Sustainable Groundwater Management Act: Kaweah Subbasin



Office of Sustainable Groundwater Management

Language Interpretation In Person

Interpretación en persona

ਵਿਅਕਤੀਗਤ ਤੌਰ 'ਤੇ ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਵਿੱਚ ਵਿਆਖਿਆ

Please visit the table outside this room for a headset or if you have technical difficulties.

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ਇਸ ਕਮਰੇ ਦੇ ਬਾਹਰ ਮੇਜ਼ 'ਤੇ ਜਾਓ ਜੇਕਰ ਤੁਹਾਨੂੰ ਹੈੱਡਸੈੱਟ ਦੀ ਲੋੜ ਹੈ ਜਾਂ ਤੁਹਾਨੂੰ ਕੋਈ ਤਕਨੀਕੀ ਮੁਸ਼ਕਲ ਪੇਸ਼ ਆ ਰਹੀ ਹੈ।



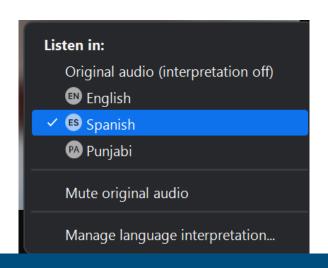
Opción de Interpretación en Zoom

- Seleccione el icono de interpretación desde los controles de la pantalla
- Seleccione español (Spanish)
- Seleccione la opción para poner el audio original en silencio (Mute Original Audio)



Language Interpretation through Zoom

- Click the Interpretation icon in your meeting controls
- Select Spanish OR English OR Punjabi
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ਜੂਮ ਰਾਹੀਂ ਭਾਸ਼ਾ ਅਨੁਵਾਦ

- ਆਪਣੇ ਮੀਟਿੰਗ ਕੰਟਰੋਲਾਂ ਵਿੱਚ ਅਨੁਵਾਦ ("Interpretation") ਆਈਕਨ ਤੇ ਕਲਿੱਕ ਕਰੋ
- ਸਪੈਨਿਸ਼ ਜਾਂ ਅੰਗਰੇਜ਼ੀ ਜਾਂ ਪੰਜਾਬੀ ਚੁਣ
- ਮੂਲ ਆਡੀਓ ਨੂੰ ਮਿਊਟ (ਆਵਾਜ਼ ਬੰਦ) ਕਰੋ



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ਸਲਾਈਡਾਂ ਨੂੰ ਆਪਣੀ ਪਸੰਦੀਦਾ ਭਾਸ਼ਾ ਵਿੱਚ ਦੇਖਣ ਲਈ, ਸਕ੍ਰੀਨ ਦੇ ਉੱਪਰ "Presentation in English," "Presentación en español," or "Presentation in Punjabi" 'ਤੇ ਕਲਿੱਕ ਕਰੋ।

For technical assistance, email

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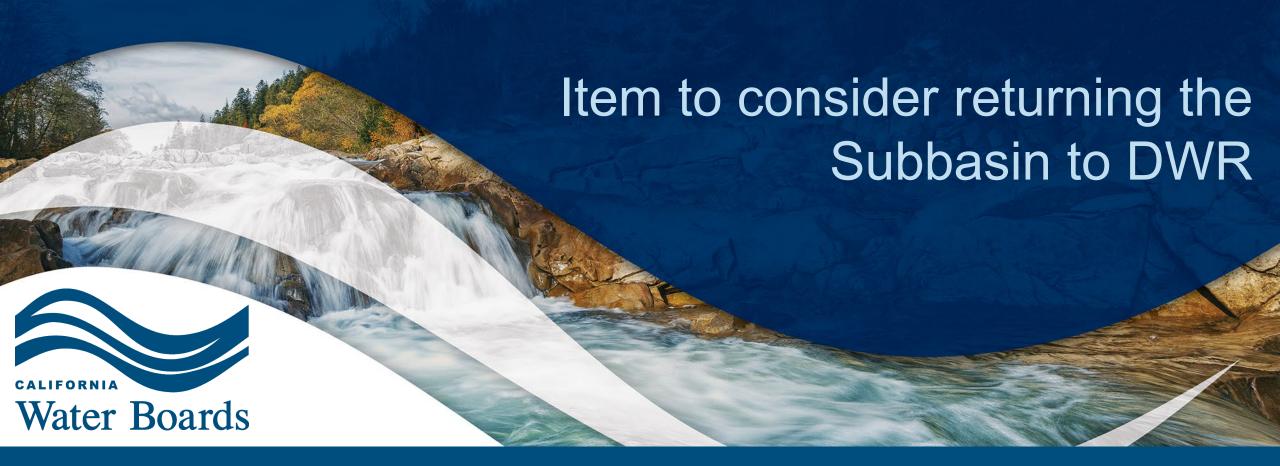
Si necesita ayuda técnica, envíe un mensaje electrónico a

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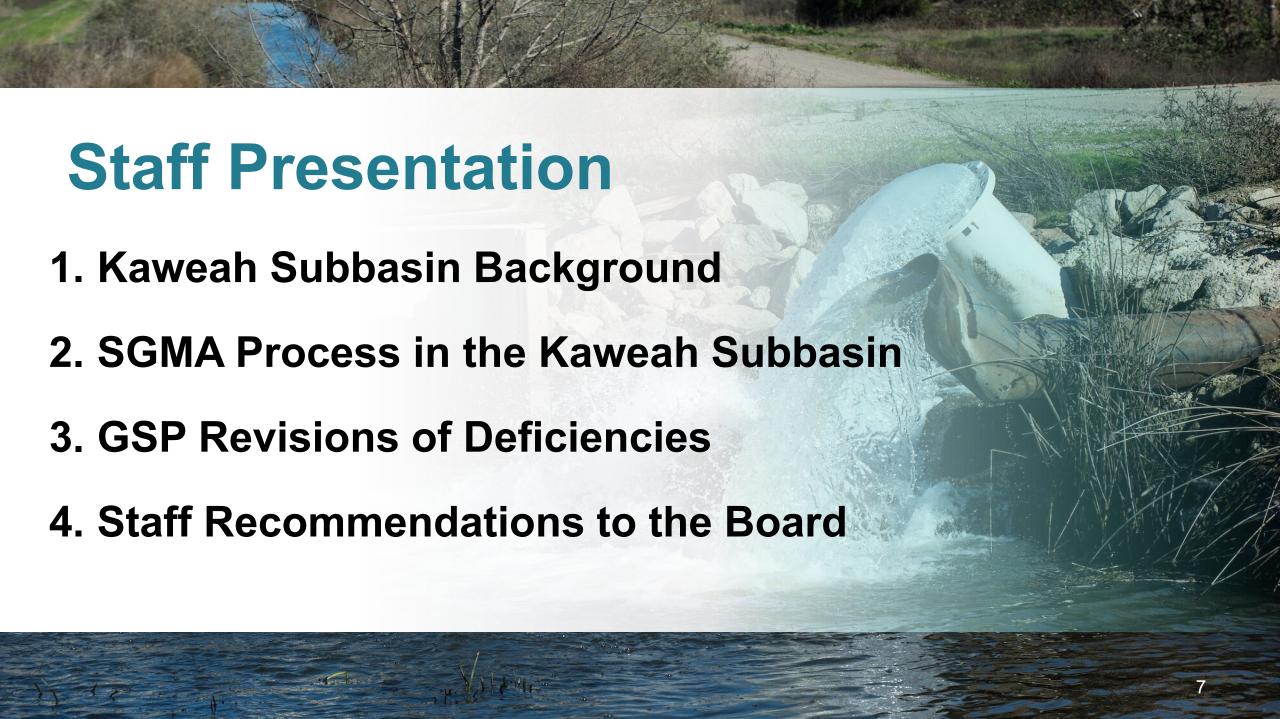
ਤਕਨੀਕੀ ਸਹਾਇਤਾ ਲਈ, ਇਸ ਵੈੱਬਸਾਈਟ 'ਤੇ ਈਮੇਲ ਕਰੋ

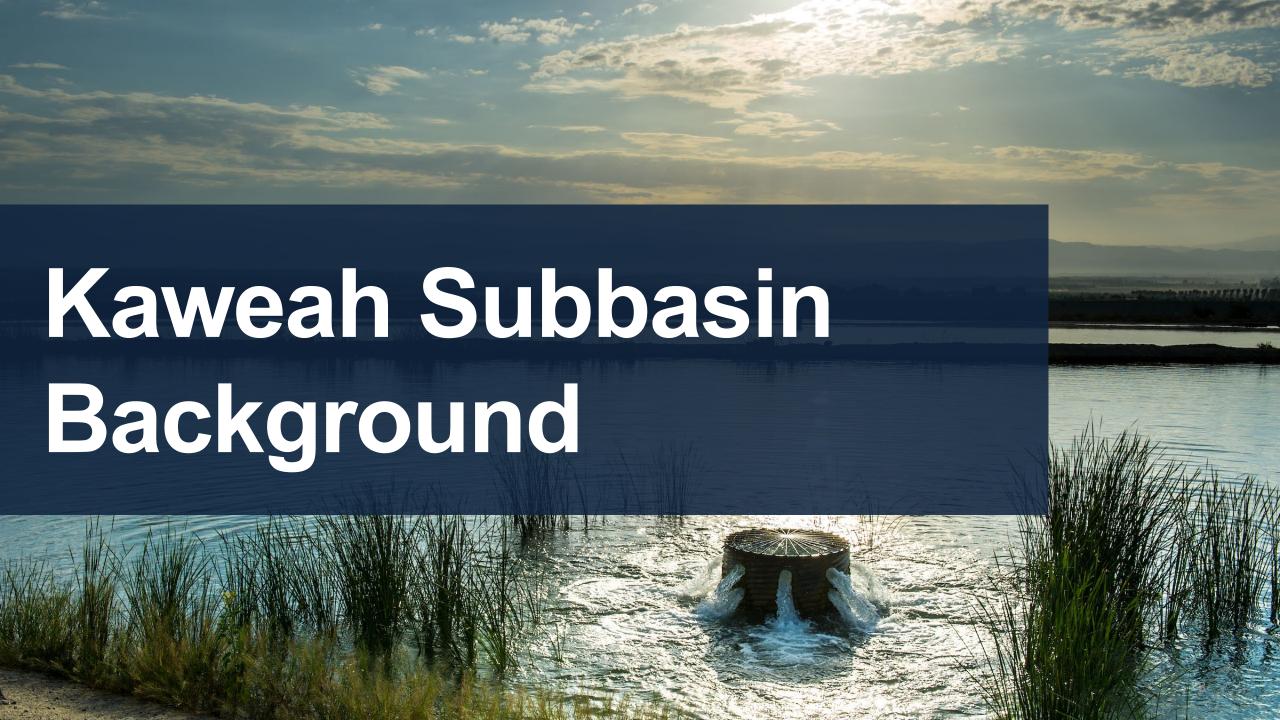
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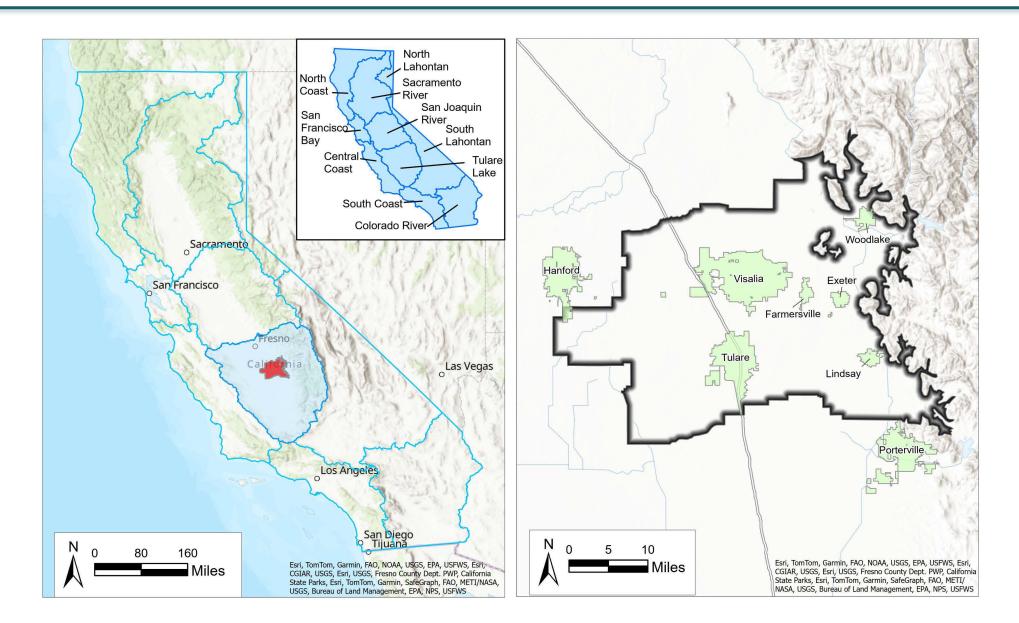


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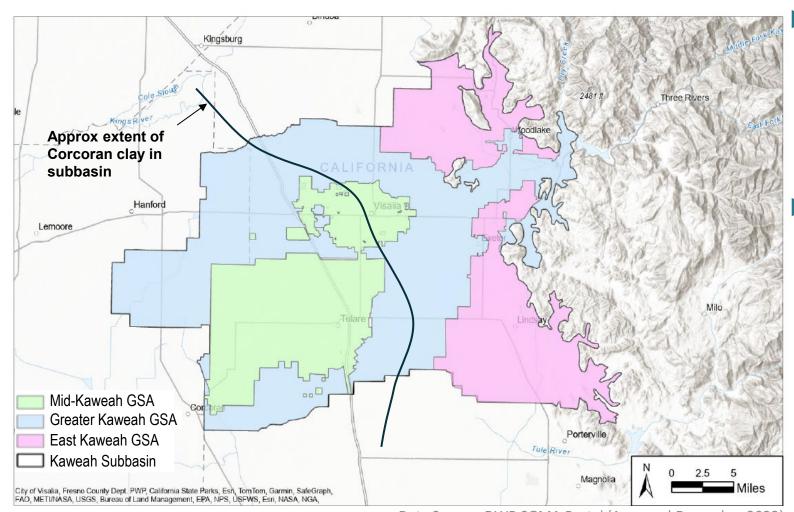




Kaweah Subbasin Physical Setting



Groundwater Sustainability Agencies



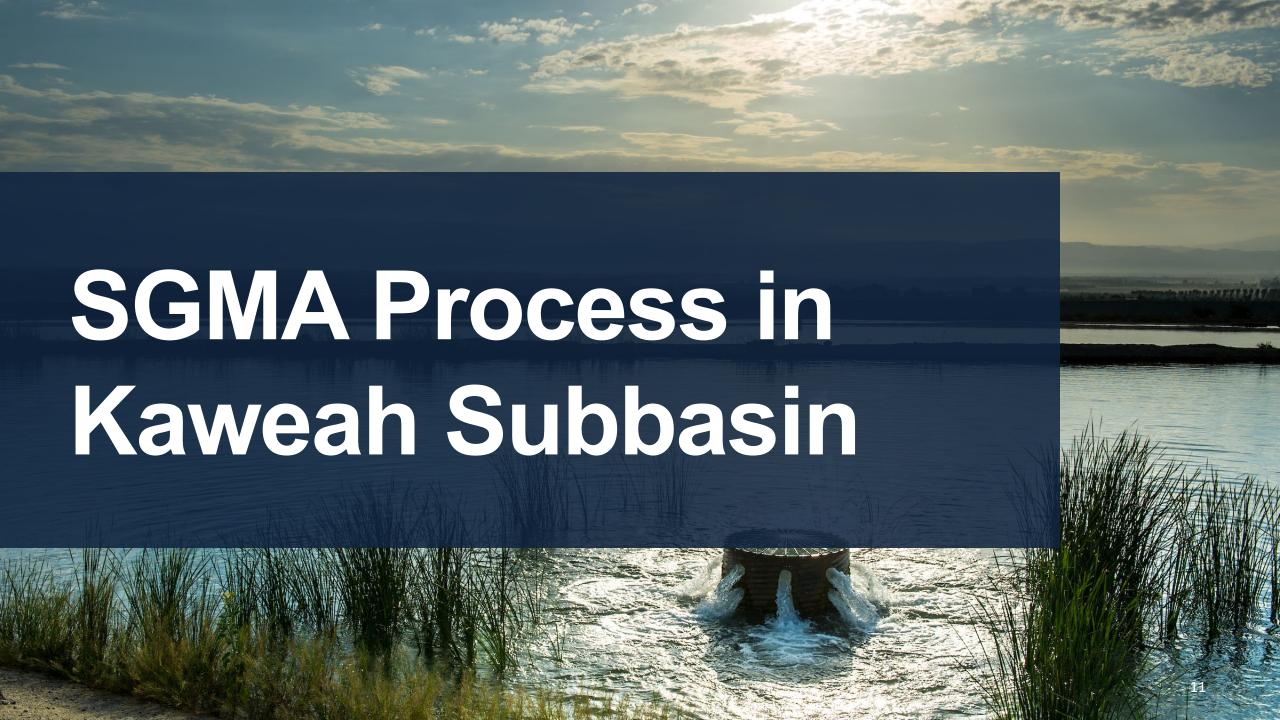
Data Source: DWR SGMA Portal (Accessed December 2023)

3 GSAs

- East Kaweah GSA
- ▶ Mid-Kaweah GSA
- Greater Kaweah GSA

► Aquifers:

- ► Single Aquifer: Located in the eastern portion of the subbasin
- Upper and Lower Aquifer: Located in the central and western portion of the subbasin



The Kaweah GSAs continued to be responsive since being referred to the Board



Board staff coordinated with GSAs



June 2024 Public Workshops

19 Technical Meetings with GSAs

Board staff review of June and October 2024 Draft GSPs

Board staff review of November 2024 Final GSPs and Coordination Agreement



2024 Kaweah Subbasin Amended GSPs

State Water Board 2024 Draft Staff Report Deficiencies	Status
Groundwater Level (GL)-1: Undesirable Result Definition	Resolved
GL-2: Minimum Thresholds	Resolved
GL-3: Sustainable Management Criteria Relationships	Substantially Resolved
GL-4: Mitigation	Resolved
Land Subsidence (LS)-1: Undesirable Result Definition	Resolved
LS-2: Sustainable Management Criteria Relationships	Resolved
LS-3: Undesirable Results and Risk of Impacts	Resolved
Groundwater Quality (GWQ)-1: Undesirable Result Definition	Resolved
GWQ-2: Sustainable Management Criteria	Resolved
GWQ-3: Monitoring	Substantially Resolved
GWQ-4: Mitigation and Management Actions	Substantially Resolved
Interconnected Surface Water (ISW)-1: Impacts on Beneficial Uses and Users	Resolved
ISW-2: Minimum Thresholds	Partially Resolved
ISW-3: Monitoring	Resolved*

^{*}Resolved for the level of information currently available to the GSAs

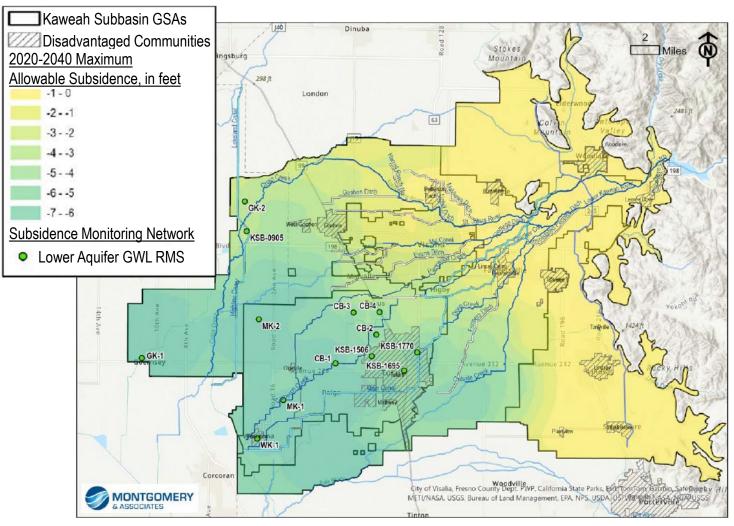
The GSAs amended their groundwater level sections to minimize impacts to drinking water users

- Revised undesirable result definition and minimum thresholds
- Dry well susceptibility analysis
- Operational flexibility
- Robust mitigation program



The GSAs should continue to refine approach for sustainable management criteria relationships

- Described the impacts of minimum thresholds on land subsidence and groundwater storage
- Need more explanation on impacts to groundwater quality and interconnected surface water



Modified after 2024 MKGSP, Appendix 5E, Figure 4. Kaweah Subbasin Lower Aquifer Representative Monitoring Sites and Subsidence Minimum Threshold



The GSAs included steps to stop active subsidence and mitigate for impacts

- Developed new sustainable management criteria (SMC) for the Friant-Kern Canal
- Updated subsidence model and groundwater level SMC to avoid subsidence in lower aquifer
- Added mitigation funding and support for critical infrastructure



2024 Coordination Agreement, Appendix 6-2. Kaweah Subbasin Mitigation Program Version 1.0

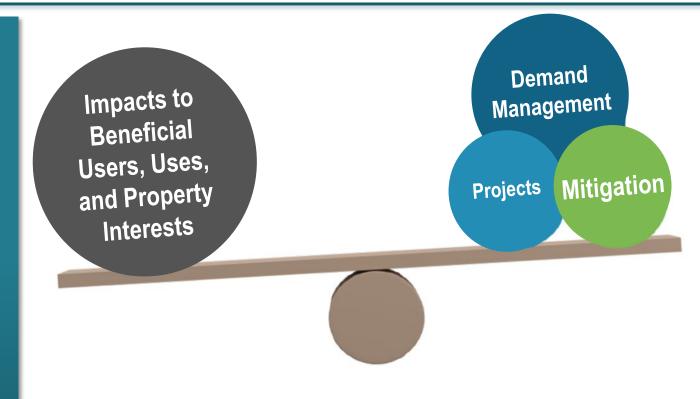


Undesirable Result:

- (1) 10 separate RMS wells with exceedances due to groundwater management after January 1, 2015, OR
- (2) GSAs cannot meet mitigation demand for domestic wells

Sustainable Management Criteria:

- Expanded list of constituents of concern
- Set minimum thresholds at drinking water standards (except for sodium and boron)



Modified after 2024 Coordination Agreement, Appendix 6-4: Degraded Water Quality SMC Technical Memorandum

The GSPs still need revisions for groundwater quality monitoring and mitigation

Improvements included:

- Developed Minimum
 Threshold Exceedance
 Policy and Well Registration
 Program
- Added mitigation for groundwater quality impacts

Revisions needed:

Fill monitoring data gaps

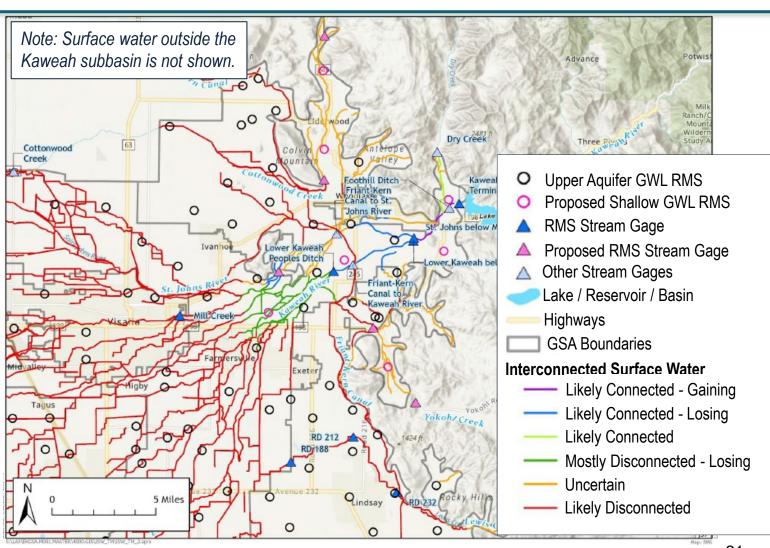


Modified after 2024 Coordination Agreement, Appendix 6-2. Kaweah Subbasin Mitigation Program Version 1.0



The GSAs used monitoring data to refine pumping effects on interconnected surface water

- Refined understanding of beneficial uses and users of interconnected surface water
- Established monitoring network and frequency
- Developed ISW Data Gap Work Plan that identified future monitoring site locations

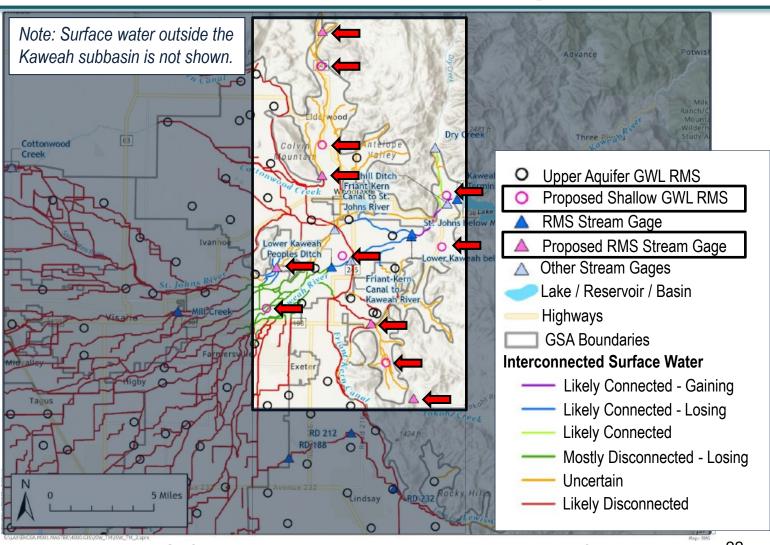




The GSPs should be revised as GSAs fill interconnected surface water data gaps

The GSAs set preliminary minimum thresholds that considered impacts to beneficial uses/users.

- Further development of model to estimate depletions
- Implementation of Data Gap Work Plan and future DWR guidance



Spotlight: Mitigation



Image source: https://ekgsa.org/2024-state-of-the-kaweah-subbasin/





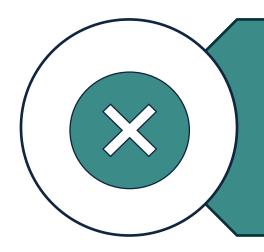
The Staff Assessment was released for public comment on October 13th.

Public comments were due on November 12th.





Staff Recommendations for Board Action



Probationary designation not warranted



Return Kaweah Subbasin to DWR's jurisdiction

Office of Sustainable Groundwater Management

SGMA@waterboards.ca.gov www.waterboards.ca.gov/sgma

