

# Fax Cover Sheet

**To:** GWEN RICCO MCZOS OFFICE OF LEGAL SERVICES, TCEQ

**From:** J BUCHERT - CENTER POINT COMMITTEE FOR GROWTH : PROGRESS

**Re:** RULE PROJECT NUMBER: 2024-006-230-0W

**Fax #:** 512-239-0606

**Pages:** 18 <sup>INCL</sup> <sub>COVER</sub>

**Contact:** J BUCHERT

**Date:** 6/10/24

June 6, 2024

Gwen Ricco  
MC 205  
Office of Legal Services  
Texas Commission on Environmental Quality  
P.O. Box 13087  
Austin, Texas 78711-3087

Re: Rule Project Number 2024-006-230-OW

Based on the Texas Commission on Environmental Quality (TCEQ) proposed rulemaking regarding its TAC230 rules, we are requesting clarity on such rules, specifically as they relate to public water systems (PWS). While TCEQ's TAC230 proposed rule changes focus on SB 2440, they also address general TAC230 application by clarifying that developers "must" do certain actions (rather than "shall" do certain actions) and by eliminating the statement "under § 230.8(c) of this title relating to Obtaining Site-Specific Groundwater Data" in §230.7(b). This change in §230.7 makes it clear when determining groundwater availability under §230.10, that general geologic and groundwater information and data acquired during an aquifer test under (1) §230.8 (individual wells) or (2) TAC Chapter 290 Subchapter D (PWS wells), will be used to determine aquifer parameters under §230.10(c)(1)-(8), using Theis or Cooper-Jacob non-equilibrium equations. From such aquifer parameters, groundwater availability is determined under §230.10(d), looking at time drawdown, distance drawdown and well interference over the short term (10 years) and long term (30 years). This information is then used to provide a certification of groundwater availability under §230.11 for both individual wells and PWS well(s), certifying the estimated drawdown of the aquifer the pumped well and subdivision boundary over 10 and 30 years; the estimated distance from the pumped well to the outer edges of the cone(s) of depression over 10 and 30 years; the recommended minimum spacing limits between wells and the recommended well yield; and the sufficiency of available groundwater quality to meet the intended use of the subdivision.

Based on what we have seen over the last 3½ years in Kerr County, we believe that additional detail/clarity is required in the rules to address TAC230 "workarounds", specifically as to groundwater availability studies with respect to existing PWS, and that our comments are relevant to TCEQ's TAC230 general rule making authority as well as to the new SB2440 changes.

Center Point Committee for Growth and Progress

The Center Point Committee for Growth and Progress (CPCGP) is a group of concerned residents in the Center Point area of Kerr County. We support sustainable

residential development rules in Kerr County, and have provided public comments to the Kerr County Commissioners Court (KCCC) as well as Headwaters Groundwater Conservation District (Headwaters) with regard to their respective rule changes impacting subdivision development and groundwater conservation in the county. We have also had numerous communications with the Texas Water Development Board (TWDB) on TAC230 related issues, particularly with regard to the use of TAC230 groundwater availability studies in their TAC364 rules.

Since 2021, the CPCGP has also dealt with specific TAC230 project-related issues, including challenging KCCC and developer "interpretations" of TAC230 that either seek to avoid the preparation of a required TAC230 groundwater availability study or "redefine" the requirement of a TAC230 groundwater availability study to essentially a back-room exercise based on historical, non-site specific and irrelevant information.

As a result, the CPCGP is sharing our comments with the issues of the current TAC230 groundwater availability rules and the resultant "water studies" that are being prepared in lieu of required TAC230 groundwater availability studies.

### Kerr County

By way of background, Kerr County is subject to several rules that dependent upon TCEQ's TAC230 groundwater availability study rules: KCCC's subdivision rules (SR), which are based on Chapter 35, §35.019 of the Texas Water Code, and its Model Subdivision Rules (MSR) which are required under Chapter 364 of the Texas Administrative Code. In addition, Kerr County is part of a TCEQ designated Priority Groundwater Management Area (PGMA), an area that is experiencing or is-expected to experience critical groundwater problems within 50 years. Kerr County is also an Economically Depressed Area Program (EDAP) county under TWDB rules, which require the application of TAC364. Both the PGMA and EDAP designations involve a significant focus on groundwater in Kerr County--albeit for different reasons--and the need to protect its resident's health, safety and welfare given limited groundwater resources.

### KCCC rules

Up until 2023, KCCC's SR used an approach that determined maximum subdivision density (and water usage) based on the number of acres in the subdivision and the size of the lots in the subdivision. However, as a result of its EDAP designation, KCCC was required to adopt MSR in November 2007; these rules require a TAC230 groundwater availability study for small lot subdivisions<sup>1</sup> in order to be approved

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<sup>1</sup> These are new subdivisions where 2 or more lots are 5 acres or less. These rules also address such new subdivisions that connect to new PWS, as well as new subdivisions that connect to an existing PWS--and the need to include a TAC230 groundwater availability study to engineering report that accompanies the plat application for both new and existing PWS.

by KCCC. Thus, prior to 2023, KCCC had a dual approach with regard to subdivision regulation: an approach based on number of acres/lot size (large lots) and a TAC230 groundwater availability study approach (small lots). KCCC's SR were re-written in 2022, and became effective on January 1, 2023. KCCC's new SR eliminated the prior acreage/lot size approach, and required a TAC230 groundwater availability study for all new subdivisions (with limited exceptions).<sup>2</sup> To date, there have been no TAC230 groundwater availability studies done in Kerr County with regard to PWS; however, there have been two voluntary (prior to the 2023 SR) TAC230 groundwater availability studies done on large lot subdivisions.

### Headwaters

Headwaters is a groundwater conservation district created under the Texas Constitution in 1991; its authority (powers and duties) are mainly detailed in the Texas Water Code, Chapter 36. Headwaters is part of the Hill Country PGMA, and thus a part of the GMA-9 region. In its rules, Headwaters makes it clear that it does not guarantee water quantity or quality under any subdivision.

Headwaters issues water drilling permits to developers, and has rules that regulate the minimum required water requirements for new development in the county since 2021. It issues permits for non-exempt wells, including those for PWS. These permits note the maximum water production permitted (the "production cap"), the total water production allowed (based on facts) and the average historical 5-year use of the permit holder.

Headwaters has used the same production cap (80,000 gallons/acre/year) for over 20 years<sup>3</sup>, and only changed it in 2022 for East Kerr County (65,000 gallons/acre/year) to address severe groundwater issues in that part of the county. The change was based on a 3<sup>rd</sup> party aquifer study (2022), which showed excessive aquifer declines over a 20-year period in East Kerr County. Of note, the study did not take into account the historic Kerr County drought in 2023 (the drought began in 2022 and is continuing into 2024), nor did it take into account water demands from new development in East Kerr County or the operation of the new wastewater treatment from Center point to Comfort. A number of the PWS in East Kerr County have had significant water issues in the last 3 years, particularly with regard to the EDAP subdivisions that rely on such PWS.

Regarding PWS, Headwaters' Rule 10 states that it may require (at the District's expense) an owner or operator of a permitted well that is to be used as a PWS well to provide some or all of the following data: a lithologic log, a gamma log, a

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<sup>2</sup> There is no exception for a new subdivision covered under the MSR.

<sup>3</sup> The basis for this number is not clear; however, the aquifer levels in Kerr County overall have declined based on data from Headwaters data from monitor wells across the county.

resistivity log and a pump test with determinations of aquifer parameters or approved equivalent test performed during drilling. Logging and pump tests must be conducted or supervised by a registered professional engineer or licensed professional geoscientist selected or approved by the District. Specific requirements are noted for well logs, pump tests and drawdown and recovery rates. Among other things, Rule 10C.2) states that "any variation from TCEQ Pump Test duration requirements, as specified under TCEQ rules at 30 Tex. Admin. Code Chapter 290, shall be coordinated with TCEQ and the District." In addition, Headwaters' Rule 10D notes that "the time drawdown and time-recovery data obtained during the Pump Test shall determine Aquifer parameters utilizing the non-equilibrium equations developed by Theis or Cooper-Jacob, or acceptable modifications thereof. The following Aquifer parameters shall be determined: 1) Rate of average yield and drawdown; 2) Specific capacity; 3) Transmissivity; 4) Storage coefficient, when an observation Well is available; and 5) Hydraulic conductivity. Given the above, it is clear that Headwaters is requesting data from an aquifer test of a PWS well(s) similar to what is required in TAC230.10(c) for PWS well(s), using TAC290 pump test requirements.

To date, Headwaters has received no groundwater/aquifer data under Rule 10, as the PWS in Kerr County pre-date TAC230. In the event that a new PWS is permitted in Kerr County, Headwaters may decide to fund the PWS well and receive the information noted above. Alternatively, Headwaters could get some data from a TAC230 groundwater availability study, as TAC230 requires that a TAC230 groundwater availability study be sent to TWDB and groundwater districts (Headwaters) for their use. Unfortunately, given the cost of a new PWS-- as well as the cost for a TAC230 groundwater availability study--it is less likely that a new PWS will be developed for a new subdivision in Kerr County. Which is why developers in Kerr County have been proposing new subdivisions that will connect to existing PWS to avoid the cost of a PWS--and a TAC230 groundwater availability study based on TAC230 "workarounds". The following examples illustrate these "workarounds":

- In 2021, a new 290+ horizontal condominium unit subdivision was proposed on 149.5 acres. This new subdivision was required to do a TAC230 groundwater availability study under the MSR, but the developers requested connection to an adjacent and existing PWS in order to avoid the cost of constructing a new PWS--as well as avoid a TAC230 groundwater availability study. The developer took the position that a TAC230 groundwater availability study was not required to connect to the existing PWS, even though the MSR required a TAC230 groundwater availability study to be attached to the final engineering report for plat approval. This approach was unsustainable, given that the proposed subdivision was in a PGMA (and in a part of Kerr County that has the most severe historical water issues) and a TAC230 groundwater availability study was never performed to show the state of the aquifer underlying the proposed subdivision. After much public comment and the number of issues involving this proposed subdivision, the

subdivision was never approved. However, it set the stage for future developers to request a “workaround” of the TAC230 rules that were embedded in KCCC’s MSR (and later its 2023 SR).

- In 2023, a developer prepared a “water availability study” to support the connection of a new three-unit horizontal condominium subdivision located within an existing PWS service area in Hunt, Texas. The study attempted to show that the PWS had sufficient water by using historical and non-site specific data (Kerrville historical average water usage; TCEQ summary sheet (number of users); the “excess capacity” of the PWS , i.e., the PWS production cap less 5 year average groundwater usage based on the PWS’ 2022 water permit issued by Headwaters; and a TWDB report from an “aquifer test” performed in 1998.<sup>4</sup> From this information, the engineer estimated the impact in 30 years, and concluded that there was “more than adequate water availability for the three condominium units for the next 30 years.” According to this approach, no aquifer testing would be required as there was no new drilling to support the new subdivisions’ additional connections to the PWS. This “workaround approach” was viewed by the developer as practical under a cost/benefit analysis, even though it was not in accordance with TAC230 requirements, the reason for a TAC230 groundwater availability study, the changes in groundwater availability and aquifers over a period of years, or the impact of the replication of small subdivisions within a CCN and the impact on other users and full build-out with regard to the CCN’s capacity. After much public comment and a number of issues involved with this proposed subdivision, KCCC’s prior “approval” was revoked.<sup>5</sup>
- This year, we understand that a developer has proposed to subdivide an existing lot in an older subdivision into 3 lots. The existing subdivision is connected to an existing PWS with multiple wells. The developer has proposed to connect the new subdivision lots to the existing PWS (which is about 1 ½ miles away from the closest CCN well). They have also indicated that this approach will be used as their model for Kerr County residential development. We also understand that the developer agrees they are subject to the MSR, and have hired a qualified engineer to do a TAC230 groundwater availability test. The engineer has indicated that no new well will be drilled, that old data from the well will be used, and that an aquifer test is not required given that the aquifer level doesn’t matter (as this is a closed aquifer and will always be saturated). As such, the engineer will provide some analysis under TAC290 Subchapter D, and use it to fill out the

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<sup>4</sup> This aquifer test would not be usable under the TAC230 rules.

<sup>5</sup> KCCC approved the proposed subdivision without having a plat application; without a plat application, KCCC could not technically approve the subdivision. When it was shown that the proposed subdivision was subject to the MSR—which does not allow variances—KCCC reversed its approval given the number of variances involved. See attached Hunt Water Availability Study.

TAC230.3 form. It is not clear what the engineer is using for information, analysis, or assumptions.<sup>6</sup>

In summary, instead of developers preparing a TAC230 groundwater availability study for the new subdivision based on drilling with respect to the existing PWS well(s), developers are using TWDB/District data to support a "water study" to be used in lieu of a TAC230 groundwater availability study. TAC230 rules incorporate minimum standard requirements—and yet developers are avoiding such minimum standard requirements with "workarounds" using historical, non-site specific and irrelevant data. This "workaround approach" also involves "circular feedback", in that historical data from TWDB or a District is used to feed back such data to TWDB/District. Such "data" is worthless to TWDB and to Headwaters, and is also worthless to give assurance to new subdivision homeowners that there is adequate groundwater to support their needs. This approach is problematical in counties around Texas, but is particularly egregious for counties/areas that are subject to PGMA and/or EDAP rules. This cannot be what the legislature or TCEQ had in mind when developing the TAC230 rules, and it is not what Headwaters expects to receive for PWS wells under Headwaters Rule 10 or TCEQ's TAC230.

Sensing the need to tighten the TAC230 rules for new subdivisions, the Texas legislature passed SB2440 in 2023<sup>7</sup> to require developers of new subdivisions to prepare a TAC230 groundwater availability study to ensure that there is sufficient groundwater under the subdivision to serve new users' water needs. The new law allows a commissioner's court to waive a TAC230 groundwater study under certain circumstances, particularly where there is credible evidence of groundwater in the vicinity of the new subdivision and the proposed subdivision divides a tract into not more than 10 parts.<sup>8</sup> However, the law also provides an anti-abuse rule that would require a TAC230 groundwater availability study for subdivisions subject to a waiver, where the original tract is subsequently divided into more than 10 parts or there is a series of proposed subdivisions from an original tract that collectively includes more than 10 parts. This new law addresses development similar to what is already happening in Kerr County, where developers are connecting new subdivisions within existing subdivisions to existing PWS, and claiming that a

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<sup>6</sup> For example, even though the engineer is dealing with a small subdivision at this point, query how he is dealing with issues relating to the replication of the developer's model, i.e., "full build out" of the larger subdivision and the usage impact on the existing PWS. An existing subdivision could look markedly different than today, depending on the number of existing lots are subdivided, the number of new lots and water users are added. In addition, it is not clear what the engineer's assumptions are with respect to drought impacts on aquifer levels.

<sup>7</sup> Effective January 1, 2024. The new TAC230 rules apply to plat applications filed on or after January 1, 2024.

<sup>8</sup> This could apply as long as the number of lots in a tract is 10 lots or less. However, in the case of Kerr County, a developer who subdivides a lot into a small lot subdivision is subject to the MSR instead of the SR; thus, a TAC230 groundwater availability study will be required in spite of the SB2440 changes to LGC232.001.

TAC230 groundwater availability study is not required or that their workaround is an appropriate TAC230 groundwater availability study even though it doesn't follow TAC230's minimum standards.

### Recommendations

We recommend the following changes to the TAC230 proposed rules, given the need for more clarity to support safeguards in the TAC230 minimum standard rules for individuals' health, safety and welfare. There are three potential alternatives that TCEQ could consider to address "workarounds":

- No deviation from TAC230 requirements (e.g., drilling, designing aquifer test, determining aquifer parameters, determining groundwater availability) for an existing PWS.<sup>9</sup> Thus, no current drilling results in no new subdivision-- but see use of prior TAC230 groundwater availability study comment below;
- Allow specific deviations from TAC230 requirements in the rules for an existing PWS, and require the developer to obtain a ruling from TCEQ where its requirements are not followed. As we have noted above, we do not think that specific deviations are appropriate in the case of minimum standard rules, nor do we think that TCEQ will desire to administer a ruling process now that TAC230 groundwater studies are required; or
- Allow a prior TAC230 groundwater availability study to be used for an existing PWS similar to what is allowed for individual wells.

(1) We believe that a TAC230 groundwater availability study should be prepared for all PWS. In the case where a TAC230 groundwater availability study has never been done for such existing PWS, e.g., all Kerr County PWS, the TCEQ should require all such PWS to prepare a TAC230 groundwater availability study by a certain date to ensure that TAC230 minimum standards are being met going forward.<sup>10</sup>

(2) Where a TAC230 groundwater availability study has been done for an existing PWS in prior years, the TAC 230 rules should require an update of such TAC230 groundwater availability study at the anniversary of 5 years from the last TAC230 groundwater availability study.<sup>11</sup>

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<sup>9</sup> Existing PWS expansions should include new connections to the existing PWS, thus requiring a TAC230 groundwater availability study.

<sup>10</sup> TWDB could fund the development of TAC230 groundwater availability studies, unless a District (Headwaters) opts to do so, in order to get pre-TAC230 PWS up to date and in compliance with TAC230. Alternatively, the PWS could pass the cost along to its users over a period of time.

<sup>11</sup> We base this on several factors: Headwater permitted well permits are renewed every 5 years. In addition, based on new development and climactic issues (severe drought), aquifer conditions could be substantially different than when the TAC230 groundwater availability study was prepared.



(3) Where a new subdivision connects to an existing PWS within the 5-year window, a prior TAC230 groundwater availability study can be used to support the TAC230 requirements if all of the current TAC230.8(c)(7) requirements are met. As such, TCEQ should allow an existing PWS to use a prior TAC230 groundwater availability study under TAC230.8(c)(7) within the 5-year period, and change its rules accordingly to allow for this.

(4) TCEQ could request that TWDB keep an approved TAC230 database of all TAC230 groundwater availability studies. This database could be used for TWDB planning, as well as for developers' use to support new subdivisions where the applicable provisions (e.g., TAC230.8(c)(7)) apply.

(5) We believe that TCEQ's TAC230 requirements must clearly show that site-specific/current data through drilling is required to determine the current status of the aquifer underlying the new subdivision for both individual wells and all PWS. We appreciate that developers are seeking to avoid drilling a new well, by arguing that they cannot do so in various circumstances, yet TAC230 is a minimum standard requirement that should be applied for development to proceed. The question is not whether a well can be drilled, but if there is sufficient groundwater in the aquifer over a 10 year or 30 year period to support the new subdivision. Assuming that an aquifer will not change or decline by providing information in lieu of a TAC230 groundwater study begs the question of groundwater availability in a PGMA/EDAP county--and could have significant negative ramifications to these provisions which rely on TAC230--to the detriment of Kerr County residents.

Thus, unless the prior TAC230 exception above applies, it should be clear that drilling is required for new subdivision connections to an existing PWS. As such, we believe that §230.10(c) should be clarified as follows:

"Determination of aquifer parameters. The parameters of the aquifer(s) being considered to supply water to the proposed subdivision must 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 (1) under §230.8 of this title (relating to Obtaining Site-Specific Groundwater Data for individual water wells or (2) under Chapter 290, Subchapter D of this title (relating to Rules and Regulations for Public Water Systems) for new and existing public water systems; and reported on or attached to the Certification of Groundwater Availability Form (TCEQ-20982)."

(6) Regarding Form TCEQ-20982 questions 29-35, a certifying engineer is given the choice to claim either "yes" or "no" (or N/A) when asked if the required aquifer parameters under TAC230.10(c) have been determined. We believe that the "No" and "N/A" choices should be removed from the Form given our comments on TAC230.10(c), the changes made by TCEQ in TAC230.7(b), and the groundwater

availability requirement that must be determined under TAC230.10(d) for both individual and PWS.

In addition, the prior version of this form asked: "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". This provision has been left off of the new form, presumably because there is no difference between the anticipated method of delivery (individual or PWS) in applying TAC230.10; however, we believe that it is still important to address "full build out" and other "geologic and geographic information" that would be determined through drilling and applied to an aquifer test in either TAC230.8(c) or TAC290, Subchapter D. Finally, correction should be made to question 30 of the Form, given that it refers to items "a. through i. below", even though the form questions only go through "h".

(7) Regarding TAC230 §230.1, we recommend that the following be used: "Purpose. This chapter establishes the form and content of a certification to be attached to a plat application that requires certification that adequate groundwater is available for a proposed subdivision if groundwater under that land is to be the source of water supply."

(8) Regarding TAC230 §230.3(c), we recommend that the following be used: "Submission of information. The certification of adequacy of groundwater under the subdivision required by this chapter must be submitted to the following..."

(9) Regarding TAC230 §230.6, "full build out" assumptions are likely to be inadequate if focused only on the new subdivision and not the broader existing subdivision in which the new subdivision is located. For example, if every owner in an existing subdivision were to further subdivide their lots, then "full build out" would look quite different. At a minimum, this should be addressed in the assumptions where new development is the result of subdividing existing development.

(10) Regarding TAC230 §230.8(c)(7) use of existing well and aquifer test data, we believe that another condition should be added to limit the rule when the data is too dated. As such, we would add: and (v) the previous date of the TAC230 test used is no older than 5 years from the anticipated certification date of the current TAC230 groundwater availability study."

(11) Regarding TAC230 §230.10(c) determinations, it is not clear what "or acceptable modifications thereof" means with regard to the determination of aquifer parameters. We believe that without further clarification, the phrase should be deleted.

(12) Regarding TAC230 §230.11(b), we recommend the following change: "These basis ~~may~~ must include, but are not limited to, uncontrollable and unknown factors

such as:" in order that engineers specifically address development from area outside the small new subdivision that cannot be predicted that will affect the storage of water in the aquifer, as well as short-term and long-term impacts from climatic variations (e.g., droughts, severity of droughts, etc) on the aquifer.

We appreciate your consideration of our comments. If you would like to discuss any of these matters, please contact Janet Buchert at [jcmbuchert@comcast.net](mailto:jcmbuchert@comcast.net).

Sincerely,

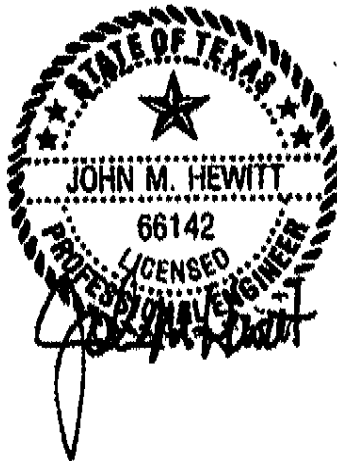
*Center Point Committee for Growth and Progress*

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Center Point Committee for Growth and Progress

Attachment as stated: Hunt Water Availability Study

**WATER AVAILABILITY STUDY**  
**1605 CYPRESS LANDING CONDOMINIUMS**  
**HUNT, TEXAS**



04-05-23

**APRIL 2023**

**Hewitt Engineering, Inc.**  
**Firm No. F-10739**  
 716 Barnett Street  
 Kerrville, Texas 78208  
 830-315-8800



**Hewitt Engineering, Inc.**  
 Consulting Engineering Services

# WATER AVAILABILITY STUDY

## 1605 CYPRESS LANDING CONDOMINIUMS HUNT, TEXAS

APRIL 2023

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### LIST OF EXHIBITS

Exhibit I. Property Survey Map

### APPENDIX

- A. TCEQ Summary Sheet for Community Water Group WSC
- B. HGCD Production Permit No. P0026
- C. Texas Water Development Board Well and Aquifer Information



## INTRODUCTION

The updated Kerr County Subdivision and Manufactured Home Rental Community Regulations for Kerr County were approved on November 22, 2022 and became effective on January 1, 2023. The following paragraphs from Section 5.01.F.3.b in the updated Subdivision rules apply to the water supply for subdivisions in Kerr County:

*(1) Public Water Systems.*

*(a) Subdividers who propose to supply drinking water by connecting to an existing public water system must provide a written agreement with the retail public utility in substantially the form attached in Appendix/Exhibit M. The agreement must provide that the retail public utility has or will have the ability to supply the total flow anticipated from the ultimate development and occupancy of the proposed subdivision for a minimum of 30 years. The agreement must reflect that the subdivider has paid the cost of water meters and other necessary connection equipment, membership fees, water rights acquisition costs, or other fees associated with connection to the public water system so that service is available to each lot upon completion of construction of the water facilities described on the final plat. (See Appendix/Exhibit M, Sample Form for Water Service Agreement)*

*(b) Where there is no existing retail public utility to construct and maintain the proposed water facilities, the subdivider shall establish a retail public utility and obtain a Certificate of Convenience and Necessity (CCN) from the commission. The public water system, the water quality and system design, construction and operation shall meet the minimum criteria set forth in 30 TAC §§ 290.38-290.51 and §§ 290.101-290.120. If groundwater is to be the source of the water supply, the subdivider shall have prepared and provide a copy of a groundwater availability study that complies with the requirements of 30 TAC §§ 230.1- 230.11 for water availability for new public water supply systems and certifies the long term (30 years) quantity and quality of available groundwater supplies relative to the ultimate needs of the subdivision. If surface water is the source of supply, the subdivider shall provide evidence that sufficient water rights have been obtained and dedicated, either through acquisition or a wholesale water supply agreement, that will provide a sufficient supply to serve the needs of the subdivision for a term of not less than 30 years.*

The 1605 Cypress Landing Condominiums will be connected to an existing public water system and will provide a written agreement with the retail public utility as described above.



## PROJECT DESCRIPTION

The 1605 Cypress Landing Condominiums will consist of three condominium units on 1.86 acres out of the Michael Short Survey No. 594, A-310, Kerr County, Texas. The site is located at 1605 SH 39 in Hunt Texas. Attachment A shows a survey exhibit of the property. The three condominium units are located within the existing Hunt Community Water Group Water Supply Corporation-TCEQ Public Water Supply PWS ID No. 1330145 service area.

## WATER DEMAND

The City of Kerrville recently updated their Water and Wastewater Master Plan in October 2022. As part of that study, Freese & Nichols evaluated water demand and per capita water usage in the City from 2010 through 2021. The average per capita water demand per connection during this period varied from a minimum per connection demand of 294 gallons to a maximum of 391 gallons per connection. The average demand over this period was 343 gallons per connection and the study used a demand of 350 gallons per connection for their evaluation and future projections. The 1605 Cypress Landing Condominiums will be restricted to a maximum of 2,500 square feet and three bedrooms. A water demand of 350 gallons per unit is a conservative water demand for each of these units. A summary of water demands for this project is listed below:

Number of Proposed Units: 3

Water Demand per Unit: 350 gallons per unit

Total water demand per day: 1,050 gallons per day

Total water demand (gallons per minute): 0.73 gpm

Total water demand per year: 383,251 gallons per year

Total water demand per year: 1.18 acre feet per year

## TCEQ PUBLIC WATER SYSTEM

The proposed project is located within the Hunt Community Water Group Water Supply Corporation-TCEQ Public Water Supply PWS ID No. 1330145 service area. There is an existing water line from the public water system on the property. There will be no new wells drilled or extensions of existing water lines associated with the new project. The Water Supply Corporation



currently serves a population of 195 and 65 connections and is approved, inspected and regulated by the Texas Commission on Environmental Quality (TCEQ). The TCEQ authority includes ensuring that the PWS has adequate water supply to serve the connections within their service area. A copy of the TCEQ summary sheet for the PWS is attached as Appendix A.

### **HEADWATERS GROUNDWATER CONSERVATION DISTRICT**

The Hunt Community Water Group and Camp La Junta recently combined their production permit with the Headwaters Groundwater Conservation District (HGCD) on January 5, 2023. Permit No. P0026 allows production of 16,520,376 gallons per year. Over the past five (5) years, the annual production has been:

2017: 13,235,500 gallons

2018: 12,955,539 gallons

2019: 13,876,769 gallons

2020: 12,936,204 gallons

2021: 11,197,030 gallons

The average annual production over the past 5 years has been 12,840,208 gallons. An additional annual demand of 383,250 gallons from the three condominium units will be insignificant and would increase the average demand to only 13,223,458 gallons per year. This annual demand including the three condominium units would be 20% less than the HGCD permitted amount. The permitted acreage for the permit is 291.997 acres. Appendix B shows the HGCD Permit.

### **WATER AVAILABILITY**

The three new condominiums will not require any new wells on the property. Therefore, no aquifer testing will be required. A review of the Texas Water Development Board (TWDB) database showed that aquifer tests were performed in the area in 1999. This data shows that the static water level was approximately 219 feet below the surface and the pumping level was 332 feet below the surface. The estimated specific capacity is 0.86 gpm/ft and the Transmissivity value varied from 88 square feet/day to 189.7 square feet/day. The thickness of the Hensell sand varied from 100-140 feet thick.





The increased demand for the water wells in the PWS will be less than 1 gallon per minute (gpm) for the three condominium units. Based on an annual total demand of 1.18 acre feet per year for the three condominium units over the 291 permitted acres for the HGCD, the impact on the aquifer would be equal to 0.004 feet of decline in the aquifer per year due to the projected water demand. Over a 30-year period, the total decline in the aquifer would be 0.12 feet or 1.5 inches. The thickness of the aquifer in this area is greater than 100 feet so there is more than adequate water availability for the three condominium units for the next 30 years.

## SUMMARY

The 1605 Cypress Landing Condominiums will consist of three condominium units on 1.86 acres located at 1605 SH 39 in Hunt Texas. The three condominium units are located within the existing Hunt Community Water Group Water Supply Corporation-TCEQ Public Water Supply PWS ID No. 1330145 service area. Per Kerr County Subdivision and Manufactured Home Rental Community Regulations for Kerr County Section 5.01.F.3.b, the 1605 Cypress Landing Condominiums will be connected to an existing public water system and will provide a written agreement with the retail public utility.

The proposed project is located within the Hunt Community Water Group Water Supply Corporation-TCEQ Public Water Supply PWS ID No. 1330145 service area. There is an existing water line from the public water system on the property. There will be no new wells drilled or extensions of existing water lines associated with the new project. The Water Supply Corporation currently serves a population of 195 and 65 connections and is approved, inspected and regulated by the Texas Commission on Environmental Quality (TCEQ). The TCEQ authority includes ensuring that the PWS has adequate water supply to serve the connections within their service area. The increased demand for the water wells in the PWS will be less than 1 gallon per minute (gpm) for the three condominium units.

The Hunt Community Water Group and Camp La Junta recently combined their production permit with the Headwaters Groundwater Conservation District (HGCD) on January 5, 2023. Permit No.



P0026 allows production of 16,520,376 gallons per year. The average annual production over the past 5 years has been 12,840,208 gallons. An additional annual demand of 383,250 gallons from the three condominium units will be insignificant and would increase the average demand to only 13,223,458 gallons per year. This annual demand including the three condominium units would be 20% less than the HGCD permitted amount. The permitted acreage for the permit is 291.997 acres.

Based on an annual total demand of 1.18 acre feet per year for the three condominium units over the 291 permitted acres for the HGCD, the impact on the aquifer would be equal to 0.004 feet of decline in the aquifer per year due to the projected water demand. Over a 30-year period, the total decline in the aquifer would be 0.12 feet or 1.5 inches. The thickness of the aquifer in this area is greater than 100 feet so there is more than adequate water availability for the three condominium units for the next 30 years.

