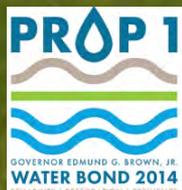


Delta-Mendota Subbasin Sustainable Groundwater Management Act Workshop

May 2019

DELTA -
MENDOTA
SGMA



Agenda

1. Welcome
2. Introductions
3. Presentation
4. Breakout Sessions



Sustainable Groundwater Management Act of 2014

"A central feature of these bills is the recognition that **groundwater management in California is best accomplished locally.**"
Governor Jerry Brown, 2014



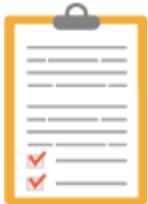
Sustainable Groundwater Management Act Terms



SGMA = Sustainable Groundwater Management Act



GSA = Groundwater Sustainability Agency



GSP = Groundwater Sustainability Plan



aquifer = an underground layer of water-bearing materials, such as gravel or sand, from which water can be pumped

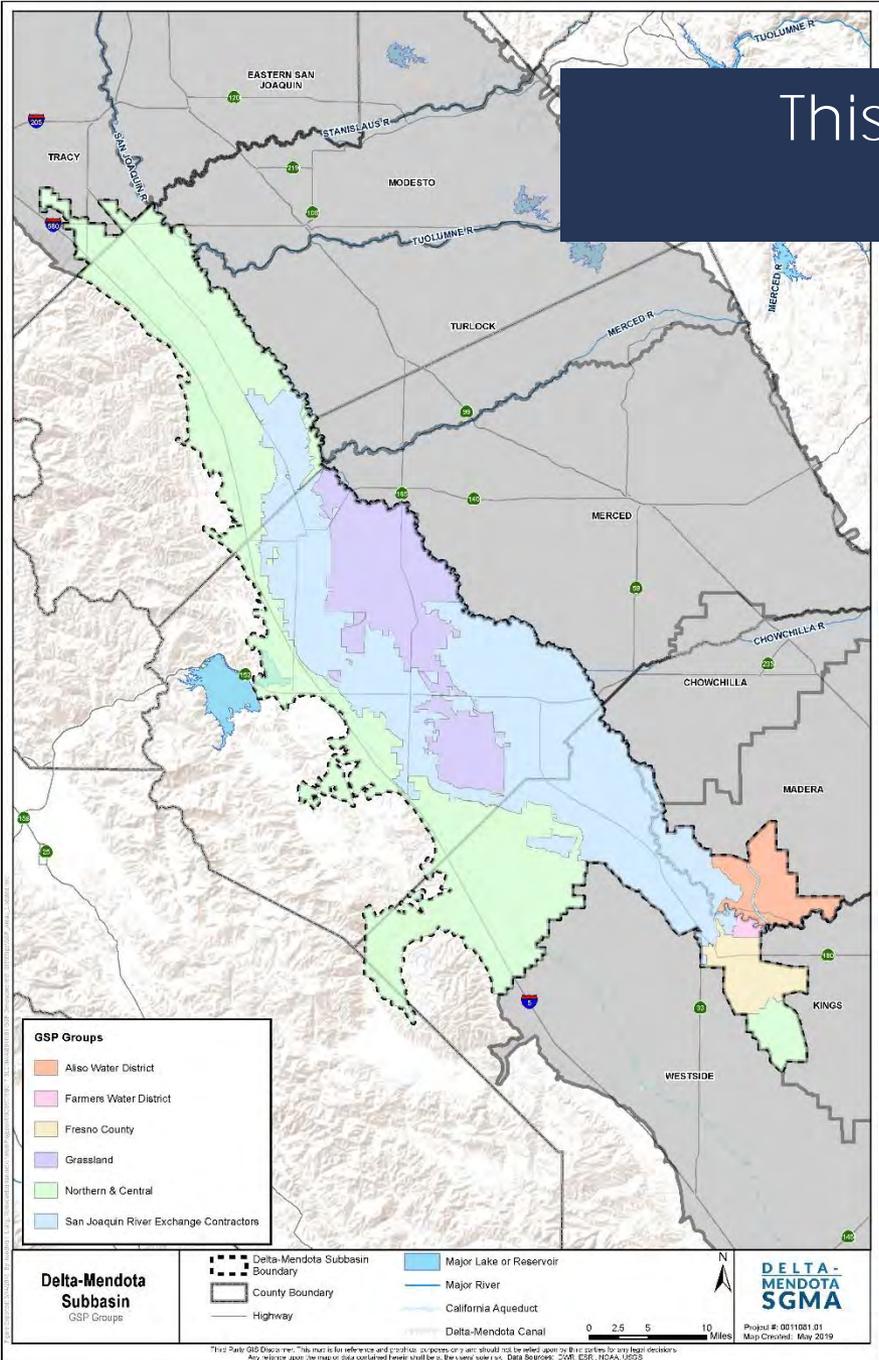
Sustainable Groundwater Management Act Timeline

June 30, 2017
Groundwater Sustainability Agencies must be formed.

January 31, 2040
Delta-Mendota Subbasin must achieve sustainability.

January 31, 2020
Groundwater Sustainability Plans must be submitted to the State.

This is a collaborative, regional effort.



Our Timeline – Pathway to Sustainability



Public Review and Participation

- Public workshops
- GSP Public Draft review
- Adoption of GSPs at public meetings
- Public comment process after adopted to State





Questions?

GSP
Development
and
Implementation

Develop
Model ✓

Prepare Water
Budgets ✓

Prepare
HCM ✓

Gather
Data ✓

Develop
Sustainability
Criteria ✓

Identify
Projects and
Management
Actions ✓

Implement
Adaptive
Management

Monitor
Projects

Implement
Projects

Submit GSPs

2

3

4

1

5

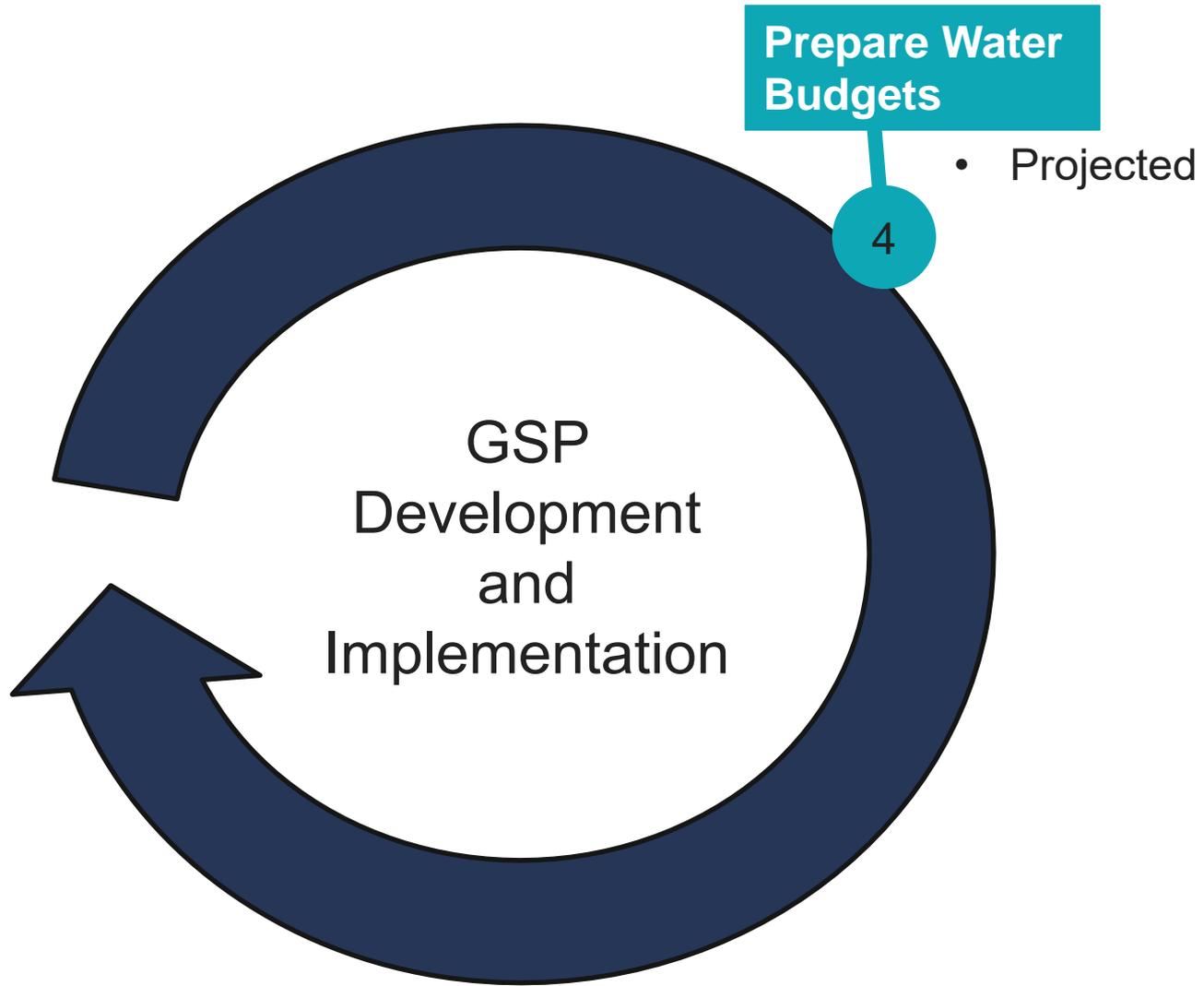
6

9

8

7





A water budget is like a checking account...



Inflows

-

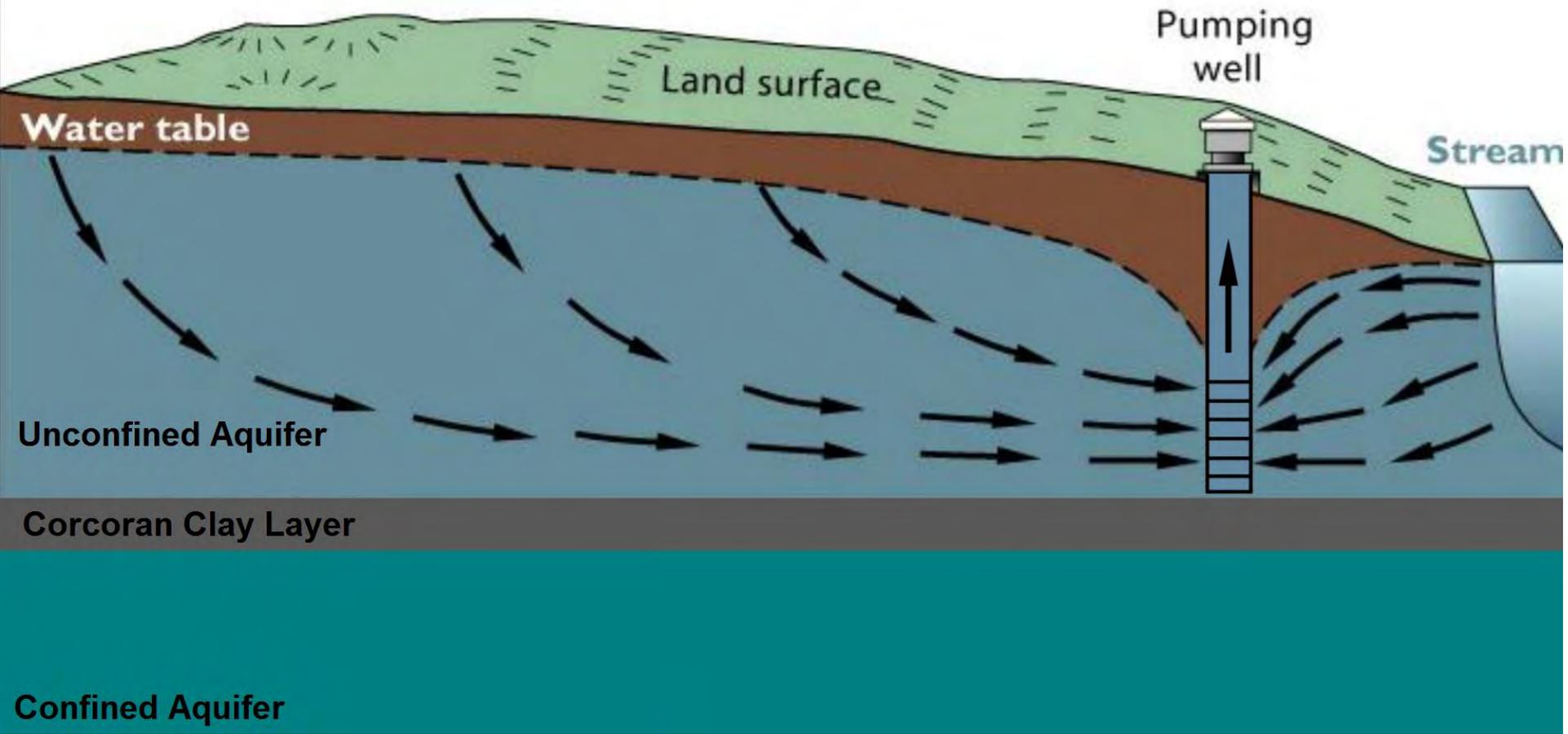


Outflows

=



Change in Storage



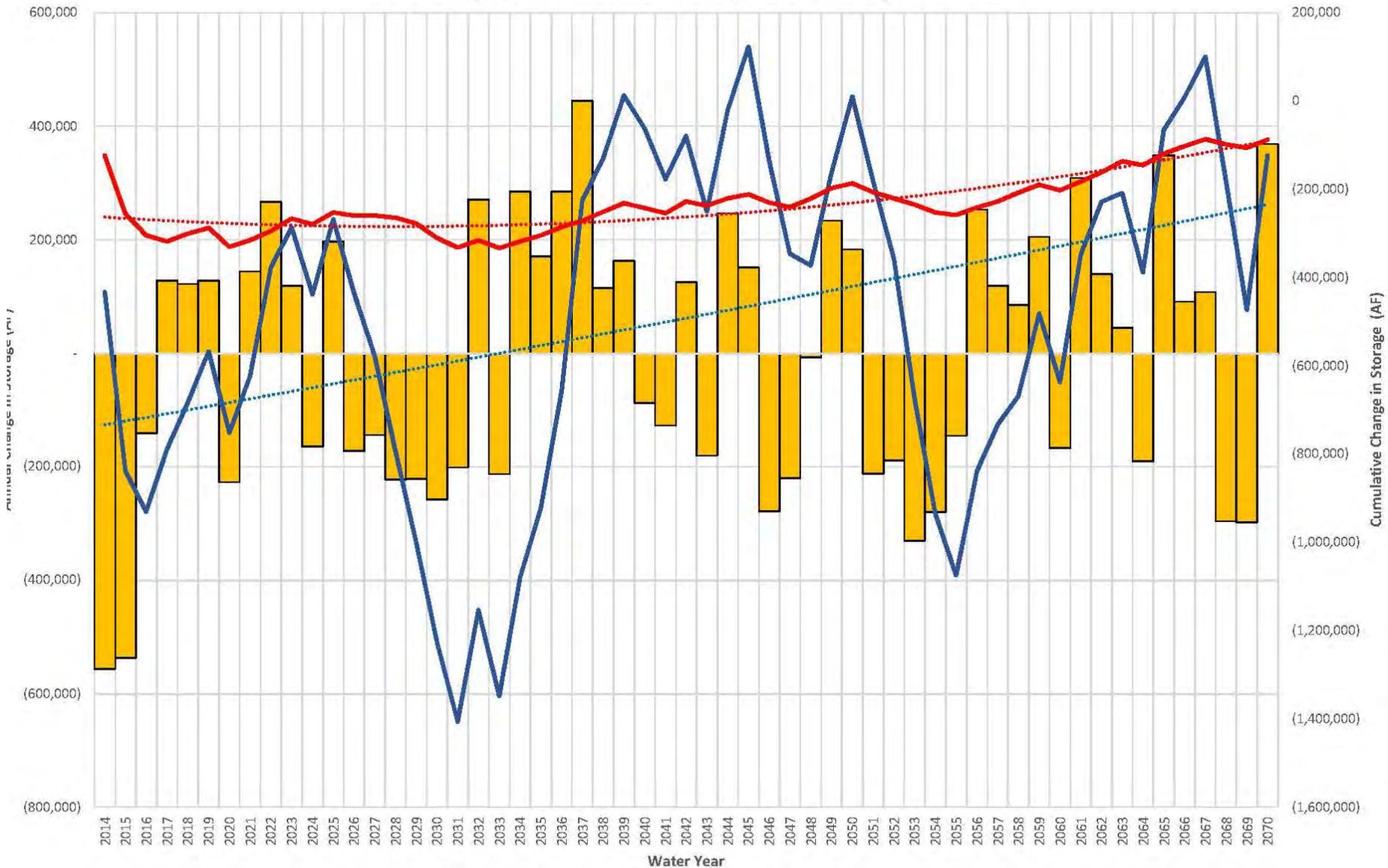
Basin-Wide Water Budgets

	UPPER AQUIFER Average Annual Change in Storage	LOWER AQUIFER Average Annual Change in Storage
Historic (2003-2012)	-50,200 acre-feet	-32,400 acre-feet
Current (2013)	-123,400 acre-feet	-52,700 acre-feet
Projected (2014-2070)	-2,100 acre-feet	-1,500 acre-feet

Estimated Sustainable Yield for the Delta-Mendota Subbasin

	UPPER AQUIFER	LOWER AQUIFER
Estimated Average Annual Sustainable Yield	320,000 – 450,000 acre-feet	250,000 acre-feet

Delta-Mendota Subbasin Water Budget with Future CCF and Projects and Management Actions

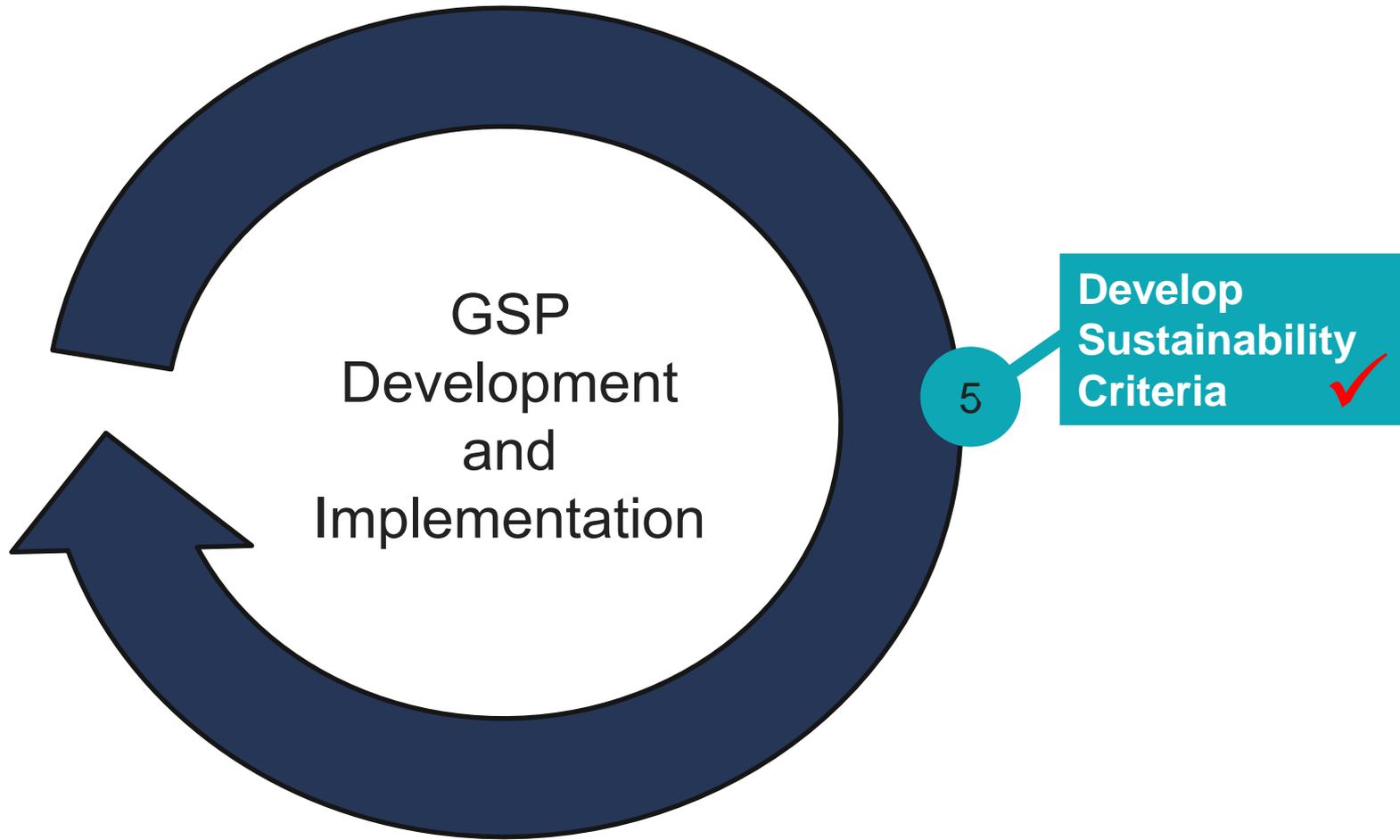


■ Annual Change in Total Storage
— Cumulative Change in Lower Aquifer Storage
⋯ Poly. (Cumulative Change in Lower Aquifer Storage)

— Cumulative Change in Upper Aquifer Storage
⋯ Poly. (Cumulative Change in Upper Aquifer Storage)

Why is this important?

- Compliance
- Long-term groundwater resources for all beneficial uses, including: drinking water, agriculture, and the environment.
- Short-term and long-term planning and management for water resources.



So What Are Undesirable Results?

Undesirable results are significant and unreasonable impacts caused by:

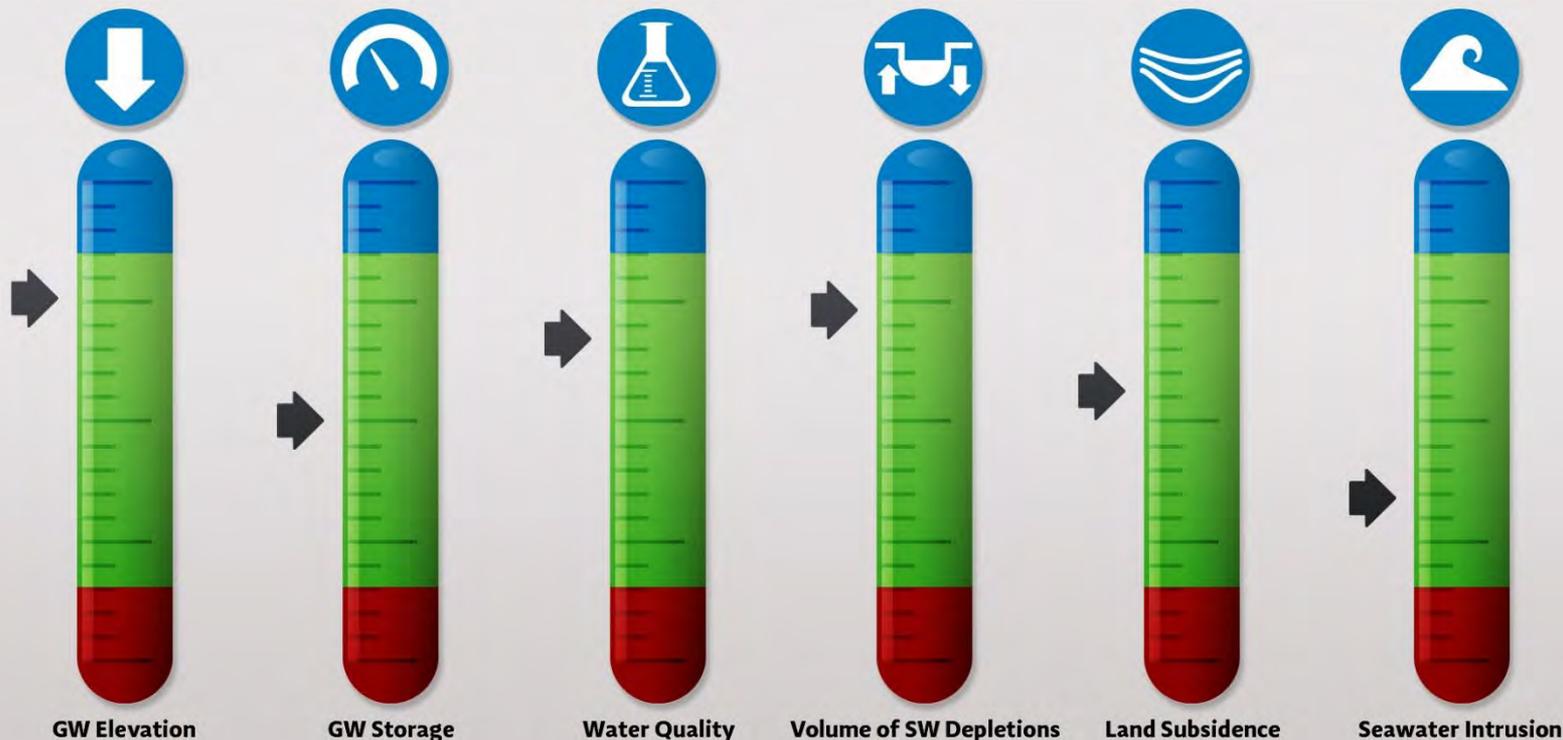
1. Chronic lowering of groundwater levels
2. Reduction of groundwater storage
3. Degraded water quality
4. Land subsidence
5. Depletions of interconnected surface water



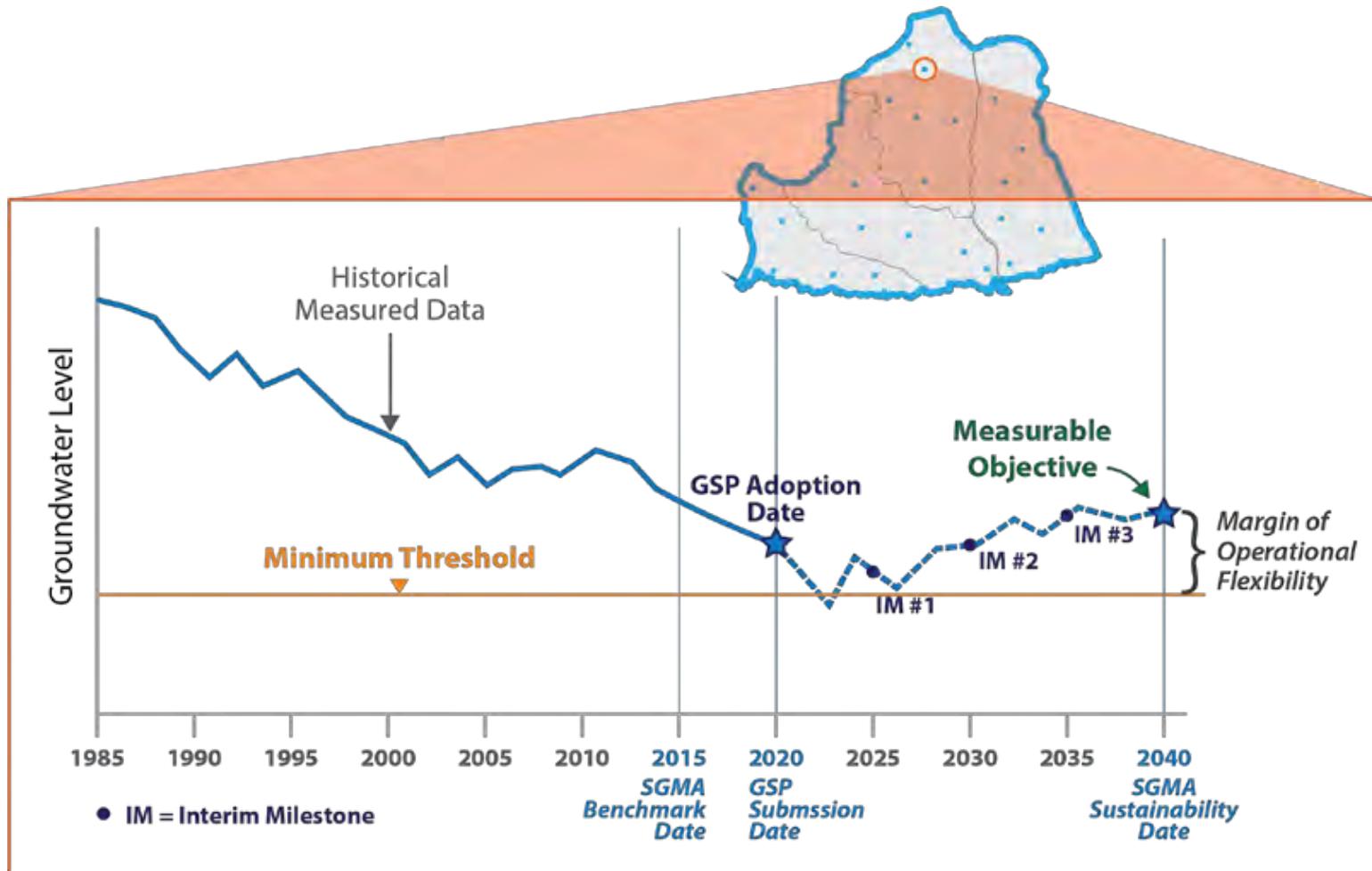
What are sustainability indicators?

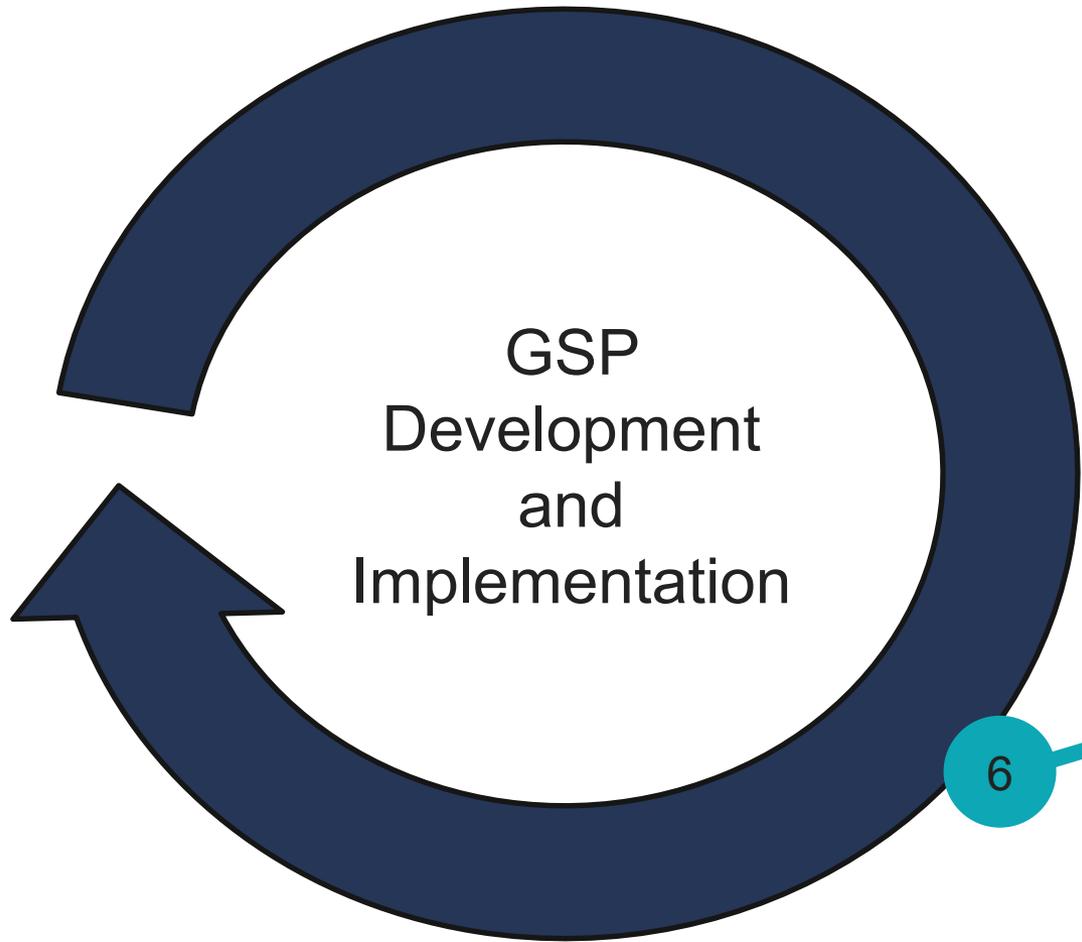


Sustainability Tracking



Thresholds & Measurable Objectives





6

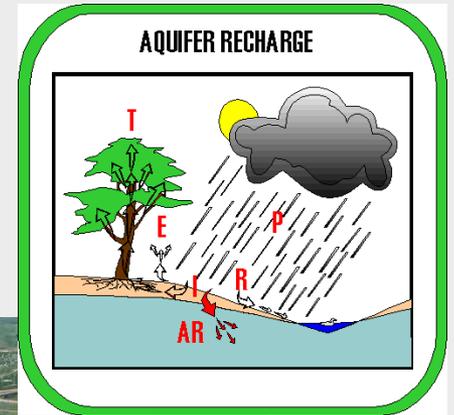
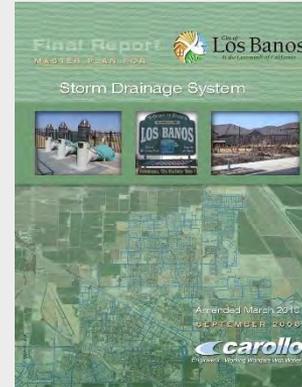
Identify
Projects and
Management
Actions ✓

Step 6: Identify Projects and Management Actions

Projects = Things you can construct



Management Actions = Plans, permits, policies, or other actions



Examples of Projects and Management Actions in the Delta-Mendota Subbasin

Projects	Management Actions
Direct and indirect groundwater recharge	Revising pumping regimes
Stormwater capture and reuse	Revising existing or implementing new pumping rules
Drainwater capture and reuse	Rotational fallowing of crop lands
Recycled water use	Drought contingency planning
Recapture and recirculation	Maximizing use of surface water and other 'alternatives' supplies
Surface water storage	Incentivizing use of surface water and reduction of groundwater demand
	Developing groundwater extraction reporting system
	Limiting groundwater pumping for credit by transferring outside a specified management area

GSP
Development
and
Implementation

Implement
Adaptive
Management

9

Monitor
Projects

8

Implement
Projects

7

Submit GSPs

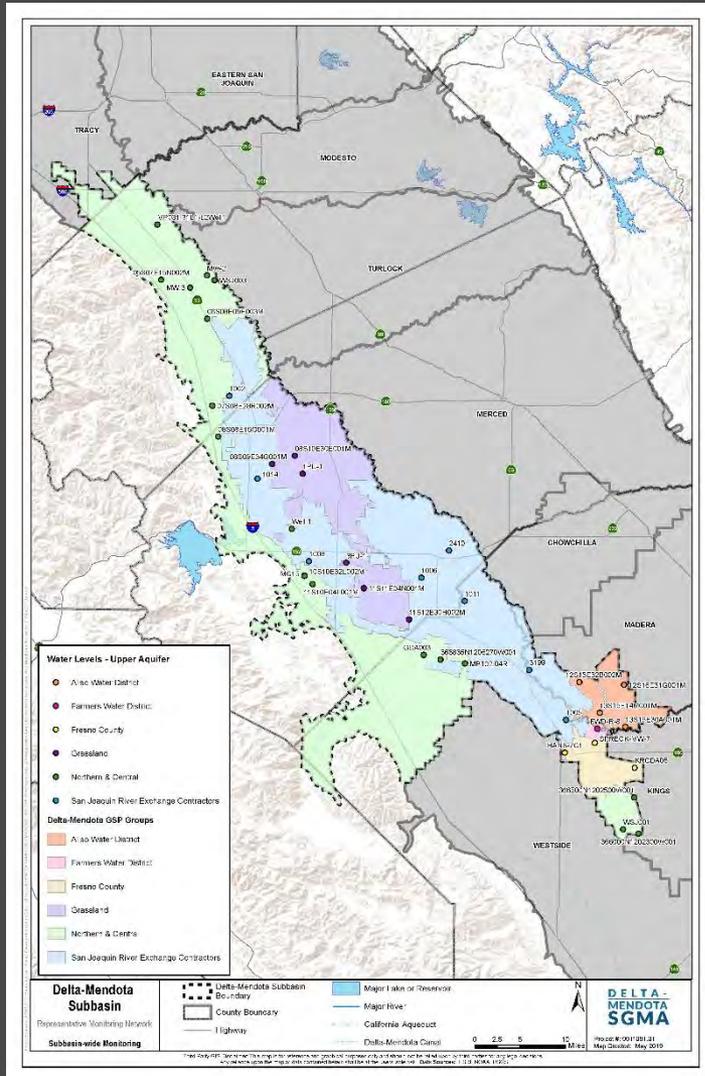


Monitoring is like a “check-up” for the groundwater basin. It gives us data to assess the “health” of the basin.

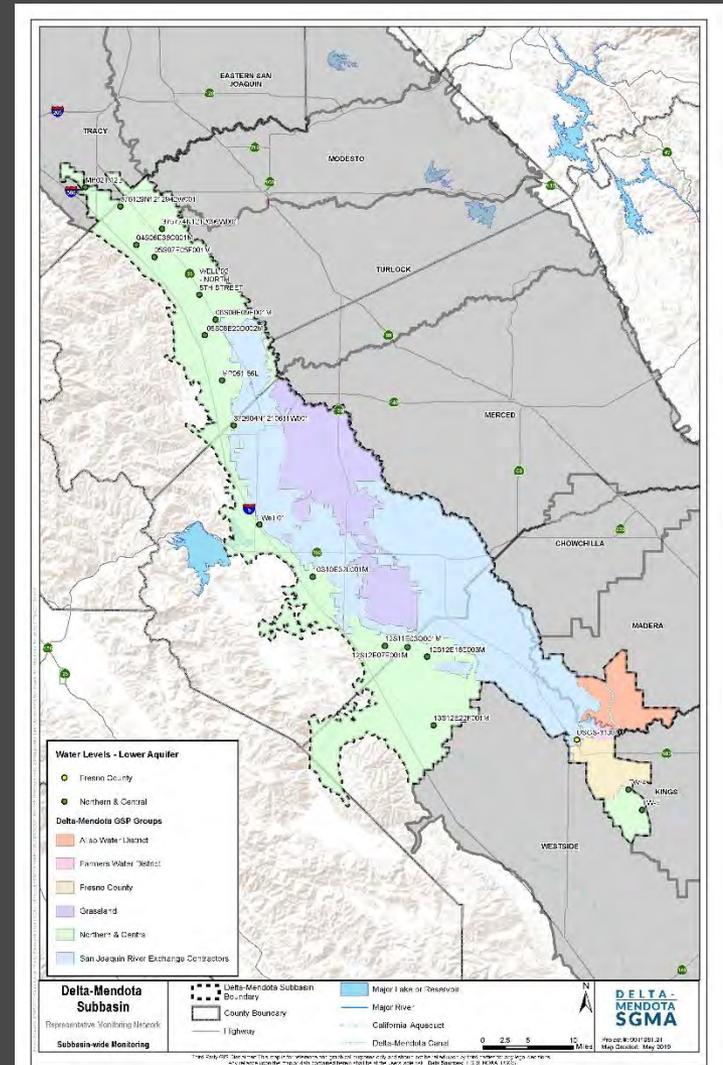
We will be monitoring for impacts to beneficial users, including...

- Groundwater extraction volumes
- Surface water-groundwater interactions
- Shallow wells
- Stage data (water levels in rivers)
- Groundwater dependent ecosystems
- Upper and lower aquifer groundwater levels
- Upper and lower aquifer groundwater quality
- Subsidence
- Evapotranspiration

Delta-Mendota Monitoring Network Maps



Upper Aquifer Water Level Monitoring Network



Lower Aquifer Water Level Monitoring Network

What's
Next?



Our Timeline

**Spring
2019**

Workshop
#4

**Summer
2019**

Refine
Admin Draft
GSPs

**Fall
2019**

Release
Public Draft
GSPs for
Review

**Winter
2019**

Adopt Final
GSPs at
Public
meetings

**Jan 31,
2020**

Deadline to
Submit
GSPs to
State

**April 1,
2020 (and
Annually
Thereafter)**

Submit
Annual
Report on
GSPs to
State

**Every Five
Years**

Five Year
Review of
GSPs

Get Involved



Talk to your
local
groundwater
sustainability
agency
representative



Sign-up for
your local
groundwater
sustainability
agency's email
list



Attend
meetings and
workshops



Provide input on
groundwater
sustainability plan
development



Help us spread
the word!



Attend Public Meetings and Workshops

Delta-Mendota Subbasin Coordination
Committee: 2nd Monday of each
month, 9:30 AM – 12:00 PM

Delta-Mendota Technical Working
Group, 3rd Tuesday of each month,
10:00 AM – 12:00 PM

Delta-Mendota Communications
Working Group: 4th Tuesday of each
month, 1:00 – 3:00 PM

All in-person meetings located at the San Luis & Delta-Mendota
Water Authority's office at: 842 6th Street, Los Banos, CA 93635

For more information on groundwater sustainability plan development and a full calendar of public meetings, visit our website at:

DeltaMendota.org

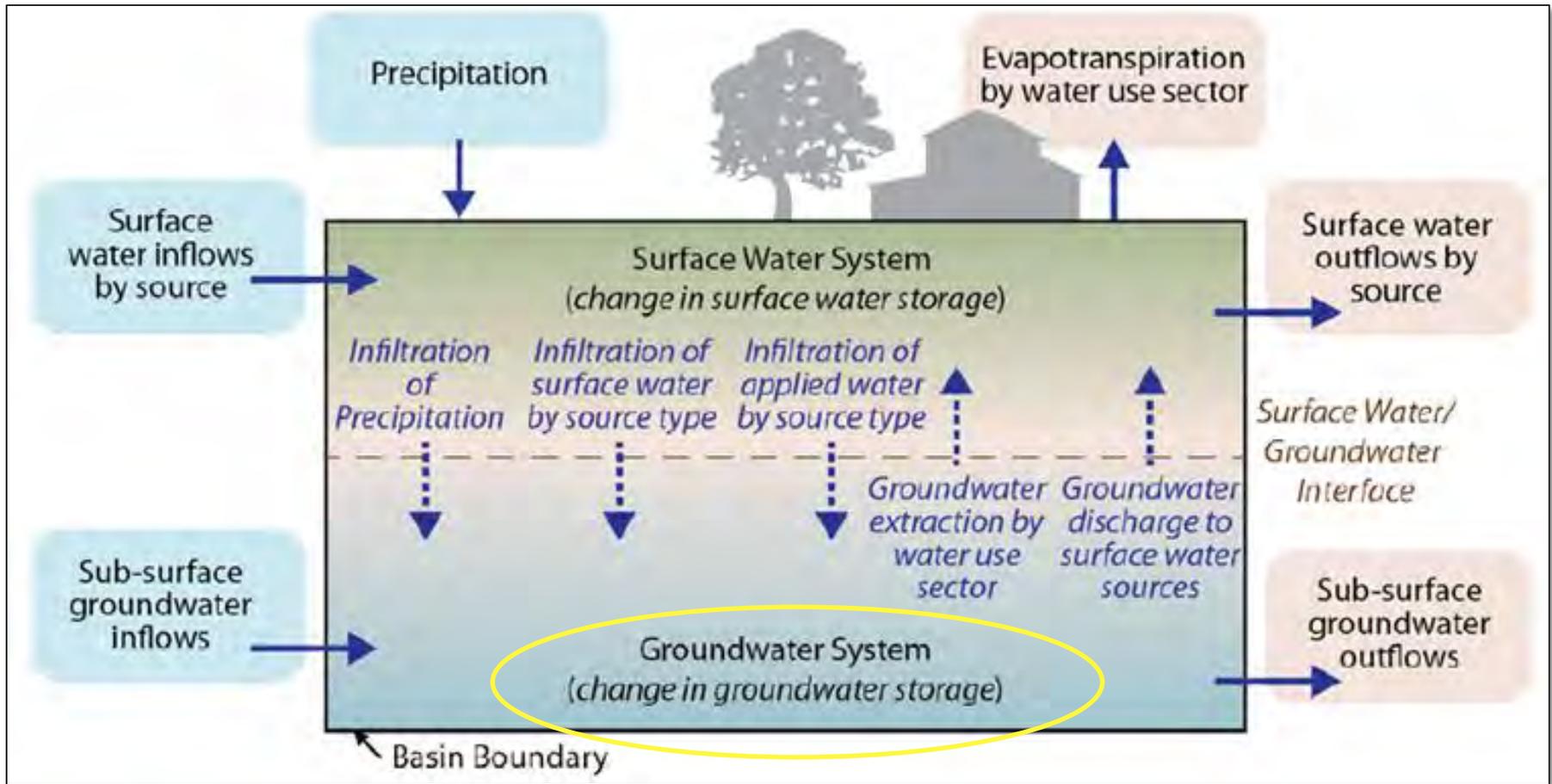


Questions?

A landscape photograph capturing a sunset scene. The sky is filled with a warm, golden glow, with scattered clouds catching the light. In the foreground, a lush green field stretches across the bottom. The middle ground features a line of trees and several tall stadium light towers. In the background, a range of mountains is visible under the soft light of the setting sun. A dark grey rectangular box is overlaid on the left side of the image, containing the text "Breakout Session".

Breakout Session

Appendix Slides



SGMA GSP Requirements

- Establish sustainability goals
- Define “significant and unreasonable” and criteria for undesirable results
- Develop sustainability goal, minimum thresholds and measurable objectives
- Develop plan for meeting sustainability goal
- Implement plan
- Monitor progress
- Engage stakeholders throughout process

