



November 1, 2022

Kari Parsons
El Paso County Planning and Community Development
2880 International Circle, Suite 110
Colorado Springs, SO 80910

Re: Joyful View Subdivision - Final Plat
SW1/4 of Sec. 33, T13S, R63W, 6th P.M.
Upper Black Squirrel Creek Designated Basin
Water Division 2, Water District 10
CDWR Reference No. 30522

Dear Ms. Parsons:

We have reviewed the above referenced proposal subdivide a 70.2-acre property located in the SW1/4 Section 13, Township 13 South, Range 63 West, 6th P.M. The property is proposed to be split into nine (9) residential lots. The lots would be served by individual on-lot wells with individual septic disposal systems.

Water Supply Demand

According to the submittal, the estimated water requirements total 4.11 acre-feet annually (0.456 acre-feet/lot), for: in-house use and irrigation of up to 3,000 square-feet of lawns and gardens and livestock watering.

Source of Water Supply

The nine (9) lots will be serviced by individual on-lot wells producing from the not-nontributary (4% replacement) Arapahoe aquifer that will operate pursuant to the Determination of Water Right No. 1940-BD. These wells will have an average diversion of 4.11 acre-feet annually for a maximum of 300 years. The subdivision lies within the allowed place of use of Determination of Water Right no. 1940-BD and the proposed uses are uses allowed under that Determination. The 4% replacement water will be replaced using return flows from the nine residences which are estimated to exceed the 4% requirement of 0.16 acre-foot per year, should the total volume be pumped.

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 37-90-107(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 amounts of water determined in 1940-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 Therefore, the water may be withdrawn in those annual amounts for a maximum of 100 years.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 *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 these sources 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 allowed average annual amount of withdrawal of 27.8 acre-feet/year from the Arapahoe aquifer would be reduced to one third of that amount, or 9.26 acre-feet/year. The applicant **claims** to own ½ of this water right or 4.63 acre-feet/year. As a result, the water may be withdrawn in those annual amounts for a maximum of 300 years.

Applications for on lot well permits, submitted by entities other than the Applicant of the Determination of Water Right No. 1940-BD must submit evidence that the Applicant has acquired the right to the portion of the water being requested in the application.

The applicant should be aware that any storm water detention structure constructed as a part of this project, must meet the requirements of a “storm water detention and infiltration facility” as defined in Designated Basin Rule 5.11, otherwise the structure may be subject to administration by this office. The applicant should review Rule 5.11 to determine whether the structure meets the requirements of the Rule and ensure any notification requirement is met.

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 allocation approach, for the proposed uses on the subdivided land is equal to the annual amount of water required to supply existing water commitments and the demands of the proposed subdivision.

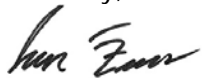
Our opinion is qualified by the following:

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 me at (303) 866-3581 ext. 8243 or at Ivan.Franco@state.co.us.

Sincerely,



Ivan Franco P.E.
Water Resource Engineer