

FREMONT COUNTY SKETCH PLAN APPLICATION

1.	Project Name: Royal Gorge Ranch & Resort							
2.	Name: TY SEUFER							
	Mailing Address: 4505 W U.S. 50							
	Telephone Number: 303-419-6782 Facsimile Number: N/A							
	Email Address: tyseufer@gmail.com							
3.	Name:							
	Mailing Address:							
	Telephone Number: Facsimile Number:							
	Email Address:							
4.	Name:							
	Mailing Address:							
	Telephone Number: Facsimile Number:							
	Email Address:							
5:	What is the proposed Subdivision name? Royal Gorge Ranch & Resort							
	What is the total acreage of the property? 733.82 acres							
	What is the total number of proposed lots? 138							
	What is the proposed average lot size, excluding outlots and roads? 4.5 acres (minimum)							
	How many phases of development are proposed with this subdivision? One phase							
	. What are the proposed general time frames for development of each phase? N/A							
	. What is the acreage of each proposed phase? N/A							
	. How many different land uses are proposed with this subdivision? 2							
	. What type of land uses are proposed with this subdivision?							
14.	. What is the acreage proposed to be devoted to each land use?							
	Recreational = Out lots @ 24.86 acres. Residential = remaining acreage (708.96 acres)							
15.	What is the current land use of the property? R3							
	Will this request be a vacation and replat of an existing subdivision? Yes X No Existing							
	subdivision name Buckskin Joe Lot #1 (Happy to provide more information should it be necessary)							
17.	Does the property currently have improvements (i.e. structures, roads, sewer & water lines, wells							
	septic systems, driveways, irrigation ditches, public utilities, etc)? Yes X No Provide a brie							
	description of the improvements, also stating which will be removed and which will stay and which							
	will be relocated: Please see Exhibit 17.1							

18	Does the property contain natural features, including geologic hazards (i.e. bluffs, cliffs, debris fans flood plains, dry gulches, drainages, ponds, lakes, streams, oil & gas deposits, mineral deposits, faul lines, etc)? Yes x No Provide a brief description of the features and how they effect the proposed subdivision: Please see Exhibit 18.1 for detailed information
19	Does the property contain easements of record or not of record? Yes X No Provide a brief
	description of the easements and how they effect the proposed subdivision:
	Easements of record include power lines, roads, and recreational trails. All details can be seen on the
	included plat. (See Exhibit 35 for plat details and easement locations)
20.	What is the potable water source for the proposed subdivision? Wells - see attached
21.	What is the sewage disposal source for the proposed subdivision? Septic
22.	What is the physical access for the proposed subdivision? Fremont County Road 3A (main access) County Road 61 (secondary/emergency access)
23.	Does the property currently have irrigation rights? Yes \(\subseteq \) No \(\times \) Is the property traversed by an
	irrigation ditch, easement or right-of-way? Yes No x
	The name of the irrigation company is: N/A
	Will irrigation rights be retained with the property? Yes \(\subseteq \) No \(\subseteq \)
24.	Is the property located within a Fire Protection District? Yes x No Please see Exhibit 24.1
25.	Provide a statement evaluating the potential wildfire hazard as related to the proposed land use explaining what the hazard is or why it does not exist: Please see Exhibit 25.1 for wildfire analysis.
	Note that propane use will be banned in the subdivision (all units will be run on electricity), open fires will be banned, and wildfire mitigation will be required on each lot.
26.	Provide a statement evaluating the potential radiation hazard as related to the proposed land use explaining what the hazard is or why it does not exist: There is not believed to be an unusual hazard from naturally occurring sources of radioactivity at the site. Please see Exhibit 26.1 for detailed information.
27.	Provide a statement evaluating the potential wildlife impacts as related to the proposed future land use: The Royal Gorge Ranch & Resort will be a gated community with minimal ecological impact, with no hunting allowed and no trespassing. There will be very minimal impact to any native wildlife - please see Exhibit 27.1.2 [Specifically: section 8.1 (m), (n) & (0)]
28	What is the existing zoning of the property? R3
	What is the proposed zoning of the property? R3
	Will all proposed lots conform to the minimum zoning standards required in the proposed zone district
50.	(i.e. size, width, etc)? Yes X No .
31	Will all design standards of the Fremont County Subdivision Regulations, Appendix I and II be met by
J1,	this proposal? Yes \square No \square If no, a list of requested waivers shall be attached, noting design
	standards from Appendix I and II, and the proposals made by this application, and be marked as
	Exhibit 31.1.
	EAHOR J1.1.

32. Based on the real estate records of the county, which include the records of the County Assessor, and "requests for notification" filed by a mineral estate owner in the records of the County Clerk and Recorder, have the mineral interests of the subject property been severed? Yes x No If yes, name of mineral interest owner See Exhibit 32.1
As per the FCSR Section IV., C., 14., a notice of the proposed subdivision shall be sent (certified mail return receipt requested) to the severed mineral interest owner(s) not less than thirty (30) days before the date of the Commission meeting at which the application is anticipated to be heard. See Subdivision – Mineral Interest Owner Notification Form. Evidence of said notice and mail receipt shall be attached to this application marked as Exhibit 32.1. \boxed{x} An exhibit has been attached.
33. Information describing topographic and soils conditions of the total property, sufficient to show the usability of the lots proposed, shall be provided with this application, and be marked as Exhibit 33.1. An exhibit has been attached.
34. A copy of the most current deed of record is attached to this application, marked as Exhibit 34.1, and can be found recorded in the Fremont County Clerk and Recorder's Office as follows: In Book at Page and under Reception Number
34. A copy of the Sketch Plan drawing shall be attached indicating, by dimension, the size and location of all improvements (i.e. roadways, rights-of-way, driveways, sewer lines, water lines, wells, septic systems, irrigation ditches, buildings, structures, public utilities, etc.) natural physical features (i.e. bluffs, cliffs, debris fans, flood plains, watercourses, lakes, live streams, dry gulches, drainages, oil - gas & mineral deposits, soil type boundaries, etc.) and easements labeled to use (all easements and rights-of-way). More than one (1) copy can be used.
35. A minimum of three (3) full size copies and three (3) reduced copies of a Sketch Plan drawing, drawn in accordance with Section IV., B. and C. of the Fremont County Subdivision Regulations shall accompany this submittal.
36. A submittal fee of \$ is attached. Check number Cash
All questions must be answered and all attachments must be included in this submittal packet or the submittal will not be accepted for review or placement on the Fremont County Planning Commission agenda.
By signing this Application, the Applicant, or the agent/representative acting with due authorization on behalf of the Applicant, hereby certifies that all information contained in the application and any attachments to the Application, is true and correct to the best of Applicant's knowledge and belief.
Applicant understands that any required private or public improvements imposed as a contingency for approval of the application may be required as a part of the approval process.

Fremont County hereby advises Applicant that if any material information contained herein is determined to be misleading, inaccurate or false, the Board of Commissioners may take any and all reasonable and appropriate steps to declare actions of the Board regarding the Application to be null and void.

Signing this Application is a declaration by the Applicant to conform to all plans, drawings, and commitments submitted with or contained within this Application, provided that the same is in conformance with the Fremont County Zoning Resolution.

Applicant Printed Name	Signature	Date
Ty Seufer	J///	02/13/202
Owner Printed Name	Signature	Date



Christopher J. Sanchez Jeffrey A. Clark Daniel O. Niemela Jonathan D. George Kristina L. Wynne Austin P. Malotte Michael A. Sayler Charles E. Stanzione

June 28, 2024

AJET Ventures, LLC c/o Ty Seufer 41746 US Hwy 50 Canon City, CO 81212

RE: Royal Gorge Ranch and Resort Subdivision Water Resources Report

Dear Ty:

This letter report provides the Water Resources Report for Individual Water Systems for the Royal Gorge Ranch and Resort Subdivision ("Royal Gorge R&R") in accordance with the Subdivision Regulations of Fremont County, Colorado §VI.F, §§29-20-303 and 304 C.R.S., and §30-28-133(3)(d) C.R.S.

To prepare this letter report we have reviewed the development plans for Royal Gorge R&R, evaluated water demands, reviewed local hydrogeologic conditions, evaluated well test data, and reviewed Upper Arkansas Water Conservancy District's ("UAWCD") water rights supplies available for the project.

Documents referred to in this report are available at the following ftp site:

ftp.bbawater.com

username: RoyalGorgeRR password: Fremont

1. Project Overview

Royal Gorge R&R is located west of Cañon City. Royal Gorge R&R consists of approximately 810 acres, 733.8 acres of which will be used to develop up to 137 4.5 to 6-acre eco-villa lots, shown in **Figure 1** and **Attachment A**. Each eco-villa is estimated to be 600 to 1,200 square-feet with up to 2 bedrooms and 1 bathroom. Each lot can be served by an individual water well. Well water use at each eco-villa will be limited to in-house and minor incidental outdoor water uses. Water demands for the Royal Gorge R&R are estimated based on full-time occupancy; however, the eco-villas are marketed and expected to be occupied as vacation homes.

Individual water supply wells will be augmented pursuant to the UAWCD's "umbrella augmentation plan" approved by the decree entered in Case No. 18CW3076, Water Division 2, (the "18CW3076 Decree") following the procedures to add structures outlined in that decree.

2. Water Demands Analysis

Water demands for the Royal Gorge R&R were estimated considering Royal Gorge R&R's requirements for water efficient development. Pursuant to the proposed Declaration and anticipated Rules and Regulations for Royal Gorge R&R, each eco-villa must be equipped with low flow fixtures and appliances and outdoor well water use will be metered and strictly limited as described herein.

Per-lot water demand is estimated at 0.205 acre-foot per year (AF/yr) based upon 175 gallons per day (gpd) (0.196 AF/yr) indoor use and an additional 244 gallons per month (0.009 AF/yr) of minor incidental outdoor use. While 175 gpd indoor use water demand is lower than typical historical per-residence water demand estimates, it is supported by a fixture analysis, actual water use data from a similar community, and water demand analyses by Colorado municipal water providers, summarized below.

2.1. Fixture Analysis

A fixture analysis was developed to estimate future indoor water demands for individual residences at Royal Gorge R&R after taking into account water conservation measures that will be implemented. Each eco-villa will be equipped with U.S. Environmental Protection Agency WaterSense certified fixtures and EnergyStar certified appliances.

For the purposes of determining the maximum potential water demand at Royal Gorge R&R, the fixture analysis utilized conservatively high values. For example, a WaterSense certified toilet utilizes 1.28 gallons per flush; however, the fixture analysis utilized 1.6 gallons per flush.

In addition to conservative fixture water use, it was also assumed that each unit would have 2.5 residents year-round. Year-round occupancy is conservative given that Royal Gorge R&R units are marketed and expected to be primarily occupied as vacation homes. Additionally, 2.5 people per unit is conservatively high given that the 2016-2022 Census data reports an average of 2.3 persons per household in Fremont County and the smaller square footage of the proposed eco-villas will result in a lesser number of persons per household.

Based on the conservative assumptions described above, the estimated indoor water usage is 0.15 AF/yr/unit as shown in **Table 1**.

2.2. Forest Glen water demands

The decree entered in Case No. 16CW3127, Water Division 1, on January 2, 2019 (the "16CW3127 Decree") approved a plan for augmentation for the Forest Glen Sports Association ("Forest Glen"). The Forest Glen service area is comprised of 93 acres with 69 lots. Similar to Royal Gorge R&R, Forest Glen water use is primarily indoor. (16CW3127 Decree, ¶6 at 2).

The engineering analysis supporting the water court application included a letter dated August 19, 2016 from BBA Water Consultants, Inc. with a detailed analysis of water use across Forest Glen from 2000 to 2015, which showed an average water use of 59 gpd per residence and a maximum monthly water use of 74 gpd per residence. A conservatively high water demand of 106 gpd per residence was adopted for the 16CW3127 Decree. (16CW3127 Decree, ¶10 at 3).

Both Denver Water and the Headwater Authority of the South Platte stipulated to the 106 gpd per residence water use rate that was used to determine replacement obligation for the plan for augmentation, equal to 0.82 AF/yr (106 gpd per residence x 365 days x 69 lots x 10% consumption). (16CW3127 Decree, ¶11 at 3).

The 106 gpd per residence water use rate included in the 16CW3127 Decree would result in a demand of 0.12 AF/yr per residence as shown in **Table 2**.

2.3. 2016 Boulder Water Efficiency Plan

The 2016 Boulder Water Efficiency Plan reports a residential indoor use rate of 48 gallons per capita per day (gpcd) from 2012 through 2015. Indoor use specific to single family homes is 61 gpcd and multi-family indoor use is 38 gpcd. (2016 Boulder Water Efficiency Plan, Table 5-2 at 34).

Boulder's Efficiency Plan projects full conversion to water efficient fixtures by 2050 at which time, Boulder projects an indoor water use rate of 39 gpcd. (2016 Boulder Water Efficiency Plan at 35).

Taking the highest reported indoor water use rate (61 gpcd) applied to 2.5 persons per residence year-round at the Royal Gorge R&R results in 153 gpd per residence demand and an annual water demand of 0.17 AF/yr, as shown in **Table 2**.

2.4. 2017 Denver Water Efficiency Plan

The 2017 Denver Water Efficiency Plan reports a single family residential indoor use rate of 50 gpcd. (2017 Denver Water Efficiency Plan at 12). Assuming 2.5 persons per residence year-round at the Royal Gorge R&R, this rate results in 125 gpd per residence demand and an annual water demand of 0.14 AF/yr as shown in **Table 2**.

2.5. 2021 Pueblo Water Efficiency Plan

The 2021 Pueblo Water Efficiency Plan reports a residential indoor use rate of 54.7 gpcd for 2015-2019. (2019 Pueblo Water Efficiency Plan, § 2.5.4 at 21). Assuming 2.5 persons per residence year-round at the Royal Gorge R&R, this rate results 137 gpd per residence demand and an annual water demand of 0.15 AF/yr as shown in **Table 2**.

3. Total Water Demands and Net Aquifer Depletions

Based on the above analysis and research of decreed and documented water use in Colorado, 0.196 AF/yr/residence is a conservatively high indoor use water demand for Royal Gorge R&R. While outdoor water use will be discouraged at the Royal Gorge R&R, accommodation is made for minor incidental outdoor water use such as bicycle and

window washing at 244 gallons per month (0.009 AF/yr) per eco-villa. Collectively, total water use is estimated at 183 gpd as shown in **Table 3**, Column [9].

Across the up to 137 planned eco-villas, 0.196 AF/yr indoor use and 0.009 AF/yr outdoor use results in 28.08 AF/yr total water demand as shown in **Table 3**, Column [6].

Net aquifer and stream depletion (a.k.a. "consumptive use" or "augmentation requirement") is the difference between well pumping to meet water demand and return flows back to the aquifer from domestic water use that partially offsets well pumping.

Net aquifer depletion is based upon UAWCD 18CW3076 Decree findings that: (i) 90% of in-house domestic water use will return to the aquifer and stream from wastewater treatment via non-evaporative individual sewage disposal systems, which are proposed for the Royal Gorge R&R and (ii) other "fully consumptive uses" such as the minor incidental outdoor water uses that do not have a return flow component. (18CW3076 Decree, ¶12.c.ii at 18 and ¶12.j at 21).

Proposed water demands on each lot will result in a total of 0.0286 AF/yr of net aquifer depletion and 3.92 AF/yr in total for up to 137 lots, summarized in **Table 3**, Columns [15] and [16].

4. Ground Water Supply for Individual Wells

Water supply for Royal Gorge R&R lots will be obtained from individual onsite wells not to exceed 15 gpm included in UAWCD's umbrella augmentation plan. As addressed in the subsections below: (i) Royal Gorge R&R is underlain primarily by crystalline bedrock; (ii) well yields are expected to be relatively low, but adequate for 183 gpd eco-villa water demand; (iii) the aquifer supply is sustainable because groundwater precipitation recharge greatly exceeds water demand and net depletion to the aquifer; (iv) "dry holes" encountered due to variable underlying geology can be remedied by drilling at a new location on the 4.5 to 6-acre lots; (v) pump testing of two Royal Gorge R&R wells confirms water supply adequacy; and (vi) water quality.

4.1. Geology

The Royal Gorge R&R is underlain by Jurassic and Precambrian-age bedrock as shown in **Figure 2**. Light green (Jmr) represents Jurassic age Morrison formation sedimentary siltstone and claystone and thin beds of sandstone, limestone, and conglomerate and Jurassic age Ralston Creek formation sedimentary conglomerate, siltstone, gypsum, sandstone, and limestone. Pink (Xgd) represents Precambrian crystalline medium to course grained granodiorite, with lesser amounts of quartz monzonite and quartz diorite. Purple (Xqd) represents Precambrian crystalline quartz diorite. Light pink (Xgn) represents Precambrian crystalline migmatitic gneiss.

4.2. Hydrogeology and aquifer sustainability

There is limited primary permeability in the geologic bedrock formations underlying the Royal Gorge R&R. Instead, groundwater flow occurs through naturally occurring factures and faults that are recharged through precipitation infiltration and overlying drainages.

Annual recharge greatly exceeds projected Royal Gorge R&R water demand and net aquifer depletion. Median precipitation at Canon City is approximately 12-inches per year. (USC00051294, Canon City Weather Station). At least 1-inch per year of precipitation infiltrates the bedrock aquifer. (Snow, 1972 at 23). Assuming approximately 8% precipitation infiltration to groundwater of 1-inch per year over the 810-ac Royal Gorge R&R, annual recharge is approximately 67.5 AF/yr, or approximately 2.4 times the 28.08 AF/yr projected annual water demand and 17-times projected 3.92 AF/yr annual net aquifer depletion.

Since aquifer recharge greatly exceeds both projected water demand and net aquifer depletion, groundwater withdrawal from the Royal Gorge R&R will not deplete aquifer storage nor affect neighboring wells.

4.3. Well depth, depth to water, and yield

Per-lot water demand is conservatively estimated at 183 gpd, or 0.13 gpm, summarized in **Table 3**, Columns [7] and [9]. Accordingly, even very low yielding water wells can support Royal Gorge R&R water demands.

Groundwater wells in the vicinity of the Royal Gorge R&R are shown on **Figure 2** and summarized in **Table 4**. Median well depth is 160 feet and maximum well depth is 580 feet. Median depth to water is approximately 40 feet and maximum depth to water is 235 feet. Median well yield is 1.0 gallons per minute (gpm) based on well construction reports and 3.0 gpm based on pump installation and test reports. Wells constructed at the Royal Gorge R&R are expected to have depths and yields within the ranges presented in **Table 4**.

Well yields at the Royal Gorge R&R are expected to be relatively low but adequate for the eco-villa indoor water demands. 500 gallons of cistern storage is recommended for each lot to maximize aquifer production and meet peak day water demands.

Some well boreholes may not encounter productive fractures during drilling resulting in "dry holes," which is a risk in a crystalline bedrock geologic environment. Well permit no. 114084-A included in **Table 4** is an example of a "dry hole" that produces only 0.067 gpm (96 gallons per day). However, 4.5 to 6-acre lot size accommodates room for lot owners to drill at a new location if a dry hole is encountered.

4.4. Royal Gorge R&R well test

A well test was completed to evaluate adequacy of wells constructed at Royal Gorge R&R for eco-villa water demands. To perform the well test, well permit nos. 69725-A and 82123 were both pumped for three days to determine the repeatable daily yield in gallons per day.

Well permit nos. 69725-A and 82123 were selected because the wells are located near the center of the Royal Gorge R&R, identified in **Figure 2**, and are representative of the relatively low expected well yields. Well permit nos. 69725-A and 82123 are constructed to depths of 540 feet and 225 ft, respectively, and are located approximately 460 feet apart.

As shown in **Table 5**, the repeatable daily groundwater withdrawal was at least 400 gpd for well permit no. 69725-A and at least 500 gpd for well permit no. 82123, which is more than 2-times the estimated 183 gpd eco-villa water demand.

4.5. Well water quality

Numerous domestic wells are constructed in the bedrock aquifer that underlies the Royal Gorge R&R. Due to the fractured rock aquifer environment that provides limited natural filtration of groundwater, we recommend that lot owners have water quality tested upon well construction, which can be completed by the Colorado Department of Public Health and Environment or by a private laboratory for a minor fee. If needed, affordable whole house or under-sink filtration technologies can be installed to address any water quality concerns.

5. Upper Arkansas Water Conservancy District Water Umbrella Plan for Augmentation

The Royal Gorge R&R is within the UAWCD boundary. The 18CW3076 Decree approves an UAWCD plan for augmentation of individual water supply wells within the Royal Gorge R&R. New augmented structures, including the individual Royal Gorge R&R wells, can be added to the UAWCD plan for augmentation by the process prescribed in ¶18 of the 18CW3076 Decree.

Generally, that process includes: (i) application to UAWCD for augmentation service; (ii) UAWCD notice to add augmented structures to the Colorado Division of Water Resources Division 2 Engineer, certain parties, and newspaper publication; and (iii) determination by the Colorado Division of Water Resources Division 2 Engineer pursuant to a new well permit application. (18CW3076 Decree, ¶18 at 28-30).

5.1. <u>Augmented depletions</u>

The 18CW3076 Decree includes a presumptive augmentation requirement for in-house only uses with wastewater treatment via non-evaporative individual sewage disposal systems at 0.031 AF/yr per residence. (18CW3076 Decree, ¶12.c.ii at 18). That augmentation requirement is based upon 280 gpd per residence, which is 1.6-times the 175 gpd estimated per-residence in-house water demand for the Royal Gorge R&R eco-villas.

To provide additional conservatism and accommodate minor incidental outdoor use, UAWCD will provide an additional 0.009 AF/yr of augmentation water (244 gallons per month), with any such uses assumed to be fully consumptive. UAWCD will require sperate metering to verify outdoor use. (18CW3076 Decree, ¶12.j at 21) and such requirements will be enforced by the Association for the Royal Gorge R&R by the requirements set forth in the Declaration and in the Rules and Regulations for the community.

Collectively, UAWCD will provide 0.04 AF/yr augmentation water for each Royal Gorge R&R eco-villa lot, which is the sum of 0.031 AF/yr for in-house use and 0.009 AF/yr for minor incidental outdoor use. Actual per-lot stream depletion is estimated at 0.0286 AF/yr,

¹ The Royal Gorge R&R is located within "Area I" where UAWCD can provide augmentation water year-round. (18CW3076 Decree, ¶9.b.i at 7).

summarized in **Table 3**, Column [15]. Accordingly, Royal Gorge R&R is providing 1.4-times the necessary augmentation water to ensure that senior water rights are protected.

5.2. Location and timing of stream depletions to be augmented

Each of the Royal Gorge R&R wells will be used for residential use, withdraw far less than 3 AF/yr, and almost all of the Royal Gorge R&R lots are located more than 2,000 feet from the Arkansas River. By these criteria, the stream depletions are defined as "steady-state" and occur at a constant rate year-round in compliance with the 18CW3076 Decree.²

Portions of eight lots in the southwest corner of the Royal Gorge R&R are located within 2,000 feet of the Arkansas River where the 18CW3076 Decree requires an AWAS Glover Method analysis to determine the amount and timing of stream depletions, shown in **Figure 3**. Those eight lots are located in Transmissivity zone T7 (identified in Table 3 at 22 of the 18CW3076 Decree) and will be constructed in Crystalline Bedrock (identified in Table 5 at 23 of the 18CW3076 Decree). Aquifer characteristics prescribed by the 18CW3076 Decree include a transmissivity of 1,090 gpd/ft and a storativity of 1.03 x 10⁻³.

As a practical matter, all of the wells constructed on the Royal Gorge R&R will deplete the Arkansas River at a constant rate because water demands from in-house and minor incidental outdoor use will occur at a constant rate year-round. To the extent that any Royal Gorge R&R wells are constructed within 2,000 feet of the Arkansas River, the 18CW3076 Decree prescribes a routine analysis method to determine the amount and timing of stream depletions when those wells are included in UAWCD's plan for augmentation.

5.3. UAWCD augmentation water rights

UAWCD's water rights supplies approved for augmentation use pursuant to the 18CW3076 Decree include Twin Lakes Reservoir transmountain water rights, water rights stored in the North Fork Reservoir, water rights stored in O'Haver Reservoir, water rights leased from the Board of Water Works of Pueblo, Colorado, the HBL water rights, Friend Ranch water rights, and other water rights decreed for augmentation use. (18CW3076 Decree, ¶10 at 8-17).

5.4. Augmentation supply adequacy and non-injury

The Division 2 Water Court has already found that the UAWCD augmentation water rights supplies are sufficient for the plan for augmentation approved by the 18CW3016 Decree:

...the [UAWCD] plan for augmentation...will not injuriously affect the owners of or persons entitled to use water under a vested water right or a decreed conditional water right. (18CW3076 Decree, ¶43.b at 45-46).

The description of the Augmentation Water and the methodology for determining out of priority depletions provided above has allowed the Court to consider the depletions from UAWCD's proposed uses of water, in quantity and in time, the amount and timing of augmentation water that would be provided by UAWCD, and

² Most of Royal Gorge R&R is located in the "Steady State Zone" identified in Exhibit E to the 18CW3076 Decree. (18CW3076 Decree, ¶13.b at 21).

the terms necessary to prevent injury to any owner of or persons entitled to use water under a vested water right or a decreed conditional water right, in accordance with C.R.S. § 37-92-305(8)(a). (18CW3076 Decree, ¶43.c at 46).

5.5. <u>UAWCD commitment</u>

Upon application and payment of applicable fees, UAWCD will provide augmentation services pursuant to the 18CW3076 Decree, evidenced by the email from UAWCD General Manager, Terry Scanga, included as **Attachment B**. The initial one-time costs for the required augmentation certificate from the UAWCD will be paid by the Declarant for the community, which includes an application fee, 1st year storage and maintenance fee, and an augmentation fee. Annual costs from that point forward payable to the UAWCD shall be assessed against the individual lots under § 38-33.3-315, C.R.S.

6. Colorado Division of Water Resources Form No. GWS-76

Based upon the information included in **Table 3**, **Attachment C** includes Division of Water Resources Form No. GWS-76 "Water Supply Information Summary" for up to 137 lots.

7. Summary of Information Required by the Subdivision Regulations of Fremont County, Colorado §VI.F

1. The expected water requirements of the subdivision now and at full development, including various water uses to be permitted. See also §§ 29-20-304(1)(a) and (d), C.R.S.

See §3, above, and Table 3.

2. The estimated consumptive use of water by the subdivision. See also § 29-20-304(1)(a), C.R.S.

See §3, above, and **Table 3**.

3. The source of water for the subdivision and the dependability of this source. See also §§ 29-20-304(1)(b), (c) and (d), C.R.S.,

See §4, above.

4. Evidence of ownership or right of acquisition of, or use of existing and proposed water rights. See also § 30-28-133 (3)(d)(I), C.R.S.

See §5, above.

5. Historic use and estimated yield of claimed water rights. See also § 30-28-133 (3)(d)(II), C.R.S.

The UAWCD water rights used for augmentation are approved by the Division 2 Water Court for augmentation use. See §5.3, above.

6. Amenability of existing rights to a change in use. See also § 30-28-133 (3)(d)(III),

C.R.S.

The UAWCD water rights used for augmentation are approved by the Division 2 Water Court for augmentation use. See §5.3, above.

7. The dependability of claimed water rights for use as a subdivision water supply. See also § 30-28-133(3(d), C.R.S.

The Division 2 Water Court has confirmed that adequate augmentation water rights supplies are available for the plan for augmentation approved by the 18CW3076 Decree. See §5.4, above.

8. An evaluation of the potential for material injury to existing water rights as a result of the subdivision including the cumulative effect of on-lot exempt domestic wells. See also § 29-20-304(1)(f), C.R.S.

The Division 2 Water Court has confirmed that plan for augmentation approved by the 18CW3076 Decree will not cause injury. See §5.4, above.

9. A plan augmentation or plan of exchange whereby any material injury to existing water rights is prevented. See also § 29-20-304(1)(f), C.R.S.

The Division 2 Water Court has confirmed that plan for augmentation approved by the 18CW3076 Decree will not cause injury. See §5.4, above.

10. Evidence that public or private water owners can and will supply water to the proposed subdivision stating the amount of water available for use within the subdivision and the feasibility of extending service to that area. See also § 30-28-133 (3)(d)(IV), C.R.S.

See §5.5, above.

11. Evidence concerning the potability of the proposed water supply for the subdivision. See also § 30-28-133 (3)(d)(V), C.R.S.

See §4.5, above.

12. A completed "WATER SUPPLY INFORMATION SUMMARY" form, as provided by the Office of the State Engineer of the State of Colorado. See also § 29-20-305(1)(b), C.R.S.

See Attachment C.

- 13. Additional Fremont County Requirements under § 29-20-304(1)(f), C.R.S.:
 - a. The probability of success of wells or on-site supply systems through the proposed subdivision.

Well yields are expected to be low but adequate for the low Royal Gorge R&R water demand of 183 gpd per eco-villa lot. If dry holes are

encountered, lot sizes are large enough to accommodate additional drilling. *See* §4.3, above.

b. The expected long-term yield of such wells or systems.

The aquifer groundwater supply to wells is sustainable because natural precipitation recharge is 2.4 times annual water demand and 17 times annual aquifer depletion from projected Royal Gorge R&R water use. See §4.2, above.

c. The expected depth to usable water.

Median depth to water is expected to be approximately 40 feet and maximum depth to water is expected to be approximately 235 feet. See §4.3, above.

d. The expected quality of the anticipated water.

Individual lot owners should submit water quality samples for a domestic drinking water suite following well construction. Affordable individual treatment systems are available if any issues are encountered. *See* §4.5, above.

e. Any expected significant problems of long-term supply, pollution or long-term maintenance of such wells or systems.

No significant long-term water supply problems, pollution, or maintenance issues are expected for the Royal Gorge R&R wells beyond those identified in this report.

If you, Freemont County or the Colorado Division of Water Resources have any questions, they are welcome to contact us.

Very truly yours,

BBA Water Consultants, Inc.

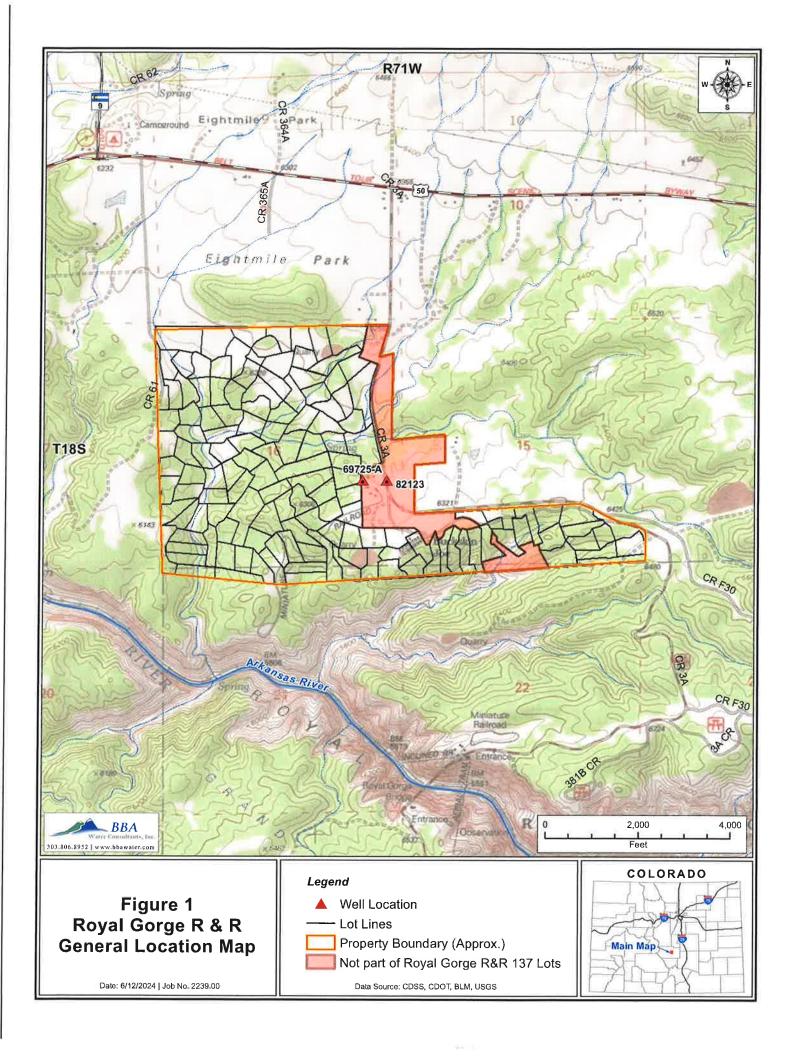
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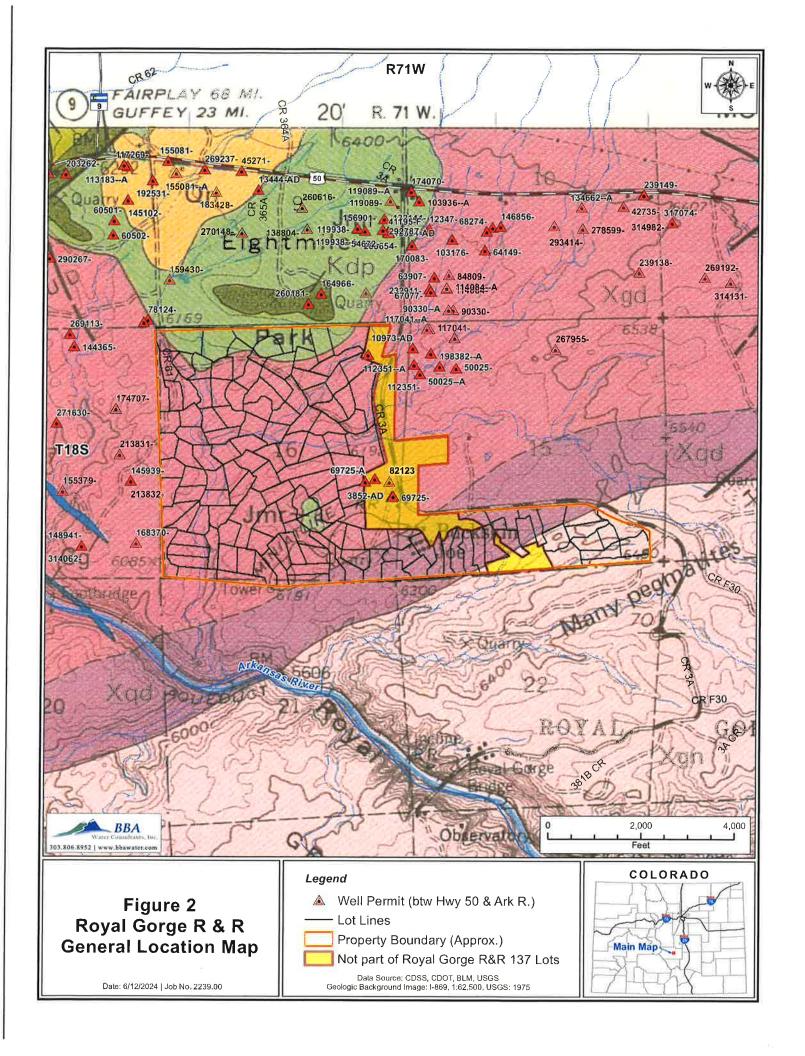
Daniel O. Niemela, C.P.G.

Principal

DON/LTL/jeb Enclosures 2239.00 Lauren Tiedemann Loob, P.E. Water Resources Engineer

awar Liedeman Look





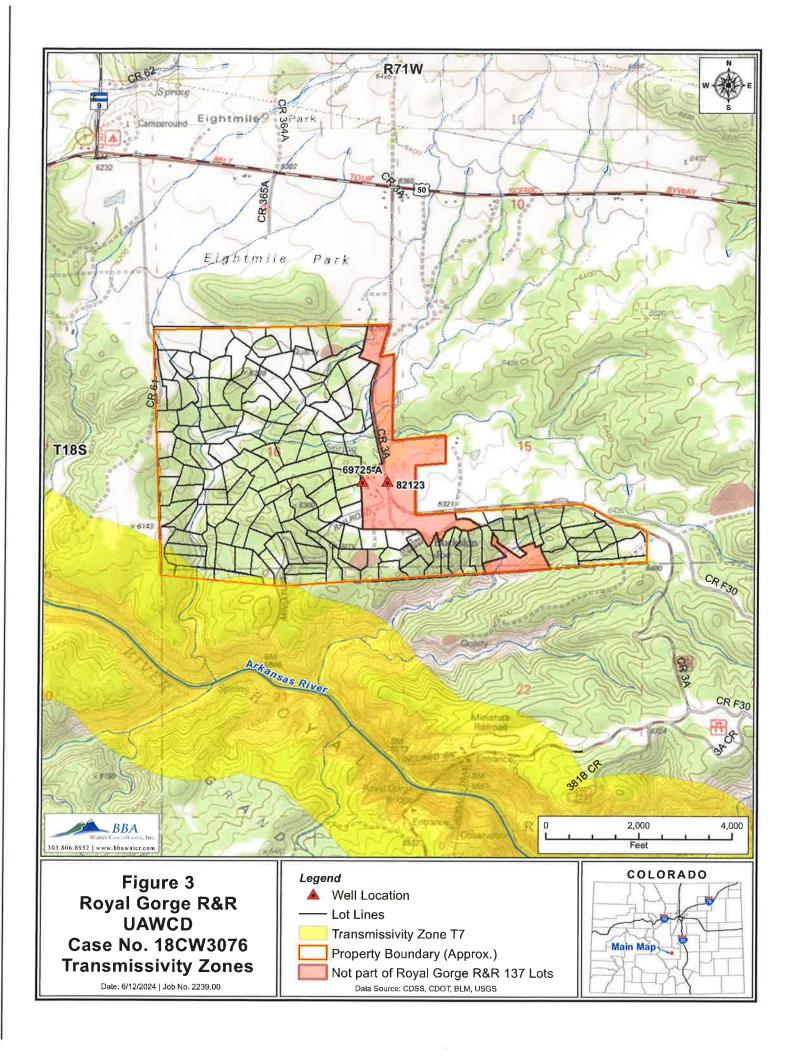


Table 1
Royal Gorge Ranch and Resort
Fixture Water Demand Analysis

	Indoor Water Demand					
Fixture / Appliance	Gallons per Minute	Minutes per Day	Gallons per Day			
Kitchen Faucet	2.2	10	22			
Bathroom Faucet	2.2	10	22			
Shower Faucet	2.5	20	50			
	Gallon Per Flush or	Flush or Load Per				
Fixture / Appliance	Load	Day	Gallons per Day 20.8			
Toilet	1.6	13				
Clothes Washer (5 loads/wk)	19	0.71	13.49			
Dish Washer	4.5	1	4.5			
	Gallons per Person					
Fluid Intake	per Day	Persons	Gallons per Day			
Potable Water Fluid Intake	11	2.5	2.5			
Estimate	135.29					
Es	49,381					
Es	timated Water per Res	sidence (AF/yr/unit):	0.15			

Notes:

- Assumes low flow rate, WaterSense certified fixtures and Energy Star certified appliances. Values increased from certification standards to be conservative.
- Assumes 2.5 persons per household, increased from 2016-2022 reported United States Census Bureau Fremont County persons per household of 2.3.

Table 2
Royal Gorge Ranch and Resort
Comparison of Water Use Rates

	Fixture	Case No.	2016 City of	2017 Denver	
	Analysis	16CW3127,	Boulder Water	Water Efficiency	2021 Pueblo Water
Parameter	(Table 1)	Division 1	Efficiency Plan	Plan	Water Efficiency Plan
Reported Indoor Water			<i>C</i> 1	50	547
Use (gal/person/day)	-	22	61	50	54.7
	Equivalent Royal Gorge Ranch and Resort Water Demand at 2.5 Persons per U				
Estimated Indoor Water	135.3	106.0	152.5	125.0	127.0
Use (gal/day/unit)	155.5	106.0	132.3	125.0	136.8
Estimated Indoor Water	49,381	29 600	55 ((2)	45.005	40.014
Use (gal/yr/unit)	49,361	38,690	55,663	45,625	49,914
Estimated Indoor Water	0.15	0.12	0.17	0.14	0.15
Use (AF/yr/unit)	0.13	0.12	0.17	0.14	0.15

Notes:

- 16CW3127 water use based on decreed single family home indoor water use.
- City of Boulder water use equal to reported single family home indoor water use rate for 2012-2015.
- Denver Water water use equal to reported single family residential indoor use.
- Pueblo Water water use equal to reported average residential indoor use.

Table 3 Royal Gorge Ranch and Resort Demand, Net Aquifer Depletion, and Consumptive Use

f										
	¥0		·		ater Demands (137 units)	<i>γ</i>		199	
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
1			Incidental O	utdoor Water						
	Indoor Water	Demand (AF)	Demar	nd (AF)	Total Water	Demand (AF)	Total Water Demand (gpm)		Total Demand (gpd)	
Month	Per Lot	Total	Per Lot	Total	Per Lot	Total	Per Lot	Total	Per Lot	Total
Jan	0.0166	2.28	0.0007	0.10	0.0174	2.38	0.127	17.40	183	25,053
Feb	0.0150	2.06	0.0007	0.10	0.0158	2.16	0.128	17.48	184	25,169
Mar	0.0166	2.28	0.0007	0.10	0.0174	2.38	0.127	17.40	183	25,053
Apr	0.0161	2.21	0.0007	0.10	0.0169	2.31	0.127	17.42	183	25,089
May	0.0166	2.28	0.0007	0.10	0.0174	2.38	0.127	17.40	183	25,053
Jun	0.0161	2.21	0.0007	0.10	0.0169	2.31	0.127	17.42	183	25,089
Jul	0.0166	2.28	0.0007	0.10	0.0174	2.38	0.127	17.40	183	25,053
Aug	0.0166	2.28	0.0007	0.10	0.0174	2.38	0.127	17.40	183	25,053
Sep	0.0161	2.21	0.0007	0.10	0.0169	2.31	0.127	17.42	183	25,089
Oct	0.0166	2.28	0.0007	0.10	0.0174	2.38	0.127	17.40	183	25,053
Nov	0.0161	2.21	0.0007	0.10	0.0169	2.31	0.127	17.42	183	25,089
Dec	0.0166	2.28	0.0007	0.10	0.0174	2.38	0.127	17.40	183	25,053
Annual	0.1960	26.85	0.0090	1.23	0.2050	28.08	0.127	17.40	183	25,054
			Ne	t Aquifer Depl	etion and Cons	umptive Use (13	37 units)			
	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]
			Incidenta	1 Outdoor						
	Indoor Consum	nptive Use (AF)	Consumptiv		Total Consumptive Use (AF)		Total Consumptive Use (gpm)		Total Consumr	ntive Use (end)
Month	Per Lot	Total	Per Lot	Total	Per Lot	Total	Per Lot	Total	Per Lot	Total
Jan	0.0017	0.23	0.0007	0.10	0.0024	0.33	0,018	2,41	25	3,476
Feb	0.0015	0.21	0.0007	0.10	0.0023	0.31	0.018	2.49	26	3,591
Mar	0.0017	0.23	0.0007	0.10	0.0024	0,33	0.018	2.41	25	3,476
Apr	0.0016	0.22	0.0007	0.10	0.0024	0.32	0.018	2.44	26	3,512
May	0.0017	0.23	0.0007	0.10	0.0024	0.33	0.018	2,41	25	3,476
Jun	0.0016	0.22	0.0007	0.10	0.0024	0.32	0.018	2,44	26	3,512
Jul	0.0017	0.23	0.0007	0.10	0.0024	0.33	0.018	2.41	25	3,476
Aug	0.0017	0.23	0.0007	0.10	0.0024	0.33	0.018	2.41	25	3,476
Sep	0.0016	0.22	0.0007	0.10	0.0024	0.32	0.018	2.44	26	3,512
Oct	0.0017	0.23	0.0007	0.10	0.0024	0.33	0.018	2.41	25	3,476
Nov	0.0016	0.22	0.0007	0.10	0.0024	0.32	0.018	2.44	26	3,512
Dec	0.0017	0.23	0.0007	0.10	0.0024	0.33	0.018	2.41	25	3,476
Annual	0.0196	2.69	0.0090	1.23	0.0286	3.92	0.018	2.43	26	3,494

Notes

Annual amounts are calculated and are not sums of monthly values to avoid rounding errors.

- [1] Equal to 175 gallons per day per lot.
- [2] Equal to [1] * 137 dwellings.
- [3] Equal to 244 gallons per month per lot.
- [4] Equal to [3] * 137 dwellings.
- [5] Equal to sum of [1] and [3].
- [6] Equal to sum of [2] and [4].
- [7] Equal to [5] converted to gallons per minute.
- [8] Equal to [6] converted to gallons per minute.
- [9] Equal to [7] times 1440 minutes/day.
- [10] Equal to [8] times 1440 minutes/day.
- [11] Equal to [1] * 10% for non-evaporative onsite wastewater treatment system.
- [12] Equal to [2] * 10% for non-evaporative onsite was tewater treatment system.
- [13] Equal to [3] * 100% for incidental outdoor use (e.g. window and bike washing).
- [14] Equal to [4] * 100% for incidental outdoor use (e.g. window and bike washing).
- [15] Equal to sum of [11] and [13].
- [16] Equal to sum of [12] and [14].
- [17] Equal to [15] converted to gallons per minute.
- [18] Equal to [16] converted to gallons per minute.
- [19] Equal to [17] times 1440 minutes/day.
- [20] Equal to [18] times 1440 minutes/day.



Table 4
Royal Gorge Ranch and Resort
Summary of Nearby Wells

	Permit	Well depth	WCTR	PITR	WCTR	PITR Yield	Top and bottom	Total screen	
	Number	(ft)	SWL (ft)	SWL (ft)	Yield (gpm)	(gpm)	screen depth (ft)	(ft)	Status
	12347	56	40		10		30-56	26	Well constructed
	42735	160	35	35	0.17	0.17	100-160	60	Well constructed
	50025	41	30	30	3	3	21-41	20	Well constructed
	63907	75	40		0.5		35-75	40	Well constructed
100	64149	100	30		1		20-40, 60-100	60	Well constructed
	67077	100	50	60	0.75	10	60-100	40	Well constructed
	68274	120	35		0.5		40-60, 80-120	60	Well constructed
	69725	148	50		1		48-68, 88-148	80	Well constructed
	69725-A	540			0.05		460-540	80	Well constructed
	78124	200	42		0.75		38-48, 175-200	35	Well constructed
	82123	225	50		2		65-85, 100-225	45	Well constructed
	84809	170	80	28	0.5	4.36			Well constructed
	90330	140	35	35	1.5	1.5	80-140	60	Well abandoned
	103176	80	30	30	4	4	50-80	30	Well constructed
	144365	120	70	7 1	30	15	60-120	60	Well constructed
	155379	158	25		3-4		20-40, 60-80, 120-158	78	Well constructed
	168370	300	120	120	2	2	255-295	40	Well constructed
	170083	100	30		1				Well constructed
	174707	200	41	41	1	1			Well constructed
	213831	550	200	180	4	5	470-490, 510-530	40	Well constructed
	239138	300	200	20	1	15	220-300	80	Well constructed
	260181	580	230	235	20	10	500-580	80	Well constructed
	269113	360	110	110	3	3	280-360	80	Well constructed
	269192	500	50	40	0.5	8	420-500	80	Well constructed
	290267	400	45		1		320-400	80	Well constructed
	293414	300							Well constructed
	317074	80	13						Well constructed
	112351-A	42	12		3		22-42	20	Well constructed
	114084-A	250	101	105	Dry	0.067			Well constructed
	117041-A	160	30		1.5		60-160	100	Well constructed
	198382-A	200	80		1.5		80-100, 160-200	60	Well constructed
	278599 ²	300							Permit canceled
	314982^{-3}	80	13						Permit canceled
	50025-A	193	22	22	1.25	1.25			Well constructed
	90330-A	140	20	20	0.5	0.5	60-140	80	Well constructed
	Average	203.1	61.2	69.4	3,3	4.9	00 110	- 00	,, on bondinoted
	Median	160.0	40.5	37.5	1.0	3.0			
	Max	580	230	235	30	15			
	Min	20	12	20	0.05	0.067			

- 1. Potential typo on the pump installation report.
- 2. Permit canceled and new permit is 293414.
- 3. Changes/expands place of use of permit no. 317074.

SWL = static water level gpm = gallons per minute

WCTR = well construction and testing report

PITR = pump installation and testing report

ft = feet

Table 5 Royal Gorge Ranch and Resort Individual Well Test

	Well	Permit No. 69725-A		Well Permit No. 82123			
0	Date and Time	Meter Reading (gal)	Rate (gpd)	Date and Time	Meter Reading (gal)	Rate (gpd)	
	3/30/2023 12:00	67890		3/30/2023 12:00	88233		
	4/3/2023 10:41	70255	599	4/3/2023 10:41	90605	601	
	4/4/2023 10:41	70717	462	4/4/2023 10:41	91172	567	
	4/5/2023 10:41	71161	444	4/5/2023 10:41	91728	556	

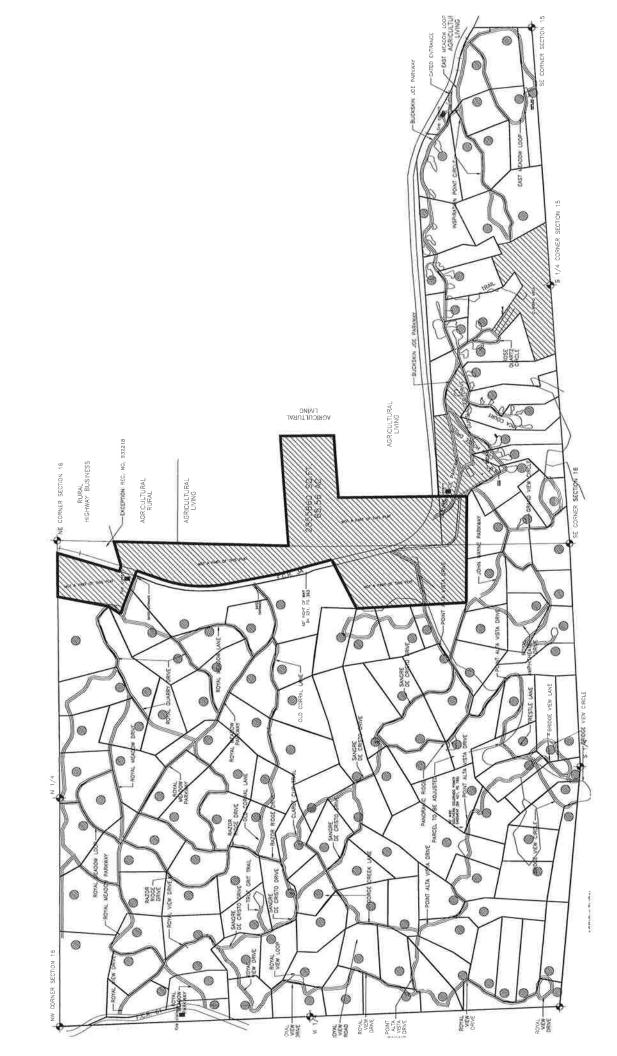
Notes:

Well test performed by Ricks Pump Service, Inc. Wells were pumped to waste using a pumpsaver. Each well would cycle on and off, each time drawing the pumping water level down to the pump intake.





ATTACHMENT A





ATTACHMENT B

Joy Barnett

From: Ralph (Terry) Scanga <manager@uawcd.com>

Sent: Friday, May 31, 2024 1:09 PM

To: Dan Niemela Cc: 'Ty Seufer'

Subject: RE: Royal Gorge R&R

Dan and Ty;

The District is able and willing to serve the Royal Gorge R&R with augmentation of wells pursuant to our established decrees.

Ralph "Terry" Scanga General Manager Upper Arkansas Water Conservancy District 339 East Hwy. 50 P.O. Box 1090 Salida, CO 81201 Phone: 719-539-5425

Phone: 719-539-5425 Fax: 719-539-7579

Email: manager@uawcd.com
Web Site: www.uawcd.com

"[Science] can never dictate what ought to be and what ends people should aim at. It is a fact that men disagree in their value judgements."

"It is insolent to arrogate to oneself the right to overrule the plans of other people and to force them to submit to the plan of the planner."

Ludwig Von Mises -1947 Essay, "Planned Chaos"

This message is intended for the above referenced person(s) only, and contains privileged and/or confidential information. If you receive this message in error, please contact the sender and delete the message

From: Dan Niemela <dniemela@bbawater.com>

Sent: Thursday, May 30, 2024 5:56 PM

To: Terry Scanga (manager@uawcd.com) <manager@uawcd.com>

Cc: Ty Seufer <tyseufer@gmail.com>

Subject: Royal Gorge R&R

Terry,

Thank you for meeting with me today regarding the Royal Gorge Ranch and Resort ("Royal Gorge R&R") project located in Fremont County and depicted in Figure 3, attached.

As discussed:

- The Royal Gorge R&R is located within "Area I" of Upper Arkansas Water Conservancy District's 18CW3076 decree, where year-round augmentation water can be provided.
- 2. Up to 138 lots with one residence per lot will each be served by an individual well. Well yields are expected to be low due to underlying fractured crystalline bedrock geology. Proposed uses include:
 - a. In-house use (0.031 AF/lot augmentation based on Upper's standard assumption of 280 gpd use; 18CW3076 Decree, ¶12.c.ii at 18).

- b. Misc. Fully Consumptive Uses (0.009 AF/lot augmentation based on 244 gallons per month separately metered outdoor water use; 18CW3076 Decree, ¶12.j at 21).
- c. Total: 0.04 AF/lot augmentation requirement.

Fremont County and the DWR will need confirmation that Upper Arkansas Water Conservancy District can augment the proposed wells following application and approval consistent with Upper's policies and the 18CW3076 Decree. Can you please reply to this email with confirmation?

You are welcome to contact me if you have any questions.

Thank you, Dan

Daniel O. Niemela, C.P.G.

Principal dniemela@bbawater.com

BBA Water Consultants, Inc.

333 W. Hampden Ave., Suite 1050 Englewood, Colorado 80110 Office: 303.806.8952

Direct: 720.245.2656 www.bbawater.com



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ATTACHMENT C

FORM NO. GWS-76 05/2011

WATER SUPPLY INFORMATION SUMMARY

STATE OF COLORADO, OFFICE OF THE STATE ENGINEER
1313 Sherman St., Room 821, Denver, CO 80203

) 866-3581 <u>dwr.colorado.gov</u>	•				
	Section 30-28-133,(d), C.R.S. requires that the applicant submit to the County, "Adequate evidence that a water supply that is sufficient in terms of quantity, quality, and dependability will be available to ensure an adequate supply of water."								
1. NAME OF DEVELOPMENT AS PROPOSED: AJET Ventures LLC									
2. LAND USE A	ACTION: Ma	ajor Subdivis	ion						
3. NAME OF EX	XISTING PARCEL			В					
SUBDIVISIO	***	ge Ranch and		, FILING (UNIT)	BLOCK	, LOT			
	EAGE: 733_828		R OF LOTS PROP		ENCLOSED?	YES or NO			
				evidence or documentation.		H-41			
l .			ie 1, 1972? TYES	or					
_	scribe the previous		i land action since J	une 1, 1972? 165 or NO					
			eating the project an	ea and tie to a section corner.					
li .)(\-	N or □ S, Range □ □ E o	r∏W See	Attachment A			
			New Mexico □U		Sec 1	Attachinent A			
Optional GP	S Locatio n: GPS U	Jnit must use the	e following settings:	Format must be UTM, Units	Easting:				
must be met	e rs , Datum must be	NAD83, Unit m	nust be set to true N	I, Zone 12 or Zone 13	Northing:				
8. PLAT - Loca	tion of all wells on p	roperty must be	plotted and permit	numbers provided.	See Att	tachment A			
			ed hand drawn sket	ch: YES or NO	500 710	definition 11			
9. ESTIMATED	WATER REQUIRE	MENTS	Statement & Commence of Financian A. S	10. WATER SUPPLY SOURCE					
	JSE	WATER RE	EQUIREMENTS	☐ EXISTING ☐ DEVELOPED	MNEW WELLS -				
	137	Gallons per Day 175 gal/d Acre-Feet per Year 0.196 AF/year	WELL SPRING	 PROPOSED AQUIFERS 	- (CHECK ONE)				
HOUSEHOLD US	= # 157 of units		0.130 A17 year	WELL PERMIT NUMBERS	ALLUVIAL	☐ UPPER ARAPAHOE			
COMMERCIAL US	E# <u>0</u> of S. F				UPPER DAWSON	☐ LOWER ARAPAHOE			
					☐ LOWER DAWSON	☐ LARAMIE FOX HILLS			
IRRIGATION # 0	of acres				☐ DENVER	□ DAKOTA			
		·			Ma other Crystall	ine Bedrock			
STOCK WATERIN	G#_0of head			☐ MUNICPAL					
OTHER: Minor		244 gal/m	0.009 AF/yr	☐ ASSOCIATION	WATER COURT D	ECREE CASE			
TOTAL			$\frac{28.08 \text{ AF/yr}}{28.08 \text{ AF/yr}}$	COMPANY	NUMBERS: 18CW3076, D	vivision 2			
1017.2				☐ DISTRICT NAME	propose 0.04				
				LETTER OF COMMITMENT FOR	augmentation				
				SERVICE YES or NO					
11. WAS AN ENGINEER'S WATER SUPPLY REPORT DEVELOPED? ▼ YES or □ NO IF YES, PLEASE FORWARD WITH THIS FORM. (This may be required before our review is completed.)									
12. TYPE OF SEWAGE DISPOSAL SYSTEM									
	TANK/LEACH FIEL			☐ CENTRAL SYSTEM	377 378				
DISTRICT NAME:									
☐ LAGOON	1			☐ VAULT					
☐ ENGINE	ERED SYSTEM (Att	ach a copy of engine	eering design.)	LOCATION SEWAGE HAUL	ED 10:				
		.,, 5	o o,	□ OTHER:					