

December 20, 2021

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

RE: Miles Subdivision AKA JeniShay Farms
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 December 10, 2021 regarding the above referenced referral. The Applicant is proposing to create a 9 lot subdivision on 52.63 acres. The 52.63 acres consists of a 39.77 acre parcel and lots previously known as Lots 5 and 6 of Terra Ridge Estates (proposed lots 1 and 9). We previously commented on this subdivision by letters dated December 30, 2020 and November 22, 2021.

Water Supply Demand

According to the JeniShay Farms Water Resources Report & Wastewater Treatment Report by JDS-Hydro Consultants dated December 2021 ("Water Resources Report"), the estimated annual demand for the 7 lots within the 39.77 acre parcel (proposed lots 2 - 8) will be 0.59 acre-feet per year per lot for 300 years, which will be used for in-house use in one single family dwelling (0.26 acre-feet), irrigation of up to 4,600 square-feet of lawn, garden and trees (0.26 acre-feet), and watering of up to 7 large domestic animals (0.07 acre-feet). The total estimated water requirement for the 7 lots is 4.13 acre-feet per year for 300 years.

According to the Water Resources Report, the estimated annual demand for proposed Lots 1 and 9 will be 1 acre-foot per year per lot for 300 years, which will be used for in house use in one single family dwelling (0.3 acre-feet), outdoor irrigation (0.65 acre-feet), and stock watering of four animals (0.05 acre-feet). The total estimated water requirement for the 2 lots is 2 acre-feet per year for 300 years.

Source of Water Supply

The proposed water source for the 9 lots is individual on lot wells in Dawson aquifer. The Dawson wells on the 7 lots within the 39.77 acre parcel (proposed lots 2 - 8) will be operated in accordance with the decree granted in Division 1 Water Court case no. 18CW3226. The Dawson wells on the 2 lots currently within Terra Ridge Estates (proposed Lots 1 and 9) will be operated in accordance with the decree granted in Division 2 Water Court case no. 96CW68 (Division 1 case no. 96CW146).

The augmentation plan granted in Division 1 Water Court case no. 18CW3226 allows the withdrawal of 0.59 acre-feet per year through 7 Dawson wells for a period of 300 years.



The uses allowed under the augmentation plan are consistent with the uses specified above for the 7 wells.

The augmentation plan granted in Division 2 Water Court case no. 96CW68 allows the withdrawal of 1 acre-foot per year through 40 wells for a period of 300 years. The uses allowed under the augmentation plan are in-house, irrigation of 13,000 square feet and watering of up to four horses. The uses specified above are consistent with the uses allowed under the augmentation plan as long as the irrigated area is limited to no more than 13,000 square-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 <u>allocation</u> approach, the annual amounts of water decreed in Division 1 Water Court case no. 18CW3226 and Division 2 Water Court case no. 96CW68 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 <u>allocation</u> approach based on three hundred years, the allowed average annual amount of withdrawal of 0.59 acre-feet/year under Division 1 Water Court case no. 18CW3226 and 1 acre-foot/year under Division 2 Water Court case no. 96CW68 may be withdrawn in those annual amounts for a maximum of 300 years.

Applications for on lot well permits must include evidence that the applicant has acquired the right to the portion of water being requested on the application.

State Engineer's Office Opinion

Based on the above, it is our opinion, pursuant to C.R.S. § 30-28-136(1)(h)(l), 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.

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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 <u>allocation</u> 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 me at 303-866-3581 x8265 or Joanna. Williams@state.co.us.

Sincerely,

Joanna Williams, P.E. Water Resource Engineer

Ec: SEO Subdivision file: 27451

Applicant: Emilie Polley, Chris Cummins and Shay Miles