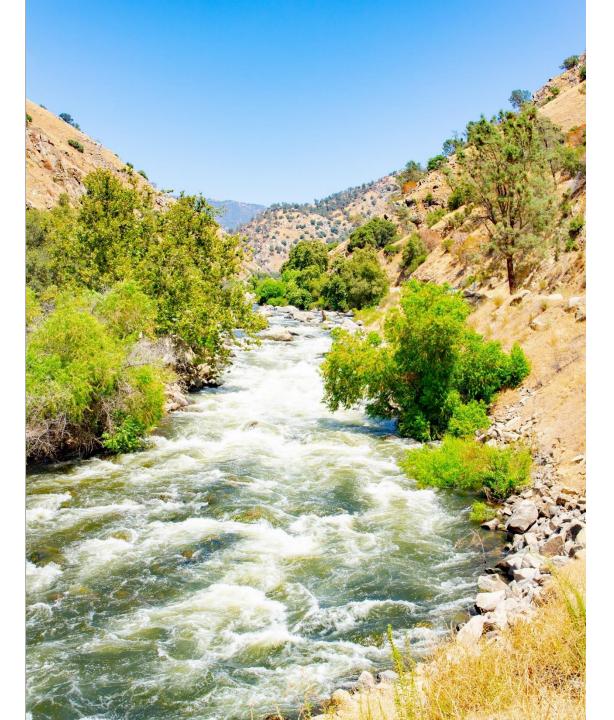


Kaweah Subbasin Water Marketing Strategy

Strategy Committee Meeting August 23, 2022



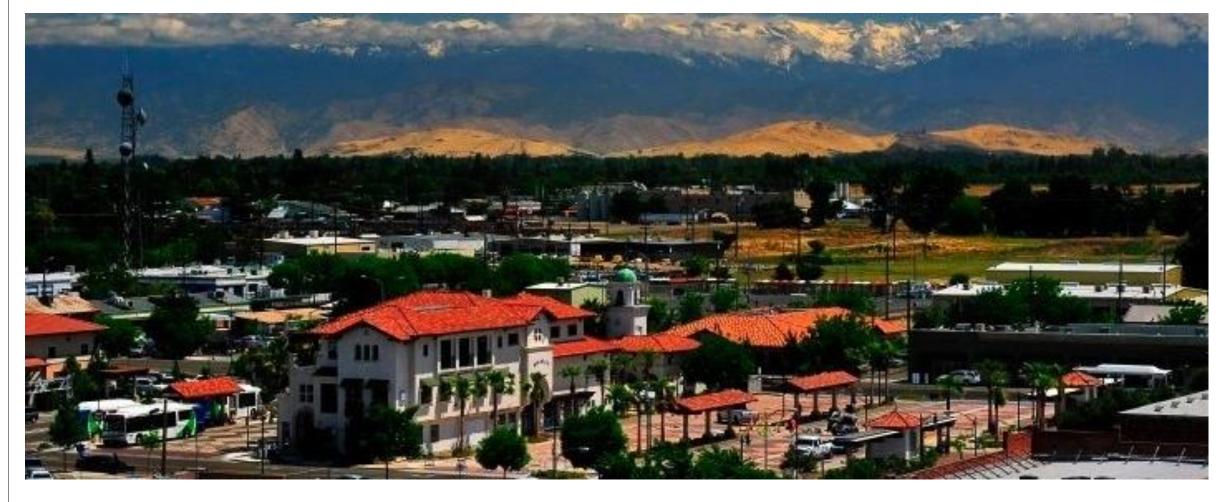
Agenda

- 1. Welcome and Roll Call
- 2. Previous Meeting Recap
 - a. Pilot Market Exercise
 - b. Australian Water Markets Presentation

3. Water Marketing Strategy

- a. Baseline Resource Elements
 - i. Groundwater Sustainability Plan Update
 - ii. Kaweah Subbasin Water Dashboard
- b. Preliminary Framework
- c. Approach
- d. Decision Points

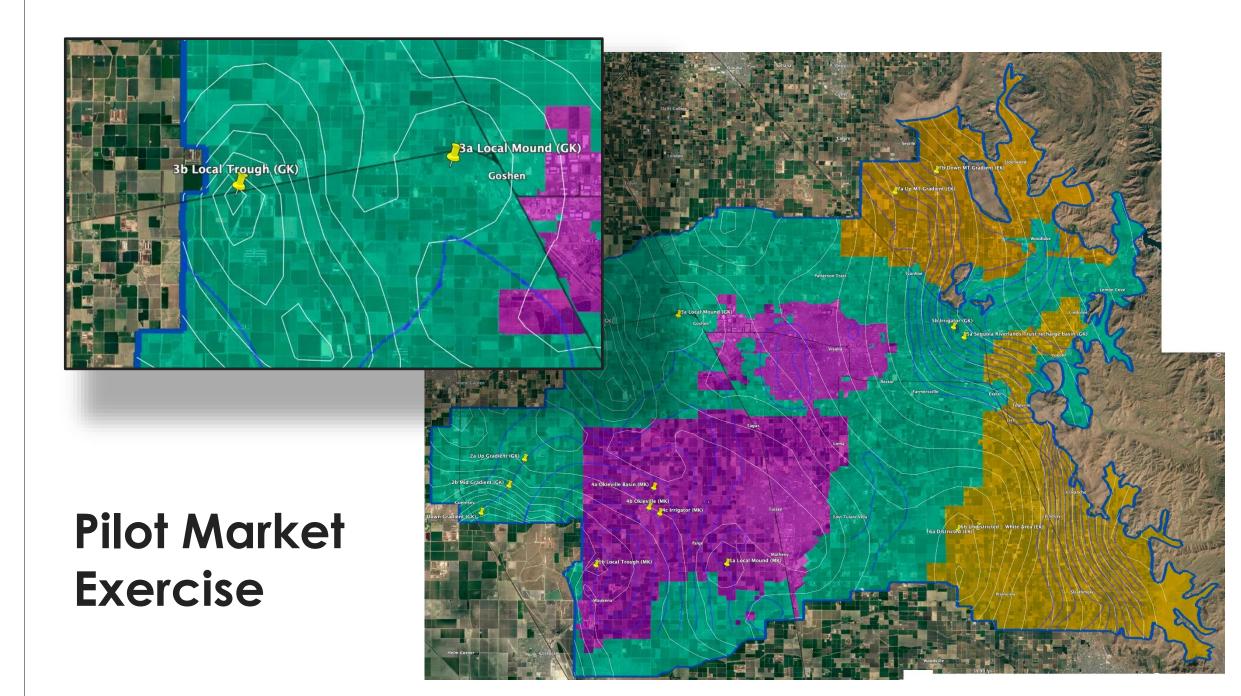
4. Adjourn



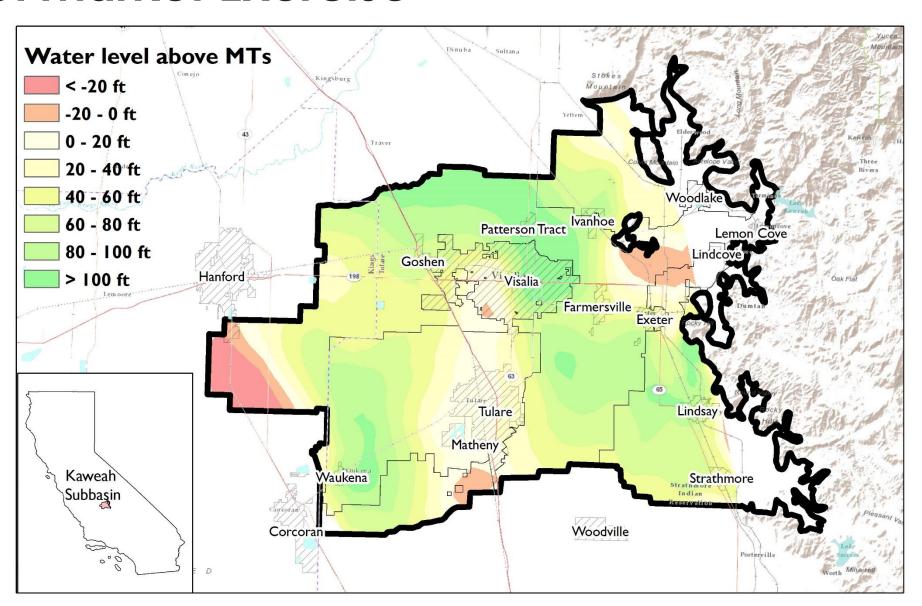
Welcome & Roll Call



Previous Meeting Recap Pilot Market Exercise



Pilot Market Exercise



Pilot Market Exercise

2a **Up Gradient** (GK)

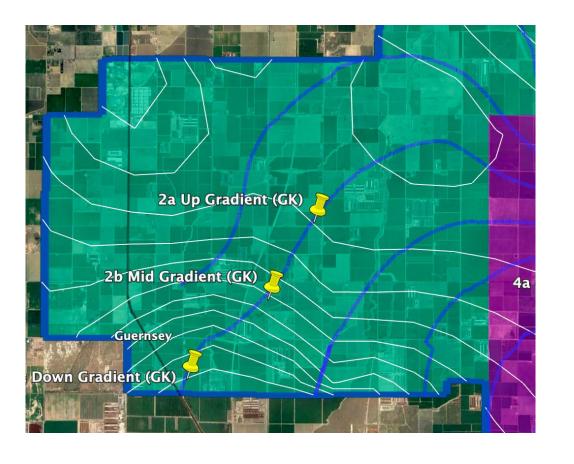
GWLevel 100 MT 20 Height above MT: 80

2b Mid Gradient (GK)

GWLevel 40 MT 20 Height above MT: 20

2c Down Gradient (GK)

GWLevel -60 MT 20 Height above MT: -80





Previous Meeting Recap
Lessons from Australian Water Markets

- 1. Market Mechanisms
- 2. Third Party Impacts
- 3. Price Information

- Related party transfers
- Bilateral contracts
 (including in
 association with
 sale of land)
- Broker facilitated bilateral contracts
 - Tenders
- Online exchanges and auctions

- 1. Market Mechanisms
- 2. Third Party Impacts
- 3. Price Information

- Related party transfers
- Bilateral contracts
 (including in
 association with
 sale of land)
- Broker facilitated bilateral contracts
 - Tenders
- Online exchanges and auctions

A core challenge in Australian water markets is the patchwork of mechanisms. This creates transaction costs for participants, confidence issues, and imperfect information.

Having one market mechanism is probably the best way to go as you're getting started. Especially if it is going to be relatively small and they are going to be limited numbers of buyers and sellers.

There are a lot of benefits of being able to integrate the market platform with the water use registry.

- 1. Market Mechanisms
- 2. Third Party Impacts
- 3. Price Information

Trade zones and limits on movement between zones Early limits on ownership and extent of trade removed progressively

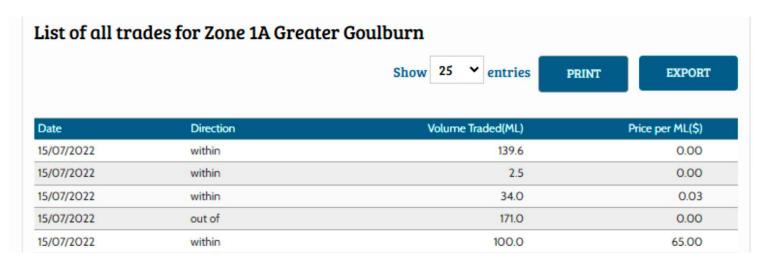
Water plans periodically reviewed to examine science and impacts

Because people were concerned about third party impacts, Australia started small with localized markets focused on temporary trades in very confined areas. Water users and regulators both realized that they *didn't know what they didn't know*.

After they got experience and user buy-in, they began testing whether trading rules that were very restrictive could be relaxed without having third party impacts.

Starting simple and responding to stakeholder concerns has been critical to bringing people along.

- Market Mechanisms
- 2. Third Party Impacts
- 3. Price Information



We often harp about the value of good price information. Price information actually increases the value of water rights across the system.

We work with agricultural investors, and they will go to systems where there is good price information. They will value those systems higher. There are benefits for everyone in having good, publicly available price information.

The market becomes part of life for water users.



Water Market Pilot | Straw Proposal

Basics

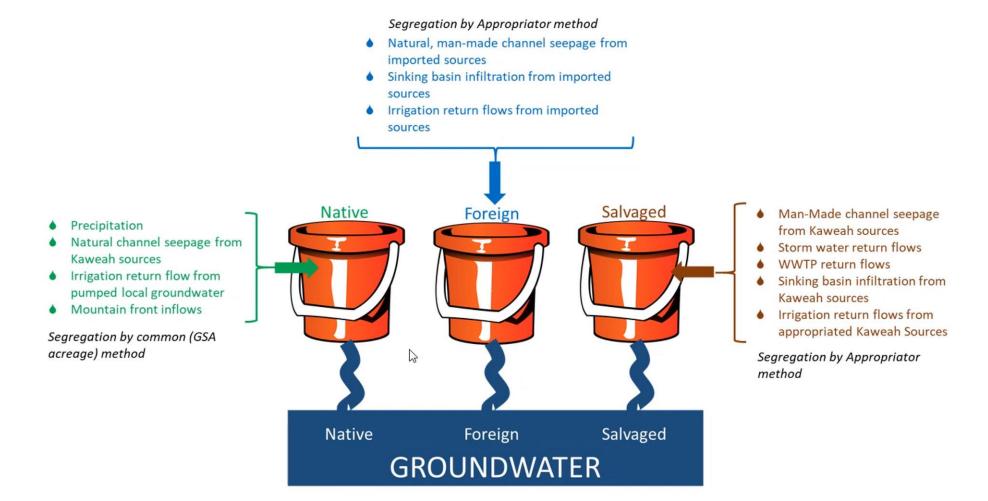
Program Period: October 1, 2022 – September 30, 2023.

Unit Traded – one acre-foot of allocation (measured as ET) to be used during the Program Period

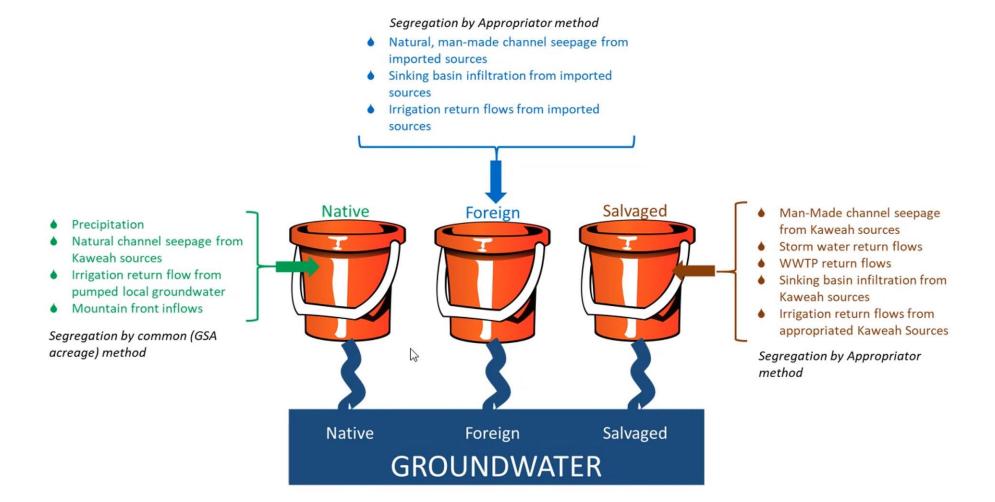
Water eligible for trade – a participant's allocation of *Native Yield*

Type of allowable trades – temporary transfer of up to 100% of unused Native Yield

Eligible Participants – land owners within a given GSA who hold allocation and who are current with all GSA fees and in compliance with all GSA ordinances, rules and regulations



Kaweah Subbasin Water Accounting Framework



Kaweah Subbasin Water Accounting Framework Water Dashboard | Demo

Type of Exchange: FORMAL

Weekly auction ←→ Once a year auction

GSA-run ←→ Third Party facilitated

Price Information: AGGREGATE PRICE INFORMATION (anonymized)

YTD number of units transferred and average price

 \longleftrightarrow

- YTD number of units transferred and average price
- Weekly number of units transferred and weekly average price
 - Weekly number of units offered and average offer price
 - Weekly number of units bid and average bid price
 - Weekly high bid and low offer prices

Mitigation of Adverse Impacts – MANAGEMENT ZONES

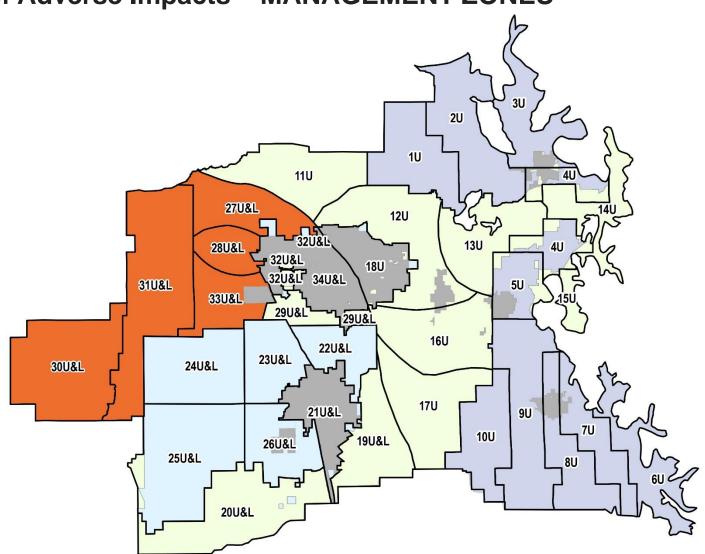
Every GSA-designated management area is a separate trading zone

 \longleftrightarrow

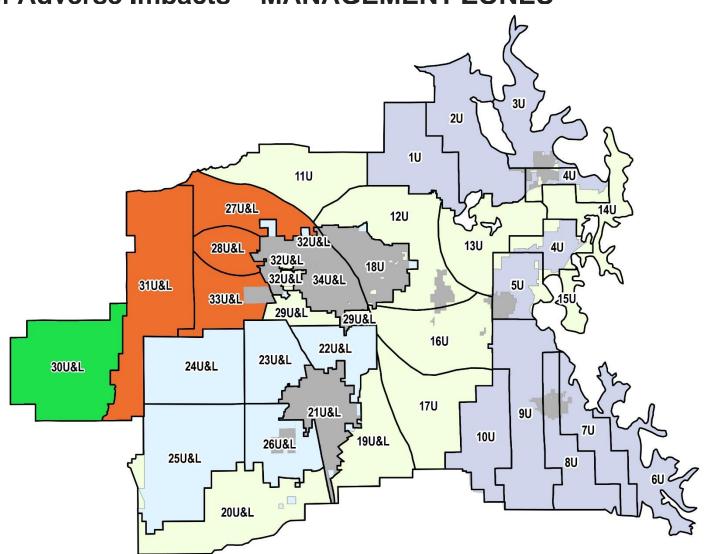
GSA-designated management areas are aggregated into a small number of trading zones

- Minimum Threshold trigger (individual zone drops out of group when MT is crossed)
- DAC trigger (trading within individual zone ceases when public well is within XX feet of bowl)

Mitigation of Adverse Impacts – MANAGEMENT ZONES



Mitigation of Adverse Impacts – MANAGEMENT ZONES





Adjourn

Water Market Guiding Principles

Flexibility

Provide water users with the flexibility to comply with new regulations and to respond to changing water availability

Adaptability

The WMS should promote adjustments in practices, rules and procedures as conditions change and as the experience of market participants grows and new information becomes available.

Transparency

The process of developing the WMS and for conducting market activities should be visible and understandable to interested stakeholders. Transparency includes the availability of accurate and reliable water use data and the timely reporting of water market activity.

Do No Harm

The WMS strategy should anticipate and avoid adverse impacts to water users and uses (add SGMA citation).

Equity & Inclusion

The WMS should be developed with an open process that includes the full range of potential market participants and other interested parties. Implementation of the WMS should be relatively simple and understandable to interested parties.

(Structural Consistency)

The WMS will develop a common framework available to the Kaweah Subbasin GSAs.