The Texas Water Development Board ("TWDB" or "board") adopts an amendment to 31 Texas Administrative Code (TAC) §356.10 and adopts a new Subchapter G, 31 TAC 356, relating to brackish groundwater production zones requirements by statutory amendments to Chapter 36 of the Texas Water Code. The proposal is adopted with changes to the rule published in the August 21, 2020, issue of the *Texas Register* (45 TexReg 34).

BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE ADOPTED AMENDMENT.

Through House Bill 722 of the 86th Texas Legislature, 2019, the Legislature created a framework for groundwater conservation districts to establish rules for a person interested in obtaining a permit from a groundwater conservation district to authorize producing brackish groundwater from a designated brackish groundwater production zone for (1) a municipal drinking water project and (2) an electric generation project. The Legislature directed the TWDB to conduct technical reviews of operating permit applications and, when requested by a groundwater conservation district, conduct technical reviews of annual reports and summarize findings in a report.

The TWDB is adopting rules to implement the technical reviews by adding two new definitions in Section 356.10 and creating a new subchapter in Chapter 356, relating to brackish groundwater production zones.

SECTION BY SECTION DISCUSSION OF ADOPTED AMENDMENTS.

31 TAC §356.10 contains definitions related to groundwater management. The adopted amendment to §356.10 adds definitions for the following two terms that will be used in the adopted new Subchapter G: "Brackish groundwater production zone operating permit" and "Designated brackish groundwater production zone."

Adopted Amendment to 31 TAC Chapter 356 by addition of a New Subchapter G (relating to brackish groundwater production zones)

31 TAC §356.70. Brackish Groundwater Production Zone Designation.

Section 356.70 is adopted to clarify how the agency identifies and designates local or regional brackish groundwater production zones in areas of the state that meet specific criteria and the information required to be provided for each zone. A designated brackish groundwater production zone may span multiple groundwater conservation districts and statute does not clarify how groundwater conservation districts should coordinate with each other related to production volumes and sharing information.

Section 356.70 also allows groundwater conservation districts to amend a brackish groundwater production zone by request. The TWDB will prepare guidance separately that will provide details and requirements of the amendment process and will provide opportunity for stakeholder input on this guidance.

31 TAC §356.71. Brackish Groundwater Production Zone Operating Permit Review.

Section 356.71 is adopted to outline how the agency will conduct an assessment and technical review of a brackish groundwater production zone operating permit applications. The section also discusses the information required to conduct the technical review and the report the agency will provide to the groundwater conservation district that submitted the application. The TWDB will prepare guidance separately that will list the type of site-specific data and other information needed and will provide opportunity for stakeholders input on this guidance.

31 TAC §356.72. Annual Report Review

Section 356.72 is adopted to outline how the agency will investigate and conduct a technical review of an annual report(s), upon request by a groundwater conservation district. The section also discusses the information required to conduct the technical review and the technical report the agency will issue to the groundwater conservation district that sends the request.

REGULATORY IMPACT ANALYSIS DETERMINATION

The board reviewed the adopted rulemaking in light of the regulatory analysis requirements of Texas Government Code §2001.0225, and determined that the rulemaking is not subject to Texas Government Code, §2001.0225, because it does not meet the definition of a "major environmental rule" as defined in the Administrative Procedure Act. A "major environmental rule" is defined as a rule with the specific intent to protect the environment or reduce risks to human health from environmental exposure, a rule that may adversely affect in a material way the economy or 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 intent of the rulemaking is to clarify the agency's role in technical reviews of brackish groundwater production zone operating permit applications and associated annual reports.

Even if the adopted rule were a major environmental rule, Texas Government Code, §2001.0225 still would not apply to this rulemaking because Texas Government Code, §2001.0225 only applies to a major environmental rule, the result of which is to: (1) exceed a standard set by federal law, unless the rule is specifically required by state law; (2) exceed an express requirement of state law, unless the rule is specifically required by federal law; (3) 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; or (4) adopt a rule solely under the general powers of the agency instead of under a specific state law. This rulemaking does not meet any of these four applicability criteria because it: (1) does not exceed any standard set by any federal law; (2) does not exceed an express requirement of state law; (3) 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; and (4) is not adopted solely under the general powers of the agency, but rather is adopted under the authority of Texas Water Code §§16.060 and 36.1015. Therefore, this adopted rule does not fall under any of the applicability criteria in Texas Government Code, §2001.0225.

TAKINGS IMPACT ASSESSMENT

The board evaluated this adopted rule and performed an analysis of whether it constitutes a taking under Texas Government Code, Chapter 2007. The specific purpose of this rule is to implement legislation and clarify the agency's role in technical reviews of brackish groundwater production zone operating permit applications and associated annual reports. The adopted rule would substantially advance this stated purpose by adopting new rules for brackish groundwater productions zone designation and guiding groundwater conservation districts in the technical review process of permit applications and annual reports.

The board's analysis indicates that Texas Government Code, Chapter 2007 does not apply to this adopted rule because this is an action that is reasonably taken to fulfill an obligation mandated by state law, which is exempt under Texas Government Code, §2007.003(b)(4). The board is the agency that identifies and designates brackish groundwater production zones.

Nevertheless, the board further evaluated this adopted rule and performed an assessment of whether it constitutes a taking under Texas Government Code, Chapter 2007. Promulgation and enforcement of this adopted rule would be neither a statutory nor a constitutional taking of private real property. Specifically, the subject adopted regulation does not affect a landowner's rights in private real property because this rulemaking does not burden nor restrict or limit the owner's right to property and reduce its value by 25% or more beyond that which would otherwise exist in the absence of the regulation. Therefore, the adopted rule does not constitute a taking under Texas Government Code, Chapter 2007.

PUBLIC COMMENTS

General Comments:

Various comments stressed the need for TWDB to add a process to amend designated brackish groundwater production zones. The comments suggested that the TWDB address when and how a groundwater conservation district or an individual can request an amendment, and what information is required for TWDB to consider amending designated brackish groundwater production zones.

(Commenters: Kenedy County Groundwater Conservation District, Prairielands Groundwater Conservation District, North Texas Groundwater Conservation District, Red River Groundwater Conservation District, Middle Pecos Groundwater Conservation District, Lone Star Groundwater Conservation District, and Texas Alliance of Groundwater Districts)

Response: The TWDB appreciates these comments. Pursuant to these comments, §356.70(d) was added to allow amending designated brackish groundwater production zones. The TWDB will also develop guidance separately that will address specific details and requirements on the amendment process and provide opportunity for stakeholder input on this guidance.

Texas Alliance of Groundwater Districts asked the agency to provide notice to groundwater conservation districts whose boundaries extend over an area being studied for possible brackish groundwater production zone designation, and prior to the consideration of zone designation.

Response: The TWDB appreciates this comment. No changes were made to the rules pursuant this comment. The TWDB will develop guidance separately that will also address specific requirements on notices.

Texas Alliance of Groundwater Districts suggested distributing brackish groundwater production volumes within a brackish groundwater production zone when the zone spans multiple jurisdictions. They believe it will be beneficial to delineate these production volumes in a manner consistent with the agency's regional water planning process.

Response: The TWDB appreciates this comment. No changes were made to the rules pursuant this comment. Rule changes are not necessary to consider this comment in the zone designation process. The TWDB may consider allocation of production volumes within GCD boundaries when considering zone designations, if appropriate.

Comments on 31 TAC §356.10

Kenedy County Groundwater Conservation District suggested updating the definition of "petition" to include submitting documents to request amending a brackish groundwater production zone.

Response: The TWDB appreciates these comments. No changes were made to the rules pursuant this comment. However, §356.70(d) was added to allow amending designated brackish groundwater production zones.

Comments on 31 TAC §356.70

North Texas, Red River, and Lone Star groundwater conservation districts suggested referencing Texas Water Code §16.060(d), relating to working together with groundwater conservation districts and stakeholders and considering the Brackish Groundwater Manual for Texas Regional Water Planning Groups, and any updates to the manual, and other relevant scientific data or findings when identifying and designating brackish groundwater conservations zones.

Response: The TWDB appreciates these comments. Pursuant to these comments, §356.70(b)(3) was added to reference Texas Water Code §16.060(d).

Comments on 31 TAC §356.71

North Texas and Red River groundwater conservation districts requested incorporating Texas Water Code §36.1015(l), relating to brackish groundwater production from a zone being in addition to or separate from the amount of modeled available groundwater developed under Texas Water Code §36.108.

Response: The TWDB appreciates these comments. Pursuant to these comments, §356.71(e)(1)(A) was modified to include that the report summarizing findings from TWDB's technical review will include whether the proposed production is in addition to the amount of modeled available groundwater provided under Texas Water Code §36.108. The TWDB would note that the district and permit holder are responsible for conducting or hiring a consultant to

complete the modeling needed to meet requirements established under Texas Water Code §36.1015(1).

Lone Star Groundwater Conversation District requested including a deadline by which TWDB will conduct its technical review.

Response: The TWDB appreciates this comment. No changes were made to the rules pursuant this comment. The TWDB will conduct technical reviews as promptly as possible to avoid causing permitting delays. This topic may also be considered in guidance documents developed to direct this process.

Lone Star Groundwater Conservation District requested addressing monitoring regarding land elevations for subsidence.

Response: The TWDB appreciate this comment. Pursuant to these comments, §356.71(e)(3) was added to reference Texas Water Code §36.1015(e)(5).

North Texas, Red River, and Lone Star groundwater conservation districts suggested adding the type of site-specific information preferred by TWDB in §356.71(f).

Response: The TWDB appreciates these comments. No changes were made to the rules pursuant this comment. The TWDB will develop guidance separately that will also address specific requirements on recommended site-specific data.

Comments on 31 TAC §356.72

Lone Star Groundwater Conservation District commented that requiring the information on monitoring of land elevations in §36.1015(e)(5) with annual reports was not included in the statute.

Response: The TWDB appreciate this comment. Pursuant to these comments, §356.71(e)(3) was added to reference Texas Water Code §36.1015(e)(5). Without receiving that information from a district, the TWDB would not be able to meet its statutory requirement included in Texas Water Code §36.1015(j)(3) to investigate and issue a report regarding whether the brackish groundwater production is projected to cause subsidence during the permit term.

Lone Star Groundwater Conservation District asked the TWDB address how a district is to remedy any negative effects identified in the agency's report that summarizes the review of annual reports.

Response: The TWDB appreciate this comment. No changes were made to the rules pursuant to the comment. The TWDB is required by statue to investigate significant aquifer level declines, negative effects on water quality, and subsidence in the Gulf Coast Aquifer. The TWDB would note that the district and permit holder are responsible for creating or hiring a consultant to prepare to develop the appropriate mitigation measures as established under Texas Water Code §36.1015(k).

STATUTORY AUTHORITY

This rulemaking is adopted under the authority of Texas Water Code §6.101, which authorizes the board to adopt rules necessary to carry out the powers and duties of the board; and Texas Water Code §§16.060 and 36.1015, which requires the board to designate brackish groundwater production zones and to conduct technical reviews of brackish groundwater production zone operating permit applications and annual reports.

Chapters 16 and 36 of the Texas Water Code are affected by this rulemaking.

<rule>

CHAPTER 356. GROUNDWATER MANAGMENT

SUBCHAPTER A. DEFINITONS

§356.10. Definitions.

- (1) Affected Person--An owner of land in the management area, a district in or adjacent to the management area, a regional water planning group with a water management strategy in the management area, a person or entity who holds or is applying for a permit from a district in the management area, a person or entity who has groundwater rights in the management area or any other person defined as affected with respect to a management area by Texas Commission on Environmental Quality rule.
- (2) Agency--The Texas Water Development Board.
- (3) Amount of groundwater being used on an annual basis—An estimate of the quality of groundwater annually withdrawn or flowing from wells in an aquifer for at least the most recent five years that information is available. It may include an estimate of exempt uses.
- (4) Board--The governing body of the Texas Water Development Board.
- (5) Brackish groundwater production zone operating permit--A permit issued by a district under Texas Water Code §36.1015.
- (6) Conjunctive use--The combined use of groundwater and surface water sources that optimizes the beneficial characteristics of each source, such as water banking, aquifer storage and recovery, enhanced recharge, and joint management.
- (7) Conjunctive surface management issues--Issues related to conjunctive use such as groundwater or surface water quality degradation and impacts of shifting between surface water and groundwater during shortages.

- (8) Designated brackish groundwater production zone--An aquifer, subdivision of an aquifer, or geologic stratum designated under Texas Water Code §16.060(b)(5).
- (9) Desired future condition--The desired, quantified condition of groundwater resources (such as water levels, spring flows, or volumes) within a management area at one or more specified future times as defined by participating groundwater conservation districts within a groundwater management area as part of the joint planning process.
- (10) District--Any district or authority subject to Chapter 36, Texas Water Code.
- (11) Executive administrator--The executive administrator of the Texas Water Development Board or a designated representative.
- (12) Groundwater Availability Model--A regional groundwater flow model approved by the executive administrator.
- (13) Major aquifer--An aquifer designated as a major aquifer in the State Water Plan.
- (14) Minor aquifer--An aquifer designated as a minor aquifer in the State Water Plan.
- (15) Modeled Available Groundwater--The amount of water that the executive administrator determines may be produced on an average annual basis to achieve a desired future condition.
- (16) Most efficient use of groundwater--Practices, techniques, and technologies that a district determines will provide the least consumption of groundwater for each type of use balanced with the benefits of using groundwater.
- (17) Natural resources issues--Issues related to environmental and other concerns that may be affected by a district's groundwater management plan and rules, such as impacts on endangered species, soils, oil and gas production, mining, air and water quality degradation, agriculture, and plant and animal life.
- (18) Office--State Office of Administrative Hearings.
- (19) Petition--A document submitted to the groundwater conservation district by an affected person appealing the reasonableness of a desired future condition.
- (20) Projected water demand--The quantity of water needed on an annual basis according to the state water plan for the state water plan planning period.
- (21) Recharge enhancement--Increased recharge accomplished by the modification of the land surface, streams, or lakes to increase seepage or infiltration rates or by the direct injection of water into the subsurface through wells.
- (22) Relevant aquifer--An aquifer designated as a major or minor aquifer.

- (23) State water plan--The most recent state water plan adopted by the board under Texas Water Code §16.051 (relating to State Water Plan).
- (24) Surface water management entities--Political subdivisions as defined by Texas Water Code Chapter 15 and identified from Texas Commission on Environmental Quality records that are granted authority under Texas Water Code Chapter 11 to store, take, divert, or supply surface water either directly or by contract for use within the boundaries of a district.
- (25) Total Estimated Recoverable Storage--The estimated amount of groundwater within an aquifer that accounts for recovery scenarios that range between 25% and 75% of the porosity-adjusted aquifer volume.

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STATUTORY AUTHORITY

This rulemaking is adopted under the authority of Texas Water Code §6.101, which authorizes the board to adopt rules necessary to carry out the powers and duties of the board; and Texas Water Code §§16.060 and 36.1015, which requires the board to designate brackish groundwater production zones and to conduct technical reviews of brackish groundwater production zone operating permit applications and annual reports.

Chapters 16 and 36 of the Texas Water Code are affected by this rulemaking.

<rule>

SUBCHAPTER G. BRACKISH GROUNDWATER PRODUCTION ZONES.

§356.70. Brackish Groundwater Production Zone Designation.

- (a) The agency will identify and designate local or regional brackish groundwater production zones in areas of the state with moderate to high availability and productivity of brackish groundwater that can be used to reduce the use of fresh groundwater and that:
- (1) are separated by hydrogeologic barriers sufficient to prevent significant impacts to water availability or water quality in any area of the same or other aquifers, subdivisions of aquifers, or geologic strata that have an average total dissolved solids level of 1,000 milligrams per liter or less at the time of designation of the zones; and
- (2) are not located in:
- (A) an area of the Edwards Aquifer subject to the jurisdiction of the Edwards Aquifer Authority;
- (B) the boundaries of the:

- (i) Barton Springs-Edwards Aquifer Conservation District;
- (ii) Harris-Galveston Subsidence District; or
- (iii) Fort Bend Subsidence District;
- (C) an aquifer, subdivision of an aquifer, or geologic stratum that:
- (i) has an average total dissolved solids level of more than 1,000 milligrams per liter; and
- (ii) is serving as a significant source of water supply for municipal, domestic, or agricultural purposes at the time of designation of the zones; or
- (D) an area of a geologic stratum that is designated or used for wastewater injection through the use of injection wells or disposal wells permitted under Texas Water Code Chapter 27.
- (b) In designating a brackish groundwater production zone under this section, the agency shall:
- (1) determine the amount of brackish groundwater that the zone is capable of producing over a 30-year period and a 50-year period without causing a significant impact to water availability or water quality as described by subsection (a)(1) of this section; and
- (2) include in the designation description:
- (A) the amounts of brackish groundwater that the zone is capable of producing during the periods described by paragraph (1) of this subsection; and
- (B) recommendations regarding reasonable monitoring to observe the effects of brackish groundwater production within the zone.
- (3) work with groundwater conservation districts and stakeholders and consider the Brackish Groundwater Manual for Texas Regional Water Planning Groups, and any updates to the manual, and other relevant scientific data or findings.
- (c) Areas of the state that are not designated as brackish groundwater production zones are not precluded from development of brackish groundwater or from future designation of zones.
- (d) The Agency may amend a designated brackish groundwater production zone upon its own initiative or upon request by a groundwater conservation district and will publish guidance discussing the timing for considering amendments.. The Agency will provide notice of the intent to amend brackish groundwater production zone with proposed changes to any groundwater conservation district within the applicable brackish groundwater production zone and to any entity that requested the amendment. A request from a groundwater conservation district must be in a form and substance acceptable to the Executive Administrator and include a justification and documentation supporting the requested amendment.

- §356.71. Brackish Groundwater Production Zone Operating Permit Review.
- (a) This section does not apply to a district that overlies the Dockum Aquifer and includes wholly or partly 10 or more counties.
- (b) When a district submits an application for a brackish groundwater production zone operating permit to the agency, the agency will conduct a technical review of the application, subject to subsections (c) and (d) of this section.
- (c) Upon receipt of such an application, the agency will assess the application to determine whether a proposed production well is located within a designated brackish groundwater production zone. If a proposed production well is not located within a designated brackish groundwater production zone, the agency will not conduct the technical review of the application. If a proposed production well is located within a designated brackish groundwater production zone, the agency will conduct the technical review of the applicable permit application or applicable portions of a permit application in accordance with subsections (d) (f) of this section.
- (d) Upon receipt of an application for a brackish groundwater production zone operating permit for a proposed production well located within a designated brackish groundwater production zone and that includes all of the information required by Texas Water Code §36.1015(g), the agency will conduct a technical review of the application. If the agency does not receive all of the information required by Texas Water Code §36.1015(g), the agency will notify the district of the missing information. The agency will not conduct a technical review of an incomplete application until all required information is received.
- (e) After conducting the application assessment and required technical review of a complete application, the agency shall provide a report of the technical review of the application to the district that submitted the application that includes:
- (1) findings regarding the compatibility of the proposed well field design with the designated brackish groundwater production zone, including:
- (A) whether the proposed production exceeds the amount of brackish groundwater that the zone is capable of producing over a 30-year period and a 50-year period, as determined pursuant to Texas Water Code §16.060(e) and is in addition to the amount of modeled available groundwater provided under Texas Water Code §36.108; and
- (B) whether the parameters and assumptions used in the model described in Texas Water Code §36.1015(g)(4)(A) are compatible with the designated brackish groundwater production zone;
- (2) recommendations for the monitoring system required by Texas Water Code §36.1015(e)(4) and (6), including whether the number of monitoring wells are adequate and in appropriate locations and aquifers, in accordance with recommendations established under Texas Water Code §16.060(e)(2)(B);

- (3) verification the district required monitoring of land elevations for a project located in a designated brackish groundwater production zone in the Gulf Coast Aquifer as required by Texas Water Code §36.1015(e)(5).
- (f) The findings and recommendations included in subsection (e) of this subsection will only be site-specific if the agency has received site-specific data and information from the district.

§356.72. Annual Report Review

- (a) If a district makes a request under Texas Water Code §36.1015(j), the agency will investigate and issue a technical report to the district that sent the request, subject to subsection (b) of this subsection.
- (b) Upon receipt of a request, the agency will determine whether it has received the applicable annual report and all of the information required under Texas Water Code §36.1015(e)(6), and for a project located in a designated brackish groundwater production zone in the Gulf Coast Aquifer, the information required to be collected under Texas Water Code §36.1015(e)(5) related to subsidence. If the agency has not received all of the information required under Texas Water Code §36.1015(e)(6) or §36.1016(e)(5), as applicable, the agency will notify the district of the missing information and will not conduct a technical review of the reports until all required information is received.
- (c) Not later than the 120th day after the date the agency receives all of the required information, the agency will investigate and issue a technical report on whether:
- (1) brackish groundwater production under the project that is the subject of the report from the designated brackish groundwater production zone is projected to cause:
- (A) significant aquifer level declines in the same or an adjacent aquifer, subdivision of an aquifer, or geologic stratum that were not anticipated by the agency in the designation of the zone;
- (B) negative effects on quality of water in an aquifer, subdivision of an aquifer, or geologic stratum; or
- (C) for a project located in a designated brackish groundwater production zone in the Gulf Coast Aquifer, subsidence during the permit term; or
- (2) whether not enough information is available to determine whether brackish groundwater production under the project that is the subject of the report from the designated brackish groundwater production zone is projected to cause the conditions listed in subsection (c)(1) of this section.