



COLORADO

Division of Water Resources

Department of Natural Resources

1313 Sherman Street, Room 821
Denver, CO 80203

May 21, 2018

Kari Parsons
El Paso County Development Services Department
DSDcomments@elpasoco.com

RE: Silverado Ranch Filing No. 1, Final Plat
Section 16, T15S, R63W, 6th P.M.
Water Division 2, Water District 10
Upper Black Squirrel Creek Designated Basin

Dear Ms. Parsons:

We have reviewed your April 26, 2018 submittal concerning the above referenced proposal for the subdivision of 106.4 acres into ten single family lots and open space as the first filing of the Silverado Ranch Subdivision.

Our office provided a letter dated April 11, 2017 on the adequacy of the proposed water supply to the Silverado Ranch Preliminary Plan (PUD) as well as the Silverado Ranch Filing No.1, Final Plat. The applicant's Letter of Intent, dated April 3, 2018, in this submittal requests amendments to the Final Plat of Filing No. 1 and withdraws the PUD amendment requests from 2017. As this submittal amends the proposals that were the subject of our April 11, 2017, this letter replaces the opinions in our April 11, 2017 letter.

Water Supply Demand

According to the submittal, the water requirement totals 4 acre-feet per year (0.4 acre-feet per year per lot) for in-house use in one single family dwelling, and irrigation of 0.04 acres (1,742 square-feet) of home gardens and lawn per lot. The water requirement for the open space is not mentioned and is therefore understood to be zero.

Source of Water Supply

The proposed source of water is individual on-lot wells producing from the non-tributary (4% replacement) Laramie-Fox Hills aquifer under Determination of Water Right 325-BD. The allowed average annual amount of withdrawal provided for in Determination of Water Right no. 325-BD is 76.8 acre-feet.

The subdivision lies within the allowed place of use of Determination of Water Right no. 325-BD, and the proposed uses are uses allowed by that Determination.

The proposed source of water 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 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.



In the *El Paso County Land Development Code*, effective November, 1986, Chapter 5, Section 49.5, (D), (2) states:

“- Finding of Sufficient Quantity - The water supply shall be of sufficient quantity to meet the average annual demand of the proposed subdivision for a period of three hundred (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 three hundred years, the allowed average annual amount of withdrawal of 76.8 acre-feet/year would be reduced to one third of that amount, or 25.6 acre-feet/year. As a result, the water may be withdrawn in that annual amount for a maximum of 300 years.

The proposed annual water supply of 25.6 acre-feet is more than the estimated annual demand of 4 acre-feet.

State Engineer’s Office Opinion

Based on the above and pursuant to Section 37-28-136(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 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 determination, 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. For planning purposes 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.

Silverado Ranch Filing No. 1, Final Plat
May 21, 2018
Page 3 of 3

If you, or the applicant, have any questions, please contact Neelha Mudigonda at 303-866-3581 ext. 8206.

Sincerely,

A handwritten signature in black ink that reads "Keith Vander Horst". The signature is written in a cursive, flowing style.

Keith Vander Horst
Chief of Water Supply, Basins

Cc: Division 2
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