

Section 18: Requests for Verification of Water Availability Studies for Subdivisions

Rule 18.1 Purpose and Background

Sections 212.0101(a), (a-1) and (a-2) for municipalities as well as Sections 232.0032(a), (a-1) and (a-2) for counties, Texas Local Government Code require verification of water availability for both municipal and county developments by way of a mandatory certification of water availability during the plat application approval process. Texas Commission on Environmental Quality (TCEQ) adopted Rules located in 30 Tex. Admin. Code, Chapter 230, that develop and clarify the certifications required to ensure or not ensure that adequate water supply exists to support property owners who purchase or build homes in the creation of a subdivision in either a municipality or county. The District's provisions set out below are intended to~~will~~ work with but not override ~~any~~the Rules ~~recently~~ adopted by TCEQ. However, to the extent the District's provisions are not addressed by TCEQ's Rules, the District's shall be required and prevail.

TCEQ's anticipates final adoption date for their Rules to be in November 2024, together with a form noted in 30 TAC §230.3(c), which shall be used for either Municipal or County requests after the final adoption. The District will not perform Water Availability Studies, but will consider applications for the purpose of verifying the results of a ~~Water Availability Study~~Groundwater Water Availability Study which is submitted to a municipality or county by the developer of a subdivision, as well as receive copies of all such applications from either Texas Water Development Board or the city or county that received the certification.

Rules set out herein cover exempt wells or public water supply wells as may be required pursuant to the applications and verifications of the ~~Water Availability Study~~Groundwater Water Availability Study, in addition to additional requirements that we require for use of exempt wells or from public water supply entities who use groundwater for their source of water.

Rule 18.2 Verification of Groundwater Availability Study

1. Applications for a Verification of ~~Water Availability Study~~Groundwater Water Availability Study shall be completed on forms provided by TCEQ, together with the following information:
 - a. Name and address of applicant
 - b. Declaration of ownership of water rights
 - c. Certified copy of complete application as filed with the appropriate County Commissioner's Court
 - d. Certified Copy scaled map of proposed subdivision with deliniations of roads and property lines
 - e. Certified copy of ~~Water Availability Study~~Groundwater Water Availability Study, properly sealed by P.G., P.E., or Professional Hydrogeologist which shall include the following:
 - i. Completed form from chapter 230
 - ii. Identification of aquifer(s) or formation(s) to be used for water supply

- iii. Estimate of amount of water to be used by each tract of land
- iv. At a minimum, both a short- and long-term determination of groundwater availability must [shall] be made, each considering the estimated total water demand at full build out of the proposed subdivision. Groundwater availability must [shall] be determined for ten (10) years and thirty (30) years and for any other time frame(s) required by the municipal or county authority for an area of one (1) mile around the proposed subdivision.
- v. Map(s) of the proposed subdivision prepared by a qualified expert identifying:
 - 1. surface geological formations, faults, topography, adjacent properties, and residential subdivisions whose boundaries lie within 2,500 feet of the proposed subdivision.
 - 2. location of test and monitor wells by longitude, latitude, and surface elevation above mean sea level.
 - 3. the location and any available information on other wells identified in the files of the District, Texas Water Development Board, TCEQ and/or otherwise known to applicant that exist within the proposed subdivision or within 500 feet of the boundaries of the proposed subdivision. Such information includes but is not limited to the Water Well Driller State Well Report, geophysical well logs, well depth information, current depth to water and any available historical water level records, status of the well (operational, inactive, abandoned, deteriorated, plugged, etc.) and the known or estimated pumping capability.
- vi. For any well located within the subdivision where the water level in the well is accessible, the static water levels to the nearest 0.1 foot and equated to mean sea level elevation.
- vii. Data resulting from the performance of an aquifer pump test utilizing proven generally accepted methods. The pump test shall be supervised by a qualified expert and shall be performed prior to any acidization or other flow capacity treatment of the well. The duration of the pump test shall be for a period of 3624 hours or until the water level has stabilized with no more than a 0.5-foot fluctuation in the test well for a minimum of at least two hours. The test shall include recovery timeline and measurement until the well has recovered 90% of the static water level at the start of the test.
- viii. Statements by a qualified expert based on the pump test regarding the following:
 - 1. the estimated total annual groundwater production of wells proposed for the subdivision at full build-out;
 - 2. a determination of transmissivity and storativity of the water-bearing formation or strata from which the groundwater will be withdrawn;

3. a determination of drawdown of each test well and monitor well for the pumping rate in use during the test;
4. a determination of the projected drawdown of the water table at the boundaries of the subdivision based on the estimated total annual groundwater production at full build-out;
5. a water quality analysis of a water sample taken from each the test well conducted by a qualified laboratory, such as those operated by the Lower Colorado River Authority, Texas Department of Health, or other laboratory acceptable to either the Commissioners Court. When a subdivision requires multiple pump tests, one water sample and analysis must be conducted for every three pump tests or part thereof water samples shall be tested for the constituents and parameters required under Texas Administrative Code Title 30, Part 1 Chapter 230.
6. an assessment of the cumulative effects of multiple subdivisions. If one or more subdivisions have submitted or are in the process of submitting Groundwater Availability Studys to the Commissioners Court and any part of the boundary of those subdivisions is located within 2,500 feet of the boundaries of the new proposed subdivision, the data and analyses of those existing Water Availability Studies shall be reviewed by the person preparing the new Groundwater Availability Study. The findings of these previous Water Availability Studies shall be incorporated with the aquifer pump test data and analyses generated for the new Groundwater Availability Study to create an assessment of the cumulative effects of actual and proposed groundwater use by the existing and proposed subdivisions on total projected aquifer pumping demand, how that total projected demand may affect local water level drawdown and recovery rates, the cumulative effect of projected drawdown at the closest or adjacent subdivision boundaries, and any related water quantity and quality concerns or changes.

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4.2. Pumping Tests Required

- a. An aquifer test shall include, at minimum, 1 pumping well and 1 monitor well.
- b. An aquifer pumping test shall be required when the number of tracts in a subdivision is greater than 20.
- ~~a-c.~~ An aquifer pumping test shall be required for each 100 proposed connections.
- ~~b-d.~~ An aquifer pumping test shall be required when multiple aquifers are being utilized for a subdivision.
- e. The aquifer pumping test shall include a 36-hour period of constant pumping and a 36-hour recovery period. At a minimum, water level measurements will be recorded using a down hole probe that is connected to a datalogger and the pumping rate will be measured using an in-line flow meter. The constant pumping

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rate should be within ten percent (10%) of the permitted maximum pumping rate for the well. In addition, after thirty (30) hours of pumping, two composite water samples will be collected and be analyzed for Total Dissolved Solids, pH, and major cations and anions.

f. The monitoring equipment reasonably required by the District shall include the capability to automatically measure water level, pumping rates, and cumulative production.

g. The equipment for measuring water levels will consist of a transducer, a sonic water level, or equivalent technology capable of measuring within an accuracy of 0.1 ft. The water level measuring equipment shall interface with software capable of recording measurements at hourly intervals.

e-h. If the initial aquifer testing does not produce water of a quantity and quality sufficient to meet TCEQ public water supply standards, then additional sets of Test-Monitor wells may be drilled and tested until TCEQ standards are met or exceeded.

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Rule 18.3 Subdivisions ~~dependant~~dependent on exempt wells

1. The requirements under this Section 18.2 apply only to subdivisions that will require exempt wells as the main source of water for individual tracts. A well must meet the requirements of Section 7.10 of these Rules and both the minimum tract size and minimum distance to property line boundaries as identified in TABLE 1 of this Section 18 to qualify as an exempt well in a subdivision.
2. Any applicant that applies for platting from any city located in Milam or Burleson County or from the Milam or Burleson County Commissioners Court that anticipates using exempt wells as the main source of water shall meet with the District prior to plat application submittance to the Court to discuss the intent and requirements of this Section 18.
3. In preparation for this meeting a copy of the proposed application to be filed with the city or commissioner's court of the appropriate county shall be provided to the District at least twenty (20) calendar days prior to the requested meeting date with the District.
4. If all tracts in a subdivision are determined to meet or exceed the minimum tract sizes and line spacing as determined in TABLE 1 of this Section 18, and ownership of groundwater necessary to support the development is verified, the General Manager, in consultation with the District's Professional Hydrogeologist, may issue a waiver for the requirements of submitting an application for Verification of a ~~Water Availability Study~~Groundwater Water Availability Study and return an opinion to the applicant and appropriate City or County Commissioner's Court that a ~~water availability study~~Groundwater Water Availability Study is not required.

~~5.1. Applications for a Verification of Water Availability Study shall be completed on forms provided by TCEQ, together with the following information:~~

a. ~~Name and address of applicant~~

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- ~~b.a. Declaration of ownership of water rights~~
- ~~e.a. Certified copy of complete application as filed with the appropriate County Commissioner's Court~~
- ~~d.a. Certified Copy sealed map of proposed subdivision with delineations of roads and property lines~~
- ~~e.a. Certified copy of Water Availability Study, properly sealed by P.G., P.E., or Professional Hydrogeologist which shall include the following:~~
 - ~~i. Completed form from chapter 230~~
 - ~~ii.i. Identification of aquifer(s) or formation(s) to be used for water supply~~
 - ~~iii.i. Estimate of amount of water to be used by each tract of land~~
 - ~~iv.i. At a minimum, both a short- and long-term determination of groundwater availability must [shall] be made, each considering the estimated total water demand at full build out of the proposed subdivision. Groundwater availability must [shall] be determined for ten (10) years and thirty (30) years and for any other time frame(s) required by the municipal or county authority for an area of one (1) mile around the proposed subdivision.~~

5. Determination of Groundwater Quality.

The qualified expert must certify that the water samples either meet these water quality standards or explain how the well water can be treated in Rules and Regulations to achieve those standards.

6. Once an application for a Verification of ~~Water Availability Study~~Groundwater Water Availability Study has been submitted to the District, the District shall have sixty (60) calendar days to determine administrative completeness.

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TABLE 1: Minimum Tract Size and Property Line Spacing

The following table below breaks down tract sizes and property line spacing based on Aquifer designation as required for exempt wells in a subdivision:

Aquifer	Minimum Tract Size per well (acres)	Minimum Distance (ft) from Property Line Boundary
Yegua Jackson, Sparta, Hooper	10	100 ft
Queen City, Calvert Bluff	5	100 ft
Carrizo	3*	75 ft
Simsboro	2*	50 ft

* Minimum Tract Size is determined by the current Municipal or County Subdivision Rules when plat is submitted to District.

7. An exempt well in a subdivision shall be registered with the District consistent with Section 7.10 of these Rules.

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8. More than one exempt well may be drilled on a tract within a subdivision provided all wells drilled on a single tract satisfy all spacing and tract size requirements for each well.
9. Any other wells that do not meet the requirements for minimum tract size and minimum distance to property line boundaries as identified in TABLE 1 of this Section 18 shall require a permit from the District and be applied for and issued consistent with these Rules.

~~4-10.~~ 10. Any landowner of a tract which meets the minimum tract size may apply for a variance to the requirements of the minimum spacing distance to property line boundaries as identified in TABLE 1 of this Section 18. The owner must apply for the variance on forms provided by the District and include a waiver from the requirements of these Rules from the landowner(s) of the property boundary considered.

~~2-11.~~ 11. A waiver to this section 18 may be applied for if the subdivision meets any of the following requirements:

- i. Less than 5 tracts and meets the tract size as outlined in TABLE 1 of this Section 18;
- ii. the use of more than one aquifer for the subdivision, with less than 5 tracts utilizing each aquifer, and meets the tract size as outlined in TABLE 1 of this Section 18;
- iii. results from an aquifer test, on the property, that has been completed and not older than 2 years, provides evidence that sufficient water supplies exist for the purpose of this section;

Rule 18.~~43~~ Subdivisions dependent on Public Water Supplies

1. If the subdivision will be served by an existing public water supply that qualifies as a Local Water Utility (utility) as defined in Section 5 of the Rules, or the Texas Water Code, the request for Verification of ~~Water Availability Study~~Groundwater Water Availability Study shall include the following:
 - a. A notarized statement or resolution from the governing body of the utility which provides evidence the subdivision is located within the CCN of the utility and an agreement to provide water to the subdivision is in place;
 - b. Evidence the subdivision is not located within the CCN of another utility; and
 - c. ~~Water Availability Study~~Groundwater Water Availability Study.
2. If the subdivision will be served by the creation of a public water supply that qualifies as a Local Water Utility as defined in Section 5 of the Rules or the Texas Water Code, the request for Verification of ~~Water Availability Study~~Groundwater Water Availability Study shall include the following:
 - a. Proper filings with, and proper approval from, any political subdivisions or offices of the State of Texas with oversight for creation of such a utility;
 - b. Evidence that sufficient water rights are owned for the property to be developed;
 - ~~b-c.~~ The use of existing wells is permitted if the existing wells comply with these Regulations and meet all applicable TCEQ public water supply standards.

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including Texas Administrative Code Title 30, Part 1 Chapter 290 Public Drinking Water; and,

~~e.d. Water Availability Study~~Groundwater Water Availability Study.

3. If the subdivision will be served by the creation of a public water supply that does not qualify as a Local Water Utility as defined in Section 5 of the Rules or the Texas Water Code, the request for Verification of ~~Water Availability Study~~Groundwater Water Availability Study shall include the following:
 - a. Proper filings with, and proper approval from, any political subdivisions or offices of the State of Texas with oversight for creation of such a utility;
 - b. Evidence that water rights are owned for the property to be developed; and
 - c. ~~Water Availability Study~~Groundwater Water Availability Study.