

Merced GSP Stakeholder Advisory Committee

Stakeholder Advisory Committee Meeting – October 19, 2022

Meeting will begin at 9:30 am or a few minutes after – thank you for joining us!

Image courtesy: Veronica Adrover/UC Merced

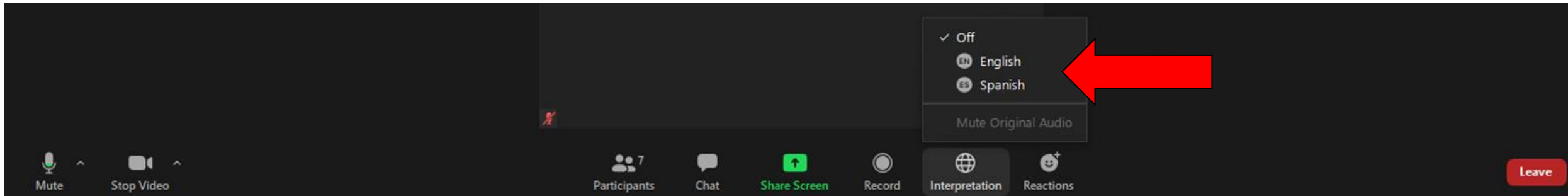
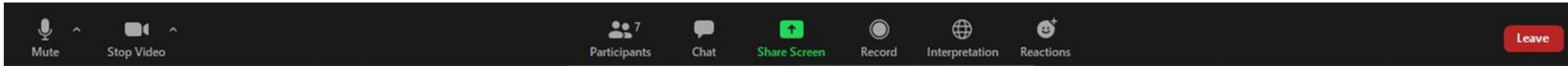


Welcome, Instructions for Zoom

Bienvenidos, Instrucciones para Zoom

We have two language audio channels available. English only speakers, please select English.

Si solamente habla español, debe seleccionar un canal de idioma



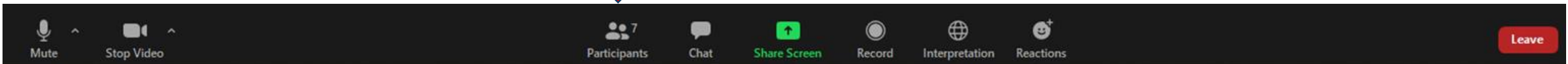
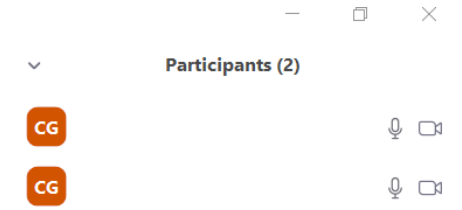
The meeting will have simultaneous interpreting, so you are welcome to comment in your native language.
La junta será interpretada simultáneamente, así que le invitamos a que haga comentarios en su lenguaje nativo.

Welcome, Instructions for Zoom

- We are beginning the meeting with everyone on mute.
- Please keep yourself muted until called upon and asked to unmute.
- We recommend that you view in “Gallery View” to see the project team and Stakeholder Committee members.
- If you have comments, please use the “**Raise Hand**” feature:
 - Stakeholder Committee: during discussion time
 - Members of the Public: during Public Comment or when the moderator asks for public comments.
- The moderator will call on you to unmute.
- If you cannot hear the host or have technical issues, use the **Chat** to Host and we will try to address the issue.

Stakeholder Advisory Committee Members

- Please keep your video on whenever possible.



Stakeholder Advisory Committee October 19 Agenda

1. Call to Order and Welcome
2. Introductions and Roll Call
3. Drought Check-in
4. Recap of the Groundwater Sustainability Plan July 2022 Update
5. 5-Year GSP Evaluation Lookahead
6. GSA Reports
7. Prop 68 Implementation Planning & Projects Grant Round 2 (due Nov 30, 2022)
8. Ongoing and Upcoming Activities
9. Public Comment
10. Next Steps and Adjourn

Image courtesy: Veronica Adrover/UC Merced

Stakeholder Advisory Committee Members

Present	Committee Member	Interest/Affiliation	Present	Alternate	Interest/Affiliation
	Arlan Thomas	MIDAC member		Ben Migliazzo	Live Oak Farms
	Bob Kelley	Stevinson Representative		Blake Nervino	Stevinson/Merquin
	Breanne Ramos	MCFB			
	Craig Arnold	Arnold Farms			
	Darren Olguin	Resident of Merced County			
	Dave Serrano	Serrano Farms - Le Grand			
	David Belt	Foster Farms			
	Emma Reyes	Martin Reyes Farm/Land Leveling			
	Greg Olzack	Atwater Resident			
	Jean Okuye	E Merced RCD			
	Joe Sansoni	Sansoni Farms/MCFB			
	Joe Scoto	Scoto Brothers/McSwain School Dist.			
	Jose Moran	Livingston City Council			
	Lacy Carothers	Cal Am Water			
	Lisa Baker	Clayton Water District			
	Lisa Kayser-Grant	Sierra Club			
	Mark Maxwell	UC Merced			
	Maxwell Norton	Unincorporated area			
	Nav Athwal	TriNut Farms			
	Olivia Gomez	Community of Planada		Nataly Escobedo Garcia	Leadership Counsel
	Parry Klassen	ESJWQC			
	Darcy Brown	River Partners			
	Rick Drayer	Merced/Mariposa Cattlemen			
	Simon Vander Woude	Sandy Mush MWC			
	Susan Walsh	City of Merced		Bill Spriggs	Resident City of Merced
	Thomas Dinwoodie	Master Gardener/McSwain			
	Trevor Hutton	Valley Land Alliance			
	Wes Myers	Merced Grassland Coalition		Lou Myers	Benjamin Land LP

Stakeholder Advisory Committee Meeting Agreements

Guidelines for successful meetings

- Civility is required.
 - Treat one another with courtesy and respect.
 - Be honest, fair, and as candid as possible.
 - Personal attacks and stereotyping are not acceptable.
- Creativity is encouraged.
 - Think outside the box and welcome new ideas.
 - Build on the ideas of others to improve results.
 - Disagreements are problems to be solved rather than battles to be won.
- Efficiency is important.
 - Participate fully, without distractions.
 - Respect time constraints and be succinct.
 - Let one person speak at a time.
- Constructiveness is essential.
 - Take responsibility for the group as a whole and ask for what you need.
 - Enter commitments honestly and keep them.

Image courtesy: Veronica Adrover/UC Merced



Drought Check-in

Image courtesy: Veronica Adrover/UC Merced



Drought Check-in

- Self Help Enterprises Emergency Water Programs in Merced County
 - Bottled Water Program – 64 active participants
 - Tanked Water Program – 60 active participants
 - Well Program – 14 pending applications, 1 approved application
- Discussion/feedback from the SAC on any current/ongoing experiences during the drought

Image courtesy: Veronica Adrover/UC Merced



Recap of the Groundwater Sustainability Plan July 2022 Update

Image courtesy: Veronica Adrover/UC Merced

Revised GSP Submitted on Time (by July 27)

- In response to DWR's Incomplete determination, with revisions for:
 - Chronic lowering of groundwater levels / domestic well impacts
 - Land subsidence
- Collaborative, transparent process January through July 2022

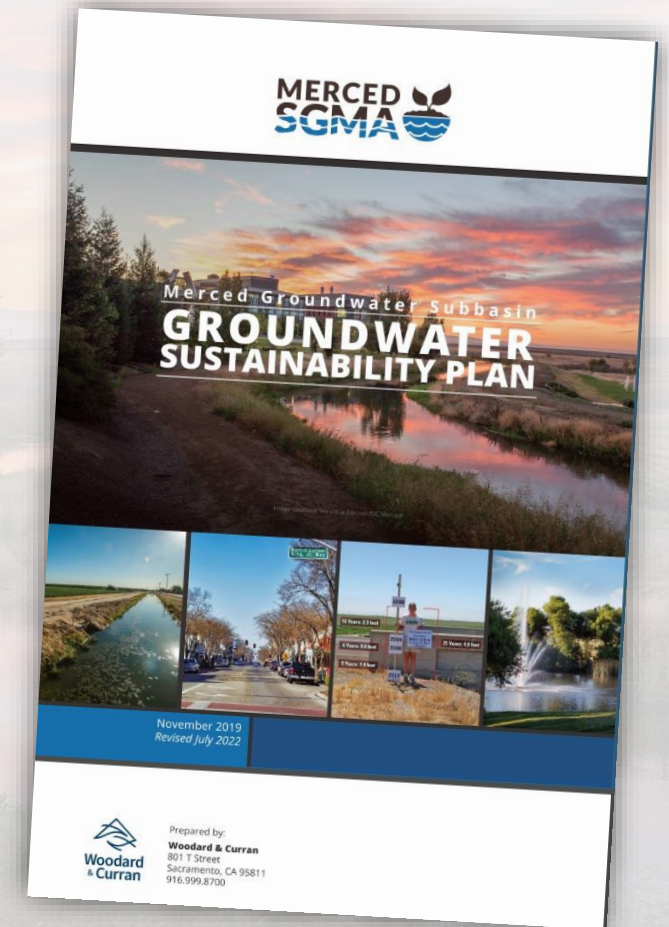








Image courtesy: Veronica Adrover/UC Merced

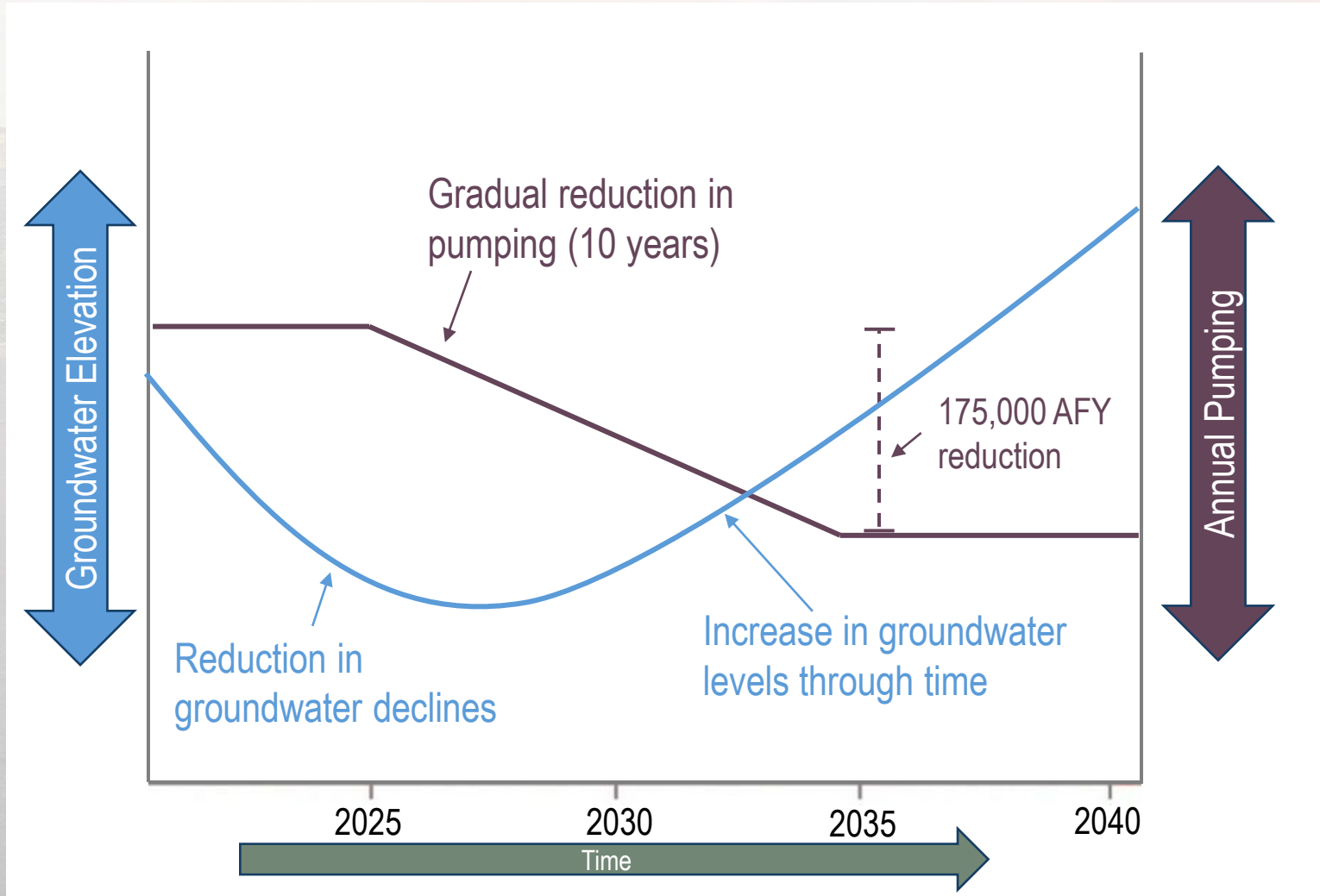
Revised Sustainable Management Criteria (SMC)

Table ES-1-1: Summary of Sustainable Management Criteria

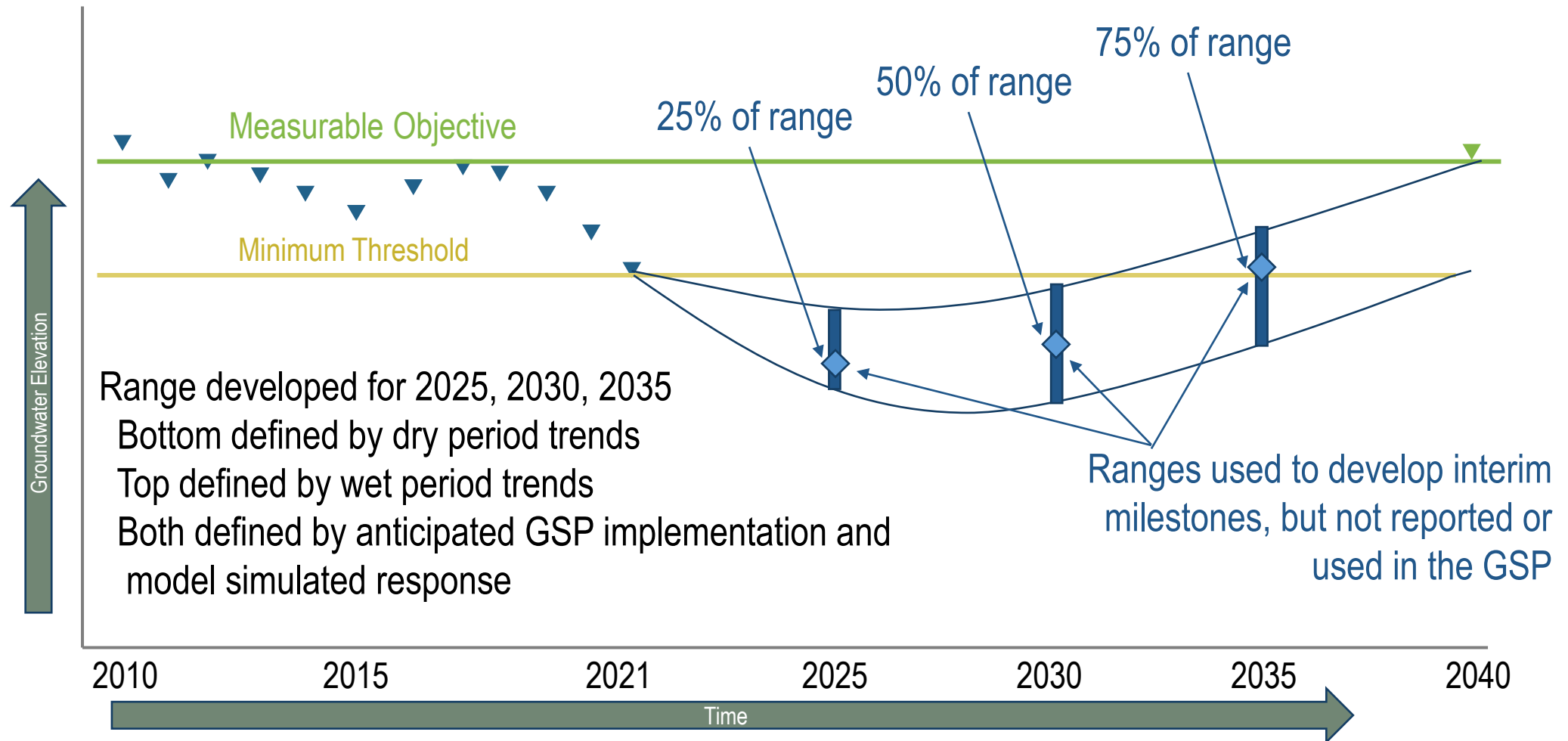
Sustainability Indicator	Minimum Threshold (MT)	Interim Milestone (IM)	Measurable Objective (MO)	Undesirable Result
 Groundwater Levels	Fall 2015 groundwater elevation	Based on range of projected values that account for hydrologic uncertainty, more details in Section 3.3.3.	November or October 2011 groundwater elevation (measured, or estimation if historical record not available)	Greater than 25% of representative wells fall below MT in 2 consecutive years <i>Removed specification of hydrologic year type</i>
 Groundwater Storage	Not applicable - not present and not likely to occur in the Subbasin due to the significant volumes of freshwater in storage			
 Seawater Intrusion	Not applicable - not present and not likely to occur due to the distance between the Subbasin and the Pacific Ocean (and Sacramento-San Joaquin Delta)			
 Degraded Water Quality	1,000 mg/L TDS	1,000 mg/L TDS	500 mg/L TDS	At least 25% representative wells exceed MT for 2 consecutive years
 Land Subsidence	0 ft/year, subject to uncertainty of +/-0.16 ft/year	2025: -0.75 ft/year 2030: -0.5 ft/year 2035: -0.25 ft/year	0 ft/year	Exceedance of MT at 3 or more representative sites for 2 consecutive years
 Depletions of Interconnected Surface Waters	Groundwater levels used as a proxy for this sustainability indicator			

(yellow highlighting indicates revised SMC)

Conceptual Scenario - Pumping vs Groundwater Levels Diagram



Interim Milestone Approach



Management Action for Subsidence Area

- Goal: Target pumping reduction (or recharge activities) within Subsidence Focus Area to achieve positive annual storage change
- Focus area defined by region with 2015-2021 average < -0.15 ft/yr
- Details to be developed as part of the management action
- Coordinate with Chowchilla and Delta-Mendota

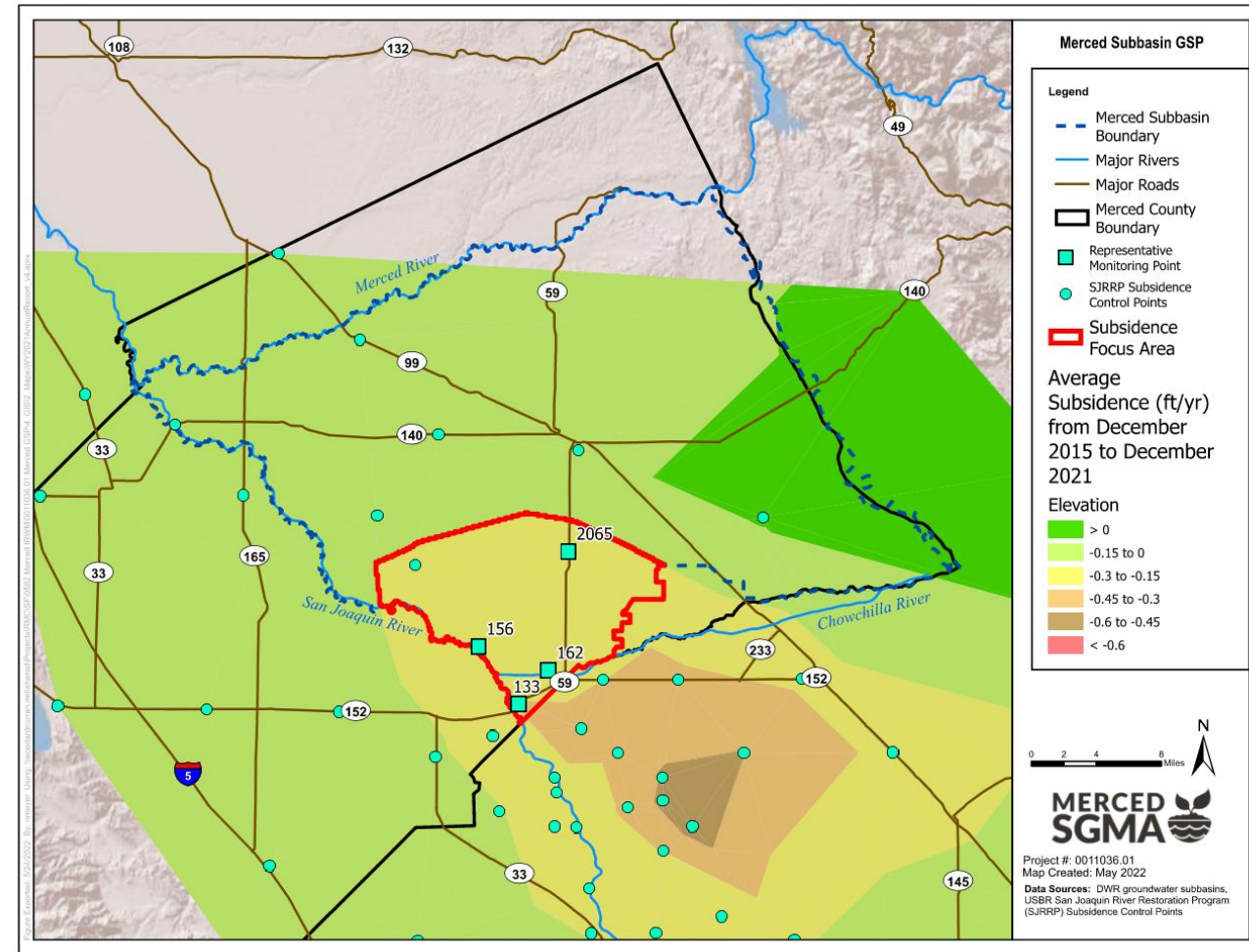


Image courtesy: Ve

Management Action for Domestic Well Mitigation Program

- Need for the program to be identified during GSP implementation to provide additional protection for domestic well users
- Envisions a board or committee reviewing claims
- Claims would need to be tied to regional groundwater conditions
- Substantial discussion by GSAs related to funding – consideration of
 - Overdraft conditions by GSAs since 1/1/2015
 - Spatial relationships of pumping to impacts
 - Ability to define specifics at this time
- Full details to be developed

Image courtesy: Veronica Adrover/UC Merced

Management Action for Above Corcoran Sustainable Management Criteria

- Intended to address unique conditions
 - Aquifer has not been substantially used
 - Subsidence may be mitigated by moving pumping shallower in the aquifer system
- Revisions to GSP may limit the ability to use this aquifer
 - Previous criteria allowed for some level of groundwater level decline, based on domestic well depths
 - New criteria keeps groundwater levels at or above 2015 levels
- Intent would be to allow use without significant and unreasonable impacts
- Details to be developed

Image courtesy: Veronica Adrover/UC Merced



Public Comment Letters

Image courtesy: Veronica Adrover/UC Merced



Letter 1 of 3: USBR San Joaquin River Restoration Program

- Desire to engage SJRRP as a stakeholder, identify as a beneficial use & user
- Interconnected surface waters uses groundwater levels as a proxy, but needs modification to be shallower
- More detailed plan needed for addressing undesirable results for lowered groundwater levels significantly below minimum thresholds
- More explanation needed around inflow assumptions for San Joaquin River and Eastside Bypass in water budget; include Restoration Flows as Developed Supply

Image courtesy: Veronica Adrover/UC Merced

Letter 2 of 3: National Marine Fisheries Services

- Have not explained how proposed Minimum Threshold (MT) for interconnected surface waters (i.e., proxy via groundwater levels) avoids undesirable result (analysis of impacts on fish migration, spawning, and rearing)
- Concerned that groundwater level MT is not adequate to avoid impacts to Endangered Species Act listed salmonids and sturgeon, and their habitat
- Groundwater Dependent Ecosystems (GDEs) analysis focuses on riparian habitat and does not include aquatic GDEs within rivers and streams
- Does not contain adequate analysis and consideration of public trust resources

Image courtesy: Veronica Adrover/UC Merced

Letter 3 of 3: Leadership Counsel for Justice & Accountability

- Missing drinking water impacts analysis for groundwater level SMC
- Fails to adequately address degradation of groundwater quality
- Does not account for dairy expansion demands on groundwater use
- Mitigation program lacks sufficient details to ensure success
- General comment that Revised GSPs (including Merced) do not comply with or conflict with:
 - Water Code Section 106.3 (right to safe & affordable drinking water)
 - Water rights of domestic users
 - Beneficial Use Doctrine
 - Public Trust Doctrine

Image courtesy: Veronica Adrover/UC Merced



5-Year GSP Evaluation Lookahead

Image courtesy: Veronica Adrover/UC Merced



GSP Regulations

- § 356.4 Periodic Evaluation by Agency
 - “Each Agency shall evaluate its Plan at least every five years...and describe whether the Plan implementation, including implementation of projects and management actions, are meeting the sustainability goal in the basin...”
 - Groundwater conditions
 - Implementation of projects/management actions & effect on groundwater conditions
 - Evaluation of basin setting in light of significant new information or changes in water use
 - Update on data gaps
 - (and more)
- § 355.6 Periodic Review of Plan by Department
 - Periodic review to ensure remains consistent with SGMA and is being implemented in a manner that will likely achieve the sustainability goal for the basin.

Image courtesy: Veronica Adrover/UC Merced

Timing of 5-year Evaluation

- “Each Agency shall evaluate its Plan at least every five years...” (§ 356.4)
- Evaluation is substantially an expanded annual report
- GSP was initially adopted in January 2020
- Five years from adoption would be January 2025
- Regulations are not clear on the timing of evaluations vs. submittal date of the documentation
- Will coordinate with DWR to assess the acceptability of delivery by April 1, 2025 – easing a 1 or 2 document solution to:
 - Meet requirements of the 5-year evaluation
 - Meet requirements of the annual report
 - 18-month timeline appropriate to allow resolution of more complex items. (October 2023 start)

Image courtesy: Veronica Adrover/UC Merced

Potential outcomes of 5-year evaluation

- Evaluation is similar to an expanded Annual Report
 - Report on conditions
 - Report on status of conditions relative to sustainable management criteria
 - Report on status of projects and management actions
- Outcome dependent on the GSAs and stakeholders
 - Respond to forthcoming comments on the updated GSP from DWR
 - Engage stakeholders, including commentors
- Update GSP if necessary
 - Consider incorporation of new wells into groundwater level representative monitoring network
 - Consider modifications to groundwater quality monitoring network
 - Consider updating allocation information
 - Other modifications, as appropriate

Image courtesy: Veronica Adrover/UC Merced



Reports

Image courtesy: Veronica Adrover/UC Merced



GSA Reports

- Updates from each GSA on activities they are undertaking in their own jurisdiction:
 - Merced Subbasin GSA
 - Merced Irrigation-Urban GSA
 - Turner Island Water District GSA #1

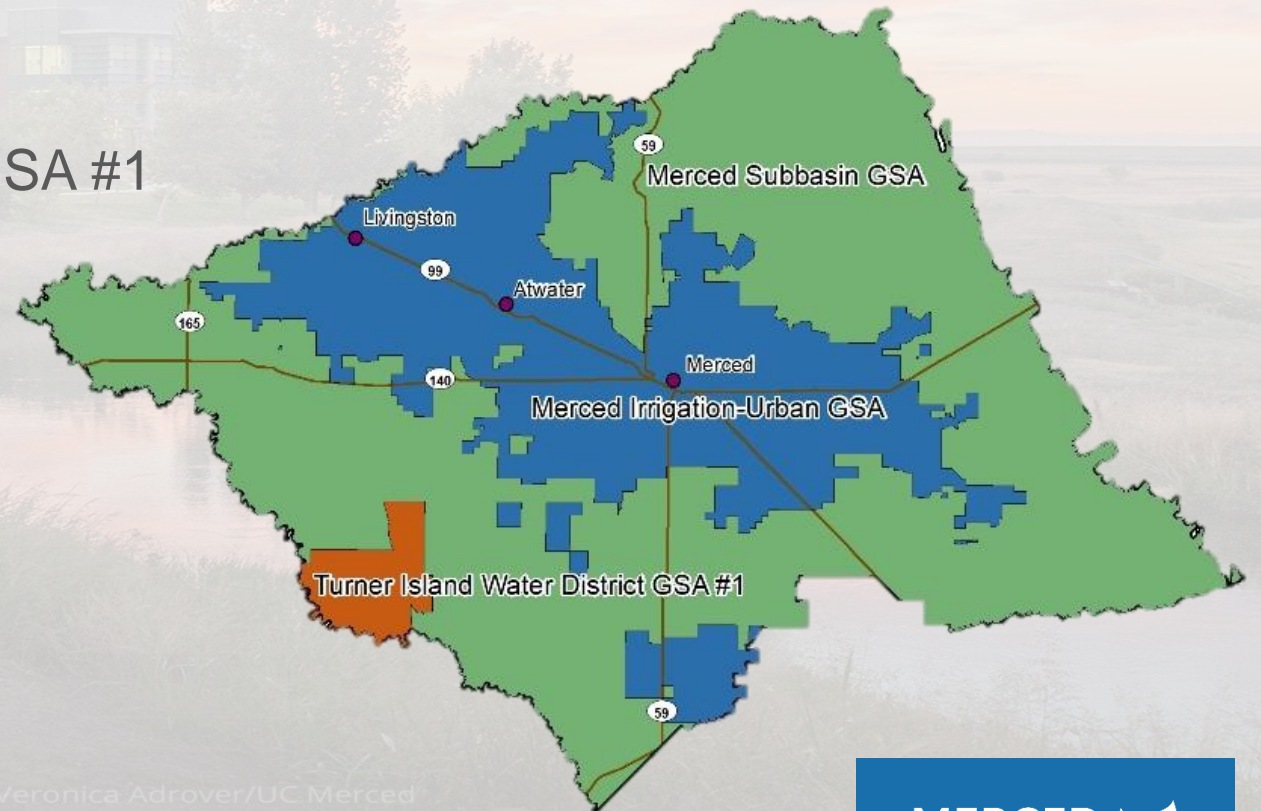
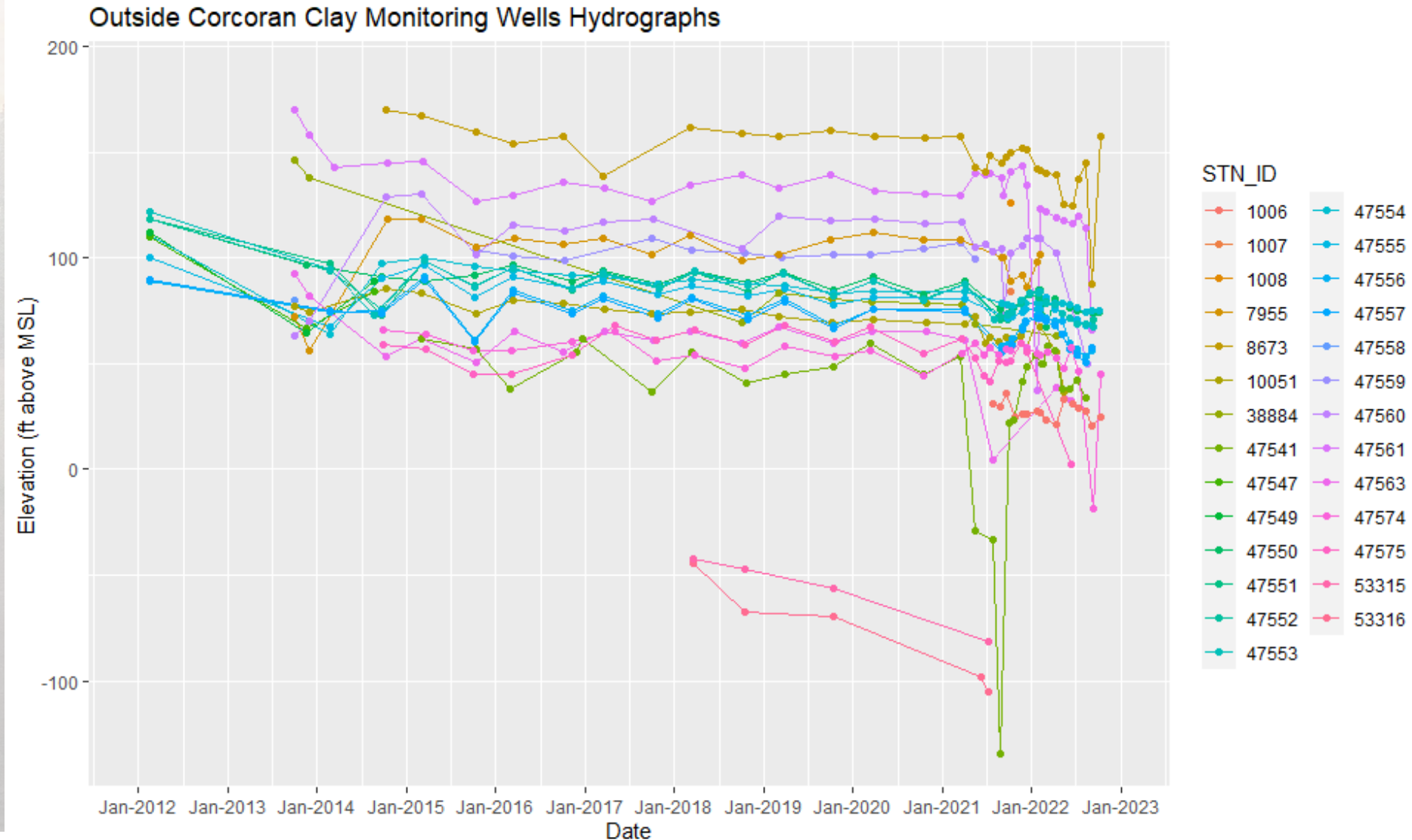


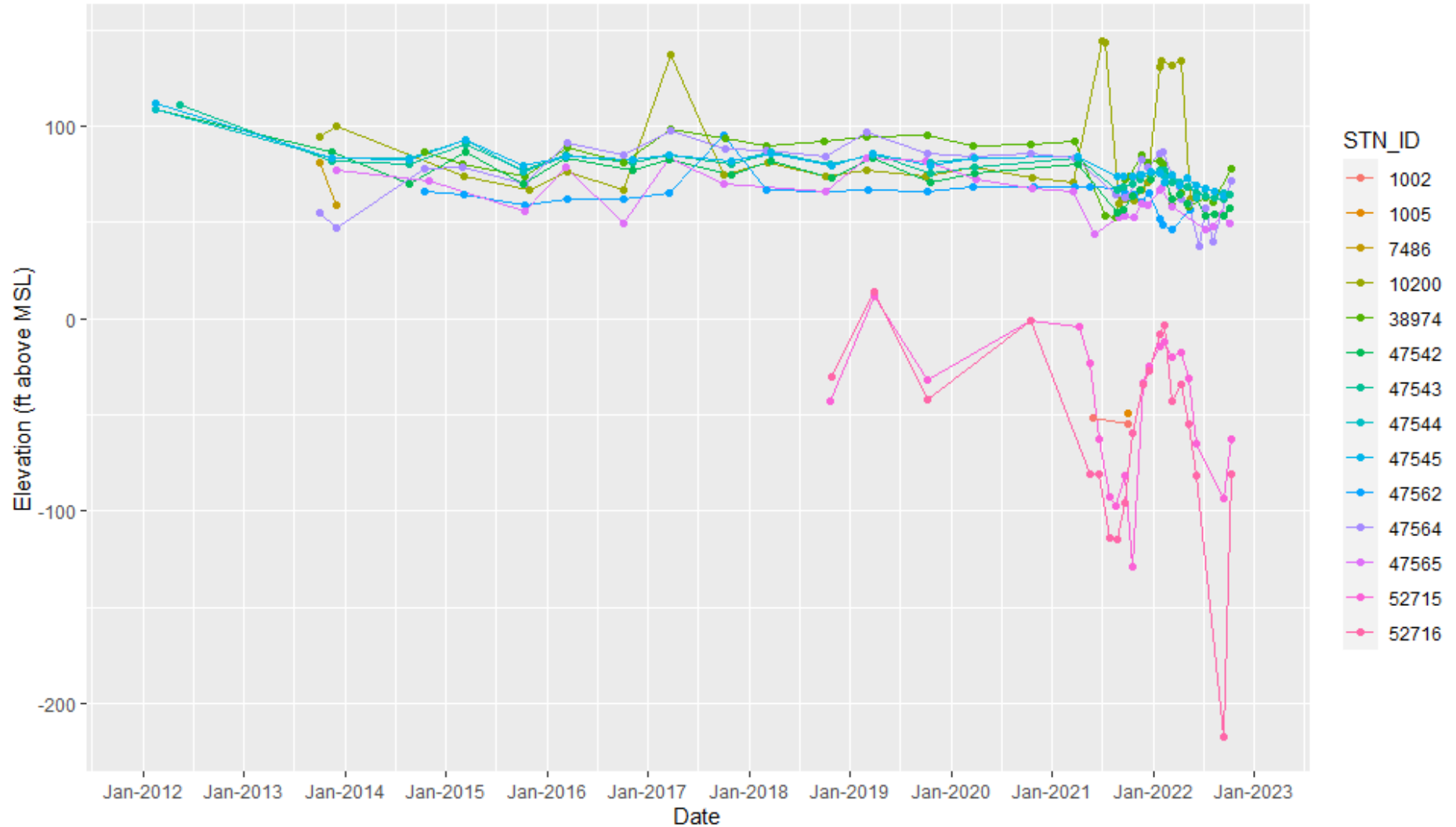
Image courtesy: Veronica Adrover/UC Merced

Current Basin Conditions



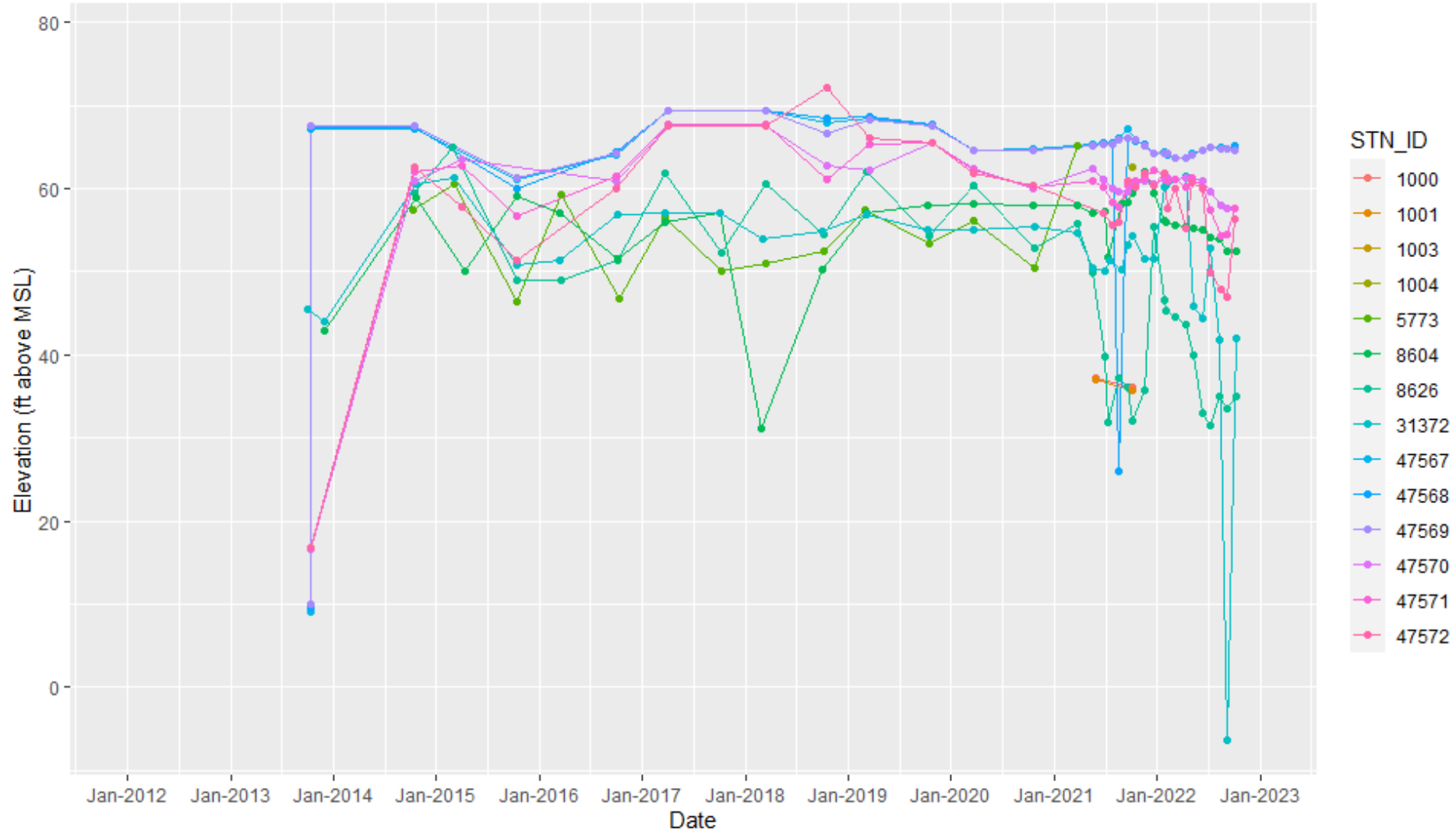
Current Basin Conditions

Below Corcoran Clay Monitoring Wells Hydrographs



Current Basin Conditions

Above Corcoran Clay Monitoring Wells Hydrographs



SAC questions and discussion



Image courtesy: Veronica Adrover/UC Merced



Prop 68 Implementation Planning & Projects Grant Round 2 (due Nov 30, 2022)

Image courtesy: Veronica Adrover/UC Merced



Background

- Round 2 adds medium & high priority basins, in addition to critically overdrafted
- \$200M funding available; \$1M-\$20M per basin
- One application per basin
- Schedule:
 - Application due November 30, 2022
 - Draft awards announced May 2023
 - Final awards Aug 2023
 - Agreements executed Sep-Nov 2023

Image courtesy: Veronica Adrover/UC Merced

Potential Projects for Application

- Projects not funded as part of Round 1 (beyond the \$7.6M cap) which could be considered

Original Rank	Updated Rank	Project Name	Submitting Agency	Project Cost	Score	Initial Grant Request	Updated Grant Request	Cumulative Grant Request	
									\$7.6M
14	16	MIUGSA Groundwater Extraction Measurement Program	MIUGSA	\$4,000,000	16	\$2,000,000	\$1,500,000	\$9,099,885	
15	17	Deadman Creek Canal Off Stream Storage and Recharge	Lone Tree MWC	\$3,410,000	15	\$3,410,000	\$1,000,000	\$10,099,885	
18	18	Tri City's Water Recharge/Underground Storage Feasibility	MSGSA, MIUGSA	\$3,500,000	8.6	\$3,500,000	\$3,500,000	\$13,599,885	\$10M

Image courtesy: Veronica Adrover/UC Merced



Ongoing and Upcoming Activities

Image courtesy: Veronica Adrover/UC Merced



Grant Updates

- Prop 68 Implementation Grant (May 2020 – Mar 2023)
- Prop 68 Implementation Planning & Projects Grant Round 1 (Jun 2022 – Jun 2025)
- SDAC Grant

Image courtesy: Veronica Adrover/UC Merced

Water quality data sampling coordination



- Annual water quality sampling program – “primary” wells used as representative monitoring wells for Merced GSP groundwater quality SMC for TDS
- TDS measured every 5 years
- Electrical Conductivity (EC) measured every year; can be used to estimate TDS
- TDS was sampled at most wells in 2022; will be compared against 2022 EC measurements at the same sites to assess the correlation between TDS and EC

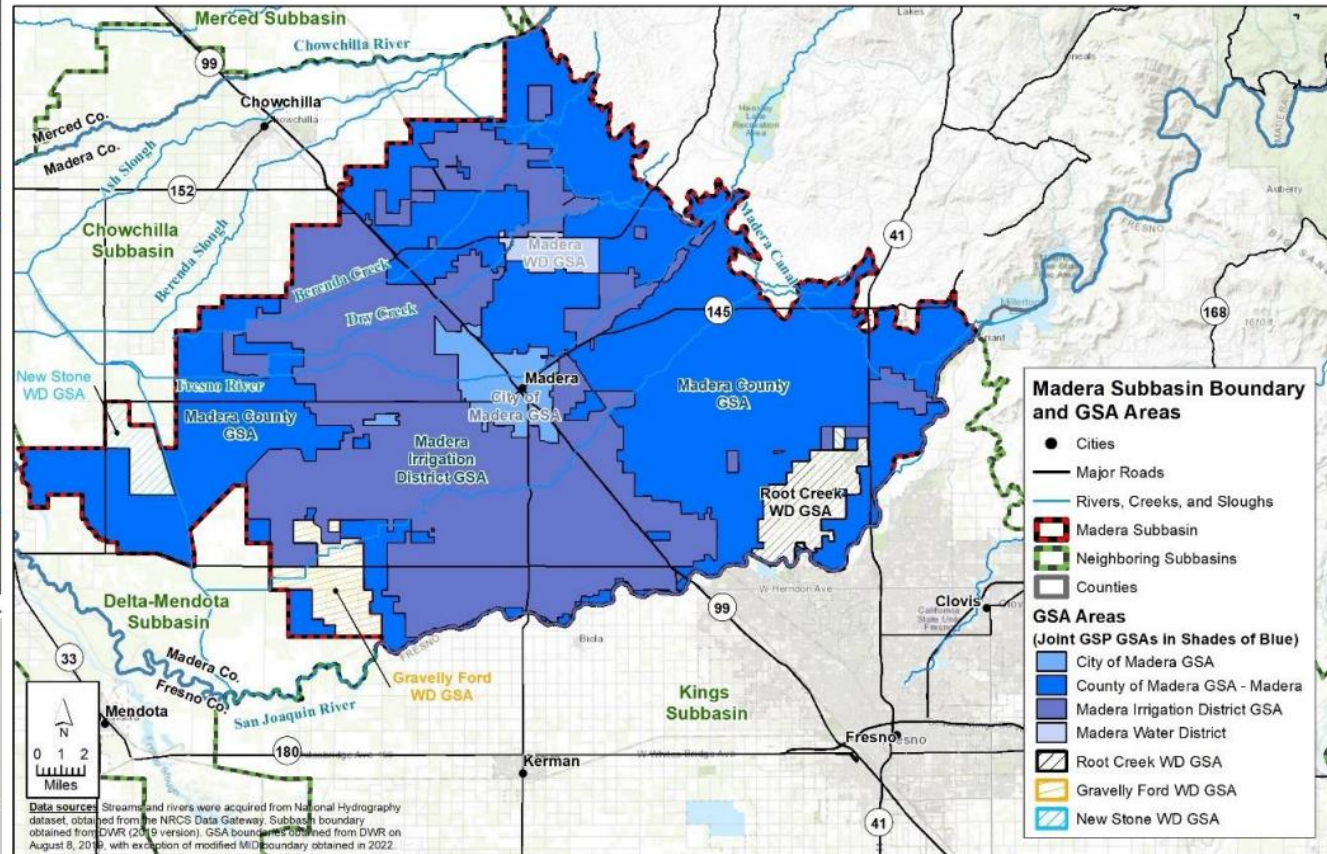
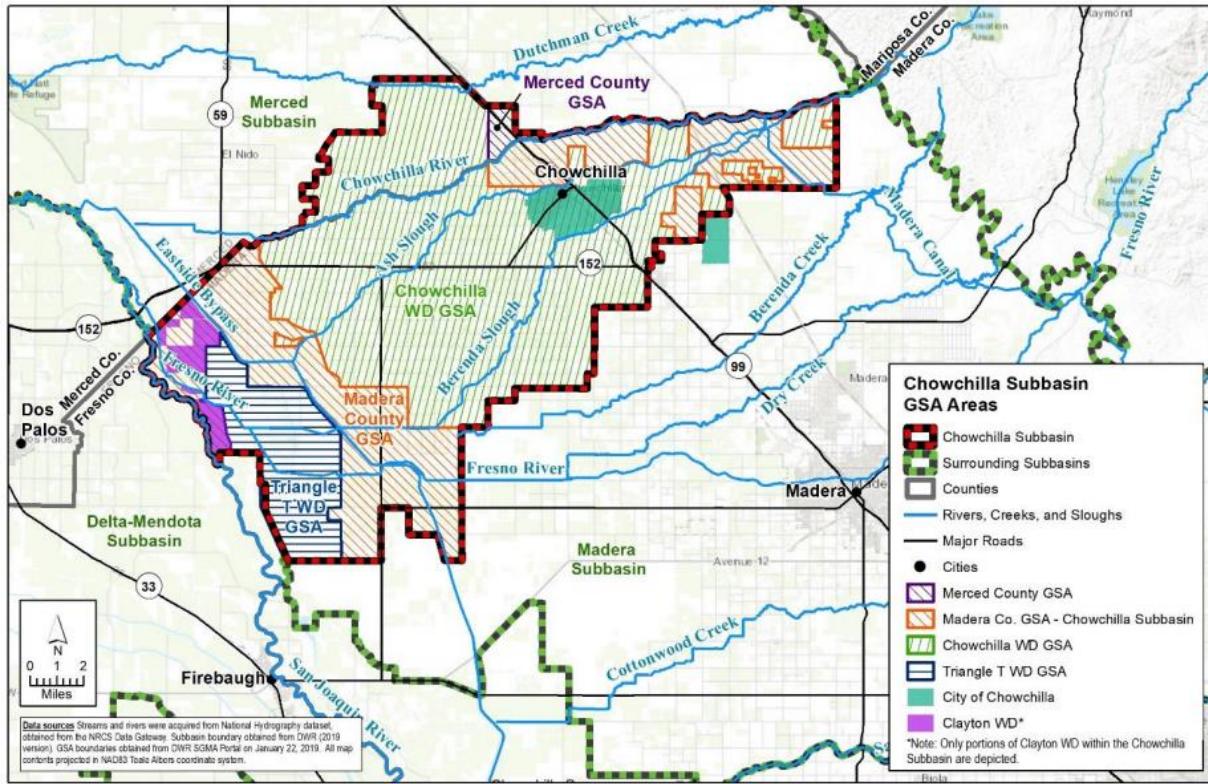
Image courtesy: Veronica Adrover/UC Merced

Evapotranspiration tools & methodologies update

- GSAs are coordinating to identify tools/methods that are
 - Of suitable accuracy for intended purposes
 - Consistent, to simplify compliance across the subbasin and reduce overall costs
 - Allow for a variety of uses for the data
- Information being developed in the Madera Subbasin and elsewhere being monitored to help identify best practices.

Image courtesy: Veronica Adrover/UC Merced

Lessons learned from Madera and Chowchilla Subbasins



C:\DE\David Engineering\DE_P\Projects - Documents\1165_Madera Co\1165.08_Madera GSP Annual Report - 2021\Data\GIS\Maps\Madera_Subbasin_GSA_Map.mxd

DWR Flood-MAR Project

- *MID to provide*

Image courtesy: Veronica Adrover/UC Merced

SAC input on prioritization for future activities

- Discussion

Image courtesy: Veronica Adrover/UC Merced



Public Comment

Image courtesy: Veronica Adrover/UC Merced



Next Steps

Image courtesy: Veronica Adrover/UC Merced

What's coming up next?

- Adjourn to next meeting: expected January 2023

Image courtesy: Veronica Adrover/UC Merced

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