



CHEROKEE METROPOLITAN DISTRICT

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Water Provider's Supplement to the Water Resources Report for the Space Village Minor Subdivision

Commitment Number 2024-03

March 1, 2024

This document was prepared to satisfy the requirements of El Paso County for a Water Provider's Report in support of a development at the **southeast corner of Space Village Drive and Command View Drive.**

Introduction

Cherokee Metropolitan District (CMD) is a Title 32 special District which provides water and wastewater to an approximately 5000-acre enclave of unincorporated El Paso county surrounded by the City of Colorado Springs. Currently CMD serves approximately 8000 residential customers and 600 commercial customers in addition to bulk users in eastern El Paso County including Schriever Air Force Base.

CMD water is sourced entirely from groundwater in two regions. The majority is withdrawn from the alluvial Upper Black Squirrel (UBS) Aquifer in eastern El Paso County through 20 wells. The remainder is sourced from two wells in deep bedrock aquifers in the northern part of the county on the “Sundance Ranch” property. Water from eight of the 20 wells in the eastern part of the county can only be used to serve a fixed set of customers. Water for the main service area of CMD comes only from the remaining 12 wells in UBS along with the two wells in Black Forest.

Calculation of Anticipated Water Demand

Expected water demand for the proposed development was based on information provided by the developer, who seeks to use the property as a storage facility. The developer has calculated a total irrigation demand of 0.28 acre-feet per year to serve landscaping on the property. There is no anticipated indoor usage for this development.

Water Supplies

Of Cherokee’s 23 wells, eight wells are restricted to serving a maximum of 653 AFY to specified in-basin customers. Excess allocation for these wells is unavailable for new developments, even if they are inside the Basin, so this water is tracked separately from CMD’s general supply portfolio. CMD’s other alluvial wells and Denver Basin wells are available for export outside the UBS basin. The total annual volume available to CMD from these exportable supplies is 3,953.5 AFY (Table 1). The physical yield of these wells is significantly higher than their annual appropriation, allowing flexibility in satisfying summer peak demand.

Table 1: Water rights and tributary status of Exportable Wells

Well Number	Water Right (AFY)	2022 Use (AFY)	Permit Number	Aquifer	Aquifer Status
Well 9	176	153.5	14145-FP-R	UBS Alluvium	Tributary
Well 10	176	163.6	14146-FP-R	UBS Alluvium	Tributary
Well 11	244	165.3	6821-FP-R	UBS Alluvium	Tributary
Well 12	244	127.4	11198-FP	UBS Alluvium	Tributary
Well 13	1268	1174.9	49988-F	UBS Alluvium	Tributary
Well 14	0	0	52429-F	UBS Alluvium	Tributary
Well 15*	281	105.4	54070-F	UBS Alluvium	Tributary
Well 16*	219	75.6	54069-F	UBS Alluvium	Tributary
Well 17*	175	16.3	63094-F	UBS Alluvium	Tributary
Well 18	225	39.7	16253-RFP-R	UBS Alluvium	Tributary
Well 19	95	44	20567-RFP-R	UBS Alluvium	Tributary
Well 20	400	133.2	4332-RFP	UBS Alluvium	Tributary
Well 21	258.5	74.8	81782-F	UBS Alluvium	Tributary
Well 22	153.5	0	27571-F, 27572-F	UBS Alluvium	Tributary
DN-4**	105	74.8	78315-F	Denver Aquifer	Non-Tributary
AR-1**	306	217.1	75881-F	Arapahoe Aquifer	Non-Tributary
DA-1	40.3	0	83604-F	Dawson Aquifer	Not-Non-Tributary
DA-4	64.5	0	83603-F	Dawson Aquifer	Not-Non-Tributary
Total	4364.8	2547.0			

*Wells 15-17 can produce a total of 609 AFY instead of their nominal total of 675 AFY. This limitation is reflected in the 3984.7 AFY total available production.

**CMD holds additional water rights and well sites in the Dawson, Denver, and Arapahoe Aquifers associated with the Sundance Ranch property. The volume presented is the reliable annual yield of each well.

CMD has 4364.8 AFY of exportable water supply available in its portfolio from alluvial and deep bedrock aquifers. Further development in the Denver Basin is not planned at this time and instead CMD is focusing on acquiring new renewable supplies proximate to existing infrastructure.

Water Commitments

CMD's water commitments stand at 4144.8 AFY before the addition of the proposed development (Table 3).

Table 3: CMD Commitments before addition of new development

Commitment Category	Volume (AFY)
In-District pre 2015	2693
In-District post 2015	782.8
Schriever Space Force Base	537
Mayberry Communities	82
Construction	25
Parks	25
Total Commitments	4144.8

Water Balance

With 4,364.8 AFY of exportable supply and 4144.8 AFY of commitments, CMD has a water balance of 220.0 AFY before the subject development. After commitment of 0.28 AFY to this development, the District will have 219.7 AFY remaining for additional commitments.

Table 4: Water balance with new development

Water Balance Before New Commitment	220.0 AFY
SE Corner Space Village & Command View	0.28 AFY
Water Balance Remaining	219.7 AFY

Other Relevant Information

Recent Water Acquisitions/Losses

CMD has not acquired any new water rights since 2015 but has been developing owned water rights. CMD has not engaged in any water trades nor lost any water rights in the last year. The District is not currently under contract to purchase new water rights although CMD is investigating purchases of renewable water rights proximate to its existing infrastructure on an ongoing basis.

New Augmentation Plans

CMD is currently pursuing a replacement plan in partnership with Meridian Service Metropolitan District (MSMD) in order to maximize the efficiency of its water supplies.

Major Water System Capital Improvements

CMD has been actualizing owned water by drilling wells and beginning production on several well sites. In February 2020 CMD brought its well 21 (81782-F) online after a year of

planning and construction. The District completed drilling of the Albrecht Well (Well 22) in fall 2022 and expect to connect to the system in 2024.

Smaller-scale improvements to the distribution system to improve reliability and resiliency have been ongoing and include deeper computer integration, upgrades to treatment systems, rehabilitation of tanks, and emergency generator refurbishment.