

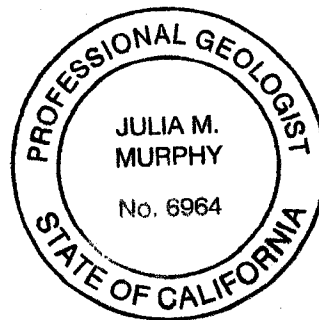
WATER RESOURCES REPORT

Telle Subdivision El Paso County, Colorado

January 11, 2021



Julia M. Murphy, MS PG
Professional Geologist /Hydrogeologist



Ground Water Investigations LLC · 11590 Black Forest Rd. 614 N Suite 15
Colorado Springs, CO 80908 · (719) 338-1805



This Water Resources Report was completed for Clifford J Telle and Nicole T. Telle (“Applicants”) by Julia Murphy of Groundwater Investigations LLC, a Professional Geologist, in accordance with the requirements of the El Paso County Land Development Code described in Section 8.4.7 (B)(1)(c). Ms. Murphy has over 25 years’ experience in hydrogeologic analysis. Locally, she has evaluated groundwater-based water supply for subdivisions in El Paso County for over 15 years. This report presents the data, documentation and analysis in sufficient detail to determine sufficiency of the Telle proposed subdivision water supply in terms of water sufficiency citing dependability, quantity and quality criteria.

1.0 Site Location

The subdivision site consists of approximately 10.12 acres located in the SE¼SE¼ of Section 10, Township 12 south, Range 66 West of the 6th P.M., El Paso County, Colorado and also described as Lot 4, Bridle Bit Subdivision. The address is 12730 Bridle Bit Road, Colorado Springs, CO 80908 (Figure 1). The Applicants intends to subdivide the property into two lots containing 5.055 acres “Lot 1” and 5.066 acres “Lot 2”. There is an existing home with a well and septic system on Lot 2.

2.0 Sufficient Water Quantity

2.1 Water Demand

The two residential lots will each use a total of 0.458 acre feet per year of groundwater from the underlying Denver Basin Aquifers to provide a minimum of 0.25 acre feet of water per year per residence for in-home use. The remaining 0.208 acre feet per year will be available for irrigation of lawn and garden, and the watering of up to four horses or equivalent livestock, per lot.

2.2. Groundwater Availability

The Water Rights to the four underlying groundwater aquifers were adjudicated June 25, 2020 under Water Court Decree 19CW3039 (Exhibit A). Table 1 quantifies the groundwater underlying the 10.12 acre property in each of the four aquifers.

Table 1 Groundwater Quantification			
AQUIFER	NET SAND (feet)	Total (Acre Feet)	Annual Average Withdrawal 100 Years (Acre Feet)
Dawson (NNT)	115	2331	2.33
Denver (NNT)	485	834	8.34
Arapahoe (NNT)	245	421	4.21
Laramie-Fox Hills (NT)	185	281	2.81

The Water Court awarded the Applicants a vested right of 2331 acre feet of groundwater underlying Applicants' Property from the not-nontributary Dawson aquifer. Of this, up to 0.458 acre feet annually may be pumped pursuant to the plan for augmentation. From the not-nontributary Denver aquifer, the Applicants were awarded a vested right to 834 acre feet of groundwater. Of this, up to 0.458 acre feet annually may be pumped pursuant to the plan for augmentation. A total of 137.4 acre feet of groundwater from each aquifer will provide sufficient quantity of water to each lot meeting the requirement of a 300-year water supply.

3.0 Sufficient Dependability

3.1 Groundwater Wells

The proposed well for vacant Lot 1 will be completed exclusively in the not-nontributary Denver Aquifer. Pumping rates range from 10 to 15 gallons per minute. The Denver aquifer was calculated to have 834 acre feet of groundwater underlying the property. Of this, 137.4 Acre feet (16.47 percent) of the total available amount is allocated for use on lot 1 to provide a 300-year supply. Numerous nearby Denver aquifer wells supply water for similar sized homes and uses therefore a well completed in this aquifer should be capable of meeting the proposed demand.

The well used by the existing home on Lot 2 has been steadily supplying water since its construction in 1982. This well is completed in the not non-tributary Dawson Aquifer and was permitted and constructed as an exempt well pursuant to C.R.S. 537-92-602 having permit number 116298 (Exhibit B). This well is being re-permitted pursuant to the Court Decree. The Dawson aquifer was calculated to contain 2331 acre feet of groundwater underlying the property. Of this, 137.4 acre feet (5.89 percent) is allocated to provide a 300-year supply. Based on historical use, production from the existing well is sufficient to meet the water supply demands for the proposed uses.

3.2. Augmentation Requirements

The augmentation obligation for the proposed well on Lot 1 constructed to the Denver aquifer requires the replacement of 4% of annual pumping. "Depletions during pumping will be effectively replaced by residential return flows from non-evaporative septic systems. The annual consumptive use for non-evaporative septic systems is 10% per year per residence. At the household indoor use rate of 0.25 acre feet per residence per year, total of 0.50 acre feet (assuming two residences), 0.45 acre feet is replaced to the stream system per year, utilizing non-evaporative septic system. Thus, during pumping, total maximum stream depletions of 0.1382 acre feet will be more than adequately augmented" (19CW3039, Exhibit A).

The augmentation obligation for the well on Lot 2 drawing groundwater from the Dawson aquifer requires the replacement of actual stream depletions. Augmentation of depletions during pumping will be by the septic system return flows. The nontributary water rights of the Laramie-Fox Hills aquifer is reserved to meet for augmentation of depletions after pumping ceases.

4.0. Sufficient Quality

4.1 Denver Aquifer Water Quality

Lot 1 will be served by a well completed in the confined Denver aquifer. As a well does not exist in the Denver aquifer on the Property, a nearby Denver well was selected to acquire a representative water quality sample (Figure 2). The well is located within a ½ mile of the property having well permit 61195-F (Exhibit C). The sample location is within New Breed Ranch subdivision west of the Applicants' property.

Water quality samples were collected by GWI using standard collection and preservation methods. Analytes selected are in compliance with the Amendment to the Land Development Code dated August 27 2019, Section 8.4.7(B)(3)(d)(10)(a). The analysis results are presented in the Water Quality Report and provides evidence that the groundwater in the Denver aquifer meets the Colorado Primary Drinking Water Standards for the required analytes at the sample location (Exhibit D).

4.2. Dawson Aquifer Water Quality

The Dawson Aquifer has been the primary source of water since 1982 for the existing home within the Bridle Bit Subdivision in accordance to the subdivisions' Water Supply Plan. The same well will continue to supply groundwater for use on Lot 2. Because the supply has not change and the existing well will be used, water quality samples were not collected from the Dawson aquifer.

5.0 Summary and Conclusion

The proposed subdivision of 10.12 acres located in Bridle Bit Subdivision will create one new lot requiring a new well. The purpose of the Water Resources Report is to provide the data, documentation and analysis in sufficient detail to determine sufficiency of the proposed subdivision's water supply in terms of dependability, quantity and quality. The amount of groundwater underlying Applicants property has been adjudicated in water court under Water Court Decree 19CW3039. Based on the proposed uses and quantification of available groundwater, there is sufficient quantity to meet the County required 300-year water supply criteria. Wells completed in the not non-tributary Dawson and Denver aquifer have successfully been supplying groundwater for similar sized homes and uses in the area at sufficient rates and duration. In addition, only a small fraction of the quantified groundwater will be used on the overlying land in accordance to an augmentation plan, the water source can reasonably be considered a dependable supply. The quality of the Denver aquifer groundwater underlying the new proposed lot 1 was evaluated in accordance with the Land Development Code and was determined to meet Primary Drinking Water Standards for the required analytes.

EXHIBIT A

WRJ

WELL PERMIT EXISTING HOME

COLORADO DIVISION OF WATER RESOURCES

818 Centennial Bldg., 1313 Sherman St., Denver, Colorado 80203

PERMIT APPLICATION FORM

RECEIVED

AUG 14 1980

WATER RESOURCES
STATE ENGINEER
COLO.

Application must be complete where applicable. Type or print in **BLACK INK**. No overstrikes or erasures unless initialed.

(X) A PERMIT TO USE GROUND WATER
(X) A PERMIT TO CONSTRUCT A WELL
FOR: (X) A PERMIT TO INSTALL A PUMP

() REPLACEMENT FOR NO. _____
() OTHER _____
WATER COURT CASE NO. _____

(1) APPLICANT - mailing address

NAME Peter R. and Katherine F. Spahn
STREET 12725 Tahosa Lane
CITY Colorado Springs, CO 80908
(State) (Zip)
TELEPHONE NO. 303-495-2792

FOR OFFICE USE ONLY: DO NOT WRITE IN THIS COLUMN

Receipt No. 7174 / _____
Basin _____ Dist. _____

CONDITIONS OF APPROVAL

This well shall be used in such a way as to cause no material injury to existing water rights. The issuance of the permit does not assure the applicant that no injury will occur to another vested water right or preclude another owner of a vested water right from seeking relief in a civil court action.

Install plain (non-perforated) casing from ground surface down to a minimum depth of 120 feet and properly sealed to prevent the pumping or appropriation of tributary waters.

DEPTH OF THIS WELL SHALL NOT EXCEED 640 FEET WHICH CORRESPONDS TO THE BASE OF THE DAWSON AQUIFER

AVERAGE ANNUAL APPROPRIATION FROM THIS WELL SHALL NOT EXCEED 0.90 ACRE FEET.

(2) LOCATION OF PROPOSED WELL

County E1 Paso
SE $\frac{1}{4}$ of the SE $\frac{1}{4}$ Section 10
Twp. 12 S., Rng. 66 W., 6th P.M.
(N.S) (E.W)

(3) WATER USE AND WELL DATA

Proposed maximum pumping rate (gpm) 15 gpm
Average annual amount of ground water to be appropriated (acre-feet): 1 acre foot
Number of acres to be irrigated: 17,000 sq. ft.
Proposed total depth (feet): 350 feet
Aquifer ground water is to be obtained from:
Dawson Formation

Owner's well designation Spahn Well #1

GROUND WATER TO BE USED FOR:

() HOUSEHOLD USE ONLY - no irrigation (0)
(X) DOMESTIC (1) () INDUSTRIAL (5)
() LIVESTOCK (2) () IRRIGATION (6)
() COMMERCIAL (4) () MUNICIPAL (8)
() OTHER (9)

DETAIL THE USE ON BACK IN (11)

NOTE! TO INSURE A MAXIMUM PRODUCTIVE LIFE OF THIS WELL, PERFORATED CASING SHOULD BE SET THROUGH THE ENTIRE PRODUCING INTERVAL OF THE AQUIFER, TO THE DEPTH INDICATED ABOVE.

(NOTE: ESTIMATED ANNUAL DIVERSIONS ARE 0.3 ACRE FEET FOR AN AVERAGE HOUSEHOLD AND 0.05 ACRE FEE WILL IRRIGATE 1000 SQ. FT. OF LAWN OR GARDEN.)

APPLICATION APPROVED

PERMIT NUMBER 116298
DATE ISSUED SEP 25 1980
EXPIRATION DATE SEP 25 1982

Bruce E. DeBryne
DEPUTY STATE ENGINEER
BY Raymond R. Schroeder
I.D. 2-10 COUNTY 21

(4) DRILLER

Name Licensed
Street _____
City _____
(State) (Zip)
Telephone No. _____ Lic. No. _____

<p>DISTRICT COURT, WATER DIVISION 2, STATE OF COLORADO Court Address: 501 North Elizabeth Street, Suite 116 Pueblo, CO 81003 Phone Number: (719) 404-8832</p>	<p>DATE FILED: June 25, 2020 1:56 PM CASE NUMBER: 2019CW3039</p>
<p>CONCERNING THE APPLICATION FOR WATER RIGHTS OF:</p> <p>CLIFFORD H. TELLE and NICOLE T. TELLE</p> <p>IN EL PASO COUNTY</p>	<p style="text-align: center;">▲ COURT USE ONLY ▲</p> <hr/> <p>Case No.: 19CW3039</p> <p>(consolidated with Water Div 1 case 19CW3113)</p>
<p style="text-align: center;">FINDINGS OF FACT, CONCLUSIONS OF LAW, RULING OF REFEREE AND DECREE ADJUDICATING DENVER BASIN GROUNDWATER AND APPROVING PLAN FOR AUGMENTATION</p>	

THIS MATTER comes before the Court on the Application filed by Clifford H. Telle and Nicole T. Telle, and having reviewed said Application and other pleadings on file, and being fully advised on this matter, the Court makes the following findings and orders:

GENERAL FINDINGS OF FACT

1. The applicants in this case are Clifford H. Telle and Nicole T. Telle, whose address is 12730 Bridle Bit Road, Colorado Springs, CO 80908 ("Applicant"). The Applicant is the owner of the land totaling approximately 10.12 acres on which the structures sought to be augmented herein are located, and under which lies the Denver Basin groundwater described in this decree, and are the owners of the place of use where the water will be put to beneficial use, except as described in Paragraph 19.

2. The Applicant filed this Application with the Water Courts for both Water Divisions 1 and 2 on June 20, 2019. The Application was referred to the Water Referees in both Divisions 1 and 2 on or about June 20, 2019.

3. The time for filing statements of opposition to the Application expired on the last day of August 2019. A Statement of Opposition was timely filed by Kettle Creek, LLC on August 31, 2019.

4. A Motion for Consolidation of the Division 1 and Division 2 cases into Water Division 2 was filed with the Colorado Supreme Court on August 31, 2019. The Panel on

Consolidated Multidistrict Litigation certified the Motion for Consolidation to the Chief Justice on August 1, 2019. Chief Justice, Nathan B. Coats, granted the Motion for Consolidation by Order dated August 28, 2019.

5. On June 20, 2019, the Division 1 Water Court, on Motion from Applicant, ordered that consolidated publication be made by only Division 2. On or near July 5, 2019, the Division 2 Water Court ordered that publication occur in *The Daily Transcript* within El Paso County.

6. The Clerk of this Court has caused publication of the Application filed in this matter as provided by statute and the publication costs have been paid. On July 19, 2019, proof of publication in *The Daily Transcript* was filed with the Division 2 Water Court. All notices of the Application have been given in the manner required by law.

7. On May 27, 2020, a stipulation between the Applicant and Kettle Creek, LLC was filed with the Division 2 Water Court. By Order dated May 28, 2020 the Division 2 Water Court approved such stipulation.

8. Pursuant to C.R.S. §37-92-302(2), the Office of the State Engineer has filed its Determination of Facts for each Denver Basin aquifer with this Court on September 4, 2019, and issued revised Determination of Facts for the Dawson and Denver aquifers on February 12, 2020, all of which have been considered by the Water Court in the entry of this Ruling and Decree.

9. Pursuant to C.R.S. §37-92-302(4), the office of the Division Engineer for Water Division No. 2 filed its Consultation Report dated October 16, 2019, and a Response to the Consultation Report was filed by the Applicant on December 15, 2019. Both the Consultation Report and Response have been considered by the Water Court in the entry of this Ruling and Decree.

10. The Water Court has jurisdiction over the subject matter of these proceedings and over all who have standing to appear as parties whether they have appeared or not. The land and water rights involved in this case are not within a designated groundwater basin.

GROUNDWATER RIGHTS

11. The Applicant requested quantification and adjudication of underground water rights for Telle Wells Nos. 1 and 2, as may be constructed to the Dawson and Denver aquifers, and additional or replacement wells associated therewith, for withdrawal of Applicant's full entitlements of supply under the plan for augmentation decreed herein. Applicant also requested quantification and adjudication of water uses from the Arapahoe and Laramie-Fox Hills aquifers. The following findings are made with respect to such

underground water rights:

12. The land overlying the groundwater subject to the adjudication in this case is owned by the Applicant and consists of approximately 10.12 acres located in the SE¼ SE¼ of Section 10, Township 12 South, Range 66 West of the 6th P.M., El Paso County, Colorado, better known as Lot 4, Bridle Bit Subdivision, a/k/a/ 12730 Bridle Bit Road, Colorado Springs, CO 80908 ("Applicant's Property"). Applicant intends to subdivide the property into two lots containing 5.055 acres and 5.066 acres. All groundwater adjudicated herein shall be withdrawn from the overlying land.

13. In accordance with the notice requirements of C.R.S. § 37-92-302, lienholders of the Applicant's Property were sent a Letter of Notice dated June 24, 2019. A Certificate of Notice was filed with the District Court, Water Divisions 1 and 2, on July 24, 2019.

14. Telle Wells Nos. 1 and 2: Telle Well Nos. 1 and 2 are and will be located on the Applicant's Property. Telle Well No. 1 is currently permitted and constructed as an exempt well pursuant to C.R.S. §37-92-602 under Well Permit No. 116298. Applicant is awarded the vested right to use Telle Well Nos. 1 and 2, along with any necessary additional or replacement wells associated with such structures, for the extraction and use of groundwater from the not-nontributary Dawson and Denver aquifers pursuant to the Plan for Augmentation decreed herein. Upon entry of this decree and submittal by the Applicant of a complete well permit application and filing fee, the State Engineer shall issue a new permit for Telle Well No. 1 and a new permit for Telle Well No. 2 pursuant to C.R.S. §37-90-137(4), consistent with and referencing the Plan for Augmentation decreed herein.

15. Of the statutorily described Denver Basin aquifers, the Dawson, Denver, Arapahoe, and Laramie-Fox Hills aquifers all exist beneath the Applicant's Property. The Dawson, Denver, and Arapahoe aquifers underlying the Applicant's Property contain not-nontributary water, while the water of the Laramie-Fox Hills aquifer underlying the Applicant's Property is nontributary. The quantity of water in the Denver Basin aquifers exclusive of artificial recharge underlying the Applicant's Property is as follows:

AQUIFER	NET SAND (ft)	Annual Average Withdrawal 100 Years (Acre Feet)	Total Withdrawal (Acre Feet)
Dawson (NNT)	115	2.33	233 ¹
Denver (NNT)	485	8.34	834
Arapahoe (NNT)	245	4.21	421

¹ The full amount is subject to Permit No. 116298 being re-permitted as a non-exempt well.

Laramie-Fox Hills (NT)	185	2.81	281
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16. Pursuant to C.R.S. §37-90-137(9)(c.5)(I), the augmentation requirements for wells in the Dawson aquifer require the replacement to the affected stream system of actual stream depletions on an annual basis. The Applicant's Property is located more than 1 mile from any point of contact with a surface stream. Pursuant to C.R.S. §37-90-137(9)(c.5)(I), depletions from wells on the property pumping from the Denver aquifer will require replacement of 4% of the amount of water pumped on an annual basis, and such additional amounts as may be required pursuant to C.R.S. §37-90-137(9)(c.5). Applicant shall not be entitled to construct a well or use water from the not-nontributary Dawson, Denver, or Arapahoe aquifers except pursuant to an approved augmentation plan in accordance with C.R.S. §37-90-137(9)(c.5), including as decreed herein as concerns the Dawson and Denver aquifers.

17. Subject to the augmentation requirements described in Paragraphs 16 and 22 and the other requirements and limitations in this decree, Applicant shall be entitled to withdraw all legally available groundwater in the Denver Basin aquifers underlying Applicant's Property. Said amounts can be withdrawn over the 300-year life for the aquifers as set forth in El Paso County Land Development Code Section 8.4.7. The average annual amounts of ground water available for withdrawal from the underlying Denver Basin aquifers, based upon the 100-year aquifer life, are determined and set forth above, based upon the Office of the State Engineer Determination of Facts issued in this case as described in Paragraph 8.

18. Applicant shall be entitled to withdraw an amount of groundwater in excess of the average annual amount decreed herein from the Denver Basin aquifers underlying Applicant's Property, so long as the sum of the total withdrawals from wells in each of the aquifers does not exceed the product of the number of years since the date of issuance of the original well permit or the date of entry of the decree herein, whichever comes first, and the average annual volume of water which Applicant is entitled to withdraw from each of the aquifers underlying Applicant's Property, subject to the requirement that such banking and excess withdrawals do not violate the terms and conditions of the plan for augmentation decreed herein and any other plan for augmentation decreed by the Court that authorizes withdrawal of the Denver Basin groundwater decreed herein.

19. Subject to the terms and conditions in the plan for augmentation decreed herein and final approval by the State Engineer's Office pursuant to the issuance of well permits in accordance with C.R.S. §§37-90-137(4) or 37-90-137(10), the Applicant shall have the right to use the ground water for beneficial uses upon the Applicant's Property consisting of domestic, irrigation, stock water, recreation, wildlife, fire protection, and also for storage and augmentation purposes associated with such uses. The amount of groundwater decreed for such uses upon the Applicant's Property is reasonable as such uses are to be made for the long term use and enjoyment of the Applicant's Property and is to establish and provide for adequate water reserves. The nontributary groundwater

may be used, reused, and successively used to extinction, both on and off the Applicant's Property subject, however, to the limitations imposed on the use of the Laramie-Fox Hills aquifer groundwater by this decree and the requirement under C.R.S. §37-90-137(9)(b) that no more than 98% of the amount withdrawn annually shall be consumed. Applicant may use such water by immediate application or by storage and subsequent application to the beneficial uses and purposes stated herein. Provided however, as set forth above, Applicant shall only be entitled to construct a well or use water from the not-nontributary Dawson, Denver, and Arapahoe aquifers pursuant to a decreed augmentation plan entered by the Court, including that plan for augmentation decreed herein.

20. Withdrawals of groundwater available from the nontributary Laramie-Fox Hills aquifer beneath the Applicant's Property in the amount determined in accordance with the provisions of this decree will not result in injury to any other vested water rights or to any other owners or users of water.

PLAN FOR AUGMENTATION

21. The structures to be augmented are the Telle Wells Nos. 1 and 2, No. 1 existing, and No. 2 to be constructed to the not-nontributary Denver aquifer underlying the Applicant's Property, along with any additional or replacement wells associated therewith.

22. Pursuant to C.R.S. §37-90-137(9)(c.5), the augmentation obligation for Telle Well No. 1, and any additional or replacement wells constructed to the Dawson aquifer, requires the replacement of actual stream depletions. The augmentation obligation for Telle Well No. 2, and any additional or replacement wells constructed to the Denver aquifer, requires the replacement of 4% of annual pumping in accordance with C.R.S. §37-90-137(9)(c.5). The water rights to be used for augmentation during pumping are the septic system return flows of the not-nontributary Telle Wells Nos. 1 and 2 to be pumped as set forth in this plan for augmentation. The water rights to be used for augmentation after pumping are Applicant's nontributary water rights in the Laramie-Fox Hills aquifer reserved herein. Applicant shall provide for the augmentation of stream depletions caused by pumping the Telle Wells Nos. 1 and 2 and any additional or replacement wells as approved herein. Water use criteria is as follows:

A. Use: Telle Wells Nos. 1 and 2 may each pump up to 0.458 acre feet of water per year (137.4 acre feet per well total), for a maximum total of 0.458 acre feet being withdrawn from each of the Dawson and Denver aquifers per year. Indoor use will utilize up to 0.25 acre feet of water per year per residence, with the remaining 0.208 acre feet per year available for other uses on the Applicant's Property, including, irrigation of lawn and garden and the watering of up to four horses or equivalent livestock, per residence. The foregoing figures assume the use of two individual septic systems, with resulting return flows from each as described below in Paragraph 22.C.

B. Depletions: Maximum annual stream depletions over the 300-year pumping period in the Dawson aquifer will amount to approximately 27.6% of pumping, or 0.12 acre-feet. Pumping from the Denver aquifer requires 4% of the annual amount pumped to be replaced to the stream system, or a maximum of 0.0182 acre feet annually. Should Applicant's pumping be less than the total 0.458 annual acre feet in each of the Dawson and Denver aquifers described herein resulting depletions and required replacements will be correspondingly reduced.

C. Augmentation of Depletions During Pumping Life of Wells: Pursuant to C.R.S. §37-90-137(9)(c.5), Applicant is required to replace actual stream depletions attributable to pumping of the maximum one Dawson aquifer well. Pursuant to C.R.S. §37-90-137(9)(c.5), Applicant is required to replace 4% of the annual amount pumped from the one Denver aquifer well. Applicant has determined that depletions during pumping will be effectively replaced by residential return flows from non-evaporative septic systems. The annual consumptive use for non-evaporative septic systems is 10% per year per residence. At the household indoor use rate of 0.25 acre feet per residence per year, total of 0.50 acre feet (assuming two residences), 0.45 acre feet is replaced to the stream system per year, utilizing non-evaporative septic systems. Thus, during pumping, total maximum stream depletions of 0.1382 acre feet will be more than adequately augmented.

D. Augmentation of Post Pumping Depletions: This plan for augmentation shall have a pumping period of a minimum of 300 years. For the replacement of post-pumping depletions which may be associated with the use of the Telle Wells Nos. 1 and 2 and any additional or replacement wells, Applicant will reserve all water from the nontributary Laramie Fox Hills aquifer, accounting for actual stream depletions replaced during the plan pumping period, as necessary to replace post pumping depletions. The amount of nontributary Laramie-Fox Hills groundwater reserved may be reduced as may be determined through this Court's retained jurisdiction as described in this decree. If the Court, by order, reduces the Applicant's obligation to account for and replace such post-pumping depletions for any reason, it may also reduce the amount of Laramie-Fox Hills aquifer groundwater reserved for such purposes, as described herein. Applicant also reserves the right to substitute other legally available augmentation sources for such post pumping depletions upon further approval of the Court under its retained jurisdiction. Even though this reservation is made, under the Court's retained jurisdiction Applicant reserves the right in the future to prove that post pumping depletions will be noninjurious. Pursuant to C.R.S. §37-90-137(9)(b), no more than 98% of water withdrawn annually from a nontributary aquifer shall be consumed. The reservation of 281 acre feet from the Laramie-Fox Hills aquifer results in 275.4 acre feet of available post-pumping augmentation water, which will be sufficient to replace post-pumping depletions from pumping the Dawson aquifer and Denver aquifer groundwater as allowed under the plan for augmentation decreed herein. Upon entry of a decree in this case, the Applicant will be entitled to apply for and receive a new well permit for the Telle Wells Nos. 1 and 2 for the uses in accordance with this decree and

otherwise in compliance with C.R.S. §37-90-137.

23. Because depletions occur to both the South Platte and Arkansas River systems under the State's groundwater flow model, the Application in this case was filed in both Water Divisions 1 and 2. The return flows set forth above as the augmentation source during the pumping period will accrue to only the Arkansas River system where most of the depletions will occur and where the Applicant's Property is located. Under this augmentation plan, the total amount of depletions will be replaced to the Arkansas River system as set forth herein, and the Court finds that those replacements are sufficient under this augmentation plan subject to Paragraphs 42-46 herein.

24. This decree, upon recording, shall constitute a covenant running with Applicant's Property, benefitting and burdening said land, and requiring construction of well(s) to the nontributary Laramie-Fox Hills aquifer and pumping of water to replace post-pumping depletions under this decree. Subject to the requirements of this decree, in order to determine the amount and timing of post-pumping replacement obligations under this augmentation plan, Applicant or its successors shall use information commonly used by the Colorado Division of Water Resources for augmentation plans of this type at the time. Pursuant to this covenant, the water from the nontributary Laramie-Fox Hills aquifer reserved herein may not be severed in ownership from the Applicant's Property. This covenant shall be for the benefit of, and enforceable by, third parties owning vested water rights who would be injured by the failure to provide for the replacement of post-pumping depletions under the decree, and shall be specifically enforceable by such third parties against the owner of the Applicant's Property.

25. Applicant or its successors shall be required to initiate pumping from the Laramie-Fox Hills aquifer for the replacement of post-pumping depletions when either: (i) the absolute total amount of water available from the Dawson and Denver aquifers allowed to be withdrawn under the plan for augmentation decreed herein (137.4 acre feet per aquifer) has been pumped; (ii) the Applicant or its successors in interest have acknowledged in writing that all withdrawals for beneficial use through the Telle Wells Nos. 1 and 2 or any additional and replacement wells have permanently ceased, (iii) a period of 10 consecutive years where no withdrawals of groundwater has occurred, or (iv) accounting shows that return flows from the use of the water being withdrawn is insufficient to replace depletions caused by the withdrawals that already occurred.

26. Unless modified by the Court under its retained jurisdiction, Applicant and its successors shall be responsible for accounting and replacement of post-pumping depletions in the amount set forth herein. Should Applicant's obligation hereunder to account for and replace such post-pumping stream depletions be reduced or abrogated for any reason, Applicant may petition the Court to also modify or terminate the reservation of the Laramie-Fox Hills aquifer groundwater.

27. The term of this augmentation plan is for a minimum of 300 years, however,

the length of the plan for a particular well or wells may be extended beyond such time provided the total plan pumping allocated to such well or wells is not exceeded. Should the actual operation of this augmentation plan depart from the planned diversions described in Paragraph 22 such that annual diversions are increased or the duration of the plan is extended, the Applicant must prepare and submit a revised model of stream depletions caused by the actual pumping or intended schedule. This analysis must utilize depletion modeling acceptable to the State Engineer, and to this Court, and must represent the water use under the plan for the entire term of the plan to date. The analysis must show that return flows have equaled or exceeded actual stream depletions throughout the pumping period and that reserved nontributary water remains sufficient to replace post-pumping depletions.

28. Consideration has been given to the depletions from Applicant's use and proposed uses of water, in quantity, time and location, together with the amount and timing of augmentation water which will be provided by the Applicant, and the existence, if any, of injury to any owner of or person entitled to use water under a vested water right.

29. It is determined that the timing, quantity and location of replacement water under the protective terms in this decree are sufficient to protect the vested rights of other water users and eliminate injury thereto. The replacement water shall be of a quantity and quality so as to meet the requirements for which the water of senior appropriators has normally been used, and provided of such quality, such replacement water shall be accepted by the senior appropriators for substitution for water derived by the exercise of the Telle Wells Nos. 1 and 2. As a result of the operation of this Plan for Augmentation, the depletions from the Telle Wells Nos. 1 and 2 and any additional or replacement wells associated therewith will not result in injury to the vested water rights of others.

CONCLUSIONS OF LAW

30. The application for adjudication of Denver Basin groundwater and approval of plan for augmentation was filed with the Water Clerks for Water Divisions 1 and 2, pursuant to C.R.S. §§37-92-302(1)(a) and 37-90-137(9)(c.5). These cases were properly consolidated before Water Division 2.

31. The Applicant's request for adjudication of these water rights is contemplated and authorized by law, and this Court and the Water Referee have exclusive jurisdiction over these proceedings. C.R.S. §§37-92-302(1)(a), 37-92-203, and 37-92-305.

32. Subject to the terms of this decree, the Applicant is entitled to the sole right to withdraw all the legally available water in the Denver Basin aquifers underlying the Applicant's Property, and the right to use that water to the exclusion of all others.

33. The Applicant has complied with C.R.S. §37-90-137(4), and the

groundwater is legally available for withdrawal by the requested nontributary well(s), and legally available for withdrawal by the requested not-nontributary well(s) upon the entry of this decree approving an augmentation plan pursuant to C.R.S. §37-90-137(9)(c.5), and the issuance of well permits by the State Engineer's Office. Applicant is entitled to a decree from this Court confirming its rights to withdraw groundwater pursuant to C.R.S. §37-90-137(4).

34. The Denver Basin water rights applied for in this case are not conditional water rights, but are vested water rights determined pursuant to C.R.S. §37-90-137(4). No applications for diligence are required. The claims for nontributary and not-nontributary groundwater meet the requirements of Colorado Law.

35. The determination and quantification of the nontributary and not-nontributary groundwater rights in the Denver Basin aquifers as set forth herein is contemplated and authorized by law. C.R.S. §§37-90-137, and 37-92-302 through 37-92-305.

36. The Applicant's request for approval of a plan for augmentation is contemplated and authorized by law. If administered in accordance with this decree, this plan for augmentation will permit the uninterrupted diversions from the Telle Wells Nos. 1 and 2 and any additional or replacement wells without adversely affecting any other vested water rights in the Arkansas River and South Platte River or their tributaries and when curtailment would otherwise be required to meet a valid senior call for water. C.R.S. §§37-92-305(3), (5), and (8).

IT IS THEREFORE ORDERED, ADJUDGED AND DECREED AS FOLLOWS:

37. All of the foregoing Findings of Fact and Conclusions of Law are incorporated herein by reference, and are considered to be a part of this decretal portion as though set forth in full.

38. The Application for Adjudication of Denver Basin Groundwater and for Approval of Plan for Augmentation filed by the Applicant is approved, subject to the terms of this decree.

A. Applicant is awarded a vested right to 233 acre feet of groundwater from the not-nontributary Dawson aquifer underlying Applicant's Property, as quantified in Paragraph 15 or as modified by the Court under its retained jurisdiction. Up to 0.458 acre feet annually (137.4 acre feet total) may be pumped pursuant to the plan for augmentation decreed herein. The remaining Dawson aquifer groundwater decreed herein which is not included in this plan for augmentation, shall not be withdrawn for any purpose except pursuant to a separate court-approved plan for augmentation authorizing the pumping of that amount.

B. Applicant is awarded a vested right to 834 acre feet of groundwater from the not-nontributary Denver aquifer underlying Applicant's Property, as quantified in Paragraph 15 or as modified by the Court under its retained jurisdiction. Applicant is authorized to pump up to 0.458 acre feet annually (137.4 acre feet total) from the Denver aquifer pursuant to the plan for augmentation decreed herein. All remaining Denver aquifer water decreed herein which is not pumped pursuant to the augmentation plan approved in this decree shall not be withdrawn for any purpose except pursuant to a separate court-approved plan for augmentation authorizing the pumping of that remaining amount.

C. Applicant is awarded a vested right to 421 acre feet of groundwater from the not-nontributary Arapahoe aquifer underlying Applicant's Property, as quantified in Paragraph 15 or as modified by the Court under its retained jurisdiction. The Arapahoe aquifer water adjudicated herein is not included in the plan for augmentation decreed herein, and it shall not be withdrawn for any purpose except pursuant to a separate court-approved plan for augmentation that authorizes the pumping.

D. Applicant is awarded a vested right to 281 acre feet of groundwater from the nontributary Laramie-Fox Hills aquifer underlying Applicant's Property, as quantified in Paragraph 15 or as modified by the Court under its retained jurisdiction. All of the water in the Laramie-Fox Hills aquifer, being 281 acre feet has been reserved for use in the plan for augmentation decreed herein. Subject to the provisions of Rule 8 of the Denver Basin Rules, 2 CCR 402-6, limiting consumption to ninety-eight percent of the amount withdrawn, and the other terms and conditions of this decree, Applicant's Laramie-Fox Hills aquifer groundwater may be utilized for all purposes described in Paragraph 19.

39. The Applicant has furnished acceptable proof as to all claims and, therefore, the Application for Adjudication of Denver Basin Groundwater and For Approval of Plan for Augmentation, as filed by the Applicant, is granted and approved in accordance with the terms and conditions of this decree. Approval of this Application will not result in any injury to senior vested water rights.

40. The Applicant shall comply with C.R.S. §37-90-137(9)(b), requiring the relinquishment of the right to consume two percent (2%) of the amount of the nontributary groundwater withdrawn annually. Ninety-eight percent (98%) of the nontributary groundwater withdrawn annually may therefore be consumed. No plan for augmentation shall be required to provide for such relinquishment. Applicant shall be required to demonstrate to the State Engineer prior to the issuance of a well permit that no more than ninety-eight percent of the groundwater withdrawn annually will be consumed.

41. Telle Wells No. 1 and 2, and any replacement or additional wells, shall be operated such that combined pumping from all wells does not exceed the annual and total pumping limits for the Dawson and Denver aquifers as decreed herein, and is in

accordance with the requirements of the plan for augmentation described herein. The State Engineer, the Division Engineer, and/or the Water Commissioner shall not curtail the diversion and use of water by the Telle Wells Nos. 1 and 2 or any additional and replacement wells so long as the return flows from the annual diversions associated with the Telle Wells Nos. 1 and 2 and such other wells accrue to the stream system pursuant to the conditions contained herein. To the extent that Applicant or one of its successors or assigns is ever unable to provide the replacement water required, then the Telle Wells Nos. 1 and 2 and any additional or replacement wells shall not be entitled to operate under the protection of this plan, and shall be subject to administration and curtailment in accordance with the laws, rules, and regulations of the State of Colorado. Pursuant to C.R.S. §37-92-305(8), the State Engineer shall curtail all out-of-priority diversions which are not so replaced as to prevent injury to vested water rights. In order for this plan for augmentation to operate, return flows from the septic systems discussed herein, shall at all times during pumping be in an amount sufficient to replace the amount of stream depletions. Applicant shall be required to have any wells pumping on the Applicant's Property providing water for in-house uses and generating septic system returns prior to pumping the wells for any of the other uses identified in Paragraphs 19 or 22.A.

42. The Court retains jurisdiction over this matter to make adjustments in the allowed average annual amount of withdrawal from the Denver Basin aquifers, either upwards or downwards, to conform to actual local aquifer characteristics, and the Applicant need not file a new application to request such adjustments.

A. At such time as adequate data may be available, Applicant or the State Engineer may invoke the Court's retained jurisdiction as provided in this Paragraph 42 for purposes of making a final determination of water rights as to the quantities of water available and allowed average annual withdrawals from any of the Denver Basin aquifers quantified and adjudicated herein. Any person seeking to invoke the Court's retained jurisdiction for such purpose shall file a verified petition with the Court setting forth with particularity the factual basis for such final determination of Denver Basin water rights under this decree, together with the proposed decretal language to affect the petition. Within four months of the filing of such verified petition, the State Engineer's Office shall utilize such information as available to make a final determination of water rights finding, and shall provide such information to the Court, Applicant, opposer, and the petitioning party.

B. If no protest is filed with the Court to such findings by the State Engineer's Office within sixty (60) days, this Court shall incorporate by entry of an Amended Decree such "final determination of water rights", and the provisions of this Paragraph 42 concerning adjustments to the Denver Basin ground water rights based upon local aquifer conditions shall no longer be applicable. In the event of a protest being timely filed, or should the State Engineer's Office make no timely determination as provided in Paragraph 42.A., above, the "final determination of water rights" sought in the petition may be made by the Water Court after notice to all parties and following a full and

fair hearing, including entry of an Amended Decree, if applicable in the Court's reasonable discretion.

43. Pursuant to C.R.S. §37-92-304(6), the Court shall retain continuing jurisdiction over the plan for augmentation decreed herein for reconsideration of the question of whether the provisions of this decree are necessary and/or sufficient to prevent injury to vested water rights of others, as pertains to the use of Denver Basin groundwater supplies adjudicated herein for augmentation purposes. The court also retains continuing jurisdiction for the purpose of determining compliance with the terms of the augmentation plan. The Court further retains jurisdiction should the Applicant later seek to amend this decree by seeking to prove that post-pumping depletions are non-injurious, that the extent of replacement for post-pumping depletions is less than the amount of water reserved herein, and other post-pumping matters addressed in Paragraph 22.D. The Court's retained jurisdiction may be invoked using the process set forth in Paragraph 46.

44. As pertains to the Denver Basin groundwater supplies, the court shall retain continuing jurisdiction for so long as Applicant is required to replace depletions to the Arkansas River system, to determine whether the replacement of depletions to the Arkansas River system instead of the South Platte River system is causing injury to water rights tributary to the South Platte River system.

45. Any person may invoke the Court's retained jurisdiction at any time that Applicant is causing depletions, including ongoing post-pumping depletions, to the South Platte River system and is replacing such depletions to only the Arkansas River system. Any person seeking to invoke the Court's retained jurisdiction shall file a verified petition with the Court setting forth with particularity the factual basis for the alleged injury and to request that the Court reconsider injury to petitioners' vested water rights associated with the above replacement of depletions under this decree, together with the proposed decretal language to effect the petition. The party filing the petition shall have the burden of proof going forward to establish a prima facie case based on the facts alleged in the petition and that Applicant's failure to replace depletions to the South Platte River system is causing injury to water rights owned by that party invoking the Court's retained jurisdiction, except that the State and Division Engineer may invoke the Court's retained jurisdiction by establishing a prima facie case that injury is occurring to any vested or conditionally decreed water rights in the South Platte River system due to the location of Applicant's replacement water. If the Court finds that those facts are established, the Applicant shall thereupon have the burden of proof to show (i) that petitioner is not injured, or (ii) that any modification sought by the petitioner is not required to avoid injury to the petitioner, or (iii) that any term or condition proposed by Applicant in response to the petition does avoid injury to the petitioner. The Division of Water Resources as a petitioner shall be entitled to assert injury to the vested water rights of others.

46. Except as otherwise specifically provided in Paragraphs 42-45, above, pursuant to the provisions of C.R.S. §37-92-304(6), this plan for augmentation decreed herein shall be subject to the reconsideration of this Court on the question of material injury to vested water rights of others, for a period of five years. Any person, within such period, may petition the Court to invoke its retained jurisdiction. Any person seeking to invoke the Court's retained jurisdiction shall file a verified petition with the Court setting forth with particularity the factual basis for requesting that the Court reconsider injury to petitioner's vested water rights associated with the operation of this decree, together with proposed decretal language to effect the petition. The party filing the petition shall have the burden of proof of going forward to establish a prima facie case based on the facts alleged in the petition. If the Court finds those facts are established, Applicant shall thereupon have the burden of proof to show: (i) that the petitioner is not injured, or (ii) that any modification sought by the petitioner is not required to avoid injury to the petitioner, or (iii) that any term or condition proposed by Applicant in response to the petition does avoid injury to the petitioner. The Division of Water Resources as a petitioner shall be entitled to assert injury to the vested water rights of others. If no such petition is filed within such period and the retained jurisdiction period is not extended by the Court in accordance with the provisions of the statute, this matter shall become final under its own terms.

47. Pursuant to C.R.S. §37-92-502(5)(a), the Applicant shall install and maintain such water measurement devices and recording devices as are deemed necessary by the State Engineer or Division Engineers, and the same shall be installed and operated in accordance with instructions from said entities. Applicant is to install and maintain a totalizing flow meter on each of Telle Well Nos. 1 and 2 or any additional or replacement wells associated therewith. Applicant shall read and record their well meter readings on April 1st and November 1st of each year and shall submit their meter readings to the Water Commissioner by April 15th and November 15th of each year or more frequently as requested by the Water Commissioner.

48. The vested water rights, water right structures, and plan for augmentation decreed herein shall be subject to all applicable administrative rules and regulations, as currently in place or as may in the future be promulgated, of the offices of Colorado State and Division Engineers for administration of such water rights, to the extent such rules and regulations are uniformly applicable to other similarly situated water rights and water users. Telle Well No. 1 shall be permitted as a non-exempt structure under the plan for augmentation decreed herein. The State Engineer shall identify in any permits issued pursuant to this decree the specific uses which can be made of the groundwater to be withdrawn, and, to the extent the well permit application requests a use that has not been specifically identified in this decree, shall not issue a permit for any such proposed use, which use the State Engineer determines to be speculative at the time of the well permit application or which would be inconsistent with the requirements of this decree, any separately decreed plan for augmentation, or any modified decree and augmentation plan.

49. This Ruling of Referee, when entered as a decree of the Water Court, shall be recorded in the real property records of El Paso County, Colorado. Copies of this ruling shall be mailed as provided by statute.

DATED THIS 3rd day of June, 2020.

BY THE COURT:



Kate Brewer, Water Referee
Water Division 2

DECREE

THE COURT FINDS THAT NO PROTEST WAS MADE IN THIS MATTER, THEREFOR THE FORGOING RULING IS CONFIRMED AND APPROVED, AND IS HEREBY MADE THE JUDGMENT AND DECREE OF THIS COURT.

Dated: June 25, 2020

BY THE COURT:



Larry C. Schwartz

LARRY C. SCHWARTZ, WATER JUDGE
WATER DIVISION 2

WATER QUALITY REPORT

Telle Subdivision
El Paso County, Colorado

January 16, 2020



Julia M. Murphy, MS PG
Professional Geologist /Hydrogeologist



Ground Water Investigations LLC • 11500 Black Forest Rd. #14 M Suite 1E
Colorado Springs, CO 80908 • (719) 333-1607



This Water Quality Report was completed for Clifford J. Telle and Nicole T. Telle ("Applicants") by Julia Murphy of Groundwater Investigations LLC ("GWI"), a Professional Geologist, in accordance with the requirements of the El Paso County Land Development Code and the Amendment to the Land Development Code dated August 27 2019 Section 8.4.7 (B)(10). Ms. Murphy has over 25 years' experience in geologic and hydrogeologic investigations with 9 years experience in water quality sampling and analysis of drinking water aquifers with specialization in contaminant hydrogeology.

This report presents a description of groundwater sampling and analysis for the purpose of providing all necessary information for a determination of sufficiency in water quality for the Telle subdivision water supply. The subdivision water supply is required to meet the Primary Drinking Water Regulations as defined by the Water Quality Control Commissions Regulation 11 under 5CCR 1002-1.

1.0 Site Location

The subdivision site consists of approximately 10.12 acres located in the SE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 10, Township 12 south, Range 66 West of the 6th P.M., El Paso County, Colorado and also described as Lot 4, Bridle Bit Subdivision. The address is 12730 Bridle Bit Road, Colorado Springs, CO 80908 (Figure 1). The Applicants intends to subdivide the property into two lots containing 5.055 acres "Lot 1" and 5.066 acres "Lot 2". There is an existing home with a well and septic system on Lot 2 (Figure 2).

2.0 Subdivision Water Source

2.1 Denver Aquifer

Lot 1 will be served by a well completed in the confined Denver aquifer. The water will be used for in-home purposes, irrigation of lawn and garden, and domestic animals. This water supply will be used within the first 5-years following subdivision approval.

2.2. Dawson Aquifer

The Dawson aquifer has been the primary source of water since 1982 for the existing home within the Bridle Bit Subdivision in compliance with the subdivisions' Water Supply Plan. The same well will continue to supply groundwater for in-home purposes, irrigation of lawn and landscape and domestic animals on Lot 2. Because the supply has not change and the existing well will be used, water quality samples were not collected from the Dawson aquifer.

3.0 Sample Location

A Denver aquifer well does not exist within the Telle Subdivision, therefore a well completed in the Denver aquifer located to the west within New Breed Ranch subdivision was selected for sampling. The selected Denver aquifer well having permit 61195-F (Exhibit A) is located within a $\frac{1}{2}$ mile of the

Telle Subdivision in agreement with Section of the El Paso County Land Development Code Section 10(e) (Figure 3).

4.0 Sample Collection

Representative water quality samples were collected by GWI on November 2, 2020 using standard collection and preservation methods. Water quality samples were received by the laboratory on November 3, 2020 and all holding times were met. A Chain of Custody was maintained for the transfer of samples to a Colorado Certified Laboratory and their subcontracted laboratory. Constituents selected to be measured are listed in the Amendment to the Land Development Code dated August 27 2019, Section 8.4.7(B)(3)(d)(10)(a). These are described as "Inorganic Chemicals", "Secondary Maximum Contaminants", "Radionuclides" and "Bacteriological". The Denver aquifer is a confined aquifer therefore Volatile Organic Compounds and Synthetic Organic Compounds were not analyzed.

5.0 Analysis Results

The analysis results for each constituent were compared to the Colorado Primary Drinking Water Standards maximum contaminant levels (MCL) and secondary MCLs. The primary MCL is the legal threshold limit on the amount of a substance that is allowed in public water systems under the Safe Drinking Water Act (SDWA). Private wells are not regulated under the SDWA however the El Paso County Public Health has required that subdivisions on wells evaluate their water supply based on the same criteria. All constituent concentrations are at or below the primary drinking water MCL. The secondary MCL was exceeded for Manganese and iron. Secondary MCLs primarily affect the aesthetic qualities of the water and are not enforceable in public water systems but are intended as guidelines. Both iron and manganese concentrations can be mitigated by use of a water softener.

6.0 Sources of Potential Contaminants

The Telle Subdivision is situated in a rural residential area surrounded by lots of 2.5 to 40 acres. There are no existing commercial sites in the area or upgradient of the property. Zoning is rural residential and there is no proposed plan that would indicate future commercial or industrial use. Domestic wells in the vicinity are completed to depths generally ranging from 300 to 640 feet below ground surface completed in the Dawson and Denver bedrock aquifers. Due to slow vertical infiltration as a result of impeding clay layers, there is a low possibility for on-site or off-site sources of potential water quality degradation. On-site septic system with leach field will be used to treat wastewater, however they are not considered a potential contaminant source when they are constructed in accordance with protective regulations regarding design and setbacks from the well.