COLORADO
Division of Water Resources
Department of Natural Resources

October 12, 2023

Ryan Howser, Project Manager
El Paso County Planning and Community Development Department
Transmitted via EDARP portal: epcdevplanreview.com

Re: **Wyoming Estates Preliminary Plan (Filing Nos. 1 & 2)**
File #: SF2322
Part of the SE ¼ of the NE ¼ of Sec. 33, Twp. 13 South, Rng. 64 West, 6th P.M.
Water Division 2, Water District 10
Upper Black Squirrel Creek Designated Basin
CDWR Assigned Subdivision No. 30982

Dear Ryan Howser:

We have received the submittal concerning the above referenced proposal to subdivide a 21.19-acre tract of land described as Lots 1 and 4 of Wyoming Estates Filing No. 1 located in the SE ¼ of the NE ¼ of Sec. 33, Twp. 13 South, Rng. 64 West, 6th P.M.

This application is related to the preliminary plan application (File # SP237) for 6 residential lots. The property has been subdivided into 4 residential lots as part of Filing No. 1. This application plan seeks approval of the water supply for the replat of Lots 1 and 4 of Wyoming Estates Filing No. 1 into 4 new lots which will be Lots 1-4 of Wyoming Estates Filing No. 2, for 6 lots total.

The proposed water supply is individual on-lot wells constructed in the Denver aquifer operating pursuant to Determination of Water Right no. 3542-BD and Replacement Plan no. 3542-RP and on-lot wells constructed in the Arapahoe aquifer operating pursuant to Determination no. 3541-BD.

Water Supply Demand

According to Subdivision Summary Form, the estimated water requirement is 650 gallons/day or 0.728 acre-feet/year per lot for household use. The total water requirement for all 4 lots is 2.91 acre-feet/year.

However, according to the Water Supply Information Summary and information provided with the Wyoming Estates Preliminary Plan referral (File # SP237), the proposed water requirement is 0.455 acre-feet/year per lot for in-home purposes, domestic animals, and irrigation of lawn and gardens for the two Denver wells and up to 1.08 acre-feet/year/lot for the Arapahoe aquifer wells. The total requirement for all 4 lots would be 3.07 acre-feet/year.

Source of Water Supply

Lots 1 and 3 of Wyoming Estates Filing No. 2

According to information provided with the Wyoming Estates Preliminary Plan referral (File # SP237), the proposed water supply for Lot 1 of Wyoming Estates Filing No. 2 is permit no. 85882-F and for Lot 3 of Wyoming Estates Filing No. 2 is permit no. 87630-F. **Upon approval of the subdivision, the Applicant must submit a request to amend the lot number and filing number associated with these well permits.** Well permit nos. 85882-F and 87630-F were issued pursuant to section 37-90-107(7), Determination no. 3542-BD, and its associated Replacement Plan no. 3542-RP. The wells are each permitted for 0.455 acre-feet/year for domestic use inside 1 single-family dwelling, the watering of domestic animals, and the irrigation of

3,000 square-feet of lawns and gardens. **Use of these wells must be in compliance with their permitted conditions and the conditions of Determination no. 3542-BD and Replacement Plan no. 3542-RP. The withdrawal from each of these wells cannot exceed 0.455 acre-feet/year.**

Lots 2 and 4 of Wyoming Estates Filing No. 2

According to information provided with the Wyoming Estates Preliminary Plan referral (File # SP237), the proposed water supply for Lots 2 and 4 of Wyoming Estates Filing No. 2 are new wells constructed in the Arapahoe aquifer operating pursuant to Determination no. 3541-BD. Determination no. 3541-BD was issued July 2, 2020 and determined a right to 12.9 acre-feet/year underlying the subject 40-acre property for residential, lawn and garden irrigation, the watering of domestic animals, and replacement. The Arapahoe aquifer is not-nontributary with a 4% replacement requirement at this location.

Allocation Approach

The proposed source of water is individual on-lot wells producing from the not-nontributary Denver aquifer that will operate pursuant to Determination no. 3542-BD and Replacement Plan no. 3542-RP and on-lot wells producing from the not-nontributary Arapahoe aquifer that will operate pursuant to Determination no. 3541-BD. The allowed average annual amount of withdrawal provided for in Determination no. 3542-BD and Replacement Plan no. 3542-RP is 0.455 acre-feet/year for 300 years per lot for 4 lots. The subdivision lies within the allowed place of use of Determination no. 3542-BD, and the proposed uses are uses allowed by that Determination and Replacement Plan. The allowed average annual amount of withdrawal provided for in Determination no. 3541-BD is 12.9 acre-feet/year for 100 years. The subdivision lies within the allowed place of use of Determination no. 3541-BD, and the proposed uses are uses allowed by that Determination.

The proposed source of water for this subdivision is bedrock aquifers 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 **allocation** approach, the annual amounts of water determined in Determination nos. 3542-BD and 3541-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
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> (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 **allocation** approach based on 300 years, the allowed average annual amount of withdrawal of 8.16 acre-feet/year from the Denver aquifer in 3542-BD and 12.9 acre-feet/year in the Arapahoe aquifer in 3541-BD would be reduced to one third of that amount, or 1.82 acre-feet/year from the Denver aquifer as allowed by Replacement Plan no. 3542-RP and 4.3 acre-feet/year in the Arapahoe aquifer in 3541-BD, which are greater than the annual demand for this subdivision. 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 an entity other than the current water right holder (Home Run Restorations, Inc.), 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 upon the above and pursuant to section 30-28-136(1)(h)(I), 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 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 water rights, 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.

Please contact Wenli.Dickinson@state.co.us or (303) 866-3581 x8206 with any questions.

Sincerely,

Ioana Comaniciu, P.E.
Water Resource Engineer

Ec: Water well permit nos. 85882-F, and 87630-F files
Upper Black Squirrel Creek Ground Water Management District (ubscgwmd@gmail.com)