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# Merced GSP Stakeholder Advisory Committee

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**Stakeholder Advisory Committee Meeting – April 25, 2022**

Image courtesy: Veronica Adrover/UC Merced



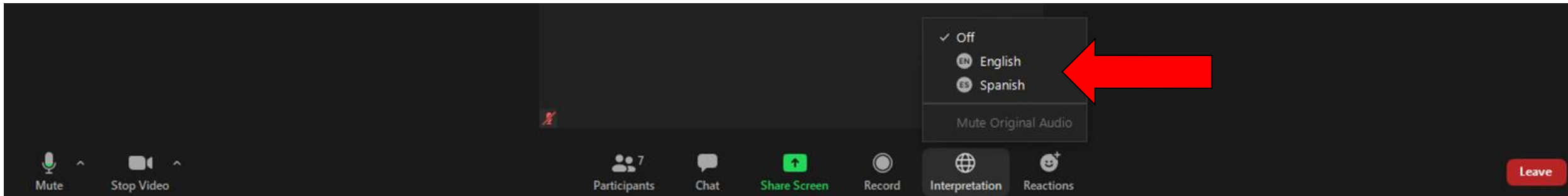
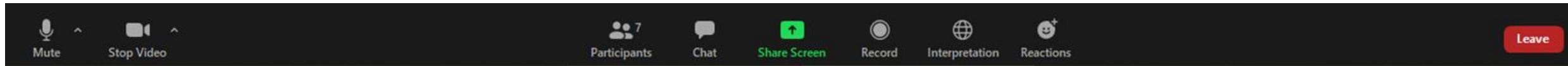


# Welcome, Instructions for Zoom

## 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



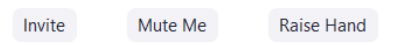
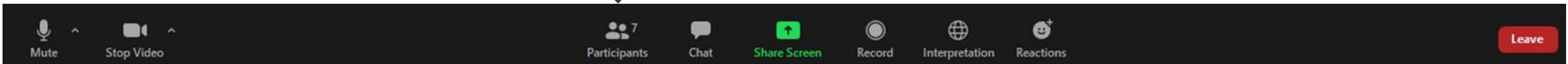
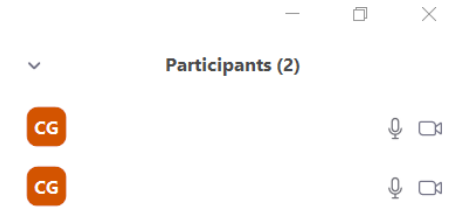
The meeting will have simultaneous interpreting, so you are welcome to comment in your native language.  
La junta será interpretada simultáneamente, así que le invitamos a que haga comentarios en su lenguaje nativo.

# 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 April 25 Agenda

1. Call to Order and Welcome
2. Introductions and Roll Call
  - a) Review of Agenda and Meeting Guidelines, Charles Gardiner
3. Potential Revisions to the Groundwater Sustainability Plan
  - a) DWR comments overview
  - b) Groundwater levels minimum threshold
  - c) Subsidence minimum threshold
  - d) Schedule
4. GSA Reports
  - a) Merced Subbasin GSA, Adriel Ramirez
  - b) Merced Irrigation-Urban GSA, Hicham EITal
  - c) Turner Island Water District GSA #1, Kel Mitchel
  - d) SAC questions and discussion
5. Public Comment
6. 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			
	Robert Weimer	Weimer Farms			
	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



# Topics Covered at March Stakeholder Advisory Committee

- 1) **Grant Updates** (New implementation grant and ongoing grant-based project progress)
- 2) **Water Year 2021 Annual Report** (overview)
- 3) **Sustainable Management Criteria Refresher** (overview)
- 4) **DWR GSP Comments** (overview and initial approach for groundwater level and subsidence thresholds)

*Reminder: Slides, notes, and all GSP documents are publicly available at [www.mercedsgma.org](http://www.mercedsgma.org)*

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# Upcoming Meetings

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- Planning to hold monthly meetings in **May** and **June**
- Topics will include status updates on technical analyses related to GSP comments from DWR and collection of feedback/input on proposed GSP edits
- Can include presentation and other discussion requested by SAC – please let us know.

Image courtesy: Veronica Adrover/UC Merced





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# Potential Revisions to the Groundwater Sustainability Plan

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Image courtesy: Veronica Adrover/UC Merced



# DWR GSP Comments Overview

1. The GSP lacks sufficient justification for identifying that undesirable results for chronic lowering of groundwater levels, subsidence, and depletion of interconnected surface waters can only occur in **consecutive non-dry water year types**
2. The GSP does not provide sufficient information to support the selection of **chronic lowering of groundwater levels** sustainable management criteria
3. The GSP does not provide sufficient information to support the selection of **land subsidence** sustainable management criteria

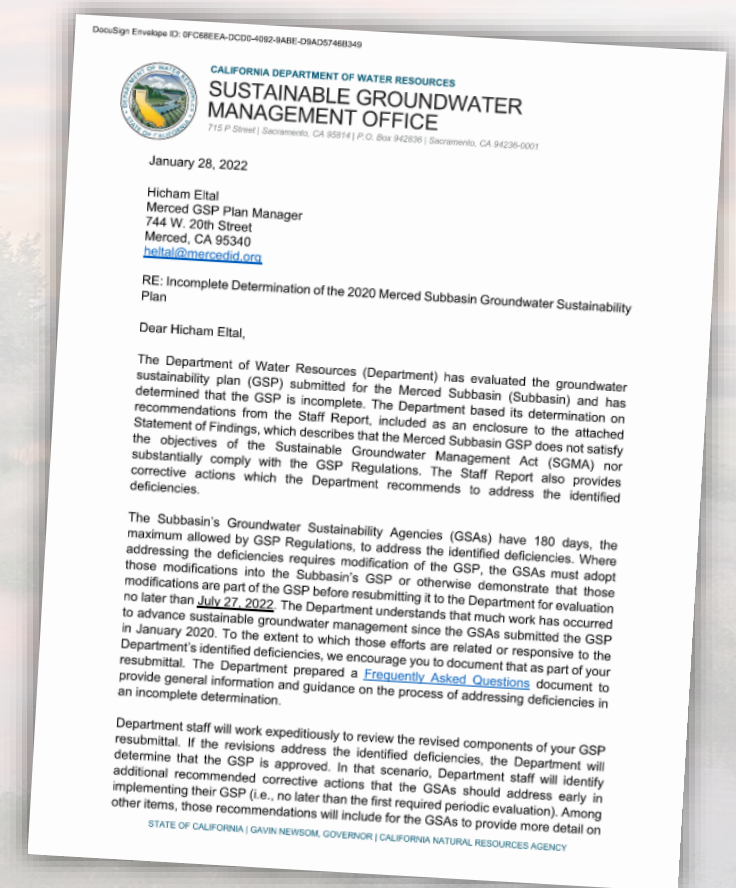
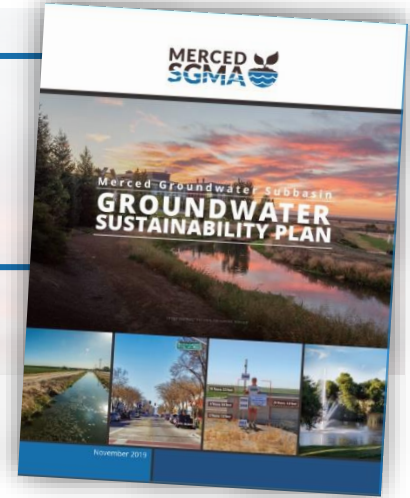


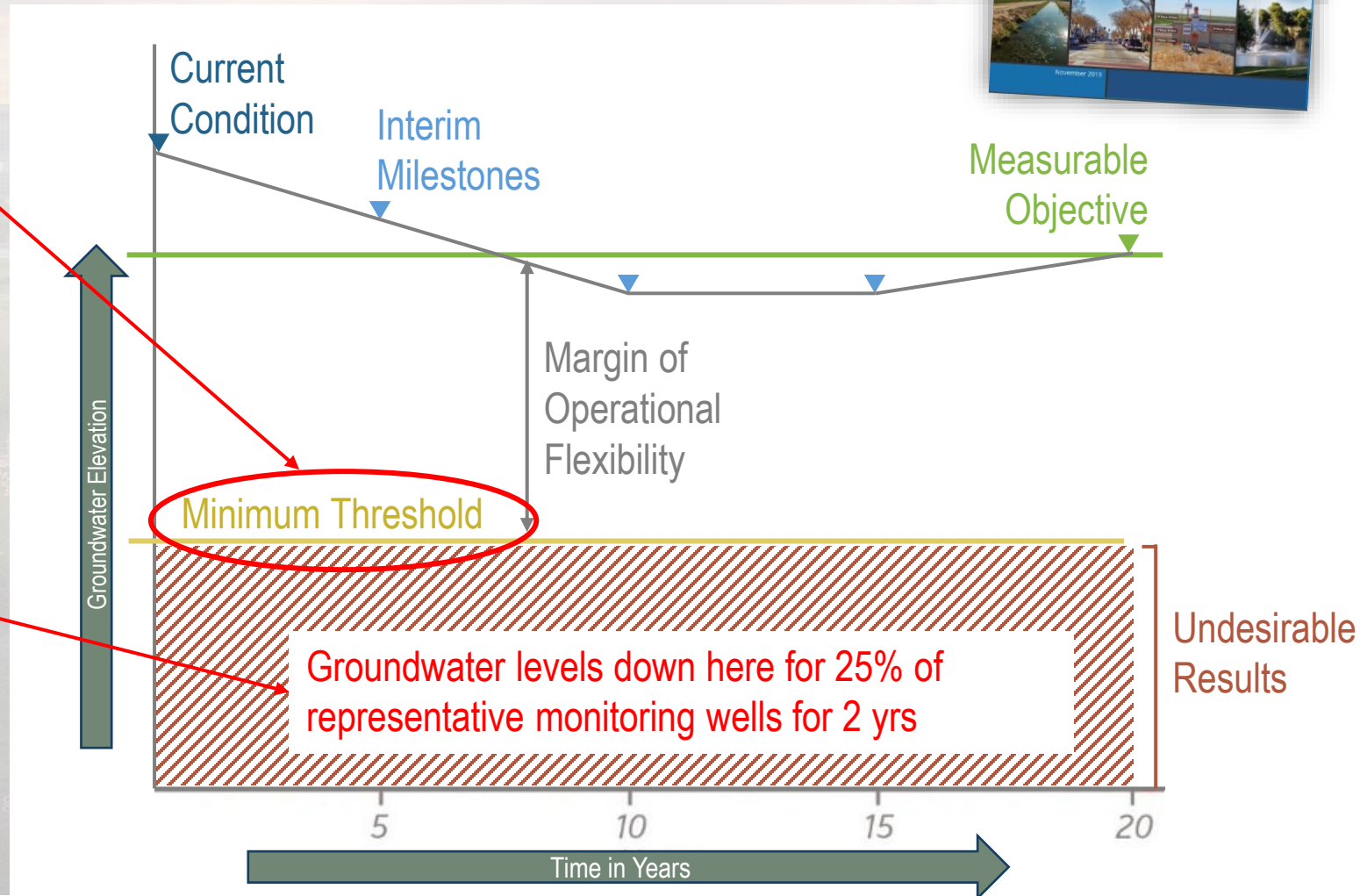
Image courtesy: Veronica Adrover/UC Merced



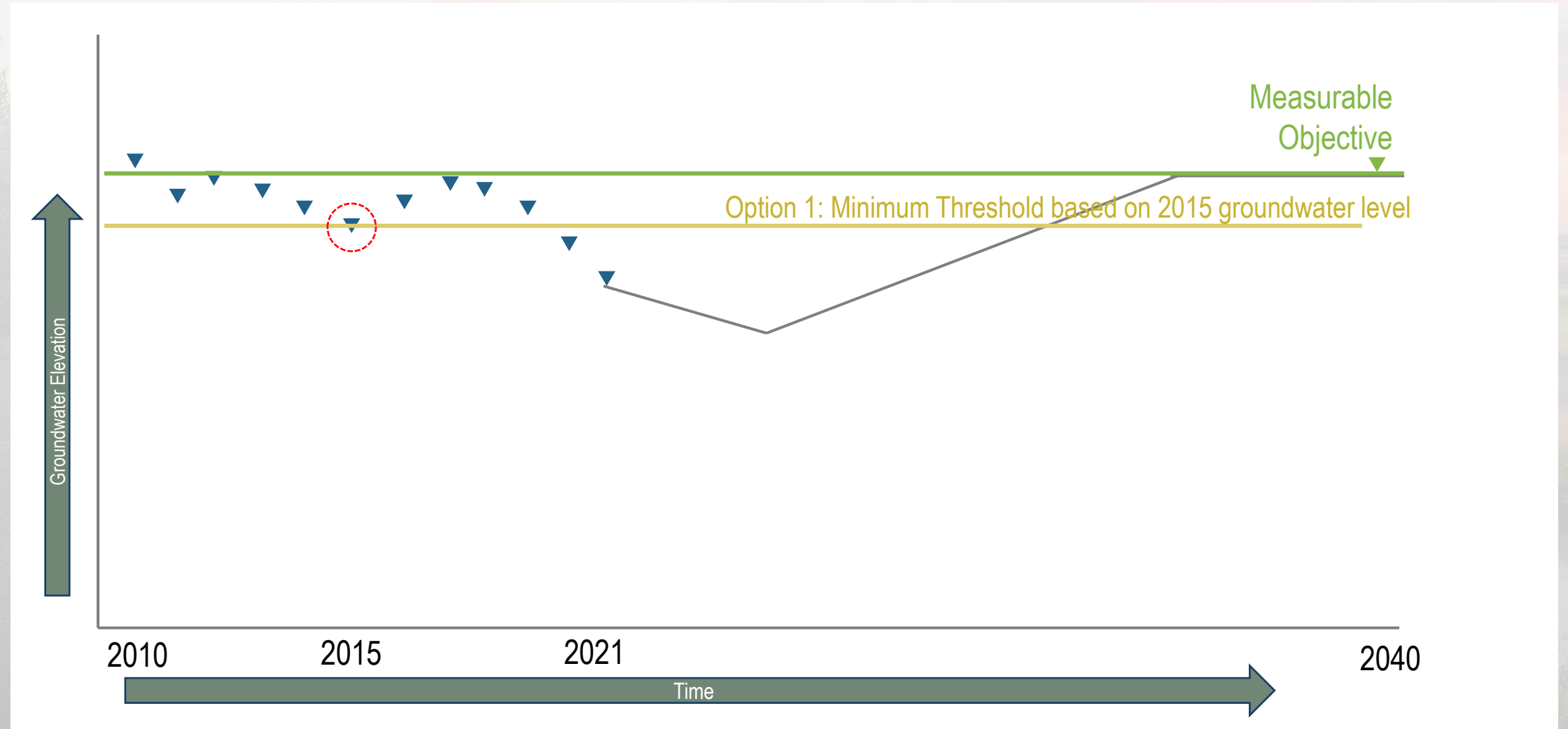
# Groundwater Level Sustainable Management Criteria in the GSP



- Minimum Threshold based on: “construction depth of the shallowest domestic well within a 2-mile radius.”
- Definition of Undesirable Results: “...when November groundwater levels at greater than 25% of representative monitoring wells fall below their minimum thresholds for two consecutive years where both years are categorized hydrologically as below normal, above normal, or wet”

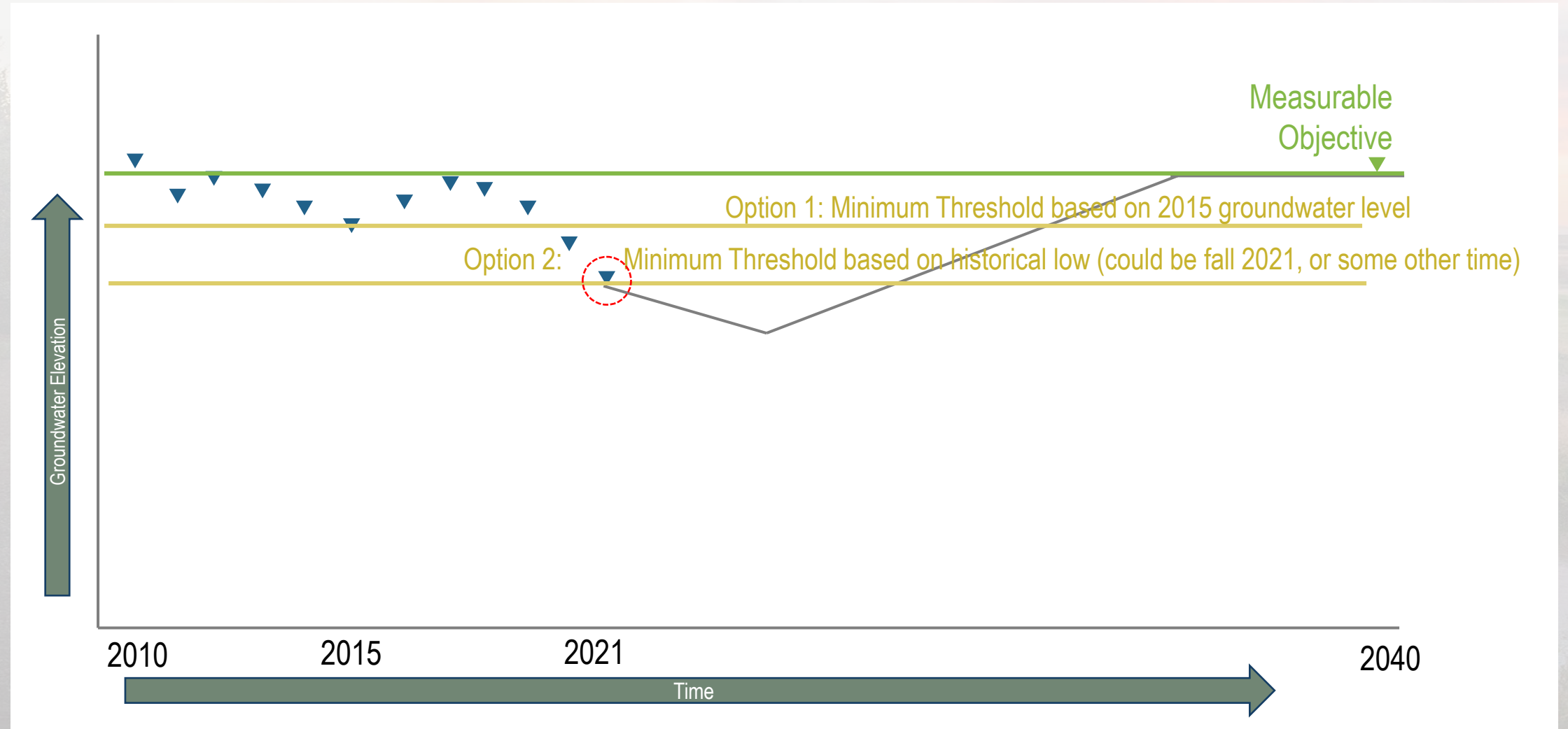


# New Minimum Threshold Options Being Evaluated

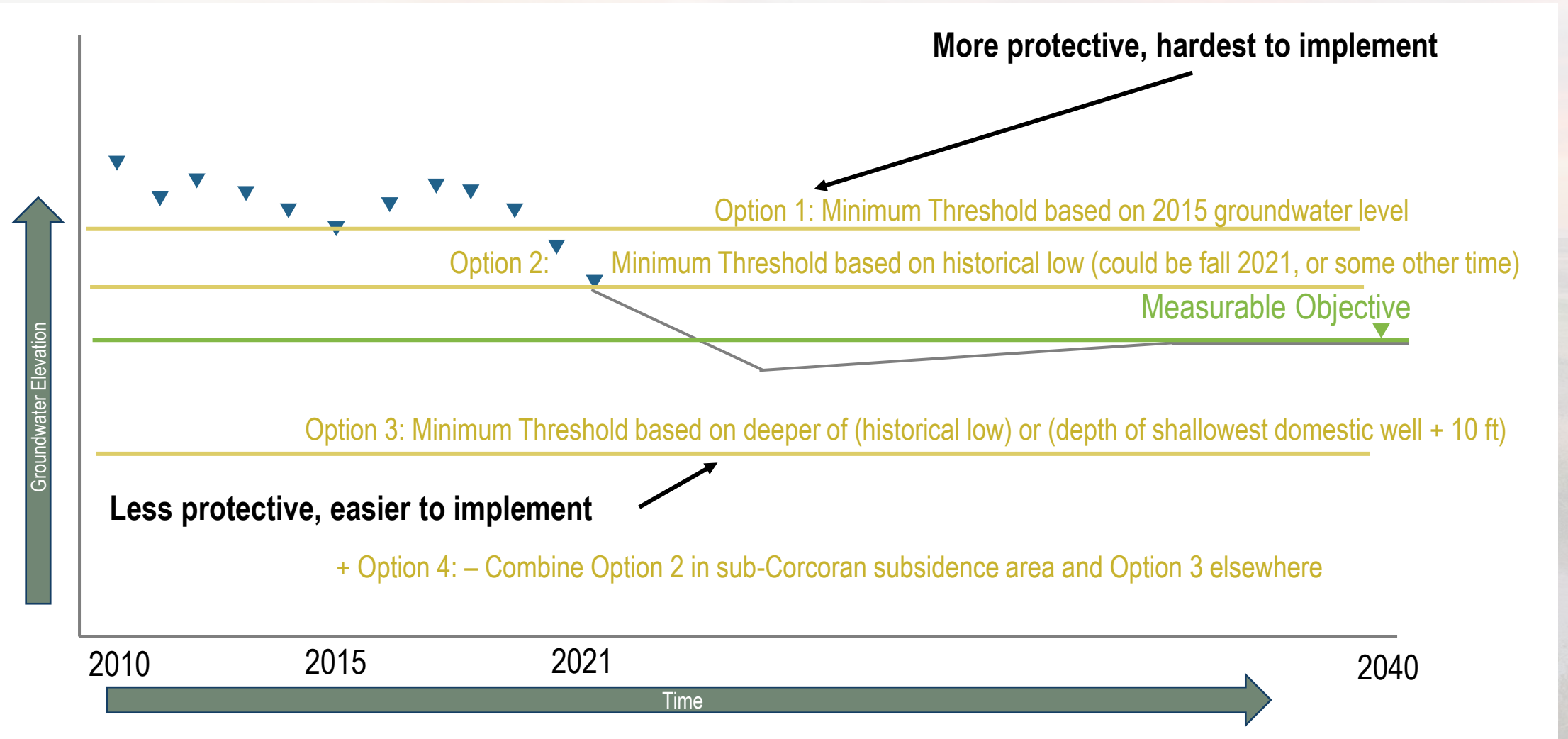




# New Minimum Threshold Options Being Evaluated



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# Latest Minimum Threshold Scenario Being Evaluated (1 of 2)

- Subsidence area defined as Dec 2011 to Dec 2021 contour of 0.15 ft/year (US Bureau of Reclamation)
  - **Proposed minimum threshold:** Historical low groundwater level for below-Corcoran subsidence area
- All other areas
  - **Proposed minimum threshold is minimum of:**
    - Shallowest domestic well depth + 10 ft
    - Historical low groundwater level

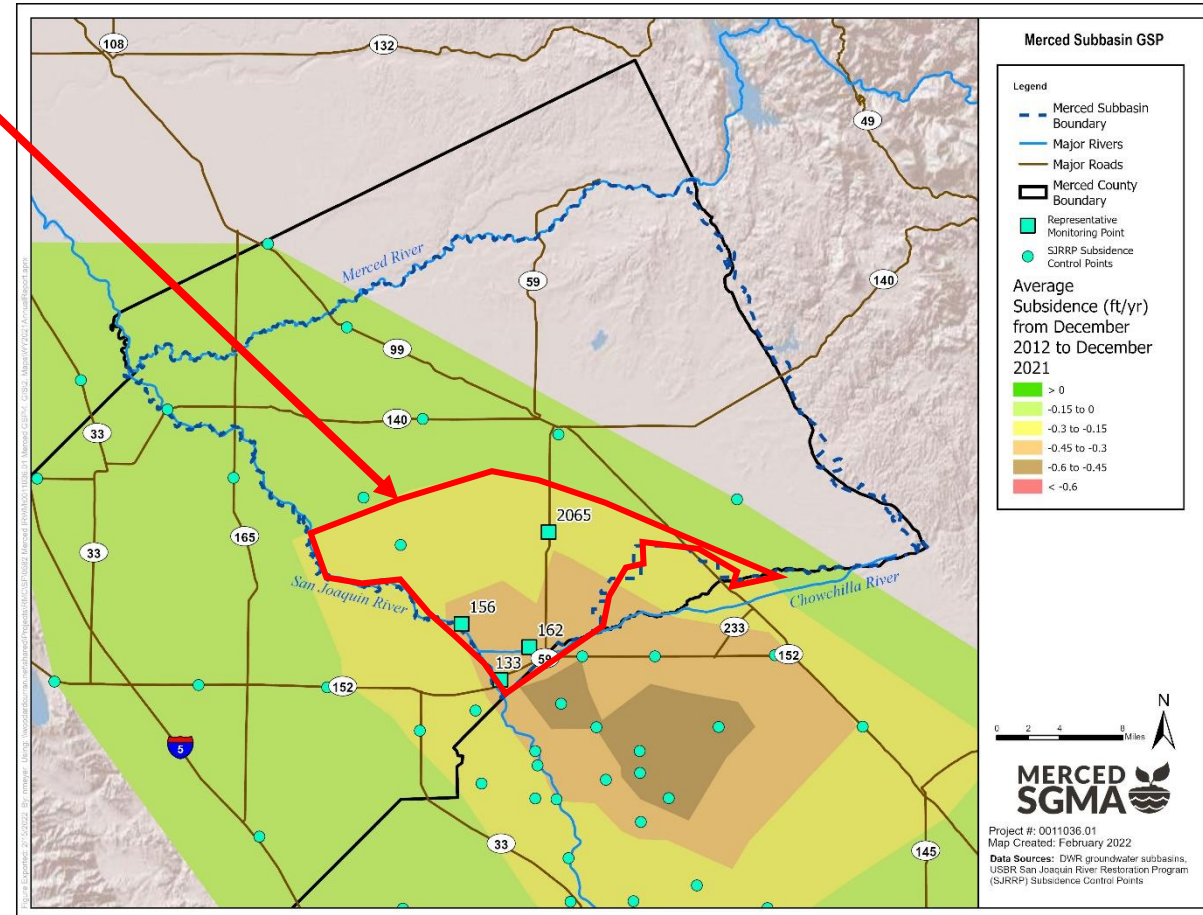
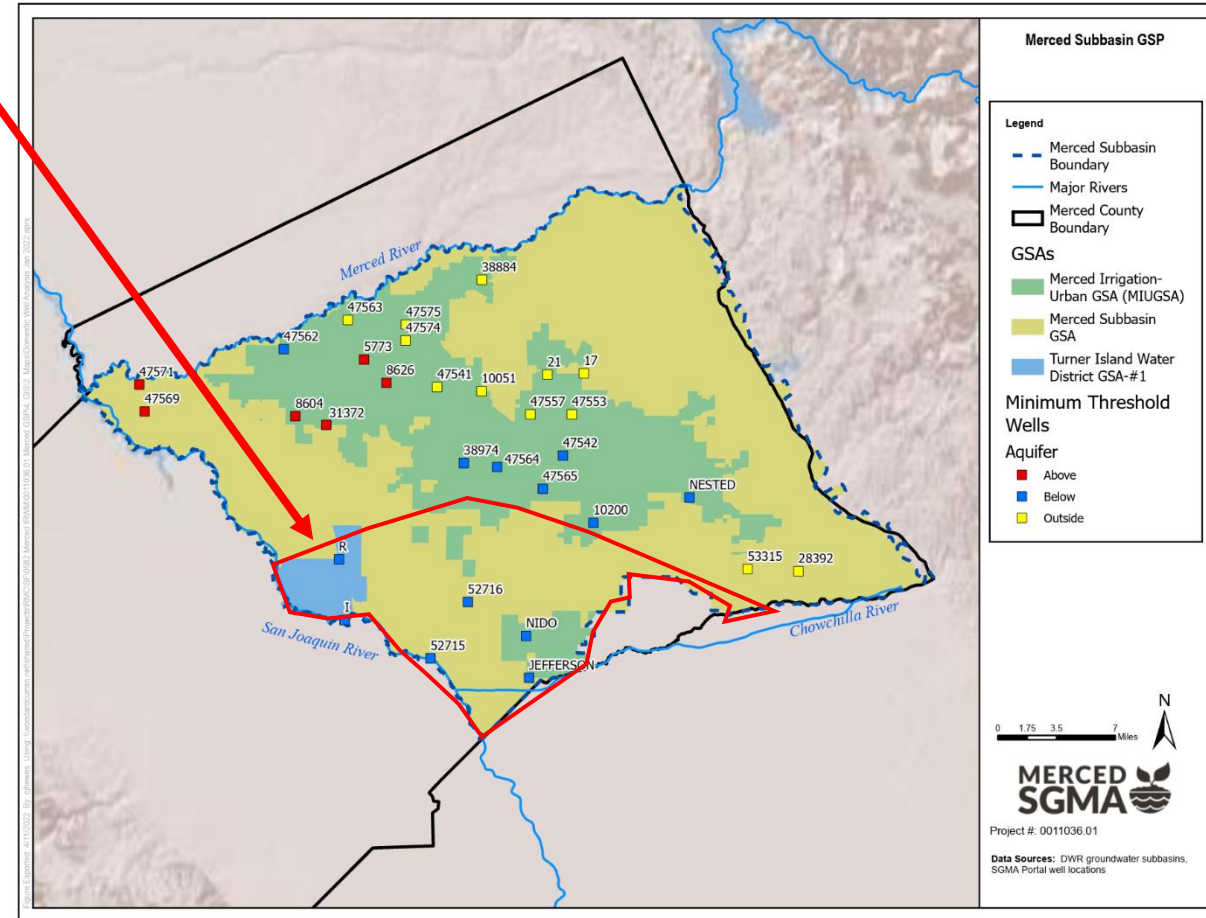


Image courtesy: Veronica



# Latest Minimum Threshold Scenario Being Evaluated (2 of 2)

- Few representative wells located in the subsidence area
- Groundwater criteria could be met without meeting subsidence criteria
- Added criteria to help meet subsidence thresholds:
  - 0 change in long-term storage within sub-Corcoran subsidence area
  - Consideration of no negative storage conditions



# Storage Change Considerations

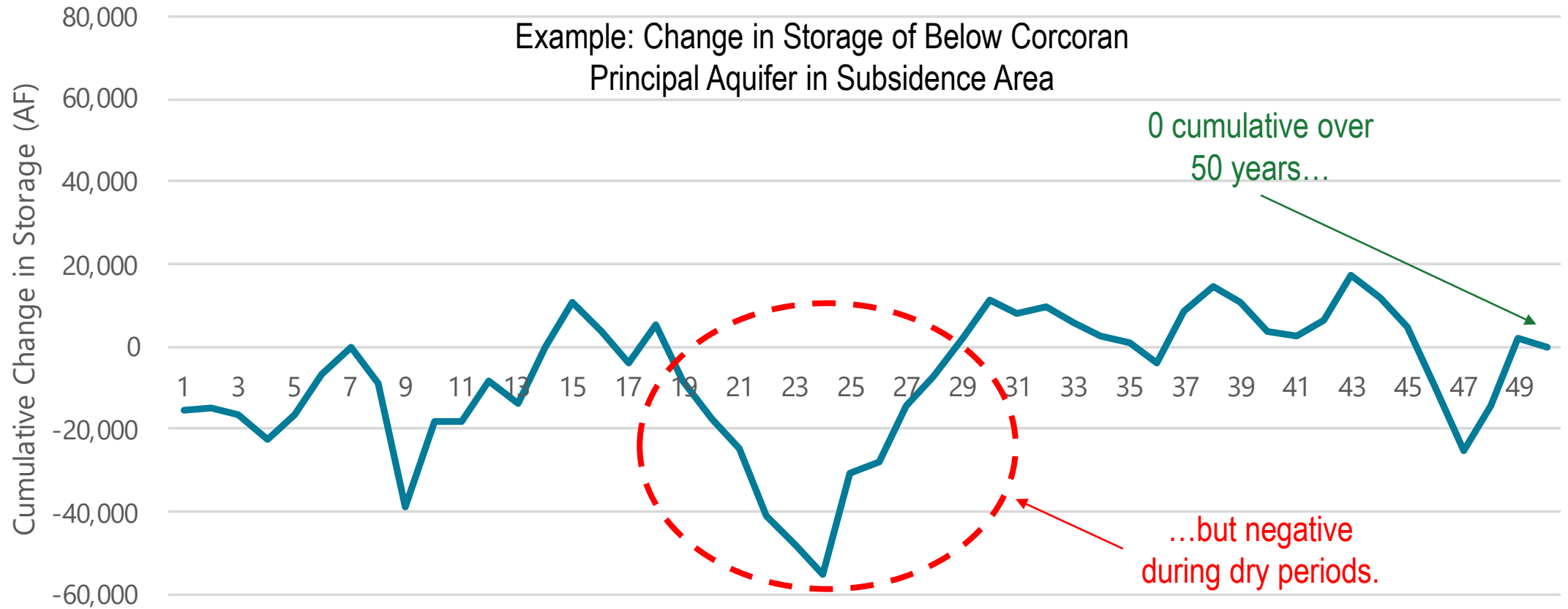


Image courtesy: Veronica Adrover/UC Merced



# Storage Change Considerations

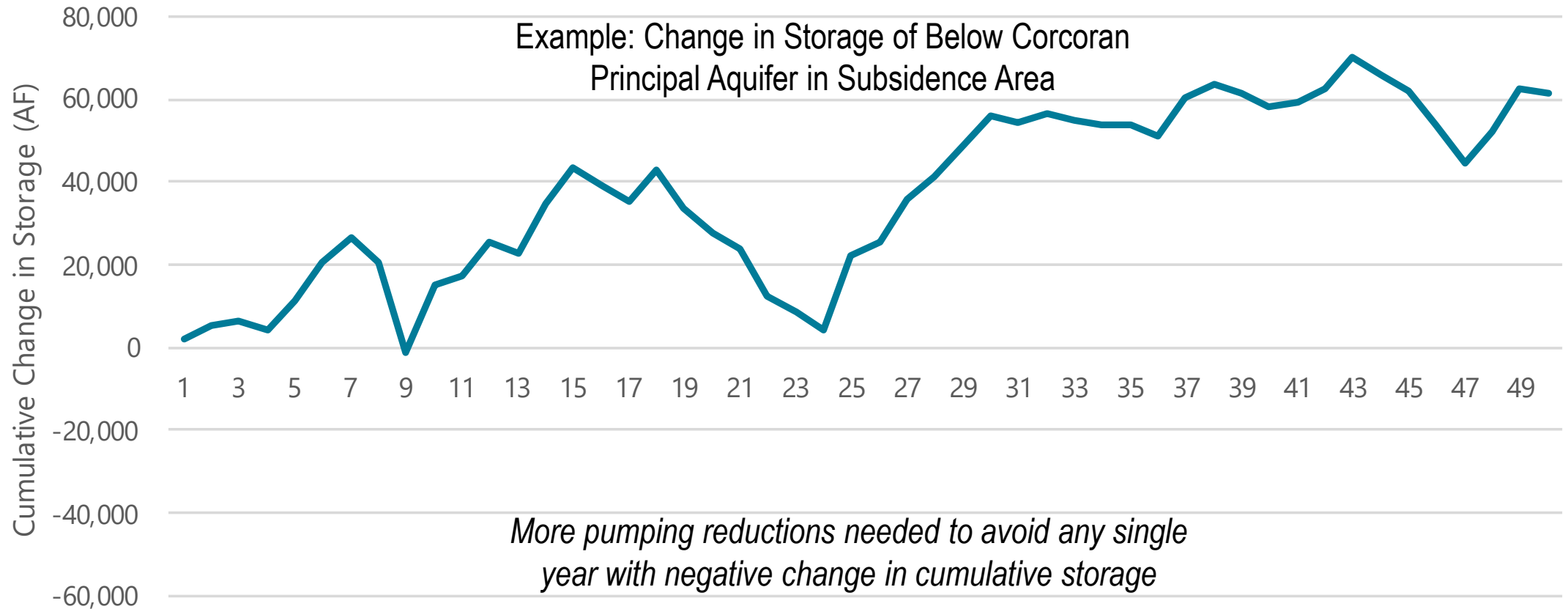


Image courtesy: Veronica Adrover/UC Merced

# Analysis Approach

- Pumping reductions are ramped down from 2025-2035
- No changes in pumping reductions after 1 year of drought
- Model runs iteratively to identify the maximum pumping while avoiding undesirable results
- Pumping reduction based on four quadrants

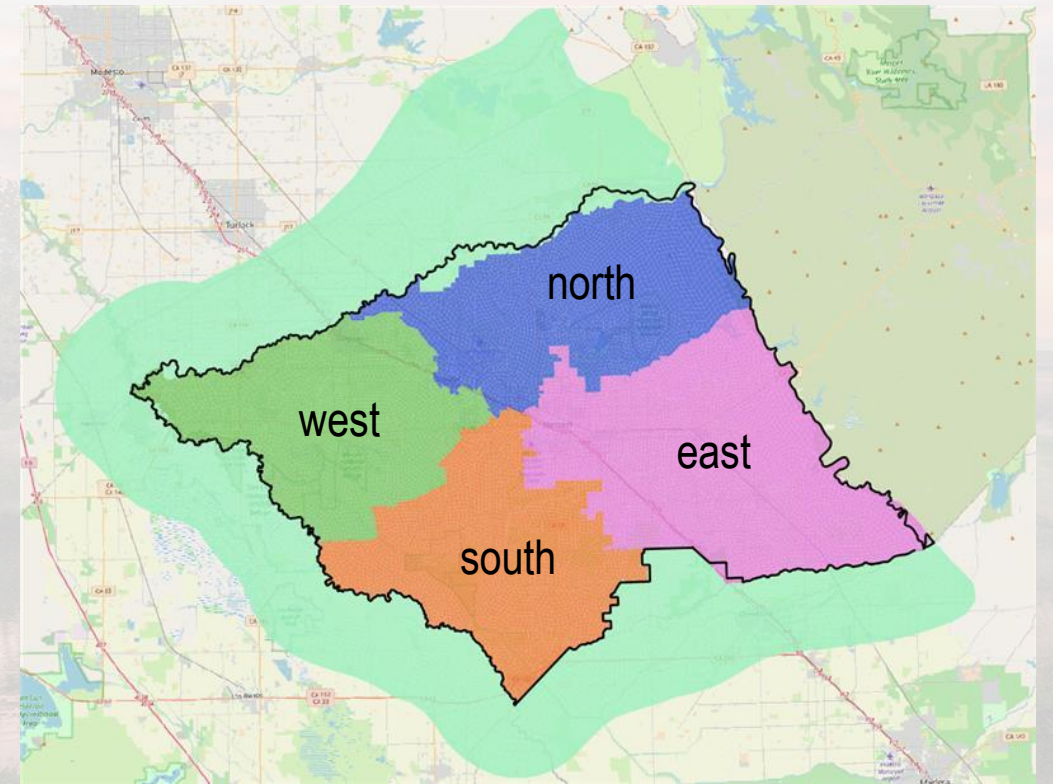


Image courtesy: Veronica Adrover/UC Merced



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# Further Consideration for Minimum Threshold Selection

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- DWR's comment letter indicates other requirements for thresholds allowing continued decline in groundwater levels
- Use of domestic well depth criteria will allow for some continued decline in groundwater levels
- Effort will be necessary to:
  - Document the potential impacts to users
  - Monitor and manage potential impacts to water quality

Image courtesy: Veronica Adrover/UC Merced

# Modeling Results

**SAC question:** Given outlined tradeoffs, which option do you prefer?

	Basis	Average Pumping Reduction	Complies with Groundwater Level Minimum Thresholds?	Long-Term Change in Storage, Below Corcoran Subsidence Area (over 50 years)	Minimum Annual Change in Storage, Below Corcoran Subsidence Area	Long-Term Change in Storage, Whole Basin (over 50 years)
0	Baseline (no pumping reductions)	0 AFY (0.0%)	No	-47,000 AF	-100,000 AF	-1,000,000 AF
GSP	Sustainable Yield Scenario published in GSP (goal of no long-term basinwide storage change)	66,000 AFY 10.7%	No	+30,000 AF	-36,000 AF	~0 AF
A	<b>2015 groundwater levels</b>	175,000 AFY 28.3%	Yes	+110,000 AF	+16,000 AF	+1,800,000 AF
B	<b>Historical low groundwater levels</b>	115,000 AFY 18.6%	Yes	+70,000 AF	+1,000 AF	+900,000 AF
C	Historical lows in subsidence area Domestic well depths + 10 feet elsewhere <b>0 long-term storage change in subsidence area</b>	70,000 AFY 11.4%	Yes	+30,000 AF	-40,000 AF	+200,000 AF
D*	Historical lows in subsidence area Domestic well depths + 10 feet elsewhere <b>Avoiding negative storage at any time after 2040 in subsidence area</b>	115,000 AFY 18.6%	Yes	+70,000 AF	+1,000 AF	+900,000 AF

\*Same model run as B

Image courtesy: Veronica Adrover/UC Merced



# GSP Update Schedule

Week Starting	4/24	5/1	5/8	5/15	5/22	5/29	6/5	6/12	6/19	6/26	7/3	7/10	7/17	7/24
GWL SMC updates														
Subsidence SMC updates														
Prepare updated GSP redline														
GSA staff & CC review														
Comments incorporation														
Board review and adoption														
CC/SAC Meetings														
DWR Meetings														
Submit updated GSP to DWR														
Project Management														

Image courtesy: Veronica Adrover/UC Merced





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# GSA Reports

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Image courtesy: Veronica Adrover/UC Merced





# GSA Reports

- Coordination Committee (*meeting later today at 3pm*)
- 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
- SAC questions & discussion

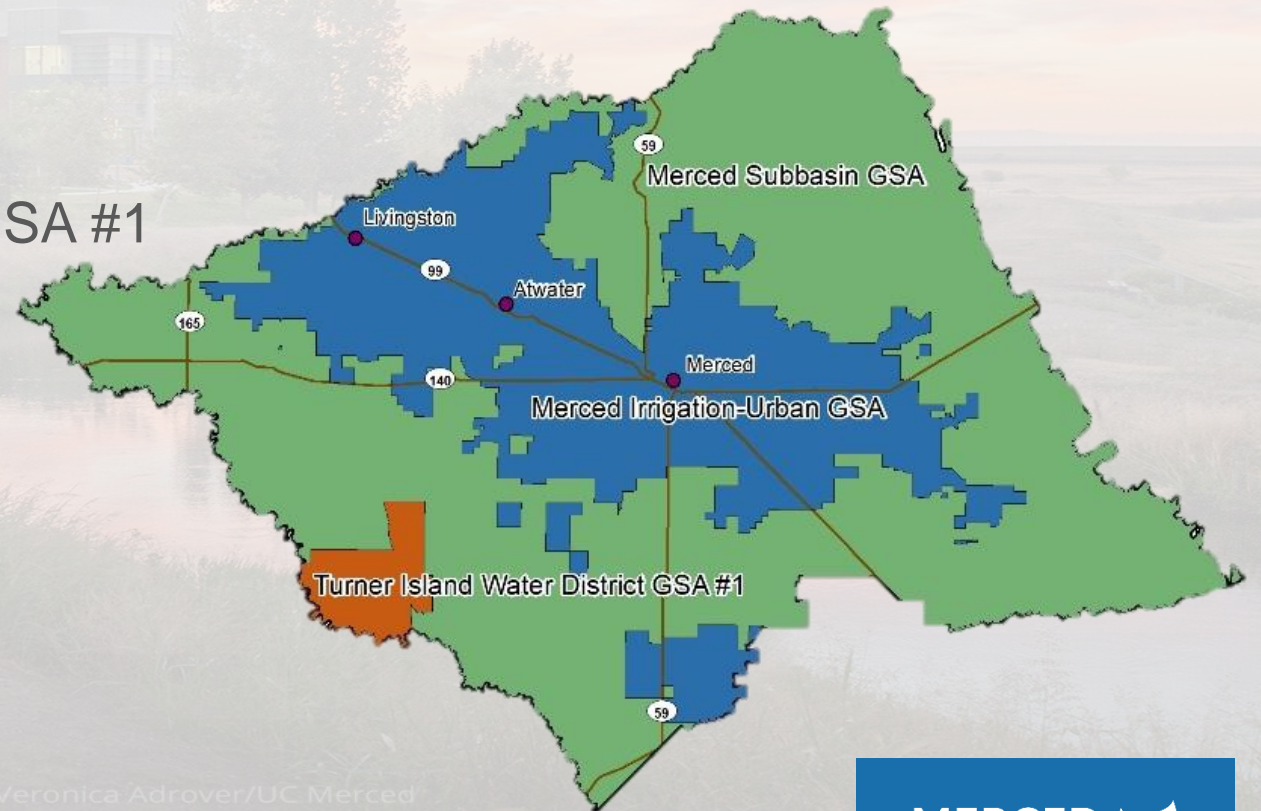


Image courtesy: Veronica Adrover/UC Merced





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# Public Comment

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Image courtesy: Veronica Adrover/UC Merced







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# Next Steps

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Image courtesy: Veronica Adrover/UC Merced





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# What's coming up next?

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- Adjourn to next Stakeholder Advisory Committee meeting: late May 2022
  - Revised GSP content based on today's feedback
  - More details on subsidence threshold

Image courtesy: Veronica Adrover/UC Merced



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