



May 13, 2024

Joe Letke, Project Manager
 El Paso County Development Services Department
 Transmitted via the EPC EDARP Portal: <https://epcdevplanreview.com>

RE: Greaves Vacation Replat Subdivision
 Case No. VR243
 Part of the NW ¼, Section 5, T12S, R65W, 6th P.M.
 Water Division 2, Water District 10

Dear Joe Letke,

We have reviewed the submittal documents related to Greaves Vacation Replat Subdivision, concerning the above referenced proposal of the vacation and replat approximately 10.364 acres known as Lot 13, Wildwood Ranch Estates, Filing 7, into two single-family residential lots of 5.348 acres (Lot 1) and 5.018 acres (Lot 2).

Water Supply Demand

Based on the water supply information summary and the April 19, 2024 Water Resource Report from MVE, INC. (“Report”) the estimated annual water requirements totals 0.60 acre-feet for in-house use (0.3 acre-feet/year/lot), 0.59 acre-feet for irrigation of up to 2,380 square-feet per lot (0.295 acre-feet/year/lot) and 0.24 acre-feet/year/lot for the watering of 4 horses or equivalent livestock. The total annual demand for the subdivision would be 1.67 acre-feet/year (0.835 acre-feet/year/lot).

Source of Water Supply

The proposed water source is individual on lot wells constructed in the Dawson aquifer operating pursuant to the decreed augmentation plan in case no. 2022CW3072. The decree in case no. 2022CW3072 quantified the amount of water underlying 10.34 acres. The following amounts of water were determined to be available underlying the 10.34 acres:

Aquifer	Annual amount available for 10.34-acre parcel (acre-feet)		Type
	Based on 100 year allocation approach	Based on 300 year allocation approach	
Dawson	9.51	3.17	Not-Nontributary
Denver	7.91	2.63	Nontributary
Arapahoe	4.31	1.43	Nontributary
Laramie-Fox Hills	2.87	0.95	Nontributary

The decreed augmentation plan in case no. 2022CW3072 allows for the total annual withdrawal of 1.67 acre-feet/year from the not nontributary Dawson aquifer, based on a 300-year allocation approach from Greaves Well Nos. 1 and 2. The augmentation plan states that indoor use will



utilize an estimated 0.26 acre-feet of water per year per residence (for a total of 0.52 acre-feet/year), with remaining 1.15 acre-feet/year pumping entitlement available for other uses, including, irrigation of lawn and garden, and the watering of horses or equivalent livestock per lot.

There is an existing well on the property operating under permit no. 170426 (canceled) and re-permitted under permit no. 88760-F (designated as Greaves Well No. 1). Well permit no. 88760-F was issued on December 5, 2023 for the use of an existing well-constructed under permit no. 170426, for a well on a residential site of 10.34 acres described as Lot 13, Filing 7, Wildwood Ranch Estates Subdivision. The use of ground water from Greaves Well No. 1 and Greaves Well No. 2 are limited to indoor uses inside two single family dwellings, irrigation of lawns and gardens, pool/hot tub, and the watering of horses, goats, chickens, or equivalent livestock. The annual amount of ground water to be withdrawn from Greaves Well No. 1 and Greaves Well No. 2 shall not exceed 1.67 acre-feet.

The proposed source of water for this subdivision is a bedrock aquifer 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 37-90-137(4)(b)(I), C.R.S., "Permits issued pursuant to this subsection (4) shall allow withdrawals on the basis of an aquifer life of one hundred years." Based on this allocation approach, the annual amounts of water decreed in case no. 2022CW3072 are equal to one percent of the total amount, as determined by rules 8.A and 8.B of the Statewide Nontributary Ground Water Rules, 2 CCR 402-7. Therefore, the water may be withdrawn in those annual amounts for a maximum of 100 years.

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 allocation approach based on three hundred years, the proposed annual water demand equals the allowed average annual amount of withdrawal of 1.67 acre-feet per year, allowed by the augmentation plan in the case no. 2022CW3072. As a result, the water may be withdrawn in that annual amount for a maximum of 300 years.

Any application for an on lot well permit for Greaves Wel No. 2, submitted by entities other than the water court Applicants in case no. 2022CW3072 (Allan Greaves and Judith Ann Greaves) must include evidence that the Applicant has acquired the right to the portion of the water being requested on the application.

Additional Comments

The Applicant should be aware that any proposed detention pond for this project must meet the requirements of a "storm water detention and infiltration facility" as defined in section 37-92-602(8), C.R.S., otherwise the structure may be subject to administration by this office. The Applicant should review DWR's *Administrative Statement Regarding the Management of Storm Water Detention Facilities and Post-Wildland Fire Facilities in Colorado*, attached, to ensure that the notification, construction and operation of the proposed structure meets statutory and administrative requirements. The Applicant is encouraged to use *Colorado Stormwater*

Detention and Infiltration Facility Notification Portal to meet the notification requirements, located at <https://maperture.digitaldataservices.com/gvh/?viewer=cswdif>.

State Engineer's Office Opinion

Based upon the above and pursuant to Section 30-28-136(1)(h)(I), 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 subdivision 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 is greater than the annual amount of water required to supply existing water commitments and the demands of the proposed subdivision.

Our opinion is qualified by the following:

The Division 1 Water Court has retained jurisdiction over the final amount of water available pursuant to the above-referenced decree, 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.

Should you or the Applicant have any questions, please contact me at this office at 303-866-3581 x8246 or ioana.comanicu@state.co.us

Sincerely,



Ioana Comanicu, P.E.
Water Resource Engineer

Ec: Subdivision file: 31329
File permit no. 88760-F