

# Texas Water Development Board

P.O. Box 13231, 1700 N. Congress Ave.  
Austin, TX 78711-3231, [www.twdb.texas.gov](http://www.twdb.texas.gov)  
Phone (512) 463-7847, Fax (512) 475-2053

May 9, 2019

J. Kevin Ward  
Region C Chair  
Trinity River Authority  
P.O. Box 60  
Arlington, Texas 76004

RE: Region C Regional Water Planning Group (RWPG) request for approval to modify future surface water availability hydrologic assumptions for development of the 2021 Region C Regional Water Plan (RWP)

Dear Mr. Ward:

The Texas Water Development Board (TWDB) has reviewed Region C's request dated March 4, 2019 for approval of alternative hydrologic assumptions to be used in determining future surface water source availability. This letter confirms that the TWDB approves the following assumptions:

1. Use of a one-year safe yield for the Lake Tehuacana water management strategy (WMS).
2. Utilize a modified Trinity River Water Availability Model (WAM) which accounts for environmental flows, updated diversions, reasonable return flows, subordination agreements, system operations, and errors and omissions in the Texas Commission on Environmental Quality (TCEQ) WAM for the Trinity River, to assess the yield for the Lake Tehuacana WMS.
3. Use of the Sulphur River Basin Riverware model to assess yields for proposed projects in the Sulphur Basin.

The RWPG also requested to evaluate environmental flows in the Sulphur River Basin using the Lyons Method. This assumption was determined to be not allowable under existing regional water planning rules in 31 TAC §357.34 (e)(3)(B) and 31 TAC §358.3(22).

Whereas, due to the absence of an updated WAM, the use of certain alternative models are authorized this planning cycle, an unmodified WAM RUN3 is utilized by the TCEQ for analyzing permit applications. The use of the modified conditions for WMS supply evaluations is authorized only if the yield produced is more conservative (less) for surface water appropriations than an unmodified WAM RUN3. It is also anticipated that an updated

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WAM for the Sulphur Basin will be available for use in evaluating WMSs during the next regional water planning cycle.

The RWPG requested use of firm yields reported by TCEQ in the Water Availability Analysis memo for Bois d'Arc Lake and Lake Ralph Hall. To be consistent with firm yields reported by TCEQ's permitted conditions, these requests did not require a hydrologic variance approval and are therefore allowable.

Although the TWDB approves the use of a one-year safe yield for developing estimate of the Lake Tehuacana surface water availability, the firm yield must still be reported to TWDB in the online planning database and plan documents.

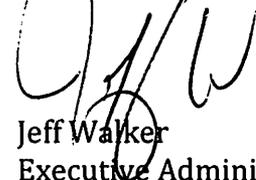
For the purpose of evaluating potentially feasible water management strategies not addressed in the above list, the appropriate TCEQ's WAM RUN3 is to be used.

While the TWDB authorizes the above modifications for the development of the 2021 Region C RWP, it is the responsibility of the RWPG to ensure that the resulting estimates of existing surface water availabilities are reasonable for drought of record planning purposes and will reflect conditions expected in the event of an actual drought of record; and in all other regards will be evaluated in accordance with the contract Exhibit C, *Second Amended General Guidelines for Fifth Cycle of Regional Water Plan Development*.

Additionally, the region should ensure and document coordination with neighboring regions on shared water sources, including Wright Patman Lake and with regard to anticipated reservoir sedimentation rates.

If you have any questions, please do not hesitate to contact Kevin Smith, project manager for Region C, at 512-475-1561 or via email at [kevin.smith@twdb.texas.gov](mailto:kevin.smith@twdb.texas.gov).

Sincerely,



Jeff Walker  
Executive Administrator

cc: Howard Slobodin, Trinity River Authority  
Amy Kaarlela, Freese & Nichols, Inc.  
Tony Smith, Carollo Engineers  
Kevin Smith, TWDB

JW/KS/ms