

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
**AGENDA ITEM REQUEST**  
for Proposed Rulemaking

**AGENDA REQUESTED:** May 10, 2024

**DATE OF REQUEST:** April 19, 2024

**INDIVIDUAL TO CONTACT REGARDING CHANGES TO THIS REQUEST, IF NEEDED:** Gwen Ricco, Rule/Agenda Coordinator, (512) 239-2678

**CAPTION: Docket No. 2023-1521-RUL.** Consideration for publication of, and hearing on, proposed amendments 30 TAC Chapter 230, Groundwater Availability Certification for Platting, Sections 230.1 - 230.11.

The purpose of this rule proposal is to amend 30 TAC Chapter 230 to implement the provisions of Senate Bill 2440 which was passed during the 88th Texas Legislature's Regular Session in 2023. The bill mandates that municipalities and counties must require Groundwater Availability Certification in the plat application and approval process for proposed subdivisions when the groundwater beneath the land serves as the primary source of water supply. (Abiy Berehe, Kayla Murray; Rule Project No. 2024-006-230-OW)

*Cari-Michel La Caille*  
\_\_\_\_\_  
Director

*Kim Nijm*  
\_\_\_\_\_  
Division Deputy Director

*Gwen Ricco*  
\_\_\_\_\_  
Agenda Coordinator

Copy to CCC Secretary? NO X YES

# Texas Commission on Environmental Quality

## Interoffice Memorandum

**To:** Commissioners **Date:** April 5, 2024

**Thru:** Laurie Gharis, Chief Clerk  
Kelly Keel, Executive Director

**From:** *CML* Cari-Michel La Caille, Director  
Office of Water

**Docket No.:** 2023-1521-RUL

**Subject:** Commission Approval for Proposed Rulemaking  
Chapter 230, Groundwater Availability Certifications for Platting  
Rule Project No. 2024-006-230-OW

### **Background and reason(s) for the rulemaking:**

The purpose of this rule proposal is to implement the provisions of Senate Bill (SB) 2440, passed during the 88th Texas Legislature's Regular Session in 2023. Local Government Code (LGC) §212.0101 and §232.0032 establish requirements for groundwater availability certification in the municipal and county plat application and approval process for proposed subdivisions when the groundwater beneath the land serves as the primary source of water supply. SB 2440 amended §212.0101(a) and §232.0032(a) to make groundwater availability certification a mandatory component of the plat application and approval process. SB 2440 also established specific circumstances under which a municipal or county authority may waive the certification requirement by adding §212.0101(a)(1) and (a)(2) and §232.0032(a)(1) and (a)(2). SB 2440 became effective on January 1, 2024, and requires that existing commission rules are continued in effect for plat applications filed before January 1, 2024.

### **Scope of the rulemaking:**

#### **A.) Summary of what the rulemaking would do:**

The Texas Commission on Environmental Quality (TCEQ) has adopted rules at 30 Texas Administrative Code (TAC), Chapter 230 that prescribe requirements for groundwater availability certification. This rulemaking will implement SB 2440 by amending the applicability provisions at 30 TAC §230.1 and referenced at 30 TAC §230.3 - 230.11. Additional amendments are proposed as discussed under Item C, below.

#### **B.) Scope required by federal regulations or state statutes:**

Scope of this rulemaking is defined by state statute at LGC, §212.0101 and §232.0032.

#### **C.) Additional staff recommendations that are not required by federal rule or state statute:**

The charge to the commission under LGC, §212.0101(b) and (c) and §232.0032(b) and (c) is limited to adopting rules that establish the form and content of a groundwater availability certification and require transmittal of specific information to the Texas Water Development Board and the applicable groundwater conservation district. Currently, 30 TAC §230.1 and §230.3 - 230.11 include references to applicability and have embedded forms. Since applicability is addressed by LGC §212.0101(a), (a)(1) and (a)(2) and §232.0032(a), (a)(1) and (a)(2) and does not require further definition, the commission proposes to replace applicability provisions with general provisions that identify the purpose of the rule. And since the current rules specify transmittal requirements and groundwater availability certification contents, the commission also proposes to remove the

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embedded forms and replace those with references to TCEQ forms so that the format of the forms can be updated as technology changes.

**Statutory authority:**

LGC, Title 7, Subtitle A, Chapter 212, Subchapter A, §§212.0101

LGC, Title 7, Subtitle B, Chapter 232, Subchapter A, §§232.0032

**Effect on the:**

**A.) Regulated community:**

None beyond the effect of the statute. Municipal and county authorities will need to incorporate these requirements into the subdivision platting process. Some municipalities and counties will be able to absorb the increased work associated with the review of the groundwater availability certification while others will need to hire engineers or professional geoscientists to review the groundwater certification. Subdivision developers will incur increased costs associated with groundwater certification. The new platting approval processes could increase fees from municipal or county platting authorities.

**B.) Public:**

None beyond the effect of the statute. The public that purchases homes in an area platted after January 1, 2024, that rely solely on groundwater will benefit from groundwater availability certifications that confirm groundwater supplies will be available to the home buyer now and in the future.

**C.) Agency programs:**

None.

**Stakeholder meetings:**

No stakeholder meetings have been held or are planned. A public hearing will be held as part of the rulemaking process.

**Public Involvement Plan**

Is a Public Involvement Plan Required? Yes

**Alternative Language Requirements**

Yes, Spanish.

**Potential controversial concerns and legislative interest:**

The author of SB 2440, Chairman Perry, is likely to have interest in the rulemaking effort.

**Would this rulemaking affect any current policies or require development of new policies?**

No.

**What are the consequences if this rulemaking does not go forward? Are there alternatives to rulemaking?**

If this rulemaking does not go forward, TCEQ rules at 30 TAC 230 would be inconsistent with LGC, §§212.0101(a), 212.0101(a)(1) and (a)(2), 232.0032(a), 232.0032(a)(1) and (a)(2).

**Key points in the proposal rulemaking schedule:**

**Anticipated proposal date:** May 8, 2024

**Anticipated *Texas Register* publication date:** May 13, 2024

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**Anticipated public hearing date:** June 24, 2024  
**Anticipated public comment period:** May 24, 2024 to June 25, 2024  
**Anticipated adoption date:** November 2024

**Agency contacts:**

Abiy Berehe, Rule Project Manager, Water Availability Division, (512) 239-5480  
Kayla Murray, Staff Attorney, Environmental Law Division, (512) 239-4761  
Gwen Ricco, Texas Register Rule/Agenda Coordinator, General Law Division, (512) 239-2678

**Attachments:**

cc: Chief Clerk, 2 copies  
Executive Director's Office  
Jim Rizk  
Krista Kyle  
Office of General Counsel  
Katherine Thigpen  
Abiy Berehe  
Kayla Murray  
Gwen Ricco

AN ACT

relating to a requirement that certain plats for the subdivision of land include evidence of groundwater supply.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:

SECTION 1. Section 212.0101, Local Government Code, is amended by amending Subsection (a) and adding Subsections (a-1) and (a-2) to read as follows:

(a) Except as provided by Subsection (a-1), ~~[If a person submits]~~ a plat application for the subdivision of a tract of land for which the source of the water supply intended for the subdivision is groundwater under that land must ~~[, the municipal authority responsible for approving plats by ordinance may require the plat application to]~~ have attached to it a statement that:

(1) is prepared by an engineer licensed to practice in this state or a geoscientist licensed to practice in this state; and

(2) certifies that adequate groundwater is available for the subdivision.

(a-1) A municipal authority responsible for approving plats may waive the requirement prescribed by Subsection (a) that a plat application have attached to it a statement described by that subsection if:

(1) based on credible evidence of groundwater availability in the vicinity of the proposed subdivision, the municipal authority determines that sufficient groundwater is

1 available and will continue to be available to the subdivided tract  
2 of land; and

3 (2) either:

4 (A) the entire tract proposed to be subdivided by  
5 the plat will be supplied with groundwater from the Gulf Coast  
6 Aquifer or the Carrizo-Wilcox Aquifer; or

7 (B) the proposed subdivision divides the tract  
8 into not more than 10 parts.

9 (a-2) A person subject to a waiver authorized by Subsection  
10 (a-1)(2)(B) regarding a subdivided tract of land must comply with  
11 the requirements of Subsection (a) if:

12 (1) the tract is subsequently divided in a manner that  
13 results in the original tract being subdivided into more than 10  
14 parts; or

15 (2) the municipal authority determines that the  
16 proposed subdivision is part of a series of proposed subdivisions  
17 from an original tract that collectively includes more than 10  
18 parts.

19 SECTION 2. Section [232.0032](#), Local Government Code, is  
20 amended by amending Subsection (a) and adding Subsections (a-1) and  
21 (a-2) to read as follows:

22 (a) Except as provided by Subsection (a-1), [~~If a person~~  
23 ~~submits~~] a plat application for the subdivision of a tract of land  
24 for which the source of the water supply intended for the  
25 subdivision is groundwater under that land must [~~, the commissioners~~  
26 ~~court of a county by order may require the plat application to~~] have  
27 attached to it a statement that:

1           (1) is prepared by an engineer licensed to practice in  
2 this state or a geoscientist licensed to practice in this state; and

3           (2) certifies that adequate groundwater is available  
4 for the subdivision.

5           (a-1) A commissioners court may waive the requirement  
6 prescribed by Subsection (a) that a plat application have attached  
7 to it a statement described by that subsection if:

8           (1) based on credible evidence of groundwater  
9 availability in the vicinity of the proposed subdivision, the  
10 commissioners court determines that sufficient groundwater is  
11 available and will continue to be available to the subdivided tract  
12 of land; and

13           (2) either:

14           (A) the entire tract proposed to be subdivided by  
15 the plat will be supplied with groundwater from the Gulf Coast  
16 Aquifer or the Carrizo-Wilcox Aquifer; or

17           (B) the proposed subdivision divides the tract  
18 into not more than 10 parts.

19           (a-2) A person subject to a waiver authorized by Subsection  
20 (a-1)(2)(B) regarding a subdivided tract of land must comply with  
21 the requirements of Subsection (a) if:

22           (1) the tract is subsequently divided in a manner that  
23 results in the original tract being subdivided into more than 10  
24 parts; or

25           (2) the commissioners court determines that the  
26 proposed subdivision is part of a series of proposed subdivisions  
27 from an original tract that collectively includes more than 10

1 parts.

2           SECTION 3. The changes in law made by this Act apply only to  
3 a plat application filed on or after the effective date of this Act.  
4 A plat application filed before the effective date of this Act is  
5 governed by the law in effect on the date the application was filed,  
6 and the former law is continued in effect for that purpose.

7           SECTION 4. This Act takes effect January 1, 2024.



\_\_\_\_\_  
President of the Senate

\_\_\_\_\_  
Speaker of the House

I hereby certify that S.B. No. 2440 passed the Senate on April 6, 2023, by the following vote: Yeas 31, Nays 0; and that the Senate concurred in House amendments on May 27, 2023, by the following vote: Yeas 31, Nays 0.

\_\_\_\_\_  
Secretary of the Senate

I hereby certify that S.B. No. 2440 passed the House, with amendments, on May 24, 2023, by the following vote: Yeas 120, Nays 18, one present not voting.

\_\_\_\_\_  
Chief Clerk of the House

Approved:

\_\_\_\_\_  
Date

\_\_\_\_\_  
Governor

The Texas Commission on Environmental Quality (TCEQ) proposes amendments to 30 Texas Administrative Code (TAC) §§230.1-230.11.

### **Background and Summary of the Factual Basis for the Proposed Rules**

The purpose of this rule proposal is to implement the provisions of Senate Bill (SB) 2440, passed during the 88th Texas Legislature's Regular Session in 2023. Local Government Code (LGC) §212.0101 and §232.0032 establish requirements for groundwater availability certification in the municipal and county plat application and approval process for proposed subdivisions when the groundwater beneath the land serves as the primary source of water supply. SB 2440 amended §212.0101(a) and §232.0032(a) to make groundwater availability certification a mandatory component of the plat application and approval process. SB 2440 also established specific circumstances under which a municipal or county authority may waive the certification requirement by adding §212.0101(a)(1) and (a)(2) and §232.0032(a)(1) and (a)(2). SB 2440 became effective on January 1, 2024, and requires that existing TCEQ rules are continued in effect for plat applications filed before January 1, 2024.

The charge to TCEQ under LGC §212.0101(b) and (c) and §232.0032(b) and (c) is limited to adopting rules that establish the form and content of a groundwater availability certification and require transmittal of specific information to the Texas Water Development Board and the applicable groundwater conservation district. Currently, 30 Texas Administrative Code (TAC) §230.1 and §§230.3 - 230.11 include references to applicability and have embedded forms. Since applicability is addressed by LGC §212.0101(a), (a)(1) and (a)(2) and §232.0032(a), (a)(1) and (a)(2) and does not require further definition, TCEQ proposes to replace applicability provisions with general provisions that identify the purpose of the rule. And since the current rules specify transmittal requirements and groundwater availability certification contents,

TCEQ also proposes to remove the embedded forms and replace those with references to TCEQ forms so that the format of the forms can be updated as technology changes.

## **Section by Section Discussion**

### *§230.1, Applicability*

LGC, §212.0101(b) and (c) and §232.0032(b) and (c) charge TCEQ with adopting rules that establish the form and content of a groundwater availability certification and require transmittal of specific information to the Texas Water Development Board and the applicable groundwater conservation district. TCEQ proposes amendments to this section that eliminate the applicability provisions because those are established by LGC, §212.0101(a), (a)(1), and (a)(2) and §232.0032(a), (a)(1), and (a)(2). Those provisions are replaced by general provisions that identify the purpose of the rule consistent with LGC, §212.0101(b) and (c) and §232.0032(b) and (c) that charge TCEQ with adopting rules that establish the form and content of a groundwater availability certification.

TCEQ also proposes amendments to remove the form embedded at §230.1(c)(2) and instead require submittal of Plat Attesting Form (TCEQ-20983). Removing the form from the rule allows for the format to change with technology over time. Conforming changes are proposed throughout 30 TAC §230.1.

### *§230.2, Definitions*

TCEQ proposes to delete the definition of “executive administrator” at §230.2(6), because “executive administrator” is not used independently from “of the Texas Water Development Board” within the chapter and, therefore, the definition is not necessary.

*§230.3, Certification of Groundwater Availability for Platting*

TCEQ proposes amendments that make conforming changes where these sections reference the provisions modified at §230.1. TCEQ also proposes amendments to remove the form embedded at §230.3(c) and instead require submittal of Certification of Groundwater Availability for Platting Form (TCEQ-20982). Removing the form from the rule allows for the format to change with technology over time. Conforming changes are proposed throughout 30 TAC §230.3.

*§230.4, Administrative Information*

TCEQ proposes amendments to §230.4 to make a conforming citation where the plat applicant “must” now follow 30 TAC Chapter 230 rules, rather than “may” or “shall” follow 30 TAC Chapter 230 rules. The word “must,” now replaces “may” and “shall,” throughout §230.4. Additionally, amendments are proposed that make conforming changes where these sections reference the provisions modified at §230.1 and §230.3.

TCEQ proposes amendments to require an email address with all contact information required by this section.

*§230.5 - §§230.11*

TCEQ proposes amendments to §§230.5 - 230.11 to make a conforming citation where the plat applicant “must” now follow 30 TAC Chapter 230 rules, rather than “may” or “shall” follow 30 TAC Chapter 230 rules. The word “must,” now replaces “may” and “shall,” throughout §§230.5 - 230.11. Additionally, the commission proposes amendments that make conforming changes where these sections reference the provisions modified at §230.1 and §230.3.

### **Fiscal Note: Costs to State and Local Government**

Kyle Girten, Analyst in the Budget and Planning Division, has determined that for the first five-year period the proposed rules are in effect, no costs are anticipated for the agency or for other units of state or local government as a result of administration or enforcement of the proposed rule.

### **Public Benefits and Costs**

Mr. Girten determined that for each year of the first five years the proposed rules are in effect, the public benefit would be consistency with state law, specifically SB 2440 from the 88th Regular Legislative Session (2023). The proposed rulemaking would not result in fiscal implications for businesses or individuals.

### **Local Employment Impact Statement**

TCEQ reviewed this proposed rulemaking and determined that a Local Employment Impact Statement is not required because the proposed rulemaking does not adversely affect a local economy in a material way for the first five years that the proposed rule is in effect.

### **Rural Communities Impact Assessment**

TCEQ reviewed this proposed rulemaking and determined that the proposed rulemaking does not adversely affect rural communities in a material way for the first five years that the proposed rules are in effect. The amendments would apply statewide and have the same effect in rural communities as in urban communities.

### **Small Business and Micro-Business Assessment**

No adverse fiscal implications are anticipated for small or micro-businesses due to the

implementation or administration of the proposed rule for the first five-year period the proposed rules are in effect.

### **Small Business Regulatory Flexibility Analysis**

TCEQ reviewed this proposed rulemaking and determined that a Small Business Regulatory Flexibility Analysis is not required because the proposed rule does not adversely affect a small or micro-business in a material way for the first five years the proposed rules are in effect.

### **Government Growth Impact Statement**

TCEQ prepared a Government Growth Impact Statement assessment for this proposed rulemaking. The proposed rulemaking does not create or eliminate a government program and would not require an increase or decrease in future legislative appropriations to the agency. The proposed rulemaking does not require the creation of new employee positions, eliminate current employee positions, nor require an increase or decrease in fees paid to the agency. The proposed rulemaking amends an existing regulation to be consistent with state law. The proposed rulemaking does not increase or decrease the number of individuals subject to its applicability. During the first five years, the proposed rule should not impact positively or negatively the state's economy.

### **Draft Regulatory Impact Analysis Determination**

TCEQ reviewed the proposed rulemaking in light of the regulatory analysis requirements of Texas Government Code, §2001.0225, and determined that the rulemaking is not subject to §2001.0225 because it does not meet the definition of a "Major environmental rule" as defined in the Texas Administrative Procedure Act. A "Major environmental rule" is a rule that is specifically intended to protect the environment or reduce risks to human health from

environmental exposure, and that may adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state.

This rulemaking does not meet the statutory definition of a “Major environmental rule” because it is not the specific intent of the rule to protect the environment or reduce risks to human health from environmental exposure. The specific intent of the proposed rulemaking is to implement legislative changes enacted by SB 2440, which requires groundwater certification during the platting process.

In addition, the rulemaking does not meet the statutory definition of a “Major environmental rule” because the proposed rule would not adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state. The cost of complying with the proposed rule is not expected to be significant with respect to the economy.

Furthermore, the proposed rulemaking is not subject to Texas Government Code, §2001.0225 because it does not meet any of the four applicability requirements listed in Texas Government Code, §2001.0225(a). There are no federal standards governing groundwater certification in the plat application and approval process. Second, the proposed rulemaking does not exceed an express requirement of state law. Third, the proposed rulemaking does not exceed a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program. Finally, the proposed rulemaking is not an adoption of a rule solely under the general powers of the commission as the proposed rules are required by SB 2440.

TCEQ invites public comment regarding the Draft Regulatory Impact Analysis Determination during the public comment period. Written comments on the Draft Regulatory Impact Analysis Determination may be submitted to the contact person at the address listed under the Submittal of Comments section of this preamble.

### **Takings Impact Assessment**

TCEQ evaluated the proposed rule and performed an assessment of whether the proposed rule constitutes a taking under Texas Government Code, Chapter 2007. The specific intent of the proposed rulemaking is to implement legislative changes enacted by Senate Bill 2440, which requires groundwater certification during the platting process with certain exceptions. The proposed rule would substantially advance this purpose by amending the Chapter 230 rules to incorporate the new statutory requirements.

Promulgation and enforcement of this proposed rule would be neither a statutory nor a constitutional taking of private real property. The proposed rule does not affect a landowner's rights in private real property because this rulemaking does not relate to or have any impact on an owner's rights to property. The proposed rule would primarily affect landowners planning to use only groundwater to supply water for subdivisions; this would not be an effect on real property. Therefore, the adopted rulemaking would not constitute a taking under Texas Government Code, Chapter 2007.

### **Consistency with the Coastal Management Program**

TCEQ reviewed the proposed rules and found that they are neither identified in Coastal Coordination Act Implementation Rules, 31 TAC §505.11(b)(2) or (4), nor would they affect any



action/authorization identified in Coastal Coordination Act Implementation Rules, 31 TAC §505.11(a)(6). Therefore, the proposed rules are not subject to the Texas Coastal Management Program.

Written comments on the consistency of this rulemaking may be submitted to the contact person at the address listed under the Submittal of Comments section of this preamble.

### **Announcement of Hearing**

TCEQ will hold a hybrid virtual and in-person public hearing on this proposal in Austin on June 10, 2024, at 2:00 p.m. in building E, room 201S at TCEQ's central office located at 12100 Park 35 Circle. The hearing is structured for the receipt of oral or written comments by interested persons. Individuals may present oral statements when called upon in order of registration. Open discussion will not be permitted during the hearing; however, commission staff members will be available to discuss the proposal 30 minutes prior to the hearing.

Individuals who plan to attend the hearing virtually and want to provide oral comments and/or want their attendance on record must register by Thursday, June 6, 2024. To register for the hearing, please email [Rules@tceq.texas.gov](mailto:Rules@tceq.texas.gov) and provide the following information: your name, your affiliation, your email address, your phone number, and whether or not you plan to provide oral comments during the hearing. Instructions for participating in the hearing will be sent on Friday, June 7, 2024, to those who register for the hearing.

For the public who do not wish to provide oral comments but would like to view the hearing may do so at no cost at:

<https://teams.microsoft.com/l/meetup->

[join/19%3ameeting\\_ZmFINDM4MTktMTk0MS00ODIkLWE0MjctYWExYTZiOTBhNmJl%40thread.v2/0?context=%7b%22Tid%22%3a%22871a83a4-a1ce-4b7a-8156-3bcd93a08fba%22%2c%22Oid%22%3a%22e74a40ea-69d4-469d-a8ef-06f2c9ac2a80%22%2c%22IsBroadcastMeeting%22%3atrue%7d](https://www.tceq.texas.gov/19%3ameeting_ZmFINDM4MTktMTk0MS00ODIkLWE0MjctYWExYTZiOTBhNmJl%40thread.v2/0?context=%7b%22Tid%22%3a%22871a83a4-a1ce-4b7a-8156-3bcd93a08fba%22%2c%22Oid%22%3a%22e74a40ea-69d4-469d-a8ef-06f2c9ac2a80%22%2c%22IsBroadcastMeeting%22%3atrue%7d)

Persons who have special communication or other accommodation needs who are planning to attend the hearing should contact Sandy Wong, Office of Legal Services at (512) 239-1802 or 1-800-RELAY-TX (TDD). Requests should be made as far in advance as possible.

### **Submittal of Comments**

Written comments may be submitted to Gwen Ricco, MC 205, Office of Legal Services, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087, or faxed to *fax4808@tceq.texas.gov*. Electronic comments may be submitted at:

<https://tceq.commentinput.com/comment/search>. File size restrictions may apply to comments being submitted via the TCEQ Public Comments system. All comments should reference Rule Project Number 2024-006-230-OW. The comment period closes on June 11, 2024. Please choose one of the methods provided to submit your written comments.

Copies of the proposed rulemaking can be obtained from the commission's website at [https://www.tceq.texas.gov/rules/propose\\_adopt.html](https://www.tceq.texas.gov/rules/propose_adopt.html). For further information, please contact Abiy Berehe, Groundwater Planning and Assessment Team, by phone at 512-239-5480 or by email at [abiy.berehe@tceq.texas.gov](mailto:abiy.berehe@tceq.texas.gov).

## §§230.1 – 230.11

### **Statutory Authority**

These amendments are proposed under Texas Water Code (TWC) §5.102, which establishes the Commission's general authority necessary to carry out its jurisdiction; §5.103, which establishes the Commission's general authority to adopt rules; and §5.105, which establishes the Commission's authority to set policy by rule. In addition, Local Government Code §212.0101(b) and §232.0032(b) require the commission to promulgate rules that establish the appropriate form and content of a certification to be attached to a plat application.

The proposed amendments implement the language set forth in SB 2440 from the 88th Texas Legislature.

### **§230.1. General [Applicability].**

(a) Purpose. This chapter establishes the form and content of a certification to be attached to a [Subdivisions utilizing groundwater as the source of water supply. In the] plat application [and approval process, municipal and county authorities may require certification that adequate groundwater is available for a proposed subdivision if groundwater under that land is to be the source of water supply. The municipal or county authority is not required to exercise their authority] under Texas Local Government Code, §212.0101 or §232.0032. [However, if they do exercise their authority, the form and content of this chapter must be used.]

(b) Use of this chapter. If required by the municipal or county authority, the plat applicant and the Texas licensed professional engineer or the Texas licensed professional

geoscientist shall use this chapter and the attached form to certify that adequate groundwater is available under the land of a subdivision subject to platting under Texas Local Government Code, §212.004 and §232.001.] These rules do not replace:

(1) other state and federal requirements applicable to public drinking water supply systems; [. These rules do not replace]

(2) the authority of counties within designated priority groundwater management areas under Texas Water Code, §35.019;[,] or

(3) the authority of groundwater conservation districts under Texas Water Code, Chapter 36.

(b) [(c)] Transmittal of data. Copies [If use of this chapter is required by the municipal or county authority, the plat applicant shall:]

[(1) provide copies] of the information, estimates, data, calculations, determinations, statements, and certification required by §230.8 of this title (relating to Obtaining Site-Specific Groundwater Data), §230.9 of this title (relating to Determination of Groundwater Quality), §230.10 of this title (relating to Determination of Groundwater Availability), and §230.11 of this title (relating to Groundwater Availability and Usability Statements and Certification) must be provided with the certification to:

(1) the executive administrator of the Texas Water Development Board, and

(2) [to] the applicable groundwater conservation district or districts, [; and]

(c) [(2)] Plat Attesting Form. The Plat Attesting Form (TCEO-20983) must be submitted with the certification, attesting [using the attached form, attest] that copies of the information, estimates, data, calculations, determinations, statements, and the certification have been provided to:

(1) the executive administrator of the Texas Water Development Board, and

(2) the applicable groundwater conservation district or districts.

[The executive director may make minor changes to this form that do not conflict with the requirements of these rules.]

**[Figure: 30 TAC §230.1(c)(2)]**

TRANSMITTAL OF DATA

Use of this form: If required by a municipal authority pursuant to Texas Local Government Code, §212.0101, or a county authority pursuant to Texas Local Government Code, §232.0032 the plat applicant shall use this form to attest that information has been provided in accordance with the requirements of Title 30, TAC, Chapter 230. This form shall be provided to the municipal or county authority, the executive administrator of the Texas Water Development Board, and the applicable groundwater conservation district or districts.

Name of Proposed Subdivision:

Property Owner's Name(s):

Address:

Phone:

Fax:

Plat Applicant's Name:

Address:

Phone:

Fax:

I, \_\_\_\_\_, the Plat Applicant, attest that the following information has been provided in accordance with Title 30, TAC, Chapter 230.

Has the Certification of Groundwater Availability for Platting Form (Figure: 30 TAC §230.3(c)) been provided to the:		(Please Circle One)	
1. Municipal or County authority?	Yes	No	
2. Executive administrator of the Texas Water Development Board?	Yes	No	
3. Applicable Groundwater Conservation District or Districts?	Yes	No	
Name of Groundwater Conservation District or Districts:			
Have copies of the information, estimates, data, calculations, determinations, and statements been provided to the:			
4. Executive administrator of the Texas Water Development Board?	Yes	No	
5. Applicable Groundwater Conservation District or Districts?	Yes	No	
Name of Groundwater Conservation District or Districts:			

Note: Mail the required information to the executive administrator of the Texas Water Development Board at the following address:

Executive Administrator  
 Texas Water Development Board  
 Groundwater Resources Division  
 P.O. Box 13231  
 Austin, Texas 78711-3231

Contact and other information for the Groundwater Conservation Districts within the state may be accessed on the following Internet pages:

- [http://www.tceq.state.tx.us/permitting/water\\_supply/groundwater/districts.html](http://www.tceq.state.tx.us/permitting/water_supply/groundwater/districts.html)
- <http://www.twdb.state.tx.us/GwRD/pages/gwrindex.html>
- <http://www.texasgroundwater.org/index.htm>

**§230.2. Definitions.**

The following words and terms, when used in this chapter, shall have the following meanings, unless the context clearly indicates otherwise. If a word or term used in this chapter is not contained in this section, it shall have the same definition and meaning as used in the practices applicable to hydrology and aquifer testing.

(1) Applicable groundwater conservation district or districts--Any district or authority created under Texas Constitution, Article III, Section 52, or Article XVI, Section 59, that:

(A) has the authority to regulate the spacing of water wells, the production from water wells, or both, and

(B) which includes within its boundary any part of the plat applicant's proposed subdivision.

(2) Aquifer--A geologic formation, group of formations, or part of a formation that contains water in its voids or pores and may be used as a source of water supply.

(3) Aquifer test--A test involving the withdrawal of measured quantities of water from or addition of water to a well and the measurement of resulting changes in water level in the aquifer both during and after the period of discharge or addition for the purpose of determining the characteristics of the aquifer. For the purposes of this chapter, bail and slug tests are not considered to be aquifer tests.

(4) Certification--A written statement of best professional judgement or opinion submitted [as attested to] on the Certification of Groundwater Availability for Platting Form (TCEQ-20982) and attested to on the Plat Attesting Form (TCEQ-20983) [contained under §230.3(c) of this title (relating to Certification of Groundwater Availability for Platting)].

(5) Drinking water standards--As defined in commission rules covering drinking water standards contained in Chapter 290, Subchapter F of this title (relating to Drinking Water Standards Governing Drinking Water Quality and Reporting Requirements for Public Water Systems).

[(6) Executive administrator--The executive administrator of the Texas Water Development Board.]

(6) [(7)] Full build out--The final expected number of residences, businesses, or other dwellings in the proposed subdivision.

(7) [(8)] Licensed professional engineer--An engineer who maintains a current license through the Texas Board of Professional Engineers in accordance with its requirements for professional practice.

(8) [(9)] Licensed professional geoscientist--A geoscientist who maintains a current license through the Texas Board of Professional Geoscientists in accordance with its requirements for professional practice.

(9) [(10)] Plat applicant--The owner or the authorized representative or agent seeking approval of a proposed subdivision plat application pursuant to municipal or county authority.

(10) [(11)] Requirements applicable to public drinking water supply systems--The requirements contained in commission rules covering public drinking water supply systems in



Chapter 290, Subchapter D of this title (relating to Rules and Regulations for Public Water Systems).

**§230.3. Certification of Groundwater Availability for Platting.**

(a) Preparation of the certification. [Certification.] The certification required by this chapter must be prepared by a Texas licensed professional engineer or a Texas licensed professional geoscientist.

(b) Certification Requirements. The certification must meet the requirements of §230.4-230.11 of this chapter.

(c) [(b)] Submission of information. The certification must be submitted [The plat applicant shall provide] to the following:

(1) the municipal or county authority,

(2) the executive administrator of the Texas Water Development Board, and

(3) the applicable groundwater conservation district or districts [the certification of adequacy of groundwater under the subdivision required by this chapter].

(d) [(c)] Form required. The certification required by this chapter must be submitted on the Certification of Groundwater Availability for Platting Form (TCEO-20982). [This chapter and the following form shall be used and completed if plat applicants are required by the municipal or county authority to certify that adequate groundwater is available under the land to be

subdivided. The executive director may make minor changes to this form that do not conflict with the requirements of these rules.]

**[Figure: 30 TAC §230.3(c)**

**CERTIFICATION OF GROUNDWATER AVAILABILITY FOR PLATTING FORM**

Use of this form: If required by a municipal authority pursuant to Texas Local Government Code, §212.0101, or a county authority pursuant to §232.0032, Texas Local Government Code, the plat applicant and the Texas licensed professional engineer or Texas licensed professional geoscientist shall use this form based upon the requirements of Title 30, TAC, Chapter 230 to certify that adequate groundwater is available under the land to be subdivided (if the source of water for the subdivision is groundwater under the subdivision) for any subdivision subject to platting under Texas Local Government Code, §212.004 and §232.001. The form and Chapter 230 do not replace state requirements applicable to public drinking water supply systems or the authority of counties or groundwater conservation districts under either Texas Water Code, §35.019 or Chapter 36.

Administrative Information (30 TAC §230.4)
1. Name of Proposed Subdivision:
2. Any Previous Name Which Identifies the Tract of Land:
3. Property Owner's Name(s):
Address:
Phone:
Fax:
4. Plat Applicant's Name:
Address:
Phone:
Fax:
5. Licensed Professional Engineer or Geoscientist:
Name:
Address:
Phone:
Fax:

Certificate Number:
6. Location and Property Description of Proposed Subdivision:
7. Tax Assessor Parcel Number(s).
Book:
Map:
Parcel:

Proposed Subdivision Information (30 TAC §230.5)		
8. Purpose of Proposed Subdivision (single family/multi-family residential, non-residential, commercial):		
9. Size of Proposed Subdivision (acres):		
10. Number of Proposed Lots:		
11. Average Size of Proposed Lots (acres):		
12. Anticipated Method of Water Distribution.		
Expansion of Existing Public Water Supply System?	Yes	No
New (Proposed) Public Water Supply System?	Yes	No
Individual Water Wells to Serve Individual Lots?	Yes	No
Combination of Methods?	Yes	No
Description (if needed):		
13. Additional Information (if required by the municipal or county authority):		
Note: If public water supply system is anticipated, written application for service to existing water providers within a 1/2-mile radius should be attached to this form (30 TAC §230.5(f) of this title).		

Projected Water Demand Estimate (30 TAC §230.6)
14. Residential Water Demand Estimate at Full Build Out (includes both single family and multi-family residential).
Number of Proposed Housing Units (single and multi-family):



been confined to the zone(s) of origin (§230.8(c)(5) of this title)?		
23. Has an aquifer test been conducted which meets the requirements of §230.8(c)(1) and (6) of this title?	Yes	No
24. Were existing wells or previous aquifer test data used?	Yes	No
25. If yes, did they meet the requirements of §230.8(c)(7) of this title?	Yes	No
26. Were additional observation wells or aquifer testing utilized?	Yes	No

Note: If expansion of an existing public water supply system or a new public water supply system is the anticipated method of water distribution for the proposed subdivision, site-specific groundwater data shall be developed under the requirements of 30 TAC, Chapter 290, Subchapter D of this title (relating to Rules and Regulations for Public Water Systems) and the applicable information and correspondence developed in meeting those requirements shall be attached to this form pursuant to §230.8(a) of this title.

Determination of Groundwater Quality (30 TAC §230.9)		
27. Have water quality samples been collected as required by §230.9 of this title?	Yes	No
28. Has a water quality analysis been performed which meets the requirements of §230.9 of this title?	Yes	No

Determination of Groundwater Availability (30 TAC §230.10)		
29. Have the aquifer parameters required by §230.10(c) of this title been determined?	Yes	No
30. If so, provide the aquifer parameters as determined.		
Rate of yield and drawdown:		
Specific capacity:		
Efficiency of the pumped well:		
Transmissivity:		
Coefficient of storage:		
Hydraulic conductivity:		
Were any recharge or barrier boundaries detected?	Yes	No

If yes, please describe:		
Thickness of aquifer(s):		
31. Have time-drawdown determinations been calculated as required under §230.10(d)(1) of this title?	Yes	No
32. Have distance-drawdown determinations been calculated as required under §230.10(d)(2) of this title?	Yes	No
33. Have well interference determinations been made as required under §230.10(d)(3) of this title?	Yes	No
34. Has the anticipated method of water delivery, the annual groundwater demand estimates at full build out, and geologic and groundwater information been taken into account in making these determinations?	Yes	No
35. Has the water quality analysis required under §230.9 of this title been compared to primary and secondary public drinking water standards as required under §230.10(e) of this title?	Yes	No
Does the concentration of any analyzed constituent exceed the standards?	Yes	No
If yes, please list the constituent(s) and concentration measure(s) which exceed standards:		

Groundwater Availability and Usability Statements (30 TAC §230.11(a) and (b))
36. Drawdown of the aquifer at the pumped well(s) is estimated to be _____ feet over a 10-year period and _____ feet over a 30-year period.
37. Drawdown of the aquifer at the property boundary is estimated to be _____ feet over a 10-year period and _____ feet over a 30-year period.
38. The distance from the pumped well(s) to the outer edges of the cone(s)-of-depression is estimated to be _____ feet over a 10-year period and _____ feet over a 30-year period.
39. The recommended minimum spacing limit between wells is _____ feet with a recommended well yield of _____ gallons per minute per well.
40. Available groundwater is / is not (circle one) of sufficient quality to meet the intended use of the platted subdivision.

41. The groundwater availability determination does not consider the following conditions (identify any assumptions or uncertainties that are inherent in the groundwater availability determination):

**Certification of Groundwater Availability (30 TAC §230.11(c))**

Must be signed by a Texas Licensed Professional Engineer or a Texas Licensed Professional Geoscientist.

42. I, \_\_\_\_\_, Texas Licensed Professional Engineer or Texas Licensed Professional Geoscientist (circle which applies), certificate number \_\_\_\_\_, based on best professional judgment, current groundwater conditions, and the information developed and presented in this form, certify that adequate groundwater is available from the underlying aquifer(s) to supply the anticipated use of the proposed subdivision.

Date:

(affix seal)

**§230.4. Administrative Information.**

At a minimum, the following general administrative information [as specified in §230.3(c) of this title (relating to Certification of Groundwater Availability for Platting),] must [shall] be provided for a proposed subdivision for which groundwater under the land will be the source of water supply:

(1) the name of the proposed subdivision;

(2) any previous or other name(s) which identifies the tract of land;

(3) the name, address, phone number, email address, and facsimile number of the property owner or owners;

(4) the name, address, phone number, email address, and facsimile number of the person submitting the plat application;

(5) the name, address, phone number, email address, facsimile number, and registration number of the licensed professional engineer or the licensed professional geoscientist preparing the certification as required in this chapter;

(6) the location and property description of the proposed subdivision; and

(7) the tax assessor parcel number(s) by book, map, and parcel.



**§230.5. Proposed Subdivision Information.**

At a minimum, the following information pertaining to the proposed subdivision must [shall] be provided [as specified in §230.3(c) of this title (relating to Certification of Groundwater Availability for Platting)]:

- (1) the purpose of the proposed subdivision, for example, single family residential, multi-family residential, non-residential, commercial, or industrial;
- (2) the size of the proposed subdivision in acres;
- (3) the number of proposed lots within the proposed subdivision;
- (4) the average size (in acres) of the proposed lots in the proposed subdivision;
- (5) the anticipated method of water distribution to the proposed lots in the proposed subdivision including, but not limited to:
  - (A) an expansion of an existing public water supply system to serve the proposed subdivision (if groundwater under the subdivision is to be the source of water supply);
  - (B) a new public water supply system for the proposed subdivision;
  - (C) individual water wells to serve individual lots; or
  - (D) a combination of methods;

(6) if the anticipated method of water distribution for the proposed subdivision is from an expansion of an existing public water supply system or from a proposed public water supply system, evidence required under §290.39(c)(1) of this title (relating to Rules and Regulations for Public Water Systems) which must [shall] be provided demonstrating that written application for service was made to the existing water providers within a 1/2-mile radius of the subdivision; and

(7) any additional information required by the municipal or county authority as part of the plat application.

**§230.6. Projected Water Demand Estimate.**

(a) Residential water demand estimate. Residential water demand estimates at full build out must [shall] be provided [as specified in §230.3(c) of this title (relating to Certification of Groundwater Availability for Platting)]. Residential demand estimates must [shall], at a minimum, be based on the current demand of any existing residential well including those identified under §230.8(b) of this title (relating to Obtaining Site-Specific Groundwater Data), or §290.41(c) of this title (relating to Rules and Regulations for Public Water Systems), and:

- (1) the number of proposed housing units at full build out;
- (2) the average number of persons per housing unit;
- (3) the gallons of water required per person per day;

(4) the water demand per housing unit per year (acre feet per year); and

(5) the total expected residential water demand per year for the proposed subdivision (acre feet per year).

(b) Non-residential water demand estimate. Water demand estimates at full build out must [shall] be provided for all non-residential uses [as specified in §230.3(c) of this title]. Non-residential uses must [shall] be specified by type of use and groundwater demand per year (acre feet per year) for each type of use. The estimate must [shall] also include the existing non-residential demand of any well including those identified under §230.8(b) of this title or §290.41(c) of this title.

(c) Total annual water demand estimate. An estimate of the total expected annual groundwater demand, including residential and non-residential estimates at full build out (acre feet per year), must [shall] be provided [as specified in §230.3(c) of this title].

(d) Submission of information. The sources of information used and calculations performed to determine the groundwater demand estimates as required by this section must [shall] be made available to the municipal or county authority if requested. The plat applicant must [shall] provide any additional groundwater demand information required by the municipal or county authority as part of the plat application.

#### **§230.7. General Groundwater Resource Information.**

(a) Aquifer identification. Using Texas Water Development Board aquifer names, the aquifer(s) underlying the proposed subdivision which is planned to be used as the source of

water for the subdivision must [shall] be identified and generally described [as specified in §230.3(c) of this title (relating to Certification of Groundwater Availability for Platting)].

(b) Geologic and groundwater information. To meet the requirements of this chapter, the following geologic and groundwater information must [shall] be considered in planning and designing the aquifer test [under §230.8(c) of this title (relating to Obtaining Site-Specific Groundwater Data)]:

(1) the stratigraphy of the geologic formations underlying the subdivision;

(2) the lithology of the geologic strata;

(3) the geologic structure;

(4) the characteristics of the aquifer(s) and their hydraulic relationships;

(5) the recharge to the aquifer(s), and movement and discharge of groundwater from the aquifer(s); and

(6) the ambient quality of water in the aquifer(s).

#### **§230.8. Obtaining Site-Specific Groundwater Data.**

(a) Applicability of section. This section is applicable only if the proposed method of water distribution for the proposed subdivision is individual water wells on individual lots. If expansion of an existing public water supply system or installation of a new public water

supply system is the proposed method of water distribution for the proposed subdivision, site-specific groundwater data must [shall] be developed under the requirements of Chapter 290, Subchapter D of this title (relating to Rules and Regulations for Public Water Systems) and the information developed in meeting these requirements must [shall] be attached to the [form required under §230.3 of this title (relating to) Certification of Groundwater Availability for Platting Form ]].

(b) Location of existing wells. All known existing, abandoned, and inoperative wells within the proposed subdivision must [shall] be identified, located, and mapped by on-site surveys. Existing well locations must [shall] be illustrated on the plat required by the municipal or county authority.

(c) Aquifer testing. Utilizing the information considered under §230.7(b) of this title (relating to General Groundwater Resource Information), an aquifer test must [shall] be conducted to characterize the aquifer(s) underlying the proposed subdivision. The aquifer test must provide sufficient information to allow evaluation of each aquifer that is being considered as a source of residential and non-residential water supply for the proposed subdivision. Appropriate aquifer testing must [shall] be based on typical well completions. An aquifer test conducted under this section utilizing established methods must [shall] be reported [as specified in §230.3(c) of this title] and must [shall] include, but not be limited to, the following items.

(1) Test well and observation well(s). At a minimum, one test well (i.e., pumping well) and one observation well, must [shall] be required to conduct an adequate aquifer test under this section. Additional observation wells must [shall] be used for the aquifer test if it is

practical or necessary to confirm the results of the test. The observation well(s) must [shall] be completed in the same aquifer or aquifer production zone as the test well. The locations of the test and observation well(s) must [shall] be shown on the plat required by the municipal or county authority.

(2) Location of wells. The test and observation well(s) must be placed within the proposed subdivision and must [shall] be located by latitude and longitude. The observation well(s) must [shall] be located at a radial distance such that the time-drawdown data collected during the planned pumping period fall on a type curve of unique curvature. In general, observation wells in unconfined aquifers should be placed no farther than 300 feet from the test well, and no farther than 700 feet in thick, confined aquifers. The observation well should also be placed no closer to the test well than two times the thickness of the aquifer's production zone. The optimal location for the observation well(s) can be determined by best professional judgement after completion and evaluation of the test well as provided in paragraph (4) of this subsection.

(3) Lithologic and geophysical logs. The test and observation wells must [shall] be lithologically and geophysically logged to map and characterize the geologic formation(s) and the aquifer(s) in which the aquifer test(s) is to be performed.

(A) A lithologic log must [shall] be prepared showing the depth of the strata, their thickness and lithology (including size, range, and shape of constituent particles as well as smoothness), occurrence of water bearing strata, and any other special notes that are relevant to the drilling process and to the understanding of subsurface conditions.

(B) Geophysical logs must [shall] be prepared which provide qualitative information on aquifer characteristics and groundwater quality. At a minimum, the geophysical logs must [shall] include an electrical log with shallow and deep-investigative curves (e.g., 16-inch short normal/64-inch long normal resistivity curves or induction log) with a spontaneous potential curve.

(C) The municipal or county authority may, on a case-by-case basis, waive the requirement of geophysical logs as required under this section if it can be adequately demonstrated that the logs are not necessary to characterize the aquifer(s) for testing purposes.

(4) Well development and performance. The test and observation well(s) must [shall] be developed prior to conducting the aquifer test to repair damage done to the aquifer(s) during the drilling operation. Development must [shall] ensure [insure] that the hydraulic properties of the aquifer(s) are restored as much as practical to their natural state.

(A) Well development procedures applied to the well(s) may vary depending on the drilling method used and the extent of the damage done to the aquifer(s).

(B) During well development, the test well must [shall] be pumped for several hours to determine the specific capacity of the well, the maximum anticipated drawdown, the volume of water produced at certain pump speeds and drawdown, and to determine if the observation well(s) are suitably located to provide useful data.

(C) Water pumped out of the well during well development must [shall] not be allowed to influence initial well performance results.

(D) Aquifer testing required by this section must [shall] be performed before any acidization or other flow-capacity enhancement procedures are applied to the test well.

(5) Protection of groundwater. All reasonably necessary precautions must [shall] be taken during construction of test and observation wells to ensure that surface contaminants do not reach the subsurface environment and that undesirable groundwater (water that is injurious to human health and the environment or water that can cause pollution to land or other waters) if encountered, is sealed off and confined to the zone(s) of origin.

(6) Duration of aquifer test and recovery. The duration of the aquifer test depends entirely on local and geologic conditions. However, the test must [shall] be of sufficient duration to observe a straight-line trend on a plot of water level versus the logarithm of time pumped. Water pumped during the test must [shall] not be allowed to influence the test results. Aquifer testing must [shall] not commence until water levels (after well development) have completely recovered to their pre-development level or at least to 90% of that level.

(A) At a minimum, a 24-hour uniform rate aquifer test must [shall] be conducted. Testing must [shall] continue long enough to observe a straight-line trend on a plot of water level versus the logarithm of time pumped. If necessary, the duration of the test should be extended beyond the 24-hour minimum limit until the straight-line trend is observed.

(i) If it is impractical to continue the test until a straight-line trend of water level versus the logarithm of time pumped is observed within the 24-hour limit, the



test must [shall] continue at least until a consistent pumping-level trend is observed. In such instances, failure to observe the straight-line trend must [shall] be recorded.

(ii) If the pumping rates remain constant for a period of at least four hours and a straight-line trend is observed on a plot of water level versus the logarithm of time pumped before the 24-hour limit has been reached, the pumping portion of the test may be terminated.

(iii) The frequency of water level measurements during the aquifer test must [shall] be such that adequate definition of the time-drawdown curve is made available. As much information as possible must [shall] be obtained in the first ten minutes of testing (i.e., pumping).

(B) Water-level recovery data must [shall] be obtained to verify the accuracy of the data obtained during the pumping portion of the test. Recovery measurements must [shall] be initiated immediately at the conclusion of the pumping portion of the aquifer test and must [shall] be recorded with the same frequency as those taken during the pumping portion of the aquifer test. Time-recovery measurements must [shall] continue until the water levels have recovered to pre-pumping levels or at least to 90% of that level. If such recovery is not possible, time-recovery measurements should continue until a consistent trend of recovery is observed.

(7) Use of existing wells and aquifer test data.

(A) An existing well may be utilized as an observation well under this section if sufficient information is available for that well to demonstrate that it meets the requirements of this section.

(B) The municipal or county authority may accept the results of a previous aquifer test in lieu of a new test if:

(i) the previous test was performed on a well located within a 1/4-mile radius of the subdivision;

(ii) the previous test fully meets all the requirements of this section;

(iii) the previous test was conducted on an aquifer which is being considered as a source of water supply for the proposed subdivision; and

(iv) aquifer conditions (e.g., water levels, gradients, etc.) during the previous test were approximately the same as they are presently.

(8) Need for additional aquifer testing and observation wells. Best professional judgement must [shall] be used to determine if additional observation wells or aquifer tests are needed to adequately demonstrate groundwater availability. The Theis and Cooper-Jacob nonequilibrium equations, and acceptable modifications thereof, are based on well documented assumptions. To determine if additional information is needed, best professional judgement must [shall] be used to consider these assumptions, the site-specific information derived from

the aquifer test required by this section, the size of the proposed subdivision, and the proposed method of water delivery.

(d) Submission of information. The information, data, and calculations required by this section must [shall] be made available to the municipal or county authority, if requested, to document the requirements of this section as part of the plat application.

**§230.9. Determination of Groundwater Quality.**

(a) Water quality analysis. Water samples must [shall] be collected near the end of the aquifer test for chemical analysis. Samples must [shall] be collected from each aquifer being considered for water supply for the proposed subdivision and reported on or attached to the Certification of Groundwater Availability Form (TCEQ-20982) [as specified in §230.3(c) of this title (relating to Certification of Groundwater Availability for Platting)].

(1) For proposed subdivisions where the anticipated method of water delivery is from an expansion of an existing public water supply system or a new public water supply system, the samples must [shall] be submitted for bacterial and chemical analysis as required by Chapter 290, Subchapter F of this title (relating to Drinking Water Standards Governing Drinking Water Quality and Reporting Requirements For Public Water Systems).

(2) For proposed subdivisions where the anticipated method of water delivery is from individual water supply wells on individual lots, samples must [shall] be analyzed for the following:

(A) chloride;

(B) conductivity;

(C) fluoride;

(D) iron;

(E) nitrate (as nitrogen);

(F) manganese;

(G) pH;

(H) sulfate;

(I) total hardness;

(J) total dissolved solids; and

(K) presence/absence of total coliform bacteria.

(3) Conductivity and pH values may be measured in the field, and the other constituents must [shall] be analyzed in a laboratory accredited by the agency according to Chapter 25, Subchapters A and B of this title (relating to General Provisions and Environmental Testing Laboratory Accreditation, respectively) or certified by the agency according to Chapter

25, Subchapters A and C of this title (relating to General Provisions and Environmental Testing Laboratory Certification, respectively).

(b) Submission of information. The information, data, and calculations required by this section must [shall] be made available to the municipal or county authority, if requested, to document the requirements of this section as part of the plat application.

**§230.10. Determination of Groundwater Availability.**

(a) Time frame for determination of groundwater availability. 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 years and 30 years and for any other time frame(s) required by the municipal or county authority.

(b) Other considerations in groundwater availability determination. Groundwater availability determinations must [shall] take into account the anticipated method of water delivery as identified under §230.5 of this title (relating to Proposed Subdivision Information) and will be compared to annual demand estimates at full build out as determined under §230.6 of this title (relating to Projected Water Demand Estimate).

(c) Determination of aquifer parameters. The parameters of the aquifer(s) being considered to supply water to the proposed subdivision must [shall] be determined utilizing the information considered under §230.7 of this title (relating to General Groundwater Resource Information) and data obtained during the aquifer test required under §230.8 of this title (relating to Obtaining Site-Specific Groundwater Data) for individual water wells or under

Chapter 290, Subchapter D of this title (relating to Rules and Regulations for Public Water Systems) and reported on or attached to the Certification of Groundwater Availability Form (TCEQ-20982) [as specified in §230.3(c) of this title (relating to Certification of Groundwater Availability for Platting)]. The time-drawdown and time-recovery data obtained during the aquifer test must [shall] be used to determine aquifer parameters utilizing the nonequilibrium equations developed by Theis or Cooper-Jacob, or acceptable modifications thereof. The following aquifer parameters must [shall] be determined:

- (1) rate of yield and drawdown;
- (2) specific capacity;
- (3) efficiency of the pumped (test) well;
- (4) transmissivity;
- (5) coefficient of storage;
- (6) hydraulic conductivity;
- (7) recharge or barrier boundaries, if any are present; and
- (8) thickness of the aquifer(s).

(d) Determination of groundwater availability. Using the information and data identified and determined in subsections (b) and (c) of this section, the following calculations must [shall] be made.

(1) Time-drawdown. The amount of drawdown at the pumped well(s) and at the boundaries of the proposed subdivision must [shall] be determined for the time frames identified under subsection (a) of this section.

(2) Distance-drawdown. The distance(s) from the pumped well(s) to the outer edges of the cone(s)-of-depression must [shall] be determined for the time frames identified under subsection (a) of this section.

(3) Well interference. For multiple wells in a proposed subdivision, calculations must [shall] be made to:

(A) determine how pumpage from multiple wells will affect drawdown in individual wells for the time frames identified under subsection (a) of this section; and

(B) determine a recommended minimum spacing limit between individual wells and well yields from the wells that will allow for the continued use of the wells for the time frames identified under subsection (a) of this section.

(e) Determination of groundwater quality. The water quality analysis required under §230.9 of this title (relating to Determination of Groundwater Quality) must [shall] be compared to primary and secondary public drinking water standards and the findings documented on or

attached to the Certification of Groundwater Availability Form (TCEO-20982) [as specified in §230.3(c) of this title].

(f) Submission of information. The information, data, and calculations required by this section must [shall] be made available to the municipal or county authority, if requested [required], to document the requirements of this section as part of the plat application.

**§230.11. Groundwater Availability and Usability Statements and Certification.**

(a) Groundwater availability and usability statements. Based on the information developed under §230.10 of this title (relating to Determination of Groundwater Availability), the following information must [shall] be provided on or attached to the Certification of Groundwater Availability Form (TCEO-20982) [as specified in §230.3(c) of this title (relating to Certification of Groundwater Availability for Platting)]:

(1) the estimated drawdown of the aquifer at the pumped well(s) over a ten-year period and over a 30-year period;

(2) the estimated drawdown of the aquifer at the subdivision boundary over a ten-year period and over a 30-year period;

(3) the estimated distance from the pumped well(s) to the outer edges of the cone(s)-of-depression over a ten-year period and over a 30-year period;

(4) the recommended minimum spacing limit between wells and the recommended well yield; and



(5) the sufficiency of available groundwater quality to meet the intended use of the platted subdivision.

(b) Groundwater availability determination conditions. The assumptions and uncertainties that are inherent in the determination of groundwater availability must [should] be clearly identified [as specified in §230.3(c) of this title]. These conditions must be identified to adequately define the basis[bases] for the availability and usability statements. These basis[bases] may include, but are not limited to, uncontrollable and unknown factors such as:

(1) future pumpage from the aquifer or from interconnected aquifers from area wells outside of the subdivision or any other factor that cannot be predicted that will affect the storage of water in the aquifer;

(2) long-term impacts to the aquifer based on climatic variations; and

(3) future impacts to usable groundwater due to unforeseen or unpredictable contamination.

(c) Certification. Based on best professional judgement, current groundwater conditions, and the information developed and presented on or attached to the Certification of Groundwater Availability Form (TCEO-20982), [in the form specified by §230.3(c) of this title], the licensed professional engineer or licensed professional geoscientist must certify [certifies] by signature, seal, and date that adequate groundwater is available from the underlying aquifer(s) to supply the estimated demand of the proposed subdivision.