

April 3, 2024

Kylie Bagley El Paso County Development Services Department 2880 International Circle, Suite 110 Colorado Springs, CO 80910

Re: Ohana Acres Minor Subdivision Final Plat - 2nd Letter

File #SF2141

Part of the NW1/4 of the NW1/4 of Section 30, T13S, R63W, 6th P.M.

Upper Black Squirrel Creek Designated Ground Water Basin

Upper Black squirrel Creek Groundwater Management District

Water Division 2, Water District 10

To Whom it May Concern:

We have reviewed the additional information regarding the above referenced proposal to subdivide approximately 19.31 acres into four lots of approximately 5 acres each. This office previously provided comments regarding this referral on December 7, 2021. This letter is intended to supersede those prior comments. The proposed minor subdivision will create four lots, all of which are intended for single-family residential use. Each of the lots will be served by a large-capacity well.

Water Supply Demand

According to the Water Supply Information Summary Sheet provided, the estimated water requirement for the subdivision totals 2.51 acre-feet/year for all four lots for all intended uses. This equates to 0.63 acrefeet/year for each of the four lots.

Source of Water Supply

Each lot will be served by a proposed individual on lot well withdrawing the allocation for the Arapahoe aquifer approved in Determination of Water Right No. 3714-BD.

Determination of Water Right No. 3714-BD was issued June 26th, 2019 pursuant to section 37-90-107(7), and the Designated Basin Rules, 2 CCR 410-1 ("Rules"). The determination allocates 755 acre-feet (7.55 acre-feet per year based on a 100-year aquifer life) of water from the Arapahoe aquifer underlying 19.31 acres generally described as a portion of the NW1/4 of the NW1/4 of Section 30, Township 13 South, Range 63 West of the 6th P.M. ("Overlying Land"). The allowed place of use is the above-described 19.31-acre Overlying Land. The use of the groundwater under 3714-BD is limited to in-home, lawn and gardens, domestic animals, commercial, agricultural, stock and replacement.



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 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 4308-BD are 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 Elbert County Subdivision Regulations - Amendment #4, effective July 27, 2020, Article XI.F.1 states:

"In order to assure a long term water supply, and given the concern with dependence on bedrock groundwater, and the difficulty in supplying future sources outside the urbanized areas, the following additional criteria apply to all proposed subdivisions. The Applicant shall present a water supply plan that provided for a 300-year aquifer lifespan when aquifer groundwater is the proposed water source, ..."

The State Engineer's Office does not have evidence regarding the length of time for which this source will provide a water supply. However, treating Elbert County's requirement as an <u>allocation</u> approach based on three hundred years, the allowed average annual amount of withdrawal of 2.51 acre-feet/year for 300 years allowed by Determination of Water Right 3714-BD (7.56 for 100 Years) is equal to the annual demand for this subdivision. As a result, the water may be withdrawn in that annual amount for a maximum of 300 years pursuant to the Determination for the Arapahoe aquifer.

The additional information provided indicates that existing well 53485-A, which is located on the property, will be plugged and abandoned and will be replaced with well permit no. 88480-F. This well permit was issued on August 9, 2023 for the replacement of permit no. 53485-A and use in one single-family dwelling, including the watering of domestic animals and the irrigation of 5,000 square-feet of lawn and gardens. The allowed average groundwater withdrawal is limited to 0.63 acre-feet. The source of the well is limited to the Arapahoe aquifer.

State Engineer's Office Opinion

Based upon the above and pursuant to section 30-28-136(1)(h)(l), 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 <u>allocation</u> 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 subdivision.

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 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.

If you or the Applicant have any questions, please contact Ivan Franco at (303) 866-3581 x8243.

Sincerely,

Mau'Cri Ioana Comaniciu, P.E. Water Resource Engineer

Ec: Subdivision File no: 28961 File for permit no. 88480-F