Conceptual Projects and Actions Considerations Reminder

The **need for potential projects and management actions** is primarily driven by the **development and future monitoring of SMCs**

The **projected water budget** and output from the 50-year model scenario ***provide us insights into***:

- How the basin may respond to **future conditions under a wide range of climate patterns** including an extended wet period and a severe drought (i.e., “stress tests”)
- **General types, size and locations of potential projects and actions** that may be needed or considered as contingencies to achieve or maintain sustainability based on SMCs

Potential Grouping of Conceptual Projects Actions:

Potential grouping/sequencing of Project and Action Scenarios:

1. Existing planned projects and actions with identified potential funding sources, voluntary or incentive-based, and lower-cost projects and actions
2. New or significantly expanded projects/actions, more costly projects or as-needed mandatory actions (would be more focused geographically and informed by simulation results from Group 1 Projects/Actions) – ***Based on initial evaluation of Baseline Scenario, Group 2 scenario simulations will likely not be necessary to demonstrate that sustainable conditions will be maintained.***

Proposed Scenarios:

Baseline Scenario evaluation

Scenario 1: Simulate all Group 1 together – evaluate

Potential Criteria for Evaluating Model Scenarios:

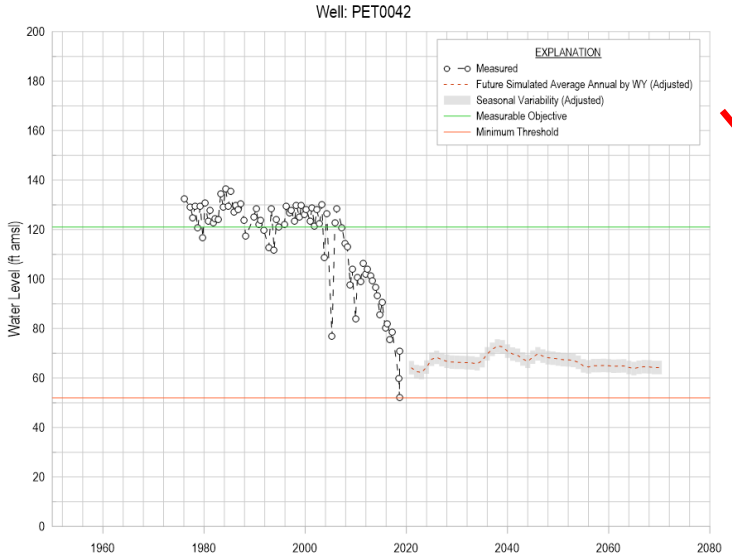
Primary Criteria

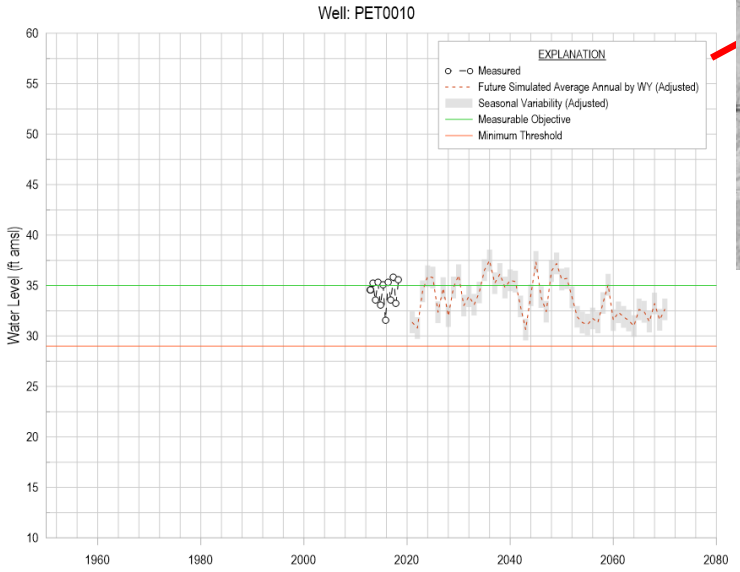
- GWL levels at GWL RMPs (compare with MTs/MOs/URs)

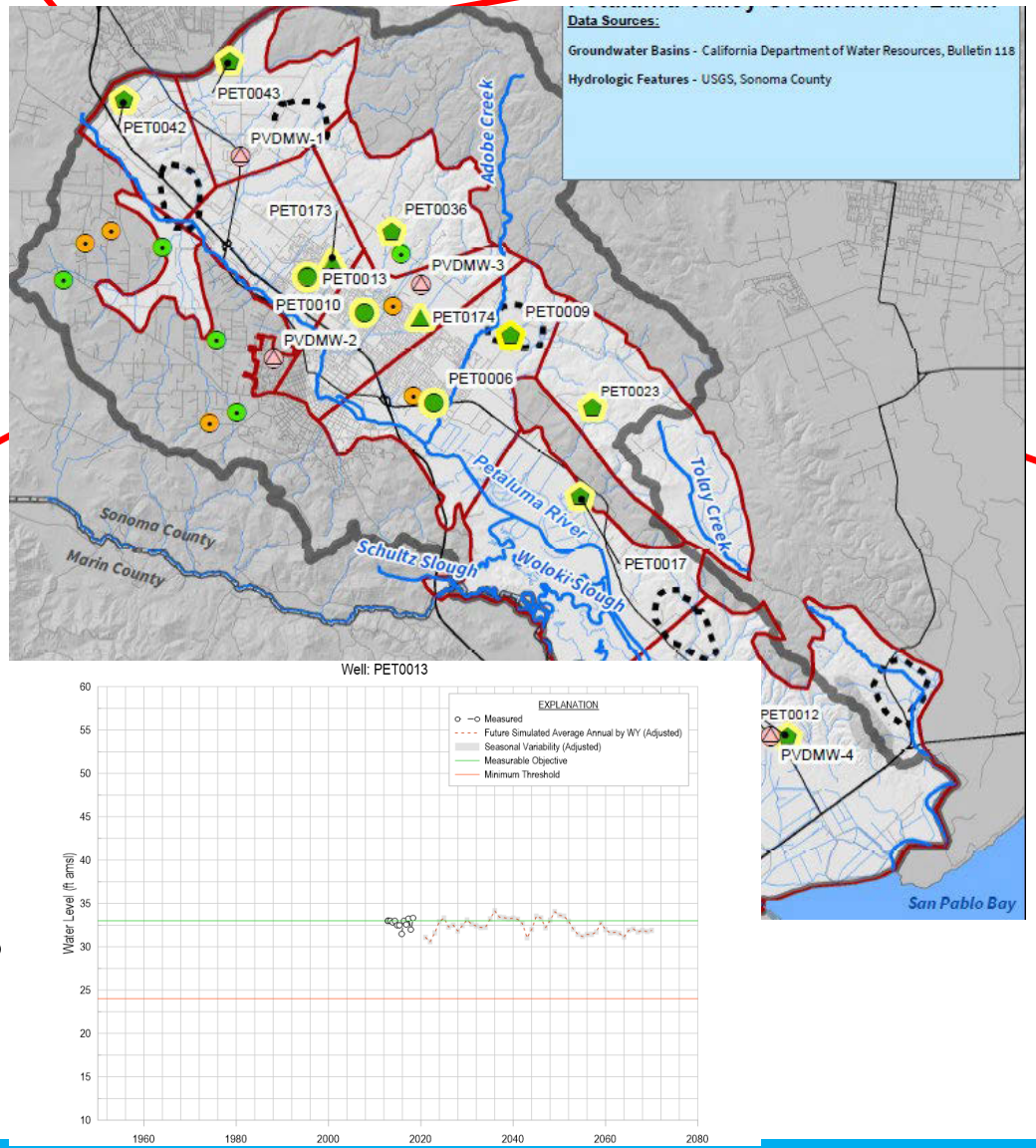
Secondary Criteria

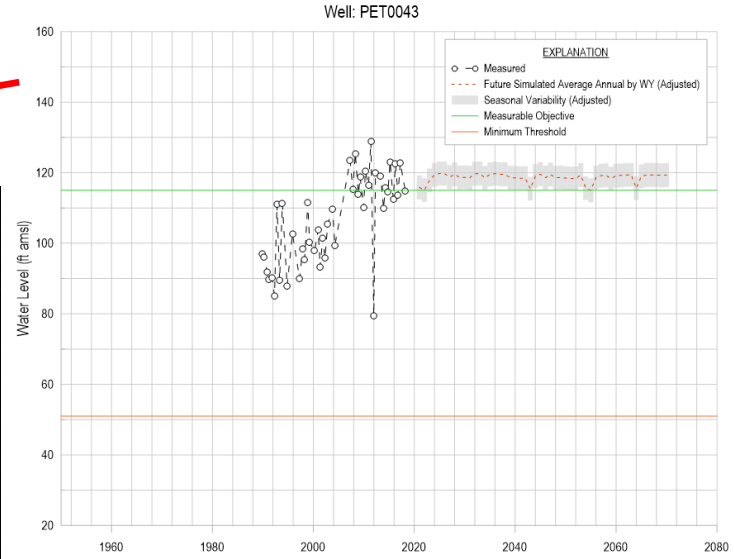
- Changes in Primary Water Budget Components:
  - Storage
  - Net SW-GW exchange
  - Subsurface inflows from Baylands area
- Contours of change in GWLs to assess spatial impacts of PMAs

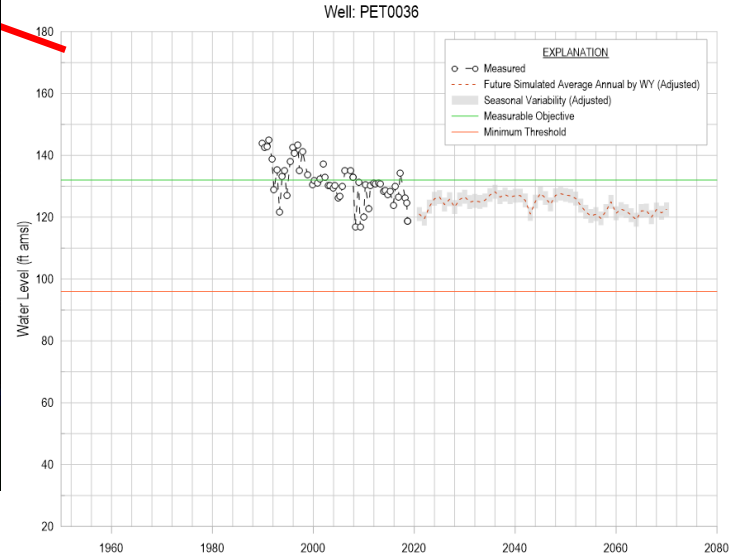
Hydrographs of Projected Simulated Groundwater-Levels at RMPs











Proposed Projects Actions for Model Scenarios:

Group 1 Projects and Actions

- Voluntary/incentive-based Conservation and Water Use Efficiency or alternate water source programs (eg, rural residential and agricultural programs)(1)
- Expanded Recycled Water for irrigation in lieu of groundwater (planned alignments/upgrades for agricultural and landscaping uses)

(1) Conservation and alternate water sources include smaller-scale dispersed land-owner projects, such as turf removal, rain-water harvesting, stormwater capture/reuse, etc. **The exact types of these dispersed projects are not-distinguished for the purposes of evaluating potential benefits using model scenarios.**

Additional Projects and Actions can be described Conceptually in GSP with plan to further study

- Stormwater recharge (detention basins, on-farm recharge, etc.)
- Groundwater Banking/Aquifer Storage and Recovery (ASR)
- Further expansion of recycled water deliveries

Next Steps for Projects/Actions

1. Develop and simulate Group 1 scenarios and evaluate results

2. Identify and prioritize conceptual projects and management actions for inclusion in the GSP

Questions/Discussion