

**SEIGEL BOYS RACING, LLC
Minor Subdivision**

**WATER
RESOURCES and
WATER QUALITY REPORT
For
Seigel Boys Racing, LLC
Minor Subdivision**

August 6, 2019

Prepared By:



13511 Northgate Estates Dr., Ste. 250, Colorado Springs, Colorado 80921

Executive Summary:

Water Resources/Quality Report – SBR Motor Sports Minor Subdivision

Chris D. Cummins of Monson, Cummins & Shohet, LLC, on behalf of the Applicant, Seigel Boys Racing, LLC (“SBR”), provides the following Water Resources/Water Quality/Wastewater Disposal Report in support of the SBR Motor Sports minor subdivision. The undersigned has been practicing water law, almost exclusively, for over 16 years, and has substantial experience with Denver Basin groundwater resources, augmentation plans, designated basin replacement plans, subdivision proceedings, and rural water usage, and therefore should be considered a “qualified professional” as concerns water resources, as discussed at Section 8.4.7(B)(1)(c) of the El Paso County Land Development Code. This Report, prepared in conjunction with other professionals, is intended to demonstrate to the El Paso County Planning Commission and the BoCC, the sufficiency in terms of quantity, dependability, and quality, of the water rights and resources to be utilized in the proposed SBR minor subdivision, near Calhan in northeastern El Paso County, Colorado. While Section 8.4.7(B)(2)(d) expressly provides that a full-blown water resources report may not be required for a minor subdivision, as here, SBR nonetheless wishes to provide all detail necessary to assist the County in its review.

The SBR development consists of approximately 39.154 acres located at the current street address of 21430 Spencer Road, Calhan, CO 80808, in the SW¼ SE¼ of Section 22 Township 12 South, Range 63 West of the 6th P.M. A portion of the subdivided land is to be provided water and sewer/septic services through an on-site individual well and Individual Septic Disposal System (“ISDS”), while the larger commercial portion of the subdivided land will remain “dry” unless and until a nontributary well to the Arapahoe and/or Laramie Fox Hills aquifer is constructed, at which point commercial wastewater will also be handled through an ISDS. The proposed minor subdivision includes two lots, a residential lot of approximately 4.144 acres, and a commercial lot of approximately 35.010 acres.

It is expected that the residential home on the residential lot (Lot 2) in the SBR subdivision will require an average of 0.30 annual acre-feet of water supply, to be provided through an individual well to the not-nontributary Denver aquifer, consistent with the Replacement Plan associated with Determination No. 3718-BD, as approved by the Colorado Ground Water Commission. Such water supply demand is consistent with other rural residential homes historical demand. The approved Replacement Plan provides for a 300-year water supply for Lot 2 within the SBR minor subdivision, and should the “dry” Lot 1 commercial lot construct a nontributary well, a 300 year supply therefore as well, with each lot utilizing ISDS of a non-evaporative nature for wastewater treatment.

The water resources to be utilized on the residential Lot 2 in the SBR minor subdivision is typical of +/- 5-acre rural residential development in parts of rural

northeastern El Paso County, Colorado. The Replacement Plan approved by the Colorado Ground Water Commission demonstrates a sufficient quantity and reliability of water to support compliance with El Paso County's 300-year water supply rules for subdivisions of this nature, and the well-established water quality in the Denver aquifer in this part of the County, demonstrates a sufficient water quality consistent with Section 8.4.7(3)(d) of the El Paso County Land Development Code, particularly as concerns the presumption of sufficient quality discussed at El Paso County Land Development Code Section 8.4.7(B)(10)(g) as concerns minor subdivisions, as here.

I. INTRODUCTION

The purpose of this report is to provide a preliminary outline of the water resources, associated wastewater requirements, and water quality, necessary for approval of the SBR minor subdivision, as proposed.

1.1 New Development Description: The SBR minor subdivision consists of approximately 39.154 acres located at 21430 Spencer Road, Calhan, CO 80808, in the SW $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 22 Township 12 South, Range 63 West of the 6th P.M. The SBR subdivision anticipates a single rural residential unit/lot, and a "dry" commercial lot. **Exhibit A**, attached hereto, is a preliminary plan for the SBR minor subdivision as proposed, prepared by Applicant's planning consultants at Eagle Land Surveying, Inc., including an area/vicinity map.

II. PROJECTION OF WATER NEEDS

2.1 Analysis of Water Demands: It is expected that the rural residential Lot 2 in the SBR minor subdivision, utilizing an individual well to the Denver aquifer will be "developed" through maintenance of the existing single family home thereon, to be utilized for in-house uses only unless and until a nontributary well is constructed upon the adjacent commercial Lot 1 to provide supplemental replacement water consistent with the Replacement Plan. Consistent with the approved Replacement Plan, it is anticipated that the existing single family residence on Lot 2 will utilize a maximum of 0.30 annual acre feet of water through the individual well, and that the commercial Lot 1 will be "dry" for the foreseeable future. As such, total demand is estimated at a maximum of 0.30 annual acre feet which will be utilized only for in-house residential purposes, consistent with Section 8.4.7(B)(7)(d). The individual well, currently permitted under Permit No. 115609, which will be re-permitted consistent with the terms and conditions of the Replacement Plan upon approval of the SBR minor subdivision, is constructed to and will produce from the not-nontributary Denver aquifer at a flow rate of 10 to 15 gallons per minute, based upon past production. There are no other wells currently constructed on the property. Based on past experience with the numerous Denver (and Dawson) aquifer wells serving rural residential properties throughout northern El Paso County, this rate of production should be more than sufficient to meet demand for in-house use.

III. PROPOSED WATER RIGHTS AND FACILITIES

3.1 Water Rights: A Replacement Plan for utilizing the underlying Denver

aquifer was approved by the Colorado Ground Water Commission on July 12, 2019. A copy of the recorded Replacement Plan and copies of the associated Determinations of Water Rights for the underlying Denver Basin groundwater in Determination Nos. 3718-BD (Denver), 3717-BD (Arapahoe), and 3716-BD are collectively attached as **Exhibit B**, including the following specific quantities of water:

AQUIFER	Saturated Thickness (ft)	Total Water Adjudicated (Acre Feet)	Annual Average Withdrawal – 100 Years (Acre Feet)
Denver (NNT)	210	1,360	4.53 ¹
Arapahoe (NT)	210	1,430	14.30
Laramie Fox Hills (NT)	255	1,530	15.30

As particularly described in the attached Determinations and associated Replacement Plan, a 300-year water supply is demonstrated in the Denver aquifer, with all depletions augmented in time, place and amount through septic return flows during pumping. Post-pumping depletions are not considered in obtaining a Replacement Plan in the designated basin, and therefore the deeper nontributary supplies remain available for other uses. The available supplies will meet both legal and physical needs on a 300-year basis. The uses of water available, per the **Exhibit B** Determinations, specifically include fire protection purposes.

3.2 Source of Supply: Rural residential water supply demand will be met using an existing not-nontributary Denver aquifer formation well, consistent with the approved Replacement Plan attached as part of **Exhibit B**. Consistent with El Paso County Land Development Code Section 8.4.7(B)(3)(c)(v), a minor subdivision utilizing individual wells need not make a further showing as to source of supply.

3.3 Water Quality and Treatment: The water quality in Denver aquifer in this area is well established as being suitable for potable use with only in-house filtration for mineral deposits, with an estimated 27,000 households in El Paso County currently utilizing Denver Basin wells. See June 15, 2015 Gazette article – “*Where there is a well, there is a way...*”, attached hereto as **Exhibit C**. There is a presumption of suitable and sufficient water quality for minor subdivisions utilizing Denver Basin groundwater supplies per El Paso County Land Development Code Section 8.4.7(B)(10)(g). All wells will meet all applicable regulatory requirements regarding quality testing before being utilized as a residential water source.

3.4 Pumping Rates for Service: The Denver aquifer in the location of the SBR minor subdivision is generally known to produce approximately 10-15 gallons per minute, more than sufficient for single family residential and accessory uses, and such production is consistent with the historical use of Permit No. 115609, as will be re-permitted for use

¹ The Denver aquifer annual withdrawal figures represent not the 100-year aquifer life discussed at C.R.S. §37-90-137(4), but rather a 300-year aquifer life consistent with provision of a 300-year water supply in compliance with El Paso County, Colorado land development code as applicable to the subdivision of Applicant’s Property.

on the residential Lot 2 consistent with the Replacement Plan.

IV. WASTEWATER AND WASTEWATER TREATMENT – While soils, geology and geotechnical analysis has been provided by other of Applicant’s consultants, Applicant provides a summary of ISDS to be utilized herein, as relates to water usage and resulting return flows which support the approved Replacement Plan.

4.1 Septic/Wastewater Loads: Septic projections are based on similar Denver Basin residential uses on rural residential lots. Average daily wastewater loads are expected to be approximately 180 gallons per day per single family residence. Maximum daily wastewater loads are expected to be roughly 200 gallons per day per single family residence, assuming residential in-house use at the 0.30 acre foot per year rate described in the approved Replacement Plan.

4.2 On-Site Wastewater Treatment Systems: The single family home on Lot 2 within the SBR minor subdivision will be served by an existing and approved individual on-site wastewater treatment system. Based on such historical use, the site is suitable for on-site wastewater treatment system/ISDS. The on-site wastewater treatment system will be evaluated and installed according to El Paso County Guidelines and properly maintained to prevent contamination of surface and subsurface water resources.

Respectfully submitted this 6th day of August, 2019

MONSON, CUMMINS & SHOHET, LLC

/s/ Chris D. Cummins

Chris D. Cummins

cc: Client

KNOW ALL MEN BY THESE PRESENTS:
THAT KERRY E. BURT BEING THE OWNER OF THE FOLLOWING DESCRIBED TRACT OF LAND, TO WIT:

LEGAL DESCRIPTION:
THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 22, TOWNSHIP 12 SOUTH, RANGE 63 WEST OF THE 6TH PRINCIPAL MERIDIAN, COUNTY OF EL PASO, STATE OF COLORADO.

BASIS OF BEARINGS: THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 22, TOWNSHIP 12 SOUTH, RANGE 63 WEST OF THE SIXTH PRINCIPAL MERIDIAN, EL PASO COUNTY, COLORADO, ASSUMED TO BEAR N90°00'00"W, A DISTANCE OF 1324.90 FEET.

DEDICATION:
THE UNDERSIGNED OWNERS HAVE CAUSED SAID TRACT OF LAND TO BE PLATTED INTO LOTS, AS SHOWN ON THE PLAT. THIS TRACT OF LAND AS PLATTED HEREIN SHALL BE KNOWN AS "SBR MOTOR SPORTS", EL PASO COUNTY, COLORADO.

OWNER:
THAT, THE AFOREMENTIONED KERRY E. BURT, HAS EXECUTED THIS INSTRUMENT THIS _____ DAY OF _____, 20____, A.D.

BY: _____
KERRY E. BURT

STATE OF COLORADO }
ss }
COUNTY OF EL PASO }

NOTARY:
THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS _____ DAY OF _____, 20____, A.D.

BY: _____

WITNESS MY HAND AND OFFICIAL SEAL.

MY COMMISSION EXPIRES: _____
NOTARY PUBLIC

GENERAL NOTES:

- FLOODPLAIN STATEMENT:**
THIS SITE IS NOT WITHIN A DESIGNATED F.E.M.A. FLOODPLAIN AS DETERMINED BY THE FLOOD INSURANCE RATE MAP FOR EL PASO COUNTY, COLORADO, COMMUNITY PANEL NUMBER 08041C 0600 F, WITH AN EFFECTIVE DATE OF MARCH 17, 1997.
- ANY PERSON WHO KNOWINGLY REMOVES, ALTERS OR DEFACTS ANY PUBLIC LAND SURVEY MONUMENT OR LAND MONUMENT OR ACCESSORY, COMMITS A CLASS TWO (2) MISDEMEANOR PURSUANT TO STATE STATUTE 18-4-508, C.R.S.
- THE RIGHT-OF-WAY REFERENCED AS BK. A, PG. 78 IS HEREBY DEDICATED TO EL PASO COUNTY.
- THE FOLLOWING REPORTS HAVE BEEN SUBMITTED IN ASSOCIATION WITH THE PRELIMINARY PLAN OR FINAL PLAT FOR THIS SUBDIVISION AND ARE ON FILE AT THE COUNTY DEVELOPMENT SERVICES DEPARTMENT: TRANSPORTATION IMPACT STUDY; DRAINAGE REPORT; WATER RESOURCES REPORT; WASTEWATER DISPOSAL REPORT; GEOLOGY AND SOILS REPORT; FIRE PROTECTION REPORT; WILDFIRE HAZARD REPORT; NATURAL FEATURES REPORT; (OTHER; MODIFY BASED UPON SPECIFIC REPORTS)
- ALL PROPERTY OWNERS ARE RESPONSIBLE FOR MAINTAINING PROPER STORM WATER DRAINAGE IN AND THROUGH THEIR PROPERTY. PUBLIC DRAINAGE EASEMENTS AS SPECIFICALLY NOTED ON THE PLAT SHALL BE MAINTAINED BY THE INDIVIDUAL LOT OWNERS UNLESS OTHERWISE INDICATED. STRUCTURES, FENCES, MATERIALS OR LANDSCAPING THAT COULD IMPEDE THE FLOW OF RUNOFF SHALL NOT BE PLACED IN DRAINAGE EASEMENTS.
- UNLESS OTHERWISE INDICATED, ALL SIDE, FRONT AND REAR LOT LINES ARE HEREBY PLATTED ON EITHER SIDE WITH A 10 FOOT PUBLIC UTILITY AND DRAINAGE EASEMENT UNLESS OTHERWISE INDICATED. ALL EXTERIOR SUBDIVISION BOUNDARIES ARE HEREBY PLATTED WITH A 20 FOOT PUBLIC UTILITY AND DRAINAGE EASEMENT. THE SOLE RESPONSIBILITY FOR MAINTENANCE OF THESE EASEMENTS IS HEREBY VESTED WITH THE INDIVIDUAL PROPERTY OWNERS.

LEGEND

- SET NO. 5 REBAR WITH 1-1/2" ALUMINUM SURVEYORS CAP OR NAIL AND DISK STAMPED "37634"
- ▲ RECOVERED AS NOTED
- BOUNDARY LINE
- - - EASEMENT LINE
- ⊕ QUARTER SECTION CORNER
- SECTION LINE
- SF SQUARE FEET

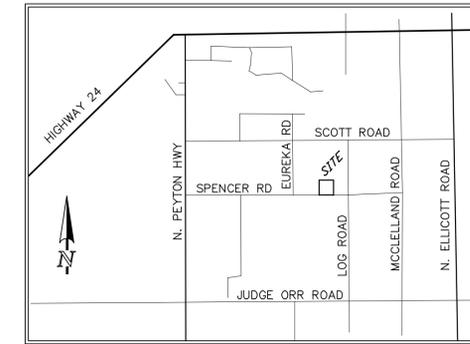
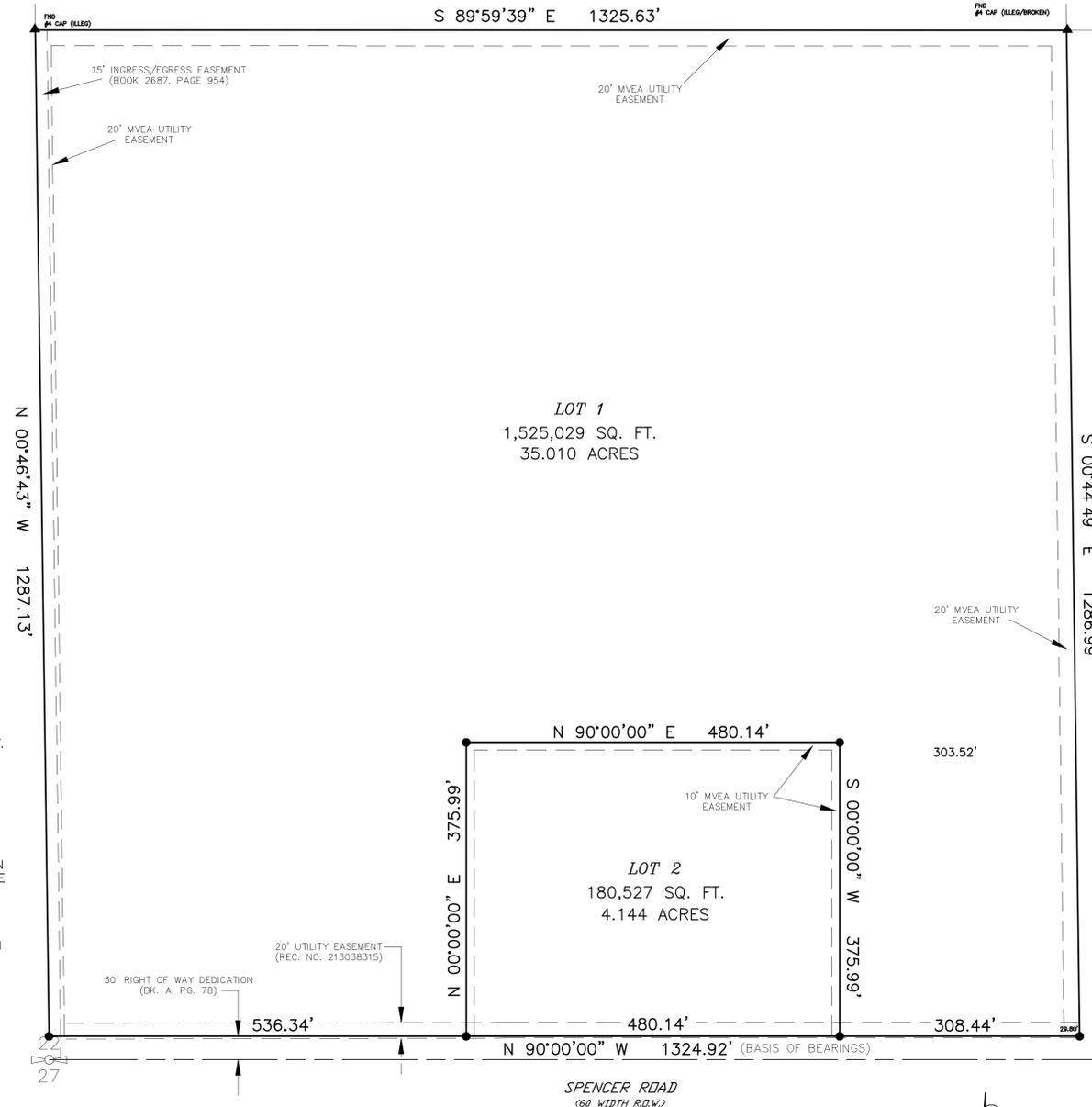
DATE OF PREPARATION: 10/29/2018
JOB NUMBER: 17089-01

SBR MOTOR SPORTS FINAL PLAT

A SUBDIVISION OF A PART OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 22
TOWNSHIP 12 SOUTH, RANGE 63 WEST OF THE 6TH P.M.,

AREA = 39.154 ACRES, MORE OR LESS

EXHIBIT A



VICINITY MAP:
N.T.S.

SURVEYOR'S STATEMENT:
THE UNDERSIGNED PROFESSIONAL LAND SURVEYOR, LICENSED IN THE STATE OF COLORADO, HEREBY STATES AND DECLARES THAT THE ACCOMPANYING PLAT WAS SURVEYED AND DRAWN UNDER HIS RESPONSIBLE CHARGE AND ACCURATELY SHOWS THE DESCRIBED TRACT OF LAND, AND SUBDIVISION THEREOF, AND THAT THE REQUIREMENTS OF TITLE 38 OF THE COLORADO REVISED STATUTES, 1973, AS AMENDED, HAVE BEEN MET TO THE BEST OF HIS KNOWLEDGE AND BELIEF.

SHAWN RICHARDS, PROFESSIONAL LAND SURVEYOR _____ DATE _____
COLORADO P.L.S. NO. 37634
FOR AND ON BEHALF OF EAGLE LAND SURVEYING, INC.

NOTICE: ACCORDING TO COLORADO LAW YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT. IN NO EVENT, MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF THE CERTIFICATION SHOWN HEREON.

BOARD OF COUNTY COMMISSIONERS CERTIFICATE:

THIS "SBR MOTORSPORTS FINAL PLAT" WAS APPROVED FOR FILING BY THE EL PASO COUNTY, COLORADO BOARD OF COUNTY COMMISSIONERS ON THE _____ DAY OF _____, 20____, SUBJECT TO ANY NOTES SPECIFIED HEREON AND ANY CONDITIONS INCLUDED IN THE RESOLUTION OF APPROVAL. THE DEDICATIONS OF LAND TO THE PUBLIC STREETS & EASEMENTS ARE ACCEPTED, BUT PUBLIC IMPROVEMENTS THEREON WILL NOT BECOME THE MAINTENANCE RESPONSIBILITY OF EL PASO COUNTY UNTIL PRELIMINARY ACCEPTANCE OF THE PUBLIC IMPROVEMENTS IN ACCORDANCE WITH THE REQUIREMENTS OF THE LAND DEVELOPMENT CODE AND ENGINEERING CRITERIA MANUAL, AND THE SUBDIVISION IMPROVEMENTS AGREEMENT.

PRESIDENT, BOARD OF COUNTY COMMISSIONERS _____ DATE _____

EL PASO COUNTY APPROVAL:

ON BEHALF OF THE COUNTY OF EL PASO, COLORADO, THE UNDERSIGNED HEREBY APPROVE FOR FILING THE ACCOMPANYING PLAT OF "SBR MOTOR SPORTS FINAL PLAT".

EXECUTIVE DIRECTOR _____ DATE _____
PLANNING & COMMUNITY DEVELOPMENT DEPARTMENT

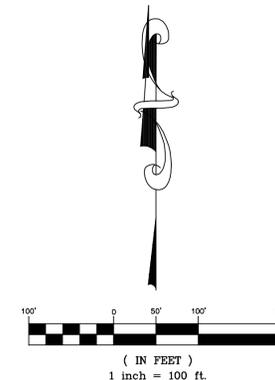
CLERK AND RECORDER:

STATE OF COLORADO }
ss }
COUNTY OF EL PASO }

I HEREBY CERTIFY THAT THIS INSTRUMENT WAS FILED FOR RECORD IN MY OFFICE AT O'CLOCK ____M. THIS _____ DAY OF _____, 20____, A.D., AND IS DULY RECORDED AT RECEPTION NO. _____ OF THE RECORDS OF EL PASO COUNTY, COLORADO.

CHUCK BROERMAN, RECORDER

BY: _____
DEPUTY
SURCHARGE: _____
SCHOOL FEE: _____
BRIDGE FEE: _____
PARK FEE: _____
DRAINAGE FEE: _____



A PORTION OF THE SE 1/4 OF SECTION 22,
TOWNSHIP 12 SOUTH, RANGE 63 WEST OF
THE SIXTH PRINCIPAL MERIDIAN



EAGLE
LAND SURVEYING INC.
P.O. BOX 5365
COLORADO SPRINGS, CO
80931-5365
PHONE: (719) 382-4150
FAX: (719) 382-3290

**COLORADO GROUND WATER COMMISSION
FINDINGS AND ORDER**

7J: ;4:F 4

IN THE MATTER OF AN APPLICATION FOR DETERMINATION OF WATER RIGHT TO GROUND WATER IN THE
UPPER BLACK SQUIRREL CREEK DESIGNATED GROUND WATER BASIN

DETERMINATION NO.: 3716-BD

AQUIFER: Laramie-Fox Hills

APPLICANT: Kerry E. Burt

In compliance with Section 37-90-107(7), C.R.S., and the Designated Basin Rules, 2 CCR 410-1, Kerry E. Burt (hereinafter "Applicant") submitted an application for determination of water right to designated ground water from the Laramie-Fox Hills Aquifer.

FINDINGS

1. The application was received by the Colorado Ground Water Commission on August 9, 2018.
2. The Applicant requests a determination of right to designated ground water in the Laramie-Fox Hills Aquifer (hereinafter "Aquifer") underlying 40 acres, described as the SW1/4 of the SE1/4 of Section 22, Township 12 South, Range 63 West of the 6th P.M., in El Paso County. According to a signed Ownership Statement dated September 13, 2018, attached hereto as Exhibit A, the Applicant owns the 40 acres of land, which are further described in said Ownership Statement (hereinafter "Overlying Land"), and claims control of the right to the ground water in the Aquifer underlying this land (hereinafter "Underlying Ground Water").
3. The Overlying Land is located within the boundaries of the Upper Black Squirrel Creek Designated Ground Water Basin and within the Upper Black Squirrel Creek Ground Water Management District. The Colorado Ground Water Commission (hereinafter "Commission") has jurisdiction over the ground water that is the subject of this Determination.
4. The Commission Staff has evaluated the application relying on the claims to control of the Underlying Ground Water in the Aquifer made by the Applicant.
5. The Applicant intends to apply the Underlying Ground Water to the following beneficial uses: domestic (in home, irrigation of lawn and gardens, domestic animals), commercial, irrigation, replacement, and fire protection. The Applicant's proposed place of use of the Underlying Ground Water is the above described 40 acres of overlying land.
6. The quantity of water in the Aquifer underlying the 40 acres of Overlying Land claimed by the applicant is 1,530 acre-feet. This determination was based on the following as specified in the Designated Basin Rules:
 - a. The average specific yield of the saturated permeable material of the Aquifer beneath the Overlying Land that could yield a sufficient quantity of water that may be extracted and applied to beneficial use is 15 percent.
 - b. The average thickness of the saturated permeable material of the Aquifer beneath the Overlying Land that could yield a sufficient quantity of water that may be extracted and applied to beneficial use is 255 feet.

7. Pursuant to Section 37-90-107(7)(a), C.R.S., and in accordance with the Designated Basin Rules, the Commission shall allocate the underlying ground water based on ownership of the overlying land and an aquifer life of one hundred years. Should the entire quantity of underlying ground water identified above be available for allocation, the allowed average annual amount of withdrawal from the Aquifer that could be allocated from beneath the Overlying Land would be 15.3 acre-feet per year.
8. A review of the records in the Office of the State Engineer has disclosed that none of the Underlying Ground Water in the Aquifer beneath the Overlying Land has been previously allocated or permitted for withdrawal.
9. Pursuant to Section 37-90-107(7)(c)(III), C.R.S., an approved determination of water right shall be considered a final determination of the amount of ground water so determined; except that the Commission shall retain jurisdiction for subsequent adjustment of such amount to conform to the actual local aquifer characteristics from adequate information obtained from well drilling or test holes.
10. The ability of wells permitted to withdraw the authorized amount of water from this non-renewable Aquifer may be less than the one hundred years upon which the amount of water in the Aquifer is allocated, due to anticipated water level declines.
11. In accordance with Rule 5.3.6 of the Designated Basin Rules, it has been determined that withdrawal of ground water from the Aquifer underlying the land claimed by the Applicant will not, within one hundred years, deplete the flow of a natural stream or its alluvial aquifer at an annual rate greater than one-tenth of one percent of the annual rate of withdrawal and, therefore, the Underlying Ground Water is nontributary ground water as defined in Rule 4.2.19 of the Designated Basin Rules. Pursuant to the Rules, no more than 98% of the amount of the Underlying Ground Water withdrawn annually shall be consumed.
12. On April 30, 2019, in accordance with Rule 9.1 of the Designated Basin Rules, a letter was sent to the Upper Black Squirrel Creek Ground Water Management District requesting written recommendations concerning this application. No written recommendations from the district were received.
13. In accordance with Sections 37-90-107(7)(c)(II) and 37-90-112, C.R.S., the application was published in the Ranchland News newspaper on May 2, 2019 and May 9, 2019. No objections to the application were received within the time limit set by statute.

ORDER

In accordance with Section 37-90-107(7), C.R.S., and the Designated Basin Rules, the Colorado Ground Water Commission orders that the application for determination of right to designated ground water in the Laramie-Fox Hills Aquifer underlying 40 acres of land, described as the SW1/4 of the SE1/4 of Section 22, Township 12 South, Range 63 West of the 6th P.M., further described in Exhibit A, is approved subject to the following conditions:

14. The allowed average annual amount of withdrawal of Underlying Ground Water from the Aquifer shall not exceed 15.3 acre-feet.
15. The total volume of Underlying Ground Water that may be withdrawn from the Aquifer pursuant to this Determination of Water Right shall not exceed 1,530 acre-feet.

16. The Commission may adjust the total volume and the allowed average annual amount of withdrawal of Underlying Ground Water that may be withdrawn from the Aquifer to conform to actual Aquifer characteristics based on analysis of geophysical logs or other site-specific data if such analysis indicates that the initial estimate of the amount of Underlying Ground Water in the Aquifer was incorrect.
17. The allowed maximum annual amount of withdrawal may exceed the allowed average annual amount of withdrawal as long as the total volume of Underlying Ground Water withdrawn does not exceed the product of the number of years since the date of approval of this determination times the allowed average annual amount of withdrawal.
18. The Applicant may pump the allowed average annual amount of withdrawal and the allowed maximum annual amount of withdrawal from one or more wells of a well field in any combination, so long as the total combined withdrawal of the wells does not exceed the amounts described in this Order.
19. No more than 98% of the allowed amount of Underlying Ground Water withdrawn annually shall be consumed. The Commission may require well owners to demonstrate periodically that no more than 98% of the underlying ground water withdrawn is being consumed.
20. The use of the allowed amount of Underlying Ground Water from this allocation shall be limited to the following beneficial uses: domestic (in home, irrigation of lawn and gardens, domestic animals), commercial, irrigation, replacement, and fire protection. The place of use shall be limited to the above described 40 acres of Overlying Land. The ground water that is the subject of this Determination may be reused and successively used to extinction to the extent dominion and control over the water is maintained and its volume can be distinguished from the volume of any stream system into which it is introduced to the satisfaction of the Commission. The ground water right determined herein is located within the Upper Black Squirrel Creek Ground Water Management District where local District rules apply which may further limit the withdrawal and use of the subject designated ground water.
21. Approval of this determination meets the requirements of Section 37-90-107(7)(d)(II) that requires a determination of ground water be made prior to the granting of a well permit pursuant to Section 37-90-107(7).
22. Wells withdrawing the allowed amount of Underlying Ground Water allocated herein are subject to the following conditions:
 - a. The wells must be located on the above described 40 acres of Overlying Land.
 - b. No well shall be located within 600 feet of any existing large-capacity well in the same Aquifer unless a Waiver of Claim of Injury is obtained from the owner of the existing well or unless the Commission, after a hearing, finds that circumstances in a particular instance warrant that a well may be permitted without regard to this limitation.
 - c. The wells must be constructed to withdraw water from only the Laramie-Fox Hills Aquifer.
 - d. The entire depth of each well must be geophysically logged prior to installing the casing as forth in Rule 9 of the Statewide Nontributary Ground Water Rules, 2 CCR 402-7.

- e. A totalizing flow meter or other Commission approved measuring device shall be installed on each well and maintained in good working order by the well owner. Annual diversion records shall be collected and permanently maintained by the well owner and submitted to the Commission and the Upper Black Squirrel Creek Ground Water Management District upon request.
 - f. The well shall be marked in a conspicuous place with this determination number, the well permit number, and the name of the Aquifer. The well owner shall take necessary means and precautions to preserve these markings.
23. A copy of this Findings and Order shall be recorded by the Applicant in the public records of the county in which the Overlying Land is located so that a title examination of the above described 40 acres of Overlying Land area, or any part thereof, shall reveal the existence of this determination.
24. The ground water right determined herein is a vested property right with specific ownership. The ground water right may be transferred independent of the land under which the right originated. Any action taken that is intended to convey, transfer, and/or sell the subject water right shall explicitly identify this Determination of Water Right number, the specific aquifer, and the annual volume (based on a 100-year aquifer life) or total volume of ground water that is being conveyed.

Dated this 12th day of July, 2019.



Kevin G. Rein, P.E.
Executive Director
Colorado Ground Water Commission

By: 

Keith Vander Horst, P.E.
Chief of Water Supply, Basins

Prepared by: jmw
F&O3716-BD.doc

Exhibit A
Determination no. 3716-BD
Page 1 of 1

RECEIVED

SEP 13 2018

Form GWS-1 (08/2016)

STATE OF COLORADO
OFFICE OF THE STATE ENGINEER
DIVISION OF WATER RESOURCES
1313 Sherman St, Room 821, Denver, CO 80203
Phone (303) 866-3581, www.water.state.co.us

WATER RESOURCES
STATE ENGINEER COLO.

NONTRIBUTARY GROUND WATER LANDOWNERSHIP STATEMENT

AQUIFER: Laramie-Fox Hills

I (we) (Please Print) Kerry E. Burt
claim and say that I (we) am (are) the owner(s) of the following described property consisting of
40 acres in the County of El Paso, State of Colorado,
as evidenced by the attached copy of a deed, recorded in the county (or counties) in which the
land is located. (insert the property's legal description)

~~21430 Spencer Road, Galvan, Colorado 80808~~ located in the SW1/4 of the SE1/4 of Section
22, T 12S R 63W, 6th P.M. in El Paso County, Colorado.

I (we) further claim and say that the right to withdraw the ground water in the aquifer underlying
the above described land has not been reserved by another, nor has consent been given to
another for the right to its withdrawal.

NOTE: A completed "Nontributary Landownership or Consent Verification of Notice" form
(GWS-43) must also be provided for all applications submitted pursuant to C.R.S. 37-90-
137(4) outside of a Designated Ground Water Basin.

Further, I (we) claim and say that I (we) have read the statement made herein; know the
contents thereof; and that the same are true to my (our) knowledge. Pursuant to Section 24-4-
104(13)(a), C.R.S., the making of false statements herein constitutes perjury in the second
degree and is punishable as a Class 1 misdemeanor.

Lee Seigel 9/13/18
Signature- Lee Seigel (attorney-in-fact for Kerry E. Burt) Date

Signature Date

.....
Type or print neatly in black ink. This form may be reproduced by photocopy or word
processing means. See additional instructions on back.

**COLORADO GROUND WATER COMMISSION
FINDINGS AND ORDER**

IN THE MATTER OF AN APPLICATION FOR DETERMINATION OF WATER RIGHT TO GROUND WATER IN THE
UPPER BLACK SQUIRREL CREEK DESIGNATED GROUND WATER BASIN

DETERMINATION NO.: 3717-BD

AQUIFER: Arapahoe

APPLICANT: Kerry E. Burt

In compliance with Section 37-90-107(7), C.R.S., and the Designated Basin Rules, 2 CCR 410-1, Kerry E. Burt (hereinafter "Applicant") submitted an application for determination of water right to designated ground water from the Arapahoe Aquifer.

FINDINGS

1. The application was received by the Colorado Ground Water Commission on August 9, 2018.
2. The Applicant requests a determination of right to designated ground water in the Arapahoe Aquifer (hereinafter "Aquifer") underlying 40 acres, described as the SW1/4 of the SE1/4 of Section 22, Township 12 South, Range 63 West of the 6th P.M., in El Paso County. According to a signed Ownership Statement dated September 13, 2018, attached hereto as Exhibit A, the Applicant owns the 40 acres of land, which are further described in said Ownership Statement (hereinafter "Overlying Land"), and claims control of the right to the ground water in the Aquifer underlying this land (hereinafter "Underlying Ground Water").
3. The Overlying Land is located within the boundaries of the Upper Black Squirrel Creek Designated Ground Water Basin and within the Upper Black Squirrel Creek Ground Water Management District. The Colorado Ground Water Commission (hereinafter "Commission") has jurisdiction over the ground water that is the subject of this Determination.
4. The Commission Staff has evaluated the application relying on the claims to control of the Underlying Ground Water in the Aquifer made by the Applicant.
5. The Applicant intends to apply the Underlying Ground Water to the following beneficial uses: domestic (in home, irrigation of lawn and gardens, domestic animals), commercial, irrigation, replacement, and fire protection. The Applicant's proposed place of use of the Underlying Ground Water is the above described 40 acres of overlying land.
6. The quantity of water in the Aquifer underlying the 40 acres of Overlying Land claimed by the applicant is 1,430 acre-feet. This determination was based on the following as specified in the Designated Basin Rules:
 - a. The average specific yield of the saturated permeable material of the Aquifer beneath the Overlying Land that could yield a sufficient quantity of water that may be extracted and applied to beneficial use is 17 percent.
 - b. The average thickness of the saturated permeable material of the Aquifer beneath the Overlying Land that could yield a sufficient quantity of water that may be extracted and applied to beneficial use is 210 feet.

7. Pursuant to Section 37-90-107(7)(a), C.R.S., and in accordance with the Designated Basin Rules, the Commission shall allocate the underlying ground water based on ownership of the overlying land and an aquifer life of one hundred years. Should the entire quantity of underlying ground water identified above be available for allocation, the allowed average annual amount of withdrawal from the Aquifer that could be allocated from beneath the Overlying Land would be 14.3 acre-feet per year.
8. A review of the records in the Office of the State Engineer has disclosed that none of the Underlying Ground Water in the Aquifer beneath the Overlying Land has been previously allocated or permitted for withdrawal.
9. Pursuant to Section 37-90-107(7)(c)(III), C.R.S., an approved determination of water right shall be considered a final determination of the amount of ground water so determined; except that the Commission shall retain jurisdiction for subsequent adjustment of such amount to conform to the actual local aquifer characteristics from adequate information obtained from well drilling or test holes.
10. The ability of wells permitted to withdraw the authorized amount of water from this non-renewable Aquifer may be less than the one hundred years upon which the amount of water in the Aquifer is allocated, due to anticipated water level declines.
11. In accordance with Rule 5.3.6 of the Designated Basin Rules, it has been determined that withdrawal of ground water from the Aquifer underlying the land claimed by the Applicant will not, within one hundred years, deplete the flow of a natural stream or its alluvial aquifer at an annual rate greater than one-tenth of one percent of the annual rate of withdrawal and, therefore, the Underlying Ground Water is nontributary ground water as defined in Rule 4.2.19 of the Designated Basin Rules. Pursuant to the Rules, no more than 98% of the amount of the Underlying Ground Water withdrawn annually shall be consumed.
12. On April 30, 2019, in accordance with Rule 9.1 of the Designated Basin Rules, a letter was sent to the Upper Black Squirrel Creek Ground Water Management District requesting written recommendations concerning this application. No written recommendations from the district were received.
13. In accordance with Sections 37-90-107(7)(c)(II) and 37-90-112, C.R.S., the application was published in the Ranchland News newspaper on May 2, 2019 and May 9, 2019. No objections to the application were received within the time limit set by statute.

ORDER

In accordance with Section 37-90-107(7), C.R.S., and the Designated Basin Rules, the Colorado Ground Water Commission orders that the application for determination of right to designated ground water in the Arapahoe Aquifer underlying 40 acres of land, described as the SW1/4 of the SE1/4 of Section 22, Township 12 South, Range 63 West of the 6th P.M., further described in Exhibit A, is approved subject to the following conditions:

14. The allowed average annual amount of withdrawal of Underlying Ground Water from the Aquifer shall not exceed 14.3 acre-feet.
15. The total volume of Underlying Ground Water that may be withdrawn from the Aquifer pursuant to this Determination of Water Right shall not exceed 1,430 acre-feet.

16. The Commission may adjust the total volume and the allowed average annual amount of withdrawal of Underlying Ground Water that may be withdrawn from the Aquifer to conform to actual Aquifer characteristics based on analysis of geophysical logs or other site-specific data if such analysis indicates that the initial estimate of the amount of Underlying Ground Water in the Aquifer was incorrect.
17. The allowed maximum annual amount of withdrawal may exceed the allowed average annual amount of withdrawal as long as the total volume of Underlying Ground Water withdrawn does not exceed the product of the number of years since the date of approval of this determination times the allowed average annual amount of withdrawal.
18. The Applicant may pump the allowed average annual amount of withdrawal and the allowed maximum annual amount of withdrawal from one or more wells of a well field in any combination, so long as the total combined withdrawal of the wells does not exceed the amounts described in this Order.
19. No more than 98% of the allowed amount of Underlying Ground Water withdrawn annually shall be consumed. The Commission may require well owners to demonstrate periodically that no more than 98% of the underlying ground water withdrawn is being consumed.
20. The use of the allowed amount of Underlying Ground Water from this allocation shall be limited to the following beneficial uses: domestic (in home, irrigation of lawn and gardens, domestic animals), commercial, irrigation, replacement, and fire protection. The place of use shall be limited to the above described 40 acres of Overlying Land. The ground water that is the subject of this Determination may be reused and successively used to extinction to the extent dominion and control over the water is maintained and its volume can be distinguished from the volume of any stream system into which it is introduced to the satisfaction of the Commission. The ground water right determined herein is located within the Upper Black Squirrel Creek Ground Water Management District where local District rules apply which may further limit the withdrawal and use of the subject designated ground water.
21. Approval of this determination meets the requirements of Section 37-90-107(7)(d)(II) that requires a determination of ground water be made prior to the granting of a well permit pursuant to Section 37-90-107(7).
22. Wells withdrawing the allowed amount of Underlying Ground Water allocated herein are subject to the following conditions:
 - a. The wells must be located on the above described 40 acres of Overlying Land.
 - b. No well shall be located within 600 feet of any existing large-capacity well in the same Aquifer unless a Waiver of Claim of Injury is obtained from the owner of the existing well or unless the Commission, after a hearing, finds that circumstances in a particular instance warrant that a well may be permitted without regard to this limitation.
 - c. The wells must be constructed to withdraw water from only the Arapahoe Aquifer.
 - d. The entire depth of each well must be geophysically logged prior to installing the casing as forth in Rule 9 of the Statewide Nontributary Ground Water Rules, 2 CCR 402-7.

- e. A totalizing flow meter or other Commission approved measuring device shall be installed on each well and maintained in good working order by the well owner. Annual diversion records shall be collected and permanently maintained by the well owner and submitted to the Commission and the Upper Black Squirrel Creek Ground Water Management District upon request.
 - f. The well shall be marked in a conspicuous place with this determination number, the well permit number, and the name of the Aquifer. The well owner shall take necessary means and precautions to preserve these markings.
23. A copy of this Findings and Order shall be recorded by the Applicant in the public records of the county in which the Overlying Land is located so that a title examination of the above described 40 acres of Overlying Land area, or any part thereof, shall reveal the existence of this determination.
24. The ground water right determined herein is a vested property right with specific ownership. The ground water right may be transferred independent of the land under which the right originated. Any action taken that is intended to convey, transfer, and/or sell the subject water right shall explicitly identify this Determination of Water Right number, the specific aquifer, and the annual volume (based on a 100-year aquifer life) or total volume of ground water that is being conveyed.

Dated this 12th day of July, 2019.



Kevin G. Rein, P.E.
Executive Director
Colorado Ground Water Commission

By: 

Keith Vander Horst, P.E.
Chief of Water Supply, Basins

RECEIVED

Form GWS-1 (08/2016)

STATE OF COLORADO
OFFICE OF THE STATE ENGINEER
DIVISION OF WATER RESOURCES
1313 Sherman St, Room 821, Denver, CO 80203
Phone (303) 866-3581, www.water.state.co.us

SEP 13 2018
WATER RESOURCES
STATE ENGINEER COLO.

NONTRIBUTARY GROUND WATER LANDOWNERSHIP STATEMENT

AQUIFER: Arapahoe

I (we) (Please Print) Kerry E. Burt
claim and say that I (we) am (are) the owner(s) of the following described property consisting of
40 acres in the County of El Paso, State of Colorado,
as evidenced by the attached copy of a deed, recorded in the county (or counties) in which the
land is located. (insert the property's legal description)

~~21430 Spenceer Road, Calhan, Colorado 80808~~ located in the SW1/4 of the SE1/4 of Section
22, T 12S R 63W, 6th P.M. in El Paso County, Colorado.

I (we) further claim and say that the right to withdraw the ground water in the aquifer underlying
the above described land has not been reserved by another, nor has consent been given to
another for the right to its withdrawal.

NOTE: A completed "Nontributary Landownership or Consent Verification of Notice" form
(GWS-43) must also be provided for all applications submitted pursuant to C.R.S. 37-90-
137(4) outside of a Designated Ground Water Basin.

Further, I (we) claim and say that I (we) have read the statement made herein; know the
contents thereof; and that the same are true to my (our) knowledge. Pursuant to Section 24-4-
104(13)(a), C.R.S., the making of false statements herein constitutes perjury in the second
degree and is punishable as a Class 1 misdemeanor.

Lee Seigel 9/13/18
Signature- Lee Seigel (attorney-in-fact for Kerry E. Burt) Date

Signature

Date

**COLORADO GROUND WATER COMMISSION
FINDINGS AND ORDER**

IN THE MATTER OF AN APPLICATION FOR DETERMINATION OF WATER RIGHT TO GROUND WATER IN THE
UPPER BLACK SQUIRREL CREEK DESIGNATED GROUND WATER BASIN

DETERMINATION NO.: 3718-BD

AQUIFER: Denver

APPLICANT: Kerry E. Burt

In compliance with Section 37-90-107(7), C.R.S., and the Designated Basin Rules, 2 CCR 410-1, Kerry E. Burt (hereinafter "Applicant") submitted an application for determination of water right to designated ground water from the Denver Aquifer.

FINDINGS

1. The application was received by the Colorado Ground Water Commission on August 9, 2018.
2. The Applicant requests a determination of right to designated ground water in the Denver Aquifer (hereinafter "Aquifer") underlying 40 acres, described as the SW1/4 of the SE1/4 of Section 22, Township 12 South, Range 63 West of the 6th P.M., in El Paso County. According to a signed Ownership Statement dated September 13, 2018, attached hereto as Exhibit A, the Applicant owns the 40 acres of land, which are further described in said Ownership Statement (hereinafter "Overlying Land"), and claims control of the right to the ground water in the Aquifer underlying this land (hereinafter "Underlying Ground Water").
3. The Overlying Land is located within the boundaries of the Upper Black Squirrel Creek Designated Ground Water Basin and within the Upper Black Squirrel Creek Ground Water Management District. The Colorado Ground Water Commission (hereinafter "Commission") has jurisdiction over the ground water that is the subject of this Determination.
4. The Commission Staff has evaluated the application relying on the claims to control of the Underlying Ground Water in the Aquifer made by the Applicant.
5. The Applicant intends to apply the Underlying Ground Water to the following beneficial uses: domestic (in home, irrigation of lawn and gardens, domestic animals), commercial, irrigation, replacement, and fire protection. The Applicant's proposed place of use of the Underlying Ground Water is the above described 40 acres of overlying land.
6. The quantity of water in the Aquifer underlying the 40 acres of Overlying Land claimed by the applicant is 1,360 acre-feet. This determination was based on the following as specified in the Designated Basin Rules:
 - a. The average specific yield of the saturated permeable material of the Aquifer beneath the Overlying Land that could yield a sufficient quantity of water that may be extracted and applied to beneficial use is 17 percent.
 - b. The average thickness of the saturated permeable material of the Aquifer beneath the Overlying Land that could yield a sufficient quantity of water that may be extracted and applied to beneficial use is 200 feet.
7. Pursuant to Section 37-90-107(7)(a), C.R.S., and in accordance with the Designated Basin Rules, the Commission shall allocate the underlying ground water based on ownership of the

overlying land and an aquifer life of one hundred years. Should the entire quantity of underlying ground water identified above be available for allocation, the allowed average annual amount of withdrawal from the Aquifer that could be allocated from beneath the Overlying Land would be 13.6 acre-feet per year.

8. A review of the records in the Office of the State Engineer has disclosed that a small-capacity well, permit no. 115609, is located on the Overlying Land and is permitted to withdraw 0.387 acre-feet per year of ground water from the Aquifer from beneath the Overlying Land. In accordance with Rule 5.3.2.4 of the Designated Basin Rules, the allowed average annual amount of withdrawal from beneath the Overlying Land is reduced to 13.21 acre-feet per year so as to account for water historically withdrawn by that well from beneath the Overlying Land. The effect of this reservation is to reduce the quantity of Underlying Ground Water which is considered available for allocation to 1,321 acre-feet. Except for that well, review of the records in the Office of the State Engineer has disclosed that none of the water in the Aquifer underlying the land claimed by the Applicant has been previously allocated or permitted for withdrawal.
9. The applicant intends to apply for a new well permit to re-permit well 115609 pursuant to the replacement plan being concurrently approved for the Denver aquifer. Well permit no. 115609 will be cancelled upon issuance of a new well permit issued pursuant to this Determination of Water Right and the replacement plan.
10. Pursuant to Section 37-90-107(7)(c)(III), C.R.S., an approved determination of water right shall be considered a final determination of the amount of ground water so determined; except that the Commission shall retain jurisdiction for subsequent adjustment of such amount to conform to the actual local aquifer characteristics from adequate information obtained from well drilling or test holes.
11. The ability of wells permitted to withdraw the authorized amount of water from this non-renewable Aquifer may be less than the one hundred years upon which the amount of water in the Aquifer is allocated, due to anticipated water level declines.
12. In accordance with Rule 5.3.6 of the Designated Basin Rules, it has been determined that withdrawal of ground water from the Aquifer underlying the land claimed by the Applicant will, within one hundred years, deplete the flow of a natural stream or its alluvial aquifer at an annual rate greater than one-tenth of one percent of the annual rate of withdrawal and, therefore, the Underlying Ground Water is considered to be non-tributary ground water. Also, the location of the land claimed by the Applicant is closer than one mile from the Aquifer contact with the alluvium. Withdrawal of water from the Aquifer underlying the claimed land area would impact the alluvial aquifer(s) of Black Squirrel Creek or its tributaries, which has been determined to be over-appropriated. Commission approval of a replacement plan pursuant to Section 37-90-107.5, C.R.S. and Rule 5.6 of the designated Basin Rules, providing for the actual depletion of the alluvial aquifer and adequate to prevent any material injury to existing water rights, is required prior to approval of well permits for wells to be located on this land area to withdraw the Underlying Ground Water from the Aquifer.
13. On April 30, 2019, in accordance with Rule 9.1 of the Designated Basin Rules, a letter was sent to the Upper Black Squirrel Creek Ground Water Management District requesting written recommendations concerning this application. No written recommendations from the district were received.

14. In accordance with Sections 37-90-107(7)(c)(II) and 37-90-112, C.R.S., the application was published in the Ranchland News newspaper on May 2, 2019 and May 9, 2019. No objections to the application were received within the time limit set by statute.

ORDER

In accordance with Section 37-90-107(7), C.R.S., and the Designated Basin Rules, the Colorado Ground Water Commission orders that the application for determination of right to designated ground water in the Denver Aquifer underlying 40 acres of land, described as the SW1/4 of the SE1/4 of Section 22, Township 12 South, Range 63 West of the 6th P.M., further described in Exhibit A, is approved subject to the following conditions:

15. The allowed average annual amount of withdrawal of Underlying Ground Water from the Aquifer shall not exceed 13.21 acre-feet.
16. The total volume of Underlying Ground Water that may be withdrawn from the Aquifer pursuant to this Determination of Water Right shall not exceed 1,321 acre-feet.
17. The applicant must obtain a new permit for the existing well (current permit no. 115609) to operate that well pursuant to this Determination of Water Right and the replacement plan being concurrently approved for the Denver aquifer.
18. The Commission may adjust the total volume and the allowed average annual amount of withdrawal of Underlying Ground Water that may be withdrawn from the Aquifer to conform to actual Aquifer characteristics based on analysis of geophysical logs or other site-specific data if such analysis indicates that the initial estimate of the amount of Underlying Ground Water in the Aquifer was incorrect.
19. The allowed maximum annual amount of withdrawal may exceed the allowed average annual amount of withdrawal as long as the total volume of Underlying Ground Water withdrawn does not exceed the product of the number of years since the date of approval of this determination times the allowed average annual amount of withdrawal.
20. The Applicant may pump the allowed average annual amount of withdrawal and the allowed maximum annual amount of withdrawal from one or more wells of a well field in any combination, so long as the total combined withdrawal of the wells does not exceed the amounts described in this Order.
21. Commission approval of a replacement plan, providing for actual depletion of affected alluvial aquifers and adequate to prevent any material injury to existing water rights in such alluvial aquifers, is required prior to approval of well permits that allow the withdraw of the Underlying Ground Water.
22. The use of the allowed amount of Underlying Ground Water from this allocation shall be limited to the following beneficial uses: domestic (in home, irrigation of lawn and gardens, domestic animals), commercial, irrigation, replacement, and fire protection. The place of use shall be limited to the above described 40 acres of Overlying Land. The ground water that is the subject of this Determination may be reused and successively used to extinction to the extent dominion and control over the water is maintained and its volume can be distinguished from the volume of any stream system into which it is introduced to the satisfaction of the Commission. The ground water right determined herein is located within the Upper Black Squirrel Creek Ground Water Management District where local District rules apply which may further limit the withdrawal and use of the subject designated ground water.

23. Approval of this determination meets the requirements of Section 37-90-107(7)(d)(II) that requires a determination of ground water be made prior to the granting of a well permit pursuant to Section 37-90-107(7).
24. Wells withdrawing the allowed amount of Underlying Ground Water allocated herein are subject to the following conditions:
 - a. The wells must be located on the above described 40 acres of Overlying Land.
 - b. No well shall be located within 600 feet of any existing large-capacity well in the same Aquifer unless a Waiver of Claim of Injury is obtained from the owner of the existing well or unless the Commission, after a hearing, finds that circumstances in a particular instance warrant that a well may be permitted without regard to this limitation.
 - c. The wells must be constructed to withdraw water from only the Denver Aquifer.
 - d. The entire depth of each well must be geophysically logged prior to installing the casing as forth in Rule 9 of the Statewide Nontributary Ground Water Rules, 2 CCR 402-7.
 - e. A totalizing flow meter or other Commission approved measuring device shall be installed on each well and maintained in good working order by the well owner. Annual diversion records shall be collected and permanently maintained by the well owner and submitted to the Commission and the Upper Black Squirrel Creek Ground Water Management District upon request.
 - f. The well shall be marked in a conspicuous place with this determination number, the well permit number, and the name of the Aquifer. The well owner shall take necessary means and precautions to preserve these markings.
25. A copy of this Findings and Order shall be recorded by the Applicant in the public records of the county in which the Overlying Land is located so that a title examination of the above described 40 acres of Overlying Land area, or any part thereof, shall reveal the existence of this determination.
26. The ground water right determined herein is a vested property right with specific ownership. The ground water right may be transferred independent of the land under which the right originated. Any action taken that is intended to convey, transfer, and/or sell the subject water right shall explicitly identify this Determination of Water Right number, the specific aquifer, and the annual volume (based on a 100-year aquifer life) or total volume of ground water that is being conveyed.

Dated this 12th day of July, 2019.



Kevin G. Rein, P.E.
Executive Director
Colorado Ground Water Commission

By: 

Keith Vander Horst, P.E.
Chief of Water Supply, Basins

RECEIVED

Form GWS-1 (08/2016)

STATE OF COLORADO
OFFICE OF THE STATE ENGINEER
DIVISION OF WATER RESOURCES
1313 Sherman St, Room 821, Denver, CO 80203
Phone (303) 866-3581, www.water.state.co.us

SEP 13 2018
WATER RESOURCES
STATE ENGINEER COLO.

NONTRIBUTARY GROUND WATER LANDOWNERSHIP STATEMENT

AQUIFER: Denver

I (we) (Please Print) Kerry E. Burt
claim and say that I (we) am (are) the owner(s) of the following described property consisting of
40 acres in the County of El Paso, State of Colorado,
as evidenced by the attached copy of a deed, recorded in the county (or counties) in which the
land is located. (insert the property's legal description)

21430 Spencer Road, Galhan, Colorado 80808 located in the SW1/4 of the SE1/4 of Section
22, T 12S R 63W, 6th P.M. in El Paso County, Colorado.

I (we) further claim and say that the right to withdraw the ground water in the aquifer underlying
the above described land has not been reserved by another, nor has consent been given to
another for the right to its withdrawal.

NOTE: A completed "Nontributary Landownership or Consent Verification of Notice" form
(GWS-43) must also be provided for all applications submitted pursuant to C.R.S. 37-90-
137(4) outside of a Designated Ground Water Basin.

Further, I (we) claim and say that I (we) have read the statement made herein; know the
contents thereof; and that the same are true to my (our) knowledge. Pursuant to Section 24-4-
104(13)(a), C.R.S., the making of false statements herein constitutes perjury in the second
degree and is punishable as a Class 1 misdemeanor.

Lee Seigel 9/13/18
Signature- Lee Seigel (attorney-in-fact for Kerry E. Burt) Date

Signature

Date

.....
Type or print neatly in black ink. This form may be reproduced by photocopy or word
processing means. See additional instructions on back.

**COLORADO GROUND WATER COMMISSION
FINDINGS AND ORDER**

IN THE MATTER OF AN APPLICATION FOR REPLACEMENT PLAN TO ALLOW THE WITHDRAWAL OF GROUND WATER FROM THE DENVER AQUIFER IN THE UPPER BLACK SQUIRREL CREEK DESIGNATED GROUND WATER BASIN.

REPLACEMENT PLAN - DETERMINATION OF WATER RIGHT NO. 3718-BD

AQUIFER: DENVER

APPLICANT: KERRY E. BURT

In compliance with Section 37-90-107.5, CRS, and the Designated Basin Rules, 2 CCR 410-1 ("Rules" or "Rule"), Kerry E. Burt ("Applicant") submitted an application for a replacement plan to allow the withdrawal of ground water from the Denver Aquifer in accordance with Determination of Water Right No. 3718-BD.

FINDINGS

1. Pursuant to Section 37-90-107(7), CRS, in a Findings and Order dated July 12, 2019, the Ground Water Commission ("Commission") approved a Determination of Water Right, no. 3718-BD, for the Denver Aquifer ("Aquifer"), summarized as follows.
 - a. The determination quantified an amount of water from beneath 40 acres of overlying land described as the SW1/4 of the SE1/4 of Section 22, Township 12 South, Range 63 West of the 6th P.M., in El Paso County ("Overlying Land").
 - b. The total volume of underlying ground water that may be withdrawn from the Aquifer shall not exceed 1,321 acre-feet and the allowed average annual amount of ground water that may be withdrawn from the Aquifer shall not exceed 13.21 acre-feet.
 - c. The use of the allowed amount of underlying ground water shall be limited to the following beneficial uses: domestic (in home, irrigation of lawn and gardens, domestic animals), commercial, irrigation, replacement, and fire protection.
 - d. In accordance with Rule 5.3.6 the withdrawal of the subject ground water will, within one hundred years, deplete the flow of a natural stream or its alluvial aquifer at an annual rate greater than one-tenth of one percent of the annual rate of withdrawal, the ground water is considered to be not-nontributary, and Commission approval of a replacement plan providing for actual depletion of affected alluvial aquifers and adequate to prevent any material injury to existing water rights in such alluvial aquifers is required prior to approval of well permits for wells to withdraw the subject ground water.
2. The subject water is Designated Ground water located within the boundaries of the Upper Black Squirrel Creek Designated Ground Water Basin and within the Upper Black Squirrel Creek Ground Water Management District. The Commission has jurisdiction.
3. Withdrawal of the subject ground water would deplete the alluvial aquifer of the Upper Big Sandy Designated Ground Water Basin and the alluvial aquifer of the Upper Black Squirrel Creek Designated Ground Water Basin, both of which, according to Rules 5.2.7.2 and 5.2.6.2, respectively, have been determined to be over appropriated. Such depletion would unreasonably impair existing alluvial rights withdrawing water from those alluvial aquifers.

4. Pursuant to Rule 5.6.1 this plan must be adequate to prevent any material injury to water rights of other appropriators, which for purposes of this plan means large capacity wells withdrawing water from the alluvial aquifer of the Upper Big Sandy Designated Ground Water Basin and the alluvial aquifer of the Upper Black Squirrel Creek Designated Ground Water Basin.
5. Pursuant to Rule 5.3.6.2(C) the amount of replacement water shall provide for the depletion of alluvial water for the first 100 years due to all previous pumping and if pumping continues beyond 100 years, shall replace actual impact until pumping ceases.
6. The subject application for the replacement plan was received by the Commission on August 9, 2018.
7. The Applicant proposes to divert 0.3 acre-feet annually from the Denver Aquifer for in-house use only in one single family dwelling until such time as the Applicant demonstrates replacement water is being delivered from Arapahoe or Laramie-Fox Hills aquifer sources as described in paragraph 11 so as to allow the well to pump a total of 1 acre-foot annually. The Denver aquifer water will be withdrawn through an existing well ("Denver aquifer well"), currently operated under well permit no. 115609, which will be re-permitted to operate under this replacement plan for a period of 300 years. Once withdrawal from the well increases to 1 acre-foot annually the use of the well will be limited to domestic use (in-house use, landscape and gardens, domestic animal watering).
8. At a continuous withdrawal of 0.3 acre-feet annually for 300 years, total depletions to the alluvial aquifer systems of the Upper Big Sandy Designated Ground Water Basin and Upper Black Squirrel Creek Designated Ground Water Basin would steadily increase to 0.27 acre-feet per year in the 300th year, as shown in Exhibit A-1.
9. At a continuous withdrawal of 0.7 acre-feet annually for 300 years, total depletions to the alluvial aquifer systems of the Upper Big Sandy Designated Ground Water Basin and Upper Black Squirrel Creek Designated Ground Water Basin would steadily increase to 0.63 acre-feet per year in the 300th year, as shown in Exhibit A-2.
10. While the well is diverting 0.3 acre-feet annually from the Denver Aquifer for in-house use only the Applicant proposes to provide 0.27 acre-feet per year of replacement water to the alluvial aquifer system of the Upper Black Squirrel Creek Designated Ground Water Basin to replace depletions resulting from such pumping. The proposed source of replacement water is septic and leaching field return flows from the in-house use of the ground water to be pumped under the plan. The Applicant estimates that return flows will consist of 90% of the water used for in-house purposes. Assuming a total annual withdrawal amount for in-house use of 0.30 acre-feet, the return flow from the well would be 0.27 acre-feet annually.
11. The additional proposed sources of replacement water that would allow the well to increase its diversions from 0.3 acre-foot annually to 1 acre-foot annually from the Denver Aquifer are return flows from in-door commercial drinking and sanitary use and irrigation use of the nontributary Laramie-Fox Hills and/or Arapahoe aquifer ground water pumped pursuant to Determination of Water Rights Nos. 3716-BD and 3717-BD ("Laramie-Fox Hills and Arapahoe ground water"), respectively; and/or direct delivery of said Laramie-Fox Hills and Arapahoe ground water recharged through a below ground infiltration structure, like a leach field, approved by the Commission, as further described below.

- a. A new Arapahoe aquifer well may be constructed pursuant to Determination of Water Rights No. 3717-BD. Pursuant to Section 37-90-107(7), CRS, in a Findings and Order dated July 1, 2019, the Ground Water Commission (“Commission”) approved a Determination of Water Right, no. 3717-BD, for the Arapahoe Aquifer, summarized as follows.
 - i. The determination quantified an amount of water underlying the Overlying Land.
 - ii. The total volume of underlying ground water that may be withdrawn from the Aquifer shall not exceed 1,430 acre-feet and the allowed average annual amount of ground water that may be withdrawn from the Aquifer shall not exceed 14.3 acre-feet.
 - iii. The use of the allowed amount of underlying ground water shall be limited to the following beneficial uses: domestic (in home, irrigation of lawn and gardens, domestic animals), commercial, irrigation, replacement, and fire protection.
 - iv. In accordance with Rule 5.3.6 of the Designated Basin Rules, it has been determined that withdrawal of ground water from the Aquifer underlying the land claimed by the Applicant will not, within one hundred years, deplete the flow of a natural stream or its alluvial aquifer at an annual rate greater than one-tenth of one percent of the annual rate of withdrawal and, therefore, the Underlying Ground Water is nontributary ground water as defined in Rule 4.2.19 of the Designated Basin Rules. Pursuant to the Rules, no more than 98% of the amount of the Underlying Ground Water withdrawn annually shall be consumed.

The 1,430 acre-feet of water that may be withdrawn under Determination of Water Right no. 3717-BD may be withdrawn at a rate of up to 4.77 acre-feet annually for 300 years, or at a higher withdrawal rate over a shorter period of time as long as the water is withdrawn in accordance with Determination of Water Right no. 3717-BD.

- b. In addition to, or as an alternative to the Arapahoe aquifer well, the Applicant may construct a new Laramie-Fox Hills aquifer well pursuant to Determination of Water Rights No. 3716-BD. Pursuant to Section 37-90-107(7), CRS, in a Findings and Order dated July 1, 2019, the Ground Water Commission (“Commission”) approved a Determination of Water Right, no. 3716-BD, for the Laramie-Fox Hills Aquifer, summarized as follows.
 - i. The determination quantified an amount of water underlying the Overlying Land.
 - ii. The total volume of underlying ground water that may be withdrawn from the Aquifer shall not exceed 1,530 acre-feet and the allowed average annual amount of ground water that may be withdrawn from the Aquifer shall not exceed 15.3 acre-feet.
 - iii. The use of the allowed amount of underlying ground water shall be limited to the following beneficial uses: domestic (in home, irrigation of lawn and gardens, domestic animals), commercial, irrigation, replacement, and fire protection.
 - iv. In accordance with Rule 5.3.6 of the Designated Basin Rules, it has been determined that withdrawal of ground water from the Aquifer underlying the land claimed by the Applicant will not, within one hundred years, deplete the

flow of a natural stream or its alluvial aquifer at an annual rate greater than one-tenth of one percent of the annual rate of withdrawal and, therefore, the Underlying Ground Water is nontributary ground water as defined in Rule 4.2.19 of the Designated Basin Rules. Pursuant to the Rules, no more than 98% of the amount of the Underlying Ground Water withdrawn annually shall be consumed.

The 1,530 acre-feet of water that may be withdrawn under Determination of Water Right no. 3716-BD may be withdrawn at a rate of up to 5.10 acre-feet annually for 300 years, or at a higher withdrawal rate over a shorter period of time as long as the water is withdrawn in accordance with Determination of Water Right no. 3716-BD.

- c. The Applicant proposes to use the Laramie-Fox Hills and Arapahoe ground water for the irrigation of 4 to 6 acres of irrigated grasses; the irrigation of grass and shrubs; fire protection; and for use in a services building that will provide a cooking/food service area, restrooms and showers (“commercial drinking and sanitary use”). The Applicant claims that irrigation water will be applied by sprinkler or similar non-drip irrigation system. The Applicant estimates that return flows will consist of 90% of the water used for in-building commercial drinking and sanitary purposes as will 15% of the water used for irrigation. Assuming a total annual withdrawal amount for in-building commercial drinking and sanitary use of 0.50 acre-feet (resulting in return flows of 0.45 acre-feet annually) and a total annual withdrawal amount of 9.2 acre-feet for irrigation (resulting in return flows of 1.38 acre-feet annually), the return flow from the well(s) would be 1.83 acre-feet annually. In the alternative, assuming a total annual withdrawal amount of 4.7 acre-feet for irrigation, with no other uses, the return flow from the well(s) would be 0.71 acre-feet annually.
12. The subject property is located within the drainage of Black Squirrel Creek, and the return flows will flow to the alluvial aquifer of the Upper Black Squirrel Creek Designated Ground Water Basin. The Applicant proposes to aggregate all replacements to the drainage in which the well or wells will operate, in accordance with Guideline 2007-1.
13. So long as the septic and leaching treatment systems for the in-house use and in-building commercial drinking and sanitary use of the water are constructed and operated in compliance with state and county health department standards the plan would not cause unreasonable impairment of water quality of the alluvial aquifer.
14. Records in this office indicate that the Applicant controls the water rights to be used as the source of replacement water, consisting of Determination of Water Right Nos. 3716-BD, 3717-BD and 3718-BD.
15. In accordance with Rule 5.6.2 the application was referred to the Upper Black Squirrel Creek Ground Water Management District on April 30, 2019. No written recommendations from the district were received.
16. In accordance with Sections 37-90-107.5 and 37-90-112, CRS, the application was published in the Ranchland News newspaper on May 2, 2019 and May 9, 2019. No objections to the application were received within the time limit set by statute.
17. The Commission Staff has evaluated the application pursuant to Section 37-90-107.5, CRS, and the requirements of Rule 5.3.6.2(C) and Rule 5.6.

18. According to Rule 5.6.2 of the Designated Basin Rules:
 - a. The Applicant has the burden of proving the adequacy of the plan in all respects.
 - b. The Commission Staff shall propose any additional terms and conditions or limitations which are necessary to prevent material injury and to ensure that the plan is administrable and enforceable.
19. Based on the above, no material injury will occur to the water rights of large capacity wells producing from the alluvial aquifer of the Upper Big Sandy Designated Ground Water Basin and the alluvial aquifer of the Upper Black Squirrel Creek Designated Ground Water Basin, due to diversions from the Denver Aquifer, if operated under this replacement plan, subject to the conditions given below.

ORDER

In accordance with Section 37-90-107.5, CRS, and the Designated Basin Rules, the Colorado Ground Water Commission orders that the application for a replacement plan to allow the withdrawal of ground water from the Denver Aquifer underlying 40 acres that are the subject of Determination of Water Right no. 3718-BD is approved subject to the following conditions:

20. The Denver aquifer water will be withdrawn through the existing well, currently operated under well permit no. 115609, which will be re-permitted to operate pursuant to this replacement plan. The use of the well will be limited to in-house use in one single family dwelling until the Applicant has demonstrated in accordance with the terms of this replacement plan that adequate return flows exist to replace depletions from the withdrawal of 1 acre-foot annually from the Denver Aquifer. Once the withdrawal from the well increases to 1 acre-foot annually the use of the well will be limited to domestic use (in-house use, irrigation of landscape and gardens, domestic animal watering).
21. The allowed annual amount of ground water to be withdrawn from the aquifer by the well operating under this plan shall not exceed 0.3 acre-feet until the Applicant has demonstrated in accordance with the terms of this replacement plan that adequate return flows and/or recharge exists to replace depletions from the withdrawal of the additional 0.7 acre-foot of water annually, for a total withdrawal of 1 acre-foot annually.
22. Prior to increasing pumping from the existing well to 1 acre-foot annually the Applicant must demonstrate to the satisfaction of the Commission that adequate return flows exist to replace depletions that result from all withdrawals through the Denver aquifer well. At a minimum the following information must be provided to the Commission:
 - a. Confirmation that the Denver aquifer well is serving an occupied single family dwelling and return flows from the dwelling are being returned through a non-evaporative septic system.
 - b. Evidence that a well has been constructed, and a pump has been installed in, a Laramie-Fox Hills aquifer well that was permitted pursuant to Determination of Water Right, no. 3716-BD; or an Arapahoe aquifer well that was permitted pursuant to Determination of Water Right, no. 3717-BD.

- c. If the Applicant will be claiming return flows from the use of the Laramie-Fox Hills aquifer and/or Arapahoe aquifer water described above as a replacement source the following must be provided to the Commission staff:
 - i. Evidence that a meter has been installed to separately measure the amount of water that will be delivered to in-door commercial drinking and sanitary uses, if such return flows are being claimed.
 - ii. Evidence that the water used for in-door commercial drinking and sanitary use is being returned through a non-evaporative septic system, if such return flows are being claimed.
 - iii. Evidence that a meter has been installed to separately measure the amount of water that will be delivered to irrigation, if such return flows are being claimed.
 - iv. Evidence that the irrigation system is a sprinkler irrigation system, or some other non-drip irrigation system, that will return at least 15% of the amount of water diverted for irrigation use to the alluvial aquifer.
 - v. Evidence that adequate water is being pumped for in-door commercial drinking and sanitary uses and/or irrigation use to replace the depletions that result from the additional 0.7 acre-feet of pumping, based on the assumed return flows of 90% for in-door commercial drinking and sanitary use and 15% for irrigation use.

- d. If the Applicant will be claiming recharge credits for direct delivery into the alluvial aquifer of water pumped from the Laramie-Fox Hills aquifer and/or Arapahoe aquifers described above as a replacement source the following must be provided to the Commission staff:
 - i. Evidence that a below ground infiltration structure has been constructed, and is operational, that is adequate to recharge the amount of water that the Applicant claims will be delivered to the structure on an annual basis.
 - ii. Evidence that a meter has been installed that separately measures the amount of water that will be delivered to recharge.
 - iii. The total quantity of water that the Applicant claims will be delivered to the recharge structure on an annual basis.
 - iv. The location on the Overlying Land where the recharge structure was constructed.
 - v. Evidence that the recharge project will prevent the unreasonable impairment of water quality.
 - vi. Evidence that the recharge structure is constructed in a manner to prevent evapotranspiration losses from occurring as a result of operation of the infiltration gallery.

- e. Proposed accounting in a spreadsheet, or other approved digital format.

23. A totalizing flow meter shall be installed on the wells. The well owners shall maintain the meters in good working order.
24. Permanent records of all withdrawals of ground water from the wells shall be recorded at least annually by the well owners, permanently maintained, and provided to the Commission and the Upper Black Squirrel Creek Ground Water Management District upon request.
25. Existing well permit no. 115609 must be re-permitted to operate pursuant to this plan.
26. Pumping under this plan is limited to a period of 300 years. The year of first use of this replacement plan shall be the year 2019.
27. Return flows from in-house use and in-door commercial use of ground water shall occur through individual on-lot non-evaporative septic systems located within the 40 acres of overlying land that are the subject of Determination of Water Right Nos. 3716-BD, 3717-BD and 3718-BD.
28. The septic systems must be constructed and operated to state and county health department standards.
29. Replacement of depletions must be provided annually in the acre-feet amounts shown in Exhibits A-1 and A-2. Exhibit A-1 only shall be used until such time as the allowed pumping of the well is increased to 1 acre-foot annually. Once the allowed pumping rate of the well is increased to 1 acre-foot annually the depletions shall be determined as the replacement requirement for the withdrawal of the 0.3 acre-feet for in-house use, based on the number of years since the year of first use of this replacement plan (2019), plus the replacement requirement as shown in Exhibit A-2 for the withdrawal of the additional 0.7 acre-feet annually, based on the number of years since the allowed pumping was increased. Annual replacement requirements may be computed by pro-rating between the values given on Exhibits A-1 and A-2, or for simplicity may be taken as the amount shown in the next succeeding 5 year increment.
30. The Applicant or their successor(s) are responsible for ensuring that replacement water is provided to the alluvial aquifer as required by this plan, and that the replacement prevents any material injury to the water rights of other appropriators. The annual replacement requirement and the annual amount of replacement water provided shall be calculated and reported on a form acceptable to the Commission. The annual amount of replacement water provided must be no less than the annual replacement requirement on a yearly basis. No credit shall be claimed by the Applicant for an oversupply of replacement water provided to the alluvium during previous years.
31. The Applicant must provide the required annual amount of replacement water for the first 100 years, or for as long as a Denver aquifer well is operated pursuant to this plan, whichever is longer.
32. To assure adequate return flows from the Denver aquifer well for replacement of the depletions resulting from in-house use, the well must be serving an occupied single-family dwelling that is generating return flows via a non-evaporative septic system.

33. So long as the Denver aquifer well continues to pump and supply an occupied dwelling while the well is used for in-house use only, the plan's required replacement obligations, shown in Exhibit A-1 will be met.
34. Should the Denver aquifer well cease pumping within the first 100 years an amended or alternate replacement plan must be obtained that will make the required replacement deliveries, unless return flows or recharge from the use of the Laramie-Fox Hills aquifer and Arapahoe aquifer ground water, as described above, are adequate to replace all depletions from the Denver well.
35. At any time while the Denver aquifer well is pumping should it be determined that return flows or credits from direct delivery are not providing all replacements required under this replacement plan an amended or alternate replacement plan must be obtained that will make the required replacement deliveries.
36. The Applicant or their successor(s) must gather, record and maintain permanent records of all information pertaining to operation of this plan, which shall include, but is not be limited to, those items identified below. The Applicant must submit records to the Commission and the Upper Black Squirrel Creek Ground Water Management District on forms acceptable to the Commission, on an annual basis for the previous calendar year, by February 15th of the following year.
 - a. Accounting that must be provided if the Denver aquifer well is used for in-house use only:
 - i. Identification of the Denver aquifer well permit issued pursuant to this plan.
 - ii. The amount of water diverted by the Denver aquifer well, both annually and cumulatively since operation of the plan began.
 - iii. The number of occupied single family dwellings served by the Denver aquifer well.
 - iv. The return flows occurring from use of the Denver aquifer well operating under the plan, assuming 0.27 acre-feet per year occupied single family dwelling (90% of the water used for in-house purposes) enters the alluvial aquifer as replacement water.
 - v. Any other information the Commission deems relevant and necessary to operation, monitoring, accounting, or administration of the plan.
 - b. Accounting that must be provided if the Denver aquifer well is expanded to allow for domestic use (in-house use, irrigation of landscape and gardens, domestic animal watering) and the withdrawal of 1 acre-foot annually:
 - i. Identification of the Denver aquifer well permit issued pursuant to this plan.
 - ii. Identification of the Laramie-Fox Hills and Arapahoe aquifer well permits used as part of this replacement plan, either through return flow or recharge.
 - iii. The amount of water diverted by each well, both annually and cumulatively since operation of the plan began.
 - iv. The number of occupied single family dwellings served by the Denver aquifer well.
 - v. Metered quantity of water pumped from the Laramie-Fox Hills and/or Arapahoe aquifer for in-door commercial drinking and sanitary use.

- vi. The return flows occurring from in-door commercial drinking and sanitary use assuming 90% of the water used for in-door commercial drinking and sanitary use enters the alluvial aquifer as replacement water.
 - vii. Metered quantity of water pumped from the Laramie-Fox Hills and/or Arapahoe aquifer for irrigation use.
 - viii. The type of irrigations system(s) used to irrigate with the Laramie-Fox Hills and/or Arapahoe aquifer water, and the return flows occurring from irrigation use assuming 15% of the water used for irrigation use enters the alluvial aquifer as replacement water.
 - ix. Metered quantity of water pumped from the Laramie-Fox Hills and/or Arapahoe aquifer that is delivered to direct recharge into the alluvial aquifer.
37. The Applicant or their successor(s) are fully responsible for the operation, monitoring, and accounting of the replacement plan. In the event a lot with a well permitted or operating pursuant to this plan is sold, evidence of the sale and notification to the new owner of their responsibility under the replacement plan shall accompany that year's accounting.
38. Any covenants adopted for a subdivision should contain a description of the replacement plan, including the limitations on water use on the lot, metering of well pumping, and how the plan is to be administered.
39. In the event the permitted well is not operated in accordance with the conditions of this replacement plan, it shall be subject to administration, including orders to cease diverting ground water.
40. All terms and conditions of Determination of Water Right No. 3716-BD, 3717-BD and 3718-BD must be met.
41. A copy of this Findings and Order shall be recorded by the Applicant in the real property records of El Paso County, so that a title examination of the above described property, or any part thereof, shall reveal to all future purchasers the existence of this replacement plan. The terms and conditions of this replacement plan shall be considered to be a covenant on and running with the subject property.

Dated this Dated this 12th day of July, 2019.



Kevin G. Rein, P.E.
Executive Director
Colorado Ground Water Commission

By: 

Keith Vander Horst, P.E.
Chief of Water Supply, Basins

Exhibit A-1
Replacement Plan - Determination No.: 3718-BD
Page 1 of 1

Designated Basin Summary Table for Kerry E. Burt							
Pumping Rate of 0.3 acre-feet per year for 300 Years from the Denver aquifer							
Section(s): Section 22, Township 12 South, Range 63 West, 6th P.M.							
Year	Pumping (Q) (AF/YR)	Annual Depletion (q) (AF/YR)	Depletion as a % of Pumping (q/Q)	Year	Pumping (Q) (AF/YR)	Annual Depletion (q) (AF/YR)	Depletion as a % of Pumping (q/Q)
5	0.3	0.038	12.6	155	0.3	0.259	86.2
10	0.3	0.070	23.3	160	0.3	0.259	86.5
15	0.3	0.097	32.3	165	0.3	0.260	86.7
20	0.3	0.120	40.0	170	0.3	0.261	86.9
25	0.3	0.139	46.4	175	0.3	0.261	87.2
30	0.3	0.156	51.9	180	0.3	0.262	87.3
35	0.3	0.170	56.5	185	0.3	0.263	87.5
40	0.3	0.182	60.5	190	0.3	0.263	87.7
45	0.3	0.192	63.9	195	0.3	0.264	87.9
50	0.3	0.200	66.8	200	0.3	0.264	88.0
55	0.3	0.208	69.3	205	0.3	0.264	88.2
60	0.3	0.214	71.5	210	0.3	0.265	88.3
65	0.3	0.220	73.4	215	0.3	0.265	88.5
70	0.3	0.225	75.0	220	0.3	0.266	88.6
75	0.3	0.229	76.4	225	0.3	0.266	88.7
80	0.3	0.233	77.7	230	0.3	0.266	88.8
85	0.3	0.236	78.7	235	0.3	0.267	88.9
90	0.3	0.239	79.7	240	0.3	0.267	89.1
95	0.3	0.242	80.6	245	0.3	0.267	89.2
100	0.3	0.244	81.3	250	0.3	0.268	89.3
105	0.3	0.246	82.0	255	0.3	0.268	89.3
110	0.3	0.248	82.6	260	0.3	0.268	89.4
115	0.3	0.250	83.2	265	0.3	0.269	89.5
120	0.3	0.251	83.7	270	0.3	0.269	89.6
125	0.3	0.252	84.2	275	0.3	0.269	89.7
130	0.3	0.254	84.6	280	0.3	0.269	89.8
135	0.3	0.255	85.0	285	0.3	0.269	89.9
140	0.3	0.256	85.3	290	0.3	0.270	89.9
145	0.3	0.257	85.6	295	0.3	0.270	90.0
150	0.3	0.258	85.9	300	0.3	0.270	90.1

Created by Ground Water Commission Staff: jmw on March 28, 2019

Values for 'Depletion as a % of Pumping' (q/Q) are not calculated when the pumping rate (Q) is changed to anything but zero

Exhibit A-2
Replacement Plan - Determination No.: 3718-BD
Page 1 of 1

Designated Basin Summary Table for Kerry E. Burt							
Pumping Rate of 0.7 acre-feet per year for 300 Years from the Denver aquifer							
Section(s): Section 22, Township 12 South, Range 63 West, 6th P.M.							
Year	Pumping (Q) (AF/YR)	Annual Depletion (q) (AF/YR)	Depletion as a % of Pumping (q/Q)	Year	Pumping (Q) (AF/YR)	Annual Depletion (q) (AF/YR)	Depletion as a % of Pumping (q/Q)
5	0.7	0.088	12.6	155	0.7	0.603	86.2
10	0.7	0.163	23.3	160	0.7	0.605	86.5
15	0.7	0.226	32.3	165	0.7	0.607	86.7
20	0.7	0.280	39.9	170	0.7	0.608	86.9
25	0.7	0.325	46.4	175	0.7	0.610	87.1
30	0.7	0.363	51.9	180	0.7	0.611	87.3
35	0.7	0.396	56.6	185	0.7	0.613	87.5
40	0.7	0.424	60.5	190	0.7	0.614	87.7
45	0.7	0.447	63.9	195	0.7	0.615	87.9
50	0.7	0.468	66.8	200	0.7	0.616	88.0
55	0.7	0.485	69.3	205	0.7	0.617	88.2
60	0.7	0.500	71.5	210	0.7	0.618	88.3
65	0.7	0.513	73.4	215	0.7	0.619	88.5
70	0.7	0.525	75.0	220	0.7	0.620	88.6
75	0.7	0.535	76.4	225	0.7	0.621	88.7
80	0.7	0.543	77.7	230	0.7	0.622	88.8
85	0.7	0.551	78.7	235	0.7	0.622	88.9
90	0.7	0.558	79.7	240	0.7	0.623	89.0
95	0.7	0.564	80.6	245	0.7	0.624	89.2
100	0.7	0.569	81.3	250	0.7	0.625	89.3
105	0.7	0.574	82.0	255	0.7	0.625	89.4
110	0.7	0.578	82.6	260	0.7	0.626	89.4
115	0.7	0.582	83.2	265	0.7	0.627	89.5
120	0.7	0.586	83.7	270	0.7	0.627	89.6
125	0.7	0.589	84.2	275	0.7	0.628	89.7
130	0.7	0.592	84.6	280	0.7	0.628	89.8
135	0.7	0.595	85.0	285	0.7	0.629	89.9
140	0.7	0.597	85.3	290	0.7	0.629	89.9
145	0.7	0.599	85.6	295	0.7	0.630	90.0
150	0.7	0.601	85.9	300	0.7	0.630	90.1

Created by Ground Water Commission Staff: jmw on March 28, 2019

Values for 'Depletion as a % of Pumping' (q/Q) are not calculated when the pumping rate (Q) is changed to anything but zero

The Country Life: Where there's a well, there's a way to get water - hopefully

By: **Bill Radford** (</author/Bill+Radford>) • June 15, 2015 • *Updated: June 15, 2015 at 4:10 am*

EXHIBIT C

About 27,000 households are served by individual water wells in El Paso County. BILL RADFORD, THE GAZETTE

[View Gallery !\[\]\(61f857d186383e36e862eb041761959b_img.jpg\) \(/gallery/articleid/1553752/pictures?display=flexFullscreen&galleryTheme=lightTheme\)](/gallery/articleid/1553752/pictures?display=flexFullscreen&galleryTheme=lightTheme)

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When a well was drilled for a neighbor's new home recently, it was another "straw" dipping into the water beneath our feet.

There's a lot of such straws in the area. An estimated 27,000 homes - about 67,500 residents - are served by private water wells in El Paso County. That's about 11 percent of residents; the rest are served by public drinking water systems, from the biggie - Colorado Springs Utilities - to smaller ones such as Donala Water and Sanitation District, Cherokee Metro and the city of Fountain. The public systems draw their water from surface water, groundwater or both.

In eastern El Paso County, where I live, most utilize groundwater - the water that lies beneath the Earth's surface. Our well reaches 870 feet into the Arapahoe Aquifer; it's one of four aquifers that make up the Denver Basin, which stretches from El Paso County to Weld County.

If you're looking for property in the country with plans to dig a well, do your homework first, cautions Mark Birkelo, general manager of Barnhart Pump Co. in Falcon.

"The first phone call you want to make is to a water well contractor," Birkelo said. A company such as Barnhart quickly can check on water quality and quantity in a given area.

"That phone call can save a lot of grief," Birkelo said.

Once a site is chosen, the homeowner must acquire a permit from the state Division of Water Resources. Residential permits include domestic and household use only; the latter means no outside water, so no water for lawns, livestock, etc.

Ready to drill a well? "The cost for drilling and pumping can be considerable," cautions El Paso County's "Code of the West." Expect to pay about \$22 to \$24 a foot for a well 600 feet or deeper, Birkelo said; the cost per foot will be less if under about 600 feet. Barnhart is not a drilling company, but does the oversight for 40 to 50 new wells a year, Birkelo said.

If moving to property with a well, test the water pump's production and the quality of the water, Birkelo advised; for information on water potability testing, visit El Paso County Public Health's website at elpasocountyhealth.org/service/water-quality.

Quality is one issue; quantity is another. One afternoon I turned on the tap and nothing came out. The immediate paranoid thought: Our well had run dry. But we had simply overtaxed the water pump; after a 10-minute break, water started to flow again. But long-term worry remains. As a water resources report on the county's website notes, "the aquifers found in the Denver Basin are not considered to be a long-range, renewable source of water. The bedrock aquifers are subject to depletion if withdrawals exceed the natural recharge rate, which is very slow, given that the water within these aquifers has accumulated over thousands of years. The negligible rate of natural recharge, the considerable increase in water withdrawal, and the semiarid climate of the region have led to a situation where the amount of withdrawal from the aquifers may be exceeding the amount of recharge."

Birkelo, who has been in the water business in El Paso County for 30 years, believes that rate of replenishment

depends on the area. There are some wells that have a higher water level than they did decades before, he said, even though "there have been more straws put into that glass of water over time." In other areas, he has seen water levels drop.

Bottom line: It's tough to know what's happening deep underground, he says. That's why oil companies "spend millions of dollars trying to see what's down there" and often end up with a hole in the ground and nothing to show for it. "We know more about outer space," Birkelo said, "than we do what's under our own two feet."