



March 30, 2017

**Water Resources Report**  
Hannah Ridge at Feathergrass Filing No. 3

**Summary of Proposed Subdivision**

The site is located in the South one-half of Section 32, Township 13 South, Range 65 West of the 6th P.M. in El Paso County, Colorado. The site is located north of Constitution Avenue, west of Akers Drive and east of the Shawnee Drive / Constitution Avenue intersection. A Vicinity Map is attached for reference.

The total area of the Hannah Ridge at Feathergrass Filing No. 3 is 8.31± acres being platted into 39 single family residential lots and street right-of-way. The total of the Single Family Residential lots is 5.40± acres and Street R.O.W. area is 2.91± acres. The adjacent Tract F, Hannah Ridge at Feathergrass Filing No. 1 (1.33± acres) is not included in this plat, but will be developed as a drainage/open space tract and require irrigation as part of the overall development.

**Determination of Sufficient Quantity of Water**

Water Demand for single family residential units are calculated based on 0.42 acre-feet per year (375 gpd/du) in accordance with Cherokee Metropolitan District practices. Hannah Ridge at Feathergrass Filing No. 3 is 39 single family lots creating a total demand of 16.38 acre-feet per year (14,622 gpd).

The property lies within the **Cherokee Metropolitan District**. The District has agreed to serve the proposed subdivision with water and sanitary sewer and has supplied a Service Commitment Letter, which is attached for reference. The land owner has purchased water rights from the Kane and Tipton water rights, which are reserved exclusively for this subdivision developers use, to supplement the District's current capabilities as explained in Cherokee's commitment letter. The developer purchased water is sufficient to supply Phases 1 through 6 of the Hannah Ridge at Feathergrass development with an amount being left over for additional uses as noted in the previous development applications for Hannah Ridge and the table below. The District will provide any other documentation required to establish sufficient water quantity.

The State Engineer's office has previously determined that there was originally 136.50 acre-feet per year available from Cherokee Metropolitan District (May 13, 2013 SEO letter - Page 2, 4<sup>th</sup> Paragraph) for use by this developer as a consequence of the developer's water purchase. The majority of this water will be utilized in the Hannah Ridge at Feathergrass development. Hannah Ridge at Feathergrass Filing No. 1 with 45 single family lots and irrigated landscape area absorbed 19.95 AF, leaving 116.55 AF for use. Another proposed subdivision by this owner (Shops at Feathergrass Filing No.1) also reserved 1.68 AF of this water supply capacity. However, this plat has not been recorded as of this date and the capacity has not been utilized. Then, Hannah Ridge at Feathergrass Filing No. 2 with 39 single family lots utilized 16.38 AF, leaving 98.49 AF for use.

The table below shows how the 136.5 AF of water supply capacity is planned to be allocated among the future phases of the Hannah Ridge at Feathergrass development:

Phase (Filing)	Single Family Residential		Mult-Family Residential		Commercial		Park/Open Space		Combined Demand (AF)	Running Total Combined Demand (AF)
	No. Lots	Demand (AF)	No. Units	Demand (AF)	No. Acres	Demand (AF)	No. Acres	Demand (AF)		
1	45	18.90	N/A		N/A		0.5	1.05	19.95	19.95
2	39	16.38	N/A		N/A		N/A		16.38	36.33
<b>3</b>	<b>39</b>	<b>16.38</b>	<b>N/A</b>		<b>N/A</b>		<b>1.3</b>	<b>2.73</b>	<b>19.11</b>	<b>55.44</b>
4	52	21.84	N/A		N/A		N/A		21.84	77.28
5	39	16.38	N/A		N/A		6.0	12.60	28.98	106.26
6	16	6.72	N/A		N/A		0.8	1.68	8.52	114.78
7	81	34.02	N/A		N/A		N/A		34.02	148.80
8	41	17.22	N/A		N/A		N/A		17.22	166.02
9	N/A		205	55.35	N/A		N/A		55.35	221.37
10	N/A		N/A		23.8	29.99	N/A		29.99	251.36
<b>TOTAL</b>	<b>352</b>	<b>147.84</b>	<b>205</b>	<b>55.35</b>	<b>23.8</b>	<b>29.99</b>	<b>8.6</b>	<b>18.06</b>	<b>251.36</b>	

Current Total Available Water Supply per State Engineer's Office = 136.50 Acre-Feet per year – 19.95 Acre-Feet per year (Filing No. 1 allocation) – 16.38 Acre-Feet per year (Filing No. 2 allocation) – 1.68 Acre-Feet per year (Shops at Feathergrass Filing No. 1 allocation) = 98.49 Acre-Feet per year. Upon platting of proposed Hannah Ridge at Feathergrass Filing No. 3, 98.49 – 19.11 = 79.38 Acre-Feet per year will remain of the developer's water supply capacity reserve for future development.

**Determination of Sufficient Dependability of Water Supply**

The property lies within the **Cherokee Metropolitan District** and will provide water and sanitary sewer service in accordance with the District's Service Commitment Letter. The District will provide any other documentation required to establish sufficient dependability of water supply.

**Determination of sufficient Quality and Potability of Water**

The property lies within the **Cherokee Metropolitan District** and will provide water and sanitary sewer service in accordance with the District's Service Commitment Letter. The most recent Drinking Water Consumer Confidence Report from Cherokee Metropolitan District is attached, which verifies the District's compliance with State and Federal standards. The District will provide any other documentation required to establish sufficient quality and potability of water.

**Requirements of the State Engineer**

The property lies within the **Cherokee Metropolitan District** and will provide water and sanitary sewer service in accordance with the District's Service Commitment Letter. The District will meet the requirements of the State Engineer and provide any documentation required to obtain the necessary findings from the Office of the State Engineer.

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Enc.



**CHEROKEE METROPOLITAN DISTRICT**  
6250 Palmer Park Blvd., Colorado Springs, CO 80915-2842  
Telephone: (719) 597-5080 Fax: (719) 597-5145

March 31, 2017

Mr. David Gorman  
M.V.E., Inc.  
1903 Lelaray Street  
Suite 200  
Colorado Springs, CO 80909

Mr. Gorman,

This letter will serve as a formal Letter of Commitment by the Cherokee Metropolitan District to provide municipal water and sewer services for the Hannah Ridge at Feathergrass, Filing No. 3 development. The proposed development is located within the District's established boundaries; sufficient water rights have been acquired by the developer, and verified by the District; therefore the District is able and willing to provide water and sewer services for Hannah Ridge at Feathergrass, Filing No. 3.

Number of lots

This water commitment is hereby made exclusively for this specific development project at this site, within the District, and must achieve appropriate zoning and a final plat land use entitlement from El Paso County Development Services within 12 months of the date of this letter.

If I may be of further assistance please contact me at your convenience.

Plat redecoration may not occur within 12 months. Does the commitment go away?

Sincerely,

A handwritten signature in blue ink, appearing to read "Kurt C. Schlegel".

Kurt C. Schlegel  
General Manager

cc: Mr. Brian Beaudette; Cherokee Metropolitan District



# CHEROKEE METROPOLITAN DISTRICT

6250 Palmer Park Blvd., Colorado Springs, CO 80915-2842

Telephone: (719) 597-5080 Fax: (719) 597-5145

Public Water Supply ID # CO0121125

## 2016 Drinking Water Consumer Confidence Report For Calendar Year 2015

*Esta informacion es importante. No la puedes leer, busque a alguien que la pueda traducir.*

We are pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality of water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water.

### General Information About Drinking Water

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. Some people may be more vulnerable to contaminants in drinking water than the public in general. 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 about drinking water from their health care providers. 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 (800) 426-4791.

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 water discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides**, 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 also may come from gas stations, urban storm water runoff and septic systems.
- **Radioactive contaminants**, 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 U.S. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

### Our Water Sources

In 2015 Cherokee Metro received its water supply from two distinct sources: Groundwater from deep aquifers in the Denver Basin (non-renewable water), north of Black Forest and alluvial groundwater from the Upper Black Squirrel Basin (renewable water). In 2015 the supplies from the Denver Basin wells supplied approximately 10% of the District's water supply. The Upper Black Squirrel Creek Alluvial Aquifer, Supplies groundwater from 19 municipal wells spanning an area nine miles north to ten miles south of the town of Ellicott. These municipal wells are drilled approximately 180 feet deep into the Upper Black Squirrel Creek aquifer.

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/swaphorn.html](http://www.cdphe.state.co.us/wq/sw/swaphorn.html) or by contacting our Superintendent, Arthur Sintas, at (719) 597-5080. The Source Water Assessment Report provides a screening-level evaluation of potential contamination that **could** occur. It **does not mean** that the contamination **has 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. Potential sources of contamination in our source water area come from row crops, fallow, small grains, pasture / hay, septic systems and roads.

The following definitions will help you understand the terms and abbreviations used in this report:

**Terms and Abbreviations**

- **Parts per million (ppm) or Milligrams per liter (mg/l):** One part per million corresponds to one minute in two years or one penny in \$10,000.
- **Parts per billion (ppb) or Micrograms per liter (µg/l):** One part per billion corresponds to one minute in 2,000 years, or one penny in \$10,000,000.
- **Pico Curies per Liter (pCi/L):** A measure of radioactivity in water.
- **Action Level (AL):** The concentration of a contaminant, if exceeded, triggers treatment or other requirements a water system must follow.
- **Maximum Contaminant Level Goal (MCLG):** The “goal” is 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 Contaminant Level (MCL):** The “maximum allowed” is 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 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.
- **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.
- **Running Annual Average (RAA):** The average of monitoring results for the previous 12 calendar months.

**Detected Contaminants**

Cherokee Metropolitan District routinely monitors for contaminants in your drinking water according to federal and state laws. The following tables show all contaminants detected in the period of January 1 to December 31, 2015, unless otherwise noted. The State of Colorado requires the District to monitor for certain contaminants once every three years, 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 “Range” column in the tables will show the lowest and highest measured values for contaminants that were sampled more than once. Violations, if any, are reported in the last section of this report.

Note: Only detected contaminants appear in this report. If no table appears in this section, it means Cherokee Metropolitan District did not detect any contaminants in the last round of monitoring.

**Radionuclides**

Radiological	Collection Date	Average	Range Low to High	Unit	MCL	Typical Source
Gross Alpha	2015	8.1	0.6 - 8.1	pCi/L	15	Erosion of natural deposits
Radium 226	2015	0.7	0.1 - 0.7	pCi/L	Ra 226+ 228 = 5	Erosion of natural deposits
Radium 228	2015	0.8	0.0 - 0.8	pCi/L	Ra 226+ 228 = 5	Erosion of natural deposits
Uranium	2015	3.7	1.6 - 3.7	ppb	30	Erosion of natural deposits

### Inorganic Contaminants

Contaminant	Sample Date	Average	Range low- High	Unit	MCL	MCLG	Typical Source
Arsenic	2015	0.55	0 to 1.6	ppb	10	10	Erosion of natural deposits; run off from orchards; runoff from glass and electronics production wastes
Barium	2015	0.064	0.04 to 0.06	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Cadmium	2015	0.3	0 to 0.3	ppb	5	5	Erosion of Natural deposits, used in metal alloys Erosion of Natural deposits
Fluoride	2015	0.76	0.33 to 1.8	ppm	4	4	Erosion of Natural deposits: Water additive which promotes strong teeth: Discharge from fertilizer and aluminum factories.
Nitrate (As N)	2015	5.58	0 to 8.3	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	2015	3.17	0 to 4.9	ppb	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines

Lead and Copper	Collection Date	90 <sup>th</sup> Percentile	Unit	AL	Typical Source
Copper	07/15/2014 to 07/23/2014	0.45	ppm	1.3	Corrosion of household plumbing systems; Erosion of natural deposits.
Lead	07/15/2014 to 07/23/2014	4.60	ppb	15	Corrosion of household plumbing systems; Erosion of natural deposits.

Disinfection By-Products	Date	Average	Range Low to High	Unit	MCL	Typical Source
Total Haloacetic Acids (HAA5)	2015	7.82	1.1 to 10.9	ppb	60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM)	2015	17.66	0 to 29.2	ppb	80	By-product of drinking water disinfection

### Organic Contaminants

Contaminant	Sample Date	Average	Range low- High	Unit	MCL	MCLG	Typical Source
Hexachlorobenzene	2015	0	0 to 0.01	ppb	1	0	Discharge from metal refineries and agricultural chemical factories
Hexachloro-cyclopentadiene	2015	0.062	0.062	ppb	50	50	Discharge from chemical factories
Xylenes	2015	0.04	0 to 0.29	ppb	10,000	10,000	Discharge from petroleum factories; and chemical factories

EPA has implemented the Unregulated Contaminant Monitoring Rule (UCMR) to collect data for contaminants that are suspected to be present in drinking water and do not have health-based standards set under the Safe Drinking Water Act. EPA uses the results of UCMR monitoring to learn about the occurrence of unregulated contaminants in drinking water and to decide whether or not these contaminants will be regulated in the future. We performed monitoring and reported the analytical results of the monitoring to EPA in accordance with its Third Unregulated Contaminant Monitoring Rule (UCMR3). Once EPA reviews the submitted results, the results are made available in the EPA's National Contaminant Occurrence Database (NCOD) (<http://www.epa.gov/dwucmr/national-contaminant-occurrence-database-ncod>) Consumers can review UCMR results by accessing the NCOD. Contaminants that were detected during our UCMR3 sampling and the corresponding analytical results are provided below.

**UNREGULATED CONTAMINANT - MONITORING REGULATION (UCMR)\***

Contaminant	Collection Date	Highest Value	Unit	Typical Source
1,4-Dioxane	03/03/2015	0.24	ug/L	Variety of applications as in inks and adhesives.
Hexavalent Chormium	03/03/2015	0.14	ug/L	Used on metal for decorative or protective coating and pigments in dyes, paints, inks, and plastics.
Molybdenum	03/03/2015	1.4	ug/L	Erosion of Natural deposits, used to make steel alloys and high-pressure and high-temperature applications.
Strontium	03/03/2015	320	ug/L	Used in making ceramics and glass products, pyrotechnics, paint pigments, fluorescent lights, and medicines.
Vanadium	03/03/2015	0.36	ug/L	Used to make metal alloys, rubber, plastics, ceramics, and other chemicals.

**\*There is no MCL for the unregulated contaminants**

**Health Information About Water Quality**

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels in 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 elevated lead levels in your home's water, you may wish to flush your tap for 30 seconds to two minutes before using tap water or you may have your water tested. Additional information is available from the *Safe Drinking Water Hotline* at (800) 426-4791.

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause Blue Baby Syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, and detected levels are above 5 ppm, you should ask advice from your health care provider.

If you have any questions about this report or your water utility, please contact our Superintendent Art Sintas at (719) 597-5080. We want our valued customers to be informed about their water utility. If you want to learn more about the utility, please call the above contact or attend our open Board of Directors' meeting scheduled at 5:30 p.m. on the second Tuesday of each month, at our office located at 6250 Palmer Park Boulevard. Other information can be found on our website [www.cherokeemetro.org](http://www.cherokeemetro.org)

**Violations**

There were no violations for 2015.

# Markup Summary

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## dspdparsons (2)

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all Letter of Commitment by the Cherokee Metroplex sewer services for the Hamahl Ridge at Fairbergs development is located within the District's establish a have been acquired by the developer, and verifiable and willing to provide water and sewer service 3.

Number of lots  
made exclusively for this specific development p achieve appropriate zoning and a final plat land is at Services within 12 months of the date of this let

please contact me at your convenience.

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**Author:** dsdparsons

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Number of lots

or this specific development project at this zoning and a final plat land use entitlement 2 months of the date of this letter.

your convenience  
Plat redecoration may not occur within 12 months. Does the commitment go away?

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**Author:** dsdparsons

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Plat redecoration may not occur within 12 months.  
Does the commitment go away?