

December 15, 2023

Ryan Howser, Project Manager

El Paso County Development Services Department Sent via online portal at: <u>epcdevplanreview.com</u>

Re: Rolling Hills Ranch North Filings 1 & 2 PUDSP

File #: PUDSP235

Part of the NE ¼ and part of the E ½ NW ¼ of Sec. 20, Twp. 12 South, Rng. 64 West, 6th P.M.

Water Division 2, Water District 10

Upper Black Squirrel Creek Designated Basin

CDWR Assigned Subdivision No. 31101

# Dear Ryan Howser:

We have received the above-referenced proposal to subdivide 148.873 acres into 441 single-family lots, landscaping, open space, and trails. The proposed water supply is service provided by the Meridian Service Metropolitan District (MSMD).

#### **Water Supply Demand**

The proposed water uses are household use and irrigation with a total estimated water demand of 137.7 acrefeet/year.

## **Source of Water Supply**

The proposed water supply is service provided by the Meridian Service Metropolitan District (MSMD). According to the August 23, 2023 will serve letter ("Letter"), MSMD is committed to serving the development.

According to Table 3 of the September 2023 Water Resources Report ("Report"), MSMD obtains their supply from nontributary Denver Basin bedrock aquifer wells and alluvial wells which withdraw groundwater under various determinations of water rights or final permits owned and controlled by MSMD as summarized below:

- 1. Meridian Ranch (Determination of Water Right nos. 154-BD, 155-BD, 156-BD, and 157-BD),
- 2. Guthrie Ranch (230-BD/4438-BD, 50% interested in 229-BD/4437-BD, 50% interest in 230-BD/4436-BD, and Final Permit nos. 612-RFP and 27554-FP),
- 3. Latigo Trails (568-BD, 569-BD, 570-BD, and 46406-F), and
- 4. Hart Ranch (2099-BD and 2100-BD).

According to the Letter, Report, and additional information provided to this office on December 14, 2023 by Tom Kerby, MSMD owns and controls 2,089 acre-feet/year based on a 300-year supply. This office calculates that MSMD has 2,022 acre-feet/year of available supply after subtracting the district's replacement and relinquishment requirements.



The current total demand on MSMD is approximately 1,687 acre-feet/year.<sup>1</sup> According to the Letter, the additional 137.7 acre-feet/year of demand from this development brings the demand on MSMD up to approximately 1,824 acre-feet/year. Therefore, it appears there are 198 acre-feet/year of surplus supply available to MSMD after meeting its commitments, replacement, and relinquishment requirements.

Well nos. 612-RFP and 27554-FP withdraw water from the Upper Black Squirrel Creek alluvial aquifer, which is currently considered to be a renewable source. The other proposed source of water for this subdivision is bedrock aquifers in the Denver Basin. The State Engineer's Office (SEO) 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 MSMD's determinations of water rights are equal to one percent of the total amount or 6,135 acre-feet as shown on the attached SEO's Table and 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 allocated Denver Basin aquifer water would be reduced to one third of that amount. The available supply of 2,089 acre-feet/year or 2,022 acre-feet/year after accounting for replacement and relinquishment requirements based on a 300-year supply is <u>greater</u> than the annual demand on MSMD of 1,824 acre-feet/year. As a result, the water may be withdrawn in that annual amount for a maximum of 300 years. Note that it is anticipated that the demand from Meridian Ranch at full build out will be 1,952 acre-feet/year which is less than MSMD's available supply.

### **Additional Comments**

The submittal indicates that a storm water detention structure is part of this project. 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.

### State Engineer's Office Opinion

Based upon the above and pursuant to section 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.

<sup>&</sup>lt;sup>1</sup> This office calculates the district has a demand of 1,686 acre-feet/year, but this difference may be due to a rounding error.

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 <u>greater</u> than the annual amount of water required to supply the district's commitments.

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 majority of MSMD's source of water is from non-renewable aquifers, 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,

Honau'Ch Ioana Comaniciu, P.E. Water Resource Engineer

Attachment: SEO's MSMD Supply and Commitment Table Updated December 14, 2023

Ec: Meridian Ranch Metro District file

Upper Black Squirrel Creek Ground Water Management District (ubscgwmd@gmail.com)