

# WRMWS D Management Area Plan Summary

## 1) Sustainability Goal

### WRMWS D'S LOCAL "SUSTAINABILITY GOAL"

The sustainability goal for the Wheeler Ridge-Maricopa Management Area is to maintain an economically-viable groundwater resource for the beneficial use of the Management Area's landowners and water users by utilizing the area's groundwater resources within the local sustainable yield.

Long-term groundwater sustainability, i.e., the absence of undesirable results within 20 years of the applicable statutory deadline, will be achieved and maintained through the implementation of projects and management actions as described herein to both increase water supplies and reduce demands within the Management Area.

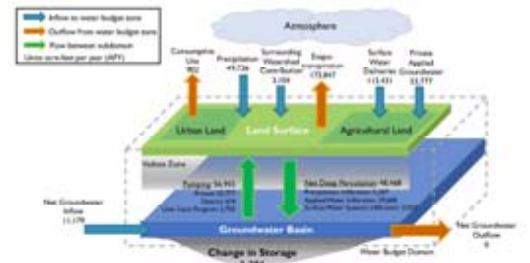


## Position - Positive / Negative Balance

### LOCAL WATER BUDGET

- Calibrated science/physics-based spreadsheet model based on actual data and measurements
  - Sustainable yield estimated to be ~60,300 AFY
- Historical water budget: Annual change in groundwater storage +3,286 AFY
- Projected (50-year) water budget:

Scenario	Estimated Annual Change in Storage *
Baseline (No climate change)	-14,665 AFY
2030 Climate Change Conditions (Moderate climate change effects)	-21,429 AFY
2070 Climate Change Conditions (High climate change effects)	-33,326 AFY



Illustrated Historical Water Budget (WY 1995-2014)

\* Projected Water Budget Results in the Absence of Projects & Management Actions; deficit due to reduced imported surface water supplies and climate change assumptions

WRMWS D will continue to serve surface water to those lands within the overlap area that have contracts with and have historically received water from WRMWS D.



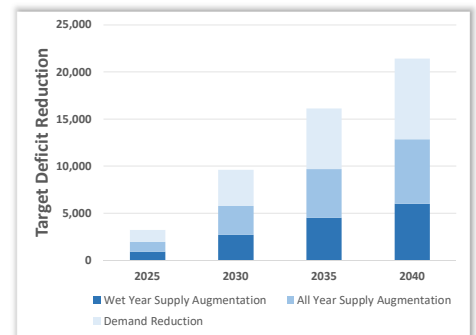
## 2) Management Projects / Action Plans -

Provide short description and time schedule as well additional water supply/ demand reduction. Also, provide a concept of a Plan B if the projected management projects/ actions do not achieve goals set or are delayed

## Glide path - timeline

### PROJECTS AND MANAGEMENT ACTIONS

- P/MAs address deficit due to reduced imported water supplies and climate change assumptions
- Supply Augmentation
  - Projects to Enhance Recharge/Banking
  - Projects to Increase Water Management Flexibility
  - Projects to Develop New Supplies
- Demand Reduction
  - Management Actions to Raise Funds to Support SGMA Compliance
  - Management Actions / Policies to Reduce Groundwater Pumping

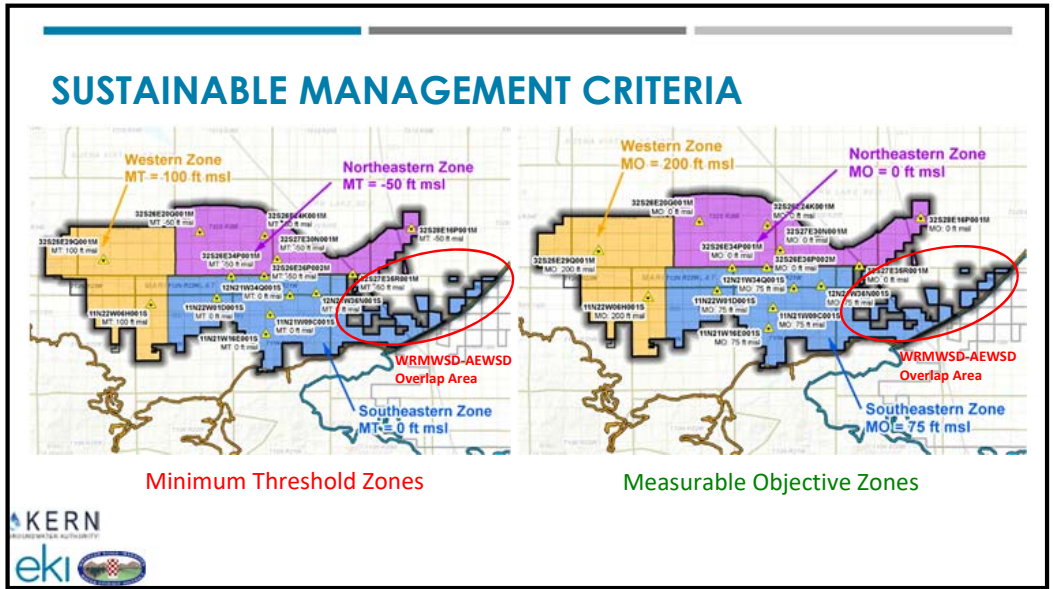


2040 "Glide Path" for P/MA Implementation

Trigger for accelerated P/MA implementation if MTs exceeded in 20% of representative monitoring sites



3) Brief discussion on your checkbook / management / minimum thresholds & measurable objectives



### SUSTAINABLE MANAGEMENT CRITERIA

Sustainability Indicator	Evaluation
Chronic Lowering of GW Levels	<ul style="list-style-type: none"> <li>Initial MTs were calculated at each long-term hydrograph well site considering historical lows, recent 10-year groundwater level trends, and the variability or range in groundwater levels.</li> <li>Initial MOs were set based on Fall 2015 levels.</li> <li>Estimates were then generalized into three Sustainability Zones.</li> <li>URs are defined as 40% or more of monitoring sites exceeding MTs over a two-year period.</li> </ul>
Reduction of GW Storage	<ul style="list-style-type: none"> <li>MOs/MTs for lowering of groundwater levels will be used as a proxy.</li> </ul>
Seawater Intrusion	<ul style="list-style-type: none"> <li>No saltwater bodies are present near the Management Area. Therefore, no MOs/MTs have been developed for this indicator.</li> </ul>
Degraded Water Quality	<ul style="list-style-type: none"> <li>No MTs/MOs have been developed for this indicator, as other regulatory programs address water quality issues (e.g., SWRCB, ILRP, CV-SALTS)] and MTs for Chronic Lowering of GW Levels are anticipated to be protective in preventing migration of poor-quality water;</li> <li>Annual monitoring of water quality constituents of concern will continue at select representative monitoring sites through SGMA implementation</li> </ul>
Land Subsidence	<ul style="list-style-type: none"> <li>MTs/MOs have been developed for a set of DWR survey benchmark locations along sections of the California Aqueduct within the Management Area</li> <li>The MT is set at the maximum rate of subsidence observed at these benchmark locations from 1993-2013. The MO set at is half of that rate.</li> </ul>
Surface Water Depletion	<ul style="list-style-type: none"> <li>No interconnected surface waters are present in the Management Area. Therefore, no MOs/MTs have been developed for this indicator.</li> </ul>

Trigger point for undesirable results / MTs

