

A Sustainable Storage & Recovery Program



Stakeholder Forum-Winter 2023

February 13, 2023



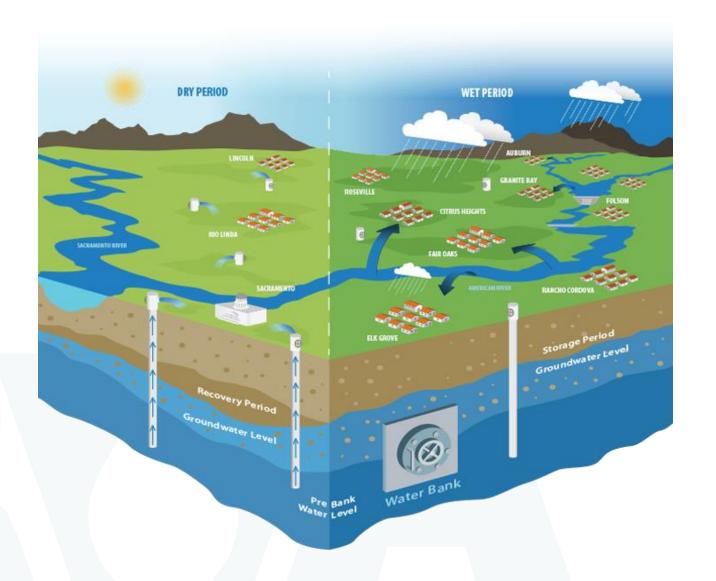




Welcome and Ground Rules



- Participation. If you have a question or comment, use the Q&A.
- Conversational courtesy. Do not interrupt each other, use appropriate language, and avoid side conversations. Humor is welcome but should never be at someone else's expense.
- Remote meeting. If you are having technical difficulties, email Atley Keller.

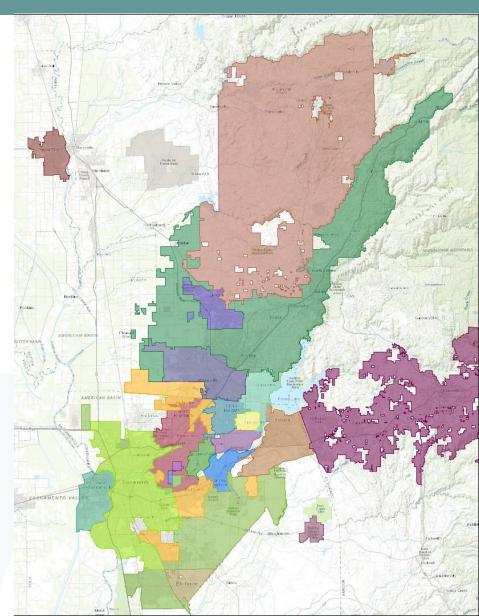


Introduction to the Regional Water Authority



RWA's Mission:

To serve, represent and align the interests of regional water providers and stakeholders for the purpose of improving water supply reliability, availability, quality and affordability.



Tonight's Agenda



- 1. Welcome and Introduction
- Recap of Stakeholder Forum #1 and Updates on Water Bank Engagement Process
- 3. The Water Bank 101
- Draft Water Bank Goal,
 Objectives, Principles, and
 Constraints
 - Presentation and Discussion
- 5. Next Steps and Wrap Up
- 6. Adjourn at 8:00 pm



Relevant Entities



Regional Water Authority

• Leading and coordinating the Water Bank development effort.

Water Bank
Program Committee

• RWA agencies supporting the Water Bank development effort by providing funding, guidance, and direction.

External WB Partners

• Entities external to RWA with which RWA engages on behalf of the WB Participating Agencies.

State and Federal Agencies

 Agencies with regulatory, permitting, and/or funding roles (DWR, SWB, Reclamation, etc.)

Stakeholders

 Non-governmental organizations, other entities, and individuals with an interest in the WB.





Major Milestones

Regional Infrastructure

Pipeline

Interties Conveyance

Wells Planning & Programs

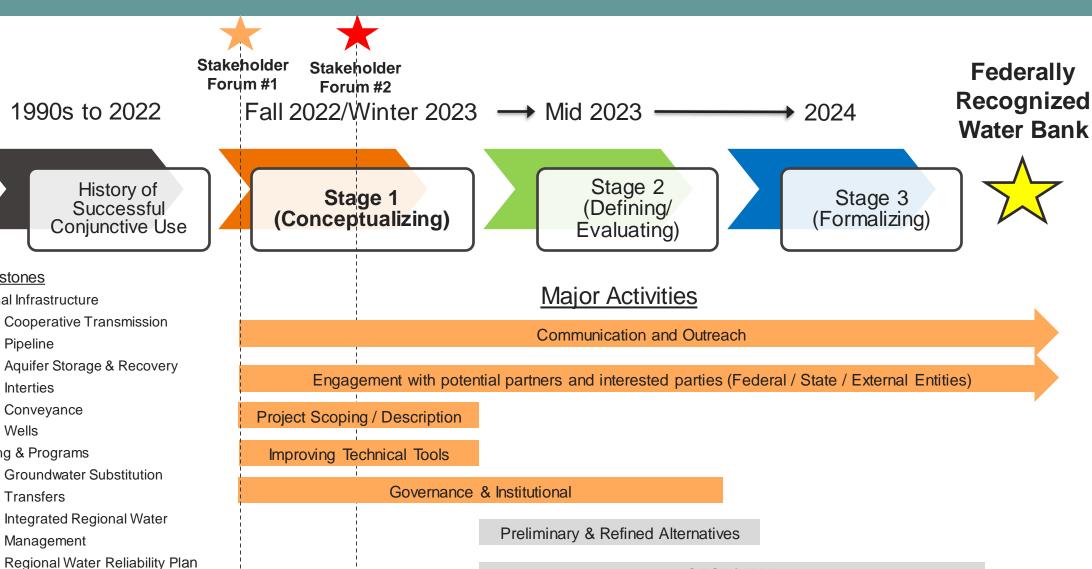
Transfers

Management

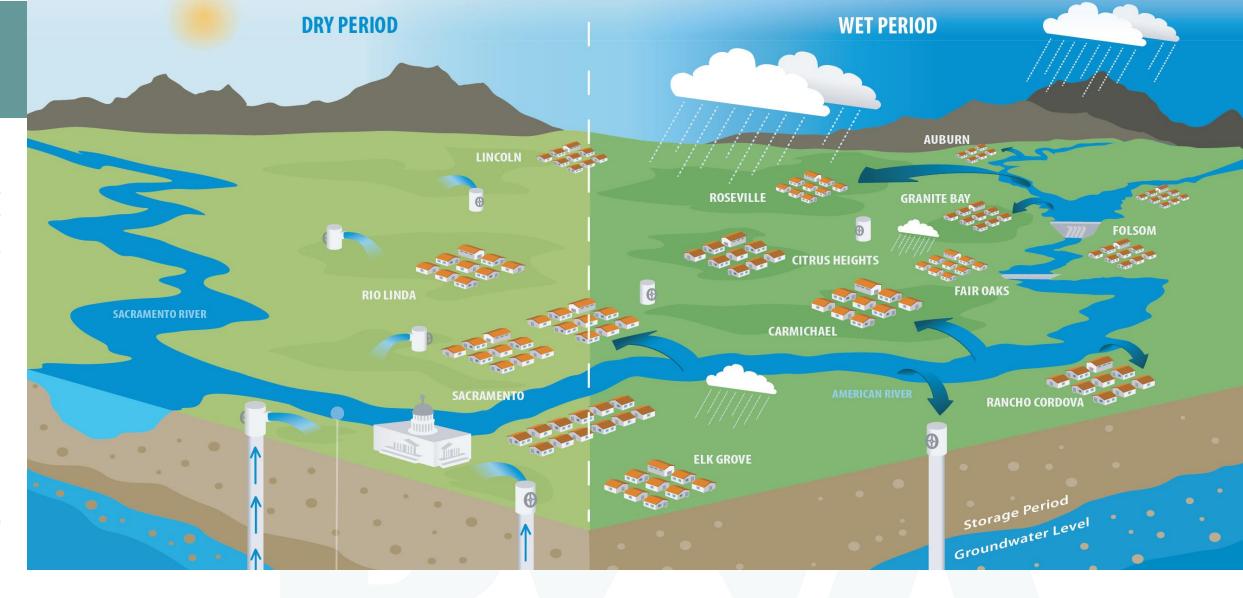
Groundwater Sustainability Plan

Stages of Sacramento Regional Water Bank





CEQA/NEPA



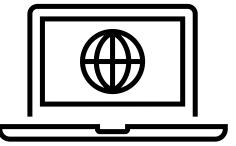
Recap of Stakeholder Forum #1

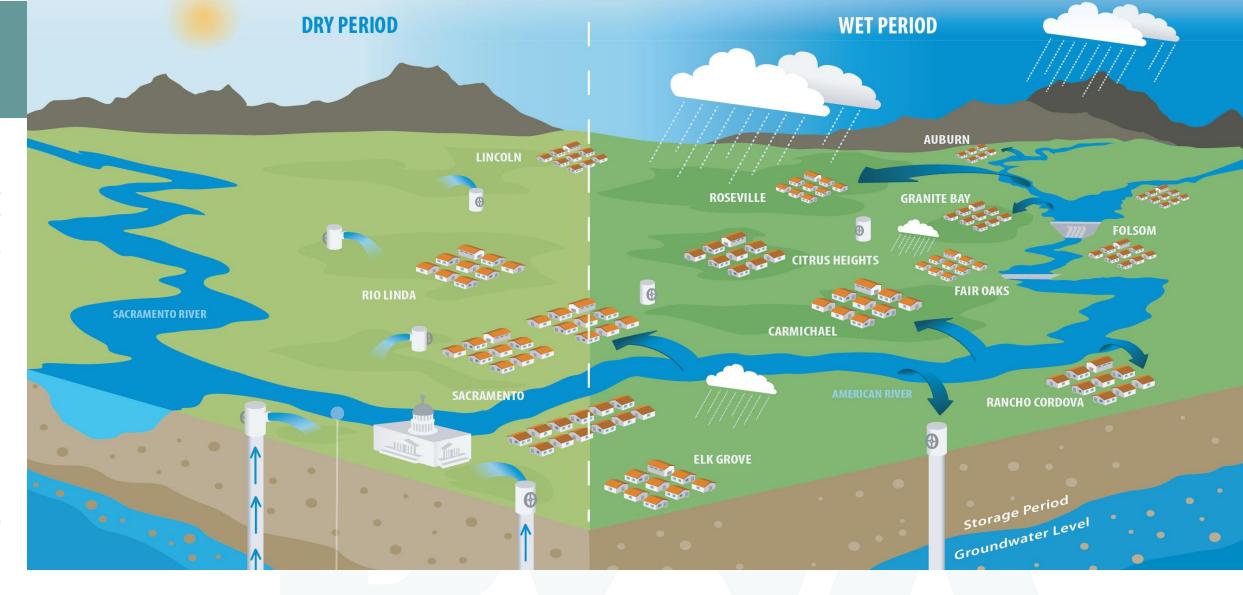
Recap of Stakeholder Forum #1



- Stakeholder Forum #1
 - Climate Change and the American River Basin Study
 - Fundamentals of Conjunctive Use
 - Sacramento Regional Water Bank
- Questions of the week
- Additional resources (website)







Water Bank 101

What is Conjunctive Use?



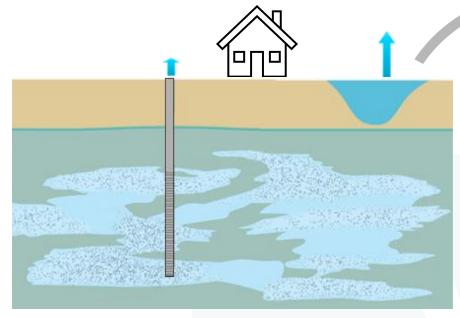
Conjunctive use is the planned use of both surface water from lakes and rivers and groundwater via wells to maximize total water availability in a region long term.

Water use is shifted to more surface water in wet conditions.

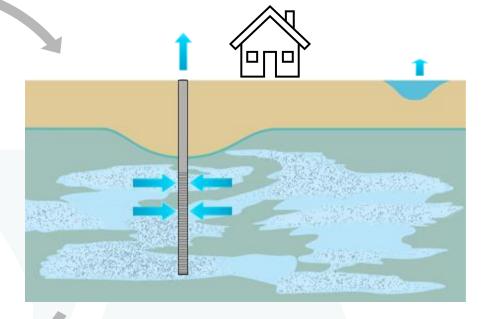
Groundwater is allowed to recharge.

Water use is shifted to more groundwater in dry conditions.

Demand is reduced on surface water.



Wet Conditions



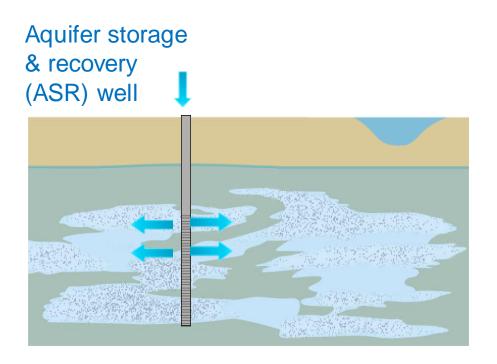
Dry Conditions

What is Direct Recharge?

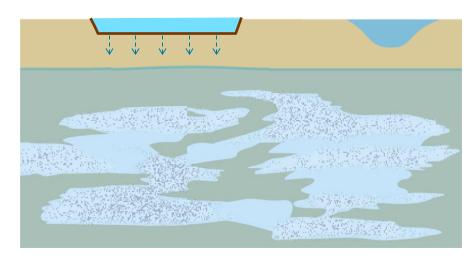


Surface water is applied to unlined spreading basin and is allowed to percolate to increase groundwater storage.

Surface water can also be recharged using injection or ASR wells to increase groundwater storage.



Spreading basin



What is In-Lieu or In-Direct Recharge?

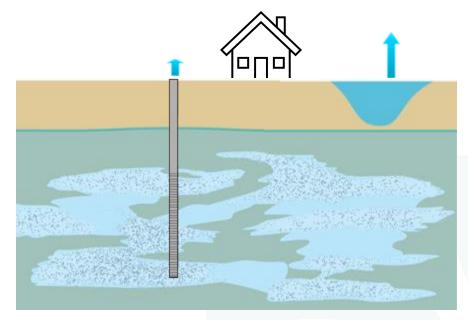


In-lieu recharge occurs when surface water is provided to groundwater users to allow groundwater storage to be replenished naturally.

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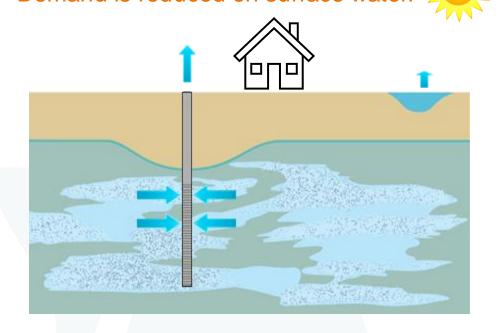
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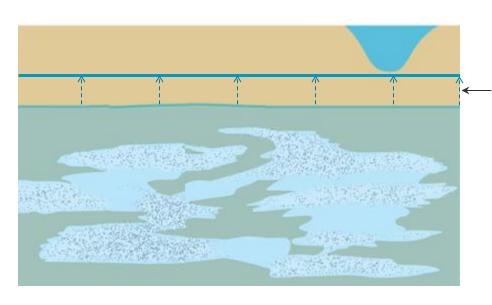


Dry Conditions

Water Bank - Recharge during wet conditions



- Available surface water in wet conditions is used:
 - to reduce groundwater use (in-lieu recharge).
 - for direct recharge using ASR wells.
- Groundwater use decrease and surface water use increase.
- Excess surface water is banked in the groundwater basin.



Groundwater storage

← increases by using excess surface water

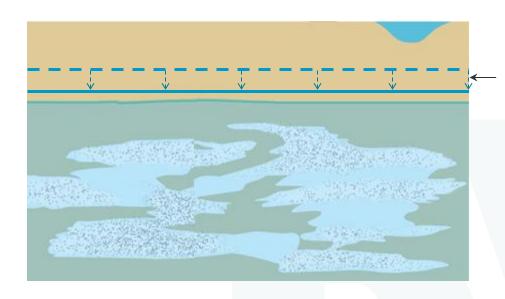


Folsom Reservoir Spilling

Water Bank – Recovery during dry conditions



- Portion of the banked groundwater is used to reduce reliance on surface water supplies.
- Some of the banked groundwater is a leave-behind to support groundwater sustainability and prevent mining of groundwater.
- Foregone surface water diversions would increase Folsom storage and can be dedicated or released to banking beneficiaries (ecosystem, local agencies, other partners).



Portion of the previously banked groundwater is recovered and used inlieu of surface water



Folsom Reservoir during 2015 drought

Water Bank Complies with Federal and State Requirements

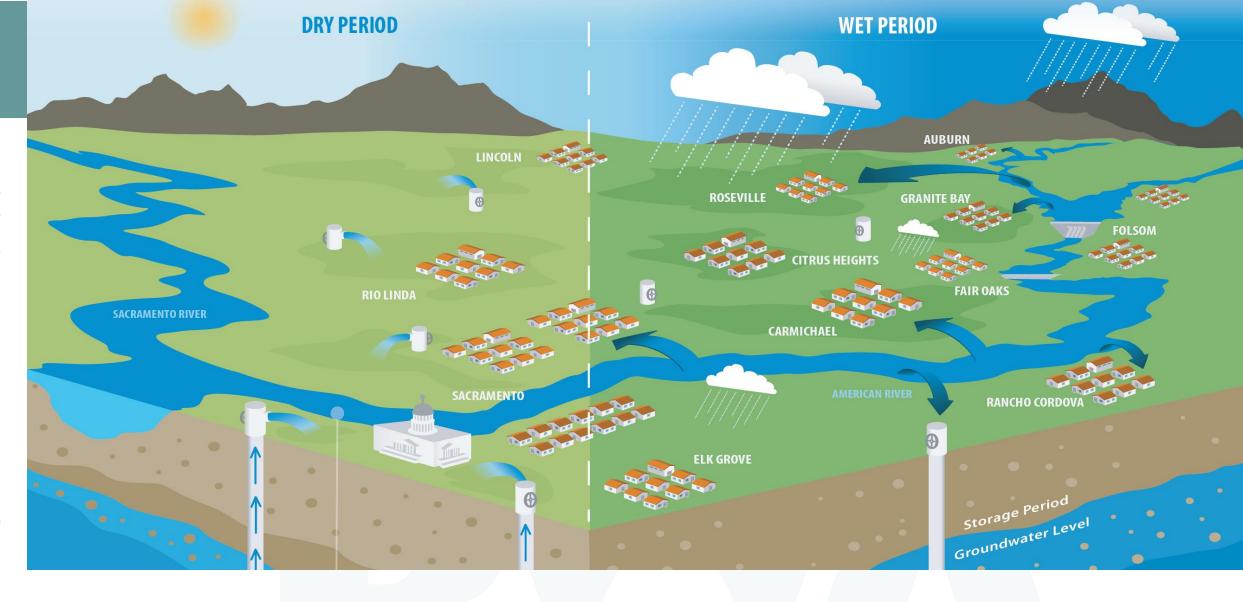


Sustainable Groundwater Management Act (SGMA)

CEQA and NEPA

Sacramento Regional Water Bank

Water Forum Agreement State Water Board and Reclamation Policies



Proposed Goal, Objectives, Principles, & Constraints



Working Draft—FOR STAKEHOLDER FORUM #2

A water supply that is reliable, resilient, and sustainable is crucial to the long-term viability of the Sacramento region's community, environment, businesses, and families.

 Your feedback on the Water Bank goal, objectives, principles, and constraints is important to the Regional Water Authority (RWA) at this early phase of development.

SACRAMENTO REGIONAL WATER BANK Proposed Goal, Objectives, Principles, and Constraints

Purpose and Use of This Document

This is the first of a series of papers that will introduce and describe the process and considerations related to the development and implementation of the Sacramento Regional Water Bank (Water Bank).

 Purpose
 1

 Background
 1

 Goal
 3

 Objectives
 3

 Principles
 4

 Constraints
 5

This document defines the proposed Water Bank goal, objectives, principles, and constraints that provide the framework to: (1) set the direction for subsequent Water Bank activities (overall

strategy, alternatives formulation, analyses, environmental documentation, governance, etc.); and (2) focus development of options and the overall project description.

- The GOAL represents the desired "end state" of activities. The goal captures the intent—the
 "why"—of the Water Bank and serves as the foundation of the entire development and
 implementation process.
- OBJECTIVES establish the intent of the Water Bank to address related aspects of the region's
 water management challenges to the maximum extent possible. Objectives provide additional
 details as to how the goal will be achieved and serve as a means of measuring success in
 achieving that goal.
- PRINCIPLES are overarching, foundational statements of shared values informing Water Bank development, implementation, and decision making.
- CONSTRAINTS are factors that shape or limit development, evaluation, and implementation
 of the Water Bank.

What Do We Need from the Stakeholder Community?

A water supply that is reliable, resilient, and sustainable is crucial to the long-term viability of the Sacramento region's community, environment, businesses, and families. And your feedback on the Water Bank goal, objectives, principles, and constraints is important to the Regional Water Authority (RWA) at this early phase of development.

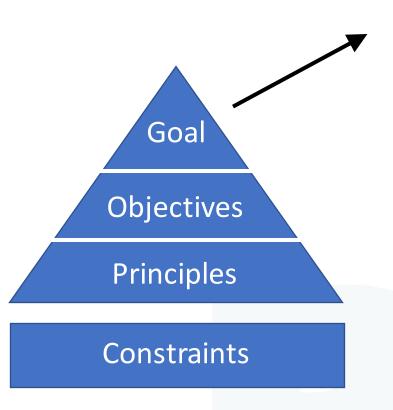
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- Include the page number and the Draft Goal, Objective, Principle, or Constraint you are referencing
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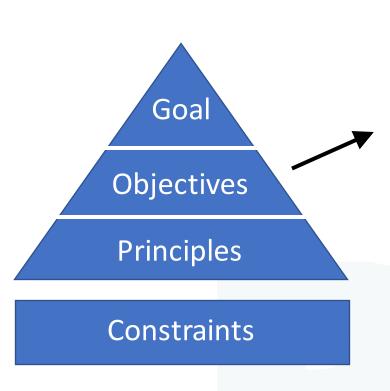
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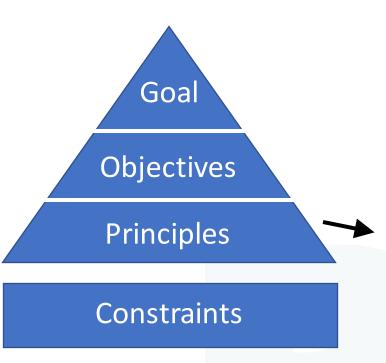




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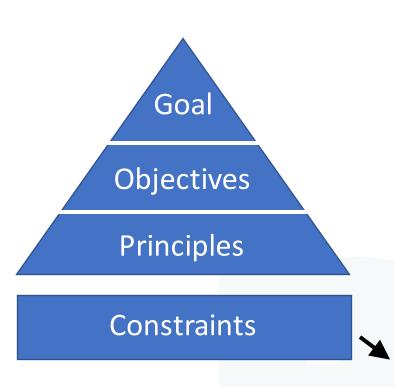


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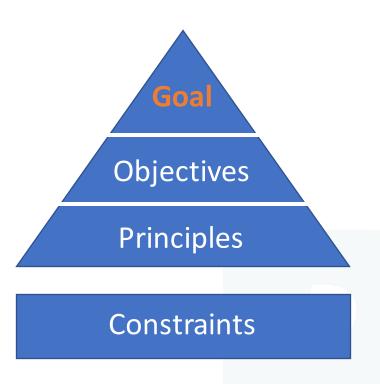
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The **GOAL** represents the desired "end state" of activities. The goal captures the intent—the "why"—of the Water Bank and serves as the foundation of the entire development and implementation process.



Goal: To expand conjunctive use throughout the region to:

- improve long-term regional reliability and provide statewide water supply opportunities when possible; and
- 2. support healthy ecosystem function on the lower American River.



OBJECTIVES represent the current and best intent to address various aspects of the region's water management issues to the maximum extent possible. Objectives provide additional details on how the goal will be achieved and serve as a means of measuring success in achieving that goal.



Objectives:

- 1. Increase groundwater recharge during wet conditions using available surface and recycled water supplies.
- 2. Reduce reliance on surface water during dry conditions by using previously banked groundwater.
- 3. Contribute to water reliability of water agencies in the region with no or limited access to groundwater.
- 4. Contribute to water reliability of water agencies in the region with no or limited access to surface water.
- 5. Maintain the quality of surface water and groundwater.
- 6. Contribute to CVP operational flexibility by reducing reliance on Folsom Reservoir during dry conditions.



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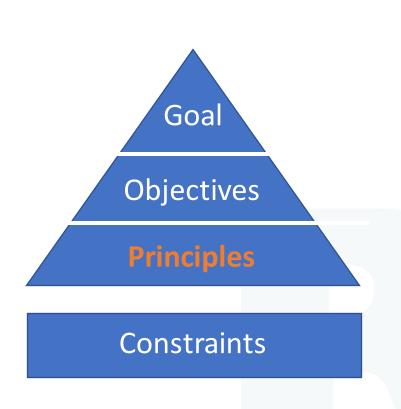


Objectives:

- 7. Contribute to healthy ecosystem function, including on the lower American River.
- 8. Consider and advance mutually beneficial opportunities to partner with entities outside the region on operational collaboration and/or investment in the Water Bank.
- 9. Generate revenue for investment in infrastructure and other projects/programs to improve regional water supply reliability, resiliency, and affordability for participating agencies.
- 10. Generate revenue to reduce financial barriers to conjunctive use for participating agencies.



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Principles	
Regional Water Management	Water Bank Development and Operations
Environmental Stewardship	Relationship to the CVP
Public Engagement	Banking Partner/ Participant Success Factors
Third-Party Success Factors	



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Regional Water Management

- Contribute to long-term sustainability of the region's groundwater basins by committing a portion of recharge to basin sustainability.
- Operate consistent with the pertinent GSPs to ensure basin sustainability.
- Maximize beneficial use of surface water in basin.
- Contribute to meeting current and future water resources needs in the region.
- Maintain and improve water supply reliability in the region.

Environmental Stewardship

- Identify and avoid negative effects on environmentally sensitive areas, in compliance with the governing GSPs (such as the lower American River and Cosumnes River).
- Provide for ecosystem benefits from Water Bank operations.



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Public Engagement

- Engage transparently with stakeholders during the Water Bank development and implementation process to promote dialogue, understand their concerns, and improve the process.
- Coordinate with other efforts and entities in the region interested in the Water Bank and water supply reliability.
- Build community awareness and encourage participation in stewardship of water resources, recognizing water as a public trust asset.
- Consider beneficial uses and users of groundwater, including domestic well owners, agricultural water users, and the environment.
- Provide education on the public benefits of Water Bank operations and transfer activities.



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Water Bank Development and Operations

- Operate as a single water bank that covers both the North and South American subbasins (as several local water agencies overlie both subbasins and to recognize the existing interconnectivity of local water agencies across the subbasins).
- Conduct recharge actions before recovery actions.
- Conduct water banking operations consistent with relevant statutory and regulatory obligations.
- Recover no more than the net banked water in the basin.
- Adaptively manage the Water Bank in compliance with the Sustainable Groundwater Management Act.
- Operate in compliance with the governing GSPs.



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Relationship to the CVP

- Operate the Water Bank consistent with the following tenets related to the CVP:
 - The Water Bank is locally managed and operated. It is not a CVP facility.
 - For any CVP water used in the Water Bank, Reclamation's control and ownership of CVP water stops at the contractors' delivery points.
 - If CVP water is stored in the Water Bank, it is delivered CVP water under the contractor's control.
 - Use of CVP water in the Water Bank is consistent with the authorized beneficial uses and places of use of Reclamation's water rights, as authorized through CVP contracts.



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Relationship to the CVP (cont.)

- Operate the Water Bank consistent with the following tenets related to the CVP:
 - Water Bank operations do not affect or require modifications to Reclamation's water rights.
 - Although the Water Bank may provide CVP operational flexibility benefits, Water Bank operations are not considered integrated into CVP operations and are therefore not subject to inclusion in the Endangered Species Act (ESA) consultation for long-term CVP/State Water Project (SWP) operations.
 - The Water Bank does not impose new restrictions on the use of CVP water by local water agencies beyond those in their respective CVP contracts.
 - Explore potential partnerships with Reclamation for the benefit the CVP.



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Banking Partner/Participant Success Factors

- Improve long-term water security, reliability, and resiliency in the region.
- Create return on investment and reliable funding stream from long-term agreements.
- Identify and meet local water agency/regional water reliability needs first.
- Secure agreement on potential water transfer partners in terms of their water use(s) and location(s).
- Provide opportunities for all local water agencies to participate in the Water Bank.
- Maintain transparency of Water Bank operations and finances.
- Maintain individual RWA member agency autonomy.
- Seek external sources of funding and financial assistance for Water Bank development and implementation.



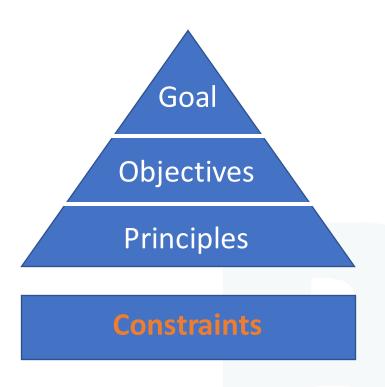
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Third-Party Success Factors

- Implement the Water Bank with no new restrictions on use of groundwater.
- Maintain consistency with Sustainable Groundwater Management Act implementation.
- Safeguard groundwater quality.
- Prevent negative effects on the lower American River area, Cosumnes River areas, or other groundwater dependent ecosystems.
- Prevent negative effects on or from related Folsom Reservoir operations.



CONSTRAINTS are factors that shape or limit the Water Bank in terms of how it is developed, evaluated, and implemented.







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Physical/Operational:

- Consider capacities and limitations of infrastructure in both near-term and long-term operations.
- Structure operations in recognition of known groundwater contamination plumes and consider additional treatment needs.

Institutional:

- Maintain consistency with policies, agreements, contracts, and other guidelines of local water agencies.
- Maintain consistency with related local and regional efforts (consider the Water Forum Agreement).

Financial:

- Secure financial resources for participating agencies to pay for infrastructure necessary to support Water Bank operations.
- Integrate funding mechanisms with fiscal requirements of participating agencies.



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Regulatory:

- Maintain compliance with existing regulations and requirements, including those related to the Sustainable Groundwater Management Act, including adopted GSPs, and Groundwater Sustainability Agencies (GSA) in the region; California Environmental Quality Act and National Environmental Policy Act; and State Water Resources Control Board and Reclamation policies (including water banking and water transfer guidelines).
- Maintain compliance with new and emerging regulations and requirements (such as changing water quality requirements).
- Recognize fluoridation practices and preferences in banking operations.
- Recognize and avoid infringing on existing uses of surface water and groundwater by private users and local water agencies.

Proposed Goal, Objectives, Principles & Constraints – Public Comments



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SACRAMENTO REGIONAL WATER BANK Goal, Objectives, Principles, and Constraints

February 13, 2023

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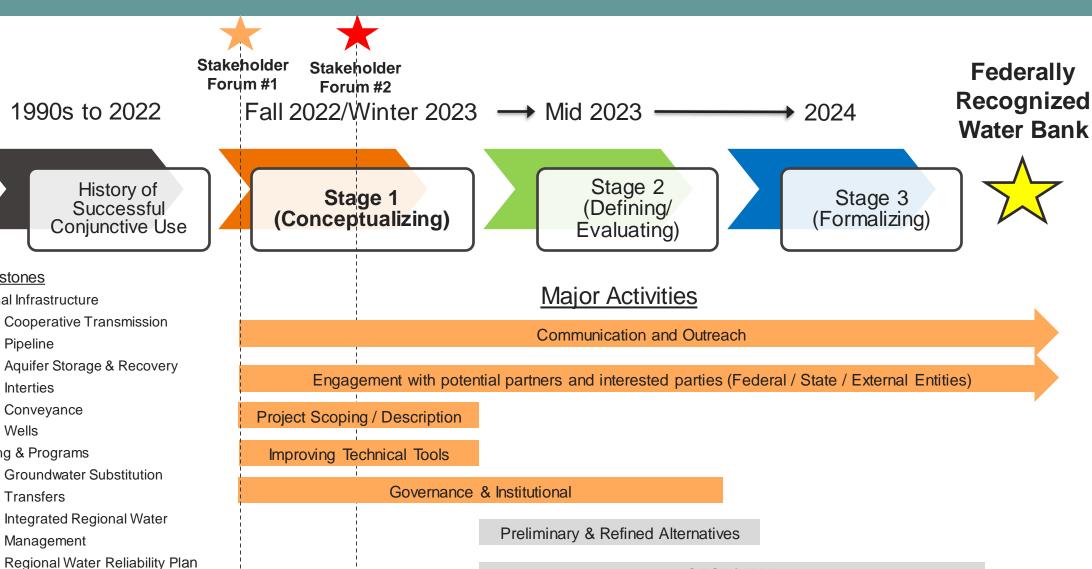
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CEQA/NEPA

Next Steps & Wrap Up



Board V Programs V News & Info V Contact Us

- Thank you for your involvement!
- Comments due February 22, 2023, at 5:00 p.m. by email to: waterbankinfo@rwah2o.org.
- Follow up survey
- Questions of the Week Reminder

Stakeholder Forum #3 (Spring – date TBD)



You can be added to our email list to receive updates here.

Questions of the Week

Each week, the Program Team will address questions provided by stakeholders. Questions may include those from a single stakeholder, or the Program Team may combine similar questions and provide comprehensive answers about the Water Bank. Questions and answers will also be posted here on this page. Additional questions may be submitted to the Water Bank program email at waterbankinfo@rwah2o.org.

You can find questions from previous weeks here.

Question: The Regional Water Authority (RWA) goal or mission does not mention the environment. Are environmental concerns considered a stakeholder?

The RWA's mission is to serve and represent regional water supply interests, and to assist members in protecting and enhancing the reliability, availability, affordability, and quality of water resources. It is clear that stewardship of our environment is critical to water supply reliability, as well as to the Sacramento region's economy and quality of life.

Both the RWA and Sacramento Groundwater Authority (SGA), a sister agency to RWA with overlapping members and joint powers authority formed in 1998 to manage the groundwater basin in Sacramento County north of the American River, have their foundation in the landmark Water Forum negotiations and Agreement, which seeks to balance the coequal objectives: Provide a reliable and safe water supply for the region's economic health and planned development through to the year 2030; and Preserve the fishery, wildlife, recreational, and aesthetic values of the Lower American River.

In fact, the SGA's mission directly references the Water Forum Agreement: To manage, protect and sustain the groundwater resources of the basin in Sacramento County north of the American River consistent with the Water Forum Agreement for the benefit of the water users within the basin, and to coordinate with other water management entities and activities throughout the region.

Ultimately, the RWA is committed to advancing the Water Forum Agreement coequal objectives via the Water Bank.

Thank you!

Sacramento Regional Water Bank contact information:

waterbankinfo@rwah2o.org

Sacramento Regional Water Bank website:

https://rwah2o.org/sacramentoregional-water-bank/



