



# MARY JANE RANCH SUBDIVISION

EL PASO COUNTY, COLORADO

WATER RESOURCES REPORT

NOVEMBER 12, 2024

Prepared by:

**Kimley»»Horn**

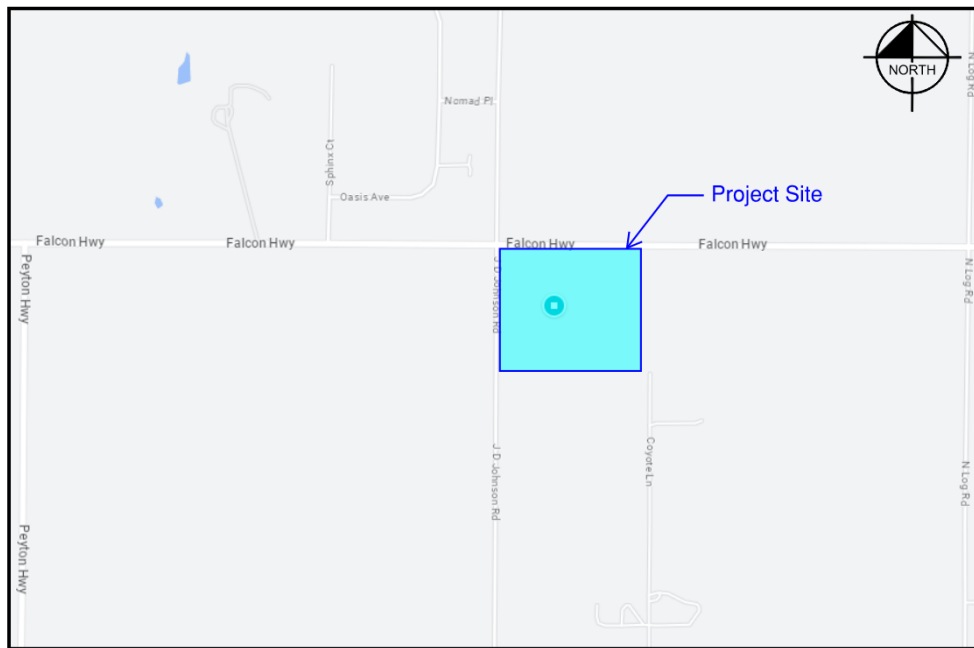
## TABLE OF CONTENTS

SUMMARY OF THE PROPOSED SUBDIVISION .....	3
SITE LOCATION.....	3
DESCRIPTION OF PROPERTY .....	3
INFORMATION REGARDING SUFFICIENT QUANTITY OF WATER .....	4
WATER SYSTEM LAYOUT AND DEMANDS.....	4
AVAILABLE QUANTITY AND DEPENDABILITY OF WATER SUPPLY .....	4
INFORMATION REGARDING SUFFICIENT WATER QUALITY .....	5
PUBLIC AND PRIVATE COMMERCIAL WATER PROVIDERS .....	5
APPENDIX A – MARY JANE RANCH SITE PLAN.....	6
APPENDIX B – MARY JANE RANCH WATER INFORMATION SUMMARY SHEET.....	7
APPENDIX C – MARY JANE RANCH FIRE PROTECTION REPORT.....	8
APPENDIX D –WATER RIGHTS INFORMATION .....	9
APPENDIX E –WATER QUALITY TEST RESULTS .....	10

## SUMMARY OF THE PROPOSED SUBDIVISION

### SITE LOCATION

This Water Resources Report has been prepared for Mary Jane Ranch (the “Project/Site”) located at the southeast corner of Falcon Highway and J D Johnson Road at 6425 J D Johnson Road, Peyton, CO. More specifically, the Site is located in the northwest ¼ of the northwest ¼ of Section 15, Township 13 South, Range 63 West of the 6th P.M., County of El Paso, State of Colorado. The property is bounded by J D Johnson Road to the west, Falcon Highway to the north, a ±40-acre single-family residence with gravel lot to the east, and privately owned ±9-acre single-family lots to the south. A vicinity map is provided below for reference:



**Vicinity Map**  
(N.T.S)

### DESCRIPTION OF PROPERTY

The Project Site is approximately 40 acres of mostly undeveloped land. The Site contains a garage with a gravel drive and accessory structures with existing access off J D Johnson Road via a private driveway. A modular single-family residence is located adjacent to the garage but will be removed from the site prior to the development of the Project. Development of Mary Jane Ranch will consist of subdividing the 40-acre section into four (4) single-family lots (Lots 1-4) ranging between 9.149 and 9.841 acres along with the addition of a private drive from J D Johnson Road to service Lots 1-3 of the Project. The location of the existing garage and single-family residence will make up Lot 4 of the Project, which is proposed to contain a new single-family residence while maintaining its existing access via J D Johnson Road. Refer to **Appendix A** for a site plan for the Project.

The existing single-family residence in Lot 4 has received potable water service through an existing well (Permit No. 228255) that will be plugged and abandoned as part of this Project. All lots will receive potable water service via the installation of new wells. Sanitary sewer service will be provided by the installation of

individual septic systems for Lots 1-3 and retaining the existing septic system for Lot 4. It is not anticipated that the Project will utilize any existing and/or construct any water or sewer mains as part of this Project.

The water system information presented herein will focus on the water supply needs anticipated with proposed development of the Project.

## INFORMATION REGARDING SUFFICIENT QUANTITY OF WATER

### WATER SYSTEM LAYOUT AND DEMANDS

The Project Site has an existing well (Permit No. 228255) that withdraws from the Denver aquifer and provides potable water service to the existing single-family residence located in Lot 4. It's anticipated that the existing well will be abandoned and new individual wells will be installed for Lots 1-4. The Water Information Summary sheet required by El Paso County can be found in **Appendix B**.

Estimated water demands for Lots 1-4 were calculated per the El Paso County Land Development Code. A conservative estimate of 0.5 AC-FT/Yr/Lot for irrigation demand was used due to the size of each lot and historical higher irrigation needs for similar developments with the same owner. Table 1, shown below, highlights the calculated estimated water use for Lots 1-4 of the Project.

**Table 1: Estimation of Water Demand (Lots 1-4)**

User Type	Unit Count	Unit Demand	Total Demand		
	(Lots)	(AC-FT/Yr/Lot)	(AC-FT/Yr)	(AC-FT/Day)	(GPD)
Household	4	0.26	1.04	0.003	928.59
Irrigation	4	0.50	2.00	0.005	1,785.75
		<b>Total:</b>	<b>3.04</b>	<b>0.008</b>	<b>2,714.34</b>

The Ellicott Fire Protection District (EFPD) will provide fire protection services for the Project. Information on fire protection for Mary Jane Ranch has been included in **Appendix C**. The proposed and existing wells for the Project are not anticipated to provide fire protection capacity.

### AVAILABLE QUANTITY AND DEPENDABILITY OF WATER SUPPLY

As previously discussed in the **Description of Property** section of this report, the Project Site will be subdivided into Lots 1-4. Water service for all four lots will be provided through the installation or retention of individual wells. Detailed water rights information for the Project Site can be found in **Appendix D**.

Water right determinations for the Project Site highlight available groundwater allocations from three aquifers: Laramie-Fox, Arapahoe, and Denver. Groundwater allocation from the Laramie-Fox aquifer is nontributary (NT) with an available water volume of 1,260 acre-feet for the Project Site. Allocations from the Arapahoe aquifer are not-nontributary (NNT) consisting of a required 4% replacement with an available water volume of 1,530 acre-feet. The Denver aquifer is NNT consisting of a required actual impact replacement with an available water volume of 950 acre-feet. Use of the NNT aquifers will require a commission approved replacement plan. Table 2, shown below, details the available water rights for the Project Site.

**Table 2: Water Rights**

Aquifer	Classification	Volume of Available Water	100-Yr Life	300-Yr Life
		(AC-FT)	(AC-FT/Yr)	(AC-FT/Yr)
Laramie-Fox	NT	1,260	12.60	4.20
Arapahoe	NNT	1,530	15.30	5.10
Denver*	NNT	950	9.50	3.17

(\* Available water in the Denver aquifer includes a reduction for the existing well (No. 228255)

El Paso County requires sufficient quantity of water to be based on the 300-year life of the available water supply. Per Tables 1-2, the Project's estimated water use of 3.04 AC-FT/Yr is below the total 300-year life of all three aquifers. The eventual homeowners will be responsible for well permitting and drilling and will utilize the Arapahoe aquifer for water service.

The Arapahoe aquifer has ample capacity available to support all proposed lots. As previously noted, the NNT water right to the Arapahoe aquifer requires a commission approved replacement plan of 4% of well diversion; however, more than 4% of well diversions will be returned to the system through the proposed onsite septic systems in which are considered to be 90% of in-house diversions as well as through irrigation, exceeding the required 4%. Establishment of the proposed wells and replacement plan coordination to obtain the well permit(s) will be the responsibility of the future lot owner(s).

It is anticipated that water rights for this property will be equally divided amongst the eventual lot owners during the sale process for each individual lot.

#### INFORMATION REGARDING SUFFICIENT WATER QUALITY

Water quality tests were performed at the existing well at 6425 JD Johnson Road that pulls from the Denver aquifer. Water samples were tested by the El Paso County Public Health Laboratory. The Standard Bacteriological and Inorganic Anions tests were both within acceptable limits recommended by the Environmental Protection Agency. Water Quality results are included in **Appendix E**.

Sage Water Users Association serves the surrounding area of the proposed development and receives their water supply from both the Arapahoe and Laramie-Fox aquifers. They post annual water quality reports in June for the preceding year. Currently, the most recent year available is 2022. Inorganic contaminants sampled at the entry point to the distribution system include arsenic, barium, chromium, fluoride, and sodium. None of these were found to be in violation of the maximum contaminant level allowed in drinking water. Similarly, there were no formal enforcement actions necessary. This proves that the Arapahoe and Laramie-Fox aquifers serving the immediate area have sufficient water quality. **Appendix E** contains the full water quality report for Sage Water Users Association in 2022.

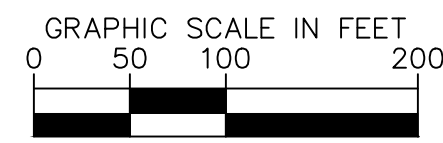
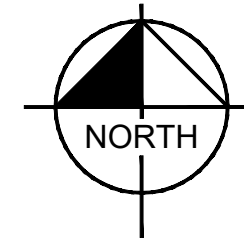
#### PUBLIC AND PRIVATE COMMERCIAL WATER PROVIDERS

Each home within the Project Site will be supplied water from individual on-site wells. Commercial water providers are not involved or responsible for the water system discussed in this report.

## APPENDIX A – MARY JANE RANCH SITE PLAN

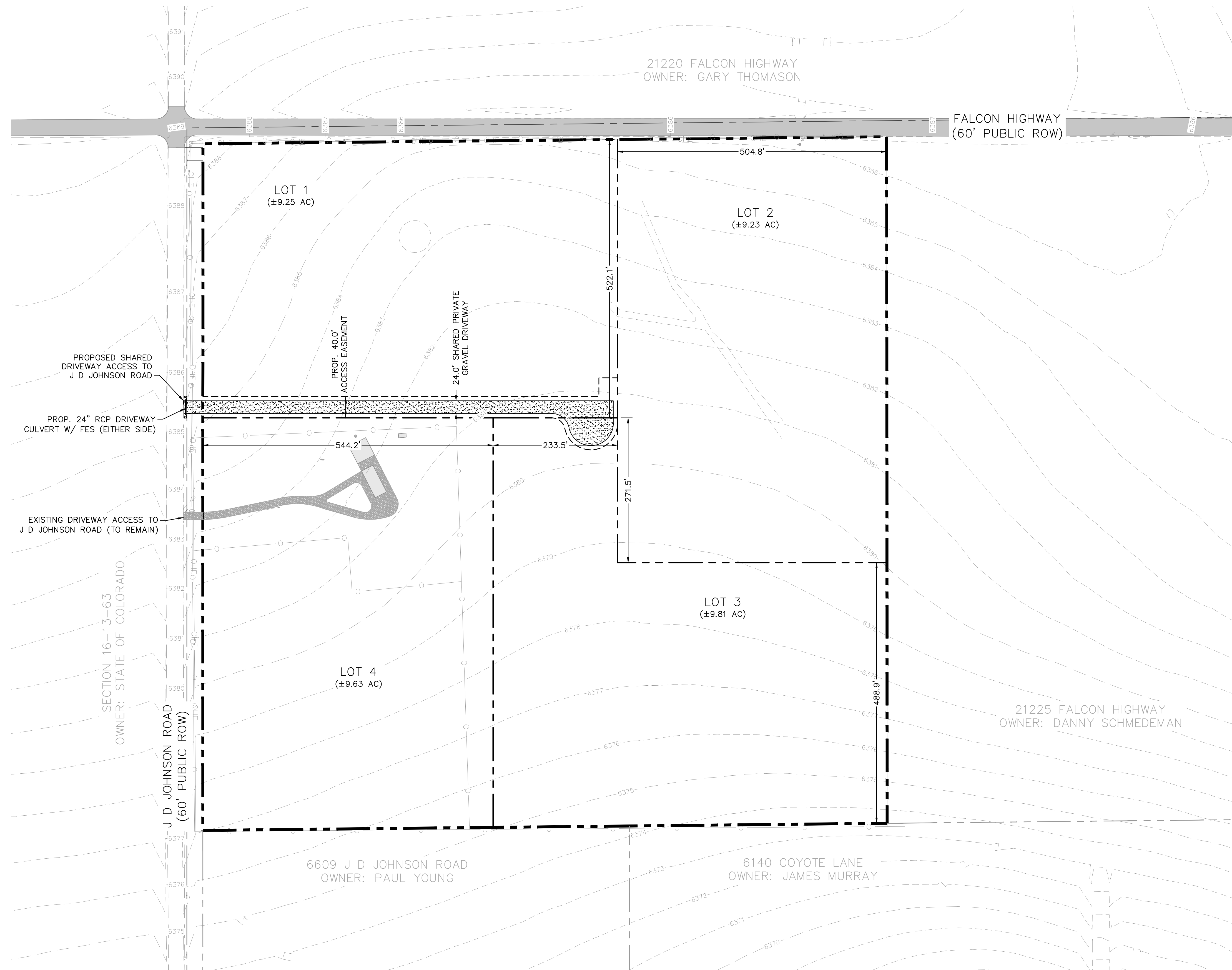
# MARY JANE RANCH - MINOR SUBDIVISION

EL PASO COUNTY, CO



## LEGEND

- PROPERTY LINE
- NEIGHBORING LOT LINE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- GRAVEL DRIVE



MARY JANE RANCH  
SITE PLAN EXHIBIT  
10/15/2024



© 2024 KIMLEY-HORN AND ASSOCIATES, INC.  
2 N NEVADA AVE., SUITE 900, COLORADO SPRINGS, 80903  
PHONE: 719-453-0180

## APPENDIX B – MARY JANE RANCH WATER INFORMATION SUMMARY SHEET



## WATER SUPPLY INFORMATION SUMMARY

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 <b>MARY JANE RANCH</b>			
2. LAND USE ACTION <b>REZONE/MINOR PLAT</b>			
3. NAME OF EXISTING PARCEL AS RECORDED <b>6425 J D JOHNSON ROAD</b>			
SUBDIVISION	FILING	BLOCK	Lot
4. TOTAL ACERAGE <b>40+/-</b>	5. NUMBER OF LOTS PROPOSED <b>4</b>	PLAT MAPS ENCLOSED <b>YES</b> <input type="checkbox"/>	
6. PARCEL HISTORY - Please attach copies of deeds, plats, or other evidence or documentation. (In submittal package)			
A. Was parcel recorded with county prior to June 1, 1972? <input type="checkbox"/> YES <input type="checkbox"/> NO			
B. Has the parcel ever been part of a division of land action since June 1, 1972? <input type="checkbox"/> YES <input type="checkbox"/> NO			
If yes, describe the previous action			
7. LOCATION OF PARCEL - Include a map delineating the project area and tie to a section corner.			
<b>NW 1/4</b> SECTION <b>15</b> and TOWNSHIP <b>13</b>		<input type="checkbox"/> N <input checked="" type="checkbox"/> S RANGE <b>63</b> <input type="checkbox"/> E <input checked="" type="checkbox"/> W	
PRINCIPAL MERIDIAN: <input checked="" type="checkbox"/> 6TH <input type="checkbox"/> N.M. <input type="checkbox"/> UTE <input type="checkbox"/> COSTILLA			
8. PLAT - Location of all wells on property must be plotted and permit numbers provided. - no wells have been drilled at this time, and no existing wells are located on the property.			
Surveyors plat <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		If not, scaled hand-drawn sketch Y <input type="checkbox"/> NO	
9. ESTIMATED WATER REQUIREMENTS - Gallons per Day or Acre Foot per Year		10. WATER SUPPLY SOURCE	
HOUSEHOLD USE #* <b>4</b> of units _____ AF/SFE/YR <b>1.04</b> AF	COMMERCIAL USE # _____ SF _____ GPD _____ AF	<input type="checkbox"/> EXISTING <input checked="" type="checkbox"/> DEVELOPED <input type="checkbox"/> NEW WELLS WELLS SPRING WELL PERMIT NUMBERS _____ _____	Proposed Aquifers - (Check One) <input type="checkbox"/> Alluvial <input checked="" type="checkbox"/> Upper Arapahoe <input type="checkbox"/> Upper Dawson <input type="checkbox"/> Lower Arapahoe <input type="checkbox"/> Lower Dawson <input type="checkbox"/> Laramie Fox Hills <input type="checkbox"/> Denver <input type="checkbox"/> Dakota <input type="checkbox"/> Other
IRRIGATION #** <b>.5</b> AF/lot/year _____ GPD <b>2.0</b> AF	ANIMAL WATERING #*** _____ 244 _____ AF/Horse/Year _____ AF	<input type="checkbox"/> MUNICIPAL <input type="checkbox"/> ASSOCIATION <input type="checkbox"/> COMPANY <input type="checkbox"/> DISTRICT NAME: _____ LETTER OF COMMITMENT FOR SERVICE <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	WATER COURT DECREE CASE NUMBERS  <b>Rec. No. 223097650</b>
TOTAL _____ <b>2,714</b> GPD <b>3.04</b> AF*	* Per Part 10 of the Findings from Rep. Plan No. 2 and Part 11 of Rep. Plan No. 3 ** Assuming 0.25 AF/year/res. lot and 2.46 AF/acre/year for commercial irrigation *** Per Part 2.c. Rep. Plan No. 2, Appendix C of Report (assuming 4 horses/SFE)		
11. ENGINEER'S WATER SUPPLY REPORT <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO If yes, please forward with this form. (This may be required before our review is completed)			
12. TYPE OF SEWAGE DISPOSAL SYSTEM			
<input checked="" type="checkbox"/> SEPTIC TANK/LEACH FIELD _____		<input type="checkbox"/> CENTRAL SYSTEM - DISTRICT NAME: _____	
<input type="checkbox"/> LAGOON _____		<input type="checkbox"/> VAULT - LOCATION SEWAGE HAULED TO: _____	
<input type="checkbox"/> ENGINEERED SYSTEM (Attach a copy of engineering design) _____		<input type="checkbox"/> OTHER: _____	

## APPENDIX C – MARY JANE RANCH FIRE PROTECTION REPORT



MARY JANE RANCH  
FIRE PROTECTION REPORT 2023

OWNER/APPLICANT:  
Robert S. & Wendy K. Williams  
16975 Falcon Highway,  
Peyton, CO 80831

CONSULTANT:  
Kimley-Horn and Associates  
2 N. Nevada Avenue, Suite 900  
Colorado Springs, Colorado 80903

Mary Jane Ranch is within the Ellicott Fire Protection District (EFPD). The proposed subdivision lies approximately 7 miles from Station No. 3 at 25850 M.

Ellicott Fire Protection District (EFPD), founded in 1984, covers an estimated 276 square miles in El Paso County including the towns and areas of Mayberry Communities, Emerald Acres, Antelope Acres, Antelope Park Ranchettes, Black Squirrel Creek, Calhan, Eaglecrest, Langness Wilderness, Grand View, Range View, Silver Bonnett, Viewpoint & Western Horizons. The district is mostly a residential community with some small business and light commercial.

The EFPD is a local district supported by property taxes. It operates through an elected board which in turn contracts with the Volunteer Department for the operation and maintenance of the District and its equipment. The EFPD maintains 11 vehicles including 3 ambulance and has present membership of 34 active volunteers and 2 full time fire fighters.

The department responds to about 774 calls a year in the Ellicott area. And also provides Advanced Life Support transport of the sick and injured to area hospitals. Response time is currently unstudied. The department operates from four stations.

- Fire Station 1 is located at 23650 State Hwy. 94.
- Fire Station 2 is located at 75 N. Ellicott Hwy.
- Fire Station 3 (Sub-Station) is located at 25850 Mid Jones Rd. at Baggett Rd.

Service is available at an ISO (Insurance Safety Office) level 9 service rating. The low rating is a result of lack of fire hydrants and distance from the fire station to the potential emergency. Any building within 1,000 ft of a fire hydrant will receive ISO class 6 protection. In the case of this development, the subject property is within one mile of the fire station and the development will provide a central water system with fire hydrants at five hundred feet spacing. The central water system is anticipated to raise the ISO rating of the development. The applicant plans to work with the local fire district on future facility needs as the project develops.

## FACILITIES

Station 1: 23650 State Hwy. 94

Equipment at Station 1 includes:

- Engine 3310 (Freightliner FL80 / American LaFrance / Becker)
- Engine 3311 (American LaFrance)
- Ambulance 3381 (Advanced Life Support)
- Brush 3341 (Brush truck)
- Tender 3363 (Tactical Tender)
- Tender 3364 (Tactical Tender)
- Tender 3366 (Tactical Tender)
- Chiefs' vehicle

Station 2: 75 N. Ellicott Hwy.

Equipment at Station 2 includes:

- Engine 3312 (Ford/E-one)
- Engine 3313 (GMC Brigadier / Fire Cat)
- Rescue 3382 (Chevy / Wheeled Coach)
- Brush 3342 (Brush Truck)
- Tender 3368 (Tactical Tender)

Station 3: 25850 Mid Jones Rd. at Baggett Rd. (Sub-Station).

Equipment at Station 3 includes:

- Engine 3320 (International)
- Tanker 3361 (Ford F-series)

Station 4: 3525 Private Rd. 112 (Sub-Station).

Equipment at Station 4 includes:

- Engine 3355 (Ford F-Series 4x4)
- Tender 3344 (Tactical Tender)

## APPENDIX D – WATER RIGHTS INFORMATION

**COLORADO GROUND WATER COMMISSION  
FINDINGS AND ORDER**

IN THE MATTER OF AN APPLICATION FOR A DETERMINATION OF A RIGHT TO AN ALLOCATION OF GROUNDWATER IN THE UPPER BLACK SQUIRREL CREEK DESIGNATED GROUNDWATER BASIN

---

DETERMINATION NO.: 4473-BD

AQUIFER: Arapahoe

APPLICANT: Mountains Reign Ranch Trust

---

In compliance with section 37-90-107(7), C.R.S., and the Designated Basin Rules, 2 CCR 410-1, Mountains Reign Ranch Trust (Applicant) submitted an application to the Colorado Ground Water Commission (Commission) for a determination of a right to an allocation of designated groundwater from the Arapahoe Aquifer.

**FINDINGS**

1. The application was received by the Commission on August 2, 2022.
2. The Applicant requests a determination of right to an allocation of designated groundwater (Determination) in the Arapahoe aquifer (Aquifer) underlying 40 acres, described as the NW 1/4 of the NW 1/4 of Section 15, Township 13 South, Range 63 West of the 6th P.M., in El Paso County (Overlying Land). According to a Nontributary Groundwater Landownership Statement dated July 31, 2022, attached hereto as Exhibit A, the Applicant owns the 40 acres of land, which are further described in said Ownership Statement, and claims control of the right to the groundwater in the Aquifer underlying the land.
3. The Overlying Land is located within the boundaries of the Upper Black Squirrel Creek Designated Groundwater Basin and within the Upper Black Squirrel Creek Ground Water Management District. The Commission has jurisdiction over the designated groundwater that is the subject of this Determination.
4. The Commission's Staff has evaluated the application relying on the claims to control of the groundwater in the Aquifer underlying the Overlying Land made by the Applicant.
5. The Applicant intends to apply the groundwater in the Aquifer underlying the Overlying Land to the following beneficial uses: domestic in-house; irrigation of lawn, garden, and greenhouse; domestic animal and stock watering; commercial; firefighting; and replacement; either directly or after temporary storage in a cistern. The Applicant's proposed place of use of the groundwater in the Aquifer underlying the Overlying Land is the above described 40 acres of Overlying Land.
6. Pursuant to section 37-90-107(7)(a), and in accordance with the Designated Basin Rules, the Commission shall allocate the groundwater in the Aquifer underlying the Overlying Land on the basis of the ownership of the Overlying Land.
7. The amount of water in storage 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 those saturated aquifer materials containing sufficient water that can be drained by gravity and placed to beneficial use is 17 percent.

- b. The average thickness of those saturated aquifer materials containing sufficient water that can be drained by gravity and placed to beneficial use is 225 feet.
8. A review of the records in the Office of the State Engineer has disclosed that none of the groundwater in the Aquifer underlying the Overlying Land has been either previously determined to be allocated by the Commission, has been permitted for withdrawal by large capacity wells that have rights that were initiated prior to November 19, 1973 that are subject to section 37-90-107(7)(b), or has been permitted for withdrawal by existing small capacity wells withdrawing water under permits issued pursuant to section 37-90-105, C.R.S. The amount of designated groundwater in the Aquifer underlying the Overlying Land that is available for allocation in this Determination is 1,530 acre-feet.
  9. Pursuant to section 37-90-107(7)(c)(III), an approved determination of a right to an allocation shall be considered a final determination of the amount of groundwater 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. Pursuant to section 37-90-107(7)(d), the Commission has authority to issue well permits pursuant to subsection 107(7) (i.e. permits for large capacity wells) for the withdrawal of designated groundwater from the Aquifer. Pursuant to section 37-90-107(7)(a) the Commission shall adopt the necessary rules to carry out the provisions of subsection (7). Pursuant to section 37-90-111(h), C.R.S., the Commission is empowered to adopt rules necessary to carry out the provisions of Article 90 of Title 37. In accordance with that authority, the Commission has adopted the Rules and Regulations for the Management and Control of Designated Ground Water (2 CCR 410-1) (“Designated Basin Rules”, or “Rules”).
  11. Large capacity well permits issued pursuant to section 37-90-107(7) are subject to the following provisions of statute and the Designated Basin Rules.
    - a. Pursuant to section 37-90-107(7)(a) well permits issued pursuant to subsection 107(7) shall allow withdrawals on the basis of an aquifer life of one hundred years. The 1,530 acre-feet of water in the Aquifer underlying the Overlying Land available for allocation in this Determination, if permitted for withdrawal by large capacity wells on the basis of an aquifer life of one hundred years, would result in an allowed average annual amount of withdrawal of 15.3 acre-feet per year.
    - b. Any amounts of groundwater in the Aquifer allocated in this Determination that are permitted for withdrawal pursuant to section 37-90-105, by small capacity well permits issued after the issuance of this Determination reduce the amount of water, and the allowed average annual amount of withdrawal, that may be withdrawn by wells permitted pursuant to section 37-90-107(7).
    - c. In accordance with Rule 5.3.6 of the Designated Basin Rules, it has been determined that withdrawal of groundwater from the Aquifer underlying the Overlying Land will, within one hundred years, deplete the flow of a natural stream or an alluvial aquifer at an annual rate greater than one-tenth of one percent of the annual rate of withdrawal and, therefore, the groundwater in the Aquifer underlying the Overlying Land is considered to be not-nontributary groundwater as defined in Rule 4.2.23 of the Designated Basin Rules. Also, the location of the land claimed by the Applicant is farther than one mile from the

Aquifer contact with the alluvium. Pursuant to the Rules, at least four percent (4%) of the amount of the underlying water withdrawn annually must be returned to the alluvial aquifer in the vicinity of the permitted point or points of withdrawal, unless other locations are approved by the Commission. Pursuant to the Rules the Applicant may at any time be required to identify the proposed, or actual, location of the delivery of the replacement water and how the required four percent (4%) of water diverted will be, or is being, delivered into the alluvial aquifer.

12. Pursuant to section 37-90-105(1), the State Engineer has the authority to approve small capacity well permits. While water withdrawn from the Aquifer from beneath the Overlying Land by small capacity wells may consist of the groundwater allocated herein, the Commission recognizes that in approving small capacity permits the State Engineer is not bound by the terms and conditions of this Determination, and may approve small capacity permits based on standards and with such conditions as the State Engineer considers appropriate.
13. The ability of wells permitted to withdraw the authorized amount of water from this nonrenewable 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.
14. On September 2, 2022, in accordance with Rule 9.1 of the Designated Basin Rules, written recommendations concerning this application were requested from the Upper Black Squirrel Creek Ground Water Management District. Written recommendations from the District were received on September 21, 2022.
15. 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 September 15, 2022 and September 22, 2022.
  - a. Objections to the application were submitted by Upper Black Squirrel Creek Ground Water Management District on September 22, 2022.
  - b. The application and objections were forwarded to the Hearing Officer and assigned case no. 22-GW-22.
  - c. The Hearing Officer entered an order dated January 23, 2023 dismissing the case and remanding the application to Staff for administrative processing.

#### **ORDER**

In accordance with section 37-90-107(7) and the Designated Basin Rules, the Commission hereby determines a right to an allocation of designated groundwater in the Arapahoe Aquifer underlying 40 acres of land, described as the NW 1/4 of the NW 1/4 of Section 15, Township 13 South, Range 63 West of the 6th P.M., further described in Exhibit A, subject to the following conditions.

16. The amount (i.e. volume) of water in the Aquifer underlying the 40 acres of Overlying Land allocated herein is 1,530 acre-feet (Underlying Groundwater).
17. The amount (i.e. volume) of Underlying Groundwater allocated herein shall be considered final, 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, if such information indicates that the initial estimate of the amount of Underlying Groundwater in the Aquifer was incorrect.

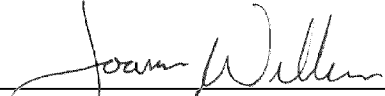
18. Approval of this Determination meets the requirements of section 37-90-107(7)(d)(II), that requires a determination of groundwater to be withdrawn by a well be made prior to the granting of a well permit pursuant to section 37-90-107(7).
19. Well permits issued pursuant to section 37-90-107(7), (i.e. large capacity wells) and this Determination are subject to the following conditions.
  - a. The total amount of Underlying Groundwater that may be withdrawn from the Aquifer by all large capacity wells permitted pursuant to this Determination may not exceed a volume of 1,530 acre-feet, less any amount of the Underlying Groundwater allocated herein permitted to be withdrawn by small capacity wells issued permits pursuant to section 37-90-105 after the issuance of this Determination. The amounts of water permitted to be withdrawn by such small capacity wells shall be considered to be one-hundred times the annual withdrawals permitted to be withdrawn by those wells.
  - b. The allowed average annual amount of withdrawal by any large capacity well (or well field) permitted to withdraw the allocated water shall be equal to the volume of water permitted to be withdrawn by that well (or well field) divided by one-hundred years.
  - c. The allowed maximum annual amount of withdrawal by any large capacity well (or well field) permitted to withdraw the allocated water may exceed the allowed average annual amount of withdrawal allowed by the well permit(s) as long as the total volume of water withdrawn by such well(s) does not exceed the product of the number of years since the date(s) of issuance of the well permit(s) times the allowed average annual amount of withdrawal allowed by the well permit(s).
  - d. 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.
  - e. At least four percent (4%) of the amount of Underlying Groundwater withdrawn annually must be returned to the alluvial aquifer in the vicinity of the permitted point or points of withdrawal, unless other locations are approved by the Commission. The Applicant may at any time be required to identify the proposed, or actual, location of the delivery of the replacement water and how the required four percent (4%) of water diverted will be, or is being, delivered into the alluvial aquifer.
  - f. The use of the Underlying Groundwater shall be limited to the following beneficial uses: domestic in-house; irrigation of lawn, garden, and greenhouse; domestic animal and stock watering; commercial; firefighting; and replacement; either directly or after temporary storage in a cistern. The place of use of the Underlying Groundwater shall be limited to the above described 40 acres of Overlying Land. The Underlying Groundwater 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 Underlying Groundwater 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 groundwater.

- g. The wells must be located on the above described 40 acres of Overlying Land.
  - h. 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.
  - i. The wells must be constructed to withdraw water from only the Arapahoe Aquifer.
  - j. The entire depth of each well must be geophysically logged prior to installing the casing in the same manner as set forth in Rule 9 of the Statewide Nontributary Ground Water Rules, 2 CCR 402-7.
  - k. 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.
  - l. 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.
20. A copy of this Determination 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.
21. The right to an allocation of designated groundwater determined herein is a vested property right with specific ownership. Some or all of the 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 number, the specific Aquifer, and the total amount (i.e. volume) of the right that is being conveyed.

Dated this 25th day of January, 2023.

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

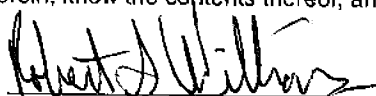
By:   
\_\_\_\_\_  
Joanna Williams, P.E.  
Chief of Water Supply, Designated Basins

Form no. **DIVISION OF WATER RESOURCES**  
 GWS-1 **DEPARTMENT OF NATURAL RESOURCES**  
 (1/2020) **1313 Sherman St, Room 821, Denver, CO 80203**  
**(303) 866-3581, [www.colorado.gov/water](http://www.colorado.gov/water), [dwrpermitsonline@state.co.us](mailto:dwrpermitsonline@state.co.us)**

RCVD DWR  
 08/02/2022

**NONTRIBUTARY GROUNDWATER LANDOWNERSHIP STATEMENT**

This form is to be submitted with applications for the following, when the applicant is the owner of the overlying land.  
 1) A well permit to withdraw groundwater from the Dawson, Denver, Arapahoe or Laramie-Fox Hills aquifers, or other aquifer the applicant claims contains nontributary groundwater, outside of a Designated Groundwater Basin subject to section 37-90-137(4), C.R.S., except when the right to withdraw the groundwater has been determined by a valid decree; OR  
 2) A determination of water right in the Dawson, Denver, Arapahoe or Laramie-Fox Hills aquifers, or a well permit to withdraw groundwater from those aquifers that are subject to Designated Basin Rule 5.4, within a Designated Groundwater Basin.  
 NOTE: Form submittal instructions can be found on our website [Colorado.gov/water](http://Colorado.gov/water). See instructions on the reverse of this form. Type or print in black or blue ink.

<b>1. APPLICANT INFORMATION</b>			
Name of Applicant Mountains Reign Ranch Trust			
Mailing Address 16975 Falcon Hwy	City Peyton	State CO	Zip Code 80831
Telephone Number (include area code) 406-438-1874	Email stuing@protonmail.com; stm@cowaterlaw.com		
<b>2. AQUIFER</b> Arapahoe			
<b>3. CLAIM OF OWNERSHIP</b> – I hereby claim that I am the owner of the following described property, as evidenced by the attached copy of a deed recorded in the county in which the property is located.			
Number of acres: <u>40</u> in the county of: <u>El Paso</u> described as follows (insert legal description).			
<u>The NW 1/4 NW 1/4 of Section 15, Township 13 South, Range 63 West of the 6th P.M.</u>			
- I further claim that the right to withdraw the groundwater in the aquifer underlying the above described property has not been reserved by another, nor has consent been given to another for the right to its withdrawal.			
<b>4. THE APPLICANT MUST PROVIDE</b> – a Verification of Notice of Application (form no. GWS-43) (see instructions for exceptions). Please see attached.			
<b>5. SIGNATURE</b> – Sign or enter name(s) of applicant(s) or authorized agent. The making of false statements herein constitutes perjury in the second degree, which is punishable as a class 1 misdemeanor pursuant to C.R.S. 24-4-104(13)(a). I have read the statements herein, know the contents thereof, and state that they are true to my knowledge.			
Signature: 		Date: <u>31 July, 2022</u>	
Robert S. Williams, as Trustee of Mountains Reign Ranch Trust			
Print name and title:			

**COLORADO GROUND WATER COMMISSION  
FINDINGS AND ORDER**

IN THE MATTER OF AN APPLICATION FOR A DETERMINATION OF A RIGHT TO AN ALLOCATION OF  
GROUNDWATER IN THE UPPER BLACK SQUIRREL CREEK DESIGNATED GROUNDWATER BASIN

---

DETERMINATION NO.: 4474-BD

AQUIFER: Denver

APPLICANT: Mountains Reign Ranch Trust

---

In compliance with section 37-90-107(7), C.R.S., and the Designated Basin Rules, 2 CCR 410-1, Mountains Reign Ranch Trust (Applicant) submitted an application to the Colorado Ground Water Commission (Commission) for a determination of a right to an allocation of designated groundwater from the Denver Aquifer.

**FINDINGS**

1. The application was received by the Commission on August 2, 2022.
2. The Applicant requests a determination of right to an allocation of designated groundwater (Determination) in the Denver aquifer (Aquifer) underlying 40 acres, described as the NW 1/4 of the NW 1/4 of Section 15, Township 13 South, Range 63 West of the 6th P.M., in El Paso County (Overlying Land). According to a Nontributary Groundwater Landownership Statement dated July 31, 2022, attached hereto as Exhibit A, the Applicant owns the 40 acres of land, which are further described in said Ownership Statement, and claims control of the right to the groundwater in the Aquifer underlying the land.
3. The Overlying Land is located within the boundaries of the Upper Black Squirrel Creek Designated Groundwater Basin and within the Upper Black Squirrel Creek Ground Water Management District. The Commission has jurisdiction over the designated groundwater that is the subject of this Determination.
4. The Commission's Staff has evaluated the application relying on the claims to control of the groundwater in the Aquifer underlying the Overlying Land made by the Applicant.
5. The Applicant intends to apply the groundwater in the Aquifer underlying the Overlying Land to the following beneficial uses: domestic in-house; irrigation of lawn, garden, and greenhouse; domestic animal and stock watering; commercial; firefighting; and replacement; either directly or after temporary storage in a cistern. The Applicant's proposed place of use of the groundwater in the Aquifer underlying the Overlying Land is the above described 40 acres of Overlying Land.
6. Pursuant to section 37-90-107(7)(a), and in accordance with the Designated Basin Rules, the Commission shall allocate the groundwater in the Aquifer underlying the Overlying Land on the basis of the ownership of the Overlying Land.
7. The amount of water in storage in the Aquifer underlying the 40 acres of Overlying Land claimed by the Applicant is 1,050 acre-feet. This determination was based on the following as specified in the Designated Basin Rules.
  - a. The average specific yield of those saturated aquifer materials containing sufficient water that can be drained by gravity and placed to beneficial use is 17 percent.

- b. The average thickness of those saturated aquifer materials containing sufficient water that can be drained by gravity and placed to beneficial use is 155 feet.
8. A review of the records in the Office of the State Engineer has disclosed that a well operating pursuant to section 37-90-105, C.R.S., (i.e. a small-capacity well), permit no. 228255, is located on the Overlying Land and is permitted to withdraw 1 acre-foot per year of groundwater from the Aquifer from beneath the Overlying Land. The amount of water considered to be withdrawn from the aquifer by this well over a period equal to an aquifer life of one hundred years is 100 acre-feet. In applying Rule 5.3.2.5 of the Designated Basin Rules to computing the amount of water available for allocation in this Determination, the amount of groundwater in the Aquifer underlying the Overlying Land available for allocation in this Determination is reduced by 100 acre-feet to 950 acre-feet. Except for that well, review of the records in the Office of the State Engineer finds no other previous allocations or permitted withdrawals from the Aquifer underlying the Overlying Land.
9. Pursuant to section 37-90-107(7)(c)(III), an approved determination of a right to an allocation shall be considered a final determination of the amount of groundwater 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. Pursuant to section 37-90-107(7)(d), the Commission has authority to issue well permits pursuant to subsection 107(7) (i.e. permits for large capacity wells) for the withdrawal of designated groundwater from the Aquifer. Pursuant to section 37-90-107(7)(a) the Commission shall adopt the necessary rules to carry out the provisions of subsection (7). Pursuant to section 37-90-111(h), C.R.S., the Commission is empowered to adopt rules necessary to carry out the provisions of Article 90 of Title 37. In accordance with that authority, the Commission has adopted the Rules and Regulations for the Management and Control of Designated Ground Water (2 CCR 410-1) (“Designated Basin Rules”, or “Rules”).
11. Large capacity well permits issued pursuant to section 37-90-107(7) are subject to the following provisions of statute and the Designated Basin Rules.
  - a. Pursuant to section 37-90-107(7)(a) well permits issued pursuant to subsection 107(7) shall allow withdrawals on the basis of an aquifer life of one hundred years. The 950 acre-feet of water in the Aquifer underlying the Overlying Land available for allocation in this Determination, if permitted for withdrawal by large capacity wells on the basis of an aquifer life of one hundred years, would result in an allowed average annual amount of withdrawal of 9.5 acre-feet per year.
  - b. Any amounts of groundwater in the Aquifer allocated in this Determination that are permitted for withdrawal pursuant to section 37-90-105, by small capacity well permits issued after the issuance of this Determination reduce the amount of water, and the allowed average annual amount of withdrawal, that may be withdrawn by wells permitted pursuant to section 37-90-107(7).
  - c. In accordance with Rule 5.3.6 of the Designated Basin Rules, it has been determined that withdrawal of groundwater from the Aquifer underlying the Overlying Land will, within one hundred years, deplete the flow of a natural stream or an alluvial aquifer at an annual rate greater than one-tenth of one percent of the annual rate of withdrawal and,

therefore, the groundwater in the Aquifer underlying the Overlying Land is considered to be not-nontributary groundwater as defined in Rule 4.2.23 of the Designated Basin Rules. 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 Overlying Land would impact the alluvial aquifer of the Upper Black Squirrel Creek Designated Groundwater Basin, 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, that provides for the replacement of the actual depletion to the alluvial aquifer and is adequate to prevent any material injury to existing water rights of other appropriators, is required prior to approval of well permits for wells to be located on this land area to withdraw the groundwater in the Aquifer underlying the Overlying Land. Pursuant to the Rules the replacement plan shall provide for the depletion of the 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, assuming water table conditions in the Aquifer.

12. Pursuant to section 37-90-105(1), the State Engineer has the authority to approve small capacity well permits. While water withdrawn from the Aquifer from beneath the Overlying Land by small capacity wells may consist of the groundwater allocated herein, the Commission recognizes that in approving small capacity permits the State Engineer is not bound by the terms and conditions of this Determination, and may approve small capacity permits based on standards and with such conditions as the State Engineer considers appropriate.
13. The ability of wells permitted to withdraw the authorized amount of water from this nonrenewable 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.
14. On September 2, 2022, in accordance with Rule 9.1 of the Designated Basin Rules, written recommendations concerning this application were requested from the Upper Black Squirrel Creek Ground Water Management District. Written recommendations from the District were received on September 21, 2022.
15. 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 September 15, 2022 and September 22, 2022.
  - a. Objections to the application were submitted by Upper Black Squirrel Creek Ground Water Management District on September 22, 2022.
  - b. The application and objections were forwarded to the Hearing Officer and assigned case no. 22-GW-22.
  - c. The Hearing Officer entered an order dated January 23, 2023 dismissing the case and remanding the application to Staff for administrative processing.

#### **ORDER**

In accordance with section 37-90-107(7) and the Designated Basin Rules, the Commission hereby determines a right to an allocation of designated groundwater in the Denver Aquifer

underlying 40 acres of land, described as the NW 1/4 of the NW 1/4 of Section 15, Township 13 South, Range 63 West of the 6th P.M., further described in Exhibit A, subject to the following conditions.

16. The amount (i.e. volume) of water in the Aquifer underlying the 40 acres of Overlying Land allocated herein is 950 acre-feet (Underlying Groundwater).
17. The amount (i.e. volume) of Underlying Groundwater allocated herein shall be considered final, 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, if such information indicates that the initial estimate of the amount of Underlying Groundwater in the Aquifer was incorrect.
18. Approval of this Determination meets the requirements of section 37-90-107(7)(d)(II), that requires a determination of groundwater to be withdrawn by a well be made prior to the granting of a well permit pursuant to section 37-90-107(7).
19. Well permits issued pursuant to section 37-90-107(7), (i.e. large capacity wells) and this Determination are subject to the following conditions.
  - a. The total amount of Underlying Groundwater that may be withdrawn from the Aquifer by all large capacity wells permitted pursuant to this Determination may not exceed a volume of 950 acre-feet, less any amount of the Underlying Groundwater allocated herein permitted to be withdrawn by small capacity wells issued permits pursuant to section 37-90-105 after the issuance of this Determination. The amounts of water permitted to be withdrawn by such small capacity wells shall be considered to be one-hundred times the annual withdrawals permitted to be withdrawn by those wells.
  - b. The allowed average annual amount of withdrawal by any large capacity well (or well field) permitted to withdraw the allocated water shall be equal to the volume of water permitted to be withdrawn by that well (or well field) divided by one-hundred years.
  - c. The allowed maximum annual amount of withdrawal by any large capacity well (or well field) permitted to withdraw the allocated water may exceed the allowed average annual amount of withdrawal allowed by the well permit(s) as long as the total volume of water withdrawn by such well(s) does not exceed the product of the number of years since the date(s) of issuance of the well permit(s) times the allowed average annual amount of withdrawal allowed by the well permit(s).
  - d. 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.
  - e. Commission approval of a replacement plan, that provides for the replacement of the actual depletion to the alluvial aquifer and is adequate to prevent any material injury to existing water rights of other appropriators in the alluvial aquifer, is required prior to approval of well permits that allow the withdrawal of the Underlying Groundwater. The replacement plan shall provide for the depletion of the 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, assuming water table conditions in the Aquifer.

- f. The use of the Underlying Groundwater shall be limited to the following beneficial uses: domestic in-house; irrigation of lawn, garden, and greenhouse; domestic animal and stock watering; commercial; firefighting; and replacement; either directly or after temporary storage in a cistern. The place of use of the Underlying Groundwater shall be limited to the above described 40 acres of Overlying Land. The Underlying Groundwater 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 Underlying Groundwater 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 groundwater.
  - g. The wells must be located on the above described 40 acres of Overlying Land.
  - h. 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.
  - i. The wells must be constructed to withdraw water from only the Denver Aquifer.
  - j. The entire depth of each well must be geophysically logged prior to installing the casing in the same manner as set forth in Rule 9 of the Statewide Nontributary Ground Water Rules, 2 CCR 402-7.
  - k. 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.
  - l. 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.
20. A copy of this Determination 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.
21. The right to an allocation of designated groundwater determined herein is a vested property right with specific ownership. Some or all of the 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 number, the specific Aquifer, and the total amount (i.e. volume) of the right that is being conveyed.



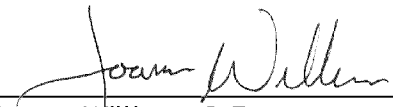
Determination No.: 4474-BD  
Aquifer: Denver  
Applicant: Mountains Reign Ranch Trust

Page 6

Dated this 25th day of January, 2023.



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

By:   
Joanna Williams, P.E.  
Chief of Water Supply, Designated Basins

Prepared by: wad  
F&O4474-BD.doc

Form no. **DIVISION OF WATER RESOURCES**  
GWS-1 **DEPARTMENT OF NATURAL RESOURCES**  
(1/2020) **1313 Sherman St, Room 821, Denver, CO 80203**  
**(303) 866-3581, [www.colorado.gov/water](http://www.colorado.gov/water), [dwrpermitsonline@state.co.us](mailto:dwrpermitsonline@state.co.us)**

RCVD DWR  
08/02/2022

**NONTRIBUTARY GROUNDWATER LANDOWNERSHIP STATEMENT**

This form is to be submitted with applications for the following, when the applicant is the owner of the overlying land.  
1) A well permit to withdraw groundwater from the Dawson, Denver, Arapahoe or Laramie-Fox Hills aquifers, or other aquifer the applicant claims contains nontributary groundwater, outside of a Designated Groundwater Basin subject to section 37-90-137(4), C.R.S., except when the right to withdraw the groundwater has been determined by a valid decree; OR  
2) A determination of water right in the Dawson, Denver, Arapahoe or Laramie-Fox Hills aquifers, or a well permit to withdraw groundwater from those aquifers that are subject to Designated Basin Rule 5.4, within a Designated Groundwater Basin.  
NOTE: Form submittal instructions can be found on our website [Colorado.gov/water](http://Colorado.gov/water). See instructions on the reverse of this form.  
Type or print in black or blue ink.

**1. APPLICANT INFORMATION**

Name of Applicant  
Mountains Reign Ranch Trust

Mailing Address  
16975 Falcon Hwy  
City  
Peyton  
State  
CO  
Zip Code  
80831

Telephone Number (include area code)  
406-438-1874

Email  
stuing@protonmail.com; stm@cowaterlaw.com

**2. AQUIFER**  
Denver

**3. CLAIM OF OWNERSHIP** – I hereby claim that I am the owner of the following described property, as evidenced by the attached copy of a deed recorded in the county in which the property is located.

Number of acres: 40 in the county of: El Paso  
described as follows (insert legal description).

The NW 1/4 NW 1/4 of Section 15, Township 13 South, Range 63 West of the 6th P.M.

- I further claim that the right to withdraw the groundwater in the aquifer underlying the above described property has not been reserved by another, nor has consent been given to another for the right to its withdrawal.

**4. THE APPLICANT MUST PROVIDE** – a Verification of Notice of Application (form no. GWS-43) (see instructions for exceptions). Please see attached.

**5. SIGNATURE** – Sign or enter name(s) of applicant(s) or authorized agent. The making of false statements herein constitutes perjury in the second degree, which is punishable as a class 1 misdemeanor pursuant to C.R.S. 24-4-104(13)(a). I have read the statements herein, know the contents thereof, and state that they are true to my knowledge.

Signature:

*Robert S. Williams*

Date: 31 July, 2022

Robert S. Williams, as Trustee of Mountains Reign Ranch Trust

Print name and title:

**COLORADO GROUND WATER COMMISSION  
FINDINGS AND ORDER**

IN THE MATTER OF AN APPLICATION FOR A DETERMINATION OF A RIGHT TO AN ALLOCATION OF  
GROUNDWATER IN THE UPPER BLACK SQUIRREL CREEK DESIGNATED GROUNDWATER BASIN

---

DETERMINATION NO.: 4472-BD

AQUIFER: Laramie-Fox Hills

APPLICANT: Mountains Reign Ranch Trust

---

In compliance with section 37-90-107(7), C.R.S., and the Designated Basin Rules, 2 CCR 410-1, Mountains Reign Ranch Trust (Applicant) submitted an application to the Colorado Ground Water Commission (Commission) for a determination of a right to an allocation of designated groundwater from the Laramie-Fox Hills Aquifer.

**FINDINGS**

1. The application was received by the Commission on August 2, 2022.
2. The Applicant requests a determination of right to an allocation of designated groundwater (Determination) in the Laramie-Fox Hills aquifer (Aquifer) underlying 40 acres, described as the NW 1/4 of the NW 1/4 of Section 15, Township 13 South, Range 63 West of the 6th P.M., in El Paso County (Overlying Land). According to a Nontributary Groundwater Landownership Statement dated July 31, 2022, attached hereto as Exhibit A, the Applicant owns the 40 acres of land, which are further described in said Ownership Statement, and claims control of the right to the groundwater in the Aquifer underlying the land.
3. The Overlying Land is located within the boundaries of the Upper Black Squirrel Creek Designated Groundwater Basin and within the Upper Black Squirrel Creek Ground Water Management District. The Commission has jurisdiction over the designated groundwater that is the subject of this Determination.
4. The Commission's Staff has evaluated the application relying on the claims to control of the groundwater in the Aquifer underlying the Overlying Land made by the Applicant.
5. The Applicant intends to apply the groundwater in the Aquifer underlying the Overlying Land to the following beneficial uses: domestic in-house; irrigation of lawn, garden, and greenhouse; domestic animal and stock watering; commercial; firefighting; and replacement; either directly or after temporary storage in a cistern. The Applicant's proposed place of use of the groundwater in the Aquifer underlying the Overlying Land is the above described 40 acres of Overlying Land.
6. Pursuant to section 37-90-107(7)(a), and in accordance with the Designated Basin Rules, the Commission shall allocate the groundwater in the Aquifer underlying the Overlying Land on the basis of the ownership of the Overlying Land.
7. The amount of water in storage in the Aquifer underlying the 40 acres of Overlying Land claimed by the Applicant is 1,260 acre-feet. This determination was based on the following as specified in the Designated Basin Rules.
  - a. The average specific yield of those saturated aquifer materials containing sufficient water that can be drained by gravity and placed to beneficial use is 15 percent.

- b. The average thickness of those saturated aquifer materials containing sufficient water that can be drained by gravity and placed to beneficial use is 210 feet.
8. A review of the records in the Office of the State Engineer has disclosed that none of the groundwater in the Aquifer underlying the Overlying Land has been either previously determined to be allocated by the Commission, has been permitted for withdrawal by large capacity wells that have rights that were initiated prior to November 19, 1973 that are subject to section 37-90-107(7)(b), or has been permitted for withdrawal by existing small capacity wells withdrawing water under permits issued pursuant to section 37-90-105, C.R.S. The amount of designated groundwater in the Aquifer underlying the Overlying Land that is available for allocation in this Determination is 1,260 acre-feet.
9. Pursuant to section 37-90-107(7)(c)(III), an approved determination of a right to an allocation shall be considered a final determination of the amount of groundwater 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. Pursuant to section 37-90-107(7)(d), the Commission has authority to issue well permits pursuant to subsection 107(7) (i.e. permits for large capacity wells) for the withdrawal of designated groundwater from the Aquifer. Pursuant to section 37-90-107(7)(a) the Commission shall adopt the necessary rules to carry out the provisions of subsection (7). Pursuant to section 37-90-111(h), C.R.S., the Commission is empowered to adopt rules necessary to carry out the provisions of Article 90 of Title 37. In accordance with that authority, the Commission has adopted the Rules and Regulations for the Management and Control of Designated Ground Water (2 CCR 410-1) ("Designated Basin Rules", or "Rules").
11. Large capacity well permits issued pursuant to section 37-90-107(7) are subject to the following provisions of statute and the Designated Basin Rules.
  - a. Pursuant to section 37-90-107(7)(a) well permits issued pursuant to subsection 107(7) shall allow withdrawals on the basis of an aquifer life of one hundred years. The 1,260 acre-feet of water in the Aquifer underlying the Overlying Land available for allocation in this Determination, if permitted for withdrawal by large capacity wells on the basis of an aquifer life of one hundred years, would result in an allowed average annual amount of withdrawal of 12.6 acre-feet per year.
  - b. Any amounts of groundwater in the Aquifer allocated in this Determination that are permitted for withdrawal pursuant to section 37-90-105, by small capacity well permits issued after the issuance of this Determination reduce the amount of water, and the allowed average annual amount of withdrawal, that may be withdrawn by wells permitted pursuant to section 37-90-107(7).
  - c. In accordance with Rule 5.3.6 of the Designated Basin Rules, it has been determined that withdrawal of groundwater from the Aquifer underlying the Overlying Land 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 groundwater in the Aquifer underlying the Overlying Land is nontributary groundwater as defined in Rule 4.2.22 of the Designated Basin Rules.

Pursuant to the Rules, no more than 98% of the amount of the groundwater in the Aquifer underlying the Overlying Land withdrawn annually shall be consumed.

12. Pursuant to section 37-90-105(1), the State Engineer has the authority to approve small capacity well permits. While water withdrawn from the Aquifer from beneath the Overlying Land by small capacity wells may consist of the groundwater allocated herein, the Commission recognizes that in approving small capacity permits the State Engineer is not bound by the terms and conditions of this Determination, and may approve small capacity permits based on standards and with such conditions as the State Engineer considers appropriate.
13. The ability of wells permitted to withdraw the authorized amount of water from this nonrenewable 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.
14. On September 2, 2022, in accordance with Rule 9.1 of the Designated Basin Rules, written recommendations concerning this application were requested from the Upper Black Squirrel Creek Ground Water Management District. Written recommendations from the District were received on September 21, 2022.
15. 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 September 15, 2022 and September 22, 2022.
  - a. Objections to the application were submitted by Upper Black Squirrel Creek Ground Water Management District on September 22, 2022.
  - b. The application and objections were forwarded to the Hearing Officer and assigned case no. 22-GW-22.
  - c. The Hearing Officer entered an order dated January 23, 2023 dismissing the case and remanding the application to Staff for administrative processing.

#### **ORDER**

In accordance with section 37-90-107(7) and the Designated Basin Rules, the Commission hereby determines a right to an allocation of designated groundwater in the Laramie-Fox Hills Aquifer underlying 40 acres of land, described as the NW 1/4 of the NW 1/4 of Section 15, Township 13 South, Range 63 West of the 6th P.M., further described in Exhibit A, subject to the following conditions.

16. The amount (i.e. volume) of water in the Aquifer underlying the 40 acres of Overlying Land allocated herein is 1,260 acre-feet (Underlying Groundwater).
17. The amount (i.e. volume) of Underlying Groundwater allocated herein shall be considered final, 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, if such information indicates that the initial estimate of the amount of Underlying Groundwater in the Aquifer was incorrect.

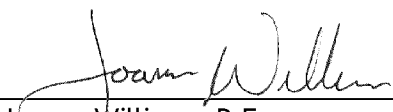
18. Approval of this Determination meets the requirements of section 37-90-107(7)(d)(II), that requires a determination of groundwater to be withdrawn by a well be made prior to the granting of a well permit pursuant to section 37-90-107(7).
19. Well permits issued pursuant to section 37-90-107(7), (i.e. large capacity wells) and this Determination are subject to the following conditions.
  - a. The total amount of Underlying Groundwater that may be withdrawn from the Aquifer by all large capacity wells permitted pursuant to this Determination may not exceed a volume of 1,260 acre-feet, less any amount of the Underlying Groundwater allocated herein permitted to be withdrawn by small capacity wells issued permits pursuant to section 37-90-105 after the issuance of this Determination. The amounts of water permitted to be withdrawn by such small capacity wells shall be considered to be one-hundred times the annual withdrawals permitted to be withdrawn by those wells.
  - b. The allowed average annual amount of withdrawal by any large capacity well (or well field) permitted to withdraw the allocated water shall be equal to the volume of water permitted to be withdrawn by that well (or well field) divided by one-hundred years.
  - c. The allowed maximum annual amount of withdrawal by any large capacity well (or well field) permitted to withdraw the allocated water may exceed the allowed average annual amount of withdrawal allowed by the well permit(s) as long as the total volume of water withdrawn by such well(s) does not exceed the product of the number of years since the date(s) of issuance of the well permit(s) times the allowed average annual amount of withdrawal allowed by the well permit(s).
  - d. 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.
  - e. No more than 98% of the amount of Underlying Groundwater withdrawn annually shall be consumed. The Commission may require well owners to demonstrate periodically that no more than 98% of the Underlying Groundwater withdrawn annually is being consumed.
  - f. The use of the Underlying Groundwater shall be limited to the following beneficial uses: domestic in-house; irrigation of lawn, garden, and greenhouse; domestic animal and stock watering; commercial; firefighting; and replacement; either directly or after temporary storage in a cistern. The place of use of the Underlying Groundwater shall be limited to the above described 40 acres of Overlying Land. The Underlying Groundwater 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 Underlying Groundwater 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 groundwater.
  - g. The wells must be located on the above described 40 acres of Overlying Land.
  - h. 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.
- i. The wells must be constructed to withdraw water from only the Laramie-Fox Hills Aquifer.
  - j. The entire depth of each well must be geophysically logged prior to installing the casing in the same manner as set forth in Rule 9 of the Statewide Nontributary Ground Water Rules, 2 CCR 402-7.
  - k. 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.
  - l. 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.
20. A copy of this Determination 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.
21. The right to an allocation of designated groundwater determined herein is a vested property right with specific ownership. Some or all of the 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 number, the specific Aquifer, and the total amount (i.e. volume) of the right that is being conveyed.

Dated this 25th day of January, 2023.



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

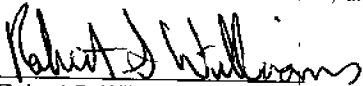
By:   
Joanna Williams, P.E.  
Chief of Water Supply, Designated Basins

Form no. **DIVISION OF WATER RESOURCES**  
 GWS-1 **DEPARTMENT OF NATURAL RESOURCES**  
 (1/2020) **1313 Sherman St, Room 821, Denver, CO 80203**  
**(303) 866-3581, [www.colorado.gov/water](http://www.colorado.gov/water), [dwrpermitsonline@state.co.us](mailto:dwrpermitsonline@state.co.us)**

RCVD DWR  
 08/02/2022

**NONTRIBUTARY GROUNDWATER LANDOWNERSHIP STATEMENT**

This form is to be submitted with applications for the following, when the applicant is the owner of the overlying land.  
 1) A well permit to withdraw groundwater from the Dawson, Denver, Arapahoe or Laramie-Fox Hills aquifers, or other aquifer the applicant claims contains nontributary groundwater, outside of a Designated Groundwater Basin subject to section 37-90-137(4), C.R.S., except when the right to withdraw the groundwater has been determined by a valid decree; OR  
 2) A determination of water right in the Dawson, Denver, Arapahoe or Laramie-Fox Hills aquifers, or a well permit to withdraw groundwater from those aquifers that are subject to Designated Basin Rule 5.4, within a Designated Groundwater Basin.  
 NOTE: Form submittal instructions can be found on our website [Colorado.gov/water](http://Colorado.gov/water). See instructions on the reverse of this form.  
 Type or print in black or blue ink.

<b>1. APPLICANT INFORMATION</b>			
Name of Applicant Mountains Reign Ranch Trust			
Mailing Address 16975 Falcon Hwy	City Peyton	State CO	Zip Code 80831
Telephone Number (include area code) 406-438-1874	Email stuing@protonmail.com; stm@cowaterlaw.com		
<b>2. AQUIFER</b> Laramie-Fox Hills			
<b>3. CLAIM OF OWNERSHIP</b> – I hereby claim that I am the owner of the following described property, as evidenced by the attached copy of a deed recorded in the county in which the property is located.			
Number of acres: <u>40</u> in the county of: <u>El Paso</u> described as follows (insert legal description).			
<u>The NW 1/4 NW 1/4 of Section 15, Township 13 South, Range 63 West of the 6th P.M.</u>			
- I further claim that the right to withdraw the groundwater in the aquifer underlying the above described property has not been reserved by another, nor has consent been given to another for the right to its withdrawal.			
<b>4. THE APPLICANT MUST PROVIDE</b> – a Verification of Notice of Application (form no. GWS-43) (see instructions for exceptions). Please see attached.			
<b>5. SIGNATURE</b> – Sign or enter name(s) of applicant(s) or authorized agent. The making of false statements herein constitutes perjury in the second degree, which is punishable as a class 1 misdemeanor pursuant to C.R.S. 24-4-104(13)(a). I have read the statements herein, know the contents thereof, and state that they are true to my knowledge.			
Signature: 		Date: <u>31 July, 2022</u>	
Robert S. Williams, as Trustee of Mountains Reign Ranch Trust			
Print name and title:			



## APPENDIX E –WATER QUALITY TEST RESULTS

**STANDARD BACTERIOLOGICAL WATER TEST**    METHOD:SM-9223B  
El Paso County Public Health Laboratory    EPA ID# CO00025

1675 West Garden of the Gods Road, Suite 2044, Colorado Springs, CO 80907 - (719) 578-3120

PWSID

- Raw
- Finished
- LT2
- Quantitative

Sample Point ID: RTOR

Sample Taken Date: 02/26/2024 Time: 1400

Address where sample was taken: 6425 JD Johnson Rd Peyton CO 80831

Sample site location: Faucet

Collector Name: Meagan Farrell Chlorine: mg/L

- Well                       City                       Recreational
- Surface/Spring             Cistern                     Wastewater

Results to: Jim Houk

Phone: (719) 284-7280

Mailing address: 6425 J D JOHNSON RD

City/State/Zip: PEYTON, CO 80831-7301

Fax/Email: jim.houk@kimley-horn.com

Comments:

Date 02/26/2024    Time 1455                      Rc'd 850

Date 02/26/2024    Time 1607                      Tested 728

Date 02/27/2024    Time 1012                      Comp 860

**Lab Sample # 16165**

**Colilert Results Per 100ml**

- Absence: Absence of coliform bacteria
- Presence: Presence of coliform bacteria & non-compliance with drinking water standards.  
MPN/100 ml:
- Absence: E. Coli: Escherichia coli bacteria
- Presence: E. Coli: Escherichia coli bacteria  
MPN/100 ml:





1675 W. Garden of the Gods Road Suite 2044  
 Colorado Springs, CO 80907 (719) 578-3120

REPORTING FORM FOR INORGANIC ANIONS IN WATER  
 EPA ID # CO00025

PWSID# -		RESULTS TO: Jim Houk	
SAMPLE INFORMATION: 6425 JD Johnson Road Peyton, CO 80831		PHONE: (719) 284-7280	
		FAX/EMAIL: jim.houk@kimley-horn.com	
		COLLECTED BY: Meaghan Farrell	
		SAMPLE COLLECTION DATE: 02/20/2024	
SITE DESCRIPTION: <input type="checkbox"/> Public System <input type="checkbox"/> Private <input type="checkbox"/> Surface <input type="checkbox"/> Stream  <input type="checkbox"/> GWUDI <input type="checkbox"/> Other		SAMPLE COLLECTION TIME: 1521	
		MATRIX: Groundwater	
		RESIDUAL CHLORINE:	
CUSTOMER: Jim Houk 6425 J D JOHNSON RD PEYTON, CO 80831-7301		SAMPLE RECEIVED DATE: 02/21/2024	
		RECEIVED TIME: 1005	TECH: 850
		RECEIVED TEMP: 9.4 °C	
		DILUTIONS: 1:1, 1:10	
COMMENTS: Mary Jane Ranch,			
TESTED		COMPLETED	
DATE: 02/21/2024		DATE: 02/21/2024	
TIME: 1108		TIME: 1654	
LAB SAMPLE #: 16078		ID: 850	
SAMPLE POINT ID: RTOR		SAMPLE POINT NAME:	
FACILITY ID: DS001		FACILITY TYPE:	
		FACILITY NAME:	

ANALYTE	RESULTS	MCL	MSL	STANDARD	LAB MRL
Nitrite	BDL mg/L	1.0		300.0	0.2
Nitrate	BDL mg/L	10.0		300.0	0.2

BDL - Below Detection Limit  
 MRL - Minimum Reporting Limit

MCL - Maximum Contamination Unit per EPA  
 MSL - Maximum Secondary Unit per EPA  
 Q - Quality Control Limit Exceeded

H - Holding Time Exceeded  
 NT - No Test

*Esta es informacion importante. Si no la pueden leer, necesitan que alguien se la traduzca.*

The Sage Water Users Association and Mid-Colorado Investment Co., Inc. are pleased to present this year's annual Water Quality Report. This report is designed to inform you about the quality of the water you consume every day. We are committed to providing you, our customers, with water that meets or exceeds all federal and state requirements. If you have any questions, please contact any member of the Sage Board of Directors (call 719-660-3076, or email [contact@sagewater.org](mailto:contact@sagewater.org)), Philip Cromwell, operator of the Sage system (719-499-8408), or Al Hagedorn of Mid-Colorado (719-687-5312), or attend the meetings of the Sage Board. The Board meets at 7:00 PM on the third Tuesday of "odd-numbered" months (Jan., Mar., etc.) at the Sage Creek Community Church, 6160 Murr Rd. For updated locations, dates and times, check [www.sagewater.org](http://www.sagewater.org), or call 719-222-2955.

## Vulnerable Populations Warning

Some people may be more vulnerable to contaminants in drinking water than the public in general. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV-AIDS or other immune system disorders, some elderly, and infants can be particularly at risk of infections. These people should seek advice from their health care providers about drinking water. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and microbiological contaminants, call the EPA Safe Drinking Water Hotline at 1-800-426-4791.

## Where Does Our Water Come From?

Our water comes from deep (over 1000 feet) wells drilled into the Laramie-Fox Hills and Arapahoe aquifers (groundwater); the amounts drawn from the two aquifers vary, but we usually deliver a blend of about 67% Laramie-Fox Hills, and 33% Arapahoe. The wells, pumps and treatment facilities are owned and maintained by Mid-Colorado. The water is chlorinated at the wells, then pumped to an underground reservoir. From there, the pressure is raised with booster pumps and the water is delivered into the distribution system, owned and maintained by the Sage Association. In 2021, the amount used by the entire Sage service area was 21,659,408 gallons, about 59,341 gallons per day average over the year.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- \* Microbial contaminants, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- \* Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- \* Pesticides and herbicides that may come from a variety of sources, such as agriculture, urban stormwater runoff, and residential uses.
- \* Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff, septic systems, and as byproducts of water disinfection.
- \* Radioactive contaminants, that can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

## The Source Water Assessment Report

The Colorado Department of Public Health and Environment has provided us with a Source Water Assessment Report for our water supply. You may obtain a copy of the report by visiting [www.cdph.state.co.us/wq/sw/swaphom.html](http://www.cdph.state.co.us/wq/sw/swaphom.html) or by contacting Al Hagedorn at 719-687-5312.

Potential sources of contamination in our source water area come from: "Road Miles."

The Source Water Assessment Report provides a screening-level evaluation of potential contamination that **could** occur. **It does not mean that contamination has occurred or will occur.** We can use this information to evaluate the need to improve our current water treatment capabilities and prepare for future contamination threats. This can help us ensure that quality finished water is delivered to your homes. In addition, the source water assessment results provide a starting point for developing a source water protection plan; this plan has been developed and implementation is beginning.

Please contact Al Hagedorn, (719-687-5312), to learn more about what you can do to help protect your drinking water sources, any questions about the Drinking Water Consumer Confidence Report, to learn more about our system, or to attend scheduled public meetings. We want you, our valued customers, to be informed about the services we provide and the quality water we deliver to you every day.

## Understanding the Table of Contaminants

In the table on the other side of this sheet, you will find some terms and abbreviations that might not be familiar to you. To help you better understand these terms, we've provided some definitions:

*Maximum Contaminant Level (MCL)* - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

*Maximum Contaminant Level Goal (MCLG)* - The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

*Maximum Residual Disinfectant Level (MRDL)* - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

*Maximum Residual Disinfectant Level Goal (MRDLG)* - The level of a drinking water disinfectant, below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

*Action Level (AL)* - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements a water system must follow.

*Waiver* - State permission not to test for a specific contaminant. **During 2021, we had waivers of monitoring requirements for dioxin, glyphosate, cyanide, and asbestos.** These contaminants are not expected to occur in our water.

*Milligram* - a unit of weight in the metric system, abbreviated "mg." There are about 454,000 milligrams in a pound. Approximately six grains of table salt weigh one milligram.

*Liter* - a unit of volume in the metric system, abbreviated "L." A liter is slightly more than one quart.

*Milligrams per liter (mg/L)* - 1 mg/L corresponds to about 4 drops of water in a full bathtub, or 10 tablespoons of salt in one day's average water use throughout the Sage subdivisions; same as "parts per million (ppm)."

*Micrograms per liter (µg/L)* - 1 µg/L corresponds to one or two grains of salt in a full bathtub, or about half a teaspoon of water in an average week's water use by all of Sage; same as "parts per billion (ppb)."

*Picocuries per liter (pCi/L)* - a measure of the radioactivity in water.

*N/A* - Not Applicable. This test was not required, or the requirement is not applicable to our system.

*N/T* - No Test. This test was not required for our system.



## What's In Our Water?

The State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Some of our data, though representative, may be more than one year old. The table below lists the regulated and unregulated contaminants that were found, as well as a few that were NOT detected. For a complete list of the **very** large number of contaminants tested for but not detected, their MCLs, sampling dates, etc., please contact Al Hagedorn at (719)-687-5312. He can also supply results for earlier years, possible health effects from contaminants, and other information about the water.

Contaminant	Sample Date	Violation Level (Yes/No)	Unit	MCL	MCLG	Likely source of contaminant	
<b>Microbiological Contaminants</b> (samples taken at booster pump station and at various locations throughout the distribution system)							
Total Coliform Bacteria	monthly	No	Absence	Presence/Absence	0	Naturally present in the environment	
<i>E. coli</i> Bacteria	monthly	No	Absence	Presence/Absence	0	Human and animal fecal waste	
<b>Inorganic Contaminants</b>							
Arsenic	4/26/21	No	1	µg/L	10	0	Erosion of natural deposits; orchard runoff
Barium	4/26/21	No	0.01	mg/L	2.0	2	Erosion of natural deposits
Chromium	4/26/21	No	2	µg/L	100	100	Erosion of natural deposits
Copper (see Note below)	9/21/21-9/23/21	No	0.01 (90th %ile)	mg/L	AL = 1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits
Fluoride (see Note below)	4/26/21	No	1.01	mg/L	4	4 (AL = 2)	Erosion of natural deposits
Lead (see Note below)	9/23/20-9/24/20	No	<0.50 (90th %ile)	µg/L	AL = 15	0	Corrosion of household plumbing systems; erosion of natural deposits
Nitrate (as Nitrogen)	4/26/21	No	<0.1	mg/L	10	10	Runoff from fertilizer use; sewage, leaching from septic tanks; erosion of natural deposits
Nitrite (as Nitrogen)	12/04/12 4/26/21	No No	<0.004 <0.1	mg/L	1.0	1	erosion of natural deposits
Sodium (unregulated)	4/26/21	N/A	124.5	mg/L	N/A	N/A	Naturally present in the environment
Total Dissolved Solids (see Note below)	12/03/12	N/A	424	mg/L	N/A	N/A	Erosion of natural deposits. This measures the residue left when the water evaporates.
<b>Radionuclides</b> (see Note below)							
Radium-226	12/03/15	No	0.2	pCi/L	5 (for combined Ra-226 + Ra-228)	0	Erosion of natural deposits
Radium-228	12/03/15	No	0.0	pCi/L			Erosion of natural deposits
Gross Alpha	12/04/12	No	0.0	pCi/L	15	0	Erosion of natural deposits
Uranium	12/04/12	No	<0.7	pCi/L	30	0	Erosion of natural deposits
<b>Disinfection Byproducts</b> (See Note below.)							
Bromodichloromethane	4/26/21	N/A	0.7	µg/L	N/A	0	Disinfection byproduct
Bromoform	4/26/21	N/A	1.1	µg/L	N/A	0	Disinfection byproduct
Dibromochloromethane	4/26/21	N/A	1.4	µg/L	N/A	60	Disinfection byproduct
Chloroform	4/26/21	N/A	<0.5	µg/L	N/A	N/A	Disinfection byproduct
TTHM in Sage distrib system (see Note below)	various 2021	No	9.7 avg	µg/L	80 µg/L	N/A	Disinfection byproducts
HAA5 in Sage distrib system (see Note below)	various 2019	No	1.25 avg (range 1.1-1.4)		60 µg/L	N/A	Disinfection byproducts
<b>Disinfectant Residual</b>							
Total Chlorine Residual (see Note below)	1/01/20-12/31/20	N/A	0.97 avg (0.70-1.30)	mg/L	N/A	N/A	Water additive added to control microbes; MRDL and MRDLG both 4.0 mg/L

### Notes to Table of Values

#### VIOLATIONS: SEE SEPARATE SHEET

**Fluoride:** If children under 7 years of age regularly consume water with fluoride levels near 1 mg/L, their permanent teeth tend to become decay-resistant. However, with *prolonged* consumption of water with fluoride levels over 2 mg/L, the children begin to be at risk of developing dental fluorosis, a mottling of the enamel of the permanent teeth. The blend of Laramie-Fox Hills and Arapahoe water sampled on 4/26/21 showed a fluoride content of 1.01 mg/L, in line with historic results. Arapahoe well water by itself slightly exceeds the action level of 2 mg/L, but it is rarely the sole source of water; only when the Laramie-Fox Hills well is out of service (e.g., when the pump needs replacing) is unblended Arapahoe water delivered. Exposure to the higher fluoride level then would be for only a few days, and should not pose a risk of dental fluorosis.

**Copper and Lead:** There is very little copper or lead in the water that is delivered to the Sage distribution system; for example, a sample of the usual blend of Laramie-Fox Hills and Arapahoe water taken 10/13/02 showed these contaminants to be present, if at all, at levels below the State Health Department lab's limits of detection. However, these contaminants might leach into the water from piping or plumbing fixtures in the homes. Accordingly, analyses were conducted on "first draw" samples (the first water taken from a tap after standing overnight) from ten homes. None of these samples showed lead or copper at or above the Action Levels; lead, in fact, was below the detection limit in all samples! Values in the Table are 90th percentile figures, and are far below the action levels.

**Lead in drinking water:** If present, elevated levels of lead can cause serious health problems (especially for pregnant women and young children). It is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home's plumbing. If you are concerned about lead in your water, you may wish to have your water tested. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. Additional information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

**Total Dissolved Solids:** This is considered a "secondary contaminant", that may cause cosmetic effects (such as skin, tooth or clothing discoloration) or aesthetic effects (taste [good or bad], odor, or color) in drinking water. The non-enforceable secondary standard is 500 mg/L.

**Disinfection Byproducts:** The first four compounds listed make up the "Total Trihalomethanes" ("TTHM"), by-products of the chlorination process used to disinfect the water. The values shown are from Mid-Colorado's sampling at the booster station on 4/26/21. Sage Water Users Association took samples in 2021 for TTHM and in 2019 for HAA5 (5 haloacetic acids) at several points in the distribution system. The results for these samples, shown in the Table, are far below the MCLs of 80 and 60 µg/L for TTHM and HAA5, respectively.

**Disinfectant Residual (Total Chlorine Residual):** The table shows results from testing the water entering the Sage distribution system (average 0.97 mg/L, range 0.70-1.30 mg/L). These reflect measurements taken when monthly samples were taken in 2021 for bacterial analysis at the booster station. Also, 2021 distribution system samples were all within allowed limits. Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose; some people who drink water that contains chlorine well in excess of the MRDL could experience stomach discomfort.

**Radionuclides:** Radioactive decay of these radium isotopes is the primary source of radon, another radioactive contaminant in water and in air. Radium itself arises from naturally occurring uranium in the rocks and soil.

Comments on this report and other aspects of water quality are very welcome! Please contact any member of the Sage Association Board of Directors. Attending the Board meetings is a great way to keep up to date about **your** water system.

## VIOLATIONS

Water supply to Sage: Mid-Colorado Investment (El Paso), PWSID CO0121465

The Colorado Department of Public Health and Environment (CDPHE) ALLEGES that Mid-Colorado had a “Non-Health-Based Violation,” namely “Failure ot deliver an annal Consumer Confidence (Water Quality) Report to the public/consumers.” This allegation is baseless! CDPHE evidently did not read the “CCR Certificate of Delivery Form” that I submitted to CDPHE on 30 June 2021. It clearly states that the CCR was delivered to the Sage Association by email on 15 June 2021. Perhaps CDPHE was confused by the fact that the CCR is for both Mid-Colorado’s supply, and Sage Water Users Association distribution system.

Alfred A. Hagedorn III, Ph.D.  
Certified Operator in Responsible Charge  
President, Mid-Colorado Investment Co., Inc.