

**DRAFT**

# SOUTH OF KERN RIVER GROUNDWATER SUSTAINABILITY PLAN PUBLIC WORKSHOP #1

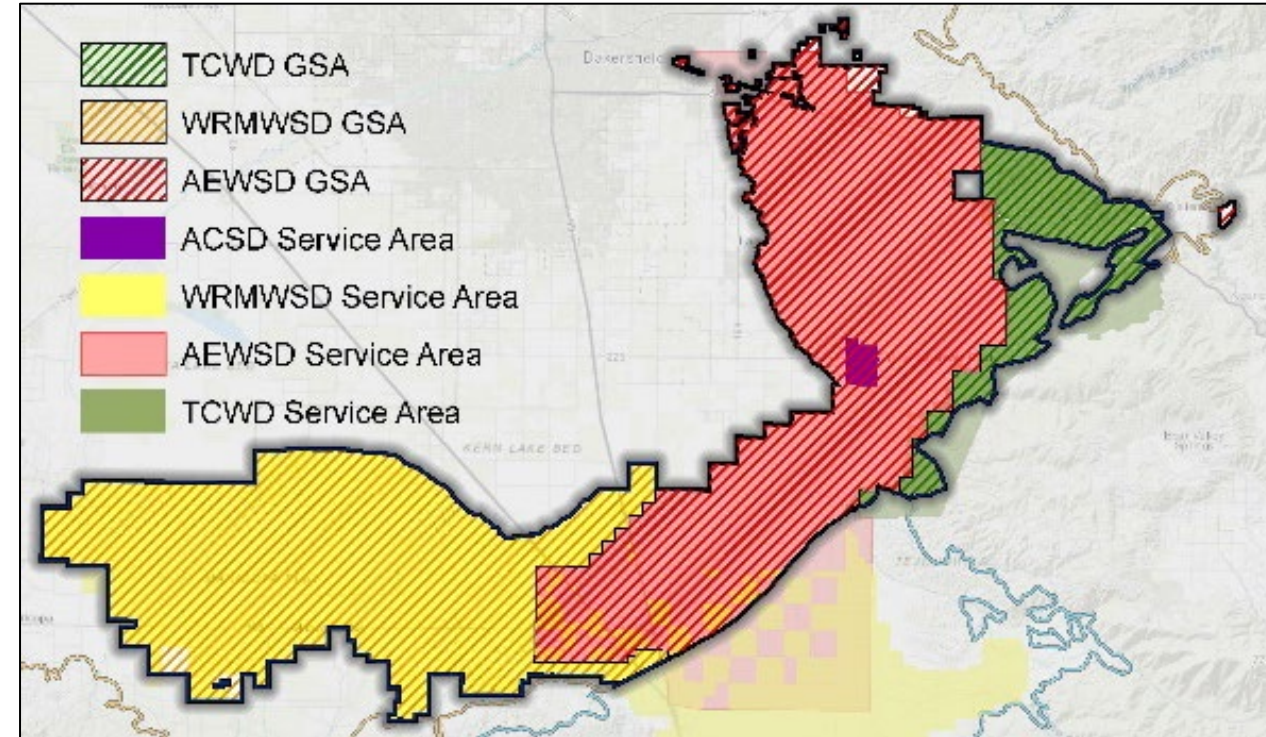
7 JUNE 2022

# PRESENTATION OUTLINE

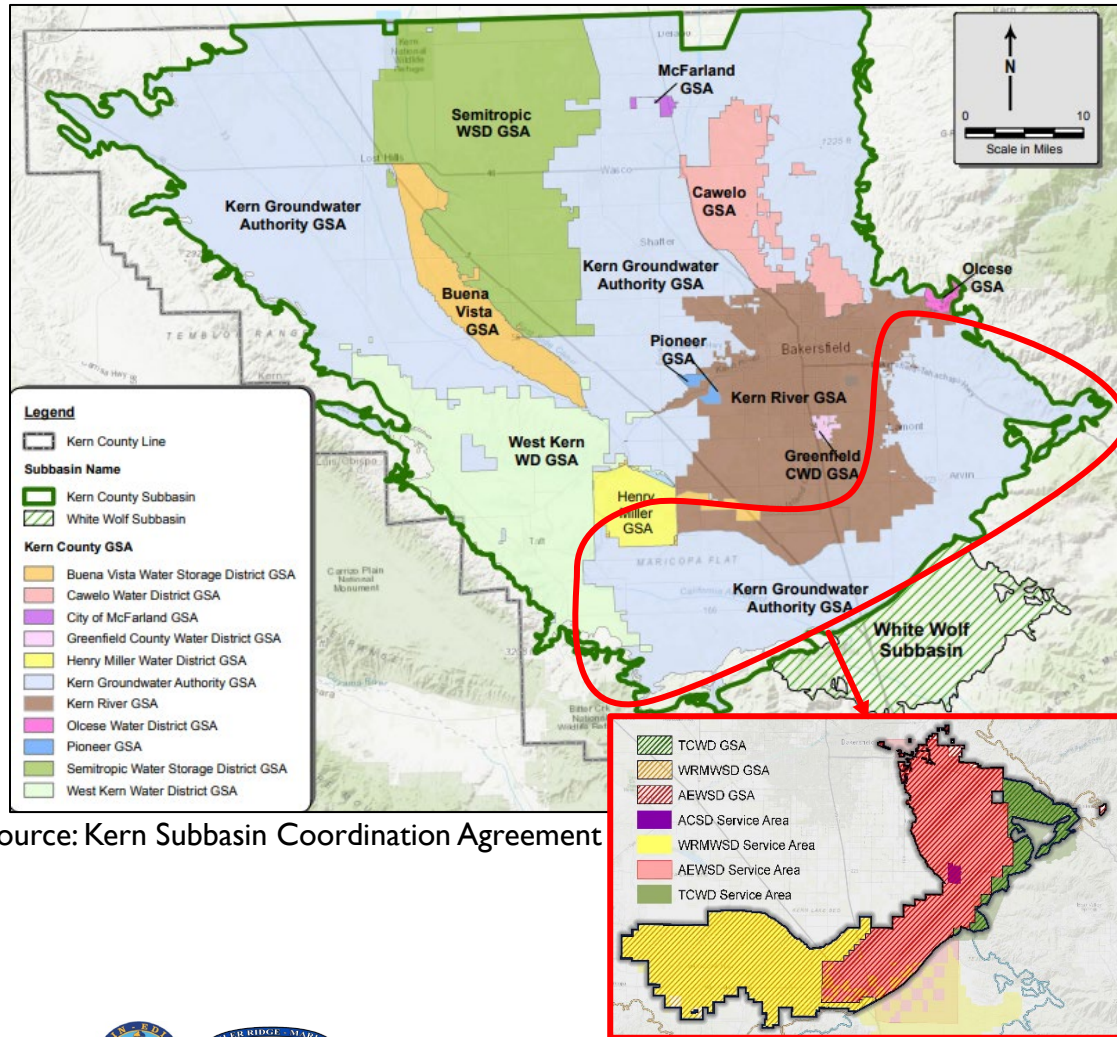
- Introduction to South of Kern River (SOKR) Groundwater Sustainability Agencies (GSAs)
- Update to the Sustainable Groundwater Management Act (SGMA) Process
- SOKR Groundwater Sustainability Plan (GSP) Development
- Q & A

# SOKR GSAs

- Arvin GSA
  - Arvin-Edison Water Storage District
  - Arvin Community Services District
- Wheeler Ridge-Maricopa GSA
- Tejon-Castac Water District GSA
- Developing a Memorandum of Agreement to manage the SOKR GSP Area



# KERN SUBBASIN PLAN



Source: Kern Subbasin Coordination Agreement

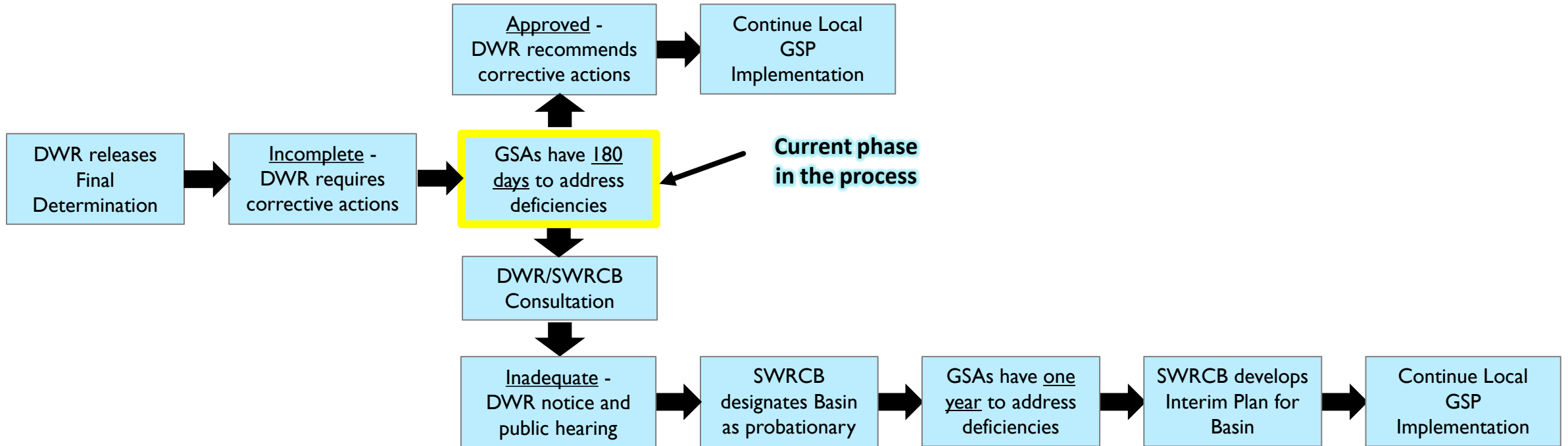
SOKR Plan Area

## 6 GSPs make up the Kern Subbasin “Plan”

- Kern Groundwater Authority (KGA) GSP
  - KGA GSA – formerly included the SOKR agencies
  - West Kern Water District GSA
  - Semitropic Water District GSA
  - City of McFarland GSA
  - Pioneer GSA
  - Cawelo Water District GSA
- Kern River GSA GSP
  - Kern River GSA
  - Greenfield County Water District GSA
- Henry Miller Water District GSP
- Buena Vista Water Storage District GSA GSP
- Olcese Water District GSA GSP
- SOKR GSP**
  - Arvin GSA
  - Wheeler Ridge-Maricopa GSA
  - Tejon-Castac Water District GSA



# KERN SUBBASIN'S CURRENT SGMA PROCESS



- GSA's have 180 days (until July 27, 2022) to correct deficiencies.
- If DWR declares the revised Plan *inadequate*, after a notice and a public hearing, the State Water Resources Control Board (SWRCB) can designate the basin as *probationary*.
- If the deficiencies identified in the *probationary* designation are not remedied within one year, the SWRCB may develop and adopt its own *interim plan* to manage groundwater use in the basin.

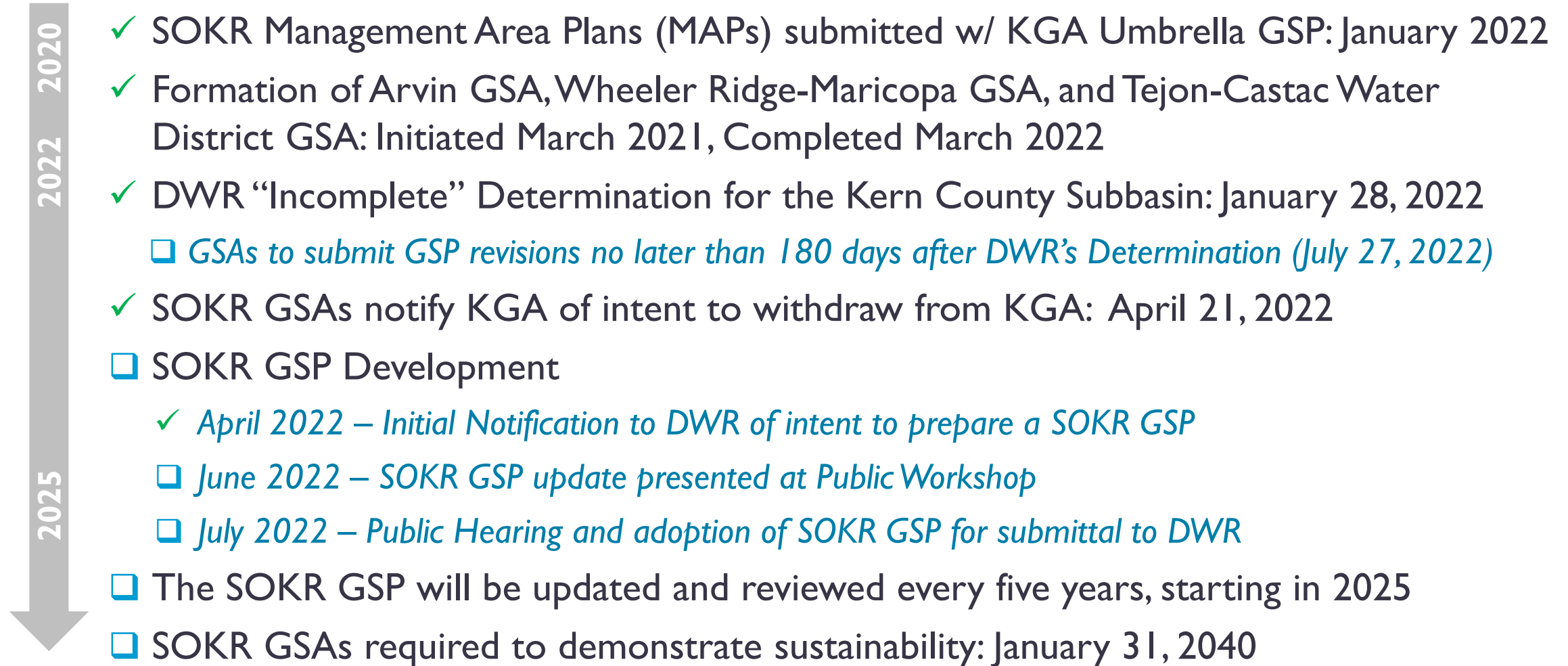
# DWR IDENTIFIED THREE MAIN DEFICIENCIES IN THE KERN SUBBASIN “PLAN”

1. The GSPs do not establish Undesirable Results that are consistent for the entire Subbasin.
2. The Plan does not set Minimum Thresholds for Chronic Lowering of Groundwater Levels in a manner consistent with the requirements of SGMA and the GSP regulations.
3. The Plan’s Land Subsidence Sustainable Management Criteria do not satisfy the requirements of SGMA and the GSP regulations.

# SOKR GSP ALLOWS FOR LOCAL GROUNDWATER MANAGEMENT

- On-going sustainable management – there are currently no Undesirable Results occurring within the SOKR Plan Area
- Maintain local control regarding projects and management actions (including management of extractions and recharge) to achieve sustainable yield
- Ongoing coordination with other Kern Subbasin GSAs supports achievement of Basin Sustainability Goal

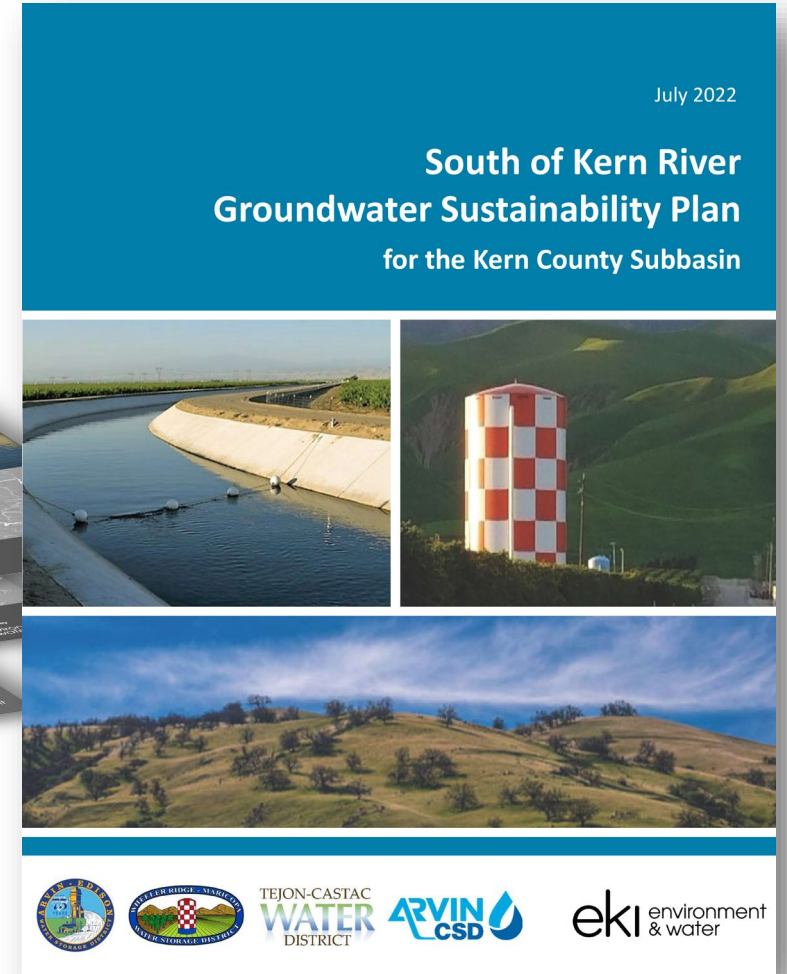
# SOKR SGMA COMPLIANCE TIMELINE





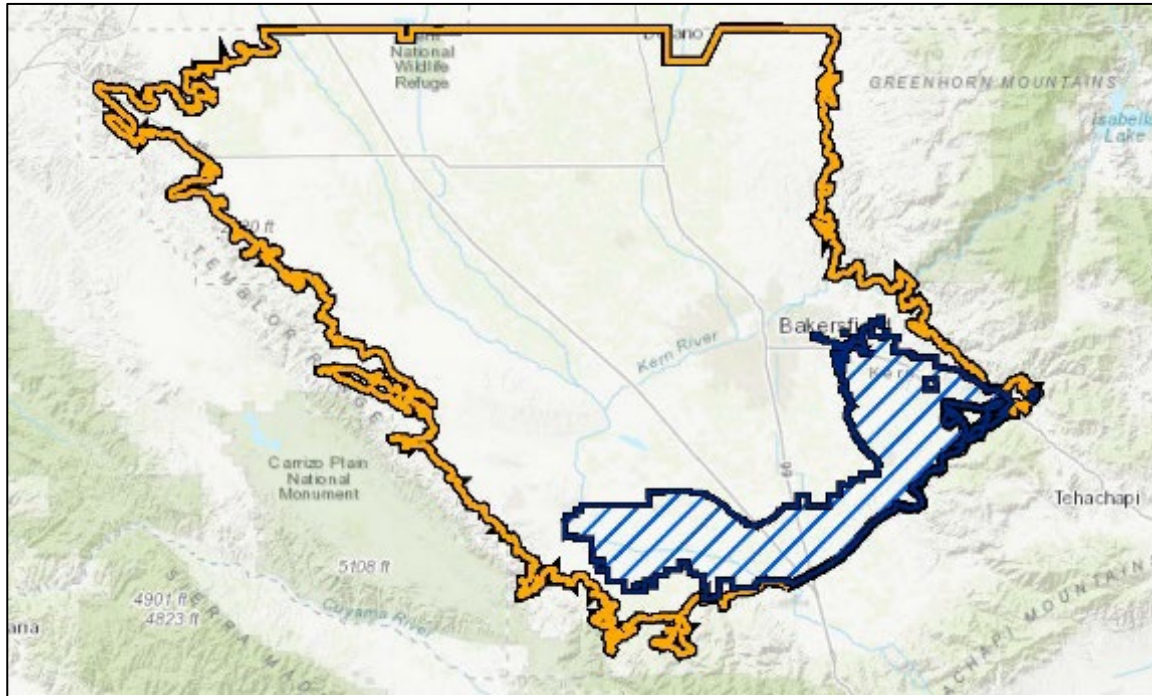
# SOKR GSP STRUCTURE / AMENDMENTS

- Three MAPs synthesized into a single SOKR GSP
- Coordinated with other Subbasin GSAs to address DWR deficiencies
- Signatory to the Basin Coordination Agreement

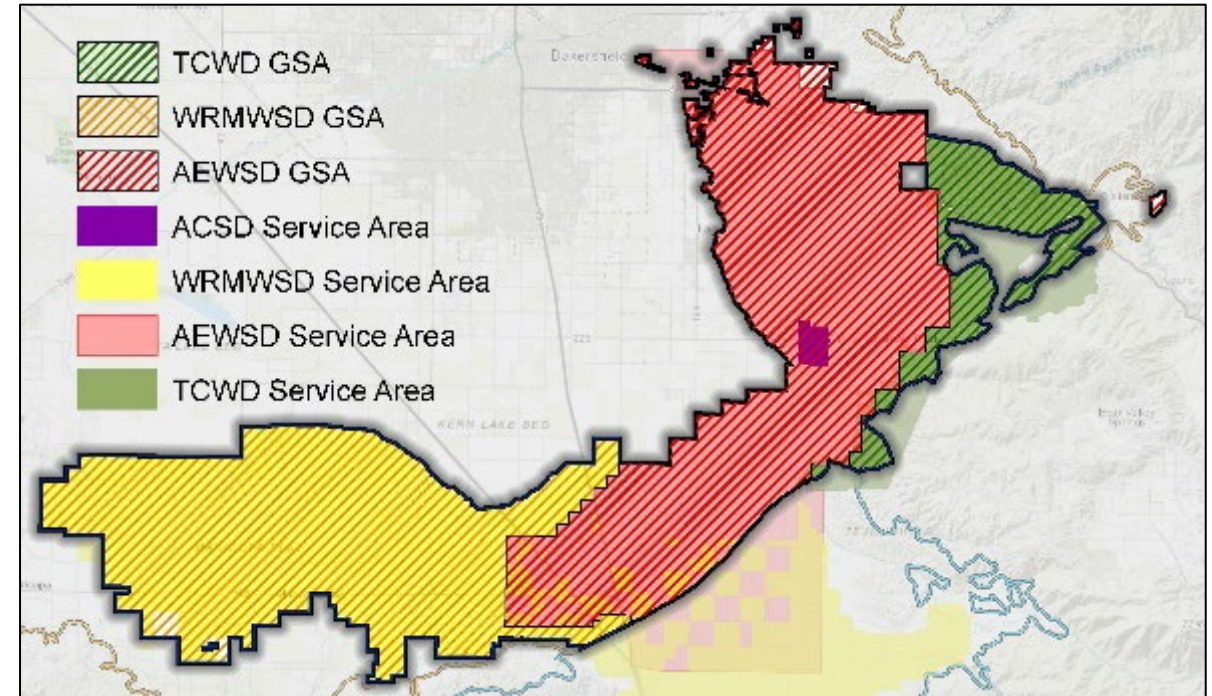


# SOKR PLAN AREA

## SOKR GSP Area Within the Kern County Subbasin



## SOKR GSA Areas



# SOKR GSP REVISIONS

- Addressed DWR deficiencies for the Kern County Subbasin (discussed on the following slides)
- Added discussion of Basin-wide coordination efforts that have occurred since 2020
  - Coordination meetings between all Basin GSA managers, Coordination Committee meetings, consultation meetings with DWR
  - Common definitions for Sustainable Management Criteria
  - Coordinated Basin Water Budget
  - Coordinated approach to Land Subsidence
  - Basin DMS, Basin Study, etc.
  - Coordinated Monitoring Protocols and Exceedance Policy
- Signatory to Coordination Agreement



# DWR DETERMINATION LETTER – DEFICIENCY #1

*“The GSPs do not establish undesirable results that are consistent for the entire Subbasin.”*

*“While the Coordination Agreement presents Subbasin-wide undesirable results, the Subbasin’s fragmented approach towards establishing management criteria that define undesirable conditions in various parts of the Subbasin does not satisfy SGMA’s requirement to use same data and methodologies.”*

- ✓ **Basin GSAs established Basin-wide criteria for undesirable results that matched prior definition in SOKR MAPs; Undesirable Results are triggered when at least 40% of Representative Monitoring Sites (RMS) exceed MTs over four consecutive bi-annual SGMA required monitoring events.**

# DWR DETERMINATION LETTER – DEFICIENCY #2

*“The Subbasin’s chronic lowering of groundwater levels sustainable management criteria do not satisfy the requirements of SGMA and the GSP regulations.”*

*“The GSPs do not consistently and sufficiently document the effects of their selected minimum thresholds on beneficial uses and users in the Subbasin, nor explain how the minimum thresholds and measurable objectives that are set below historical lows will impact other applicable sustainability indicators...”*

- ✓ **Basin GSAs created a consolidated list of beneficial use and user categories.**
- ✓ **SOKR GSAs had already performed well impacts analyses to develop MTs/MOs in each management area, clearly demonstrating no significant and unreasonable impacts on beneficial users.**
- ✓ **The SOKR GSP includes clear descriptions of how Minimum Thresholds affect beneficial uses and users, as well as the relationship between Sustainability Indicators.**

There were also comments specific to each MAP...



# DEFICIENCY #2 – ARVIN-EDISON MANAGEMENT AREA

*“As the Arvin Edison management area plan appears to rely, at least to some extent, on the Impacted Well Mitigation Program to justify its minimum thresholds, which allow for continued lowering of groundwater levels in some areas, the KGA GSP must provide specific details, including timeline for implementation, of the program. Describe the scope of the program and how users impacted by continued groundwater level decline, particularly early in implementation of the Plan, will be addressed.”*

- ✓ **The SOKR GSP includes a more detailed description of the AEWSD Well Mitigation Program**

# DEFICIENCY #2 – WHEELER RIDGE-MARICOPA MANAGEMENT AREA

*“As the KGA GSP Wheeler Ridge-Maricopa management area appears to rely, at least to some extent, on the Impacted Well Mitigation Program to justify its minimum thresholds, which allow for continued lowering of groundwater levels in some areas, provide specific details, including timeline for implementation, of the program. Describe the scope of the program and how users impacted by continued groundwater level decline, particularly early in implementation of the Plan, will be addressed.”*

- ✓ **The SOKR GSP includes a more detailed description of the WRMWSD Well Mitigation Program**

# DEFICIENCY #2 – TEJON-CASTAC MANAGEMENT AREA

*“The KGA GSP must explain the selection of groundwater level minimum thresholds for the Tejon-Castac management area, including how they represent site-specific levels of depletion that could cause undesirable results, how they may affect the interests of beneficial uses and users of groundwater, and the relationship between this sustainability indicator and other sustainability indicators such as degradation of groundwater quality and subsidence, both of which can be exacerbated by lowering groundwater levels.”*

- ✓ **In the SMC sections, the SOKR GSP includes clear descriptions of how Minimum Thresholds avoid Undesirable Results and affect the interests of beneficial uses and users, as well as the relationship between Sustainability Indicators.**

# DWR DETERMINATION LETTER – DEFICIENCY #3

*“The Subbasin’s land subsidence sustainable management criteria do not satisfy the requirements of SGMA.”*

*“The Plan lacks a Subbasin-wide, coordinated approach to establishing land subsidence sustainable management criteria.”*

- ✓ **Basin GSAs have developed a Basin-wide approach to address Land Subsidence. The SOKR GSP will incorporate these efforts through the following:**
  - ✓ **Basin-wide subsidence study**
  - ✓ **Use of updated InSAR data**
  - ✓ **Coordinated definition and mapping of Basin-wide critical infrastructure**
  - ✓ **Revised the definition of Land Subsidence Undesirable Results to only include subsidence caused by groundwater management actions (i.e., extraction and recharge)**

# OPPORTUNITIES FOR PUBLIC COMMENT

- June 7 Public Workshop
- June 14/15 Draft SOKR GSP released for Public Review through July 5:
  - <https://aewsd.org/>
  - <https://wrmwsd.com/>
  - <https://www.tejoncastacwd.com/>
  - <https://www.arvincsd.com/>
- July 20/21/22 Public Hearing and Adoption (see above websites for details)
- DWR 60-day comment period starts after submission on July 27, 2022



# QUESTIONS?



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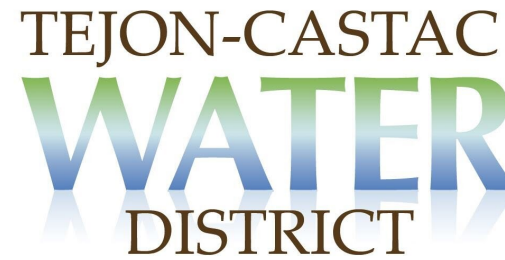


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