

NOTICE OF OPEN MEETING OF THE
SOUTH CENTRAL TEXAS
REGIONAL WATER PLANNING
POPULATION AND WATER
DEMANDS WORK GROUP

TAKE NOTICE that a meeting of the Population and Water Demands Work Group, as established by the South Central Texas Regional Water Planning Group (SCTRWPG) will be held on Thursday, January 19, 2023, at 1:00 PM both in person and virtually. The in-person meeting will be held at the San Antonio Water System's Customer Service Building, Room CR-145, 2800 US Hwy 281 North, San Antonio, TX 78212. You can attend virtually on WebEx at <https://saws.webex.com/saws/j.php?MTID=m179fa9eb1ccad8cd65db4dd70467af05>. The following subjects will be considered for discussion and/or action at said meeting.

1. Review Additional Draft Data from TWDB
 - a. Irrigation Projections and Supporting Data
2. Discussion and Appropriate Action Regarding a Recommendation for Feedback to TWDB

Comments and submissions may be submitted through email to ccastillo@sariverauthority.org. Any written documentation can be sent to Tim Andruss, Chair, South Central Texas Regional Water Planning Group, c/o San Antonio River Authority, Attn: Caye Castillo, 201 W. Sheridan Street, San Antonio, TX 78204. Please direct any questions to Caye Castillo at (210) 302-4258.

Agenda Item 1: Review Additional Draft Data from TWDB: Irrigation Projections and Supporting Data

Draft Water Demands: Irrigation

- Draft data released August 2022
- RWPG Responsibilities:
 - Review and submit revisions via consultant
 - Due to TWDB by **July 14, 2023**, but we can submit any time before then

Recap: Irrigation Demands

- Texas Water Development Board (TWDB) released draft 2026 water demand projections and supporting data (Draft 2026 Demands) in Aug 2022
- Region L Regional Water Planning Group (RWPG) received presentation on Draft 2026 Demands in Nov 2022
- Population and Water Demands (PWD) Workgroup reviewed Draft 2026 Demands data at a meeting in December 2022.

Direction from PWD Workgroup Meeting in December 2022

1. Does historical use incorporate forbearance programs for the Edwards Aquifer?
2. How does the 2021 Region L Regional Water Plan incorporate forbearance programs?
3. Compare County data for Frio, Medina, Uvalde and Zavala counties to TWDB numbers to assess accuracy.
4. Review and present various options for baseline using corrected historical use data, as needed. The 10-year average was favorable to the group in December 2022.
5. Maintain constant projected demands from 2030-2080

Recap: 2026 Draft Irrigation Methodology

Draft irrigation water demand projections for each region-county were developed based upon:

- The TWDB Agricultural Conservation department develops annual irrigation water use estimates at the county level:
 - Apply a calculated evapotranspiration-based "crop water need" estimate to reported irrigated acreage from the Farm Service Agency.
 - Adjust estimates based on surface water release data from the TCEQ and comments from groundwater conservation districts, irrigation districts, and river authorities.

1. Does historical use incorporate forbearance programs for the Edwards Aquifer?

- TWDB uses FSA acreage to estimate historical use
- TWDB provided FSA Acreage for 2014-2019
- For some counties within EAA, FSA acreage was lower in 2015, for others, higher
- Difficult to say if historical water use in 2015 is low because 2015 was a historically wet year
- Planted acreage is not necessarily lower due to these programs
- Looked into potential increases to historical water use resulting from additional acreage and increases were not significant

The combination of the fact that VISPO/ASR programs do not necessarily reduce planted acreage and that 2015 was a historically wet year that required less pumping makes it difficult to say that an increase to the 2015 historical water use is needed.

2. How does the 2021 Region L Regional Water Plan incorporate forbearance programs?

- Section 3.1.1 Drought-year groundwater availability of Edwards Aquifer is limited to 243,401 acft/yr (incl. exempt domestic and federal uses). Based on contractual obligations, Edwards Aquifer Authority Act (EAA Act), and Full implementation of the Edwards Aquifer Habitat Conservation Plan (EAHCP), which includes 4 flow protection measures:
 - Voluntary Irrigation Suspension Program Option (VISPO);
 - Municipal Conservation Program;
 - Emergency Stage V Critical Period Reductions; and
 - Aquifer Storage and Recovery (ASR) Program.
- Section 5.2.3: Edwards Transfers Water Management Strategy (WMS): Transfer supply potential (Edwards Aquifer irrigation rights to municipal and industrial uses for each county in EAA) limited by Full implementation of the EAHCP
- Chapter 6: Cumulative effects springflows based on simulated impacts of EAHCP
- Section 7.5.3: Recommended Triggers and Responses for Irrigation and Steam-Electric Uses
 - Review of EAA Critical Period/Drought Management Plan is recommended
- Section 8.1.1: Recommendation to TWDB to undertake studies that consider VISPO and other factors' impacts on estimating irrigation demands, supplies, needs, and WMSs

2021 RWP Incorporates these programs in the available supplies and as a WMS, along with other evaluations

3. Compare County data for Frio, Medina, Uvalde and Zavala counties to TWDB numbers to assess accuracy

- Requested data from Evergreen UWCD, EAA, Medina County GCD, Uvalde UWCD, Wintergarden GCD, and BMA.
- Did not receive sufficient data to create a complete picture, but it appears that in most cases, the TWDB numbers should not be considered underreported.
- Medina County had the most complete data and matched well, within 10% or less in nearly every year.

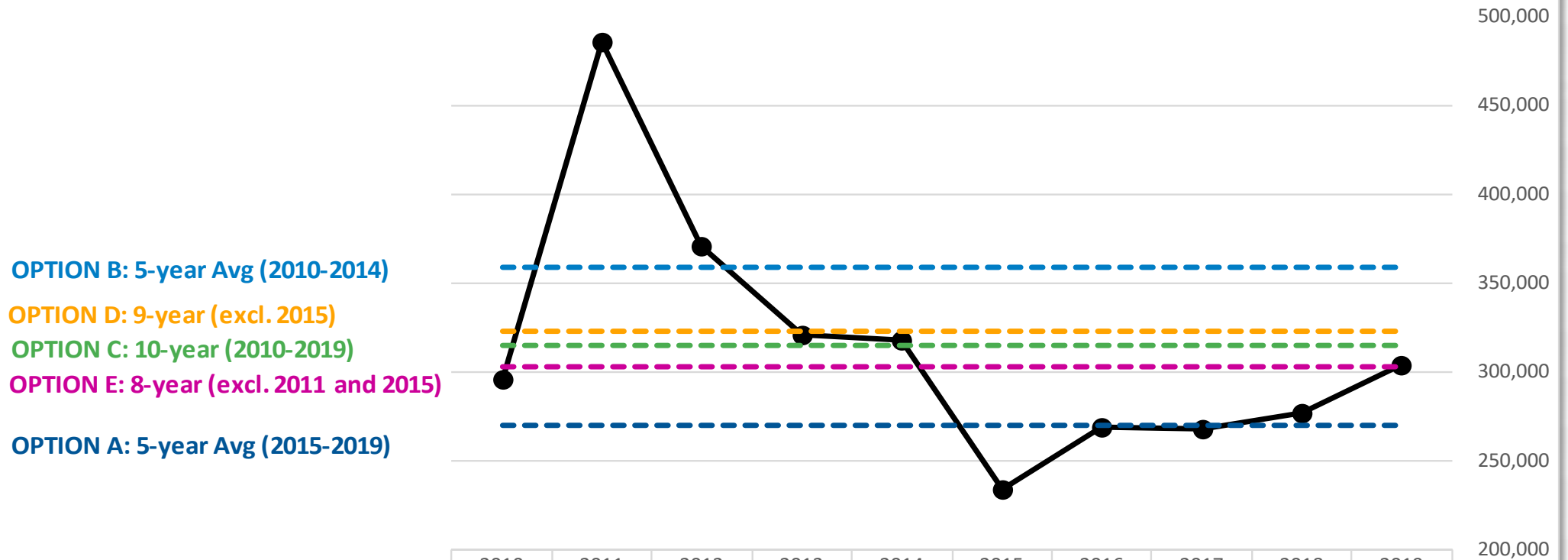
4. Review and present various options for baseline

2030 Demand

- **Option A** (current): No change from 2026 Draft Irrigation Projections from TWDB (2015-2019)
- **Option B**: Use 2021 RWP Irrigation Projections (2010-2014 average)
- **Option C**: Use most recent ten-years of TWDB water use estimates without revisions (2010-2019 average)
- **Option D**: 9-year average that excludes 2015 (wettest year)
- **Option E**: 8-year average that excludes 2015 (wettest year) and 2011 (driest year)

4. Review and present various options for baseline

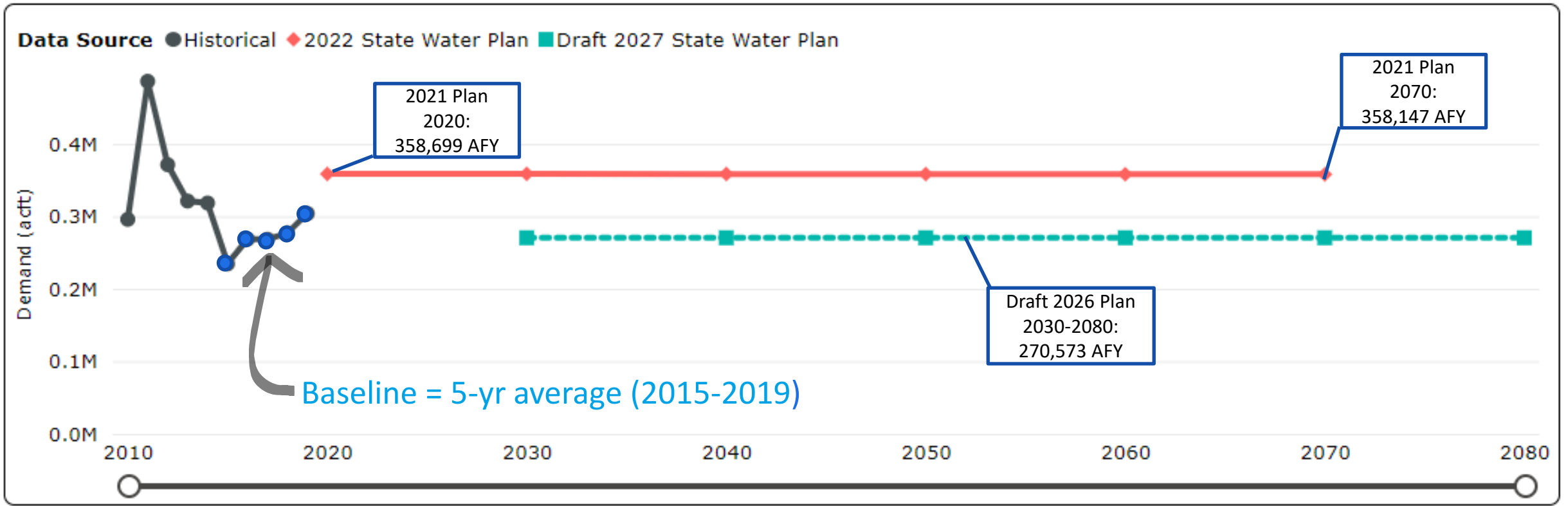
Region L Historical Irrigation Water Use and Baseline Demand Options



- OPTION B: 5-year Avg (2010-2014)
- OPTION D: 9-year (excl. 2015)
- OPTION C: 10-year (2010-2019)
- OPTION E: 8-year (excl. 2011 and 2015)
- OPTION A: 5-year Avg (2015-2019)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
—●— Historical Water Use Estimates	295,937	486,470	371,363	321,222	318,499	234,604	268,742	268,431	277,094	304,061
— — — OPTION A: 5-year Avg (2015-2019)	270,586	270,586	270,586	270,586	270,586	270,586	270,586	270,586	270,586	270,586
— — — OPTION B: 5-year Avg (2010-2014)	358,698	358,698	358,698	358,698	358,698	358,698	358,698	358,698	358,698	358,698
— — — OPTION C: 10-year (2010-2019)	314,642	314,642	314,642	314,642	314,642	314,642	314,642	314,642	314,642	314,642
— — — OPTION D: 9-year (excl. 2015)	323,535	323,535	323,535	323,535	323,535	323,535	323,535	323,535	323,535	323,535
— — — OPTION E: 8-year (excl. 2011 and 2015)	303,169	303,169	303,169	303,169	303,169	303,169	303,169	303,169	303,169	303,169

2026 Draft Irrigation Methodology



Source: TWDB

Same methodology as 2021 RWPs

- 2030-2080 held constant, except counties where Available Groundwater volumes (MAGs + non-MAGs) are less than groundwater portion of the demand projections – those counties demands will decrease.
- MAGs that have been reviewed and updated by July 2022 by the TWDB Groundwater staff were incorporated into the draft irrigation projections.

Draft Water Demand Projections: Irrigation Criteria for Adjustment

One or more of the following criteria must be verified by the regional water planning group and the Executive Administrator for consideration of revising the irrigation water demand projections:

1. Evidence that irrigation water use estimates for a county from another information source or more recent modeled available groundwater (MAG) volumes are more accurate than those used in the draft projections.
2. Evidence that recent (10 years or less) irrigation trends are more indicative of future trends than the draft water demand projections.
3. Evidence that the baseline irrigation demand projection is more likely to reflect the future irrigation demand than the groundwater resource-constrained water demand projection (especially where economically feasible water supply strategies have been identified).
4. Region or county-specific studies that have developed water demand projections or trends for the planning period, or part of the planning period, and are deemed to be more reasonable estimates than the TWDB-generated draft projections.
5. Evidence of errors identified in historical water use, including volumes of reuse (treated effluent) or brackish groundwater that were not included in the draft projections.

**Agenda Item 2:
Discussion and Appropriate Action
Regarding Recommendation for Feedback to
TWDB**

Consider Path Forward

2030 Demand

- **Option A** (current): No change from 2026 Draft Irrigation Projections (2015-2019)
- **Option B**: Use 2021 RWP Irrigation Projections (2010-2014 average)
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Discussion.

- Proposed revisions for TWDB
- Next Steps
- Next Meeting(s)
- Other topics