

October 25, 2023

Jeff Walker Executive Administrator Texas Water Development Board 1700 North Congress Austin, Texas 78711-3231

Re: Hydrologic Variance Requests for Water Availability Determination of Current Surface Water Supplies in Far West Texas (Region E)

Dear Mr. Walker

The Far West Texas Region is located within the Rio Grande Basin. Surface water supplies are obtained from the Rio Grande River and Pecos River, a tributary of the Rio Grande.

As intended by Senate Bill 1, the assessment of surface water availability in the Far West Texas Region will be conducted to accurately reflect water supplies that are available for use. This assessment will include updates to new water right permits and current operating policies and/or contractual agreements. As required by the planning guidelines, we will provide information on firm yields for all water supply sources.

In accordance with regional planning rules and guidelines, the Far West Texas Region intends to use the Full Authorization Run (Run 3) of the TCEQ-approved WAM for determining surface water availability in the region. However, to most accurately reflect the current conditions and operations of the region, the following variances are requested. Please note that most of the requested variances are identical to the assumptions used in previous Region E water plans.

## Far West Texas (Region E) Variance Requests

- The supply from the Bureau of Reclamation's Rio Grande Project, which includes releases from Elephant Butte and Caballo Reservoirs, as well as run-of-the-river flows entering Texas from New Mexico, will be based on the lowest annual historical allotment delivered and available to these entities. Please note that this does not include return flows, which will be evaluated separately. Entities include El Paso Water Utilities and El Paso County Water Improvement District #1.
- 2. The demand pattern for irrigation rights above Fort Quitman will be modified so that diversions only occur from March through October. This change is to be consistent with actual operation of the Rio Grande Project.
- Corrections proposed by Region F in the Balmorhea area in Reeves County in the Pecos Basin. These changes are related to San Solomon Springs and Giffin Springs flows, which in the current TCEQ WAM are currently being passed downstream instead of being used by the water rights dependent on those springs.

No other variances are anticipated at this time.

Please call me if you have any questions regarding our request.

Sincerely,

Scott Reinert Chair, Far West Texas Water Planning Group

cc: Heather Rose, TWDB Project Manager Jennifer Herrera, WSP Juan Acevedo, WSP Annette Gutierez, Rio Grande Council of Government Jon Albright, Freese and Nichols, Inc.

# Surface Water Hydrologic Variance Request Checklist

Texas Water Development Board (TWDB) rules<sup>1</sup> require that regional water planning groups (RWPG) use most current Water Availability Models (WAM) from the Texas Commission on Environmental Quality (TCEQ) and assume full utilization of existing water rights and no return flows for surface water supply analysis. Additionally, evaluation of existing stored surface water available during Drought of Record conditions must be based on Firm Yield using anticipated sedimentation rates. However, the TWDB rules also allow, and **we encourage**, RWPGs to use more representative, water availability modeling assumptions; better site-specific information; or justified operational procedures other than Firm Yield with written approval (via a Hydrologic Variance) from the Executive Administrator in order to better represent and therefore prepare for expected drought conditions.

RWPGs must use this checklist, which is intended to save time and reduce effort, to request a Hydrologic Variance for estimating the availability of surface water sources. For Questions 4 – 10, please indicate whether the requested variance is for determining Existing Supply, Strategy Supply, or both. Please complete a separate checklist for each river basin in which variances are being requested.

## Water Planning Region: E

1. Which major river basin does the request apply to? Please specify if the request only applies part of the basin or only to certain reservoirs.

## Rio Grande Basin

- 2. Please give a brief, bulleted, description of the requested hydrologic variances including how the alternative availability assumptions vary from rule requirements, how the modifications will affect the associated annual availability volume(s) in the regional water plan, and why the variance is necessary or provides a better basis for planning. You must provide more-detailed descriptions in the subsequent checklist questions. Attach any available documentation supporting the request.
  - The demand pattern for irrigation rights above Fort Quitman will be modified so that diversions only occur from March through October. This change is consistent with the actual operation of the Rio Grande Project.
  - Variances proposed by Region F in the Balmorhea area in Reeves County in the Pecos Basin to reflect potential futile calls by downstream water rights.
- 3. Was this request submitted in a previous planning cycle? If yes, please indicate which cycle and note how it is different, if at all, from the previous request?

Yes

<sup>&</sup>lt;sup>1</sup> 31 Texas Administrative Code (TAC) §§ 357.10(14) and 357.32(c)

The same hydrologic variance requests were implemented in the 2021 Far West Texas Water Plan with the exception of corrections for cancelled or abandoned water rights. This correction is included in the updated Rio Grande WAM.

4. Are you requesting to extend the period of record beyond the current applicable WAM hydrologic period? If yes, please describe the proposed methodology. Indicate whether you believe there is a new drought of record in the basin.

No

Choose an item.

Click or tap here to enter text.

5. Are you requesting to use a reservoir safe yield? If yes, please describe in detail how the safe yield would be calculated and defined, which reservoir(s) it would apply to, and why the modification is needed or preferrable for drought planning purposes.

No

Choose an item.

Click or tap here to enter text.

6. Are you requesting to use a reservoir yield other than firm yield or safe yield? If yes, please describe, in a bulleted list, each modification requested including how the alternative yield was calculated, which reservoir(s) it applies to, and why the modification is needed or preferrable for drought planning purposes. Examples of alternative reservoir yield analyses may include using an alternative reservoir level, conditional reliability, or other special reservoir operations.

No

Choose an item.

7. Are you requesting to use a different model (such as a RiverWare or Excel-based models) than RUN 3 of the applicable TCEQ WAM? If yes, please describe the model being considered including how it incorporates water rights and prior appropriation and how it is more conservative than RUN 3 of the applicable TCEQ WAM.

No

Choose an item.

Click or tap here to enter text.

8. Are you requesting to use a modified TCEQ WAM? If yes, please describe in a bulleted list all modifications in detail including all specific changes to the WAM and whether the modified WAM is more conservative than the TCEQ WAM RUN 3. Examples of WAM modifications may include adding subordination agreements, contracts, updated water rights, modified spring flows, updated lake evaporation, updated sedimentation<sup>2</sup>, system or reservoir operations, or special operational procedures into the WAM.

Yes

Existing and Strategy Supply

These changes are detailed in Question 2. They are more conservative since they reflect actual operation.

9. Are you requesting to include return flows in the modeling? If yes, are you doing so to model an indirect reuse water management strategy (WMS)? Please provide complete details regarding the proposed methodology for determining reuse WMS availability.

No

Choose an item.

Click or tap here to enter text.

10. Are any of the requested Hydrologic Variances also planned to be used by another region for the same basin? If yes, please indicate the other Region. Please indicate if unknown.

## Unknown

Click or tap here to enter text.

11. Please describe any other variance requests not captured on this checklist or add any other information regarding the variance requests on this checklist.

The supply from the Bureau of Reclamation's Rio Grande Project, which includes releases from Elephant Butte and Caballo Reservoirs, as well as run-of-the-river flows entering Texas from New Mexico, will be based on the lowest annual historical allotment delivered and available to these entities. Please note that this does not include return flows, which will be evaluated separately. Entities include El Paso Water Utilities and El Paso County Water Improvement District #1.

<sup>&</sup>lt;sup>2</sup> Updating anticipated sedimentation rates does not require a hydrologic variance under 31 TAC § 357.10(14). The Technical Memorandum will require providing details regarding the sedimentation methodology utilized. Please consider providing that information with this request.