



# PEERLESS FARMS

EL PASO COUNTY, COLORADO

WATER RESOURCE REPORT

JUNE 12, 2025

Prepared by:

Kimley»Horn

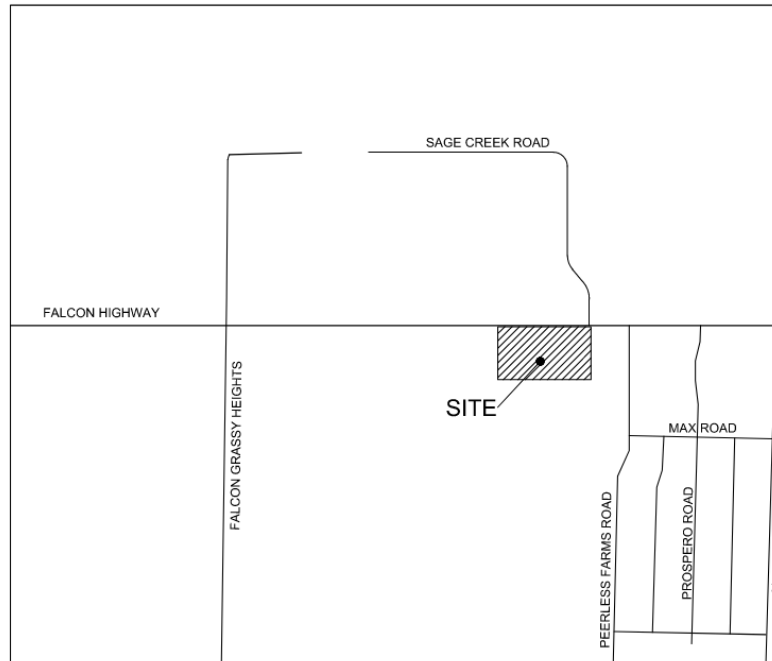
## TABLE OF CONTENTS

SUMMARY OF THE PROPOSED SUBDIVISION.....	3
SITE LOCATION.....	3
DESCRIPTION OF PROPERTY.....	3
INFORMATION REGARDING SUFFICIENT QUANTITY OF WATER .....	4
WATER SYSTEM LAYOUT AND DEMANDS .....	4
AVAILABLE QUANTITY AND DEPENDABILITY OF WATER SUPPLY .....	4
INFORMATION REGARDING SUFFICIENT WATER QUALITY .....	5
PUBLIC AND PRIVATE COMMERCIAL WATER PROVIDERS .....	5
APPENDIX A – PEERLESS FARMS PRELIMINARY PLAN .....	6
APPENDIX B – PEERLESS WATER INFORMATION SUMMARY SHEET .....	7
APPENDIX C – PEERLESS FIRE PROTECTION REPORT.....	8
APPENDIX D – WATER RESOURCES MEMORANDUM (WATER RIGHTS INFORMATION) ..	9

## 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 a single-family house, one guest house, 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 the Final Plat 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 one single family home and one guest house 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. 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. Discussed further in the Dependability of Water Supply section of this report, the lots will be divided between the Denver and Arapahoe wells. 4 will be on Denver and 3 will be on Arapahoe. A conservative estimate for indoor, irrigation, and stock watering uses have been calculated per the table below:

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

Aquifer	Use Type	Unit Count	Unit Demand	Total Demand	
		(sqft & horse)	(AC-FT/Yr/Lot)	(AC-FT/Yr)	(GPD)
Denver	Household	1	0.2	0.200	178.575
	Irrigation	2940	0.0566	0.166	148.578
	Stock Watering	4	0.011	0.044	39.287
<i>Denver Aquifer Subtotal per Lot:</i>				<b>0.410</b>	<b>366.440</b>
Arapahoe	Household	1	0.2	0.200	178.575
	Irrigation	6996	0.0566	0.396	353.556
	Stock Watering	4	0.011	0.044	39.287
<i>Arapahoe Aquifer Subtotal per Lot:</i>				<b>0.640</b>	<b>571.418</b>
<b>Denver Aquifer Subtotal (4 lots):</b>				<b>1.642</b>	<b>1,465.761</b>
<b>Arapahoe Aquifer Subtotal (3 lots):</b>				<b>1.920</b>	<b>1,714.253</b>
<b>Total:</b>				<b>3.562</b>	<b>3,180.013</b>

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
Denver*	NT	44.6	0.446	0.148
	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 3.562 AC-FT/Yr will not be able to be solely supplied by the Denver Aquifer decreed water right. Both the Denver and Arapahoe Aquifers will be utilized for the proposed wells. A replacement plan has been submitted for the NNT rights within the Denver Aquifer. Establishment of the proposed wells will be the responsibility of the future lot owner(s). The proposed lots will be assigned to aquifers per the Replacement Plan included in **Appendix E**. A Breakdown of uses per well can be found in **Table 1**.

## 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 F**.

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 F** 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 FINAL PLAT



PEERLESS SUBDIVISION  
FINAL PLAT  
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

KNOW ALL MEN BY THESE PRESENTS

THAT ROBERT S. AND WENDY K. WILLIAMS, BEING THE OWNER OF THE FOLLOWING TRACT OF LAND:

A PARCEL OF LAND LOCATED IN THE NORTHWEST QUARTER OF SECTION 13, TOWNSHIP 13 SOUTH, RANGE 64 WEST OF THE 6TH P.M., COUNTY OF EL PASO, STATE OF COLORADO, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION 13;

THENCE S00°31'50"W ALONG THE WEST SECTION LINE, A DISTANCE OF 60.01 FEET TO THE TRUE POINT OF BEGINNING;

THENCE N89°21'32"E ON A LINE PARALLEL TO THE NORTH SECTION LINE, A DISTANCE OF 1779.95 FEET;

THENCE S00°38'28"E, A DISTANCE OF 992.00 FEET;

THENCE N89°28'10"W, A DISTANCE OF 1799.86 FEET;

THENCE N00°31'50"E, A DISTANCE OF 995.39 FEET TO THE TRUE POINT OF BEGINNING;

CONTAINING A CALCULATED AREA OF 1,742,644.8 SQUARE FEET OR 40.00 ACRES.

OWNERS CERTIFICATE

THE UNDERSIGNED, BEING ALL THE OWNERS, MORTGAGEES, BENEFICIARIES OF DEEDS OF TRUST AND HOLDERS OF OTHER INTERESTS IN THE LAND DESCRIBED HEREIN, HAVE LAID OUT, SUBDIVIDED, AND PLATTED SAID LANDS INTO LOTS, TRACTS, STREETS, AND EASEMENTS (USE WHICH ARE APPLICABLE) AS SHOWN HEREON UNDER THE NAME AND SUBDIVISION OF PEERLESS SUBDIVISION. ALL PUBLIC IMPROVEMENTS SO PLATTED ARE HEREBY DEDICATED TO PUBLIC USE AND SAID OWNER DOES HEREBY COVENANT AND AGREE THAT THE PUBLIC IMPROVEMENTS WILL BE CONSTRUCTED TO EL PASO COUNTY STANDARDS AND THAT PROPER DRAINAGE AND EROSION CONTROL FOR SAME WILL BE PROVIDED AT SAID OWNER'S EXPENSE, ALL TO THE SATISFACTION OF THE BOARD OF COUNTY COMMISSIONERS OF EL PASO COUNTY, COLORADO. UPON ACCEPTANCE BY RESOLUTION, ALL PUBLIC IMPROVEMENTS SO DEDICATED WILL BECOME MATTERS OF MAINTENANCE BY EL PASO COUNTY, COLORADO. THE UTILITY EASEMENTS SHOWN HEREON ARE HEREBY DEDICATED FOR PUBLIC UTILITIES AND COMMUNICATION SYSTEMS AND OTHER PURPOSES AS SHOWN HEREON. THE ENTITIES RESPONSIBLE FOR PROVIDING THE SERVICES FOR WHICH THE EASEMENTS ARE ESTABLISHED ARE HEREBY GRANTED THE PERPETUAL RIGHT OF INGRESS AND EGRESS FROM AND TO ADJACENT PROPERTIES FOR INSTALLATION, MAINTENANCE, AND REPLACEMENT OF UTILITY LINES AND RELATED FACILITIES.

OWNER SIGNATURE

BY: ROBERT S. WILLIAMS

TITLE: OWNER

OWNER SIGNATURE

BY: WENDY K. WILLIAMS

TITLE: OWNER

STATE OF COLORADO

COUNTY OF

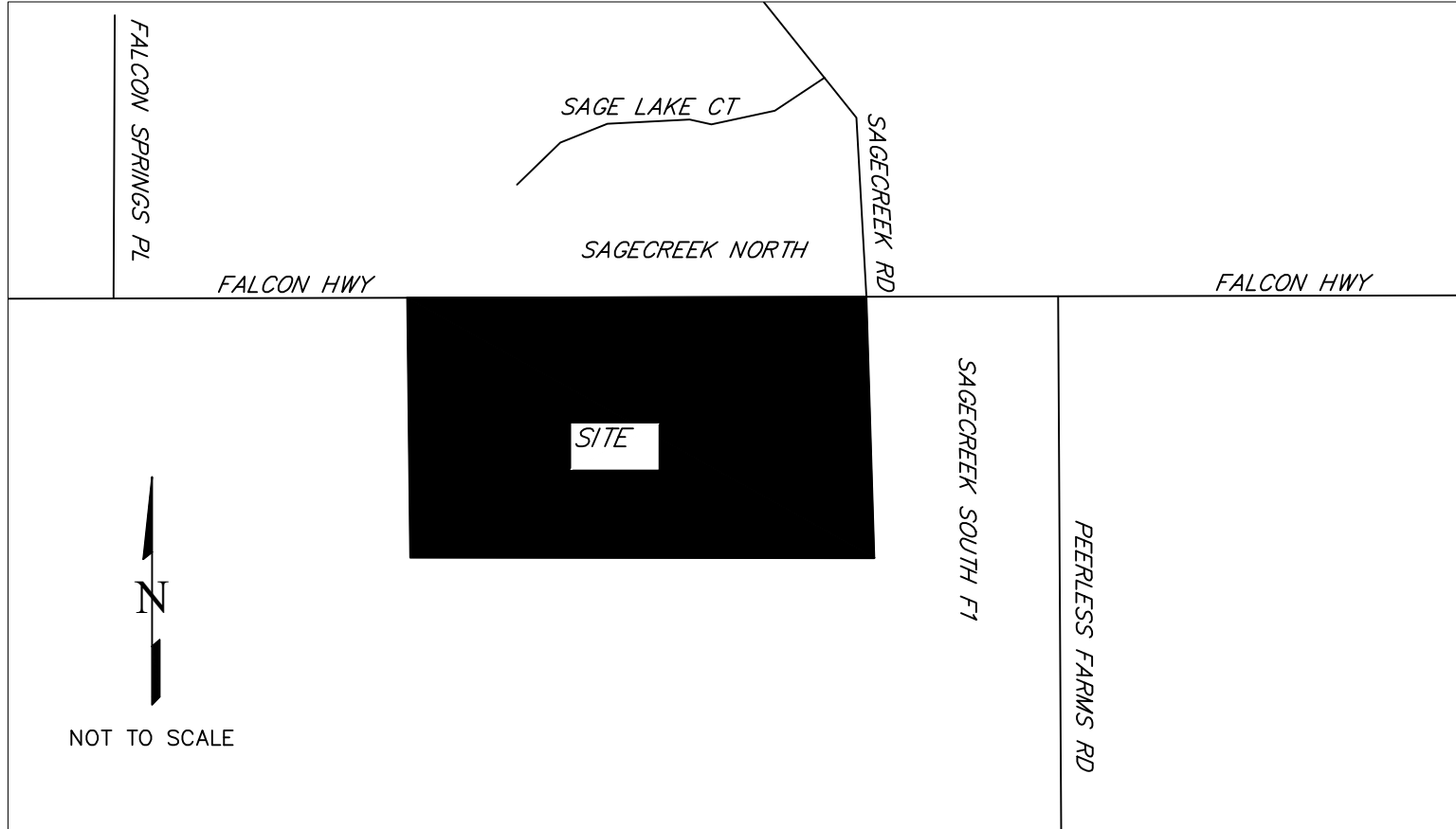
SIGNED BEFORE ME ON, 20

BY (NAME(S) OF INDIVIDUAL(S) MAKING STATEMENT).

(NOTARY'S OFFICIAL SIGNATURE)

(TITLE OF OFFICE)

(COMMISSION EXPIRATION)



VICINITY MAP  
NOT TO SCALE

GENERAL NOTES

- ALL LINEAL UNITS DEPICTED ON THIS SUBDIVISION PLAT ARE U.S. SURVEY FEET.
- BASIS OF BEARING: ALL BEARINGS DEPICTED ON THIS SUBDIVISION PLAT ARE BASED UPON THE NORTH LINE OF THE SUBJECT PROPERTY, BEING MONUMENTED AT EACH END BY FOUND REBAR AND PLASTIC SURVEYORS CAP, PLS 7338; BEARING N89°21'32"E
- ALL REFERENCES TO RECEPTION NUMBERS SHOWN HEREON ARE PUBLIC DOCUMENTS RECORDED WITH THE CLERK AND RECORDER OF EL PASO COUNTY, COLORADO.
- THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY CENTENNIAL LAND SURVEYING, LLC TO DETERMINE OWNERSHIP OF THIS TRACT OF LAND. FOR ALL INFORMATION REGARDING EASEMENTS AND RIGHT OF WAY, CENTENNIAL LAND SURVEYING LLC RELIED UPON TITLE COMMITMENT NO. 123456789, PREPARED BY INSERT TITLE COMPANY HERE, DATED INSERT DATE HERE.
- PER BOOK 3673 AT PAGE 879, MOUNTAIN VIEW ELECTRIC HAS A RIGHT OF WAY EASEMENT WITHIN SECTION 13, TOWNSHIP 13 SOUTH, RANGE 64 WEST. THE LOCATION OF SAID EASEMENT IS NON DESCRIPTIVE OR PLOTTABLE.
- PER BOOK 2614 AT PAGE 368, EL PASO COUNTY MUTUAL TELEPHONE COMPANY HAS A RIGHT OF WAY EASEMENT WITHIN SECTION 13, TOWNSHIP 13 SOUTH, RANGE 64 WEST. THE LOCATION OF SAID EASEMENT IS NON DESCRIPTIVE OR PLOTTABLE.
- DEVELOPER SHALL COMPLY WITH FEDERAL AND STATE LAWS, REGULATIONS, ORDINANCES, REVIEW AND PERMIT REQUIREMENTS, AND OTHER AGENCY REQUIREMENTS, IF ANY, OF APPLICABLE AGENCIES INCLUDING, BUT NOT LIMITED TO, THE COLORADO DIVISION OF WILDLIFE, COLORADO DEPARTMENT OF TRANSPORTATION, U.S. ARMY CORPS OF ENGINEERS AND THE U.S. FISH AND WILDLIFE SERVICE REGARDING THE ENDANGERED SPECIES ACT, PARTICULARLY AS IT RELATES TO THE LISTED SPECIES (E.G., PREBLE'S MEADOW JUMPING MOUSE).
- NO DRIVEWAY SHALL BE ESTABLISHED UNLESS AN ACCESS PERMIT HAS BEEN GRANTED BY EL PASO COUNTY.
- FLOODPLAIN: NO STRUCTURES OR FENCES ARE PERMITTED WITHIN DESIGNATED "FLOODPLAIN" OR "PARK AND OPEN SPACE" AREAS. THIS PROPERTY IS LOCATED WITHIN A DESIGNATED FEMA FLOODPLAIN AS DETERMINED BY THE FLOOD INSURANCE RATE MAP, COMMUNITY MAP NUMBER 08041005676, EFFECTIVE DATE DECEMBER 7, 2018; NO STRUCTURES ARE PERMITTED WITHIN THE DESIGNATED FLOODPLAIN AREAS.
- PER EGM SECTION 17.1.B.5, THE RESIDENTIAL LOTS IMPERVIOUS AREA MAY NOT EXCEED 10 PERCENT UNLESS A STUDY IS PREPARED IN COMPLIANCE WITH THE REQUIREMENTS LAID OUT IN THE ABOVE EGM SECTION AND THE IMPERVIOUS AREA MAY NOT EXCEED 20 PERCENT. THIS IMPERVIOUS AREA FOR EACH LOT MUST INCLUDE THE PROPOSED DRIVEWAY.
- THE FOLLOWING REPORTS HAVE BEEN SUBMITTED IN ASSOCIATION WITH THE PRELIMINARY PLAN FOR THIS SUBDIVISION AND ARE ON FILE AT THE COUNTY PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT: TRANSPORTATION IMPACT STUDY, DRAINAGE REPORT, WATER RESOURCES REPORT, WASTEWATER DISPOSAL REPORT, GEOLOGY AND SOILS REPORT, FIRE PROTECTION REPORT, WILDFIRE HAZARD REPORT, NATURAL FEATURES REPORT. ALL ITEMS MAY BE MODIFIED BASED UPON SPECIFIC DESIGN PER LOT.
- WATER IN THE DENVER BASIN AQUIFERS IS ALLOCATED BASED ON A 100-YEAR AQUIFER LIFE HOWEVER, FOR EL PASO COUNTY PLANNING PURPOSES, WATER IN THE DENVER BASIN AQUIFERS IS EVALUATED BASED ON A 300-YEAR AQUIFER LIFE. APPLICANT AND ALL FUTURE OWNERS IN THE SUBDIVISION SHOULD BE AWARE THAT THE ECONOMIC LIFE OF A WATER SUPPLY BASED ON WELLS IN A GIVEN DENVER BASIN AQUIFER MAY BE LESS THAN EITHER THE 100 YEARS OR 300 YEARS USED FOR ALLOCATION INDICATED DUE TO ANTICIPATED WATER LEVEL DECLINES. FURTHERMORE, THE WATER SUPPLY PLAN SHOULD NOT RELY SOLELY UPON NON-RENEWABLE AQUIFERS. ALTERNATIVE RENEWABLE WATER RESOURCES SHOULD BE ACQUIRED AND INCORPORATED IN A PERMANENT WATER SUPPLY PLAN THAT PROVIDES FUTURE GENERATIONS WITH A WATER SUPPLY.
- NO BUILDING PERMITS SHALL BE ISSUED UNTIL EL PASO COUNTY HAS RECEIVED PROOF THAT WELL NO. 8141 HAS BEEN PLUGGED AND ABANDONED.

EASEMENTS

ALL LOT LINES, (FRONT, REAR AND SIDE) ARE HEREBY PLATTED WITH TEN FOOT DRAINAGE AND UTILITY EASEMENTS. THE SURFACE AREA OF SAID EASEMENTS SHALL BE MAINTAINED BY THE PROPERTY OWNER.

SOILS & GEOLOGY CONDITIONS, CONSTRAINTS & HAZARDS NOTES:

- A SOILS AND GEOLOGY STUDY FOR ROBERT WILLIAMS WAS COMPLETED BY RMG ENGINEERS ON APRIL 14, 2021 AND INCLUDED THE AREA OF DEVELOPMENT PROPOSED, KNOWN AS PEERLESS FARMS. THE PRELIMINARY PLAN SUBMITTED TO THE EL PASO BOARD OF COUNTY COMMISSIONERS PLANNING AND COMMUNITY DEVELOPMENT FILE NUMBER (TBD). DEVELOPERS AND HOMEOWNERS SHOULD BECOME FAMILIAR WITH THIS REPORT AND ITS CONTENTS.
- THE PROPOSED DEVELOPMENT IS FEASIBLE, THE GEOLOGIC CONDITIONS IDENTIFIED POTENTIALLY HYDROCOMPACTIVE SOILS, SEISMICITY, RADON, AND EROSION; HOWEVER, THESE CONDITIONS ARE CONSIDERED TYPICAL FOR THE FRONT RANGE REGIONS OF COLORADO. MITIGATION OF GEOLOGIC CONDITIONS IS MOST EFFECTIVELY ACCOMPLISHED BY AVOIDANCE. HOWEVER, WHERE AVOIDANCE IS NOT PRACTICAL NOR ACCEPTABLE ALTERNATIVE, GEOLOGIC CONDITIONS SHOULD BE MITIGATED BY IMPLEMENTING APPROPRIATE PLANNING, ENGINEERING AND SUITABLE CONSTRUCTION PRACTICES.
- SITE SPECIFIC SOILS STUDIES SHALL BE PERFORMED FOR THE LOTS WITHIN THIS SUBDIVISION PRIOR TO FOUNDATION CONSTRUCTION TO IDENTIFY SUBSURFACE SOIL CONDITIONS ANTICIPATED TO SUPPORT FOUNDATIONS AND PROVIDE PERTINENT GEOTECHNICALLY RELATED PARAMETERS AND RECOMMENDATIONS FOR FOUNDATION DESIGN AND CONSTRUCTION.
- DUE TO THE SHALLOW GROUNDWATER CONDITIONS ENCOUNTERED NEAR THE UNNAMED INTERMITTENT CREEK, THE USE OF BASEMENTS ON LOTS 1, 5 AND 6 MAY BE LIMITED. NEW CONSTRUCTION IS NOT CURRENTLY PROPOSED ON LOT 3. IF BASEMENT CONSTRUCTION IS PROPOSED ON LOT 3 IN THE FUTURE, WE RECOMMEND THAT THOSE STRUCTURE BE SUBJECT TO THE SAME FEASIBILITY EVALUATIONS AS RECOMMENDED ABOVE FOR LOTS 1, 5 AND 6.
- THE PROPOSED RESIDENCES ON LOT 1 AND 5 AND ANY FUTURE STRUCTURES PROPOSED FOR LOT 3, WILL NEED TO CONSIDER THE BFE AT THE TIME OF CONSTRUCTION.
- BASEMENTS OR CRAWLSPACES ARE NOT ALLOWED WITHOUT DATA DEMONSTRATING ADEQUATE SEPARATION (APPROXIMATELY 3-5 FEET) CAN BE MAINTAINED FROM FLUCTUATING GROUNDWATER LEVELS. BASEMENTS SHOULD NOT BE ALLOWED WITHOUT GROUNDWATER MONITORING THROUGHOUT A 12 MONTH PERIOD THAT CLEARLY INDICATES ADEQUATE SEPARATION (APPROXIMATELY 3-5 FEET) CAN BE MAINTAINED FROM FLUCTUATING GROUNDWATER LEVELS. IMPACTS TO THE MEASURED FLUCTUATING GROUNDWATER LEVELS FROM VARIATIONS IN YEARLY PRECIPITATION RATES MUST BE INCLUDED IN THIS ANALYSIS. PRIOR TO APPROVAL OF BASEMENT OR OTHER HABITABLE BELOW GRADE CONSTRUCTION, SITE SPECIFIC INVESTIGATIONS MUST PROVIDE DATA ON THE FLUCTUATION OF GROUNDWATER AND HOW THE VARIATION OF YEARLY PRECIPITATION RATES MAY IMPACT THIS FLUCTUATION. PREVIOUSLY IDENTIFIED MITIGATION ALTERNATIVE, SURFACE AND SUBSURFACE DRAINAGE SYSTEMS SHOULD BE CONSIDERED. EXTERIOR PERIMETER FOUNDATION DRAINS SHOULD BE INSTALLED AROUND BELOW GRADE HABITABLE OR STORAGE SPACES. SURFACE WATER SHOULD BE EFFICIENTLY REMOVED FROM THE BUILDING AREA TO PREVENT PONDING AND INFILTRATION TO THE SUBSURFACE SOIL.
- ALL CONSTRUCTION SHOULD REMAIN OUTSIDE THE UNNAMED CREEK DRAINAGEWAY. IT IS RECOMMENDED THE UNNAMED CREEK DRAINAGEWAY BE IDENTIFIED AS A "NO BUILD AREA" UNLESS ADDITIONAL STUDIES ARE PERFORMED, IN CONJUNCTION WITH THE DRAINAGE ENGINEER, PRIOR TO ANY NEW CONSTRUCTION.
- NO BELOW GRADE HABITABLE SPACE, INCLUDING BASEMENTS OR CRAWLSPACES ARE ALLOWED IN THIS SUBDIVISION. SHOULD BELOW GRADE HABITABLE SPACE BE DESIRED FOR THIS DEVELOPMENT A GROUNDWATER MONITORING PROGRAM MUST BE FOLLOWED TO DEVELOP GROUNDWATER DATA THAT INCLUDES GROUNDWATER ELEVATIONS, SEASONAL FLUCTUATIONS, AND IMPACTS OF YEARLY PRECIPITATION TRENDS ON THE EXTENT OF GROUNDWATER FLUCTUATION EXPECTED FOR THE DESIGN LIFE OF THE SUBDIVISION.
- REFER TO THE SOILS REPORT FOR MORE DETAILED INFORMATION.

SURVEYORS CERTIFICATE

I MICHAEL J. MUIRHEID, A DULY REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY CERTIFY THAT THIS PLAT TRULY AND CORRECTLY REPRESENTS THE RESULTS OF A SURVEY MADE ON DATE OF SURVEY, BY ME OR UNDER MY DIRECT SUPERVISION AND THAT ALL MONUMENTS EXIST AS SHOWN HEREON; THAT MATHEMATICAL CLOSURE ERRORS ARE LESS THAN 1:10,000; AND THAT SAID PLAT HAS BEEN PREPARED IN FULL COMPLIANCE WITH ALL APPLICABLE LAWS OF THE STATE OF COLORADO DEALING WITH MONUMENTS, SUBDIVISION, OR SURVEYING OF LAND AND ALL APPLICABLE PROVISIONS OF THE EL PASO COUNTY LAND DEVELOPMENT CODE.

I ATTEST THE ABOVE ON THIS DAY OF, 20

MICHAEL J. MUIRHEID

DATE

COLORADO REGISTERED PLS 37909

PLANNING AND COMMUNITY DEVELOPMENT DIRECTOR CERTIFICATE

THIS PLAT FOR PEERLESS SUBDIVISION WAS APPROVED FOR FILING BY THE EL PASO COUNTY, COLORADO PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT DIRECTOR ON DAY OF, 20, SUBJECT TO ANY NOTES OR CONDITIONS SPECIFIED HEREON.

PLANNING AND COMMUNITY DEVELOPMENT DIRECTOR

CLERK AND RECORDER

STATE OF COLORADO )

COUNTY OF EL PASO )

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

STEVE SCHLEIKER, RECORDER

BY: DEPUTY

FEES

RECORDING FEES: DRAINAGE FEES: PARK FEES: SCHOOL FEES: BRIDGE FEES:

SUMMARY TABLE

TOTAL SUBDIVISION AREA: 1,742,644.8 SQ. FT.  
TOTAL LOTS (7) AREA: 1,697,770.8 SQ. FT.  
TOTAL RIGHT OF WAY AREA: 44,874.1 SQ. FT.

OWNER INFORMATION

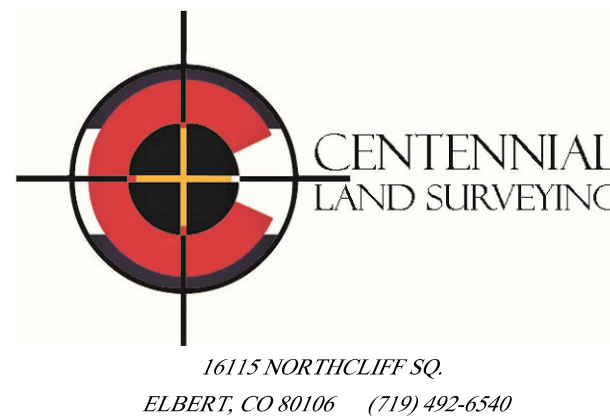
OWNER(S): ROBERT S. AND WENDY K. WILLIAMS  
ADDRESS: 16975 FALCON HIGHWAY, PEYTON, CO 80831  
PHONE NO.: (406) 438-1874

PROFESSIONAL LAND SURVEYOR

CENTENNIAL LAND SURVEYING, LLC  
MICHAEL J. MUIRHEID  
16115 NORTHCLIFF SQ., ELBERT, CO 80106  
(719) 492-6540

PROFESSIONAL ENGINEER

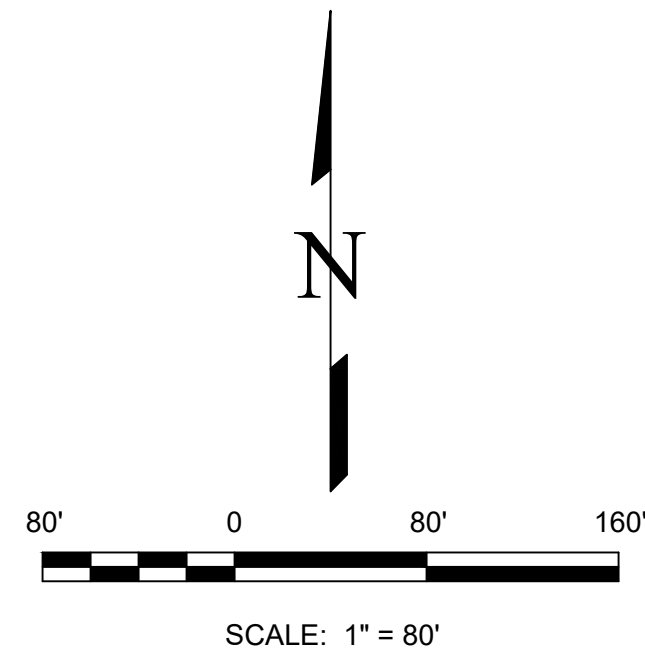
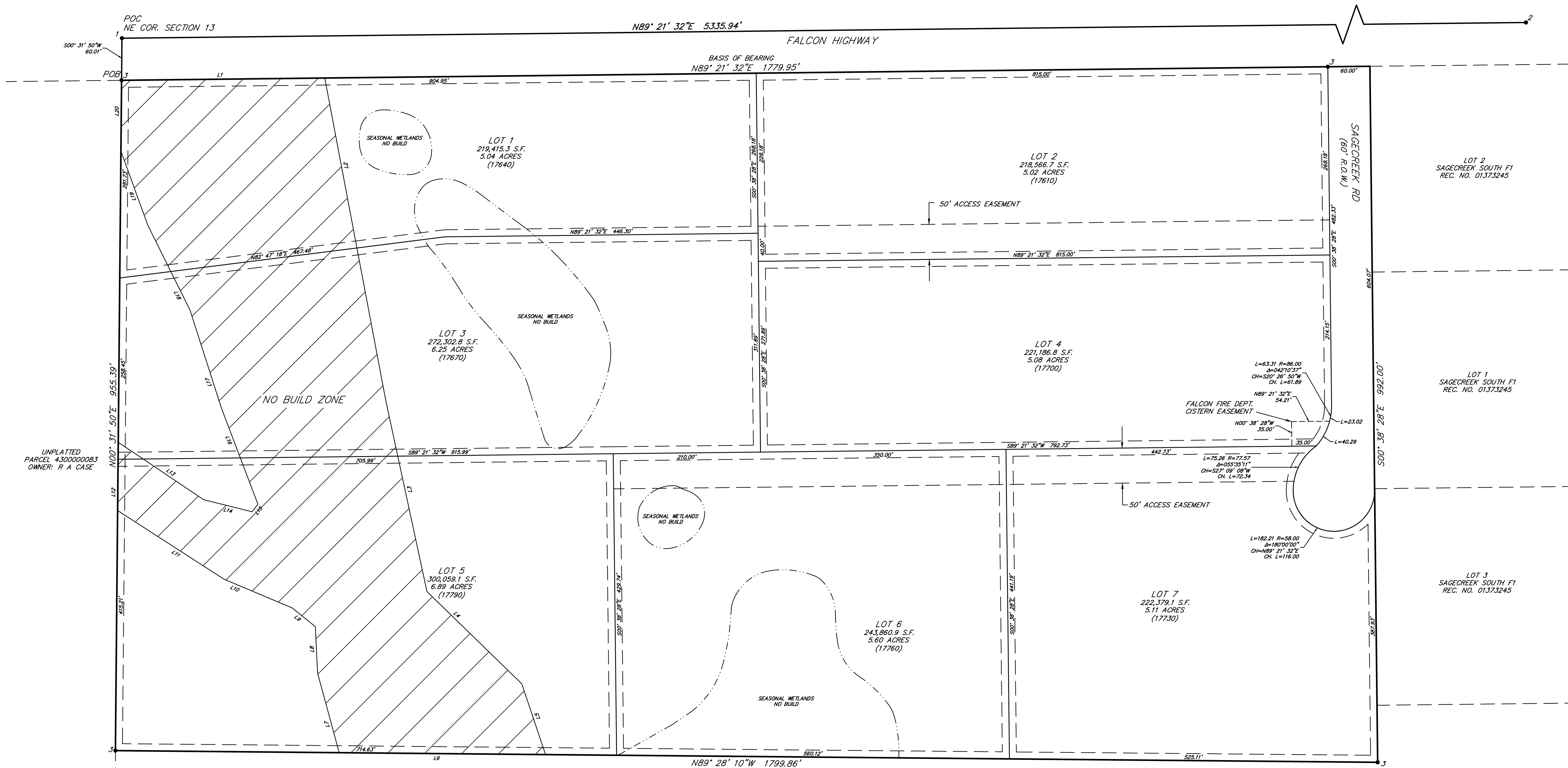
KIMLEY-HORN  
LARRY SALAZZAR  
2 N. NEVADA AVE. STE. 900, COLORADO SPRINGS, CO 80903  
(719) 453-0180



REVISIONS	DRAWN: MJM
	CHECKED: RFM
	DATE: 10/14/24
	JOB No.: 201029



PEERLESS SUBDIVISION  
FINAL PLAT  
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



PROPERTY ADDRESS

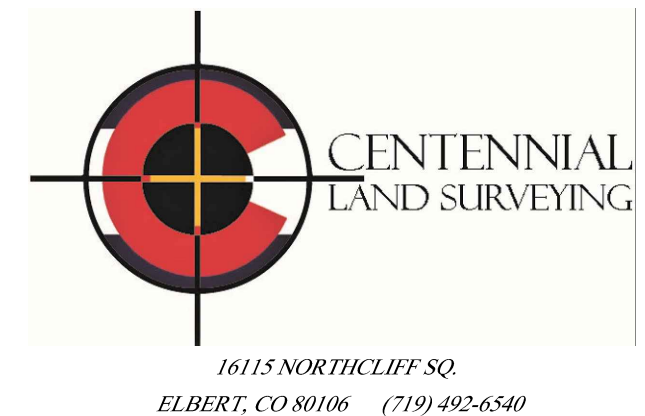
LOT 1	(17640)
LOT 2	(17610)
LOT 3	(17670)
LOT 4	(17700)
LOT 5	(17790)
LOT 6	(17760)
LOT 7	(17730)

UNPLATTED  
PARCEL 4300000083  
OWNER: R A CASE

UNPLATTED  
PARCEL 4313000002  
OWNER: ARLEN TUTTLE, R W CASE,  
LONG HOPE JOINT VENTURES LLP

SURVEY MONUMENTATION

- FOUND NW CORNER OF SECTION 13  
2 1/2" ALUMINUM CAP IN RANGE BOX PLS 30130
- FOUND NE CORNER OF SECTION 13  
2 1/2" ALUMINUM CAP, PLS 9646
- FOUND REBAR WITH YELLOW CAP, PLS 7338



2 OF 2

REVISIONS	DRAWN: <b>MJM</b>
	CHECKED: <b>RFM</b>
	DATE: <b>10/14/24</b>
	JOB No.: <b>201029</b>

Line Table		
Line #	Direction	Length
L1	N89° 21' 31"E	289.70
L2	S10° 43' 22"E	468.25
L3	S12° 10' 49"E	278.12
L4	S45° 47' 07"E	188.55
L5	S18° 32' 52"E	106.38
L6	N89° 28' 10"W	294.21
L7	N15° 08' 58"W	117.73
L8	N02° 50' 23"W	66.13
L9	N50° 54' 21"W	42.33
L10	N67° 11' 46"W	105.44

Line Table		
Line #	Direction	Length
L11	N57° 12' 53"W	180.61
L12	N00° 31' 50"E	97.44
L13	S56° 06' 13"E	146.78
L14	S75° 58' 21"E	71.05
L15	N38° 10' 30"E	13.63
L16	N20° 50' 29"W	146.38
L17	N17° 46' 20"W	146.82
L18	N26° 25' 00"W	135.33
L19	N19° 56' 26"W	112.13
L20	N00° 31' 50"E	100.96



## 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 adequate supply of water"

1. NAME OF DEVELOPMENT AS PROPOSED <b>PEERLESS FARMS FINAL PLAT</b>			
2. LAND USE ACTION <b>FINAL PLAT</b>			
3. NAME OF EXISTING PARCEL AS RECORDED <b>4313000001</b>			
SUBDIVISION	FILING	BLOCK	Lot
4. TOTAL ACERAGE <b>40+/-</b>	5. NUMBER OF LOTS PROPOSED <b>7</b>	PLAT MAPS ENCLOSED <b>YES</b> <input type="checkbox"/>	
6. PARCEL HISTORY - Please attach copies of deeds, plats, or other evidence or documentation. (In submittal package)			
A. Was parcel recorded with county prior to June 1, 1972? <input type="checkbox"/> YES <input type="checkbox"/> NO			
B. Has the parcel ever been part of a division of land action since June 1, 1972? <input type="checkbox"/> YES <input type="checkbox"/> NO			
If yes, describe the previous action			
7. LOCATION OF PARCEL - Include a map delineating the project area and tie to a section corner.			
NW 1/4 SECTION <b>13</b> and TOWNSHIP <b>13</b> <input type="checkbox"/> N <input checked="" type="checkbox"/> S RANGE <b>64</b> <input type="checkbox"/> E <input checked="" type="checkbox"/> W			
PRINCIPAL MERIDIAN: <input checked="" type="checkbox"/> 6TH <input type="checkbox"/> N.M. <input type="checkbox"/> UTE <input type="checkbox"/> COSTILLA			
8. PLAT - Location of all wells on property must be plotted and permit numbers provided. - no wells have been drilled at this time, and no existing wells are located on the property.			
Surveyors plat <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO If not, scaled hand -drawn sketch Y <input type="checkbox"/> NO			
9. ESTIMATED WATER REQUIREMENTS - Gallons per Day or Acre Foot per Year		10. WATER SUPPLY SOURCE	
HOUSEHOLD USE # <b>7</b> of units <b>0.2</b> AF/SFE/YR <b>1.4</b> AF		<input type="checkbox"/> EXISTING <input checked="" type="checkbox"/> DEVELOPED <input type="checkbox"/> NEW WELLS	
COMMERCIAL USE # _____ SF _____ GPD _____ AF		WELLS SPRING WELL PERMIT NUMBERS	
IRRIGATION # ** <b>0.0566</b> AF/lot/year _____ GPD <b>1.85</b> AF <b>AF/1000sqft/lot/year</b>		Proposed Aquifers - (Check One) <input type="checkbox"/> Alluvial <input type="checkbox"/> Upper Arapahoe <input type="checkbox"/> Upper Dawson <input type="checkbox"/> Lower Arapahoe <input type="checkbox"/> Lower Dawson <input type="checkbox"/> Laramie Fox Hills <input type="checkbox"/> Denver <input type="checkbox"/> Dakota <input type="checkbox"/> Other	
ANIMAL WATERING # *** <b>4</b> <sup>244</sup> <b>0.011</b> AF/Horse/Year <b>0.31</b> AF <b>horses/lot</b>		<input type="checkbox"/> MUNICIPAL	
TOTAL <b>3,180</b> GPD <b>3.56</b> AF*		<input type="checkbox"/> ASSOCIATION	
* Per Part 10 of the Findings from Rep. Plan No. 2 and Part 11 of Rep. Plan No. 3		<input type="checkbox"/> COMPANY	
** Assuming 0.25 AF/year/res. lot and 2.46 AF/acre/year for commercial irrigation		<input type="checkbox"/> DISTRICT	
*** Per Part 2.c. Rep. Plan No. 2, Appendix C of Report (assuming 4 horses/SFE)		NAME:	
		LETTER OF COMMITMENT FOR	
		SERVICE <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
11. ENGINEER'S WATER SUPPLY REPORT <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO If yes, please forward with this form. (This may be required before our review is completed)			
12. TYPE OF SEWAGE DISPOSAL SYSTEM			
<input checked="" type="checkbox"/> SEPTIC TANK/LEACH FIELD		<input type="checkbox"/> CENTRAL SYSTEM - DISTRICT NAME:	
<input type="checkbox"/> LAGOON		<input type="checkbox"/> VAULT - LOCATION SEWAGE HAULED TO:	
<input type="checkbox"/> ENGINEERED SYSTEM (Attach a copy of engineering design)		<input type="checkbox"/> OTHER:	

## APPENDIX C – 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:

- 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

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





## 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

**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 stream or its alluvial aquifer at an annual rate greater than one-tenth of one percent of the annual rate of withdrawal and, therefore, the groundwater in the Aquifer underlying the Overlying Land is



nontributary groundwater as defined in Rule 4.2.22 of the Designated Basin Rules. Pursuant to the Rules, no more than 98% of the amount of the groundwater in the Aquifer underlying the Overlying Land withdrawn annually shall be consumed.

12. Pursuant to section 37-90-105(1), the State Engineer has the authority to approve small capacity well permits. While water withdrawn from the Aquifer from beneath the Overlying Land by small capacity wells may consist of the groundwater allocated herein, the Commission recognizes that in approving small capacity permits the State Engineer is not bound by the terms and conditions of this Determination, and may approve small capacity permits based on standards and with such conditions as the State Engineer considers appropriate.
13. The ability of wells permitted to withdraw the authorized amount of water from this nonrenewable Aquifer may be less than the one hundred years upon which the amount of water in the Aquifer is allocated, due to anticipated water level declines.
14. On September 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 one-hundred times the annual withdrawals permitted to be withdrawn by those wells.
  - b. The allowed average annual amount of withdrawal by any large capacity well (or well field) permitted to withdraw the allocated water shall be equal to the volume of water permitted to be withdrawn by that well (or well field) divided by one-hundred years.
  - c. The allowed maximum annual amount of withdrawal by any large capacity well (or well field) permitted to withdraw the allocated water may exceed the allowed average annual amount of withdrawal allowed by the well permit(s) as long as the total volume of water withdrawn by such well(s) does not exceed the product of the number of years since the date(s) of issuance of the well permit(s) times the allowed average annual amount of withdrawal allowed by the well permit(s).
  - d. The Applicant may pump the allowed average annual amount of withdrawal and the allowed maximum annual amount of withdrawal from one or more wells of a well field in any combination, so long as the total combined withdrawal of the wells does not exceed the amounts described in this Order.
  - e. No more than 98% of the amount of Underlying Groundwater withdrawn annually shall be consumed. The Commission may require well owners to demonstrate periodically that no more than 98% of the Underlying Groundwater withdrawn annually is being consumed.
  - f. The use of the Underlying Groundwater shall be limited to the following beneficial uses: domestic in-house; irrigation of lawn, garden, and greenhouse; domestic animal and stock watering; commercial; firefighting; and replacement; either directly or after temporary storage in a cistern. The place of use of the Underlying Groundwater shall be limited to the above described 40.01 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

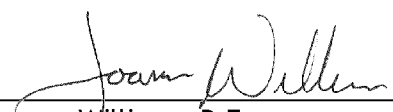
or unless the Commission, after a hearing, finds that circumstances in a particular instance warrant that a well may be permitted without regard to this limitation.

- 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.
  - 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.



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

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

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

RCVD DWR  
08/02/2022

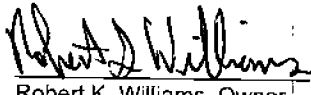
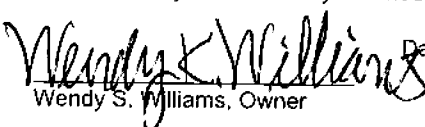
## NONTRIBUTARY GROUNDWATER LANDOWNERSHIP STATEMENT

This form is to be submitted with applications for the following, when the applicant is the owner of the overlying land.

1) A well permit to withdraw groundwater from the Dawson, Denver, Arapahoe or Laramie-Fox Hills aquifers, or other aquifer the applicant claims contains nontributary groundwater, outside of a Designated Groundwater Basin subject to section 37-90-137(4), C.R.S., except when the right to withdraw the groundwater has been determined by a valid decree; OR

2) A determination of water right in the Dawson, Denver, Arapahoe or Laramie-Fox Hills aquifers, or a well permit to withdraw groundwater from those aquifers that are subject to Designated Basin Rule 5.4, within a Designated Groundwater Basin.

NOTE: Form submittal instructions can be found on our website [Colorado.gov/water](http://Colorado.gov/water). See instructions on the reverse of this form. Type or print in black or blue ink.

<b>1. APPLICANT INFORMATION</b>			
Name of Applicant Robert S Williams and Wendy K Williams			
Mailing Address 16975 Falcon Hwy		City Peyton	State CO
Zip Code 80831			
Telephone Number (include area code) 406-438-1874		Email stuing@protonmail.com; stm@cowaterlaw.com	
<b>2. AQUIFER</b> Laramie-Fox Hills			
<b>3. CLAIM OF OWNERSHIP</b> – I hereby claim that I am the owner of the following described property, as evidenced by the attached copy of a deed recorded in the county in which the property is located.  Number of acres: 40.01 in the county of: El Paso described as follows (insert legal description).  <b>THAT PORTION OF THE NORTHWEST QUARTER OF SECTION 13 IN TOWNSHIP 13 SOUTH, RANGE 64 WEST OF THE 6TH P.M., MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION 13; THENCE SOUTH 00°31'50" WEST ALONG THE WEST SECTION LINE, A DISTANCE OF 60.01 FEET TO THE TRUE POINT OF BEGINNING; THENCE NORTH 89°21'32" EAST ON A LINE PARALLEL TO THE NORTH SECTION LINE A DISTANCE OF 1,779.95 FEET; THENCE SOUTH 00°38'28" EAST, A DISTANCE OF 992.00 FEET; THENCE NORTH 89°28'10" WEST A DISTANCE OF 1,799.86 FEET; THENCE NORTH 00°31'50" EAST 955.39 FEET TO THE TRUE POINT OF BEGINNING, COUNTY OF EL PASO, STATE OF COLORADO.</b>  - I further claim that the right to withdraw the groundwater in the aquifer underlying the above described property has not been reserved by another, nor has consent been given to another for the right to its withdrawal.			
<b>4. THE APPLICANT MUST PROVIDE</b> – a Verification of Notice of Application (form no. GWS-43) (see instructions for exceptions). Please see attached.			
<b>5. SIGNATURE</b> – Sign or enter name(s) of applicant(s) or authorized agent. The making of false statements herein constitutes perjury in the second degree, which is punishable as a class 1 misdemeanor pursuant to C.R.S. 24-4-104(13)(a). I have read the statements herein, know the contents thereof, and state that they are true to my knowledge.  Signature:   Date: 31 July, 2022 Robert K. Williams, Owner Wendy S. Williams, Owner  Print name and title:			



DN-4476-BD  
REC. NO. 223007799

**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 stream or its alluvial aquifer at an annual rate greater than one-tenth of one percent of the annual rate of withdrawal and, therefore, the groundwater in the Aquifer underlying the Overlying Land is nontributary groundwater as defined in Rule 4.2.22 of the Designated Basin Rules.

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

12. Pursuant to section 37-90-105(1), the State Engineer has the authority to approve small capacity well permits. While water withdrawn from the Aquifer from beneath the Overlying Land by small capacity wells may consist of the groundwater allocated herein, the Commission recognizes that in approving small capacity permits the State Engineer is not bound by the terms and conditions of this Determination, and may approve small capacity permits based on standards and with such conditions as the State Engineer considers appropriate.
13. The ability of wells permitted to withdraw the authorized amount of water from this nonrenewable Aquifer may be less than the one hundred years upon which the amount of water in the Aquifer is allocated, due to anticipated water level declines.
14. On September 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 one-hundred times the annual withdrawals permitted to be withdrawn by those wells.
  - b. The allowed average annual amount of withdrawal by any large capacity well (or well field) permitted to withdraw the allocated water shall be equal to the volume of water permitted to be withdrawn by that well (or well field) divided by one-hundred years.
  - c. The allowed maximum annual amount of withdrawal by any large capacity well (or well field) permitted to withdraw the allocated water may exceed the allowed average annual amount of withdrawal allowed by the well permit(s) as long as the total volume of water withdrawn by such well(s) does not exceed the product of the number of years since the date(s) of issuance of the well permit(s) times the allowed average annual amount of withdrawal allowed by the well permit(s).
  - d. The Applicant may pump the allowed average annual amount of withdrawal and the allowed maximum annual amount of withdrawal from one or more wells of a well field in any combination, so long as the total combined withdrawal of the wells does not exceed the amounts described in this Order.
  - e. No more than 98% of the amount of Underlying Groundwater withdrawn annually shall be consumed. The Commission may require well owners to demonstrate periodically that no more than 98% of the Underlying Groundwater withdrawn annually is being consumed.
  - f. The use of the Underlying Groundwater shall be limited to the following beneficial uses: domestic in-house; irrigation of lawn, garden, and greenhouse; domestic animal and stock watering; commercial; firefighting; and replacement; either directly or after temporary storage in a cistern. The place of use of the Underlying Groundwater shall be limited to the above described 40.01 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

Aquifer: Arapahoe

Applicant: Robert S. Williams and Wendy K. Williams


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.



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

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

Prepared by: wad  
F&O4476-BD.doc

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

RCVD DWR  
08/02/2022

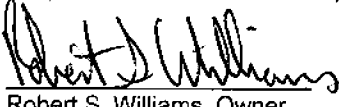
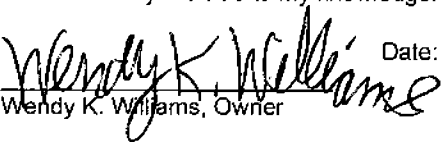
## NONTRIBUTARY GROUNDWATER LANDOWNERSHIP STATEMENT

This form is to be submitted with applications for the following, when the applicant is the owner of the overlying land.

1) A well permit to withdraw groundwater from the Dawson, Denver, Arapahoe or Laramie-Fox Hills aquifers, or other aquifer the applicant claims contains nontributary groundwater, outside of a Designated Groundwater Basin subject to section 37-90-137(4), C.R.S., except when the right to withdraw the groundwater has been determined by a valid decree; OR

2) A determination of water right in the Dawson, Denver, Arapahoe or Laramie-Fox Hills aquifers, or a well permit to withdraw groundwater from those aquifers that are subject to Designated Basin Rule 5.4, within a Designated Groundwater Basin.

NOTE: Form submittal instructions can be found on our website [Colorado.gov/water](http://Colorado.gov/water). See instructions on the reverse of this form.  
Type or print in black or blue ink.

<b>1. APPLICANT INFORMATION</b>			
Name of Applicant Robert S Williams and Wendy K Williams			
Mailing Address 16975 Falcon Hwy		City Peyton	State CO
Zip Code 80831			
Telephone Number (include area code) 406-438-1874		Email stuing@protonmail.com; stm@cowaterlaw.com	
<b>2. AQUIFER</b> Arapahoe			
<b>3. CLAIM OF OWNERSHIP</b> – I hereby claim that I am the owner of the following described property, as evidenced by the attached copy of a deed recorded in the county in which the property is located.  Number of acres: 40.01 in the county of: El Paso described as follows (insert legal description).  <b>THAT PORTION OF THE NORTHWEST QUARTER OF SECTION 13 IN TOWNSHIP 13 SOUTH, RANGE 64 WEST OF THE 6TH P.M., MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION 13; THENCE SOUTH 00°31'50" WEST ALONG THE WEST SECTION LINE, A DISTANCE OF 60.01 FEET TO THE TRUE POINT OF BEGINNING; THENCE NORTH 89°21'32" EAST ON A LINE PARALLEL TO THE NORTH SECTION LINE A DISTANCE OF 1,779.95 FEET; THENCE SOUTH 00°38'28" EAST, A DISTANCE OF 992.00 FEET; THENCE NORTH 89°28'10" WEST A DISTANCE OF 1,799.86 FEET; THENCE NORTH 00°31'50" EAST 955.39 FEET TO THE TRUE POINT OF BEGINNING, COUNTY OF EL PASO, STATE OF COLORADO.</b>  - I further claim that the right to withdraw the groundwater in the aquifer underlying the above described property has not been reserved by another, nor has consent been given to another for the right to its withdrawal.			
<b>4. THE APPLICANT MUST PROVIDE</b> – a Verification of Notice of Application (form no. GWS-43) (see instructions for exceptions). Please see attached.			
<b>5. SIGNATURE</b> – Sign or enter name(s) of applicant(s) or authorized agent. The making of false statements herein constitutes perjury in the second degree, which is punishable as a class 1 misdemeanor pursuant to C.R.S. 24-4-104(13)(a). I have read the statements herein, know the contents thereof, and state that they are true to my knowledge.  Signature:   Date: 31 July, 2022 Robert S. Williams, Owner Wendy K. Williams, Owner  Print name and title:			



DN-4477-BD  
REC. NO. 223007798

**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:

Aquifer: Denver

Applicant: Robert S. Williams and Wendy K. Williams

- 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 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.

8. 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 underlying 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 stream or an alluvial aquifer at an annual rate greater than one-tenth of one percent of the annual rate of withdrawal and, therefore, the groundwater in the Aquifer underlying 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 stream or an alluvial aquifer at an annual rate greater than one-tenth of one percent of the annual rate of withdrawal and, therefore, the groundwater in the Aquifer underlying 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.



Aquifer: Denver

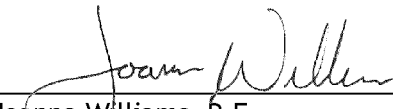
Applicant: Robert S. Williams and Wendy K. Williams

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.



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

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

Prepared by: wad  
F&O4477-BD.doc

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, [www.colorado.gov/water](http://www.colorado.gov/water), [dwrpermitsonline@state.co.us](mailto:dwrpermitsonline@state.co.us)**

RCVD DWR

08/02/2022

**NONTRIBUTARY GROUNDWATER LANDOWNERSHIP STATEMENT**

This form is to be submitted with applications for the following, when the applicant is the owner of the overlying land.

1) A well permit to withdraw groundwater from the Dawson, Denver, Arapahoe or Laramie-Fox Hills aquifers, or other aquifer the applicant claims contains nontributary groundwater, outside of a Designated Groundwater Basin subject to section 37-90-137(4), C.R.S., except when the right to withdraw the groundwater has been determined by a valid decree; OR

2) A determination of water right in the Dawson, Denver, Arapahoe or Laramie-Fox Hills aquifers, or a well permit to withdraw groundwater from those aquifers that are subject to Designated Basin Rule 5.4, within a Designated Groundwater Basin.

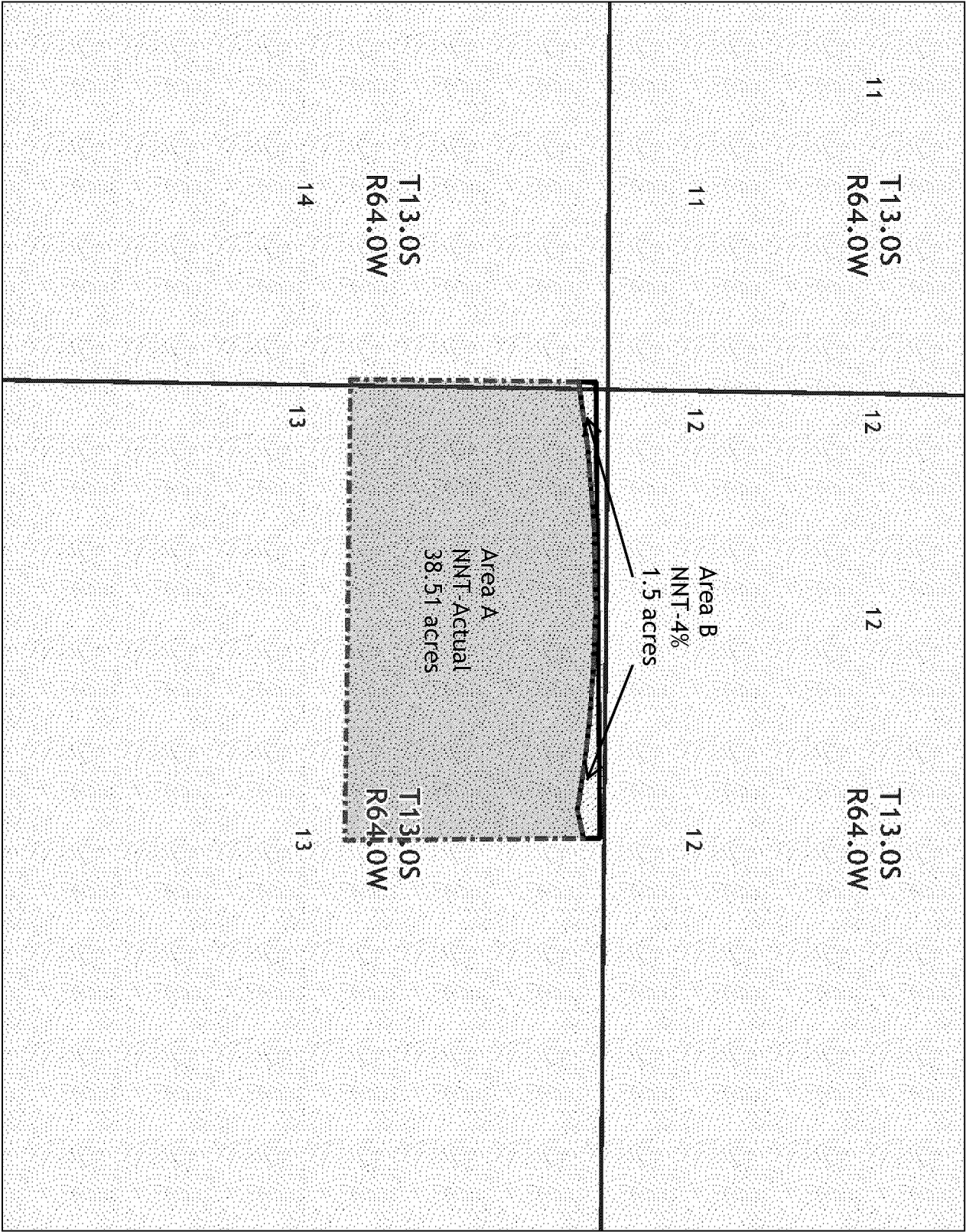
NOTE: Form submittal instructions can be found on our website [Colorado.gov/water](http://Colorado.gov/water). See instructions on the reverse of this form.

Type or print in black or blue ink.

<b>1. APPLICANT INFORMATION</b>			
Name of Applicant Robert S Williams and Wendy K Williams			
Mailing Address 16975 Falcon Hwy	City Peyton	State CO	Zip Code 80831
Telephone Number (include area code) 406-438-1874	Email stuing@protonmail.com; stm@cowaterlaw.com		
<b>2. AQUIFER</b> Denver			
<b>3. CLAIM OF OWNERSHIP</b> – I hereby claim that I am the owner of the following described property, as evidenced by the attached copy of a deed recorded in the county in which the property is located.			
Number of acres: <u>40.01</u> in the county of: <u>El Paso</u>			
described as follows (insert legal description).			
<p><b>THAT PORTION OF THE NORTHWEST QUARTER OF SECTION 13 IN TOWNSHIP 13 SOUTH, RANGE 64 WEST OF THE 6TH P.M., MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION 13; THENCE SOUTH 00°31'50" WEST ALONG THE WEST SECTION LINE, A DISTANCE OF 60.01 FEET TO THE TRUE POINT OF BEGINNING; THENCE NORTH 89°21'32" EAST ON A LINE PARALLEL TO THE NORTH SECTION LINE A DISTANCE OF 1,779.95 FEET; THENCE SOUTH 00°38'28" EAST, A DISTANCE OF 992.00 FEET; THENCE NORTH 89°28'10" WEST A DISTANCE OF 1,799.86 FEET; THENCE NORTH 00°31'50" EAST 955.39 FEET TO THE TRUE POINT OF BEGINNING, COUNTY OF EL PASO, STATE OF COLORADO.</b></p>			
- I further claim that the right to withdraw the groundwater in the aquifer underlying the above described property has not been reserved by another, nor has consent been given to another for the right to its withdrawal.			
<b>4. THE APPLICANT MUST PROVIDE</b> – a Verification of Notice of Application (form no. GWS-43) (see instructions for exceptions). Please see attached.			
<b>5. SIGNATURE</b> – Sign or enter name(s) of applicant(s) or authorized agent. The making of false statements herein constitutes perjury in the second degree, which is punishable as a class 1 misdemeanor pursuant to C.R.S. 24-4-104(13)(a). I have read the statements herein, know the contents thereof, and state that they are true to my knowledge.			
Signature: <u>Robert S. Williams</u>		Date: <u>31 July, 2022</u>	
<u>Robert S. Williams, Owner</u>		<u>Wendy K. Williams, Owner</u>	
Print name and title:			



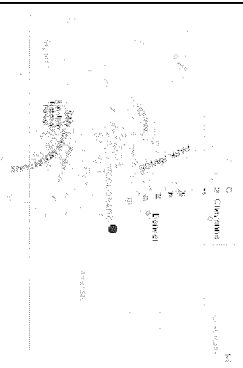
Exhibit B, Determination no. 4477-BD, Page 1 of 1



Legend

- ☒ Township
- ☐ Section
- ☐ Alluvium
- ☐ Subcrop
- Zone Type**
  - NON TRIBUTARY
  - NNT 4%
  - NNT ACTUAL

Location



Notes

Applicant: Robert S. Williams and Wendy K. Williams  
Receipt No.: 10023310

1,142 0 571 1,142 Feet

1 : 6,850



This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.

Date Prepared: 8/10/2022 1:23:35 PM

## APPENDIX E – REPLACEMENT PLAN INFORMATION

### **SUMMARY OF REPLACEMENT PLAN**

Application of Robert S. Williams and Wendy K. Williams

Applicants seek a replacement plan for use of the not-nontributary Denver aquifer underlying a tract of land containing 40.01 acres, being in the NW1/4 of Section 13, Township 13 South, Range 64 West of the 6th P.M., El Paso County, also known as 16975 Falcon Highway, Peyton, Colorado 80831, to be subdivided into up to 7 single-family lots. The Applicants' property is located within the Upper Black Squirrel Designated Basin and the Upper Black Squirrel Ground Water Management District, and is more particularly described as follows:

COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION 13; THENCE SOUTH 00°31'50" WEST ALONG THE WEST SECTION LINE, A DISTANCE OF 60.01 FEET TO THE TRUE POINT OF BEGINNING; THENCE NORTH 89°21'32" EAST ON A LINE PARALLEL TO THE NORTH SECTION LINE A DISTANCE OF 1,779.95 FEET; THENCE SOUTH 00°38'28" EAST, A DISTANCE OF 992.00 FEET; THENCE NORTH 89°28'10" WEST A DISTANCE OF 1,799.86 FEET; THENCE NORTH 00°31'50" EAST 995.39 FEET TO THE TRUE POINT OF BEGINNING, COUNTY OF EL PASO, STATE OF COLORADO.

("Applicants' Property")

Applicants propose to pump up to 1.642 annual acre-feet of water from the Denver aquifer for domestic-type uses, including in-house, irrigation of lawn, gardens, and greenhouse, and watering of domestic animals and stock. Such pumping would be through use of the current existing Denver aquifer well with Permit No. 8141 as is constructed on the property, and an additional three wells to be constructed to the Denver aquifer. Such wells shall serve four lots within the proposed seven-lot subdivision of Applicants' Property with one well for each lot. The current permit will re-permitted upon approval of this replacement plan. The Denver aquifer underlying the Applicants' Property was subject of Colorado Ground Water Commission Findings and Order in Determination No. 4477-BD.

Each of the four wells are anticipated to pump a maximum of 0.41 acre-feet from the not-nontributary Denver aquifer annually. Estimated maximum annual depletions amount to 73.465% of actual pumping in the 300<sup>th</sup> year of pumping, or an estimated maximum of 1.206 acre-feet.

Replacements for pumping from the four wells shall be made by means of septic system return flows in the amount of 90% of diversions to in-house uses from seven individual non-evaporative septic systems. Four of the lots will utilize Denver aquifer wells

as described above, the three remaining lots will utilize nontributary Arapahoe aquifer wells. All wells will discharge to non-evaporative septic systems. A minimum of 0.20 annual acre-feet will be used for in-house uses on the seven lots, resulting in septic return flows of 0.18 acre-feet annually per lot, or a total of 1.26 acre-feet annually. The remainder of the pumping per lots will be used for other accessory uses of landscape, lawn, and garden irrigation, and for the watering of domestic animals and livestock.

The water quality in the Denver aquifer in this area is well established as being suitable for potable use with only in-house filtration for mineral deposits. There is a general acceptance of suitable and sufficient water quality for residences utilizing Denver Basin groundwater supplies. The well will meet all applicable regulatory requirements regarding quality testing before being utilized as a residential and consequently, replacement water source. The septic systems will be evaluated according to applicable Guidelines, including those of the El Paso County Department of Health and Human Services, and properly maintained to prevent contamination of surface and subsurface water resources. All water pumped from the wells will be metered to ensure no water beyond that permitted is pumped. The replacement water consists of septic return flows, conservatively estimated as being 90% of water utilized in-house.

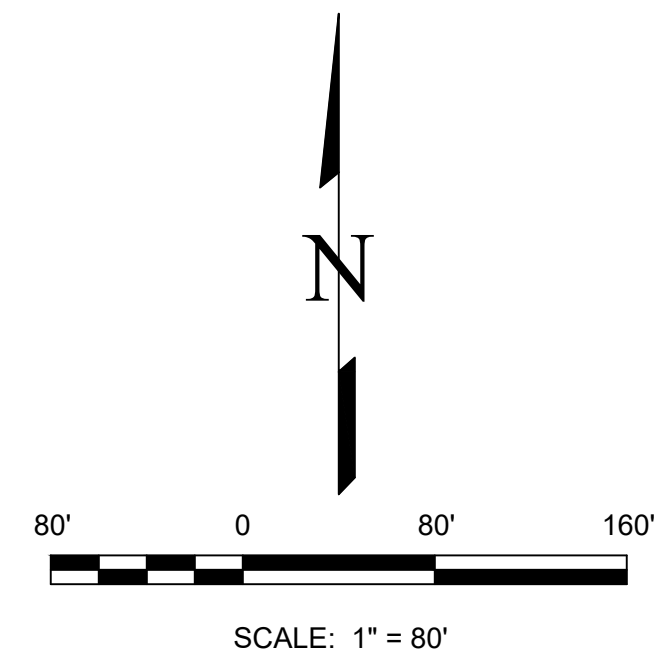
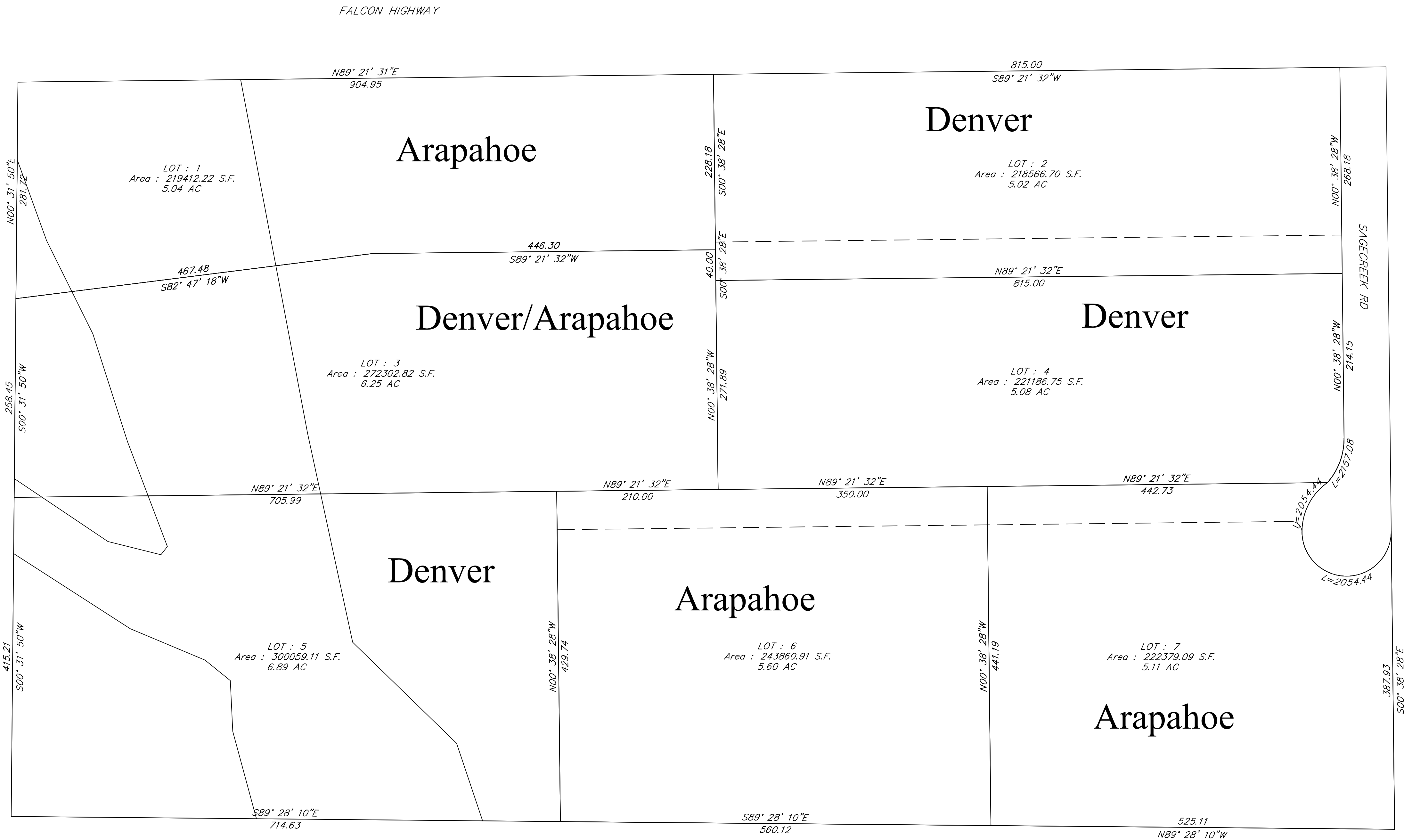
Estimated cost of construction amounts to \$2,700,000. Development will begin upon approval of this replacement plan application and County subdivision approval, and will last approximately 24 months.

Replacement amounts available for the 1.642 acre-feet of total annual pumping of the Denver aquifer wells amounts to 1.26 acre-feet from the septic systems return flows from all seven lots, which exceeds the maximum well depletions of 1.206 acre-feet, or 73.465% of total pumping over the 300-year life of the replacement plan. All depletions are therefore replaced and there will not be any injury to other vested water rights.

# PEERLESS SUBDIVISION

## FINAL PLAT

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



LEGAL DESCRIPTION

LEGAL

BENCH MARK

DESCRIPTION AND LOCATION

GENERAL NOTES

1. NOTES

1 OF 1

REVISIONS	DRAWN: <b>MJM</b>
	CHECKED: <b>SLM</b>
	DATE: <b>06/10/23</b>
	JOB No.: <b>201029</b>





### Estimated Groundwater Volumes for Williams Property

Location: NW 1/4 of NW 1/4 of Section 13, Township 13 S, Range 64 W  
Parcel No.: 431300001 - El Paso County  
Address: 16975 Falcon Highway, Peyton, CO 80403  
Well or Case Number: 4477, 4476, 4475 - BD  
Elevation: 6,544 Feet  
Surface Area: 40.01 Acres  
Number of lots: 7  
Number of wells (Denver): 4 (NNT)  
Number of wells (Arapahoe): 3 (NT)  
Designated Basin: Uppper Black Squirrel Creek Designated Basin  
Management District: Upper Black Squirrel Groundwater Management District

<i>Aquifer</i>	<i>Surface Area (Acres)</i>	<i>Net Sand (ft)</i>	<i>Avg. Specific Yield (%)</i>	<i>Total Approp. Volume (AF)</i>	<i>100-year Ann. Approp. (AF/yr)</i>	<i>300-year Ann. Approp. (AF/yr)</i>
Upper Dawson (NNT)	40.01	-	20.00%	-	-	-
Denver (NNT)	40.01	145.00	17.00%	986.25	9.86	3.29
Upper Arapahoe (NT)	40.01	200.00	17.00%	1360.34	13.60	4.53
Laramie-Fox Hills (NT)	40.01	215.00	15.00%	1290.32	12.90	4.30

### Appendix B: Estimated Annual Water Use and Pumping Rates

Denver Wells		
Use	Constant	Increment
Four (4) wells		
Domestic Indoor	0.200	AF/year
Irrigation <sup>1</sup>	0.166	AF/year
Stock Watering <sup>2</sup>	0.044	AF/year
<b>Total Well Demand</b>	<b>0.410</b>	<b>AF/year/lot</b>

Note 1: Assume 2,940 ft<sup>2</sup> at 0.0566 AF/1,000 ft<sup>2</sup>

Note 2: Assume 4 horses at 0.011 AF/horse/year

Total Demand Denver Aquifer: 1.642 AF/year

Arapahoe Wells		
Use	Constant	Increment
Three (3) wells		
Domestic Indoor	0.200	AF/year
Irrigation <sup>1</sup>	0.396	AF/year
Stock Watering <sup>2</sup>	0.044	AF/year
<b>Total Well Demand</b>	<b>0.640</b>	<b>AF/year/lot</b>

Note 1: Assume 2,940 ft<sup>2</sup> at 0.0566 AF/1,000 ft<sup>2</sup>

Note 2: Assume 4 horses at 0.011 AF/horse/year

Total Demand Arapahoe Aquifer: 1.921 AF/year

#### Estimated Return Flows through Septic (domestic use only)

Percent of domestic: Indoor 90.00%

Denver - Volume return (minimum residential volume) 0.720 AF/year - Denver Aquifer (@ 0.20 AF/year domestic use)

Arapahoe - Volume return (minimum residential volume) 0.540 AF/year - Arapahoe Aquifer (@ 0.20 AF/year domestic use)

Total Return Flows = 1.260 AF/year - Both Aquifers (@ 0.20 AF/yr domestic use)

**Table 3: AUG-3 Denver Basin Depletion Model - Maximum Depletions - NW 1/4 of NW 1/4 of Section 13, Township 13 S, Range 64 W Designated Basin\_V2019 for use inside Upper Black Squirrel Creek Basin**

Not-Nontributary Aquifers - Upper Black Squirrel Designated Basin - 16975 Falcon Highway				
Pumping Interval	Designated Basin - Maximum Total Depletions			Year of Max. Depletion
	Formation	Total Depl. (AF/yr)	Total Depl. (% of Pumping)	
300-year pumping period (Upper Black Squirrel Only)	Denver (NNT)	1.2000	73.100%	300
300-year pumping period (All Designated Basins)	Denver (NNT)	1.2060	73.465%	300

Summary Table 1			Summary Table 2				
			Model Period (years)	300			
Applicant Name	Robert S. and Wendy K. Williams		Applicant Name	Robert S. and Wendy K. Williams			
Receipt No.	4475-BD, 4476-BD, and 4477-BD		Receipt No.	4475-BD, 4476-BD, and 4477-BD			
Number of Years of Pumping	300		Number of Years of Pumping	300			
Pumping Rate (ac-ft/yr)	1.64		Pumping Rate (ac-ft/yr)	1.642			
Total Volume (ac-ft)	493		Total Volume (ac-ft)	493			
Legal for All Sections	Section 13, T 13 S, R64W, 6th P.M.		Legal for All Sections	Section 13, T 13 S, R64W, 6th P.M.			
Model	DE10		Model	DE10			
Aquifer	Denver		Aquifer	Denver			
100th Year Stream Depletion			Maximum Stream Depletion				
Streams	100th Year Depletion (ac-ft/yr)	q/Q (%)	Streams	Max.Depletion during model period (ac-ft/yr)	Year during model period	Max. Depletion during pumping period (ac-ft/yr)	Year during pumping period
BIJOU	0.000	0.000	BIJOU	0.000	300	0.000	300
BIG SANDY	0.000	0.000	BIG SANDY	0.000	300	0.000	300
MONUMENT	0.000	0.000	MONUMENT	0.000	300	0.000	300
COTTONWOOD	0.000	0.000	COTTONWOOD	0.000	300	0.000	300
SHOOKS RUN	0.000	0.000	SHOOKS RUN	0.000	300	0.000	300
SAND-DIV2	0.000	0.010	SAND-DIV2	0.006	300	0.006	300
BLACK SQUIRREL-UBSCDB	0.564	34.314	BLACK SQUIRREL-UBSCDB	1.200	300	1.200	300
STEELS FORK	0.000	0.000	STEELS FORK	0.000	300	0.000	300
HORSE CREEK	0.000	0.000	HORSE CREEK	0.000	300	0.000	300
<b>Total</b>	<b>0.564</b>	<b>34.323</b>	<b>Total</b>	<b>1.206</b>	<b>300</b>	<b>1.206</b>	<b>300</b>
South Platte(No Designated Basin Streams)	0.000	0.000	South Platte Basin(No Designated Basin Streams)	---	---	---	---
Arkansas(No Designated Basin Streams)	0.000	0.010	Arkansas Basin(No Designated Basin Streams)	0.006	300	---	300
Designated Basin	0.564	34.314	Designated Basin	1.200	300	---	300

Created by RESPEC Company, LLC on May 01, 2025

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

Exhibit A  
Replacement Plan - Determination No.: 4475-BD, 4476-BD, and 4477-BD-BD  
Page 1 of 1

Designated Basin Summary Table for Robert S. and Wendy K. Williams Pumping Rate of 1.642 acre-feet per year for 300 Years from the Denver aquifer Section(s): Section 13, T 13 S, R64W, 6th P.M.							
Year	Pumping (Q) (AF/YR)	Annual Depletion (q) (AF/YR)	Depletion as a % of Pumping (q/Q)	Year	Pumping (Q) (AF/YR)	Annual Depletion (q) (AF/YR)	Depletion as a % of Pumping (q/Q)
5	1.6	0.007	0.4	155	1.6	0.842	51.3
10	1.6	0.019	1.2	160	1.6	0.862	52.5
15	1.6	0.036	2.2	165	1.6	0.882	53.7
20	1.6	0.058	3.5	170	1.6	0.901	54.8
25	1.6	0.082	5.0	175	1.6	0.919	55.9
30	1.6	0.109	6.7	180	1.6	0.936	57.0
35	1.6	0.139	8.5	185	1.6	0.953	58.0
40	1.6	0.170	10.3	190	1.6	0.969	59.0
45	1.6	0.202	12.3	195	1.6	0.985	59.9
50	1.6	0.235	14.3	200	1.6	0.999	60.8
55	1.6	0.269	16.4	205	1.6	1.014	61.7
60	1.6	0.303	18.4	210	1.6	1.027	62.5
65	1.6	0.337	20.5	215	1.6	1.040	63.3
70	1.6	0.371	22.6	220	1.6	1.053	64.1
75	1.6	0.404	24.6	225	1.6	1.065	64.8
80	1.6	0.437	26.6	230	1.6	1.077	65.5
85	1.6	0.470	28.6	235	1.6	1.088	66.3
90	1.6	0.502	30.6	240	1.6	1.099	66.9
95	1.6	0.533	32.5	245	1.6	1.109	67.5
100	1.6	0.564	34.3	250	1.6	1.119	68.2
105	1.6	0.593	36.1	255	1.6	1.129	68.7
110	1.6	0.622	37.9	260	1.6	1.138	69.3
115	1.6	0.650	39.6	265	1.6	1.147	69.8
120	1.6	0.677	41.2	270	1.6	1.156	70.4
125	1.6	0.703	42.8	275	1.6	1.163	70.8
130	1.6	0.728	44.3	280	1.6	1.171	71.3
135	1.6	0.753	45.8	285	1.6	1.179	71.8
140	1.6	0.776	47.2	290	1.6	1.187	72.3
145	1.6	0.799	48.7	295	1.6	1.194	72.7
150	1.6	0.821	50.0	300	1.6	1.200	73.1

Created by RESPEC Company, LLC on May 01, 2025

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

Stream Depletion for Robert S. and Wendy K. Williams Pumping Rate of 1.642 acre-feet per year for 300 Years from the Denver aquifer								
Time (yr)	Kiowa Bijou Designated BIJOU		Upper Big Sandy Designated BIG SANDY		Upper Black Squirrel BLACK SQUIRREL-UBSCDB		TOTAL	
	q/Q (%)	vol./yr (af/yr)	q/Q (%)	vol./yr (af/yr)	q/Q (%)	vol./yr (af/yr)	q/Q (%)	vol./yr (af/yr)
0	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.000
5	0.0	0.00	0.0	0.00	0.4	0.01	0.4	0.007
10	0.0	0.00	0.0	0.00	1.2	0.02	1.2	0.019
15	0.0	0.00	0.0	0.00	2.2	0.04	2.2	0.036
20	0.0	0.00	0.0	0.00	3.5	0.06	3.5	0.058
25	0.0	0.00	0.0	0.00	5.0	0.08	5.0	0.082
30	0.0	0.00	0.0	0.00	6.7	0.11	6.7	0.109
35	0.0	0.00	0.0	0.00	8.5	0.14	8.5	0.139
40	0.0	0.00	0.0	0.00	10.3	0.17	10.3	0.170
45	0.0	0.00	0.0	0.00	12.3	0.20	12.3	0.202
50	0.0	0.00	0.0	0.00	14.3	0.24	14.3	0.235
55	0.0	0.00	0.0	0.00	16.4	0.27	16.4	0.269
60	0.0	0.00	0.0	0.00	18.4	0.30	18.4	0.303
65	0.0	0.00	0.0	0.00	20.5	0.34	20.5	0.337
70	0.0	0.00	0.0	0.00	22.6	0.37	22.6	0.371
75	0.0	0.00	0.0	0.00	24.6	0.40	24.6	0.404
80	0.0	0.00	0.0	0.00	26.6	0.44	26.6	0.437
85	0.0	0.00	0.0	0.00	28.6	0.47	28.6	0.470
90	0.0	0.00	0.0	0.00	30.6	0.50	30.6	0.502
95	0.0	0.00	0.0	0.00	32.5	0.53	32.5	0.533
100	0.0	0.00	0.0	0.00	34.3	0.56	34.3	0.564
105	0.0	0.00	0.0	0.00	36.1	0.59	36.1	0.593
110	0.0	0.00	0.0	0.00	37.9	0.62	37.9	0.622
115	0.0	0.00	0.0	0.00	39.6	0.65	39.6	0.650
120	0.0	0.00	0.0	0.00	41.2	0.68	41.2	0.677
125	0.0	0.00	0.0	0.00	42.8	0.70	42.8	0.703
130	0.0	0.00	0.0	0.00	44.3	0.73	44.3	0.728
135	0.0	0.00	0.0	0.00	45.8	0.75	45.8	0.753
140	0.0	0.00	0.0	0.00	47.2	0.78	47.2	0.776
145	0.0	0.00	0.0	0.00	48.7	0.80	48.7	0.799
150	0.0	0.00	0.0	0.00	50.0	0.82	50.0	0.821
155	0.0	0.00	0.0	0.00	51.3	0.84	51.3	0.842
160	0.0	0.00	0.0	0.00	52.5	0.86	52.5	0.862
165	0.0	0.00	0.0	0.00	53.7	0.88	53.7	0.882
170	0.0	0.00	0.0	0.00	54.8	0.90	54.8	0.901
175	0.0	0.00	0.0	0.00	55.9	0.92	55.9	0.919
180	0.0	0.00	0.0	0.00	57.0	0.94	57.0	0.936
185	0.0	0.00	0.0	0.00	58.0	0.95	58.0	0.953
190	0.0	0.00	0.0	0.00	59.0	0.97	59.0	0.969
195	0.0	0.00	0.0	0.00	59.9	0.98	59.9	0.985
200	0.0	0.00	0.0	0.00	60.8	1.00	60.8	0.999
205	0.0	0.00	0.0	0.00	61.7	1.01	61.7	1.014
210	0.0	0.00	0.0	0.00	62.5	1.03	62.5	1.027
215	0.0	0.00	0.0	0.00	63.3	1.04	63.3	1.040
220	0.0	0.00	0.0	0.00	64.1	1.05	64.1	1.053
225	0.0	0.00	0.0	0.00	64.8	1.06	64.8	1.065
230	0.0	0.00	0.0	0.00	65.5	1.08	65.5	1.077
235	0.0	0.00	0.0	0.00	66.3	1.09	66.3	1.088
240	0.0	0.00	0.0	0.00	66.9	1.10	66.9	1.099
245	0.0	0.00	0.0	0.00	67.5	1.11	67.5	1.109
250	0.0	0.00	0.0	0.00	68.2	1.12	68.2	1.119
255	0.0	0.00	0.0	0.00	68.7	1.13	68.7	1.129
260	0.0	0.00	0.0	0.00	69.3	1.14	69.3	1.138
265	0.0	0.00	0.0	0.00	69.8	1.15	69.8	1.147
270	0.0	0.00	0.0	0.00	70.4	1.16	70.4	1.156
275	0.0	0.00	0.0	0.00	70.8	1.16	70.8	1.163
280	0.0	0.00	0.0	0.00	71.3	1.17	71.3	1.171
285	0.0	0.00	0.0	0.00	71.8	1.18	71.8	1.179
290	0.0	0.00	0.0	0.00	72.3	1.19	72.3	1.187
295	0.0	0.00	0.0	0.00	72.7	1.19	72.7	1.194
300	0.0	0.00	0.0	0.00	73.1	1.20	73.1	1.200

Created by RESPEC Company, LLC on May 01, 2025

Values for q/Q are not calculated when the pumping rate (Q) is changed to anything but zero.

## APPENDIX F – 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# -		RESULTS TO: Jim Houk			
SAMPLE INFORMATION: 16975 Falcon Hwy Peyton, CO 80831		PHONE: (719) 284-7280			
		FAX/EMAIL: jim.houk@kimley-horn.com			
		COLLECTED BY: Meaghan Farrell			
		SAMPLE COLLECTION DATE: 02/20/2024			
SITE DESCRIPTION: <input type="checkbox"/> Public System <input type="checkbox"/> Private <input type="checkbox"/> Surface <input type="checkbox"/> Stream  <input type="checkbox"/> GWUDI <input type="checkbox"/> Other		SAMPLE COLLECTION TIME: 1508			
		MATRIX: Groundwater			
		RESIDUAL CHLORINE:			
CUSTOMER: Jim Houk 6425 J D JOHNSON RD PEYTON, CO 80831-7301		SAMPLE RECEIVED DATE: 02/21/2024			
		RECEIVED TIME: 1003                      TECH: 850			
		RECEIVED TEMP: 9.3 °C			
		DILUTIONS: 1:1, 1:10			
COMMENTS: Peerless Farms,					
TESTED		COMPLETED		TECH	
DATE: 02/21/2024		DATE: 02/21/2024			
TIME: 1108		TIME: 1726		ID: 850	
LAB SAMPLE #: 16079		SAMPLE POINT NAME:			
SAMPLE POINT ID: RTOR		FACILITY TYPE:			
FACILITY ID: DS001		FACILITY NAME:			

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

BDL - Below Detection Limit  
MRL - Minimum Reporting Limit

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

H - Holding Time Exceeded  
NT - No Test



El Paso County Public Health Laboratory EPA ID# CO00025  
1675 West Garden of the Gods Road, Suite 2044, Colorado Springs, CO 80907 - (719) 578-3120

- ☐ Raw
- ☐ Finished
- ☐ LT2
- ☐ Quantitative

Comments:

MPN/100 ml:

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

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

Vulnerable Populations Warning

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

Where Does Our Water Come From?

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

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:  
\* Microbial contaminants, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.  
\* Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.  
\*Pesticides and herbicides that may come from a variety of sources, such as agriculture, urban stormwater runoff, and residential uses.  
\*Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff, septic systems, and as byproducts of water disinfection.  
\*Radioactive contaminants, that can be naturally occurring or be the result of oil and gas production and mining activities.

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

The Source Water Assessment Report

The Colorado Department of Public Health and Environment has provided us with a Source Water Assessment Report for our water supply. You may obtain a copy of the report by visiting [www.cdphe.state.co.us/wq/sw/swaphom.html](http://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 **could** occur. **It does not mean that contamination has occurred or will occur.** We can use this information to evaluate the need to improve our current water treatment capabilities and prepare for future contamination threats. This can help us ensure that quality finished water is delivered to your homes. In addition, the source water assessment results provide a starting point for developing a source water protection plan; this plan has been developed and implementation is beginning.

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

Understanding the Table of Contaminants

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

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

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

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

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

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

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

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

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

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

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

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

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

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



What’s In Our Water?

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

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

Notes to Table of Values

VIOLATIONS: SEE SEPARATE SHEET

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

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

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

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

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

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

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

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

## **VIOLATIONS**

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

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

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