STATE OF TEXAS §
§
COUNTY OF BEXAR §

Re: Applications by Lower Colorado River Authority (LCRA) to Lost Pines Groundwater Conservation District for Amendments to Operating Permits

AFFIDAVIT OF MR. GEORGE RICE, P.G.

Before me, the undersigned notary, on this day personally appeared George Rice, who, being by me duly sworn, testified as follows:

1. My name is George Rice. I am of sound mind and capable of making this affidavit. The facts stated in this affidavit are within my personal knowledge and are true and correct.
2. I have a Master of Science degree in Hydrology from the University of Arizona and have worked as a hydrologist for more than 30 years. I am a licensed Professional Geoscientist in Texas (lic. # 6144).
3. I have employed the groundwater availability model (GAM) in order to determine the estimated drawdown in the Calvert Bluff, Simsboro and Hooper aquifers within the boundaries of the Lost Pines Groundwater Conservation District under certain conditions. The results of this modeling are reflected in Attachment A and Attachment B to this affidavit.
4. I have also employed the GAM in order to determine general trends in the discharge of groundwater into the Colorado River under certain conditions. The results of this modeling are also reflected in Attachment A and Attachment B to this affidavit.
5. The modeling program used to prepare both of the attached documents is a computer-based simulation commonly used to evaluate the drawdown of groundwater levels within an aquifer under particular conditions. This model is used for this purpose by the Texas Water Development Board as well as the Lost Pines Groundwater Conservation District.

6. The modeling program used to prepare the attached documents is a computer-based simulation that also provides a general estimate of the effects that groundwater withdrawals would have upon hydraulically connected surface waters.
7. The assumptions used in the attached modeling are reasonable, and conform with accepted professional practices in the use of this model.
8. The data used in the performance of the attached modeling is of a type that is reasonably relied upon in the use of this model.
9. The attached modeling was performed in compliance with all standard methods for the use of this model.
10. Attachment A to this affidavit is a document titled "Excerpts from report presented to LPGCD Board". This document contains a table showing the effects of LCRA's proposed pumping on the Calvert Bluff, Simsboro, and Hooper aquifers. It also contains a graph showing the effect of LCRA's proposed pumping on the Colorado River. The tables and graph were excerpted from Attachment B.
11. Attachment B to this affidavit is a document titled "Evaluation of LCRA's Proposal to Pump Groundwater from the Simsboro Aquifer" This document describes GAM simulations performed to estimate the effects of LCRA's proposed pumping on groundwater and on the Colorado River. The GAM simulations led to the following conclusions. 1) LCRA's pumping would reduce hydraulic heads in the Calvert Bluff, Simsboro, and Hooper aquifers. 2) Where these aquifers are confined, the reduced heads would cause water levels in wells to decline. 3) In the unconfined portions of the Simsboro, the reduced heads would cause dewatering of portions of the aquifer. 4)

LCRA's pumping would reduce groundwater discharge to the Colorado River, thereby reducing the amount of water flowing in the river.

FURTHER AFFIANT SAYETH NOT.

George Rice

SWORN TO AND SUBSCRIBED before me on the 16th day of December, 2014.

Notary Public, State of Texas

RICHARD L. SCHOFF
MY COMMISSION EXPIRES
November 12, 2018

Notary's printed name:

Richard L. Schoff

My commission expires

Nov 12, 2018