

From: Ronald G. Fieseler <manager@blancogw.org>
Sent: Monday, April 24, 2023 4:14 PM
To: Rick Schroder
Cc: Brent J Sulzemeier; Paul Babb
Subject: RE: Permit Amendment Application

Rick and B.J.,

I apologize for the long delay in providing answers to your question below.

In general, Permitted Non-Exempt well owners who request an increase in permitted production volume are required to follow specific District Rules, some of which are dependent on the proposed amount of increase in annual permitted pumpage volume. Most of the requirements are the same as those required of a newly drilled non-exempt well, including BPGCD Rule 3.4A, 3.5D(3), 8.4, and possibly 8.5. These Rules can be found on the BPGCD website: <https://bpgcd.org/documents/>

The study you ask about is briefly described in BPGCD Rule 3.4A(m). A Hydrogeological Testing report will be required for Johnson City's proposal to almost double the current annual permitted groundwater production. A single test consists of a pumping well and at least one non-pumping observation well. Pumping rates and drawdown of the water level are measured in both wells. Each test will normally last for 24 hour, or perhaps 36 hours if the test will also be used to document the Public Water Supply Well requirements of the TCEQ. The pumping phase will be followed by measuring the recovery rate. The data gathered during the test will be used to calculate various aquifer characteristics including productivity, transmissivity, storativity, recovery rates, calculations of the aquifer pumping and drawdown overtime, and the probable effect of the pumping at neighboring properties. Due to the large proposed increase in permitted annual pumpage volume sought by the City, it will likely require at least 2, and perhaps 3 of these aquifer tests to fully document the effects of the increased pumping.

As you mentioned, as of now, we have only had a general conversation with B.J. Once the City is prepared to move forward, we will be happy to meet with you or B.J. and begin the paperwork. Initially this will consist of a Change in Well Status, an Amendment to the existing Well Operating Permit, and the payment of \$100 for the Permit Amendment Application Fee. At such time we can go into the details of the documents required as part of the application (some of which I may be able to waive), and discuss the necessary aquifer test(s).

Even though I cannot make specific recommendations, I can offer the following names and phone numbers of consultants who have recently conducted aquifer tests for new subdivisions in Blanco County and are familiar with the aquifer testing procedures. Regardless of which consultant the City selects, we would encourage cooperative planning between the City, the consultant, and our District.

Wet Rock Geological Services, Kaveh Khorzad, PG

C.J. Bennett, PG

We look forward to working with Johnson City as they move forward with their Capital Improvements Plan. Please feel free to call with any further questions.

Ron Fieseler, PG

General Manager, Blanco Pedernales GCD
(830) 708-5020 cell

From: Rick Schroder <rschroder@johnsoncitytx.org>
Sent: Friday, March 24, 2023 12:18 PM
To: Ronald G. Fieseler <manager@blancogw.org>
Cc: Brent J Sultemeier <bsultemeier@johnsoncitytx.org>
Subject: Permit Amendment Application

Mr. Fieseler –

I hope you are doing well and everything is going great at the Groundwater District!

As you are aware, the Public Works Director BJ Sultemeier met with you and Mr. Babb this week to discuss an amendment to the City's existing permit. Although this issue has not been brought before the City Council at this time, City Staff is researching the process to increase the permitted maximum annual production volume from 150 million gallons per year to 272,594,775 gallons per year, an increase of 122,594,775 gallons.

This increase is based upon the City's Capital Improvements Plan and Impact Fee Study adopted in July 2022, which estimates the 10-year projected average day flow of 746,835 gallons per day. Please see page 8 of the document below:

<https://storage.googleapis.com/proudcity/johnsoncitytx/uploads/2022/07/22-0702-COJC-CIP-and-Impact-Fee-Study-20220721-FINAL.pdf>

BJ informed me that the Groundwater District would require a study be conducted and submitted with the attached Permit Amendment Application. Can you please elaborate on what study is required and what specifically must be included in the study so that I can contact appropriate firms and receive pricing?

Thank you for your help!

Best,

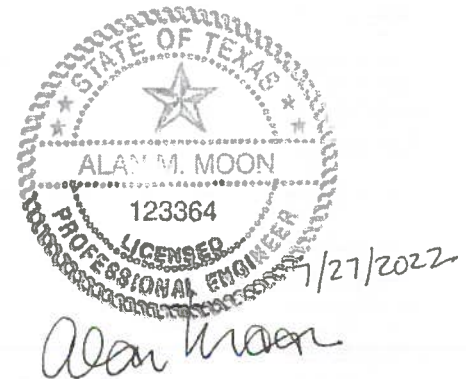


Rick A. Schroder
Chief Administrative Officer
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Yesterday is not ours to recover, but tomorrow is ours to win or lose. – President LBJ

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Capital Improvements Plan and Impact Fee Study 2022 Update

City of Johnson City



JULY 2022
QUIDDITY JOB NO. 0A830-0011-00



capacity (with the largest pump out of service) of 2 gpm per connection or enough firm booster pump capacity to meet the maximum day peak hour demand. The City’s water plants have enough supply, elevated storage, ground storage, and booster pump capacity to serve the existing system. The existing system water plant capacity analysis is presented in Attachment B.

3.2 FUTURE SYSTEM EVALUATION

3.2.1 METHODOLOGY OF PROJECTED WATER DEMANDS

To determine the projected water demands, the projected connections based on the future developments and timelines were utilized. The water unit demands by type of connection were applied to the projected connections, where applicable, and unit demands were established for Mixed Use and Industrial connections based upon Quiddity’s experience with similar types of developments within the region.

3.2.2 5-YEAR PROJECTIONS

Table 3-5 presents the projected average daily flows for the 5-year anticipated buildout.

Table 3-5 5-Year Projected Average Day Flow

Connection Type	Connections	Unit Demand (gpd/conn)	Total Demand (gpd)
Existing Single Family Residential	724	115	83,260
New Single Family Residential	201	225	45,225
Existing Multi Family Residential	4	910	3,640
Multi Family (Apartments)	400	200	80,000
Commercial	133	190	25,270
Commercial (RV Parks)	4	20,000	80,000
Industrial	2	2,000	4,000
Institutional	77	215	16,555
Accountability/Losses	20%		67,160
Total	1,535		405,540

3.2.3 10-YEAR PROJECTIONS

Table 3-6 presents the projected average daily flows for the 10-year anticipated buildout.

Table 3-6 10-Year Projected Average Day Flow

Connection Type	Connections	Unit Demand (gpd/conn)	Total Demand (gpd)
Existing Single Family Residential	724	115	83,260
New Single Family Residential	660	225	148,500
Multi Family Residential	221	910	201,110
Multi Family (Apartments)	400	200	80,000
Commercial	203	190	38,570
Commercial (RV Parks)	4	20,000	80,000
Industrial	2	2,000	4,000
Institutional	87	215	18,705
Mixed Use	124	200	24,800
Accountability/Losses	10%		67,460
Total	2,405		746,835

The total demand is expected to more than double from the 5-year projected demand.

3.2.4 FUTURE SYSTEM CAPACITY ANALYSIS

The City’s water plants do not have enough water supply, elevated storage, ground storage, and booster pump capacity to serve the projected 5-year and 10-year buildouts. The City needs to build a 100,000 gallon elevated storage tank and a 320 gallon per minute (gpm) well to serve the 5-year buildout. The City also needs to build a 100,000 gallon ground storage tank, a 330 gpm well, and two (2) - 300 gpm booster pumps in the 10-year buildout. The 5-year and 10-year water plant capacity analyses are presented in Attachments C and D, respectively.

3.3 CAPITAL IMPROVEMENTS PLAN (CIP)

Quiddity collaborated with City Staff to identify and include projects in the Water CIP that are needed to not only serve new development, but also to assist with operations and better serve the existing customers. Previous CIPs were utilized as reference for improvement and rehabilitation projects that were planned, but not completed, to date. However, not all projects in the CIP can be utilized for impact fees; only those that serve new or future development can be funded through impact fees. Table 3-7 presents the Water CIP. Cost estimates are included in Attachment E for construction projects that can be funded

Blanco-Pedernales Groundwater Conservation District

601 West Main, P.O. Box 1516 Johnson City, Texas 78636 (830) 868-9196 FAX (830) 868-0376
manager@blancogw.org

Permit Amendment Application

Instructions: This form is used for well Operating Permit and Transport Permit amendments only and shall be filled out as completely as possible. In accordance with District Rule 3.3(C) and 3.4(F), a permit holder may apply for an amendment to their maximum permitted production volumes.

Please Check () Application for an increase in production. Requires payment of an Application Fee of \$100.
Appropriate () Application for a decrease in production. Does not require payment of an application fee.
Box(s): () Application for a change in type of use. Does not require payment of an application fee.

Well Inspection: District staff shall inspect each well permitted by the District. Property access for inspections is authorized by Texas Water Code, Chapter 36.123 and shall be scheduled with the well owner and conducted in accordance with District Rule 3 and Rule 4.5. Inspections may include confirming well location, measuring water level, confirming pumping capability, water sampling, geological survey, or any other well-related inspection activity deemed necessary by the District.

Well Owner

Name: _____

Mailing Address: _____
(Street or P.O. Box) (City) (ZIP)

Daytime Phone: _____ Alternate Phone: _____

Contact Person (if other than owner): _____ Phone: _____

Permit Information

This Permit Amendment Application is for a: () Single Well System () Multi-Well System

District Well Registration #: _____ State or Temporary Well #: _____

Well Currently Used For: () Public Water Supply () Irrigation () Testing () Monitor () Industrial

Other (please specify in detail) _____

() If a change in use is proposed, provide details of usage: _____

Operating Permit Amendment Applications must provide:

Current Permitted Maximum Annual Production Volume: _____ Gallons per Year

Requested Change: () Increase () Decrease of: _____ Gallons per Year

Requested Maximum Annual Production Volume: _____ Gallons per Year

Required Attachment for all applications:

() Annual Groundwater Production Calculations. Annual groundwater production requests shall be based, if possible, on historical records, current metered usage, or other accurate measurement methods. If such documentation is not available, the applicant shall provide production calculations based on type of use, pumping capabilities, pumping times, pumping frequency, and other pertinent data to substantiate approximate groundwater production. Well owners may wish to contact the District for consultation and assistance when calculating or estimating annual groundwater production needs.

Owner's or Applicant's Sworn Statement

I hereby swear and affirm that the information given herein is true and accurate to the best of my knowledge and belief, and that I am aware of, knowledgeable of, and will comply with all District Rules.

Owner's or Applicant's Signature

Date

To Be Completed by District Personnel Only

Well Registration #: _____ State or Temp. Well #: _____

If a Multi-Well System list other wells: _____

Application Fee: _____ Paid By: _____

Current Well Uses: () Public Water Supply () Irrigation () Testing () Monitor () Industrial
() Other: _____

Proposed Changes in Well Uses: _____

Is well located in CGDA: () Yes () No Name of CGDA: _____

Permit Action and Specifications

Date Application was Administratively Complete: _____ () Admin. Approved () Ref. to Board

Date Application was Ref. to Board: _____ Public Hearing Date: _____

Board Action: () Approved as Filed () Modified or with Special Conditions () Denied Date: _____

Operating Permit Maximum Permitted Annual Production: _____ Gallons

Existing Special Permit Conditions: _____

New Special Permit Conditions: _____

Staff Inspection Notes: _____

Signed by: _____ Date: _____