

January 4, 2024

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

Re: Saddlehorn Ranch, Filing No. 4 (File # SF2133) Parts of Sec. 3, Twp. 13S, Rng. 64W, 6<sup>th</sup> P.M. Water Division 2, Water District 10 Upper Black Squirrel Creek Designated Basin CDWR Assigned Subdivision No. 30875 - 2<sup>nd</sup> Letter

Dear Ryan Howser:

We have reviewed the above referenced re-referral to subdivide approximately 162.32 acres located in Sec. 3, Twp. 13S, Rng. 64W, 6<sup>th</sup> P.M. into 42 single-family lots of approximately 2.5 acres each. 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 816 acres (of which 608 acres will be developed), from which 218 single-family residential lots will be created. The remaining acreage will be preserved as open space for recreational purposes. This is the fourth of five total filings planned for this development. This letter supersedes the comments provided by this office on July 24, 2023.

## Water Supply Demand

According to the February 28, 2021 letter, the proposed water uses are indoor residential use and irrigation. The estimated water demand is 0.67 acre-feet/year demand per lot, or 28.14 acre-feet/year for all 42 lots, which is consistent with the estimated water demand for other filings. 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 October 5, 2022 Permanent Will-Serve Letter, SRMD is committed to providing 146.06 acrefeet/year of water to meet the domestic needs of the 218 residential lots of the subdivision at full buildout subject to the requirements set forth in that letter.

The Water Resources and Wastewater Report for the Saddlehorn Ranch Subdivision Report ("Report") revised June 2022, which previously submitted to this office for Saddlehorn Ranch Filing No. 2, states that SRMD has 198.16 acre-feet/year in supply from the nontribuary Arapahoe and Laramie-Fox Hills aquifers based on a 300-year supply from Determination of Water Right nos. 457-BD and 458-BD. 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 well and equipment associated with well permit no. 85169-F: 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 acrefeet/year, a total volume of 32,203 acrefeet, and a total volume of 272,000 acrefeet from the nontributary Arapahoe aquifer in combination with all wells operating pursuant to 458-BD. This well is permitted for the following uses: domestic, irrigation, commercial, industrial, recreational and livestock watering purposes. Since SRMD was only conveyed 24,383 acrefeet (which is less than the 32,203 acrefeet this well is permitted for), this well must be re-permitted for only the portion of 458-BD water owned by SRMD.
- The well and equipment associated with well permit no. 85170-F: 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 for Determination of Water Right no. 457-BD. The well is permitted to withdraw an average annual amount of 277.97 acre-feet/year, a total volume of 27,797 acre-

feet, and a total volume of 234,700 acre-feet from the nontributary Laramie-Fox Hills aquifer with all wells operating pursuant to 457-BD. This well is permitted for the following uses: domestic, irrigation, commercial, industrial, recreational and livestock watering purposes. Since SRMD was only conveyed 21,047 acre-feet (which is less than the 27,797 acre-feet this well is permitted for), this well must be re-permitted for only the portion of 457-BD water owned by SRMD.

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 54,078.5 acre-feet/year or 180.26 acre-feet/year based on a 300-year supply from Determination of Water Right nos. 457-BD, 458-BD, and 459-BD.<sup>1</sup> 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.

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 Determination nos. 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 540.785 acre-feet/year would be reduced to one third of that amount, or 180.26 acre-feet/year, which is <u>greater</u> than the annual demand of 146.06 acre-feet for the entire Saddlehorn Ranch Subdivision filings, including Filing 4 subject of this application. As a result, the water may be withdrawn in that annual amount for a maximum of 300 years.

A review of our records shows well permit no. 84434 located on the property subject of this subdivision. Permit no. 84434 was issued on June 17, 1976 pursuant to section 37-90-105, C.R.S. for a well on a 38-acre tract for domestic uses. Based on the depth and location of the well, the well is constructed in the not-nontributary (4% replacement requirement) portion of the Denver aquifer. Upon approval of Filing No. 4, the conditions under which permit no. 84434 were issued will no longer exist, rendering the permit out of

<sup>&</sup>lt;sup>1</sup> This amount excludes the not-nontributary (actual impact replacement requirement) groundwater from Area B of 459-BD since there is no replacement plan in place to prevent injury.

compliance with its permit. Prior to subdivision approval, the Applicant must clarify whether permit no. 84434 will be re-permitted pursuant to Determination no. 459-BD or plugged and abandoned.

## State Engineer's Office Opinion

Based on the above and pursuant to section 30-28-136(1)(h)(I), C.R.S. and 30-28-136(1)(h)(II), C.R.S., the State Engineer's Office has not received enough information to render an opinion regarding the potential for causing material injury to decreed water rights, or the adequacy of the proposed water supply. **Prior to further review of the subdivision water supply plan, the Applicant must:** 

- 1. Re-permit well nos. 85169-F and 85170-F consistent with the water rights owned by SRMD.
- 2. Clarify whether permit no. 84434 will be re-permitted pursuant to Determination no. 459-BD or plugged and abandoned.

## 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 structures can meet the requirements of a "storm water detention and infiltration facility" as defined in Designated Basin Rule 5.11, the structures may be subject to administration by this office. The Applicant should review Rule 5.11 to determine whether the structures meet the requirements of the Rule and ensure any notification requirement is met.

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

Sincerely,

HODy and Cir

Ioana Comaniciu, P.E. Water Resource Engineer

Ec: Water well permit file nos. 85169-F, 85170-F, and 84434 SRMD District file Upper Black Squirrel Ground Water Management District