

1.0 Introduction

The City of Bryan Water Utility serves over 85,000 customers in Brazos County. Brazos County is within the Brazos Valley Groundwater Conservation District (BVGCD) regulatory boundaries. The BVGCD regulates groundwater in Brazos and Robertson counties consistent with Chapter 36 of the Texas Water Code. The BVGCD requires production permits for non-exempt wells. The BVGCD manages production for non-exempt wells using a correlative-right approach combined with several well spacing requirements.

The City of Bryan currently has ten operating permits through the BVGCD allowing production of 32,138 acre-feet per year (AFY) of groundwater. Of the current City permits, nine of ten, representing 27,300 AFY of permitted production, are classified by the BVGCD as Historic Use permits. The 2021 Bryan Water Distribution System Master Plan projects that water demand will double from 2025 to 2040. The City of Bryan has an increasing population to serve, as well as a need for flexibility in operation of the Bryan well system, and therefore seeks drilling and operating permits for four new proposed Simsboro wells in Brazos County. The four proposed wells would increase permitted withdrawals for the city by an additional 14,204 AFY. **Table 1** provides the proposed locations and production rates associated with the newly proposed wells (Bryan Wells #20, 21, 22 and 23). All new wells will be equipped to operate at an instantaneous flow rate of 3,300 gpm. The average annual rates for wells #20 through 23 are 1,775, 1,882, 3,100 and 2,050 gpm, respectively. **Figure 1** provides the locations of the newly proposed wells along with the other Bryan wells and the acreage owned or controlled by the City of Bryan in a radius of one mile from the newly proposed wells.

Table 1. Proposed New Simsboro Production Wells

New Well ID	Latitude	Longitude	Estimated Depth (ft bgs)	Annual Supply (AF)	Average Annual Rate (gpm)
20	30.724081	-96.441389	2,900	2,863	1,775
21	30.718428	-96.434894	2,950	3,035	1,882
22	30.712978	-96.462196	2,900	5,000	3,100
23	30.715839	-96.473132	2,880	3,306	2,050

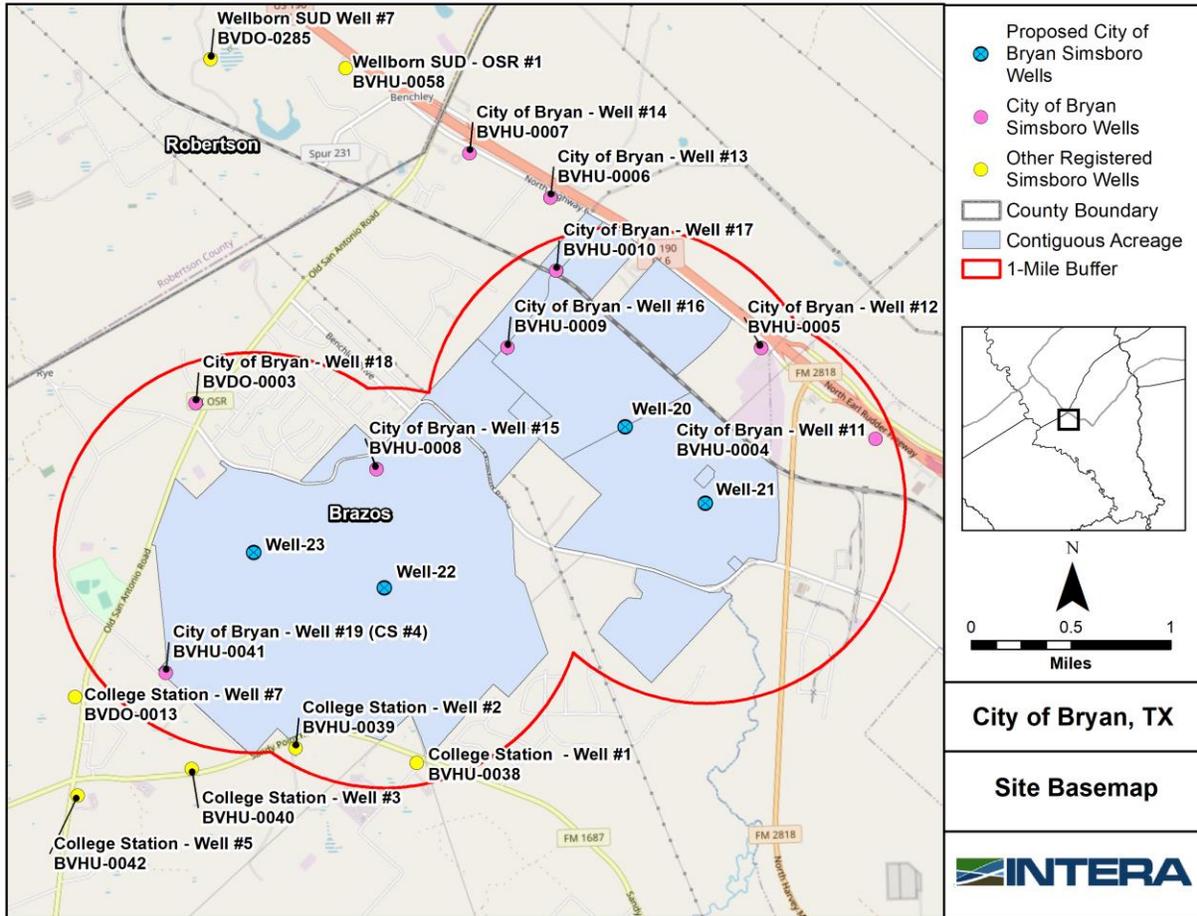


Figure 1. Proposed well locations with all current BVGCD Simsboro Aquifer registered and permitted wells within one mile of the proposed wells.

BVGCD Rule 8.4(7)(B) defines the requirements for an Operating Permit application for wells capable of producing more than 800 AFY, which applies to the proposed new Bryan wells. Among the regulatory requirements defined in Rule 8.4(7)(B)(1-3), the rule requires submittal of an evaluation report for the new well(s) describing the hydrogeology in proximity to the well(s), a table and figure showing registered or permitted wells within one mile of the new proposed well(s), and a local and regional assessment of drawdown associated with the newly proposed production.

This evaluation report has been written to comply with the evaluation required under BVGCD Rule 8.4(7)(B)(1-3) for Bryan City Proposed Wells #20, 21, 22 and 23. This report will accompany the operating permit application for these wells. The report has been organized to comply with the BVGCD Rule Requirements. Section 2 provides a description of the hydrogeology in the vicinity of the proposed wells to comply with Rule 8.4(7)(B)(1). Section 3 provides a table and map of registered or permitted wells within one mile of the four proposed well locations (Rule 8.4(7)(B)(2)) and demonstrates compliance with spacing and acreage rules documented in Rule 6.1(b)(1), 6.1(b)(3) and Rule 7.1(c).

Section 4 provides drawdown estimates from the new proposed pumping for the four proposed wells consistent with Rule 8.4(7)(B)(3). Section 5 contains a summary of the report findings.