

SCV  
GSA

# Draft Technical Memo for GSP Projects and Management Actions

MEMBER AGENCIES



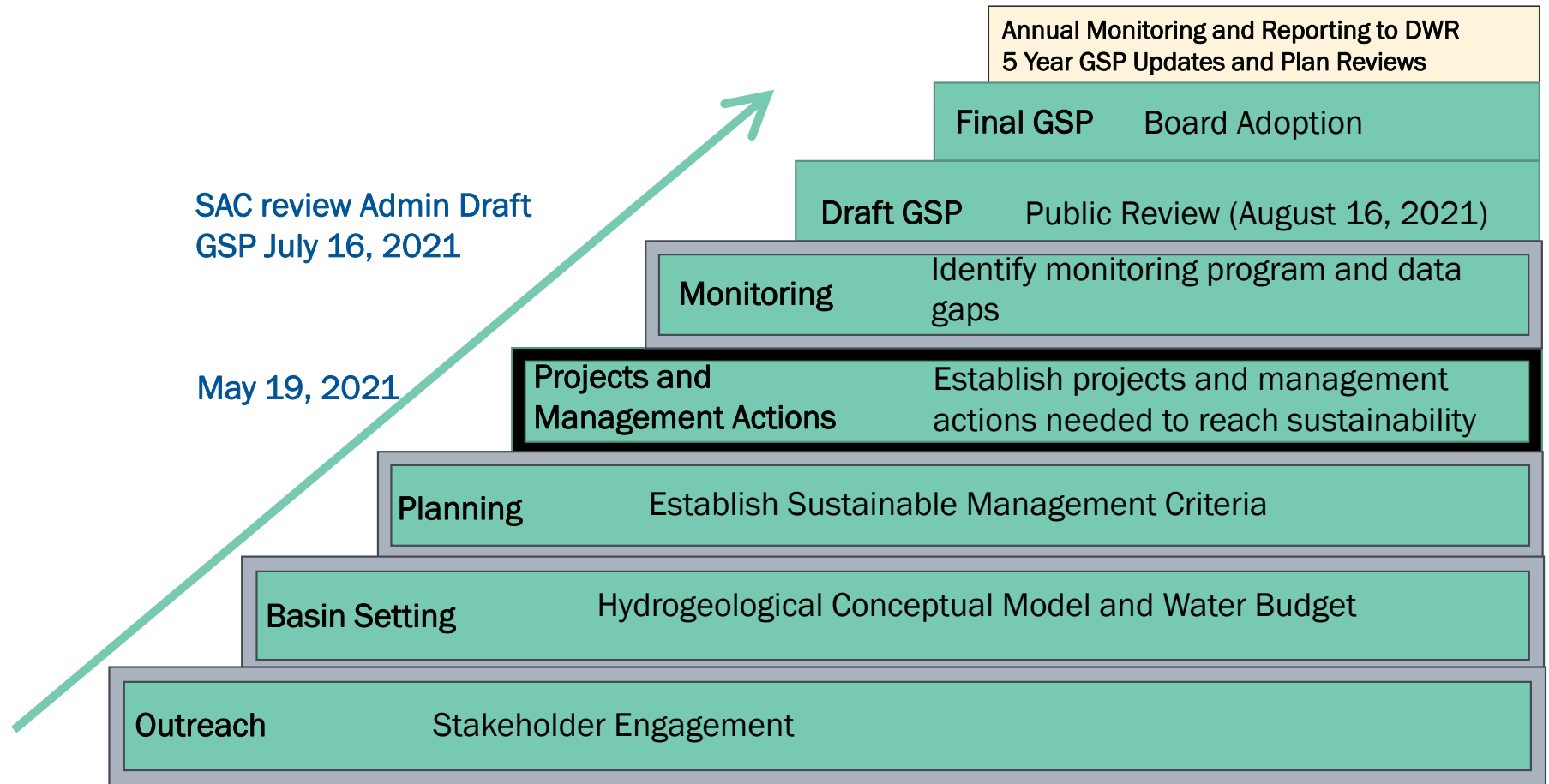
Rick Viergutz/SCV Water  
Jeff Barry/GSI Water Solutions

May 19, 2021

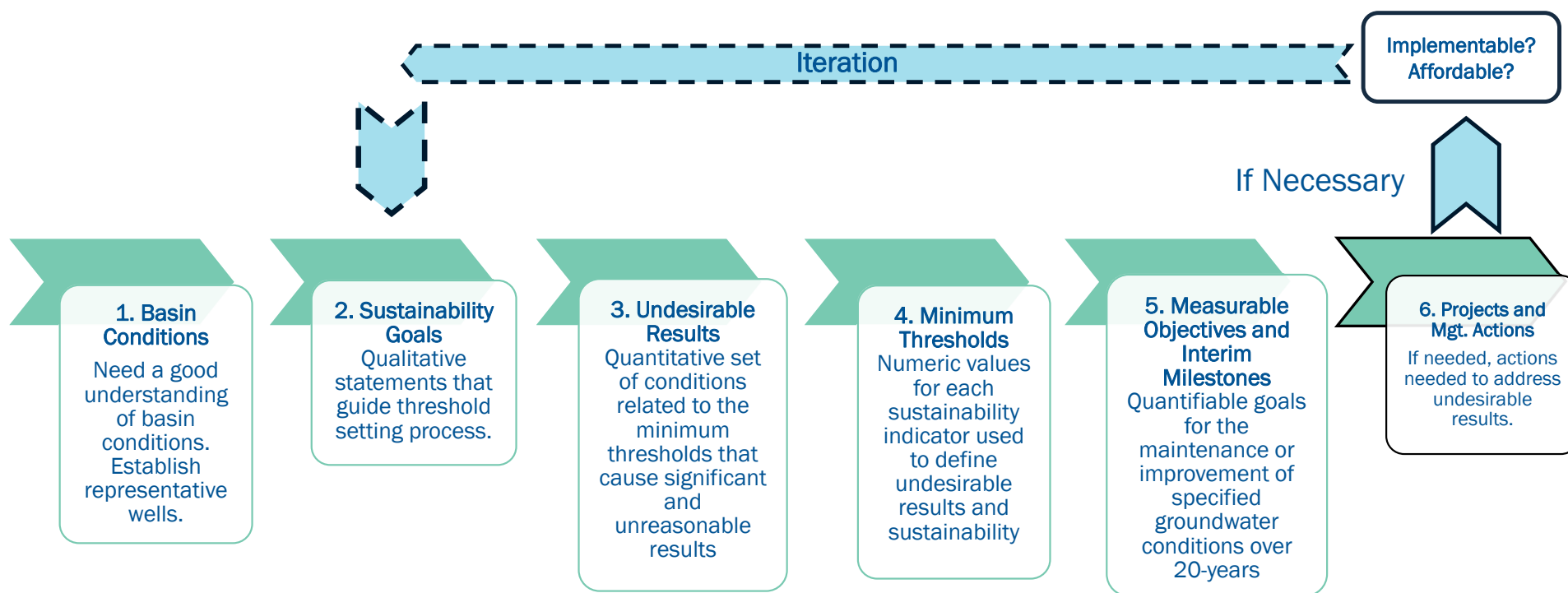
# Today's Meeting Topics

- Review GSP development process
- Review Basin Wide Management Actions
- Review Examples of Management Actions and Projects use
- Discussion

# Activities Leading to an Accepted GSP



# Sustainable Management Criteria (SMC) Development Process



# Overview

- The Draft TM Describes
  - Key information about the basin, wells, and the potential for undesirable results during GSP implementation.
  - Steps that will be taken to improve sustainability (such as filling in data gaps and with monitoring and analysis) and how responses to the potential for undesirable results work.

# Basin Wide Management Actions

- Addressing data gaps
- Monitoring, reporting, and outreach
- Promoting best water use practices
- Actions if Minimum Thresholds are reached
- Actions if GDE Action Triggers are reached
- Other management actions and projects

# Addressing Data Gaps

- Certain actions and projects to fill data gaps proposed
  - Installation of piezometers
  - Elevation Survey
  - Domestic Well Water Quality
  - Monitoring land surface for subsidence

# Monitoring, Reporting, and Outreach

- Despite the many monitoring programs in place in the basin, some new monitoring is necessary to fill data gaps
  - Domestic water quality monitoring
  - GDE monitoring
  - Subsidence monitoring
  - Groundwater extraction data from non-*de minimis* well owners



# Promoting Best Water Use Practices

- The GSA will support the existing and future conservation programs by municipal water providers
- The GSA will perform outreach to private well operators regarding water conservation

# Basin Wide Management Actions

- Addressing data gaps
- Monitoring, reporting, and outreach
- Promoting best water use practices
- Actions if Minimum Thresholds are reached
- Actions if GDE Action Triggers are reached
- Other management actions and projects

# Actions if Minimum Thresholds are Reached

- The cause will be evaluated
- If the cause is due to groundwater extraction and/or the trend indicates that undesirable results are imminent then management actions would be called upon.
  - Recall that undesirable results are defined by exceeding minimum thresholds for a certain number of monitoring points over a certain period of time.

# Drought and GSA Response

- The relative effect of drought v. pumping on water levels may be complex.
- If water levels fall below MTs, an evaluation is performed
  - If water level decline during drought is expected to reverse before undesirable results are reached, the GSA may defer implementing management actions and reevaluate later. However, if the downward trend toward undesirable results continues then management actions would be implemented.

# Actions if Minimum Thresholds are Reached

- Chronic Lowering of Groundwater Levels and Reduction in Storage
- Depletion of Interconnected Surface Water
- Degraded Water Quality
- Subsidence

# Actions if Minimum Thresholds are Reached

- Chronic Lowering of Groundwater Levels and Chronic Reduction in Storage
  - Evaluate Cause
  - Evaluate Trend
  - If Undesirable Results are anticipated, then management actions taken.
- Management Actions Include
  - Redistribute or reduce pumping
  - Additional surface water releases from Castaic Lake
  - Import additional State Water Project and/or banked water
  - Implement tiered water conservation measures for the basin

# Actions if Minimum Thresholds are Reached

- Depletion of Interconnected Surface Water
  - Minimum thresholds shared with criteria for
    - Chronic Lowering of Groundwater Levels
    - Chronic Decline in Storage
  - Management actions same as with Chronic Lowering of Groundwater Levels and Chronic Depletion in Storage
- Primary focus with this indicator is with Groundwater Dependent Ecosystems (more slides on this later)
  - Special GDE Monitoring and Evaluation Program
  - Includes Triggers based on Historic Lows

# Actions if Minimum Thresholds are Reached

- Degraded Water Quality
  - Evaluate Cause
  - Evaluate Trend
  - Consult with regulatory agencies
  - If Undesirable Results are anticipated, then management actions taken.
- Management Actions Include
  - Review alternatives to improve groundwater quality
  - Work with affected groundwater users to deploy well head treatment systems
  - Arrange for alternate water supply
  - Shift pumping to other locations, and/or
  - Reduce or stop pumping near the affected area



# Actions if Minimum Thresholds are Reached

- Subsidence
  - Evaluate Cause
  - Evaluate Trend
  - If Undesirable Results are anticipated, then management actions taken.
- Management Actions are same for Chronic Lowering of Water Levels
  - Redistribute or reduce pumping
  - Additional surface water releases, such as from Castaic Lake
  - Import additional State Water Project and/or banked water
  - Implement tiered water conservation measures for the basin

# Actions if GDE Triggers are Reached

- Use of triggers based on historic low groundwater elevations
  - One location has trigger 2 feet higher
- Evaluation Process Takes Place
  - Includes 6 steps
  - Results in Evaluation Report and Communication to GSA BoD
- Management actions may be called upon
  - Redistribute pumping (shift and/or stop pumping)
  - Increase imported water
  - Water conservation
  - Outreach to private well owners
  - Evaluate additional projects

# Other Management Actions and Projects

- Ongoing Agency Coordination
- Removal of Invasive Species
- Optional Managed Aquifer Recharge Projects
  - Improve drought resiliency
  - Old Castaic School Site/Potential Eastern Recharge
  - Potable water in vicinity of Placerita Nature Center
  - Off Stream Recharge with Recycled Water
  - Aquifer Storage and Recovery

# Next Steps

- Next steps include public workshop on the Draft Management Actions and Projects TM, and workshop wrap up with your committee.
- Release of admin draft GSP to your committee in July.
  - We will describe key changes from older drafts in that transmittal.

# • Questions/Discussion