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# Merced GSP Stakeholder Advisory Committee

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**Stakeholder Advisory Committee Meeting – June 1, 2022**

Image courtesy: Veronica Adrover/UC Merced

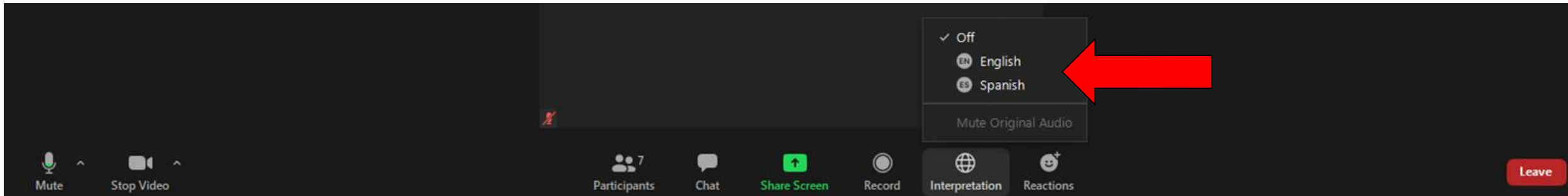
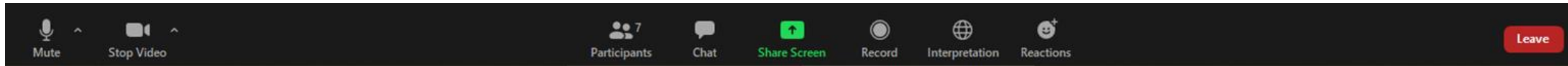


# Welcome, Instructions for Zoom

## 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



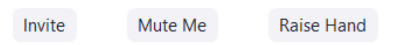
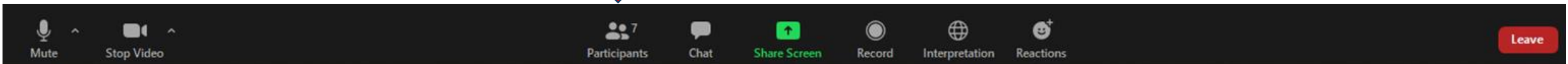
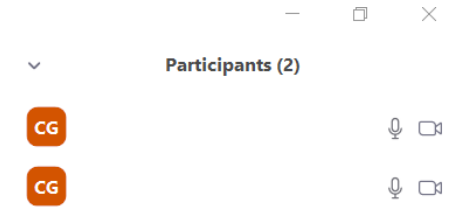
The meeting will have simultaneous interpreting, so you are welcome to comment in your native language.  
La junta será interpretada simultáneamente, así que le invitamos a que haga comentarios en su lenguaje nativo.

# 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 June 1 Agenda

1. Call to Order and Welcome
2. Introductions and Roll Call
  - a) Review of Agenda and Meeting Guidelines, Charles Gardiner
3. Drought Check-in
4. Potential Revisions to the Groundwater Sustainability Plan
  - a) Groundwater levels
  - b) Subsidence
  - c) Domestic well mitigation
  - d) Adoption / public input opportunities
5. GSA Reports
  - a) Merced Subbasin GSA, Adriel Ramirez
  - b) Merced Irrigation-Urban GSA, Matt Beaman
  - c) Turner Island Water District GSA #1, Kel Mitchel
  - d) SAC questions and discussion
6. Public Comment
7. 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 April Stakeholder Advisory Committee

## 1) DWR GSP Comments

- a) Groundwater levels minimum threshold & modeled pumping reductions
- b) Subsidence minimum threshold

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



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# Drought Check-in

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Image courtesy: Veronica Adrover/UC Merced





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# Drought check-in

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- Discussion/feedback from the SAC on any current/ongoing experiences during the drought

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

- Chronic lowering of groundwater levels / domestic well impacts
- Land subsidence

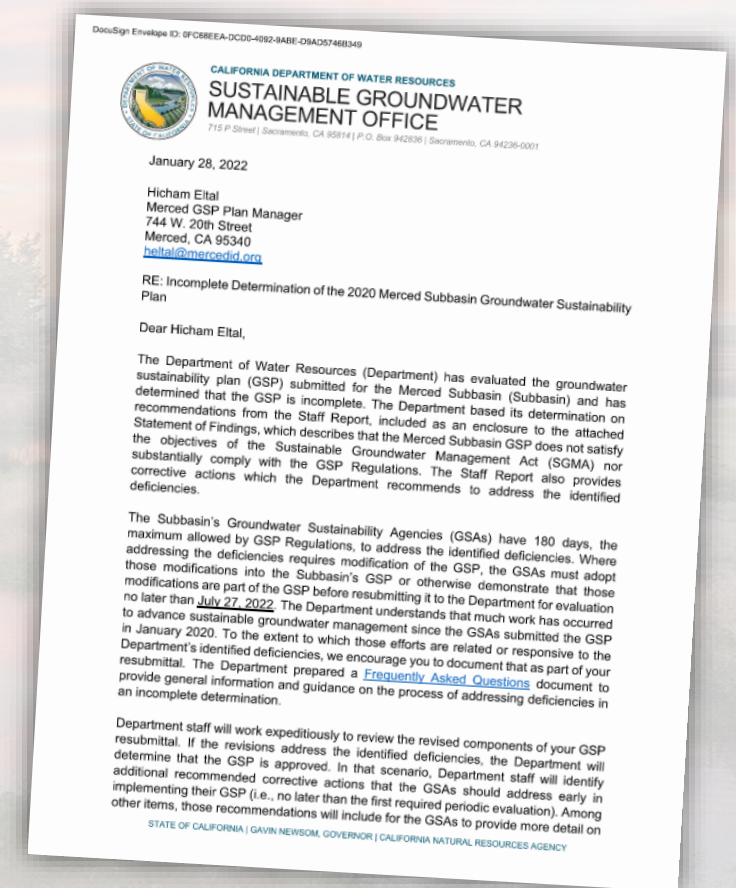
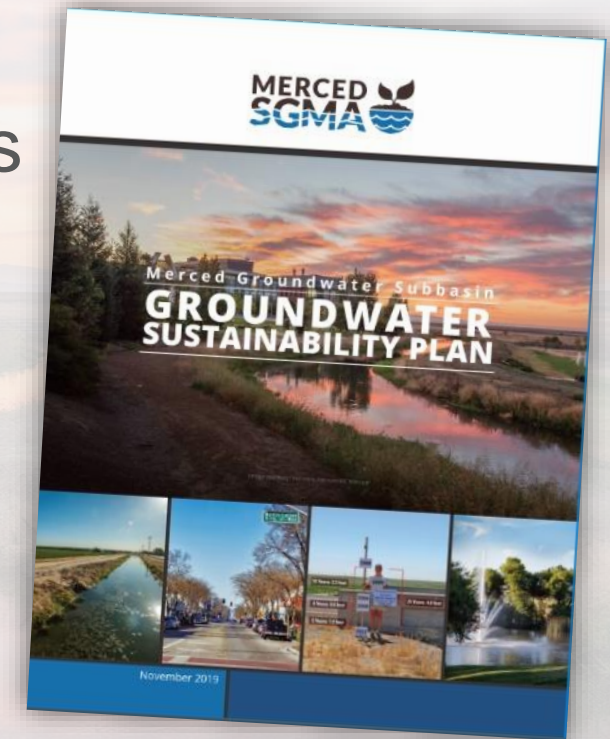


Image courtesy: Veronica Adrover/UC Merced

# Groundwater Level Sustainable Management Criteria

## Three Discussions Today:

- Minimum thresholds – direction from the GSAs
  - Groundwater levels
  - Subsidence
- Modifications for consistency with minimum thresholds:
  - Measurable objectives
  - Interim milestones
- New Management Actions
  - Subsidence
  - Domestic well mitigation



Veronica Adrover/UC Merced

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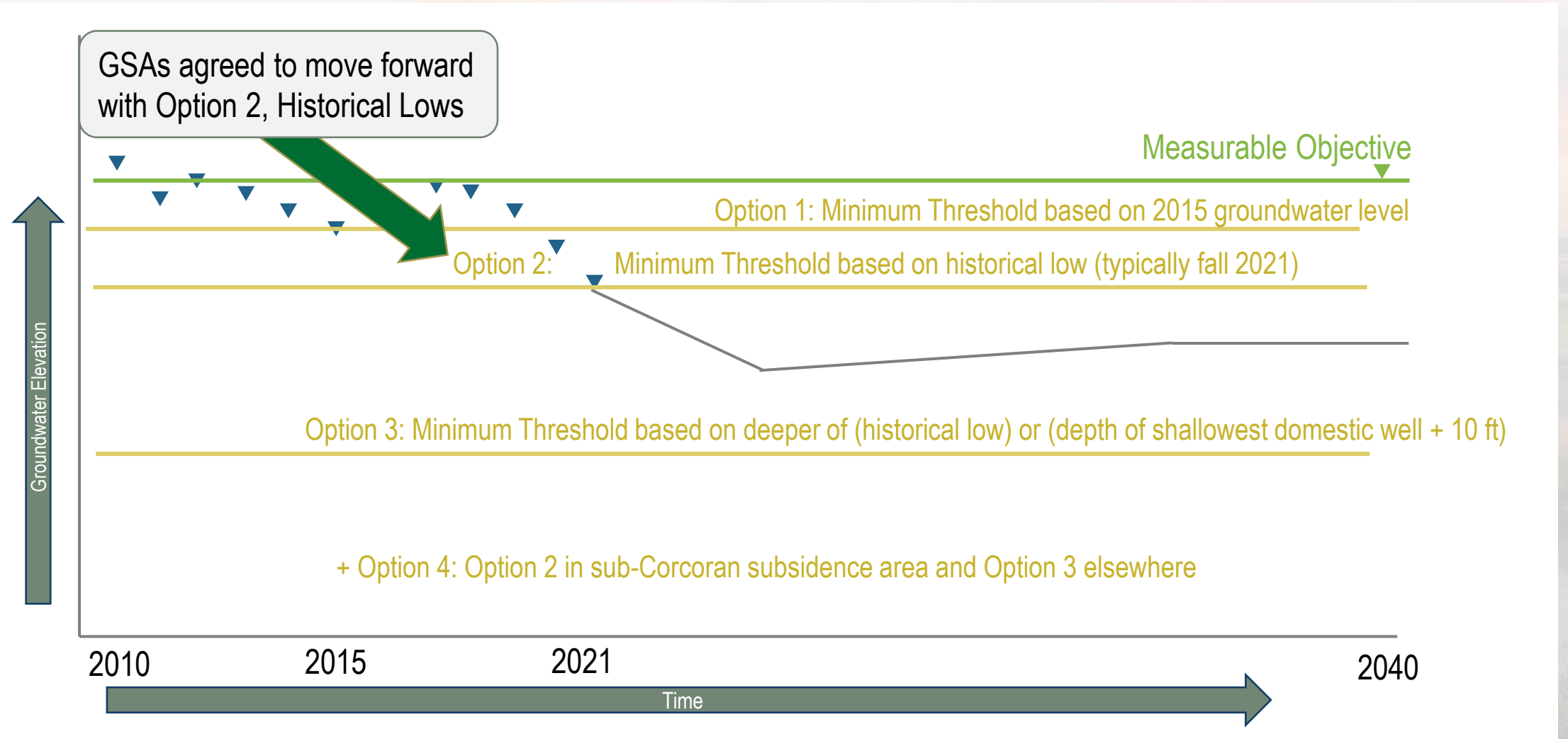
# Groundwater Level Minimum Threshold – GSA Direction

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- Considered input from the committees along with other information
- Decided to pursue the historical lows as the minimum threshold approach
  - Incorporating a domestic well mitigation program, with primary financial responsibility with MSGSA
  - Incorporating a management action to explore different levels above Corcoran in the subsidence area for more flexibility in responding to subsidence issues

Image courtesy: Veronica Adrover/UC Merced

# Potential Minimum Threshold Options Evaluated



# Potential Minimum Threshold Options Evaluated

(Copy of table from 4/25 meeting)

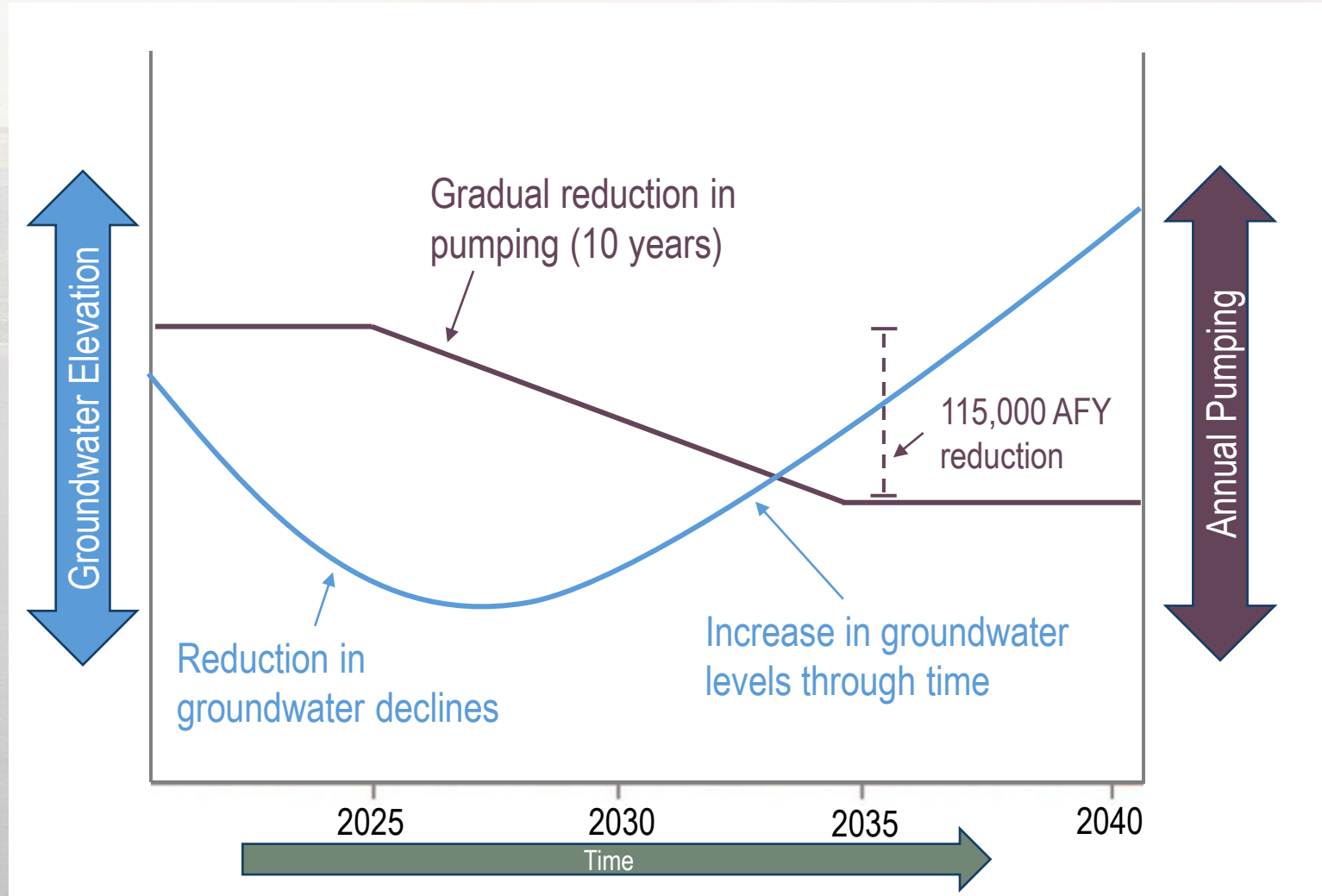
	Basis	Average Pumping Reduction	Complies with Groundwater Level Minimum Thresholds?	Long-Term Change in Storage, Below Corcoran Subsidence Area (over 50 years)	Minimum Annual Change in Storage, Below Corcoran Subsidence Area	Long-Term Change in Storage, Whole Basin (over 50 years)
0	Baseline (no pumping 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

GSAs agreed to move forward with Historical Lows

\*Same model run as B

Image courtesy: Veronica Adrover/UC Merced

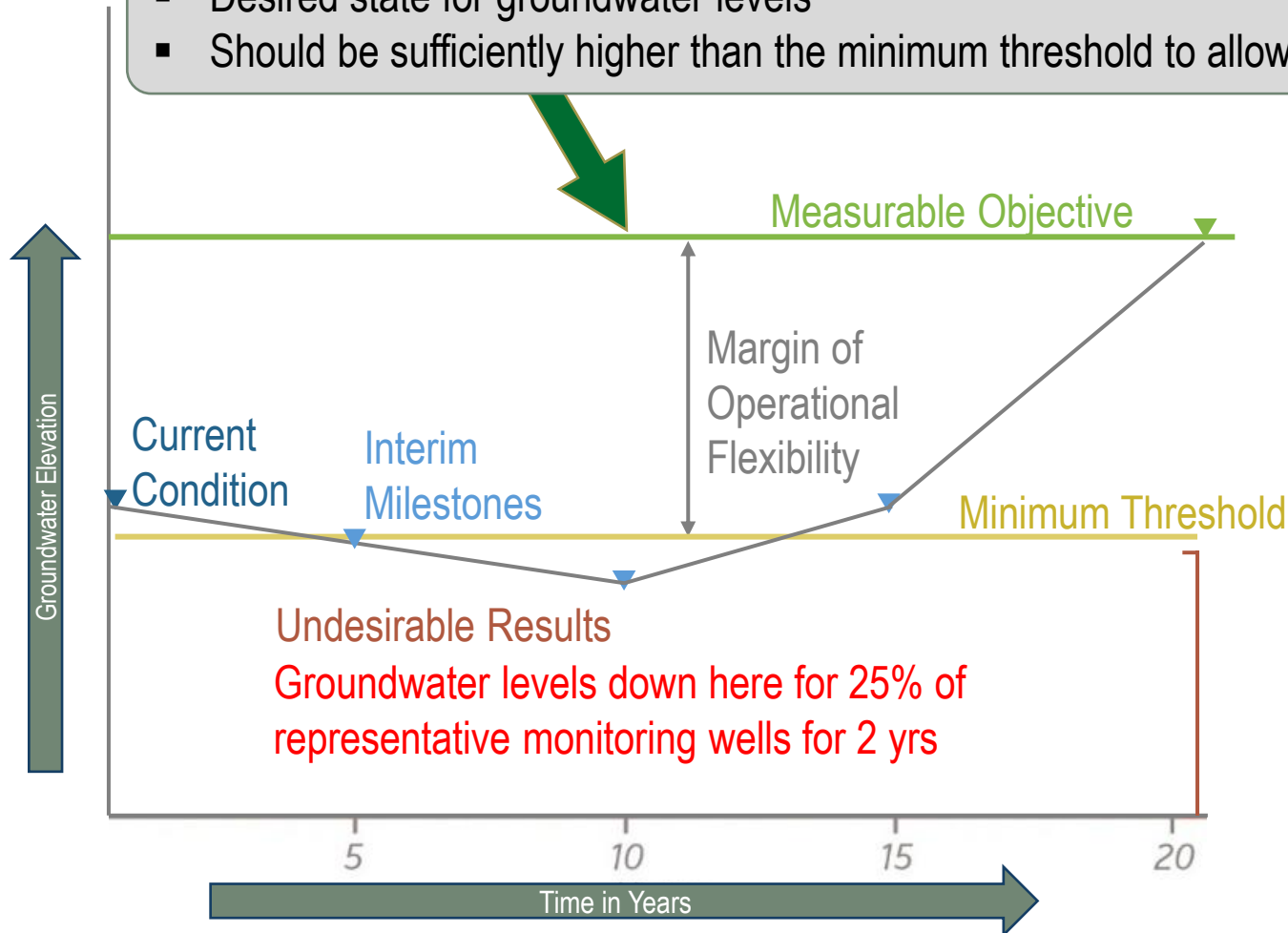
# Conceptual Scenario - Pumping vs Groundwater Levels Diagram





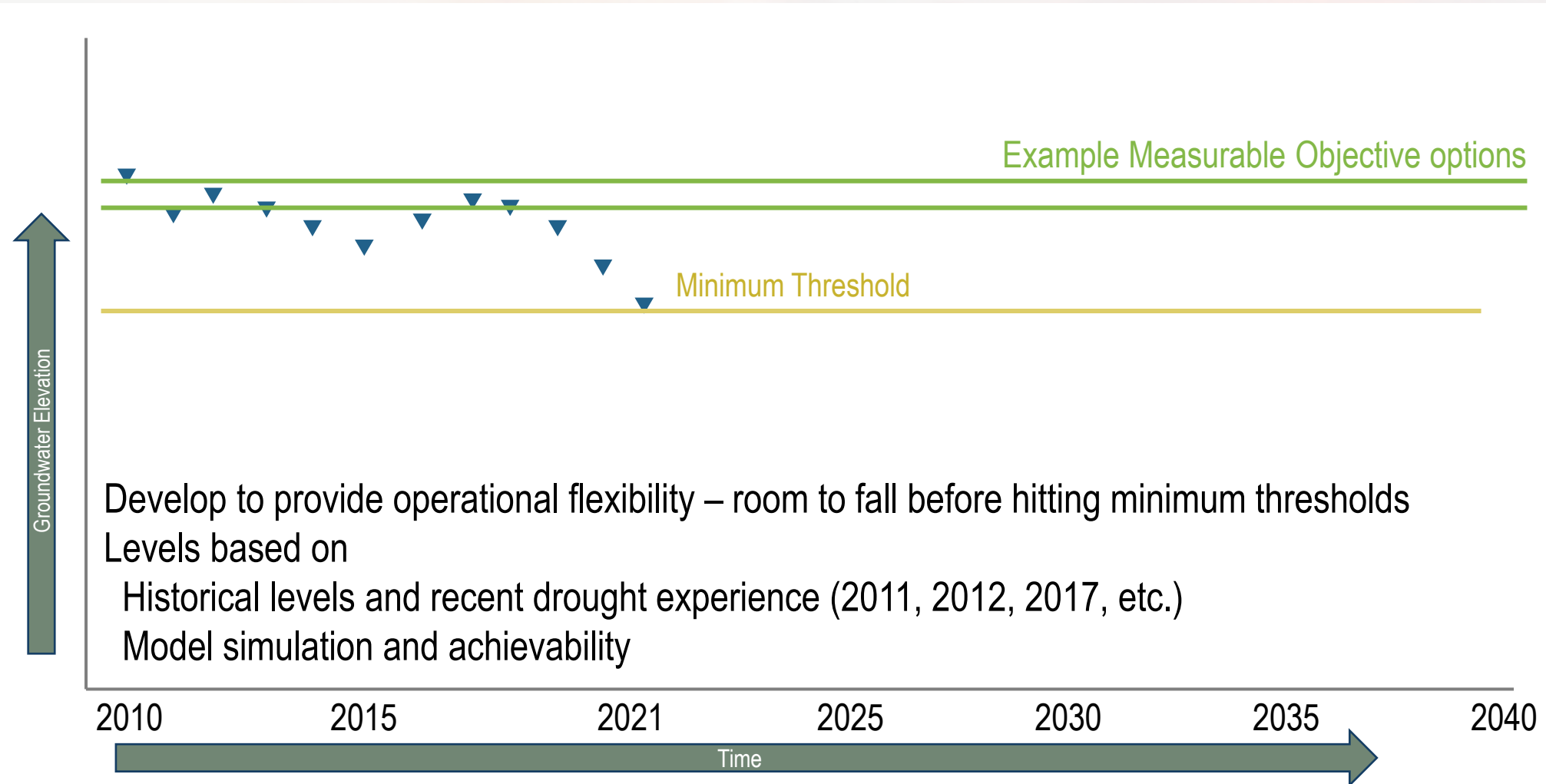
# Groundwater Level Measurable Objective

- Desired state for groundwater levels
- Should be sufficiently higher than the minimum threshold to allow for impacts of droughts

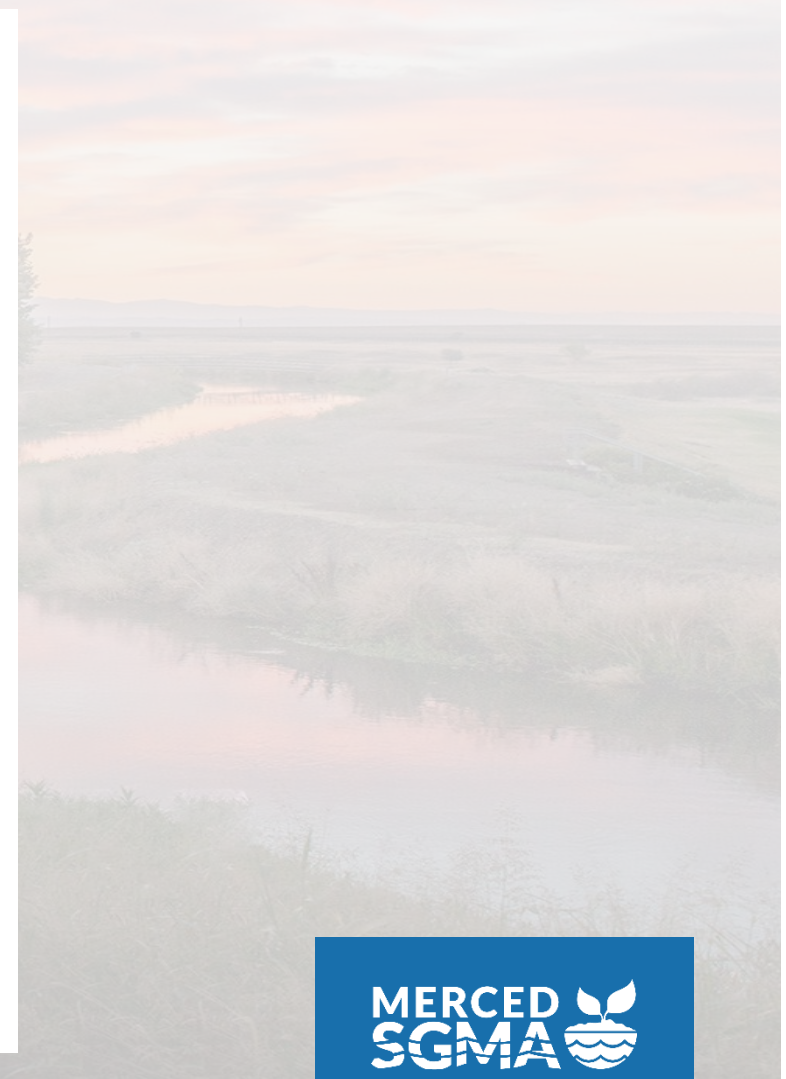
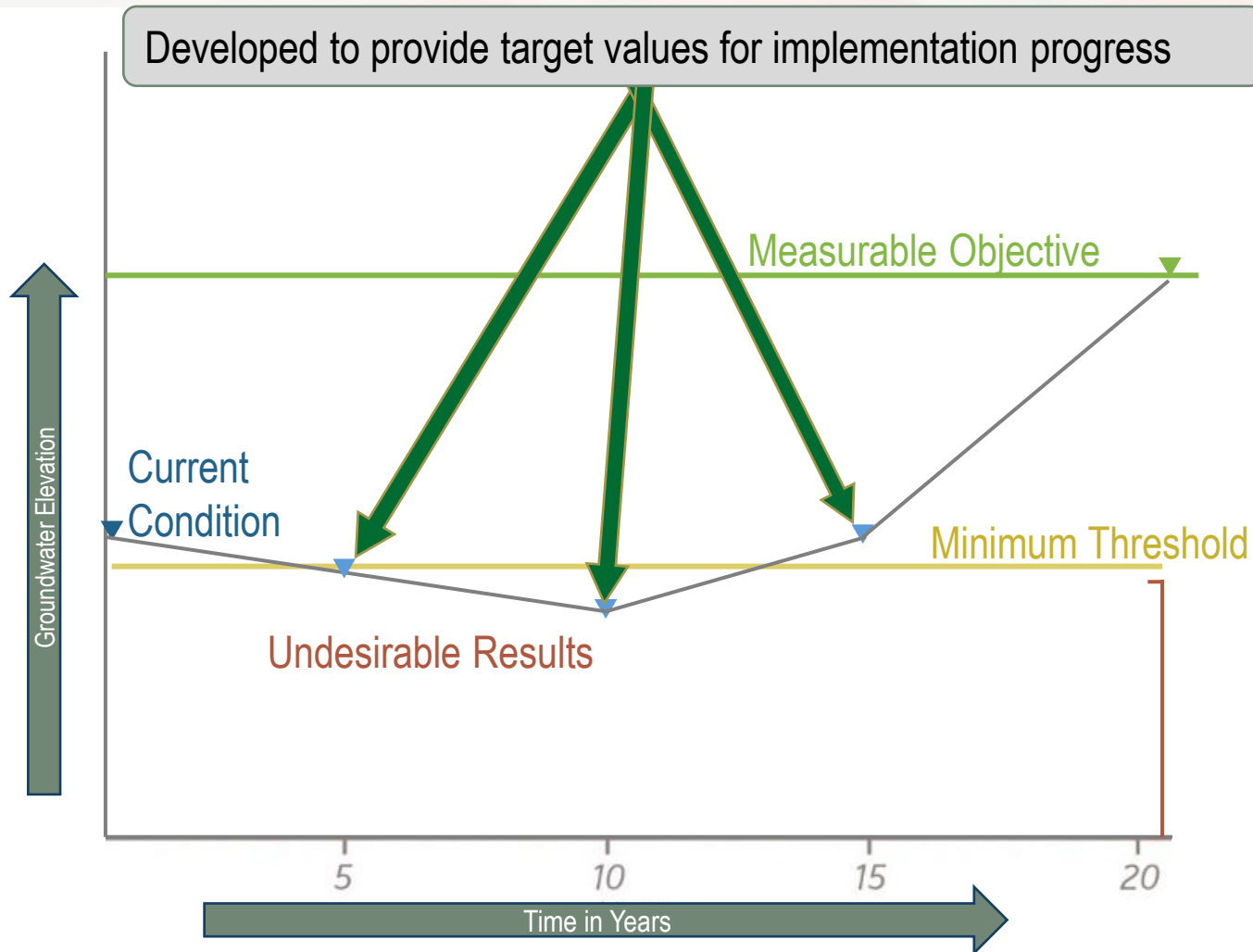


- Previously based on average simulated conditions under sustainable conditions
- New definition of minimum threshold requires reconsideration of measurable objectives

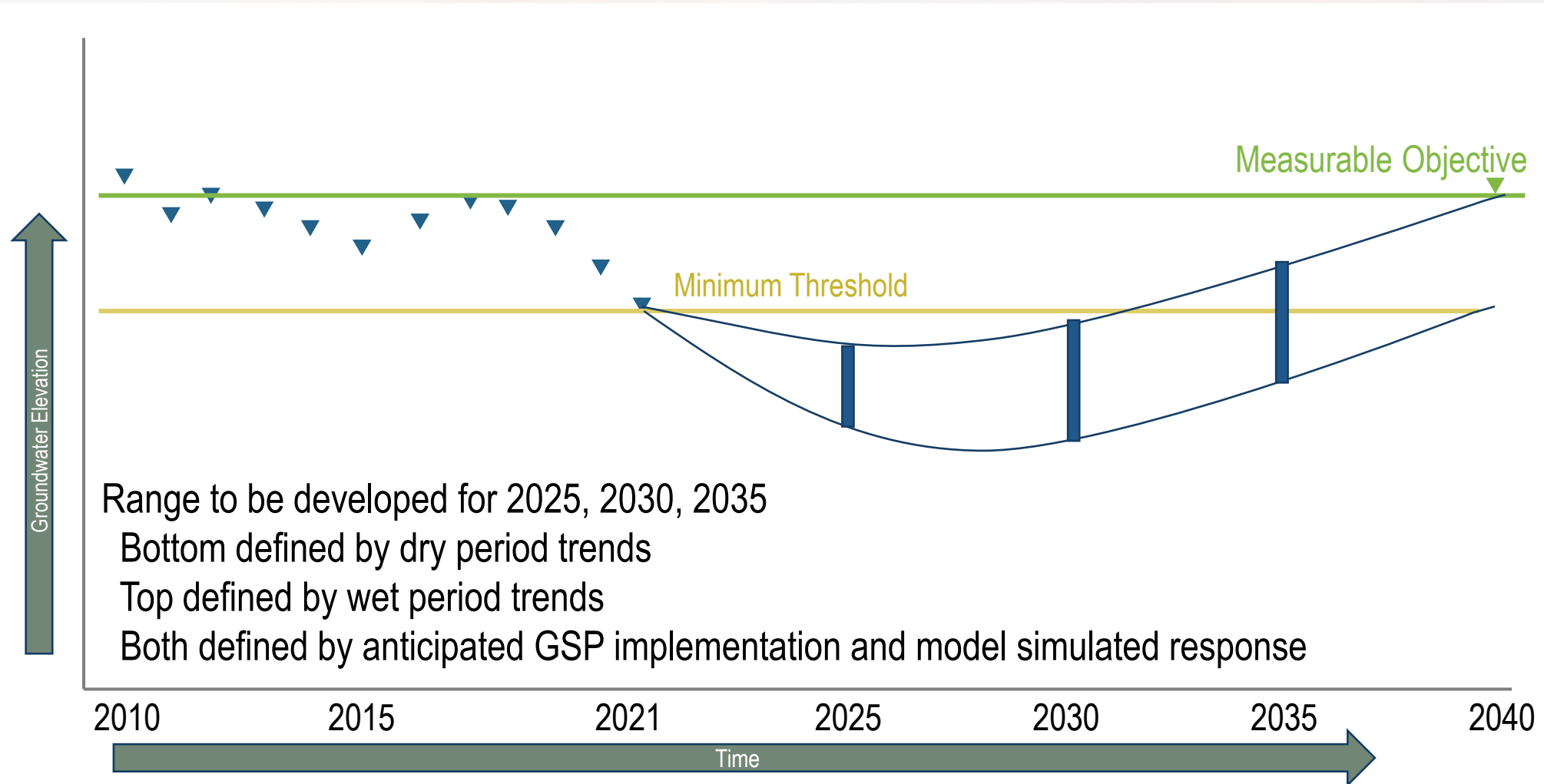
# Measurable Objective Approach



# Groundwater Level Interim Milestones



# Interim Milestone Approach



# Subsidence Sustainability Management Criteria

- Minimum threshold option: 0 ft/yr – with consideration of uncertainty
- Other options:
  - Total subsidence instead of rate
  - Addition of a 5-year rolling average or similar
- Measurement error
  - GPS observations from the USBR network have a +/- 2.5 cm (~1 inch) vertical accuracy
  - Measurement error issue to be discussed with DWR
- Other option (groundwater levels as proxy) would involve more rework of the section which is currently based on subsidence rate

Image courtesy: Veronica Adrover/UC Merced

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# Subsidence Sustainability Management Criteria

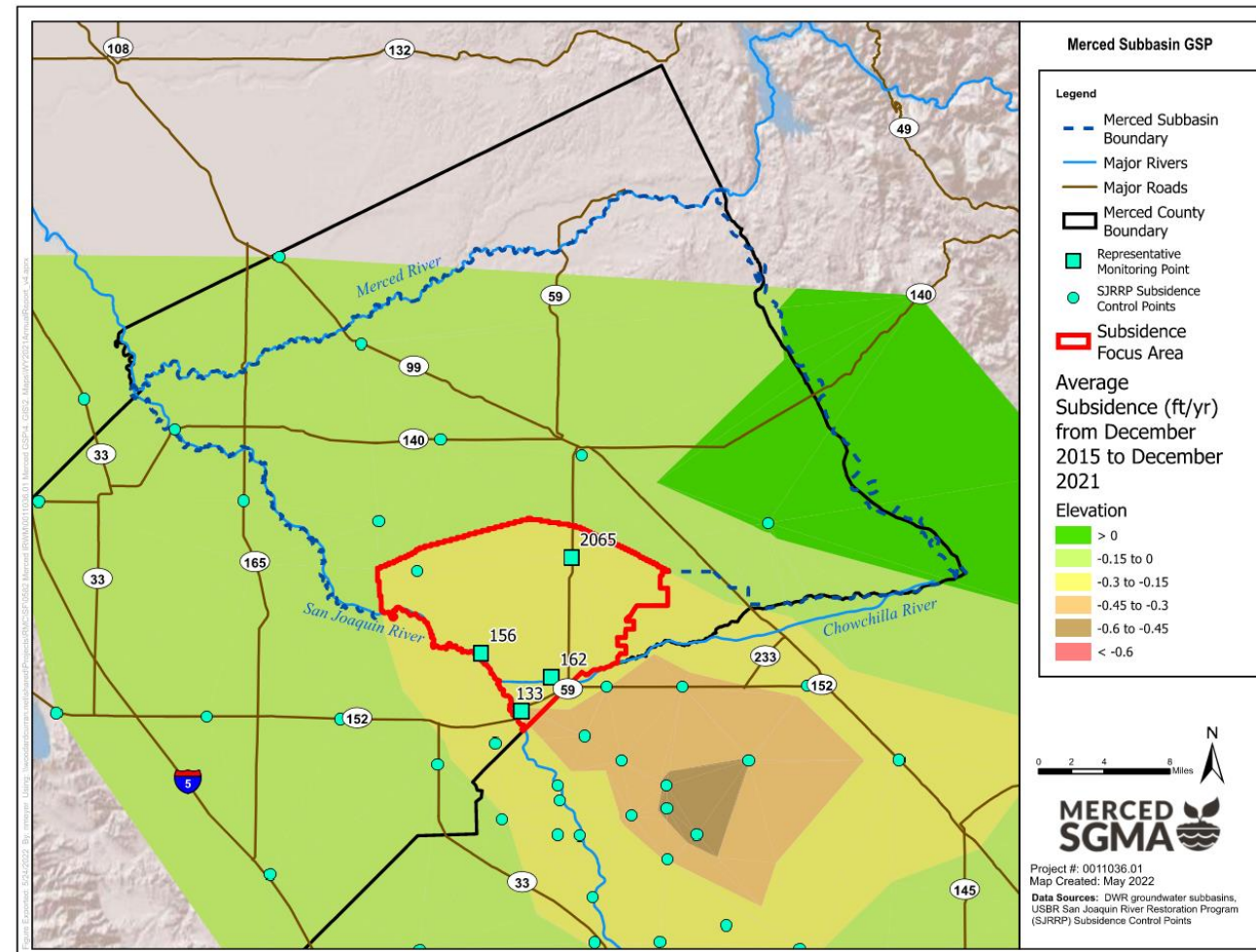
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- Measurable objective option: 0 ft/yr
- Interim Milestones will assume some level of subsidence through 2040 – residual and new

Image courtesy: Veronica Adrover/UC Merced

# Management Action for Subsidence Area

- Goal: Target pumping reduction (or recharge activities) within Subsidence Focus Area to achieve positive annual storage change (defined by region with 2015-2021 average  $< -0.15$  ft/yr)
- Exact details to be developed as part of the management action determined after GSP is updated



# Management Action for Domestic Well Mitigation Program

- Management action to develop a Domestic Well Mitigation Program
- Identify need for the program during GSP implementation
- Envisions a board or committee reviewing claims
- Claims would need to be tied to regional groundwater conditions
- Primary financial responsibility with MSGSA, through negotiations
- Details to be developed

Image courtesy: Veronica Adrover/UC Merced



# Adoption Process and Opportunities for Input

Week Starting	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

- 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

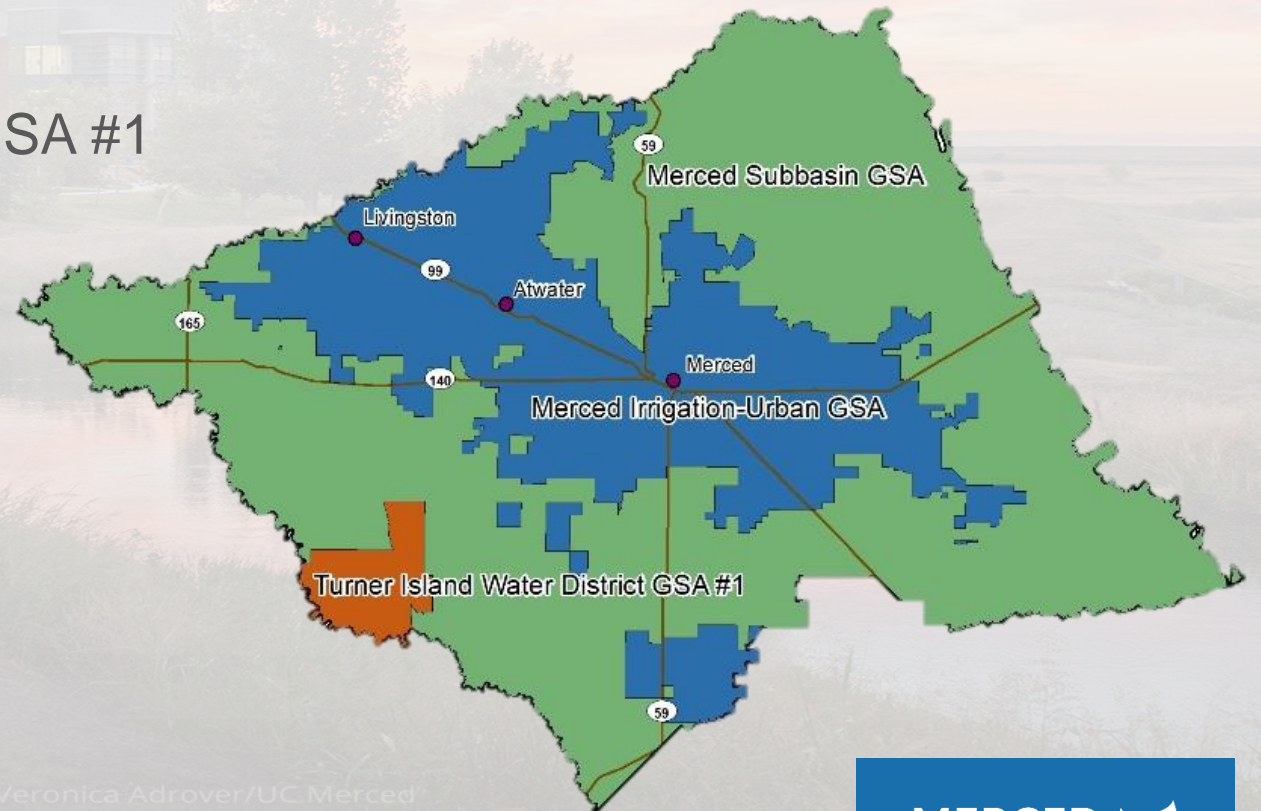


Image courtesy: Veronica Adrover/UC Merced



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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: tentatively June 27, 2022
  - Revised GSP content based on today's feedback

Image courtesy: Veronica Adrover/UC Merced

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