

June 29, 2021

John Green, Project Manager El Paso County Development Services Department Transmitted via the EPC EDARP Portal: <u>epcdevplanreview.com</u>

Re: Warner Minor Subdivision Case No. MS214 The NE ¼ NW ¼ of Sec. 23, T 11S, R 65W, 6th P.M. Kiowa-Bijou Designated Basin Water Division 1, Water District 1

Dear John Green:

We have reviewed the above-referenced proposal for a minor subdivision of 39.86 acres located at 17350 W Goshawk Rd, known as the NE ¹/₄ NW ¹/₄ of Sec. 23, T 11S, R 65W, 6th P.M. The property will be subdivided into 4 lots: Lot 1 (5 acres), Lot 2 (5 acres), Lot 3 (19.86 acres) and Lot 4 (10 acres). Lot 3 has an existing single-family residence and a well, presumably well permit no. 85771-F.

Water Supply Demand

According to the submitted material, the estimated water demand is 1.0 acre-foot per year per lot (4.0 acre-feet per year total). The water on each lot will be used for in-home use (0.25 acre-feet/year); and irrigation of lawn and garden, domestic animal watering and commercial use (0.75 acre-feet per year).

Source of Water Supply

The proposed water supply source is individual on lot wells constructed in the Dawson aquifer to operate pursuant to Determination of Water Right No. 4025-BD and Replacement Plan No. 4025-RP. Determination of Water Right No. 4025-BD was issued October 22, 2020 and allows an average annual withdrawal of 37.77 acre-feet for 100 years from the Dawson aquifer for in home use, irrigation of lawn and garden, domestic animal watering and commercial use. The allowed place of use is the 40 acres described as the NE ¼ NW ¼ of Sec. 23, T 11S, R 65W, 6th P.M. Replacement Plan No. 4025-RP was issued October 22, 2020 and allows an average annual withdrawal of 1.0 acre-foot for 300 years from the Dawson aquifer for each of four residential lots (4.0 acre-feet total). The allowed uses under the plan for each on lot well is use in one single family residence, irrigation of lawn and garden, domestic animal watering and commercial use.

The proposed source of water for this development is a bedrock aquifer allocation from the Denver Basin. The State Engineer's Office does not have evidence regarding the length of time for which the bedrock aquifer sources 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 allocation approach, the annual amount of water determined in Determination of Water Right No. 4025-BD is equal to one percent of the total amount, 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.

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 <u>allocation</u> approach based on 300 years, the allowed average annual amount of withdrawal of 37.77 acre-feet/year from the Dawson would be reduced to one third of that amount, or 12.59 acre-feet/year. Additionally, the average annual withdrawal amount allowed under Replacement Plan 4025-BD is equal to the proposed water demand. Based on this approach, there is sufficient water legally available in the Dawson aquifer based on a 300-year aquifer life to meet the proposed per lot demand based on the allocation available in accordance with Determination of Water Right No. 4025-BD and Replacement Plan no. 4025-RP.

A review of our records shows well permit no. 85571-F located on the subject property. Well permit no. 85571-F was issued May 26, 2021 pursuant to section 37-90-107(7), C.R.S., Determination of Water Right No. 4025-BD and Replacement Plan no. 4025-RP for the use of an existing well constructed under permit no. 95869. The use of this well must be in accordance with applicable statutes, the Designated Basin Rules, Determination of Water Right No. 4025-BD and Replacement Plan no. 4025-BD and Replacement Plan no. 4025-RP.

State Engineer's Office Opinion

Based upon the above and pursuant to section 30-28-136(1)(h)(I), C.R.S. the State Engineer's Office offers the opinion that the proposed water supply can be provided without causing material injury to existing water rights and the supply is expected to be **adequate**.

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 physically available, based on current 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 <u>allocation</u> approach, for the proposed uses is greater than the annual amount of water required to supply the proposed subdivision.

Our opinion is qualified by the following:

The Colorado Ground Water Commission has retained jurisdiction over the final amount of water available pursuant to the above-referenced Determination of Water Right and Replacement Plan, 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 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.

If you or the Applicant have any questions, please contact Wenli Dickinson at (303) 866-3581 x8206 or at <u>Wenli.Dickinson@state.co.us</u>.

Sincerely,

form (1)

Joanna Williams, P.E. Water Resource Engineer

Ec: Referral No. 28770 Keith Vander Horst, Chief of Water Supply, Designated Basins