

Revised September 10, 2018



**EASTERN SAN JOAQUIN  
GROUNDWATER AUTHORITY**

**GWA Board Meeting  
September 12, 2018**

# Agenda

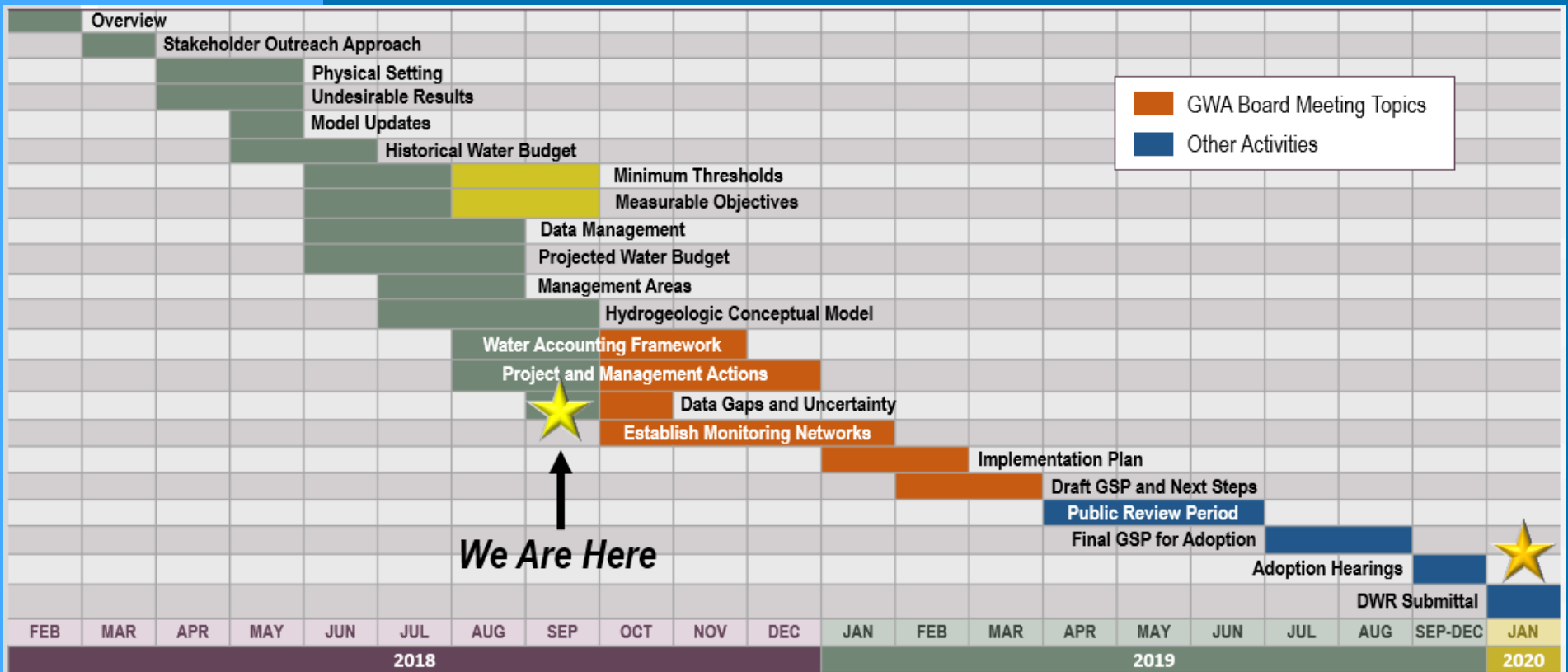


- Approval of August Board Meeting Minutes
- GWA Financial Report
- Roadmap Update and Project Schedule
- Outreach & Groundwater Sustainability Workgroup Update
- GSP Action Update
  - Thresholds Status
  - Projected Water Budget
  - Sustainable Yield
  - Projects and Management Actions
  - October Workshop
- DWR Update
- October Agenda Items



# GWA Financial Report

# GSP Topics & Project Schedule



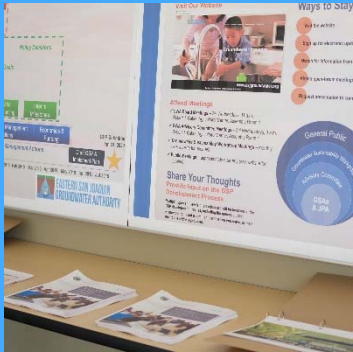


# Outreach & Groundwater Sustainability Workgroup Update

# Open House Recap



- Thank you for participating!
- ~50 members of the public in attendance
- Thank you GSAs for sending representatives!
- Open house materials will be posted to the website



# Next Informational Meeting



The second Informational Meeting will occur in the Nov./Dec. timeframe (four are planned in total)

We are asking Advisory Committee members for proposed locations throughout the Basin

# Outreach Update



- Reminder – monthly outreach materials are sent to GSAs on the first of the month.
- The focus of this month's outreach is *Stay Involved*, encouraging people to stay involved after the interest we saw at the Open House.
- GSA are encouraged to use and modify these materials.



# Tracking GSA Outreach Efforts



- GSAs have been asked to fill out a simple survey each month to indicate the outreach activities planned for the coming month
- Survey to be included in Board packet the following month (September survey to be in October packet)

Example Survey:

GSA Name	Website Updated	Outreach Slides Posted	Public Meeting Attended	Posted to Social Media	Distributed Press Release
GSA #1	X		X	X	
GSA #2	X	X	X		
GSA #3		X	X	X	X
GSA #4	X		X	X	X
...					

# Groundwater Sustainability Workgroup Update




- 10 Workgroup members and 3 members of the public attended the last meeting on August 15th
- The September Workgroup meeting was held on September 11<sup>th</sup> from 4 – 5:30 p.m. at the Robert Cabral Ag Center, Mokelumne Room
- Situation Assessment interviews are underway
- Notes from June and July Workgroup meetings are provided as part of the Board packet



# Groundwater Sustainability Workgroup Update



 EASTERN SAN JOAQUIN  
GROUNDWATER AUTHORITY

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Eastern San Joaquin Groundwater Authority Groundwater Sustainability Workgroup  
September 11, 2018  
4 – 5:30 p.m.  
Robert J. Cabral Agricultural Center  
2101 E. Earhart Ave., Stockton, CA  
Mokelumne Room

Agenda

- I. Welcome
- II. Comments and Meeting Notes
- III. Update on Background Conditions
- IV. Undesirable Results & Minimum Thresholds Continued
- V. Historical Water Budget & Current Conditions Baseline
- VI. Recap of Open House
- VII. Announcements
- VIII. Other Topics
  - a. Non-agenda items
  - b. Public Comment

# Reminder – Workgroup Materials are Posted

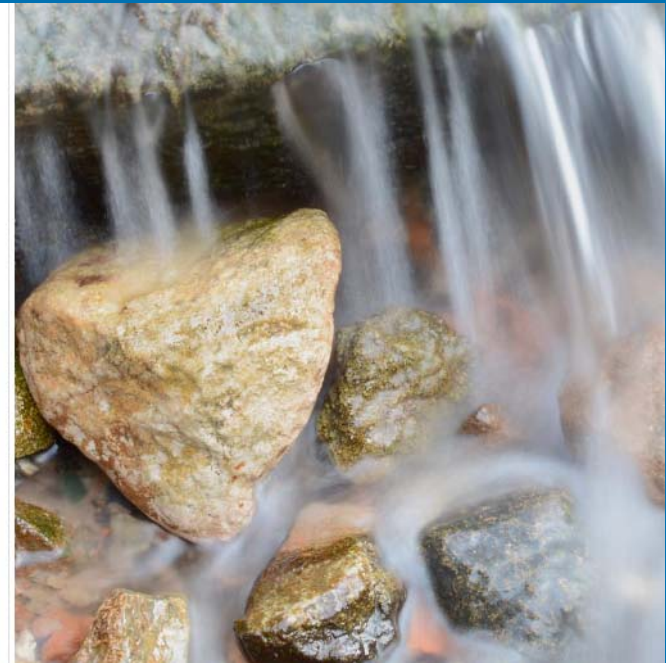


## Groundwater Sustainability Workgroup Meetings

Groundwater Sustainability Workgroup meetings occur on an approximately monthly basis. The Groundwater Sustainability Workgroup represents a diverse mix of members who represent the broad interests of groundwater users in the subbasin as well as the diverse social, cultural and economic elements of the population. During the meetings, stakeholders learn about the GSP's development, share questions and provide comments to the project's consulting team. Groundwater Sustainability Workgroup members are also encouraged to communicate information back to their organizations and report back any input to the consulting team.

2018

Meeting Notifications	Meeting Agendas	Meeting Materials
	<a href="#">August 15</a>	<a href="#">August 15</a> <a href="#">August 15 Printable Version</a>
<a href="#">July 10</a>	<a href="#">July 10</a>	<a href="#">July 10</a>
<a href="#">June 12</a>	<a href="#">June 12</a>	<a href="#">June 12</a>



<http://www.esjgroundwater.org/Get-Involved/Meetings>



**GSP Action Update – Thresholds Status**

# Six Sustainability Indicators to be Addressed



Chronic lowering of groundwater levels indicating a significant and unreasonable depletion of supply



Significant and unreasonable degraded water quality



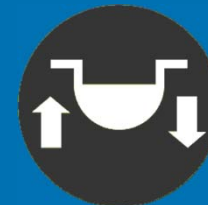
Significant and unreasonable reduction of groundwater storage



Significant and unreasonable land subsidence



Significant and unreasonable seawater intrusion



Depletions of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of the surface water

# GW Elevation Thresholds: What Comes Next?



Preliminary  
Thresholds



Final Thresholds



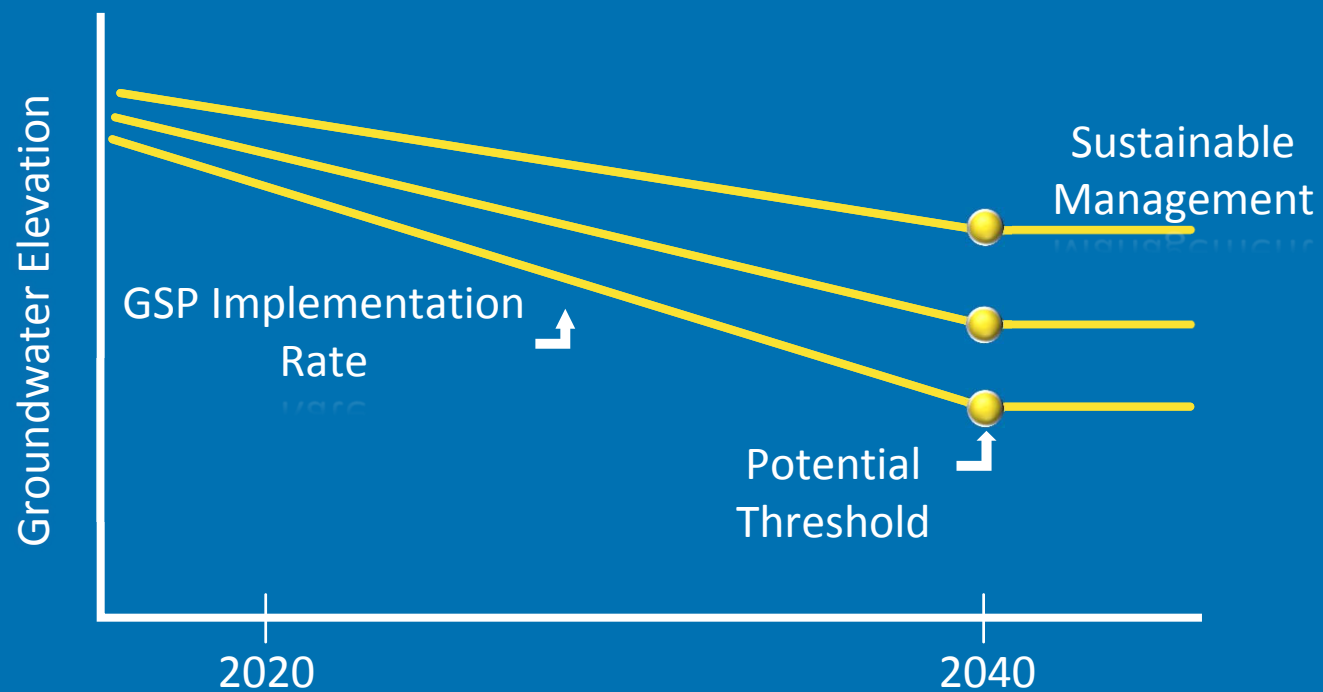
Water  
Budget

- Projected Water Budget will be used to understand average sustainable pumping rates basin-wide
- Projects and Management Actions need to be identified to include supply and demand-side measures to achieve sustainability
- Depending on rate of project implementation, groundwater elevation thresholds may need to be adjusted<sup>15</sup>

# Rate of Plan Implementation May Necessitate Changes in GW Elevation Thresholds



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**GSP Action Update – Projected Water Budget**

# Water Budget: Defining Time Frames



## Historical

Uses historical information for hydrology, precipitation, water year type, water supply and demand, and land use going back a minimum of 10 years.

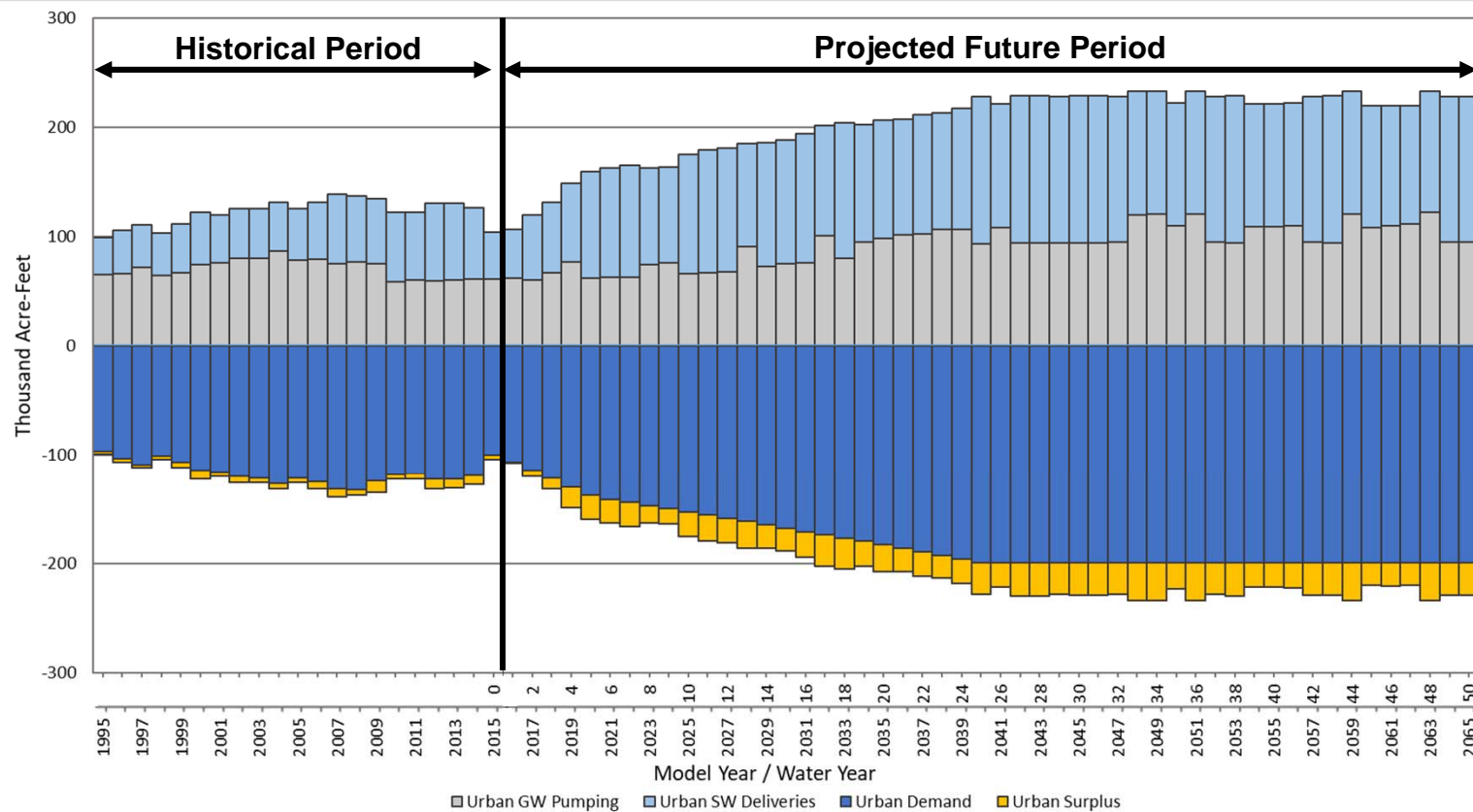
## Current Conditions

Holds constant the most recent or “current” data on population, land use, year type, water supply and demand, and hydrologic conditions.

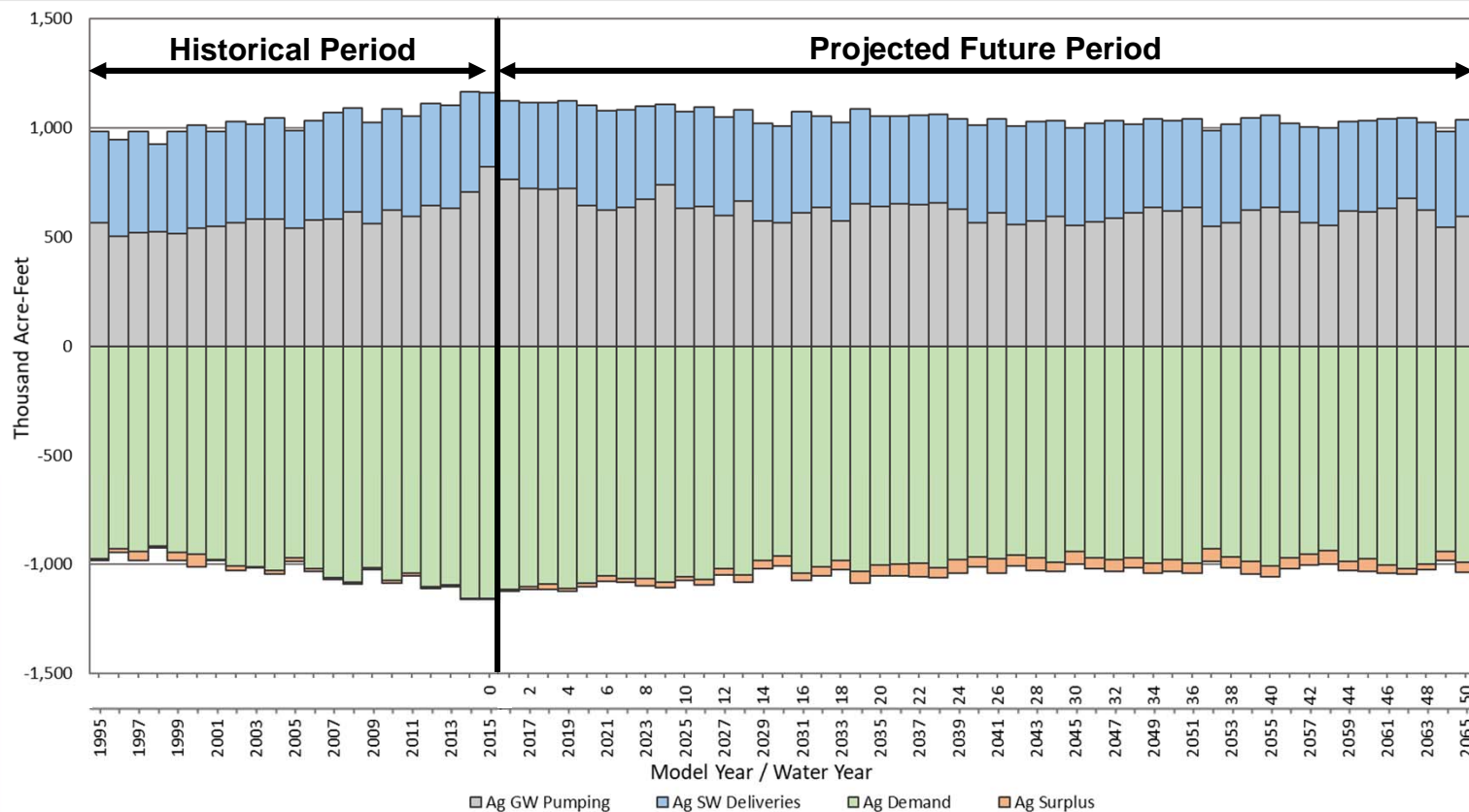
## Future Conditions

Uses the future planning horizon to estimate population growth, land use changes, climate change, etc.

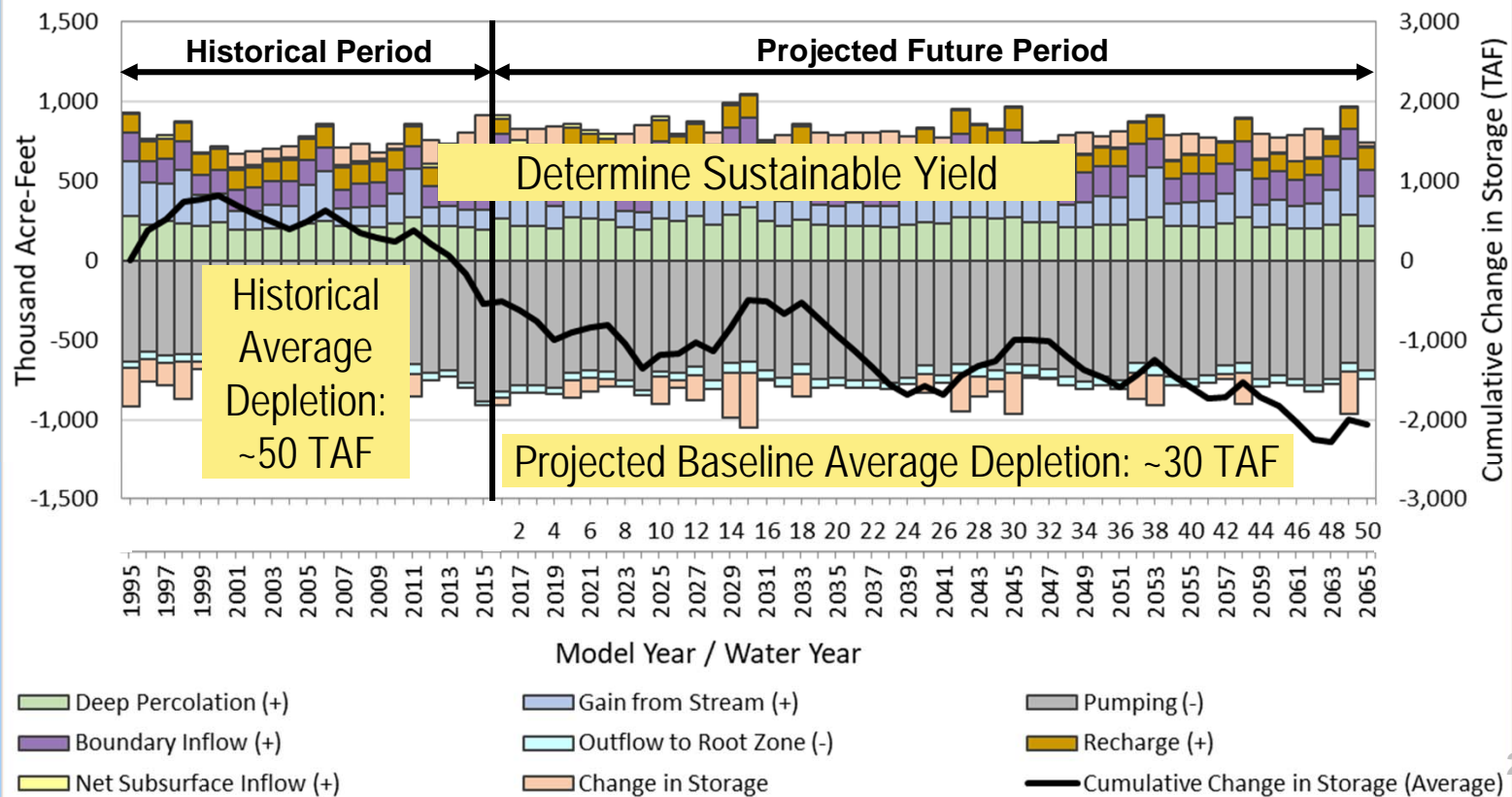
# Projected Conditions Baseline L&WU: Urban Water Use



# Projected Conditions Baseline L&WU: Agricultural Water Use



# Projected Conditions Baseline Groundwater Budget





# GSP Action Update – Sustainable Yield

# What is Sustainable Yield?



“Sustainable yield means the maximum quantity of water, calculated over a base period representative of long-term conditions in the basin and including any temporary surplus, that can be withdrawn annually from a groundwater supply without causing an undesirable result.”

California Water Code Section 10721

# Sustainable Yield Actions



## Demand-side sustainability actions:

- Reduce agricultural and urban GW use to achieve sustainability

## Supply-side sustainability actions:

- Identify project and management actions to achieve sustainability

## Composite sustainability actions:

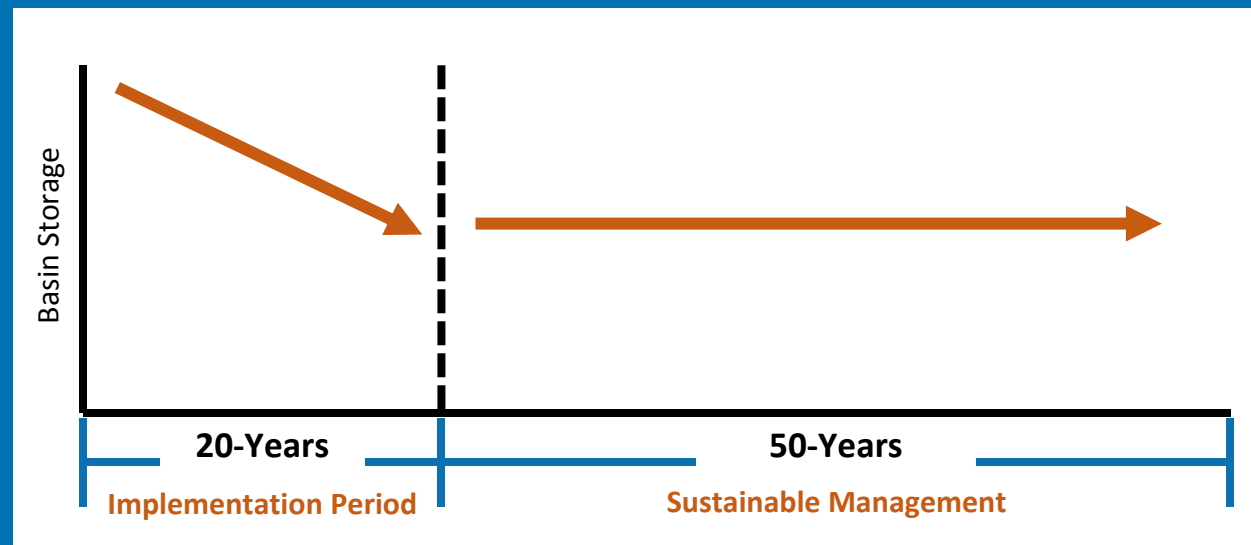
- Combination of demand-side and supply-side actions



# Sustainable Yield Modeling Assumptions



- Determine GW use reduction by 2040 to provide a soft transition to complete sustainability conditions



# Summary: Sustainable Yield



- Operations assume up to approximately 12% reduction in GW use through 2040
- To maintain sustainability, long-term GW use to be reduced by approximately 12-15%

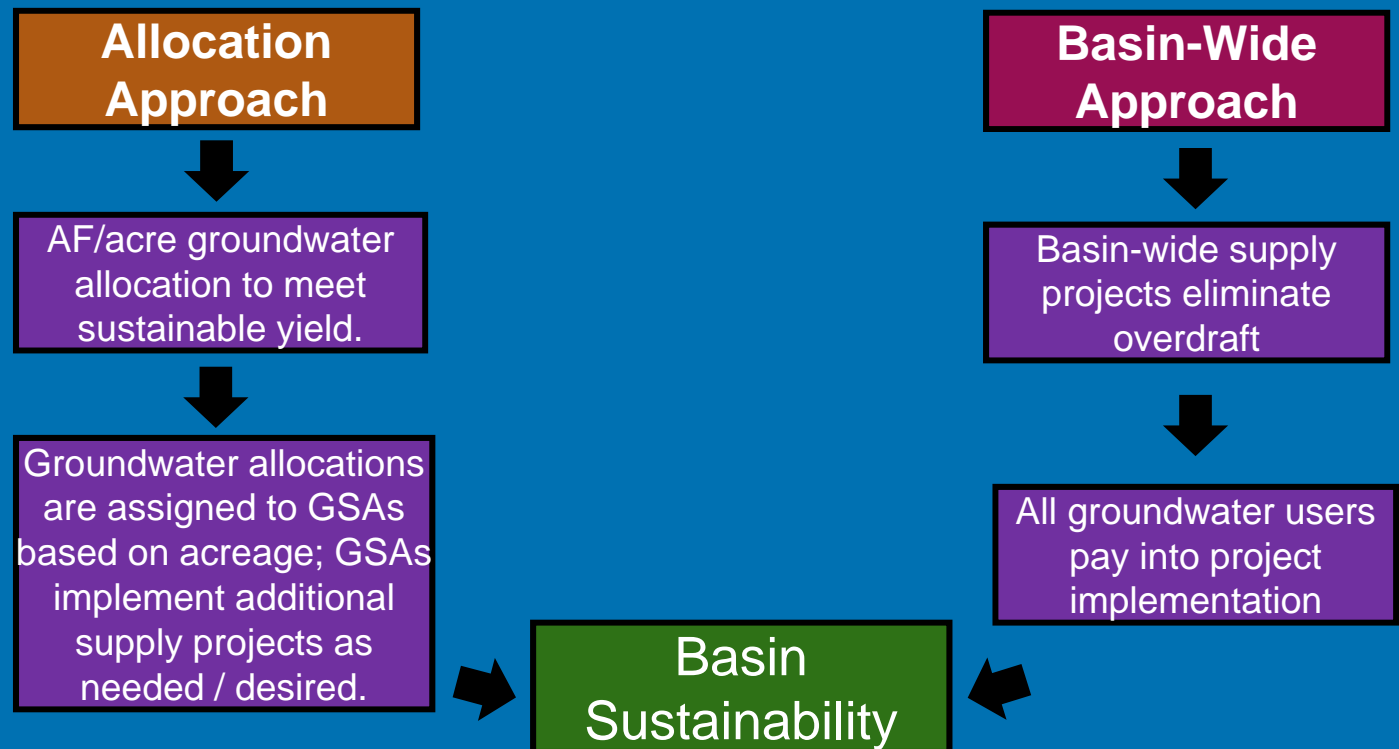
## Next Steps:

- Supply-side sustainability actions: Identify project and management actions to achieve sustainability



**GSP Action Update – Projects and  
Management Actions**

# Approaches to Meeting Sustainable Yield



# Comparison of Approaches



	Pros	Cons
<b>Allocation Approach</b>	<ul style="list-style-type: none"><li>• Standardized approach</li><li>• Clear cut limits on pumping</li></ul>	<ul style="list-style-type: none"><li>• Metering needed</li><li>• Pumping limitations may be significant in some areas</li><li>• More GSA oversight required</li></ul>
<b>Basin-Wide Approach</b>	<ul style="list-style-type: none"><li>• May be more cost-effective</li><li>• Could be scalable</li><li>• Well positioned for outside funding</li><li>• Preserves flexibility</li></ul>	<ul style="list-style-type: none"><li>• Projects must be economically feasible</li></ul>

# Approach



**Today:** Initiate discussion on and establish framework for Projects and Management Actions

**Next Month:** Project and Management Actions Workshop following Board Meeting on October 10<sup>th</sup>

- Brainstorming session with GSAs to meet and discuss potential future projects and management actions
- Identify project types and areas of benefit
- Identify potential management actions and associated areas of application (Basin-wide or by GSA)

# What Information is Needed?



## Project Details:

- Size
- Location
- Timeline
- Estimated Cost (Capital and O&M)
- Status of Design
- Permitting and Funding
- Project Partners and Beneficiaries Identified
- Potential Ordinances

# Categories of Projects and Management Actions



Flood/Stormwater Management

Recycling

Conservation

Recharge

Transfers



# Examples of Projects and Management Actions



- Intra-basin transfers (water transfers to Stockton East, Central San Joaquin)
- Non-potable supply projects
- Conservation
- Potential ordinances
- Fallowed land program
- Groundwater markets



**GSP Action Update – October Workshop**

# October Workshop



- Projects and Management Actions brainstorming workshop, October 10, 2018; 12:30-2:30pm

**Board Action** – Approve budget October Workshop item



# DWR Update

# Technical Support Services Funding Update



- DWR coordinating revision of language in agreement for finalization
- Monitoring well screening/prioritization for TSS

# DWR Update



- Update from Paul Wells



**October Board Topics**

# October Board Topics



- Projects and Management Actions





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