

March 20, 2023

Ryan Howser, Project Manager El Paso County Development Services Department Transmitted via the EPC EDARP Portal

Re: Saddlehorn Ranch, Filing No. 3 (File # SF234)

a.k.a. 824 Acre Curtis Road Subdivision
Parts of W1/2 of Sec. 3, Twp. 13S, Rng. 64W, 6th P.M.
Water Division 2, Water District 10
Upper Black Squirrel Creek Designated Basin

Dear Ryan Howser:

We have reviewed the referral concerning the above referenced proposal to subdivide 175.4285 acres into 44 single-family lots of approximately 2.5 - 3.7 acres each and one 38.7 acre Tract A.

This office previously provided comments on the entire 816.5-acre Saddlehorn Ranch Subdivision (File # SP196 and SF1912) on November 19, 2020, subdivision file no. 26492. The entire subdivision will consist of 608 acres of developed land, on which 218 single-family residential lots will be created. The remaining acreage will be preserved as open space for recreational purposes.

Water Supply Demand

According to the submittal, the proposed water uses are indoor residential use. The estimated water demand is 0.67 acre-feet/year demand per lot, or 29.48 acre-feet/year for all 44 lots. The estimated water demand to serve all 218 the residential lots is 146.06 acre-feet/year.

Source of Water Supply

The proposed water supplier is the Saddlehorn Ranch Metropolitan District (SRMD) which was formed pursuant to the order and decree entered in the El Paso County District Court, case no. 19CV32097 and approved by the El Paso County Board of Commissioners in Resolution No. 19-282 dated August 20, 2019. According to the September 1, 2020 Permanent Will-Serve Letter, SRMD is committed to providing 146.06 acre-feet/year of water to meet the domestic needs of the 218 residential lots of the subdivision at full buildout.

The Water Resources and Wastewater Report for the Saddlehorn Ranch Subdivision Report ("Report") revised June 2022 states that SRMD has 198.16 acre-feet/year in supply. However, according to the Special Warranty Deed recorded March 2, 2023, it appears that the SRMD has been conveyed the following amounts of groundwater:

• 21,047 acre-feet of water or 210.47 acre-feet/year based on a 100-year aquifer life from the Laramie-Fox Hills aquifer allocated under Determination of Water Right no. 457-BD.



- Determination of Water Right no. 457-BD allocated 234,700 acre-feet from the nontributary Laramie-Fox Hills aquifer underlying 6,955.31 acres, which includes the land subject of this subdivision, for domestic, irrigation, commercial, industrial, recreation and livestock watering uses.
- 24,383 acre-feet of water or 243.83 acre-feet/year based on a 100-year aquifer life from the Arapahoe aquifer allocated under Determination of Water Right no. 458-BD.
 - Determination of Water Right no. 458-BD allocated 272,000 acre-feet from the nontributary Arapahoe aquifer underlying 6,955.31 acres, which includes the land subject of this subdivision, for domestic, irrigation, commercial, industrial, recreation and livestock watering uses.
- 21,203 acre-feet of water or 212.03 acre-feet/year based on a 100-year aquifer life from the Denver aquifer allocated under Determination of Water Right no. 459-BD.
 - Determination of Water Right no. 459-BD as amended in the Findings and Order dated August 20, 2018, allocated 96,000 acre-feet of not-nontributary (4% replacement requirement) water underlying Area A and 138,350 acre-feet of not-nontributary (actual impact replacement requirement) water underlying Area B from the Denver aquifer, of which Area A and B include the land subject of this subdivision, for domestic, irrigation, commercial, industrial, recreation and livestock watering uses. The groundwater from Area B cannot be withdrawn without Commission approval of a replacement plan that provides for replacement of actual depletion to the alluvial aquifer and is adequate to prevent any material injury to existing water rights.
 - The amounts of water from each area transferred, according to the Special Warranty Deed, is proportional to Areas A and B, however such amounts combined shall not exceed 23,086 acre-feet should the Commission adjust the allocation based on actual aquifer characteristics. Based on Area A being 2,837 acres and Area B being 4,118.31 acres, it appears that 8,648.5 acre-feet of water from Area A and 12,554.5 acre-feet of water from Area B was conveyed.

The subdivision lies within the allowed place of use of Determination of Water Right nos. 457-BD, 458-BD, and 459-BD and the proposed uses are uses allowed by those Determinations. Therefore, it appears that the amount of firm water supply available to SRMD is 57,984.5 acre-feet/year or 193.28 acre-feet/year based on a 300-year supply from Determination of Water Right nos. 457-BD, 458-BD, and 459-BD. If these calculated amounts are not correct, the Applicant must submit clarification of the water rights owned and controlled by the SRMD for our review.

According to previously submitted information, SRMD has developed two nontributary Denver Basin wells, permit nos. 85169-F and 85170-F, as its water supply. Well permit no. 85169-F was issued March 1, 2021 pursuant to section 37-90-107(7), C.R.S. and the Findings and Order of the Colorado Ground Water Commission ("Commission") dated March 3, 2004 for Determination of Water Right No. 458-BD. The well is permitted to withdraw an average annual amount of 322.03 acre-feet/year and a total volume of 32,203 acre-feet from the nontributary Arapahoe aquifer. Well permit no. 85170-F was issued March 1, 2021 pursuant to section 37-90-107(7), C.R.S. and the Findings and Order of the Commission dated March 3, 2004

¹ This amount excludes the not-nontributary (actual impact replacement requirement) groundwater from Area B since there is no replacement plan in place to prevent injury.

for Determination of Water Right No. 457-BD. The well is permitted to withdraw an average annual amount of 277.97 acre-feet/year or a total volume of 27,797 acre-feet from the nontributary Laramie-Fox Hills aquifer. Both wells are permitted for the following uses: domestic, irrigation, commercial, industrial, recreational and livestock watering purposes. These permits are permitted to withdraw the entire 457-BD and 458-BD allocations. Since it appears that the permit holder, Gorilla Capital, is no longer the sole owner of the 457-BD and 458-BD allocations permitted to be withdrawn by these wells, well nos. 85169-F and 85170-F may be required to be re-permitted consistent with ownership of the water rights withdrawn from these wells, unless Gorilla Capital demonstrates that they still own the remaining portion of the water allowed to be withdrawn by well nos. 85169-F and 85170-F. For this situation only the ownership of the wells will need to be updated to SRMD and Gorilla Capital.

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 <u>allocation</u> approach, the annual amounts of water determined in 457-BD, 458-BD, and 459-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 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 579.845 acre-feet/year would be reduced to one third of that amount, or 193.28 acre-feet/year, which is <u>greater</u> than the annual demand of 146.06 acre-feet for the entire Saddlehorn Ranch Subdivision, including Filing 2 of subject of this application. As a result, the water may be withdrawn in that annual amount for a maximum of 300 years.

State Engineer's Office Opinion

Based upon the above and pursuant to sections 30-28-136(1)(h)(l) and 30-28-136(1)(h)(ll), 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 <u>greater</u> 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.

Additional Comments

According to the submitted material, storm water detention structure(s) will be developed on the site. The Applicant should be aware that, unless the structure can meet the requirements of a "storm water detention and infiltration facility" as defined in Designated Basin Rule 5.11, 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. Additionally, the letter of intent stated that water quality control ponds will be developed throughout the subdivision to mitigate impact to the wetlands. Construction details and liner information for the ponds were not provided. The ponds must be constructed in accordance with Colorado laws. If the ponds do not meet the requirements of a "storm water detention and infiltration facility" as referenced above, then such ponds would be subject to administration by this office. Additionally, the ponds would not be allowed to expose groundwater to evaporation without first obtaining a Commission-approved replacement plan adequate to prevent any material injury to existing water rights.

Please contact Ivan Franco at (303) 866-3581 x8243 or at lvan.Franco@state.co.us with questions.

Sincerely,

Ioana Comaniciu, P.E. Water Resource Engineer

Ec: Subdivision File No. 30682

Water well permit file nos. 85169-F and 85170-F

Upper Black Squirrel Ground Water Management District