

Westside District Water Authority (WDWA)

1.0 WDWA Checkbook:

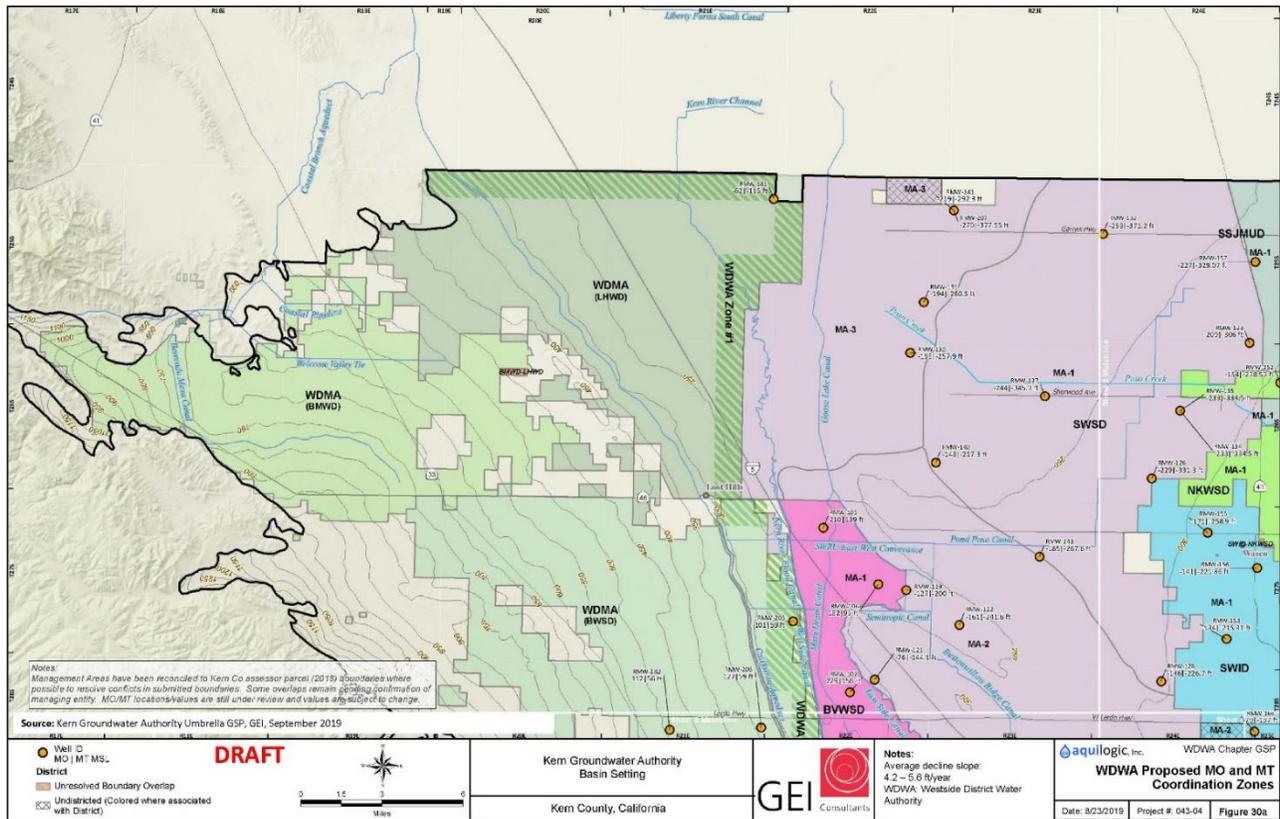
Water Type	WDWA Current	KGA Current
Total Supply (AFY):	318,167	1,683,128
Total Demand (AFY):	285,000	1,939,409
Surplus (AFY):	33,167	-256,281

2.0 Management Projects and Timelines:

- 1. Collect Representative Hydrogeologic Data:** Acquire sufficient groundwater data to assess groundwater trends in the WDWA. Groundwater elevations will be used as a proxy to determine groundwater change in storage. This PMA will be implemented beginning in the first five-year reassessment period. The data collected during this time period will allow for the development of adaptive management strategies that may be necessary.
- 2. Water Resource Coordination:** Growers in the WDWA have historically made significant investment in efficient irrigation technologies and land management methods that promote water conservation and sustainability. The WDWA will continue to work cooperatively in close consultation with landowners, the KGA and adjacent GMAs to coordinate groundwater resource monitoring, testing, and future water trading and development to meet sustainability goals. This PMA will be implemented beginning in the first five-year reassessment period.
- 3. Conjunctive Reuse of Brackish Groundwater:** Evaluate the feasibility of an innovative, phased project that will integrate the harvesting, treatment and conjunctive use of naturally degraded brackish groundwater underflow (estimated 60%) and the reuse of oilfield produced water (estimated 40%) for multiple beneficial uses. Phase 1, the feasibility study, will be completed during the first five-year reassessment period (by 2025). If determined to be viable, and funding is available, the initial phase of facility construction and treated water production would be completed by 2030. Phase 2, of facility construction to provide for increased treated water capacity would be completed between 2035 and 2040.

3.0 MTs and MOs: The MT/MOs are based on three representative well hydrographs and one C2VSim simulation. The number and location of MT/MO monitoring locations will be reexamined based on data collected from the monitoring network (MNP) during the first five-year reassessment period. The three sustainability indicators that require monitoring and/or MT/MOs are: **1.)** Chronic lowering of groundwater levels, **2.)** Reduction of groundwater in storage; and **3.)** Potential for localized land subsidence. Degraded groundwater is a naturally occurring phenomenon and therefore is outside the control of the WDWA. However, planned MNP monitoring will help further quantify this condition. The current MT/MO monitor locations are purposefully sited to monitor the boundaries (northeast and east) of the WDWA where modeled groundwater underflow exits the WDWA towards the downgradient former bed of Lake Tulare and the axis of the basin. The groundwater underflow leaving the WDWA is a natural condition that is beyond WDWA control. The preliminary WDWA regional MT/MO monitoring well (RMW) locations are:

- RMW-181-WDWA, 25S21E-01R01: **MT:** -62ft. below MSL, **MO:** -115 ft. below MSL,
- RMW-203-WDWA, 27S22E-30: **MT:** 101ft. above MSL, **MO:** 59ft. above MSL,
- RMW-182-WDWA, 28S21E-16 **MT:**112 ft. above MSL, **MO:** 56 ft. above MSL, and
- RMW-206-WDWA, 28S21E-13H **MT:**127 ft. above MSL, **MO:**59 ft. above MSL.



4.0 Public Outreach: In addition to maintaining the WDWA website which houses the latest GSP Chapter Drafts and upcoming board meeting dates, the WDWA has participated in several SGMA/Draft GSP public outreach events to inform the public and stakeholders about SGMA and the content of the WDWA GSP chapter. The outreach meeting/event activities afforded the WDWA the opportunity to solicit comments and answer questions posed by the public and stakeholders during the SGMA GSP process. The meeting/event dates were: **1.** KGA Public Workshop 5/14/19, **2.** WDWA Board Meeting 6/5/19, **3.** WDWA Board Meeting 8/21/19, **4.** KGA Public Workshop 9/26/19 **5.)** WDWA Board Meeting(s) 12/9/19, **6.)** KGA public Board Meetings on 8/28/19 and 12/18/19. Staff has also been giving close to monthly updates at the board meetings of WDWA and its three districts: BWSD, BMWD, and LHWD. It should be noted that the WDWA does not supply groundwater for municipal supply.

5.0 Public Comment Letters: The WDWA received one direct comment letter (Wonderful Orchards) during the Draft KGA GSP 90-day public comment period. WDWA consultants discussed the letter with staff and Wonderful Orchards, and pertinent comments related to the WDWA were incorporated into the Final Chapter GSP. In addition, some verbiage identifying Lokern Ecological Reserve lands in the WDWA was added to address comments from the Department of Fish and Wildlife addressed to the KGA.

6.0 Revisions to the August Management Area Plan: Reflecting coordination with the KGA, adjacent GSAs, and stakeholder/beneficial user comments, the following are key revisions to the August 2019 WDWA Management Area Plan:

- Refinement/revision of the WDWA Checkbook. Specifically, estimates for total water demand for 2030 and 2040 were adjusted to more conservatively reflect potential changes in demand due to climate change. Current year Checkbook numbers were also updated based on the KGA Guidance Document. Native Yield was adjusted to 0.15 af/ac, precipitation to 0.20 af/irrigated ac (based on CIMIS stations in WDWA), and alternative water supply reduction to 37,714 AFY. It is important to note that current Checkbook alternative water supply conservatively

only reflects WDWA purchases from outside the basin and does not include WDWA intra-basin purchases/transfers or landowner's intra-basin exchanges.

- Refinement of the WDWA MT/MO regional monitoring well network by the addition of a fourth MT/MO monitoring location. Current hydrographs related to MT/MO monitoring are considered preliminary due to the lack of representative data in the WDWA, and additional MT/MO monitoring locations may be added based on data collected during the first reassessment period. Because of the limited amount of groundwater pumping in the WDWA (~3,000 AFY), the current MT/MO monitoring locations are purposefully sited to monitor the WDWA boundaries (northeast and east) where modeled groundwater underflow exits the WDWA.
- Incorporation of relevant data from the most recent KGA C2VSim-Kern model run. Specifically, updated WDWA Chapter GSP to show the KCS, as a whole, has a total storage deficit of approximately -324,326 AFY over the baseline period.
- Incorporation of relevant and applicable comments derived from public/stakeholder engagement, KGA discussions and recent comment letters. Previously cited examples include refinement of Checkbook inputs, and MT/MO monitoring locations.
- Incorporation of over 34,000 acres of white lands who have signed agreements with the WDWA for coverage in the GSP Chapter.