## PEERLESS FARMS

## EL PASO COUNTY, COLORADO

WATER RESOURCE REPORT

MARCH 6, 2024

Prepared by:



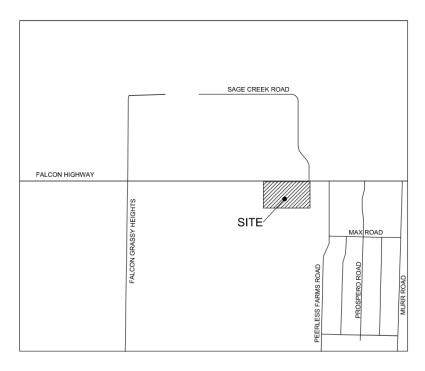
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## SUMMARY OF THE PROPOSED SUBDIVISION

## SITE LOCATION

This Water Resources Report has been prepared for Peerless Farms (the "Project/Site") located at the southeast corner of Falcon Highway and Sage Creek Road at 16975 Falcon Hwy in Peyton, CO. More specifically, the Site is located in a portion of the northwest quarter of Section 13, Township 13 South, Range 64 West of the 6th P.M., County of El Paso, State of Colorado. The Property is bounded by Falcon Hwy to the north, privately owned pastures to the west and south, and Sagecreek South Filing No. 1 to the east. A vicinity map is provided below for reference:



## DESCRIPTION OF PROPERTY

The Project Site is approximately 40 acres of mostly undeveloped land. The Site is mostly vacant but contains two single family houses, one large barn and multiple small chicken coops and sheds. Development for Peerless Farms involves the construction of a public road with two private driveways, roadside ditches, and culverts. The public road will be an extension of Sage Creek Road on the east side of the Site, providing access to the two proposed private gravel driveways within the Site. The existing access road west of Sage Creek Road will be demolished. The Site will be subdivided into seven (7) large residential lots (Lots 1-7) for future single-family residences. Refer to **Appendix A** for a preliminary site plan for the Project.

An existing private water line runs along the North side of the Site from Sage Creek Road to the existing access road, and then runs south through the Site. This line is assumed to be abandoned and does not provide water service currently. There is also a public water line on the east side within an existing utility easement. It is not anticipated that the Project will utilize these existing lines for water service.

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 currently consists of two single family homes that are provided potable water service via an existing well (Permit No. 8141). The existing well withdraws from the alluvial aquifer and the not-nontributary portion of the Denver Aquifer. It's anticipated that the existing well will be abandoned and new individual wells will be installed for Lots 1-7.

Previous submittals for this Project had water service being provided by Sage Creek Water Association via a service agreement with Mid Colorado Investment Company dated December 2021. However, it is understood that Sage Creek Water Association no longer has the ability to provide potable water service the Project; therefore, the developer has decided to move forward with providing water service with new water wells. The Water Information Summary sheet required by El Paso County is included in **Appendix B**.

Estimated water demands for Lots 1-7 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 1-7 of the Project.

User Type	Unit Count		Total Demand				
	(Lots)	(AC-FT/Yr/Lot)	(AC-FT/Yr) (AC-FT/Day) (GPD)				
Household	7	0.26	1.82	0.005	1,625.04		
Irrigation	7	0.50	3.50 0.010		3,125.07		
		Total:	5.32	0.015	4,750.11		

## Table 1: Estimation of Water Demand (Lots 1-7)

The Falcon Fire Protection District (FFPD) will provide fire protection services for the Project. Information on fire protection for Peerless Farms 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 7 large residential lots and each, including existing homes, will be provided water services by new individual wells. Determination of Water Rights no. 4475-BD, 4476-BD and 4477-BD were approved for domestic, irrigation, animal watering, commercial, replacement, and firefighting purposes in January of 2023 with available groundwater allocations from three aquifers: Laramie-Fox, Arapahoe, and Denver. Detailed water rights information for the proposed wells can be found in **Appendix D**.

Groundwater allocations for the Project Site from the Laramie-Fox and Arapahoe aquifers are nontributary (NT) with an available water volume of 1,290 and 1,360 acre-feet, respectively. Allocations from the Denver aquifer consist of both NT and not-nontributary (NNT) water availability. The NT water availability from the Denver aquifer consists of 44.6 acre-feet whereas the NNT water availability is 987 acre-feet, excluding the existing well (Permit No. 8141). However, use of the NNT water right from the Denver aquifer requires an actual impact replacement plan with commission approval. 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	1,290	12.90	4.30	
Arapahoe	NT	1,360	13.60	4.53	
Donvor*	NT	44.6	0.446	0.148	
Denver*	NNT	987	9.87	3.29	

(\*) Available water in the Denver aquifer includes a reduction for the existing well (No. 8141)

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 5.32 AC-FT/Yr will not be able to be solely supplied by one aquifer within the decreed water right. Each home has an estimated water use of 0.76 AC-FT/Yr and homeowners are responsible for ensuring that at least two wells are utilized to maintain appropriate quantity of use from each aquifer. It is recommended that both the Arapahoe and Denver aquifers are utilized for the proposed wells due to the Arapahoe's NT classification and the large expense associated with establishing a well in the Laramie-Fox aquifer. As previously noted, the NNT water right to the Denver aquifer requires a commission approved replacement plan of the actual impact of well diversion; however, a significant portion 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. Establishment of the proposed wells and required replacement plan will be the responsibility of the future lot owner(s).

## INFORMATION REGARDING SUFFICIENT WATER QUALITY

Water quality tests were performed at the existing well at 16975 Falcon Highway 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 lots 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

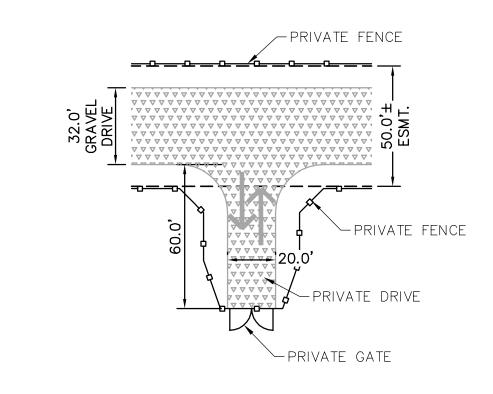
Each home within the Site will be supplied water from individual on-site wells. Commercial water providers are not involved or responsible for the water system discussed in this report.

## APPENDIX A – PEERLESS FARMS PRELIMINARY PLAN

LOT TABLE						
LOT NO.	SF/AC±	USE				
1	219,785SF± / 5.046AC±	RESIDENTIAL				
2	218,572SF± / 5.018AC±	RESIDENTIAL				
3	272,926SF± / 6.266AC±	RESIDENTIAL				
4	222,638SF± / 5.112AC±	RESIDENTIAL				
5	299,089SF± / 6.866AC±	RESIDENTIAL				
6	243,136SF± / 5.582AC±	RESIDENTIAL				
7	221,582SF± / 5.087AC±	RESIDENTIAL				

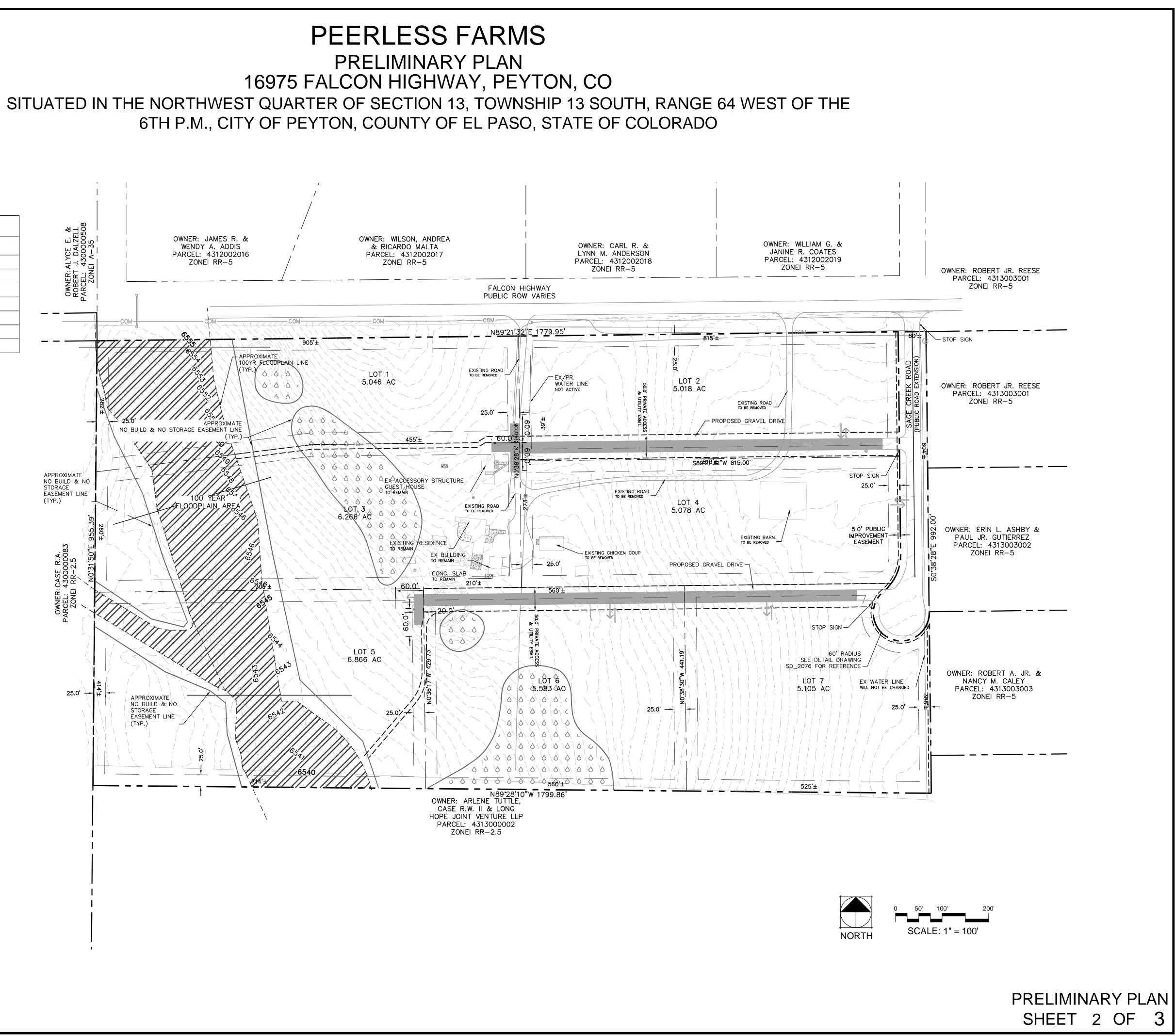
LEGEND
GRAVEL ROAD
ASPHALT ROAD
FLOODPLAIN
SEASONALLY WET AREAS*
LOT LINE
PROPERTY SETBACK
FEMA 100YR FLOODPLAIN
ACCESS AND UTILITY EASEMENTS

\*NOTE: SEE FIG. 11 FROM RMG ARCHITECTS AND ENGINEERS SOILS AND GEOLOGY REPORT. JOB NO.: 180213 FOR FURTHER INFORMATION.



ALTERNATIVE HAMMERHEAD / PRIVATE FENCE LAYOUT DETAIL TYPICAL TURN ROUND





PEERLESS FARMS PRELIMINARY PLAN - COUNTY FILE NO. SP-21-7

APPENDIX B – PEERLESS 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 adeuate supply of water"

1. NAME OF DEVELOPMENT AS PROPOSED PEERLESS FARMS FINAL PLAT							
2. LAND USE ACTION FINAL PLAT							
3. NAME OF EXISTING PARCEL AS RECORDED 4313000001							
SUBDIVISION FILING BLOCK Lot							
4. TOTAL ACERAGE 40+/- 5. NUMBER OF LOTS PROPOSED 7 PL	4. TOTAL ACERAGE 40+/- 5. NUMBER OF LOTS PROPOSED 7 PLAT MAPS ENCLOSED YES						
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?							
B. Has the parcel ever been part of a division of land action since June 1, 1972?	B. Has the parcel ever been part of a division of land action since June 1, 1972?						
If yes, describe the previous action							
7. LOCATION OF PARCEL - Include a map deliniating the project area and tie to a section corner.							
NW 1/4 SECTION 13 and TOWNSHIP 13	□n Xas range <u>64</u> □e Xaw						
PRINCIPAL MERIDIAN:	COSTILLA						
8. PLAT - Location of all wells on property must be plotted and permit numbers provided no wells have been drilled at this tim	e, and no existing wells are located on the property.						
Surveyors plat 🕅 YES 🗌 NO	If not, scaled hand -drawn sketch Y 🔲 NO						
9. ESTIMATED WATER REQUIREMENTS - Gallons per Day or Acre Foot per Year	10. WATER SUPPLY SOURCE						
HOUSEHOLD USE #* 7 of units AF/SFE/YR 1.82 AF	WELLS SPRING Proposed Aquifers - (Check One)						
	WELL PERMIT NUMBERS						
COMMERCIAL USE # SF GPD AF	Upper Dawson						
	Lower Dawson						
IRRIGATION #** .5 AF/lot/year GPD 3.5 AF	🗙 Denver 🗌 Dakota						
ANIMAL WATERING # *** 244 AF/Horse/Year AF							
	MUNICIPAL						
GPD AF	ASSOCIATION WATER COURT DECREE CASE NUMBERS						
	□ COMPANY NO. 223007800 (3)						
TOTAL 4,746 GPD 5.32 AF							
	NO. 223007798 (1)						
* Per Part 10 of the Findings from Rep. Plan No. 2 and Part 11 of Rep. Plan No. 3	NAME:						
** Assuming 0.25 AF/year/res. lot and 2.46 AF/acre/year for commercial irrigation	LETTER OF COMMITMENT FOR						
**** Per Part 2.c. Rep. Plan No. 2, Appendix C of Report (assuming 4 horses/SFE)							
11. ENGINEER'S WATER SUPPLY REPORT X YES NO If ye	s, please forward with this form. (This may be required before our review is completed)						
12. TYPE OF SEWAGE DISPOSAL SYSTEM							
SEPTIC TANK/LEACH FIELD							
LAGOON     VAULT - LOCATION SEWAGE HAULED TO:							
ENGINEERED SYSTEM (Attach a copy of engineering design)     OTHER:							

## APPENDIX C – PEERLESS FIRE PROTECTION REPORT

Fire Protection Report Fire District: Falcon Fire Protection District Parcel ID Nos.: 4313000001 Area/Acreage: ±40.01 AC Existing Zoning: RR-5

**Site Location:** The development limits are generally defined by Falcon Highway on the northern boundary and Sage Creek Road located at the northeast corner of said property.

**Project Summary:** This application includes the requested approval for a proposed site development plan of the 40.01-acre site of seven (7) lots RR-5 zone development. The site plan includes platted boundary descriptions, ROW dedications and improvements, private parking and drives, stormwater and water quality facilities, utilities, pedestrian amenities and landscape buffers and setbacks).

## FIRE PROTECTION REPORT

Note: The information provided in this report was provided by the Falcon Fire Protection District.

## About the Department

The Falcon Fire Protection District (FFPD) is composed entirely of unincorporated areas of El Paso County, Colorado's most populous county. The District has no organized towns or cities.

The District is governed by a five-member, publicly-elected Board of Directors who may serve up to two consecutive four-year terms. The Falcon Fire Department is managed by a career Fire Chief and a Deputy Chief of Operations. It is staffed primarily with career (paid) firefighter/emergency medical technicians (EMTs) and uses reserve (volunteer) firefighter/EMTs to augment staffing.

The District covers 113 square miles of unincorporated El Paso County. It serves more than 66,300 people (per El Paso County Assessor, Oct. 2018) and protects more than 16,100 structures with a 2018 estimated market value of \$4.2 billion.

Falcon F.D. operates from five stations:

- Station 1, the newest station, is at Meridian Ranch Boulevard and Stapleton Road. It is staffed 24/7.
- Station 2, on North Meridian Road in the north end of the District, is not staffed.
- Station 3 (also Headquarters), at Old Meridian Road and Highway 24, is staffed 24/7.

- Station 4, located on Capital Drive north of Constitution Avenue in the southwest section of the District, is staffed 24/7.
- Station 6, on Jones Road in the east end of the District, is not staffed.

The project is located within five (5) miles of Station 6 and has a project response time of five (5) to ten (10) minutes. The site has been designed to not include fire hydrants and internal circulation.

As of February 1, 2017, FFPD has an Insurance Services Office (ISO) rating of Class 3 for all residential properties located within five road miles of any FFPD or Automatic Aid partner fire stations, regardless of proximity to a fire hydrant. ISO Class 10 applies to residential properties located more than five road miles from an FFPD or Automatic Aid fire station.

The FFPD is supported primarily by a property tax rate of 8.612 mills. The District does not receive funding from El Paso County or the State of Colorado. The District board of directors and administrators work hard to utilize taxpayer funds as efficiently as possible while still providing effective emergency services to the Falcon community.

## **Historical Background**

The Falcon Volunteer Fire Department was organized in 1975 and incorporated on March 3, 1977 by a group of volunteers who saw a need in the community. The Department owned and operated the assets of the department until the formation of the Falcon Fire Protection District, a special district under the statutes of the state of Colorado, in 1981.

## **Builders/Developers Information**

The Falcon Fire Department works closely with local builders and developers to help ensure they have all the information they need to plan, design, construct and complete residential and commercial projects within the Department's jurisdiction.

The links on the Falcon Fire PD site include information, regulations and forms builders and developers are most likely to need during the planning, design and construction process.

For more information regarding development and construction contact Chief Harwig at (719) 495-4050.

## Fire Stations & Apparatus

Visit the FFPD contact page for a complete listing of hours, addresses, and locations, as well as information about Community Rooms.

## **STATION 1**

Located in the Woodmen Hills neighborhood, this is the primary response station for areas north of Woodmen Road. Groundbreaking for the 15,500-square foot station took place July 31, 2009, and the station became operational in May 2010. The station has a Community Room and a First Aid room. It also serves as the District's primary fitness center for its personnel.

Falcon F.D. apparatus at Station 1 include:

- An engine
- A water tender (water truck)
- A brush truck
- A utility truck
- A command vehicle
- An ambulance

## **STATION 2**

Falcon F.D. apparatus at Station 2 include:

- A 4-wheel drive engine
- A water tender
- A brush truck

## **STATION 3 / HEADQUARTERS / TRAINING**

With the opening of Station 1, the Falcon Fire Department's building on Old Meridian Road became a true headquarters facility that houses administration offices as well as a fire crew 24/7. It hosts the monthly Falcon Fire Protection District Board meetings and serves as the Department's primary classroom and training facility for emergency medical services, fire, hazardous materials, and technical rescue disciplines. A new fire station is in the process of being built in order to house all of the firefighters and ambulance crew and to accommodate the apparatus and supplies. It will also have a First Aid room. The building has the same floorplan as Station 4. The old building will be renovated into administrative offices and will have a larger training/community room.

Falcon F.D. apparatus at Station 3 include:

719 453 0180

- An engine
- A tender
- A utility truck
- A brush truck
- An ambulance

## **STATION 4**

Falcon Fire Department's newest station is located on Capital Drive north of Constitution Avenue. It is the primary response station for areas along the Marksheffel corridor that are in the jurisdiction of the Falcon Fire Protection District. Groundbreaking for the station took place June 15, 2016 and the station became operational on May 13, 2017. The station has a Community Room and a First Aid room. Falcon F.D. apparatus at Station 4 include:

- An engine
- A water tender
- A brush truck
- An ambulance

## **STATION 6**

Falcon F.D. apparatus at Station 6 include:

- A water tender
- A brush truck

719 453 0180

# APPENDIX D – WATER RESOURCES MEMORANDUM (WATER RIGHTS INFORMATION)

## Kimley *Whorn*

## **MEMORANDUM**

To:	El Paso County C/O Ryan Howser
From:	Larry Salazar
	Kimley-Horn and Associates, Inc.
Date:	06/19/2023
Subject:	Water Resources

This is an electronic memo of determination.

Upon application for determination of an allocation right for groundwater in the upper black Squirrel Creek Designated Groundwater Basin, three (3) aquifers were found.

Findings of Determination Numbers are as follows:

- 4475-BD
  - Rec. No. 223007800
  - Aquifer: Laramie-Fox Hills
- 4476-BD
  - Rec. No. 223007799
  - Aquifer: Arapahoe
- 4477-BD
  - Red. No. 223007798
  - Aquifer: Denver

DN-4475-BD REC. NO. 223007800 2230078001/26/202312:55 PMPGS6\$38.00DF \$0.00Electronically Recorded Official Records El Paso County COSteve Schleiker, Clerk and RecorderTD1000N

## 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.: 4475-BD

AQUIFER: Laramie-Fox Hills

APPLICANT: Robert S. Williams and Wendy K. Williams

In compliance with section 37-90-107(7), C.R.S., and the Designated Basin Rules, 2 CCR 410-1, Robert S. Williams and Wendy K. Williams (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 40.01 acres, generally described as a portion of the N 1/2 of the NW 1/4 of Section 13, Township 13 South, Range 64 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 40.01 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 40.01 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 40.01 acres of Overlying Land claimed by the Applicant is 1,290 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 215 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 1,290 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 1,290 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 12.9 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 steam 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 1, 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-23.
  - 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 40.01 acres of land, generally described as a portion of the N 1/2 of the NW 1/4 of Section 13, Township 13 South, Range 64 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 40.01 acres of Overlying Land allocated herein is 1,290 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 1,290 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 onehundred 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 40.01 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 40.01 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.
- 1. 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 40.01 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.

Kain

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

Prepared by: wad F&O4475-BD.doc

By:

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

Exhibit A Determination no. 4475-BD Page 1 of 1

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, <u>www.colorado.gov/water</u>, 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. See instructions on the reverse of this form.

Type or print in black or blue ink.

1. APPLICANT INFORMATION				
Name of Applicant Robert S Williams and Wendy K W	/illiams			
Mailing Address	City		State	Zip Code
16975 Falcon Hwy	Peyton		CO	80831
Telephone Number (include area code)	,	Email		
406-438-1874		stuing@protonma	il.com; stm@cowa	iterlaw.com
2. AQUIFER				
Laramie-Fox Hills	1			
3. CLAIM OF OWNERSHIP – I hereby the attached copy of a deed recorder	d in the county in which the	property is located.	ibed property, as	evidenced by
Number of acres:	in the co	unty of: <u>El Paso</u>		
described as follows (insert legal des	scription).			
NORTHWEST CORNER OF SAID S SECTION LINE, A DISTANCE OF 6 89°21'32" EAST ON A LINE PARA THENCE SOUTH 00°38'28" EAST, DISTANCE OF 1,799.86 FEET; THE BEGINNING, COUNTY OF EL PASC - I further claim that the right to with	LLEL TO THE NORTH SEC A DISTANCE OF 992.00 F NCE NORTH 00°31'50" E STATE OF COLORADO.	POINT OF BEGINN FION LINE A DIST EET; THENCE NOR AST 955.39 FEET	ING; THENCE N ANCE OF 1,779 TH 89°28'10" V TO THE TRUE PO the above descr	IORTH .95 FEET; NEST A OINT OF
has not been reserved by another,	nor has consent been given	to another for the ri	ight to its withdra	wał
4. THE APPLICANT MUST PROVIDE - exceptions). Please see attached	: •			
<ol> <li>SIGNATURE – Sign or enter name(s) or perjury in the second degree, which is pu statements herein, know the contents the</li> </ol>	DISDADIE AS A Class 1 misdeme:	mor nureuant to C D C	ilse statements hei 5. 24-4-104(13)(a).	rein constitutes I have read the
Signature: Robert K. Williams, Owner	2- Wendy S. Miliams, C	Winer Bate: 3	s) July,	9035
Print name and title:				
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DN-4476-BD REC. NO. 223007799 2230077991/26/202312:54 PMPGS6\$38.00DF \$0.00Electronically Recorded Official Records El Paso County COSteve Schleiker, Clerk and RecorderTD1000N

## 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.: 4476-BD

AQUIFER: Arapahoe

APPLICANT: Robert S. Williams and Wendy K. Williams

In compliance with section 37-90-107(7), C.R.S., and the Designated Basin Rules, 2 CCR 410-1, Robert S. Williams and Wendy K. Williams (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 40.01 acres, generally described as a portion of the N 1/2 of the NW 1/4 of Section 13, Township 13 South, Range 64 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 40.01 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 40.01 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 40.01 acres of Overlying Land claimed by the Applicant is 1,360 acre-feet. This determination was based on the following as specified in the Designated Basin Rules.
  - a. The average specific yield of 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 200 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 1,360 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 1,360 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 13.6 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 steam 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 1, 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-23.
  - 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 40.01 acres of land, generally described as a portion of the N 1/2 of the NW 1/4 of Section 13, Township 13 South, Range 64 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 40.01 acres of Overlying Land allocated herein is 1,360 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 1,360 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 onehundred 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 40.01 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 40.01 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 40.01 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.

Lein ark

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

Prepared by: wad F&O4476-BD.doc

eres M Bv:

Joahna Williams, P.E. Chief of Water Supply, Designated Basins

### Formino. DIVISION OF WATER RESOURCES

Exhibit A Determination no. 4476-BD Page 1 of 1

GWS-1 DEPARTMENT OF NATURAL RESOURCES (1/2020) 1313 Sherman St, Room 821, Denver, CO 80203

(303) 866-3581, www.colorado.gov/water, dwrpermitsonline@state.co.us

## NONTRIBUTARY GROUNDWATER LANDOWNERSHIP STATEMENT

RCVD DWR 08/02/2022

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

2) A determination of water right in the Dawson, Denver, Arapanoe of Laramie-Fox Hills adulters, 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. See instructions on the reverse of this form. Type or print in black or blue ink.

1. APPLICANT INFORMA	TION				
Name of Applicant					
Robert S Williams an	a vvendy K vvilliams				
Mailing Address	·	City		State	Zip Code
16975 Falcon Hwy		Peyton		CO	80831
Telephone Number (includ	e area code)		Email		
406-438-1874			stuing	@protonmail.com; stm@c	waterlaw.com
2. AQUIFER	÷				
Arapahoe					
3. CLAIM OF OWNERSHI	P - I hereby claim th	nat I am the owner of	the follow	wing described property	, as evidenced by
the attached copy of a d	leed recorded in the	county in which the p	property i	s located.	
40.4	24				
Number of acres: 40.0		in the co	unty of: _	El Paso	
described as follows (in:	sert legal description	ı).			
THAT PORTION OF TH	E NORTHWEST QL	JARTER OF SECTIO	N 13 IN	<b>TOWNSHIP 13 SOUT</b>	H, RANGE 64
WEST OF THE 6TH P.N	1., MORE PARTICU	LARLY DESCRIBED	) AS FOL	LOWS: COMMENCING	
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SECTION LINE, A DIS	TANCE OF 60:01 F	EET TO THE TRUE F	POINT O	F BEGINNING: THENC	E NORTH
89°21'32" EAST ON A	LINE PARALLEL TO	o the north sec <sup>*</sup>	TION LIP	NE A DISTANCE OF 1.3	79.95 FEFT:
THENCE SOUTH 00°38	3'28" EAST, A DIST	ANCE OF 992.00 F	EET; THE	NCE NORTH 89°28'1	" WEST A
DISTANCE OF 1,799.8	6 FEET; THENCE N	ORTH 00°31'50" E	AST 955	.39 FEET TO THE TRU	E POINT OF
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	-	-	,	er for the right to its with	
4. THE APPLICANT MUS					
	see attached.		apprioatio	n (ionn no. 0470-40) (5	
5. SIGNATURE - Sign or e		ant(s) or authorized ac	ent. The	making of false statement	s herein constitutes
perjury in the second degre	ee, which is punishable	as a class 1 misdeme	anor pursu	ant to C.R.S. 24-4-104(13	(a). I have read the
statements herein, know th	ne contents thereof, an	d state that they are tru	ue to my ki	nowledge.	
Signature:	\{.} <b>₩</b> ~	John Mill	Var.M.	nowledge. 1 Date: 31 July UMC	2032
Normen J	1 mmmg	YWWWYK.	1 Juli	amo '	/: ) 
	illiams, Owner	vvendy K. Williams, C	Jwrier		
Print name and title:	1	0			
					1

DN-4477-BD REC. NO. 223007798 2230077981/26/202312:54 PMPGS9\$53.00DF \$0.00Electronically Recorded Official Records El Paso County COSteve Schleiker, Clerk and RecorderTD1000N

### 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.: 4477-BD

AQUIFER: Denver

APPLICANT: Robert S. Williams and Wendy K. Williams

In compliance with section 37-90-107(7), C.R.S., and the Designated Basin Rules, 2 CCR 410-1, Robert S. Williams and Wendy K. Williams (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 40.01 acres generally described as a portion of the N 1/2 of the NW 1/4 of Section 13, Township 13 South, Range 64 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 40.01 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 40.01 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 replacement water requirement for withdrawal of groundwater from the Aquifer consists of two different requirements, which effectively divides the Overlying Land into two areas. The amount of groundwater in the Aquifer and a maximum annual amount available for allocation will be determined specifically for the Aquifer underlying each of the two areas. These areas are designated and described as follows:

- a. Area A containing 38.51 acres generally described as a portion of the N 1/2 of the NW 1/4 of Section 13, Township 13 South, Range 64 West of the 6th P.M., which overlies not-nontributary groundwater located closer than one mile from the Aquifer contact with the alluvium; and
- b. Area B containing 1.50 acres generally described as a portion of the N 1/2 of the N 1/2 of the N 1/2 of the NW 1/4 of Section 13, Township 13 South, Range 64 West of the 6th P.M., all in El Paso County, which overlies not-nontributary groundwater located farther than one mile from the Aquifer contact with the alluvium.

These two areas are further depicted on a map attached hereto as Exhibit B.

- The amount of water in storage in the Aquifer underlying the 40.01 acres of Overlying Land claimed by the Applicant is as follows: 1,150 acre-feet for Area A and 44.6 acre-feet for Area B. 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 175 feet for both Area A and Area B.
- 9. 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. 8141, is located on Area A of the Overlying Land and is permitted to withdraw 3 acre-feet per year of groundwater from the alluvial aquifer and Denver aquifer from beneath Area A. The amount of water considered to be withdrawn from the Denver aquifer by this well over a period equal to an aquifer life of one hundred years is 163 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 Area A available for allocation in this Determination is reduced by 163 acre-feet to 987 acre-feet. Except for this 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.
- 10. 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.
- 11. 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").

- 12. 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 987 acre-feet of water in the Aquifer underlying Area A and 44.6 acre-feet of water in the Aquifer underlying Area B 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 9.87 acre-feet per year for Area A and 0.446 acre-feet per year for Area B.
  - 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 the replacement water requirements for withdrawal of groundwater from the Aquifer undelrying the Overlying Land is as follows:
    - i. Area A Withdrawal of groundwater from the Aquifer underlying Area A will, within one hundred years, deplete the flow of a natural steam 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 Area A is considered to be not-nontributary groundwater as defined in Rule 4.2.23 of the Designated Basin Rules. Also, the location of Area A is closer than one mile from the Aquifer contact with the alluvium. Withdrawal of water from the Aquifer underlying Area A 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 Area A.
    - ii. Area B Withdrawal of groundwater from the Aquifer underlying Area B will, within one hundred years, deplete the flow of a natural steam 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 Area B is considered to be not-nontributary groundwater as defined in Rule 4.2.23 of the Designated Basin Rules. Also, the location of Area B 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.

- 13. 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.
- 14. 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.
- 15. On September 1, 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.
- 16. 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-23.
  - 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 40.01 acres generally described as a portion of the N 1/2 of the NW 1/4 of Section 13, Township 13 South, Range 64 West of the 6th P.M., in El Paso County, further described in Exhibit A, subject to the following conditions.

- 17. The amount (i.e. volume) of water in the Aquifer underlying the 40.01 acres of Overlying Land allocated herein is 987 acre-feet for Area A and 44.6 acre-feet for Area B (Underlying Groundwater).
- 18. 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.
- 19. 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).

- 20. 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 987 acre-feet for Area A and 44.6 acre-feet for Area B, 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. Replacement water requirements shall be as follows:
    - i. For the aquifer underlying the above described 38.51 acres of Area A, 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 withdraw of the groundwater in the Aquifer underlying Area A.
      - 1. Upon withdrawal of the total allowed average amount of water underlying Area A, in any calendar year, the allowed average annual amount of water underlying the above described Area B may be withdrawn through wells located on Area A, subject to 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.
    - ii. For the aquifer underlying the above described 1.50 acres of Area B, at least four percent (4%) of the amount of groundwater in the Aquifer underlying Area B withdrawn annually must be returned to the uppermost aquifer in the vicinity of the permitted point or points of withdrawal, unless other locations are approved by the Commission.

- 1. Upon withdrawal of the total allowed average amount of water underlying Area B, in any calendar year, the allowed average annual amount of water underlying the above described Area A may be withdrawn through wells located on Area B, subject to 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.
- 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 40.01 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 40.01 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.
- 21. 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 40.01 acres of Overlying Land area, or any part thereof, shall reveal the existence of this Determination.

Determination No.: 4477-BD Aquifer: Denver Applicant: Robert S. Williams and Wendy K. Williams

22. 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.

nin R. Lein

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

Prepared by: wad F&O4477-BD.doc

() r M By:

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

Exhibit A Determination no. 4477-BD Page 1 of 1

## 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, <u>www.colorado.gov/water</u>, dwrpermitsonline@state.co.us

RCVD DWR 08/02/2022

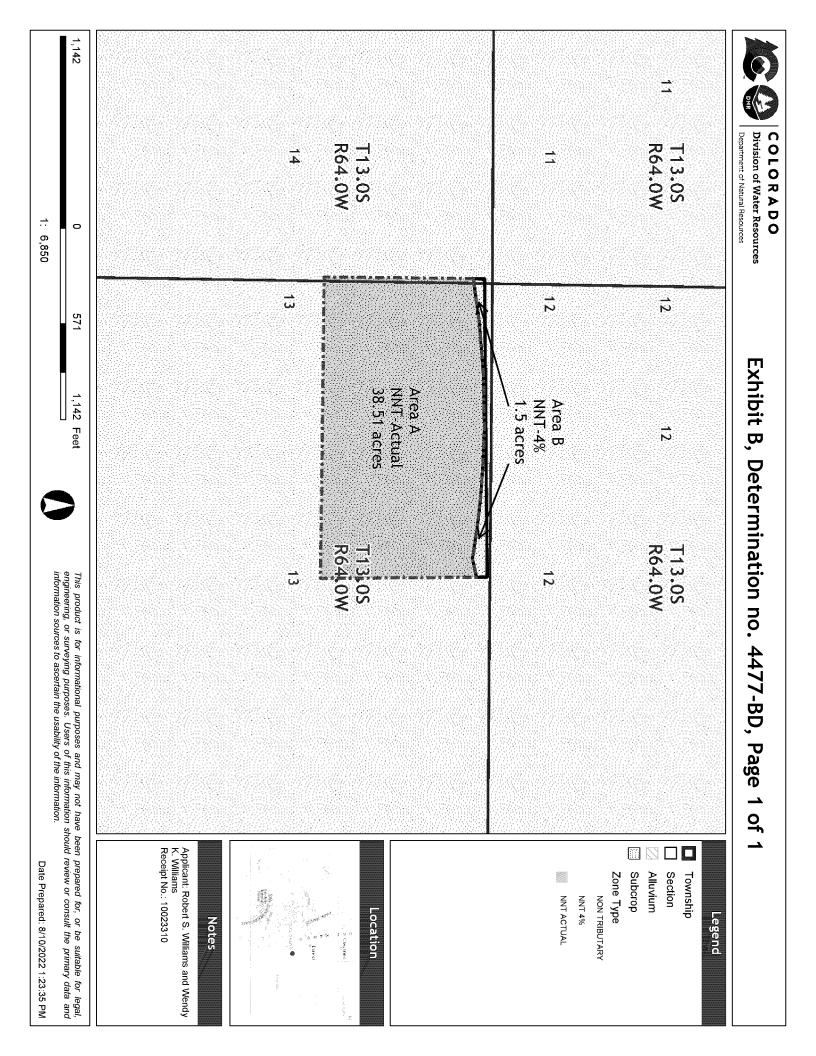
## NONTRIBUTARY GROUNDWATER LANDOWNERSHIP STATEMENT

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. See instructions on the reverse of this form. Type or print in black or blue ink.

1. APPLICANT INFORMATION				
Name of Applicant Robert S Williams and Wendy K Wi	liams			
Mailing Address	City		State	Zip Code
16975 Falcon Hwy	Peyton		0	80831
Telephone Number (include area code)		Email		
406-438-1874		stuing@protonmail.com	; stm@cov	vaterlaw.com
2. AQUIFER				
Denver				
3. CLAIM OF OWNERSHIP - I hereby	claim that I am the owner of	the following described p	property,	as evidenced by
the attached copy of a deed recorded				
Number of acres: 40.01	in the co	unty of:El Paso		
described as follows (insert legal des	cription).	•		
THAT PORTION OF THE NORTHW	EST QUARTER OF SECTION	N 13 IN TOWNSHIP 1	3 SOUTH	, RANGE 64
WEST OF THE 6TH P.M., MORE PA				
NORTHWEST CORNER OF SAID S				
SECTION LINE, A DISTANCE OF 6	0.01 FEET TO THE TRUE	POINT OF BEGINNING	THENCE	NORTH
89°21'32" EAST ON A LINE PARA	LLEL TO THE NORTH SEC	TION LINE A DISTANC	E OF 1,7	79.95 FEET;
THENCE SOUTH 00°38'28" EAST,	A DISTANCE OF 992.00 F	EET; THENCE NORTH 8	9°28'10	" WEST A
DISTANCE OF 1,799.86 FEET; THE		AST 955.39 FEET TO T	HE TRUE	POINT OF
BEGINNING, COUNTY OF EL PASC	, STATE OF COLURADO.			
- I further claim that the right to with	draw the groundwater in th	e aquifer underlying the	above de	scribed property
has not been reserved by another,				
4. THE APPLICANT MUST PROVIDE -	- a Verification of Notice of	Application (form no. GW	S-43) (se	e instructions for
exceptions). Please see attached				
5. SIGNATURE – Sign or enter name(s)	of applicant(s) or authorized a	gent. The making of false s	tatements	herein constitutes
perjury in the second degree, which is pu statements herein, know the contents the	inishable as a class 1 misdeme preof, and state that they are tr	anor pursuant to C.R.S. 24- ue to my knowledge.	4-104(13)(	a). I have read the
AN AN ININ	· N/ 0.11	Joli M. Day ZI	$\sim$ 1	1000
Signature:	rom YVMMXK	YUUUUX S	3.00	À' 3097
_ Robert S. Williams, Own	er Wendy K. Williams, I	Dwner		
Print name and title:	V			
L				



## APPENDIX E – WATER QUALITY TEST RESULTS



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#-				RESULT	<b>S TO:</b> Jim Houk			
SAMPLE INFORMATION:				PHONE: (719) 284-7280				
16975 Falcon Hwy Peyton, CO 80831				FAX/EMAIL: jim.houk@kimley-horn.com				
				COLLECTED BY: Meaghan Farrell				
				SAMP	LE COLLECTION	DATE:	02/20/2024	
SITE DESCRIPTION	:			SAMP	PLE COLLECTION	TIME: 1	508	
Public System	Private	□ Surface □ Stre	eam	MATR	XIX: Groundwater			
GWUDI	□ Other			RESI	DUAL CHLORINE:			
CUSTOMER:				SAMP	LE RECEIVED DA	TE: 02/	/21/2024	
Jim Houk 6425 J D JOHNSON RD				RECE	EIVED TIME: 1003	2	TECH: 850	)
PEYTON, CO 80831-730	01			RECE	EIVED TEMP: 9.3 °C	•		
				DILUTIONS: 1:1, 1:10				
COMMENTS: Peerles:	s Farms,							
TESTED				CON	<b>NPLETED</b>			TECH
DATE: 02/21/2024			DATE: 02/21/2	024				
TIME: 1108			TIME: 1726	ID: 850				
LAB SAMPLE #: 160	)79		SAMPLE POINT NAME:					
SAMPLE POINT ID:	FACILITY TY	FACILITY TYPE:						
FACILITY ID: DS001 FAC			FACILITY NA	NAME:				
<b>ANALY</b> Nitrate Nitrite	ΓE	< 0.2 mg/L	<b>ACL N</b> LO.0 1.0	1SL	<b>STANDARD</b> 300.0 300.0	0	<b>MRL</b> .2 .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

Revision: 6/21/2019

STANDARD BACTERIOLOC El Paso County Public Healt 1675 West Garden of the Gods Road, Suite 20	h Laboratory	METHOD:SM-9223B EPA ID# CO00025 30907 - (719) 578-3120		Date 02/21/2024 Date 02/21/2024	Time Time 1216	Rc'd 850 Tested 860	
PWSID		☐ Raw ☐ Finished ☐ LT2	d	Date 02/22/2024	Time 0738	Comp 860	
Sample Point ID: RTOR	Quantita	ative	Lab Sample # 16079				
Sample Taken Date: 02/20/2024 Time: 1508		Coli	ilert Results	Per 100ml			
Address where sample was taken: 16975 Falcon Hwy Peyton CO 80831							
Sample site location: Other -Peerless Farms	mg/L	Absence: Ab	sence of coli	form bacteria			
□ Well □ City □ Surface/Spring □ Cistern	Recreational Wastewater				resence of concerned of concerned of concerned of the sence of the sen	oliform bacteria & king water	
Results to: Jim Houk		Phone: (719) 284-7280		MPN/100 ml:			
Mailing address: 6425 J D JOHNSON RD				Absence: E.	Coli: Escher	ichia coli bacteria	
City/State/Zip: PEYTON, CO 80831-7301		□ Presence:E.	Coli: Escher	ichia coli bacteria			
Fax/Email: jim.houk@kimley-horn.com							

Comments:

MPN/100 ml:

Sage Water Users Association PWSID #CO0121745 Mid-Colorado Investment Co. PWSID #CO0121465

## 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 ), 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 ,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.cdphe.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 <u>could</u> 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 (\mu g/L)* - 1  $\mu g/L$  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
Violation
Level
Unit
MCL
MCLG
Likely source of contaminant

Contaminant	Sample	Violation		Unit	MCL	MCLG	Likely source of contaminant
Mianahiological Contaminant	Date	. ,	Detected	station and	at romiana le	antions th	nough out the distribution system)
							roughout the distribution system)
Total Coliform Bacteria	monthly	No	Absence	Presence/ Absence	Presence	0	Naturally present in the environment
E. coli Bacteria	monthly	No	Absence	Presence/	Presence	0	Human and animal fecal waste
				Absence			
Inorganic Contaminants				_			
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
Durrum		110	0.01	ing 2	2.0	-	
Chromium	4/26/21	No	2	µg/L	100	100	Erosion of natural deposits
	0/01/01	<b>N</b> .	0.01	17		1.2	
Copper	9/21/21-	No	0.01	mg/L	AL = 1.3	1.3	Corrosion of household plumbing systems; erosion of
(see Note below)	9/23/21		(90th %ile	e)			natural deposits
Fluoride	4/26/21	No	1.01	mg/L	4	4	Erosion of natural deposits
(see Note below)				0		(AL = 2)	1
Lead	9/23/20-	No	< 0.50	µg/L	AL = 15	0	Corrosion of household plumbing systems; erosion of
(see Note below)	9/24/20		(90th %ile	e)			natural deposits
Nitrate (as Nitrogen)	4/26/21	No	< 0.1	mg/L	10	10	Runoff from fertilizer use; sewage, leaching from septic
(us milligen)	1/20/21	110	-0.1	ing/L	10	10	tanks; erosion of natural deposits
Nitrite (as Nitrogen)	12/04/12	No	< 0.004	mg/L	1.0	1	erosion of natural deposits
	4/26/21	No	< 0.1	C			
Sodium (unregulated)	4/26/21	N/A	124.5	mg/L	N/A	N/A	Naturally present in the environment
Total Dissolved Solids	12/03/12	N/A	424	mg/L	N/A	N/A	Erosion of natural deposits. This measures the residue left
(see Note below)	12/03/12	14/11	727	iiig/ L	14/21	11/11	when the water evaporates.
Radionuclides (see Note below	)						
Radium-226	12/03/15	No	0.2	pCi/L	5 (for com		Erosion of natural deposits
Radium-228	12/02/15	No	0.0	pCi/L	bined Ra-2 + Ra-228)	226	Erosion of natural deposits
Kadiulii-228	12/03/15	NU	0.0	pci/L	+ Ka-220)		Elosion 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
Disinfection Byproducts (See 1	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 μg/L	N/A	0	Disinfection byproduct
Dibromochloromethane	4/26/21	N/A	1.1	μg/L μg/L	N/A	60	Disinfection byproduct
Chloroform	4/26/21	N/A N/A	<0.5	μg/L μg/L	N/A	N/A	Disinfection byproduct
TTHM in Sage distrib system	various	No	<0.5 9.7 avg	μg/L μg/L	80 μg/L	N/A	Disinfection byproducts
(see Note below)	2021	110	9.7 avg	μg/L	80 µg/L	11/21	Disincetion byproducts
HAA5 in Sage distrib system	various	No	1.25 avg		60 µg/L	N/A	Disinfection byproducts
(see Note below)	2019		(range 1.1	-1.4)			
Disinfactant Desidual							
Disinfectant Residual	1/01/20	NI/A	0.07 ave	ma/I	NI/A	NI/ A	Water additive added to control microhese
Total Chlorine Residual	1/01/20-	N/A	0.97 avg (0.70-1.30	0	N/A	N/A	Water additive added to control microbes;
(see Note below)	12/31/20		(0.70-1.30	<i>י</i> ן			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 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.