

August 27, 2024

Kari Parsons, Planner III El Paso County Development Services Department Transmitted via the EPC EDARP Portal: <u>https://epcdevplanreview.com/</u>

Re: Grandview Reserve Phase 2 Case No. PUDSP236 Parts of Sec. 21 and part of the NW ¼ NE ¼ of Sec. 28, Twp. 12S, Rng. 64W, 6th P.M. Water Division 2, Water District 10 Upper Black Squirrel Creek Designated Basin CDWR Assigned Subdivision No. 31130 - 2nd Letter

Dear Kari Parsons:

We have reviewed the re-referral concerning the above-referenced proposal to develop 224 townhomes and 206 duplex units (430 lots total) on 68.62 acres as part of the Grandview Reserve Phase 2 development. The proposed water supplier is the Grandview Reserve Metropolitan District (GRMD).

This office most recently provided comments on the entire Grandview Reserve PUD containing 768.23 acres and approximately 3,260 single-family equivalents (SFEs) on December 21, 2023 (File # AASI213 and CDWR Assigned Referral No. 29054).

This letter supersedes our January 6, 2024 comments on Phase 2. It appears the only significant changes with this re-referral is an increase in the number of lots and therefore an increase in water demand.

Water Supply Demand

Water will be used for household purposes and irrigation with an annual demand of 151.79 acrefeet/year based on a demand of 0.353 acre-feet/year per SFE.

Source of Water Supply

The proposed water supplier is the Grandview Reserve Metropolitan District (GRMD). A will-serve letter from the GRMD commits to serve the 430 SFEs associated with Phase 2 was included with the referral.

GRMD will operate large capacity Arapahoe and Laramie-Fox Hills aquifers pursuant to amended Determination of Water Right nos. 510-BD and 511-BD, summarized in Table 1. The allowed uses of the amended determinations are: domestic, livestock watering, lawn irrigation, commercial, industrial, replacement, augmentation and municipal use by Four-Way Ranch Metropolitan District and the Woodman Hills Metropolitan District; and all municipal purposes by the Grandview Reserve



Metropolitan District No. 1 including: domestic, agricultural, stock watering, irrigation, commercial, industrial, manufacturing, fire protection, power generation, wetlands, piscatorial, and wildlife, either directly or after storage. The proposed Grandview Reserve Subdivision filings are within the Overlying Land Area of the determinations. These water rights are summarized in Table 1. Our records show well permit nos. 88235-F and 88210-F withdraw the allocations from Determination of Water right nos. 511-BD and 510-BD, respectively.

According to the previously provided March 2, 2022 letter from Emilie B. Polley (Polley Letter), GRMD has no other existing obligation beyond the Grandview Reserve development. According to information available to this office, the GRMD committed to providing 203.79 acre-feet/year to Filing No. 1, therefore with the demand from Phase 2, the total present demand on the GRMD appears to be 355.54 acre-feet/year, as shown in Table 1.

	Determination			Allocation	Allocation
	Determination	Aquifer	Status	(acre-feet/year	(acre-feet/year on
	No.			on 100-year basis)	300-year basis)
Supply	510-BD	Laramie-Fox Hills	Nontributary	1,312.50	437.5
	511-BD	Arapahoe	Nontributary	1,400	466.67
	Total Supply			2,712.5	904.17
	Supply after Re	linquishment Requ	2,658.25	886.09	
Demand		203.79			
		151.79			
		530.51			
		1,178.60			
	Future Supply at Full Build-Out				-292.51

Table 1	- GRMD's		and Demand
		Sapp.	

The proposed source of water for this subdivision is bedrock aquifers in the Denver Basin. The State Engineer's Office does not have evidence regarding the length of time for which this source will be a physically and economically viable source of water. According to section 37-90-107(7)(a), C.R.S., "Permits issued pursuant to this subsection (7) shall allow withdrawals on the basis of an aquifer life of 100 years." Based on this <u>allocation</u> approach, the annual amounts of water determined in 510-BD and 511-BD are equal to one percent of the total amount as shown in column 5 of Table 1, as determined by rule 5.3.2.1 of the Designated Basin Rules, 2 CCR 410-1. Therefore, the water may be withdrawn in those annual amounts for a maximum of 100 years.

¹ The amount in the water supply plan for which this office provided comments on May 31, 2022. However, the July 19, 2024 Water Resource Report prepared by HR Green, LLC (Report) states combined Phase 1 (Filing 1-4) and Phase 2 annual demand is 193.44 acre-feet which would result in a demand of less than 203.79 associated with Filing 1 and 151.79 for Phase 2. The reason for the discrepancy in the Report between the demand for Filing 1 in the previously provided water supply plan and Phase 2 is unclear.

The *El Paso County Land Development Code*, Section 8.4.7.(B)(7)(b) states:

"(7) Finding of Sufficient Quantity

(b) Required Water Supply. The water supply shall be of sufficient quantity to meet the average annual demand of the proposed subdivision for a period of 300 years."

The State Engineer's Office does not have evidence regarding the length of time for which this source will "meet the average annual demand of the proposed subdivision." However, treating El Paso County's requirement as an <u>allocation</u> approach based on 300 years, the allowed average annual amount of withdrawal of 2,712.5 acre-feet/year would be reduced to one third of that amount, or 904.17 acre-feet/year, which is greater than the annual demand of the GRMD's present commitments of 355.54 acre-feet/year. As a result, the water may be withdrawn in that annual amount for a maximum of 300 years.

Please note that the anticipated demand on the District at full buildout is approximately 1,178.60 acre-feet/year, which exceeds the GRMD's supply of 886.09 acre-feet/year (after the relinquishment requirements). The GRMD is seeking additional water resources such as re-use to increase its supply.

Additional Comments

According to the submitted material, storm water detention structure(s) will be developed on the site. The Applicant should be aware that, unless the structure can meet the requirements of a "storm water detention and infiltration facility" as defined in Designated Basin Rule 5.11, the structure may be subject to administration by this office. The Applicant should review Rule 5.11 to determine whether the structure meets the requirements of the Rule and ensure any notification requirement is met.

State Engineer's Office Opinion

Based upon the above and pursuant to section 30-28-136(1)(h)(I) and section 30-28-136(1)(h)(II), C.R.S., it is our opinion that the proposed water supply is adequate and can be provided without causing injury to decreed water rights.

Our opinion that the water supply is **adequate** is based on our determination that the amount of water required annually to serve the development is currently physically available, based on current estimated aquifer conditions.

Our opinion that the water supply can be provided **without causing injury** is based on our determination that the amount of water that is legally available on an annual basis, according to the statutory allocation approach, for the proposed uses on the subdivided land is greater than the annual amount of water required to supply existing water commitments and the demands of the proposed development.

Our opinion is qualified by the following:

The Ground Water Commission has retained jurisdiction over the final amount of water available pursuant to the above-referenced water rights, pending actual geophysical data from the aquifer.

The amounts of water in the Denver Basin aquifer, and identified in this letter, are calculated based on estimated current aquifer conditions. The source of water is from a non-renewable aquifer, the allocations of which are based on a 100-year aquifer life. The county should be aware that the economic life of a water supply based on wells in a given Denver Basin aquifer may be less than the 100 years (or 300 years) used for allocation due to anticipated water level declines. We recommend that the county determine whether it is appropriate to require development of renewable water resources for this subdivision to provide for a long-term water supply.

Please contact <u>Wenli.Dickinson@state.co.us</u> or (303) 866-3581 x8206 with any questions.

Sincerely,

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Ioana Comaniciu, P.E. Water Resource Engineer

Ec: Upper Black Squirrel Ground Water Management District GRMD file