

**Water Budget: KGA “Checkbook” Approach**

- To reconcile the Subbasin’s C2VSim groundwater model (the Model) with the water budget components described by each of the individual management area plans, the KGA coordinated with its members to develop a “Checkbook” water budget which describes the baseline portion of water budget components for each of the plan areas.
- It is acknowledged that the Model is not fully calibrated, due to data gaps and will be continuously improved as SGMA is implemented.
- The baseline of the Model does not capture SSJMUD’s recent (post-2015) activities with respect to increased groundwater banking in the Subbasin. These projects will be accounted for in the data provided to KGA for the annual reporting to DWR.

	KGA “Checkbook”
Irrigated Area (acres)	50,496
<b>TOTAL INFLOW (AFY)</b>	<b>133,278</b>
<b>TOTAL OUTFLOW (AFY)</b>	<b>149,835</b>
IMPLIED CHANGE IN GROUNDWATER STORAGE (AFY):	
	-16,557

**Achieving Sustainability in 2040**

The Projects proposed by SSJMUD are anticipated to result in an increase in water supply (through increased imports or water savings) by an average of 14,370 AFY. These projects include additional in-District recharge, additional groundwater banking in partnership with other Kern County Subbasin districts, and improvements to conveyance for capacity return water already banked in the Subbasin.

Management Actions proposed by the District are projected to result in an average demand reduction of 7,550 AFY. Proposed Management Actions include land use conversion (from permanent recharge basins and spreading grounds, conversion of land from agricultural use to urban and industrial uses, urban water conservation (required by AB 1668/SB 606), and the development of an in-lieu recharge program to encourage growers to use available surface water rather than pumping groundwater to meet their demand.

The combination of Projects and Management Actions for SSJMUD is projected to result in average water budget surplus of at least 500 AFY by 2030. By 2070, SSJMUD’s projected average surplus is at least 700 AFY. Projects are already underway to develop, design, and construct additional in-District recharge facilities and improvements to conveyance for capacity to return banked water to SSJMUD.

**Sustainable Management Criteria**

Groundwater level Measurable Objectives (MOs) for the representative monitoring sites are the projected groundwater elevations for 2030, based on the hydrologic trends for 2006 to 2016. The Minimum Thresholds (MTs) are the projected groundwater elevations for 2040, based on the same trends as the MOs. These SMCs were established in coordination with neighboring districts and can be re-evaluated and revised during SGMA implementation.

Groundwater levels are used as a proxy for reduction of groundwater storage. Qualitative SMCs were established for degradation of water quality and land subsidence, in addition to using groundwater levels as a proxy for these Sustainability Indicators. Monitoring of these indicators may lead to the eventual establishment of numerical SMCs for water quality and/or land subsidence in subsequent plan updates, in coordination with other KGA members and the Subbasin at large.



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Based on the results of the Subbasin Model, the District’s projects and management actions are projected to result in the groundwater levels at the representative monitoring sites above the MOs, thus complying with SGMA.

### **Stakeholder Outreach**

SSJMUD engaged in the following outreach activities during the development of the Public Draft of its plan, and during the Public Comment period:

Monthly KGA Stakeholder Coordination Meetings	SGMA Update at Monthly SSJMUD Board Meetings	KGA SGMA Open House (5/14/19 and 9/26/19)
SSJMUD Stakeholder Outreach Meeting (4/29/19)	SSJMUD Stakeholder Outreach Follow-up (5/2/19)	SSJMUD Stakeholder Outreach Meeting (10/8/19)

SSJMUD and its consultant also met with growers and representatives from the cities of Delano and McFarland, when requested. The District’s “Open Door” policy was conducive to communication and engagement with stakeholders in the plan area.

### **Comment Letters Received**

The district received three comment letters during the 90-day Public Comment period pertaining to its management area plan. The District’s responses to these letters are summarized in its Comments Response matrix, included in the management area plan as an appendix. Some of the comments provided resulted in revisions to the Public Draft of the Management Area Plan.

### **Revisions Made to SSJMUD Management Area Plan**

In response to the letters received by the District, clarification of the purpose of the water budget and definitions of the water budget components were made. Further clarification of the proposed projects and management actions was also provided in response to the comment letters.

Revisions made to the plan that were not related to comment letters provided to SSJMUD include:

- Revision of Water Budget section (Section 2.5 of the SSJMUD plan) to include the coordinated KGA Checkbook budget,
- Clarification of Potential Causes and Potential Effects of Degraded Water Quality in the Plan Area (Section 3.2.3 of the SSJMUD plan),
- Addition of City of McFarland’s Taylor Ave well as a representative monitoring site, and
- The addition of two Management Actions (Refinement of Water Budget Components and Mitigation of Potential Impacts to Domestic Wells)