Water Trading & the Sustainable Groundwater Management Act



California's Groundwater Management

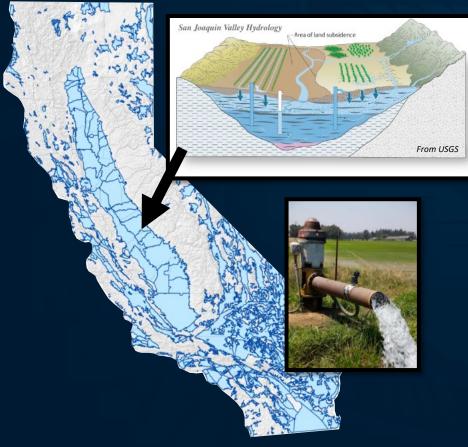


Safeguarding Groundwater Interests in Water Trading

Groundwater Trading vs. Transfers

Water Resiliency Portfolio Action 3.6

Create flexibility for [GSAs] to trade water within basins...with rules that safeguard natural resources, small- and medium-size farms, and water supply and quality for disadvantaged communities.



WRP Action 21.3

Develop best practices for inter- and intra-basin groundwater trading programs that protect communities, economies, and the environment, including standards for measuring, reporting, accounting, and monitoring groundwater use and trading.

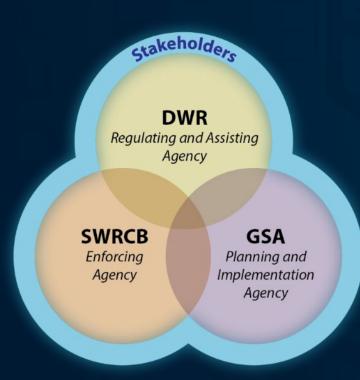
Water Resiliency Portfolio Action Series 21

Ease movement of water across the state by simplifying water transfers.



How Does <u>SGMA</u> Provide a <u>Framework</u> for Water Trading?

Local Control



New Governance



Sustainability Indicators

Avoid Six Undesirable Results



Lowering of GW Levels



Reduction of GW Storage



Seawater Intrusion



Degraded Water Quality



Land Subsidence



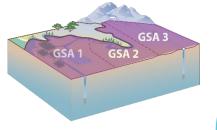
Depletion of Interconnected Streams

How Does the GSP Provide a Foundation for Water Trading?

Groundwater Sustainability Plans

GSP

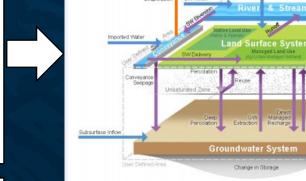
Who - Administrative Information -



What

- Basin Setting -





Where

- Sustainable Management Criteria -- Monitoring Network -















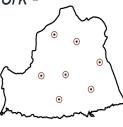








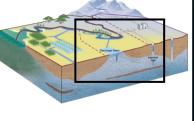




How

- Projects & Management Actions -





Sound Water Budgets Transparent Allocations **Trusted GW Trading**

Atmospheric System

Water Trading will need good data



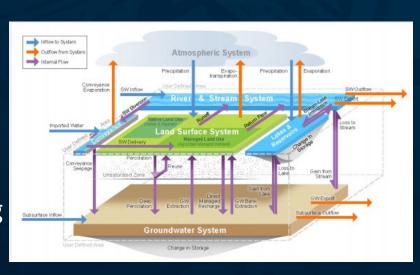
- Well registration
- Water use & accounting
- Water allocations

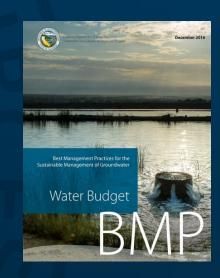
- Transparent platform
- Equitable opportunities
- Verifiable trades

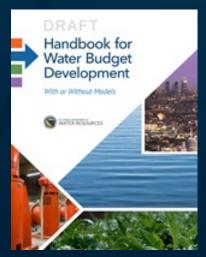
Importance of GSP Water Budgets

- Quantified GSP Water Budgets
 - Based on high quality data
 - Continual refinement
 - Uncertainty challenges
- Similar Methodologies
 - Apples-to-Apples comparison
 - Transparency of data
 - Challenge in Multi-GSP basins
- Confidence in Accuracy
 - Requires Monitoring & Reporting



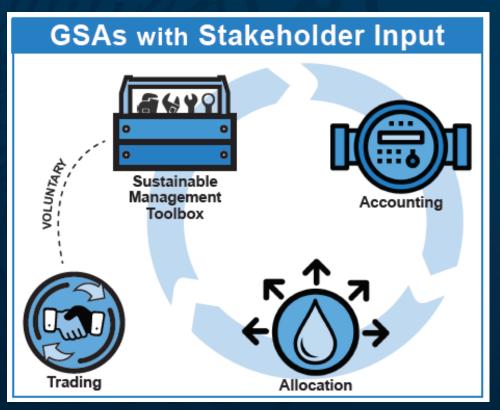






Cycle of GSP Implementation

- SGMA Process (5-year Cycles, Over 20 years)
 - Annual Reporting
 - Critical Data and Tools
 - Water Budgets & Sustainable Mgmt Criteria
 - Accurate Accounting
 - Local Allocation of Resource
- Water Trading
 - Opportunity to Share Resources
 - Support Regional Economies
 - Adapt to Changing Climatic Conditions



SGMA Activities that Support Water Trading

- Purposeful Outreach
 - DWR Liaisons serve as Basin Point-of-Contacts
 - Third-party facilitators available for local conflict resolution
 - Written translation services for community engagement
- Planning Guidance for GSP Implementation
 - State Best Management Practices
 - Water Budget Handbook Guidance
- Supporting Technical Data & Tools
 - Groundwater levels & use
 - Land use data
 - Continued data collection and reporting
 - Modelling and climate change data

STATEWIDE ACCOUNTING PLATFORM

- Partnership launched with CA Water Data Consortium and Environmental Defense Fund to develop statewide platform
- June 23 Workshop at 11:00 am
 - Click Here to Register





https://water.ca.gov/Programs/Groundwater-Management/Assistance-and-Engagement https://water.ca.gov/Programs/Groundwater-Management/Data-and-Tools

Future Funding Assistance – Existing & Proposed



Financial Assistance for SGM Implementation Grant Program

- In April 2021, ~\$26 million awarded to critically overdrafted basins
- In 2022, ~\$70 million will be available for all high and medium priority basins



~\$1 billion to benefit groundwater management & SGMA efforts

- Grants and technical assistance to locals for SGMA Implementation (\$300M to DWR)
- Accelerate the frequency of collection and reporting of subsidence data (\$10M to DWR)
- Critical data collection (Part of \$49M to DWR)
 - Enhanced groundwater monitoring
 - Support groundwater accounting
 - Enhanced Aerial electromagnetic surveys

Current Landscape

- DWR is in the process of evaluating the first GSPs
 - Recommended and required corrective actions for GSAs to update and continue implementing plans
- GSAs have differing levels of details in water budgets
 - Need for measured pumping data or sound estimates to provide for more equitable/efficient markets
- GSAs are developing projects and management actions
 - Water availability will likely limit additional water supply projects, trading opportunities
- DWR supports the development of a transparent accounting platform
- Trading platforms will be helpful tools for local control and standardization

Considerations





Markets may be helpful, particularly for increasing flexibility, but are not required.



Don't rush or skip the details. There is time to let a market develop. Learn from each other.



Front-end work needed for a markets is also good for overall groundwater management.

For additional information please contact us at: <u>SGMPS@water.ca.gov</u>