



Kaweah Subbasin Water Marketing Strategy

Strategy Committee Meeting
January 31, 2022

Agenda

1. Welcome and Previous Meeting Recap
2. Update on Anticipated GSA Groundwater Ordinances
3. Committee Member Comments & Guiding Principles
4. Next Committee Meeting: Wednesday, February 23



Update on Anticipated GSA Groundwater Ordinances



Committee Member Comments & Guiding Principles

Water Market Principles, Goals & Objectives

Principles, Goals & Objectives provide a framework for making decisions regarding alternative strategies

Example: Fox Canyon Water Market

- Provide water users with flexibility to respond to changing water availability
- Incentivize conservation & creation of new supplies
- Positively impact the distribution of water quality
- Ensure that trading is neutral with respect to land use patterns (Ag to Urban conversion)
- Create Transparent & Fair Market Activity
 - Transparency
 - Reduction of Market Power
 - Mitigation of 3rd Party Impacts
 - Reduction of Transaction Costs

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Example: Fox Canyon Water Market

- Provide water users with flexibility to respond to changing water availability
Allow transfers of allocation separate from ownership of the land
- Incentivize conservation & creation of new supplies
Explore Ag to M&I transfers in the future
- Positively impact the distribution of water quality
Special Management Areas (SMAs) with directional restrictions
- Ensure that trading is neutral with respect to land use patterns (Ag to Urban conversion)
Initially, only temporary transfers between agricultural users
- Create Transparent & Fair Market Activity
 - Transparency
Universal telemetric monitoring of extraction
 - Reduction of Market Power
Anonymized market
 - Mitigation of 3rd Party Impacts
SMAs, series of pilot markets
 - Reduction of Transaction Costs
Formal exchange; pre-approval of transfers subject to market rules

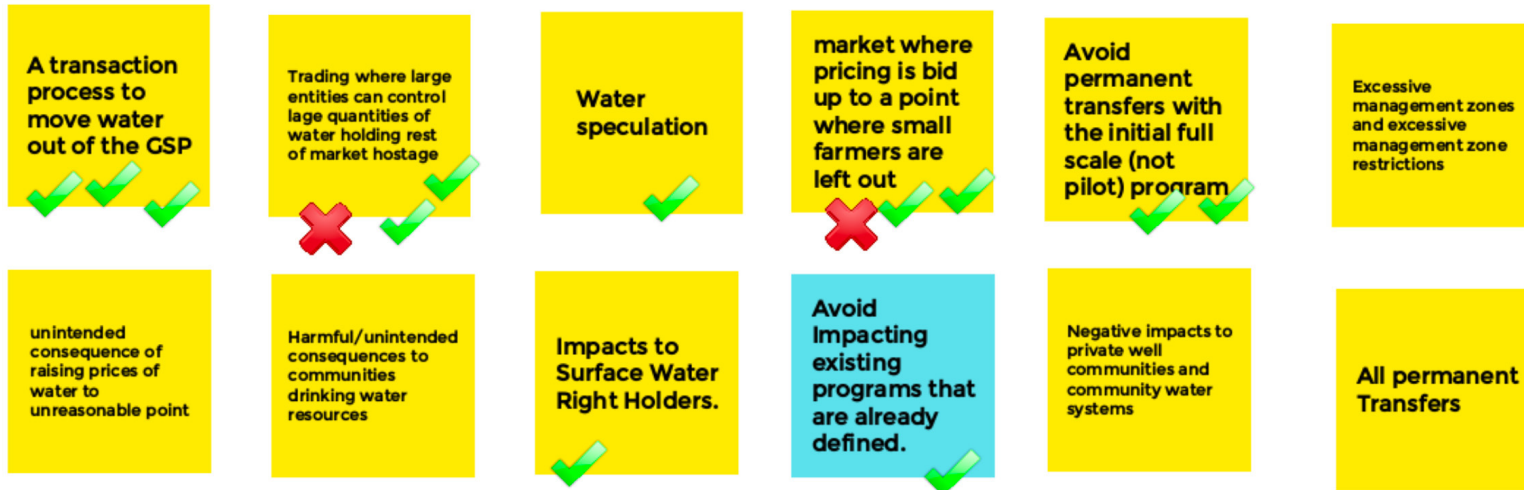
Water Market Guiding Principles: JamBoard

What should the water marketing strategy ACCOMPLISH?

Be very low cost to conduct and administer transactions 	Should provide Equitable trading policy 	Equitable water market that is protective of drinking water users 	Align the Human Right to Water with water market 	Adequate inclusion of the needs of DAC/SDACs re: drinking water and water quality protection 	Minimalistic approach to achieve sustainability goals	Identify potential benefits to DAC/SDAC communities	
Simplicity 	Create a component of the marketing strategy to move water between all 3 GSA's in the Kaweah basin 	Transparency 	Strive to develop a Market to provide the most flexibility to landowners to develop their business plans and be a landowner driven process. 	Allowable movement of water should be directly tied to groundwater levels in monitoring program to avoid undesirable results	Anonymous trading 	Provide a market in which landowners can mitigate financial impacts of following by the sale of excess water assets	Transfer distances regulated on a case by case basis rather than an one size fits all. ie: (1 mile for a user transferring allocation to a location near a municipal well and 3+ miles for a user transferring allocation where there are no municipal wells)
Buffer zones around disadvantaged communities: private & community wells 	Robust stakeholder engagement 	Clearly defined water carryover policy 	Disadvantaged communities need to be engaged in shaping groundwater markets (these types of meetings need to be held in the communities, bilingual educational materials) 	Incorporation of Following Program into market	Protection of groundwater dependent ecosystems	Daily reporting of water trades 	InterBasin and InterGSA Trading Policy along borders
Electronic clearinghouse for both viewing and making trades.	Include an emergency drinking water mitigation plan	Blockchain based Market using DAO Smartcontracts	Groundwater level monitoring near vulnerable groundwater areas, like communities that rely on shallow wells 	Open platform allowing direct communication between buyer and seller. Platform should still require reporting to GSA.	Identifying groundwater allocations that adequately address community needs now and into the future 	should not only detect the status and trends of groundwater conditions, but must also be deployed to ensure that the market is running well and is not resulting in adverse impacts to groundwater quality and/or groundwater	Use the emergency program to test some features of the permanent program

Water Market Guiding Principles: JamBoard

What should the water marketing strategy AVOID?



Water Market Guiding Principles: JamBoard

Accomplish/Avoid	Original Comment	For	Against	Guiding Principle	Secondary Principles	Notes
Accomplish	Create a component of the marketing strategy to move water between all 3 GSAs in the Kaweah basin	4		Flexibility	Adaptability	
Avoid	A transaction process to move water out of the GSP	3		Do no harm	Adaptability	
Accomplish	Strive to develop a market to provide the most flexibility to landowners to develop their business plans and be a landowner driver process	2		Adaptability		
Avoid	Avoid permanent transfers with the initial program	2		Do no harm	Adaptability	
Accomplish	Transferability that is evaluated on a case by case basis rather than an one size fits all		5	Flexibility	Do no harm	
Accomplish	Interbasin and InterGSA trading policy along borders			Flexibility	Adaptability	
Accomplish	Blockchain based market using DAO			Transparency	Ease of Use	
Accomplish	detect the status of trans of groundwater conditions but must also be deployed to ensure that the market is running well and is not resulting in adverse impacts to groundwater quality			Do no harm	Transparency	
Accomplish	Use the emergency program to test some features of the permanent program.			Adaptability	Flexibility	
Accomplish	Allowable movement of water should be directly tied to groundwater levels in monitoring program to avoid undesirable results			Do no harm	Adaptability	

Water Market Guiding Principles

JamBoard Exercise: Guiding Principles

- **Flexibility**
Provide water users with flexibility to comply with new regulations and to respond to changing water availability
- **Adaptability**
The WMS should anticipate 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 all 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 mitigate the risks of adverse impacts to third parties including DACs, GDEs, and small farms. The WMS should create mechanisms which address impacts as they are revealed.
- **Equity & Inclusion**
The WMS should be developed with an open process that includes the full range of potential market participants and other stakeholders who could be impacted. Implementation of the WMS should be relatively simple and understandable to all stakeholders. In addition, the WMS should mitigate Market Power, the ability of certain participants to limit the participation of others.

Water Market Guiding Principles

JamBoard Exercise: Guiding Principles

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Water Market Guiding Principles

JamBoard Exercise: Guiding Principles

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Water Market Guiding Principles

JamBoard Exercise: Guiding Principles

Has anything been left out?

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JamBoard Exercise: Guiding Principles

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- **Promote Regional Management Objectives**
The WMS should enable and promote the achievement of water management objectives articulated in the Groundwater Sustainability Plans adopted in the Kaweah Subbasin.

Principles, Goals & Objectives provide a framework for making decisions regarding alternative strategies

Existing Water Markets

- Method of Allocation
- Allocation Flexibility
- Unit of Trade

- **Term of Transfers**

- Type of Exchange
- Geographic Limitations
- Monitoring of Use
- Penalties for Overage

Temporary only (1 to 5 years)

- Central Kansas, Fox Canyon, Main San Gabriel, Scott River, Tehachapi

Permanent only

- Twin Platte, Cummings

Temporary and Permanent

- Most CA adjudications, Murray-Darling, Oregon Freshwater Trust

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Formal, centralized exchange

- Agency-operated
(Central Kansas, Maipo River)
- Third-Party Administrator
(Fox Canyon, Murray-Darling, Twin Platte)
- Water Trust or Co-Op
(Santa Paula, Oregon Freshwater Trust, Scott River)

Informal

- Bulletin Board
(Edwards, Murray-Darling)
- Private Contract Arrangement
(most CA adjudications, including Mojave & Santa Paula; Murray-Darling; Umatilla)

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Geographic Boundaries

- Sub-Areas
(Mojave, Murray-Darling, Santa Maria, Truckee-Carson)
- Special Management Areas
(Fox Canyon)
- Buffers around municipal wells
(Twin Platte)

Directional Restrictions

- Edwards, Fox Canyon

Exchange Rates

- Twin Platte