East Bay Plain Subbasin

Groundwater Sustainability Plan Development

Stakeholder Communication & Engagement Meeting

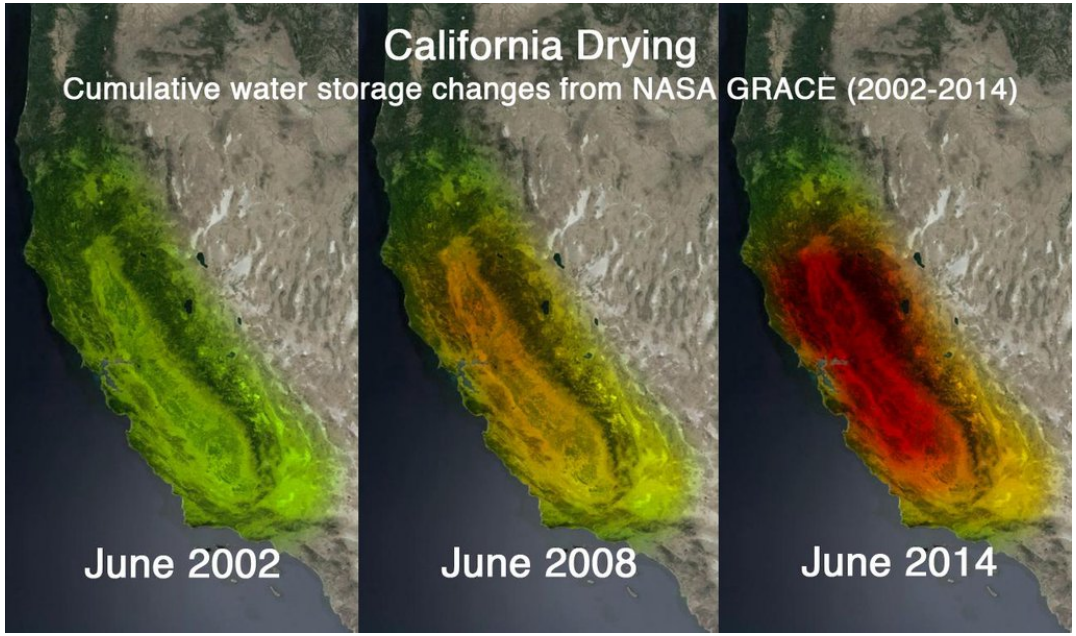
June 22, 2021

Agenda

- **Welcome & Introductions**
- **Background**
- **Schedule Update**
- **Recent DWR Reviews of Submitted GSPs**
- **Framework for Key SGMA Definitions**
  - Sustainability Indicators & Undesirable Results
  - Sustainable Management Criteria
- **Challenges to Defining the Sustainable Management Criteria (SMC)**
- **Approach to Developing SMC**
- **Future Scenario**
- **Example Management Actions**
- **Next Steps**

GSP: Groundwater Sustainability Plan
SGMA: Sustainable Groundwater Management Act

Background
Sustainable Groundwater Management Act



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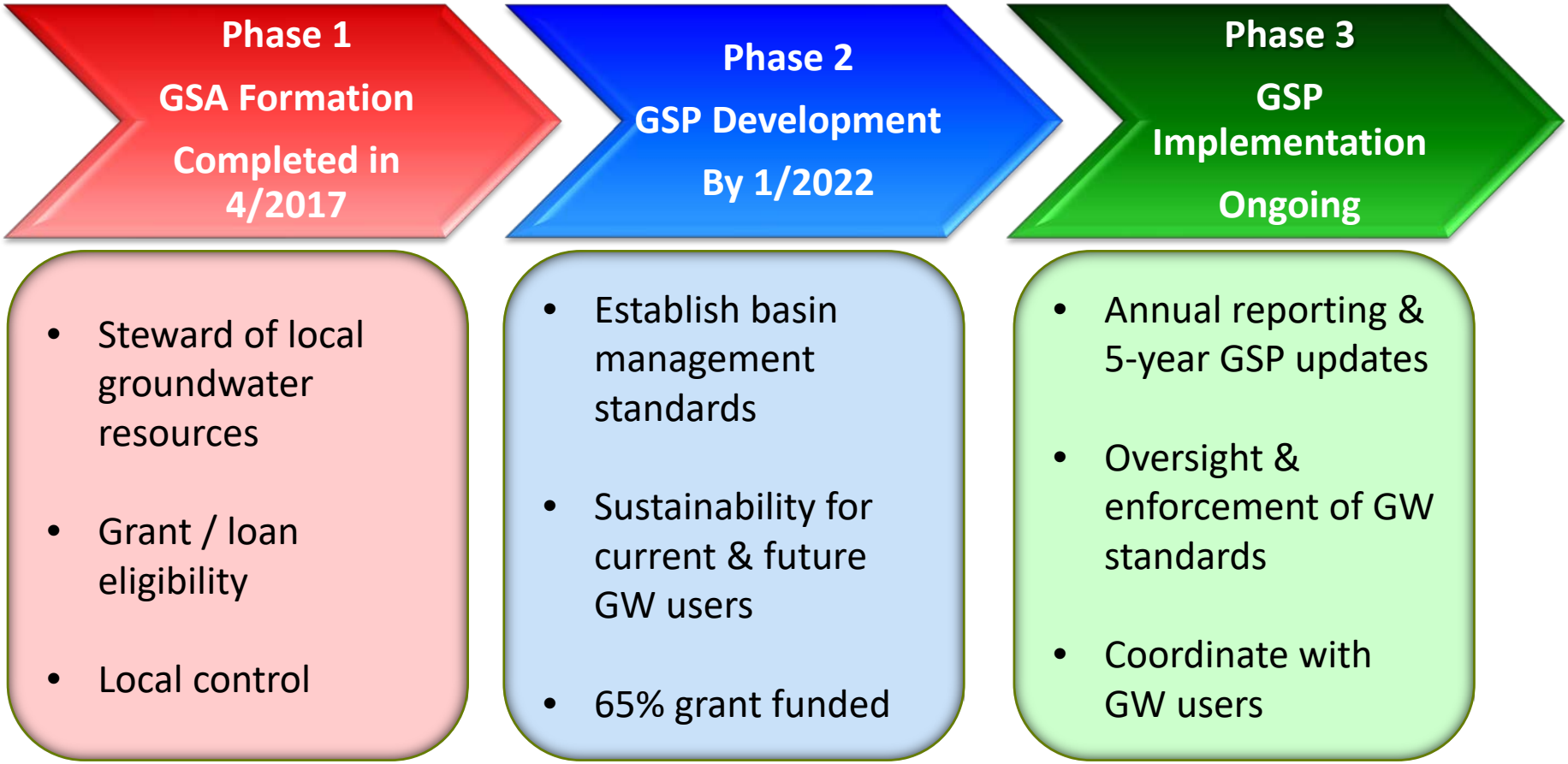
Signed on 9/16/14

- Assembly Bill 1739
- Senate Bill 1168
- Senate Bill 1319

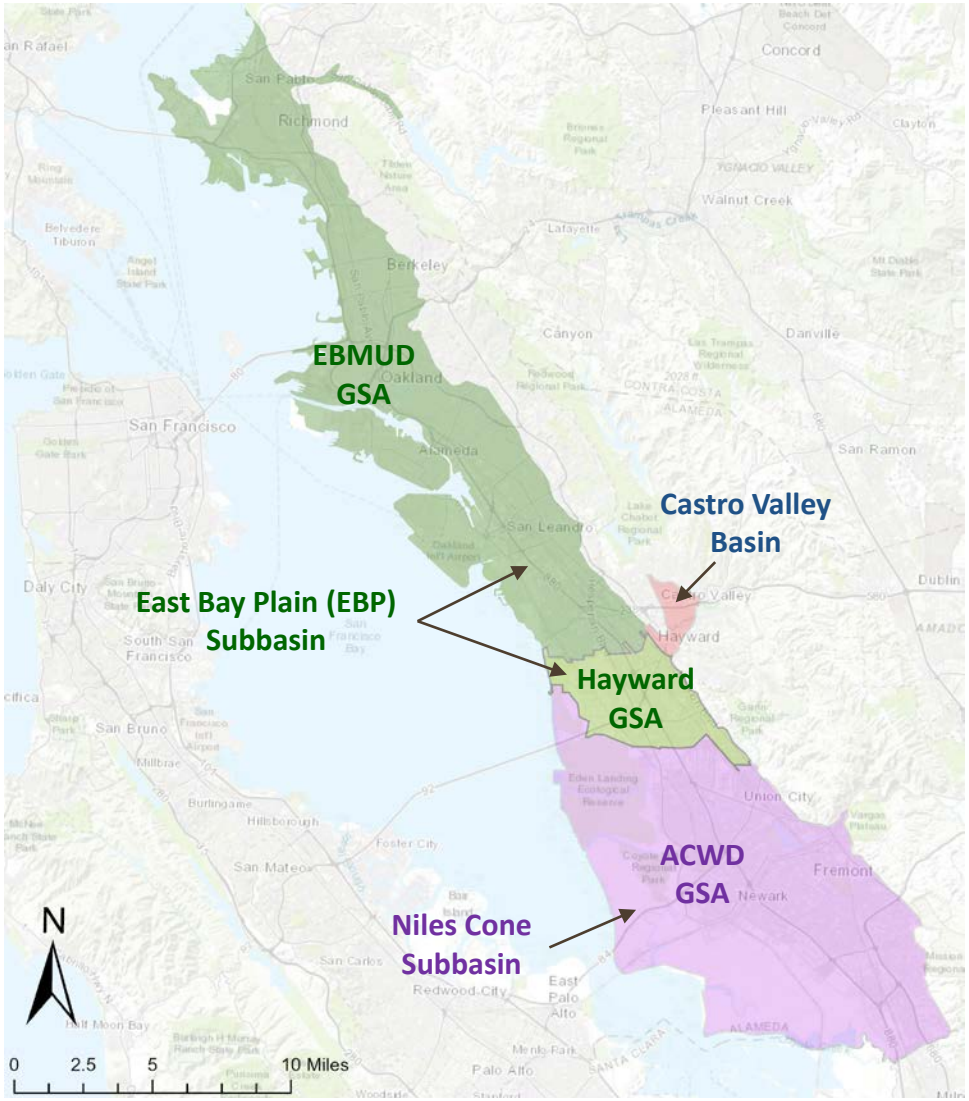
Background

Sustainable Groundwater Management Act



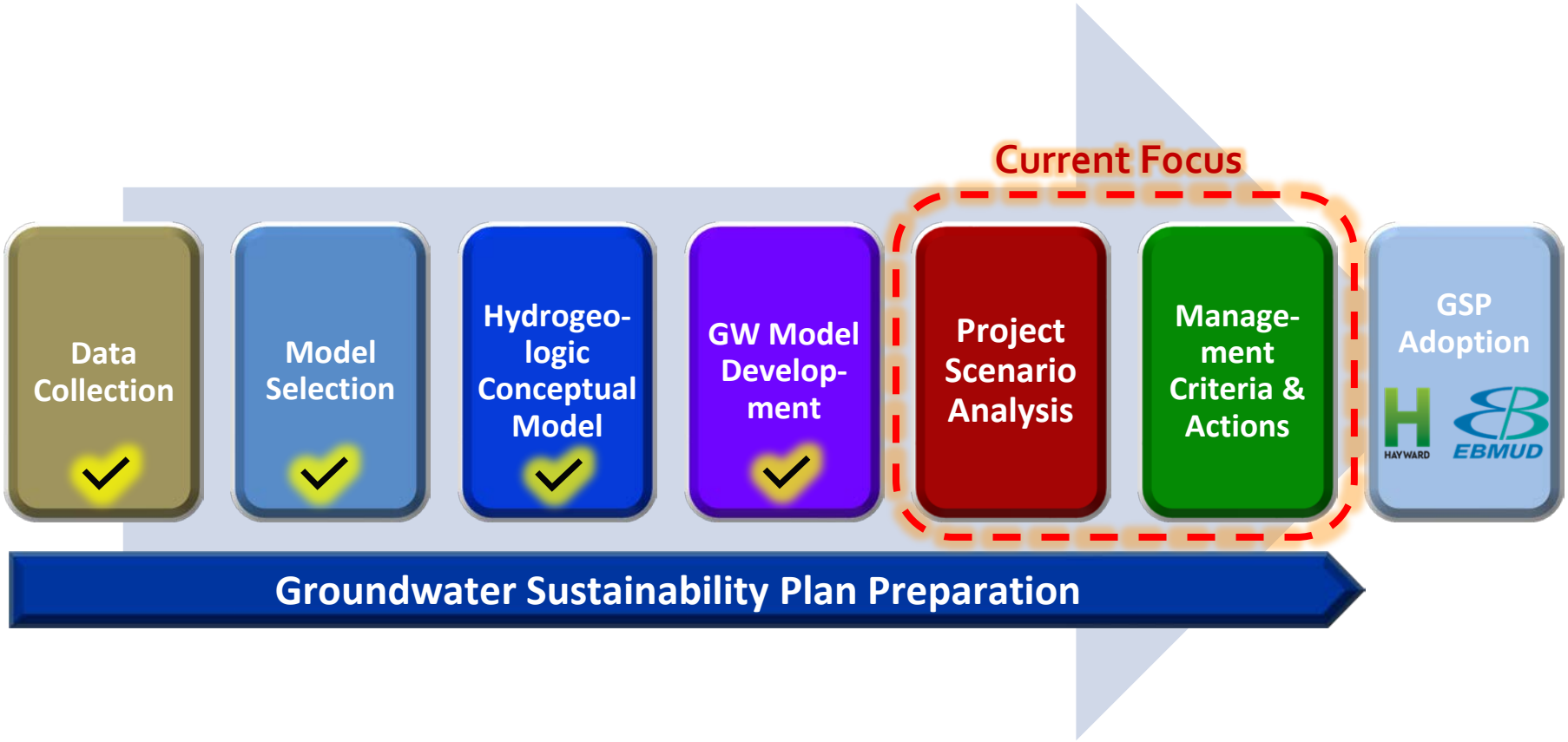
GSA *– Groundwater Sustainability Agency*
GSP *– Groundwater Sustainability Plan*
GW *- Groundwater*

Background
Governance



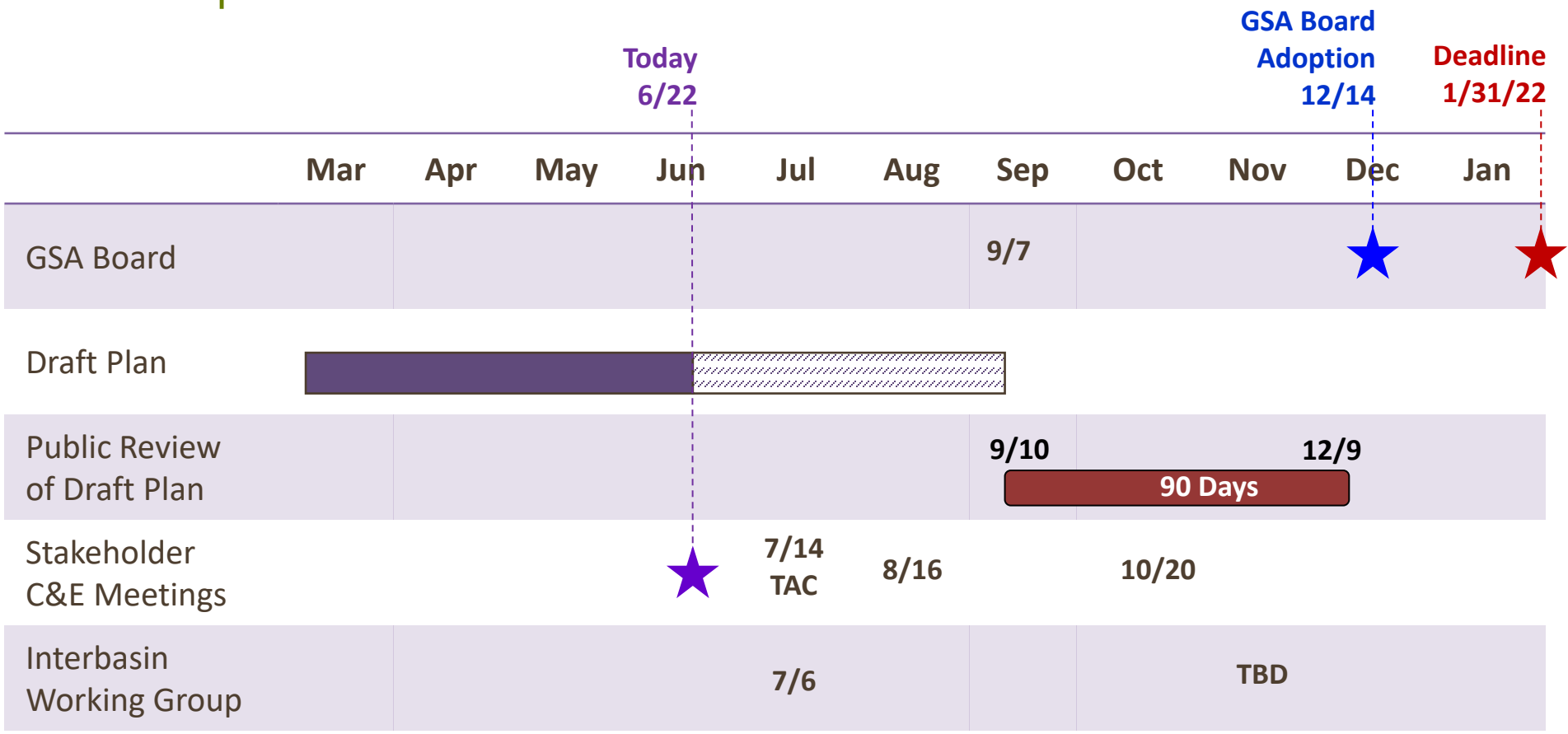
- **3 GSAs**
  - East Bay Plain Subbasin: EBMUD & Hayward
  - Niles Cone: ACWD
  - Castro Valley has no GSA

Schedule Update
GSP Milestones



Schedule Update

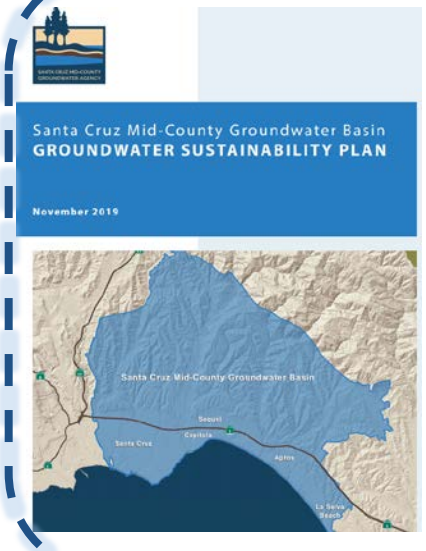
GSP Preparation & Submittal

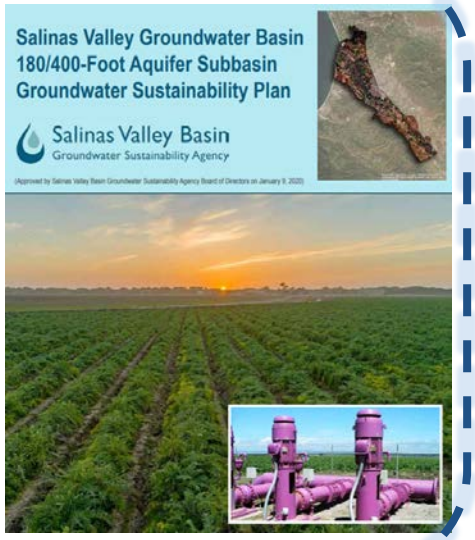


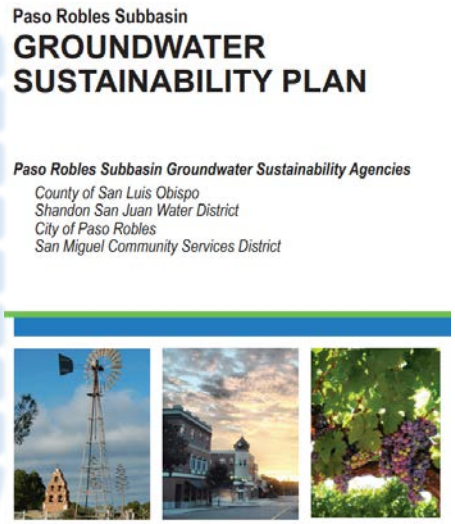
C&E: Communication & Engagement

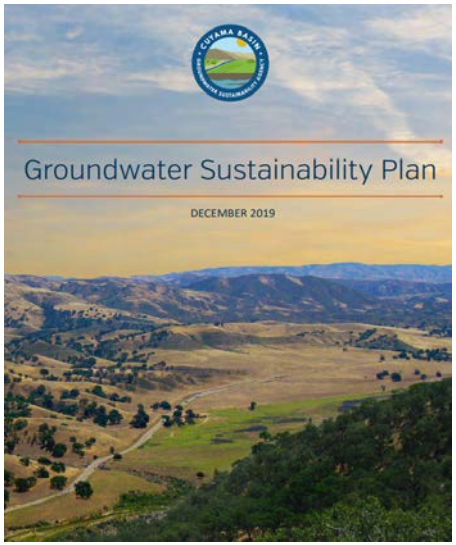
Recent DWR Reviews of Submitted GSPs

Approved





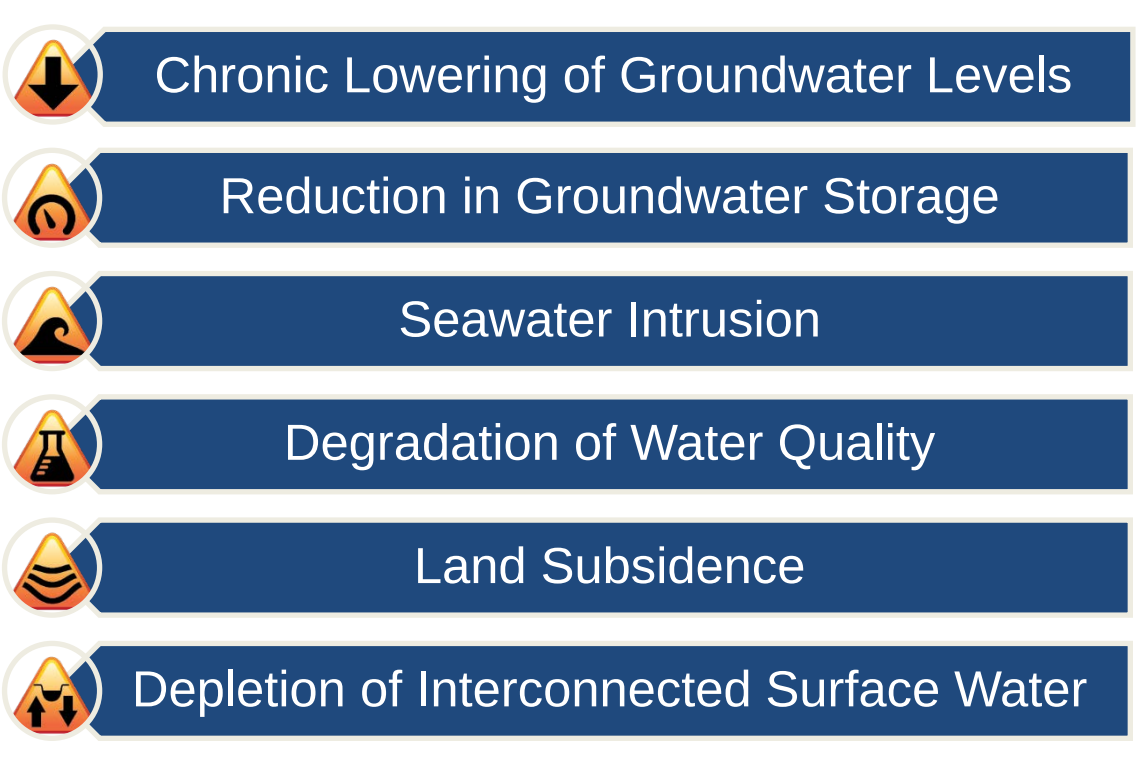




- **Key comments from DWR**
  - Define undesirable results with specificity
  - Provide justification using best available science and information
  - Evaluate and disclose effects on beneficial uses and users
  - Include projects and actions consistent with avoiding undesirable results
  - Identify data gaps and how those data gaps will be filled

Framework for Key SGMA Definitions
Sustainability Indicators & Undesirable Results

Six Sustainability Indicators

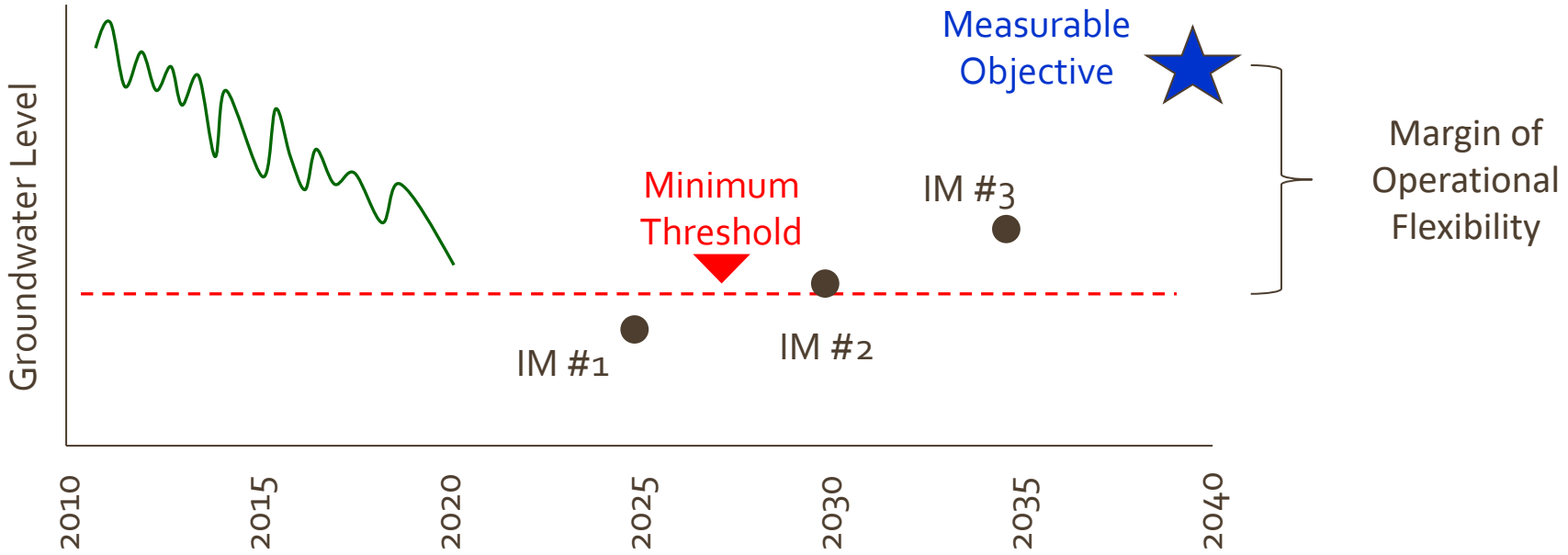


Undesirable Results (URs):

- Significant and unreasonable occurrence of conditions that adversely affect groundwater use
- Must identify specific causes and effects to avoid
- Must specify processes and criteria relied on to define URs

Sustainable Yield: Maximum pumping that avoids URs

Framework for Key SGMA Definitions
Sustainable Management Criteria (SMC)



Minimum threshold (MT): Numeric value for each sustainability indicator used to define when undesirable results occur.

Measurable objectives (MO): Specific, quantifiable goals to maintain or achieve Basin's sustainability goal.

Interim milestone (IM): Target value representing measurable groundwater conditions, in increments of 5 years.

Challenges to Defining the SMC
Data Gaps

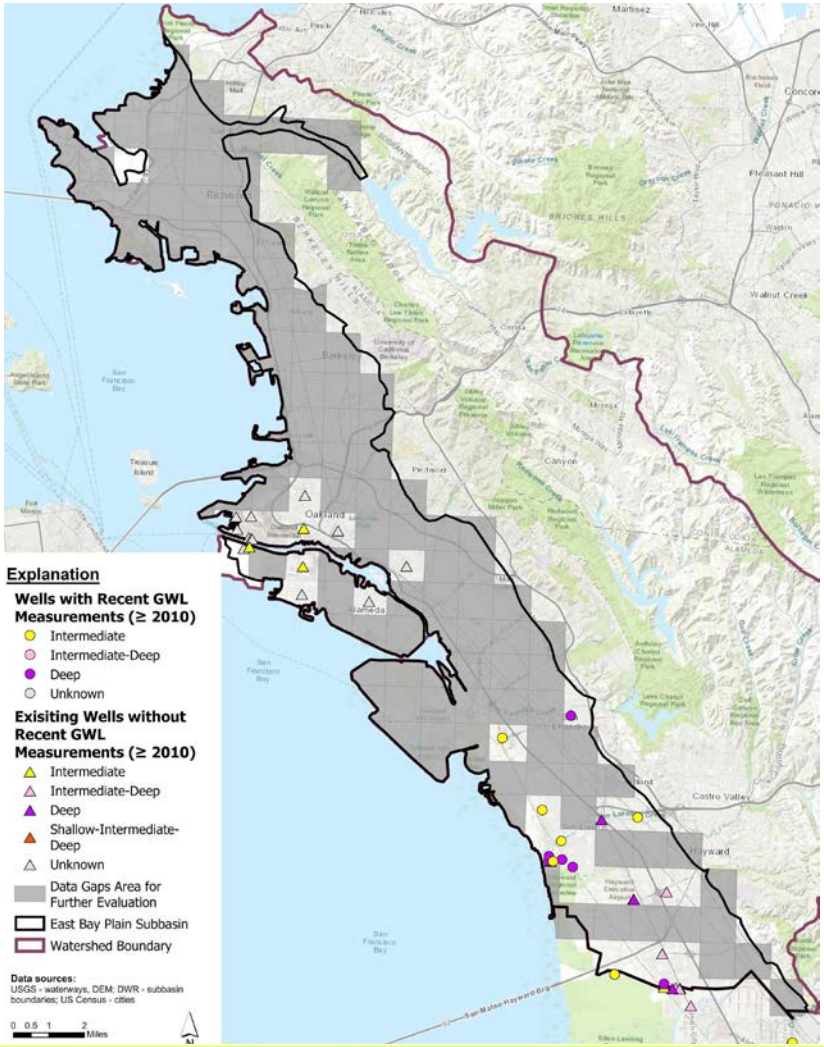
Limited data

- Historical GW levels
- North and transition zone
- Water quality
- Shallow chloride concentrations

No data

- Depletion of interconnected surface water

Example Data Gap: Water Levels > 200 feet



Challenges to Defining the SMC
Potential Representative Monitoring Sites (RMS)

- Up to 30 wells in 14 locations
- Not all wells exist yet
- Existing wells in Port of Oakland Area may be available

Approach to Developing SMC

- **Manage and protect the EBP Subbasin (i.e., do not cause undesirable results)**

- **Decisions and future projects driven by data and science**
  - Understanding development potential within the sustainable yield

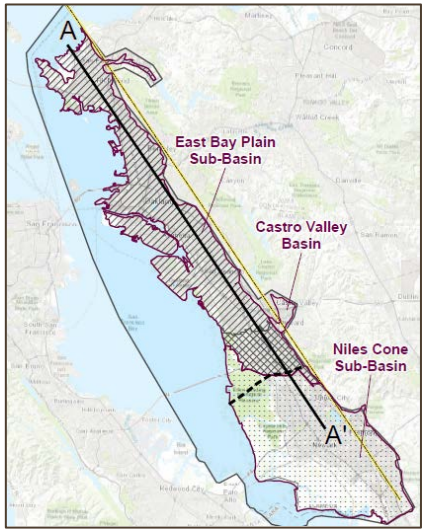
Continued stakeholder engagement and involvement

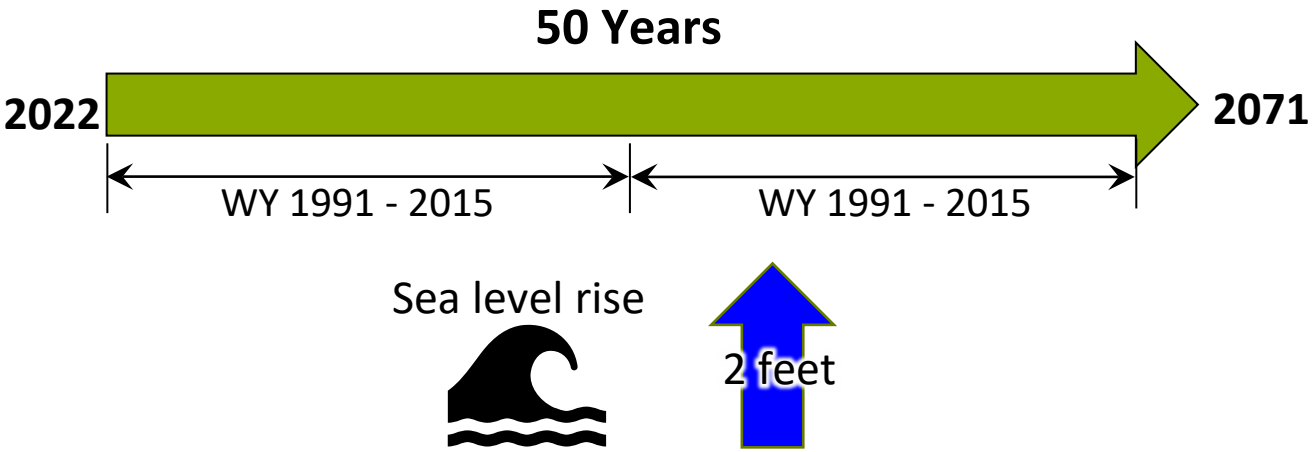
SMC criteria to be updated as data gaps are filled

- **Continue evaluating opportunities to diversify water supply portfolio with groundwater**

Future Scenario

Baseline with Existing Pumping





- EBP Subbasin pumping based on 2002 – 2015
- Niles Cone Subbasin pumping based on average from 2011 – 2020

- Level of development consistent with approved land use plans

Future Scenario

Baseline with Future Pumping

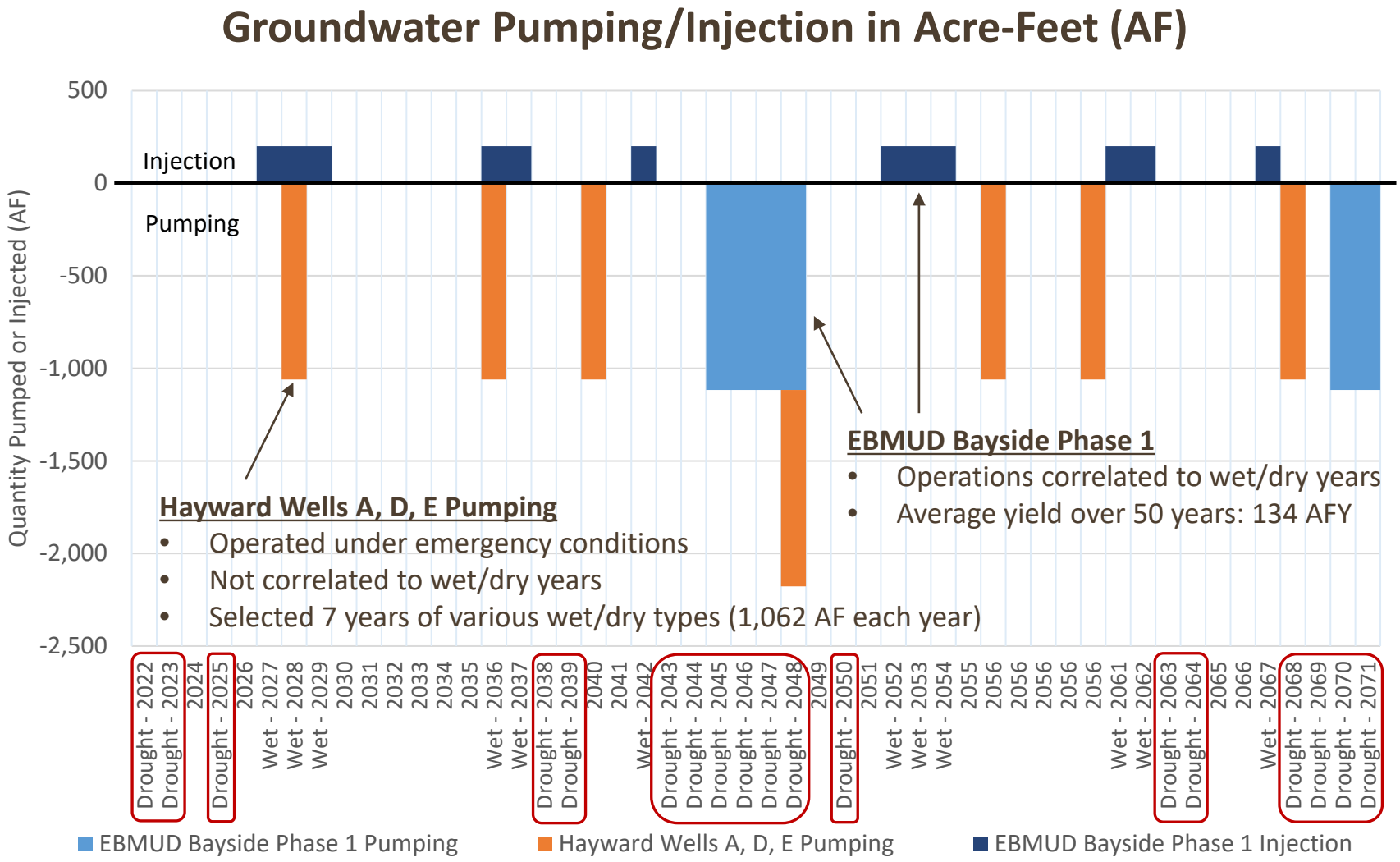
"Reasonably occur to meet water demands"

EBMUD Bayside Phase I

Hayward Emergency Wells

Future Scenario

Baseline with Future Pumping



Future Scenario

Potential Future Projects Pending Data & Science

EBMUD

Future Bayside

- Multiple phases as described in the UWMP

Park Irrigation

- Serve large parks currently on distribution system
- Distributed across basin
- Avoids distribution system water quality concerns

Chabot Recovery

- Portion of dry year stream releases met w/ groundwater
- Pump groundwater from intermediate aquifer zone

Future Scenario

Potential Future Projects Pending Data & Science

Hayward

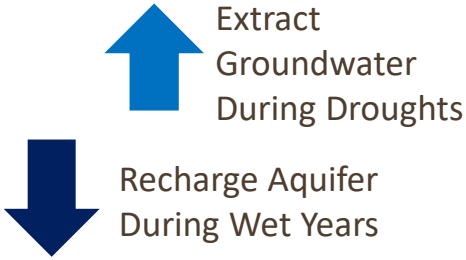
Well Conversion Study

- Evaluate conversion of Hayward emergency wells to drought supply wells (i.e., treatment, aquifer & system hydraulics, permitting, etc.)

Stormwater Resource Evaluation

- Evaluate potential for capture, detention, and recharge of stormwater

Conjunctive Use



- Study to evaluate conjunctive use opportunities in the Hayward GSA area

Example Management Actions

- **Monitoring**
  - Groundwater levels
  - Groundwater quality
  - Install additional wells
  - Existing extensometer network for land subsidence
  - Implement data management system

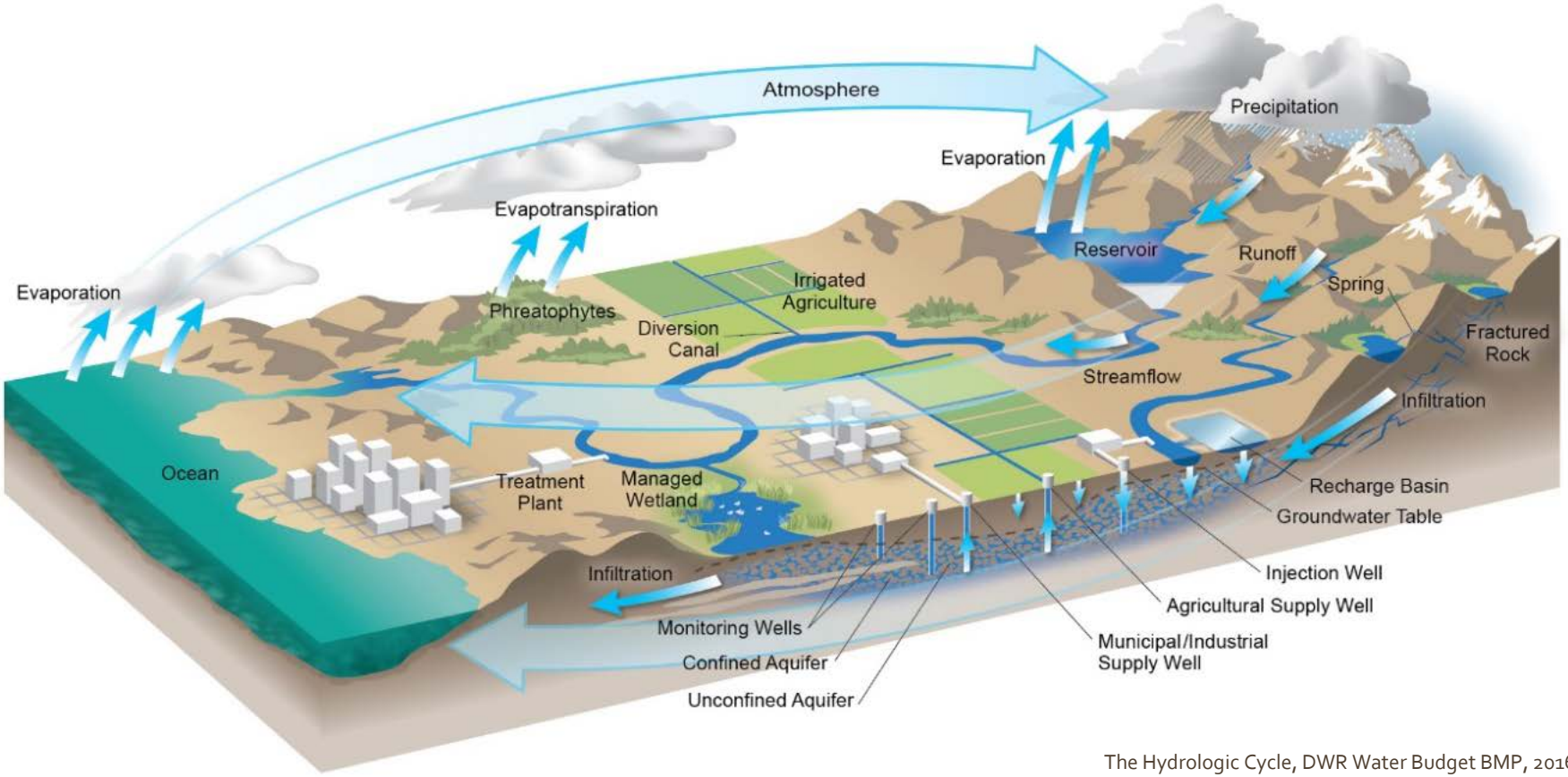
- **Interconnected surface water characterization**
  - Streamflow measurements
  - Install stream gages & shallow wells
  - Isotopic sampling
  - Habitat surveys

Next Steps

- **Define undesirable results**
- **Define sustainable management criteria**
- **Continue drafting the Plan**
- **Future meetings**
  - Technical Advisory Committee: July 14
  - Stakeholder C&E Meetings: August 16 and October 20

C&E: Communication & Engagement

Questions



The Hydrologic Cycle, DWR Water Budget BMP, 2016