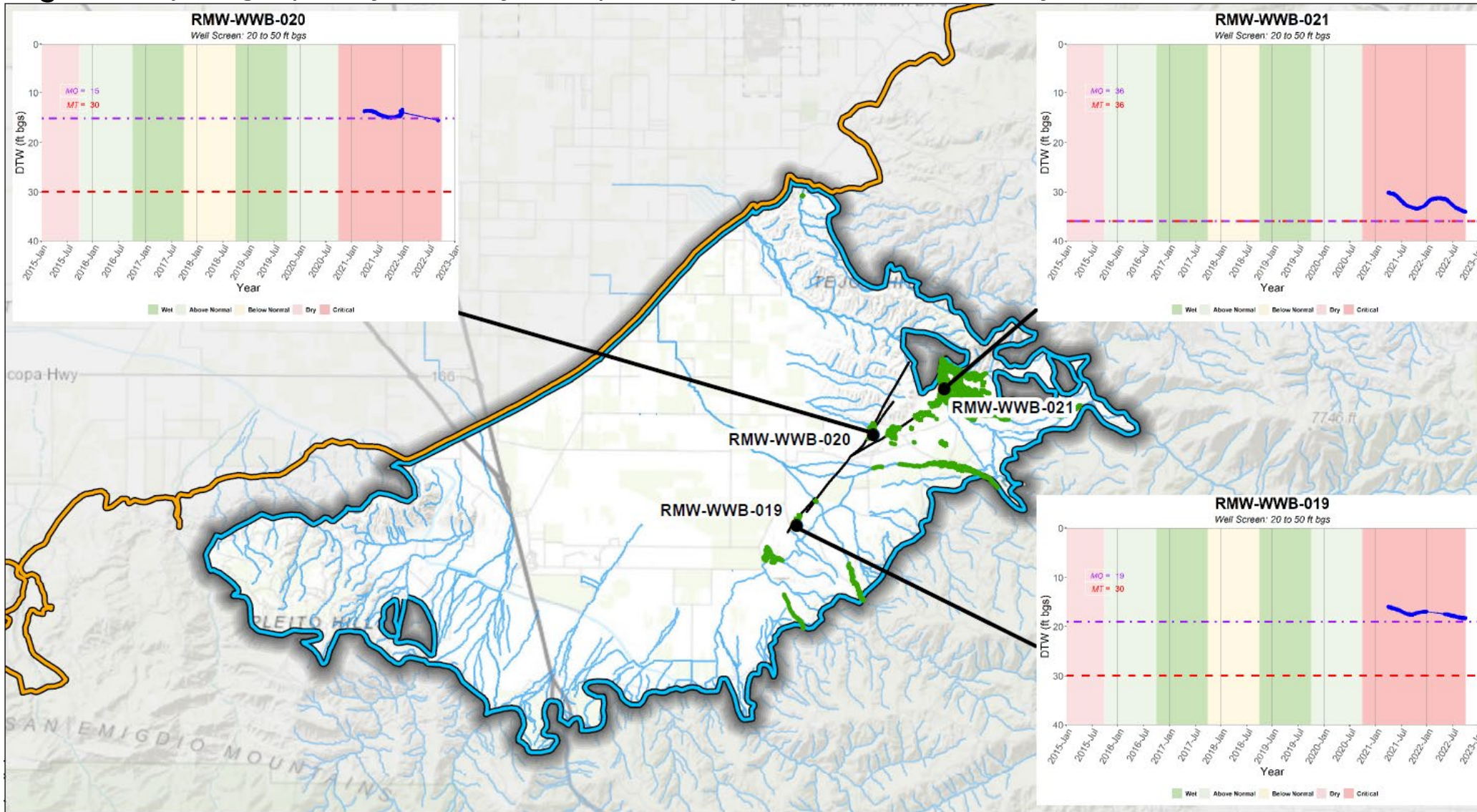
WATER LEVEL SMCs

Figure 4. Hydrographs of RMWs for Chronic Lowering of Groundwater Levels



INTERCONNECTED SURFACE WATER SMCs

Figure 5. Hydrographs of RMWs for Depletion of Interconnected Surface Water



SURFACE WATER USE BY SECTOR AND SOURCE

Table 2. Summary of Surface Water Supply by Sector and Source

Water Year	WRMWSD Imports (AF)		AEWSD Imports (AF)	TCWD Imports (AF)	Total Imports (AF)		Stream Diversions (AF)
	Agricultural	M&I	Agricultural	M&I	Agricultural	M&I	Agricultural
2021	15,911	3,251	18,391	526	34,302	3,777	1,128
2022	11,799	2,526	19,716	496	31,515	3,022	2,751

- Imports are based on surface water deliveries to customers; actual imports may be greater due to conveyance system losses.
- WRMWSD agricultural deliveries are calculated based on the total water delivered by turnout, minus the total volume of groundwater pumped into the WRMWSD distribution system
- Imported surface water delivered by WRMWSD to M&I users are not included in the Soil Moisture Balance Accounting model (SMB). 94% of the M&I water was delivered to Pastoria Energy Facility. It is assumed that these M&I deliveries contributions to the groundwater system are negligible.
- Stream diversions were unavailable for some points of diversion during the reporting period.

PROGRESS TOWARDS INTERIM MILESTONES



Lowering
GW Levels

- One well exceeded (fell below) its MT in both Fall and Spring, with downward trending water levels in some other wells



Degraded
Quality

- All wells had constituent concentrations below MCLs and therefore above MTs



Land
Subsidence

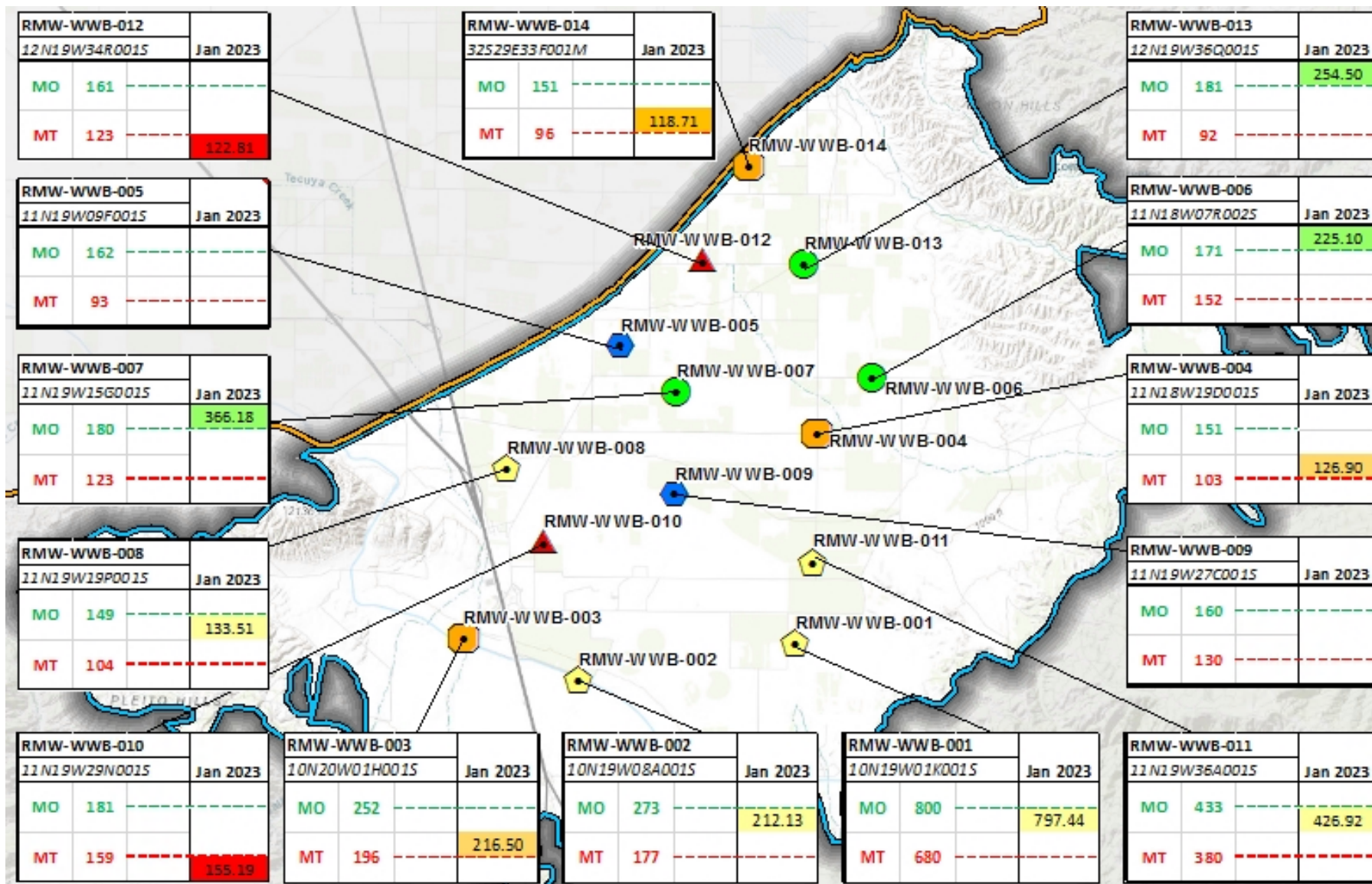
- No specific SMCs set, average change in land surface elevation:
 - California Aqueduct: -0.31 ft
 - 850 Canal: -0.17 ft
 - InSAR: -0.1 to 0.1 ft



Surface Water
Depletion

- All wells remain above MTs

JANUARY MEASUREMENTS COMPARED TO SMCS



- Two wells remain below MTs

Legend

Groundwater Subbasin

- White Wolf (DWR 5-022.18)
- Kern County (DWR 5-022.14)

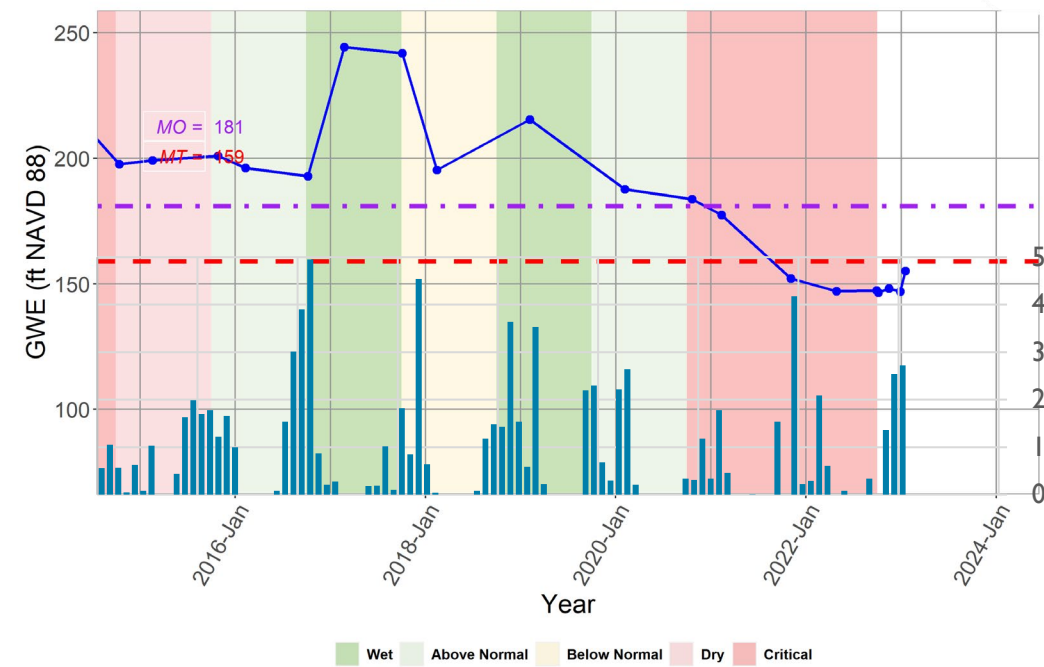
Well Status

- Water Level above MO (3 or 21.5%)
- Water Level between MO and MT but closer to MO (4 or 29%)
- Water Level between MO and MT but closer to MT (3 or 21.5%)
- Water Level below MT (2 or 14%)
- No Measurements (2 or 14%)

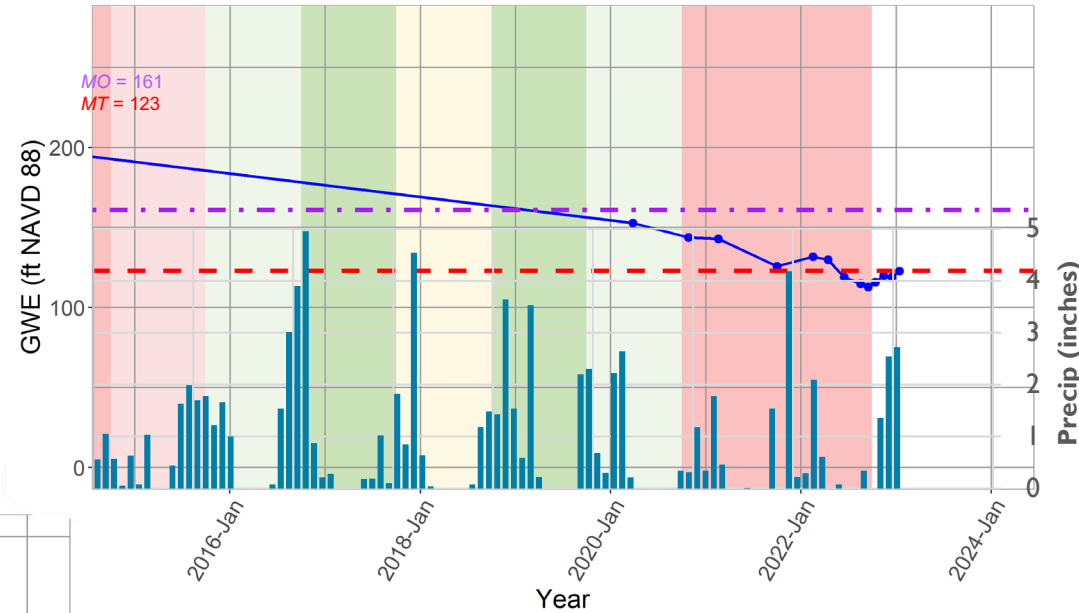


WATER LEVEL RESPONSE TO RECENT PRECIP

RMW-WWB-010

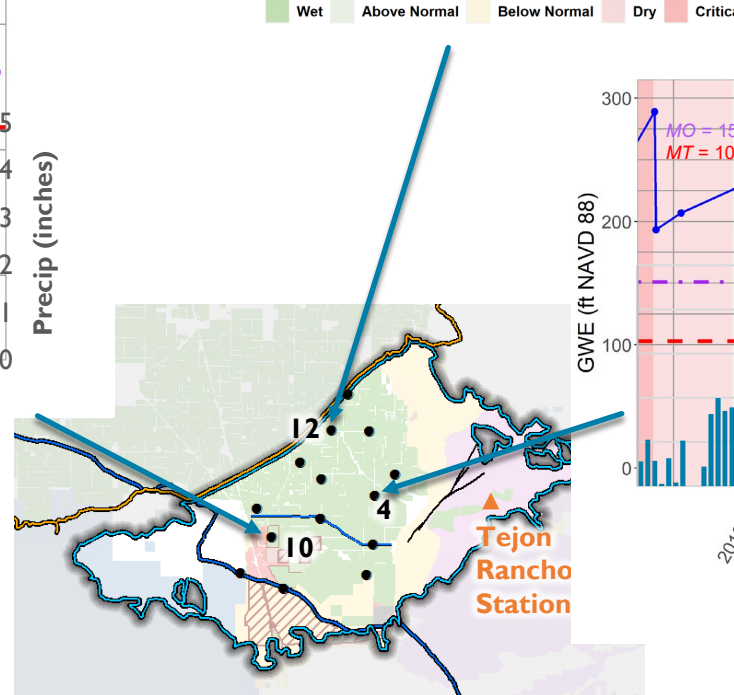
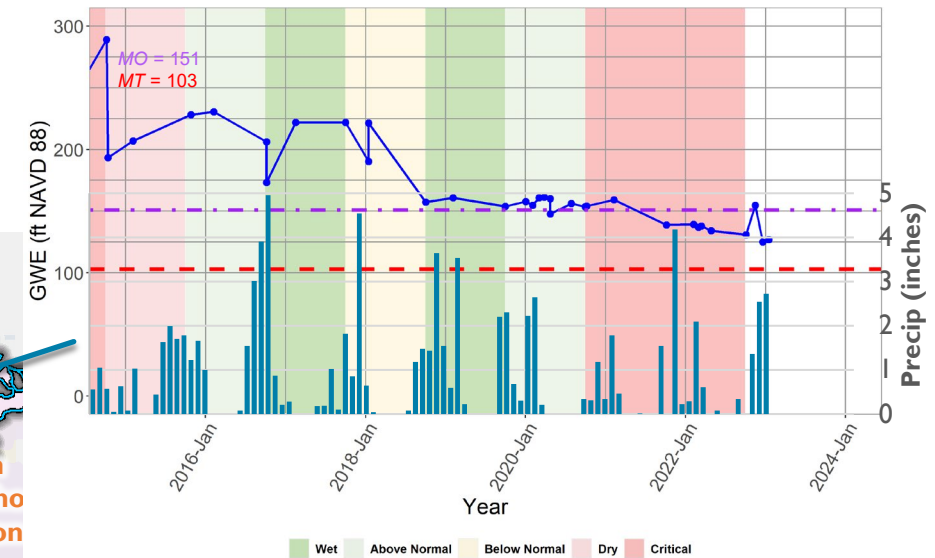


RMW-WWB-012



- 6.62 inches of rain measured November to January at Tejon Rancho climate station
- Water levels increased by 1.03 feet (median)

RMW-WWB-004



7b. SUMMARY OF RECENTLY APPROVED GSPS

DWR APPROVED FOUR 2022 GSPs ON JANUARY 26th

- High priority
 - Napa Valley
 - Sonoma Valley
- Medium priority
 - Petaluma Valley
 - Santa Rosa Plain

Common Features:

- Northern CA basin
- Single GSA and GSP for basin
- At least partly stable water levels
- Maximum of one management area
- Generally similar approach to SMCs

POTENTIALLY RELEVANT COMMENTS



More detailed MT for Land Subsidence

Napa Valley: While Department staff conclude that the GSA has provided reasonable evidence and rationale to support the claim that the Subbasin has not experienced groundwater-induced land subsidence in the past, the definition of the minimum threshold should be expanded to ensure any future land subsidence is detected and addressed.



Update Interconnected Surface Water SMCs and monitoring (DWR guidance forthcoming)

All: Department staff understand that quantifying depletions of surface water from groundwater extractions is a complex task that likely requires developing new, specialized tools, models, and methods to understand local hydrogeologic conditions, interactions, and responses. During the initial review of GSPs, Department staff have observed that most GSAs have struggled with this new requirement of SGMA.



Specify number (not just %) of wells impacted at Chronic Lowering of Groundwater Levels MT

Petaluma Valley: To ensure full disclosure to potentially affected interests and informed decision making, the GSA should more explicitly analyze and report the total number of wells that may be impacted by the proposed minimum thresholds.

7c. P/MAS COMMITTEE INITIATION

P/MA COMMITTEE

- Standing Technical Advisory Committee (TAC) meeting
 - Virtual meetings, open to the public
 - 2nd Thursdays at 12 PM – 1 PM
- First meeting 9 February 2023 (this Thursday)
 - Will help guide land repurposing program grant application

7d. ROUND 2 MULTIBENEFIT LAND REPURPOSING PROGRAM GRANT SOLICITATION

BLOCK GRANT APPLICATION FOR ROUND 2 OF THE MULTIBENEFIT LAND REPURPOSING PROGRAM

- Department of Conservation
- Awards of up to \$8.89M
- Applications due 29 March 2023
- Currently reworking WWGSA's Round 1 application
- Will require:
 - Authorizing resolution (agenda item #8)
 - Letters of support

California Department of Conservation
Solicitation Notice and Application for:

Multibenefit Land Repurposing Program

FINAL
January 31, 2022



FEEDBACK FROM ROUND 1 APPLICATION

- WWGSA’s application scores and ranking varied widely depending upon reviewer
- Reviewers liked the range of land repurposing options and appreciated that project partners represented agricultural, water, and environmental interests
- Increase focus on community engagement, including:
 - Outline for Disadvantaged Community (DAC) engagement and consideration
 - Specify how barriers to participation will be mitigated, including bilingual communications
 - Allocate more budget for planning and community outreach and engagement efforts
- Expand details on the land repurposing plan and how feedback from DACs and community outreach will be incorporated into the land repurposing project ranking and selection process
- Expand on policy experience of GSA Board
- Expand partnerships to include environmental justice voices

PARTNERSHIP AND COLLABORATION

- Required for successful application
- Letters of support
 - Outline financial/ in-kind commitment from **partners**
 - Show meaningful incorporation of interest from **collaborators**

“Partnering is defined as commitments by other organizations, government agencies, private citizens or volunteer groups to provide funds or in-kind services.”

“Collaboration is defined as working with other organizations, government agencies, groups, and individuals to ensure that all entities work in agreement and are non-duplicative of each other’s activities, and to ensure that diverse interests are meaningfully incorporated into the block grant recipient’s work.”