



August 27, 2021

John Green
El Paso County Development Services Department
DSDcomments@elpasoco.com

RE: McGehee Subdivision AKA Mountain Shadow Vacate and Replat
Part of the E ½ of the SW ¼, Section 29, T11S, R65W, 6th P.M.
Water Division 1, Water District 8

Dear John Green,

We have reviewed the additional information received by this office on August 5, 2021 regarding the above referenced referral. The Applicant is proposing to vacate Lot 3, Mountain Shadow Ranch Second Phase and subdivide the 10.495 acres into two lots. This office previously commented on the referral in a letter dated March 2, 2021, this letter supersedes the previous letter.

Water Supply Demand

According to the Water Supply Information Summary and the McGehee Minor Subdivision Water Resources Report by Monson, Cummins & Shohet, LLC dated June 28, 2021 ("Water Resources Report"), the estimated annual demand for the two lots is 0.82 acre-feet per year for 300 years, which will be used for domestic type uses, including in-house, landscape/irrigation of lawn and gardens, watering of domestic animals and stock, commercial uses, home office use and hot tub/swimming pool purposes.

Source of Water Supply

The proposed water source for the two lots is an existing well, permit no. 81469-F, to be used as a shared well. Well permit no. 81469-F is constructed in the Dawson aquifer and operates pursuant to the decreed augmentation plan in Division 1 Water Court Case no. 17CW3054 and may withdraw 0.82 acre-foot per year for ordinary household purposes inside two single family dwellings, irrigation of home lawn and garden and the watering of domestic animals. Prior to withdrawal of groundwater from the well for commercial uses, home office use and hot tub/swimming pool purposes, the well would need to be re-permitted to allow for such uses.

The decreed augmentation plan in Division 1 Water Court Case no. 17CW3054 allows for the annual withdrawal of 0.82 acre-feet per year from the not nontributary Dawson aquifer, based on a 300 year allocation approach. The augmentation plan states the ground water will be used for indoor residential uses, and a guest cottage, commercial uses, livestock water, home office use, irrigation, hot tub and/or swimming pool purposes and augmentation.



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. 17CW3054 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.

In the *El Paso County Land Development Code*, effective November, 1986, Chapter 5, Section 49.5, (D), (2) states:

"- Finding of Sufficient Quantity - The water supply shall be of sufficient quantity to meet the average annual demand of the proposed subdivision for a period of three hundred (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 annual demand for the two lots discussed above is the same as the allowed average annual amount of withdrawal allowed by the augmentation plan. As a result, the water may be withdrawn in that annual amount for a maximum of 300 years.

This office does not encourage the use of shared wells and will in no way enforce or administer well sharing agreements. However, should the county approve a division of land that relies on a shared well we recommend the use of a well sharing agreement that outlines well maintenance, use, and access. At no point should the agreement, or shared nature of the well, expand the uses of the well beyond those uses allowed on the well permit.

State Engineer's Office Opinion

Based on the above, it is our opinion, pursuant to C.R.S. § 30-28-136(1)(h)(I), it is our opinion that the proposed water supply is adequate and can be provided without causing injury to decreed water rights, **so long as prior to the withdrawal of groundwater from the well constructed under permit no. 81469-F for commercial uses, home office use and hot tub/swimming pool purposes, the well is re-permitted to allow such uses.**

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.

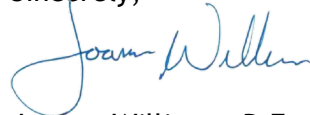
Our opinion is qualified by the following:

The Division 1 Water Court has retained jurisdiction over the final amount of water available pursuant to the above-referenced decrees, pending actual geophysical data from the aquifer.

The amounts of water in the Denver Basin aquifers, 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 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 Ailis Thyne of this office at 303-866-3581 x8216.

Sincerely,



Joanna Williams, P.E.
Water Resource Engineer

Ec: Subdivision file: 27537
File permit no. 81469-F