



COLORADO

Division of Water Resources

Department of Natural Resources
Colorado Ground Water Commission

July 12, 2019

Nina Ruiz
El Paso County Planning and Community Development
Transmitted via email:
NinaRuiz@elpasoco.com

RE: Judge Orr Ranchettes Preliminary Plan
Part of the E½ of the SE¼ of Sec. 33, T12S, R64W, 6th P.M.
Upper Black Squirrel Creek Ground Water Management District
Water Division 2, Water District 10

Dear Ms. Ruiz:

We have received your June 20, 2019 submittals concerning the above-referenced proposal to subdivide a 40.67-acre parcel of land into seven lots. Our office previously commented on this subdivision in a letter dated January 8, 2018. This letter replaces our January 8, 2018 letter.

Water Supply Demand

According to a report from GroundWater Investigations, LLC dated June 6, 2019 provided with the submittal, the estimated water requirements total 4.9_ acre-feet annually (0.7 acre-feet/year per lot), for in house use in one single family dwelling, irrigation of landscape, domestic animals, and commercial use on each lot.

Source of Water Supply

The proposed source of water supply is individual on-lot wells producing from the non-tributary (4% replacement) Denver aquifer pursuant to Determination of Water Right No. 679-BD.

Determination of Water Right No. 679-BD was issued to Robert D. and Stephen R. Gieck for the water in the Denver aquifer underlying 139.25 acres including the subject 40.67 acres, and allows the withdrawal of 46.3 acre-feet of water annually for domestic, stock watering, irrigation, commercial, industrial, and replacement uses on the 139.25 acres. The Applicant claims ownership of 14.70 acre-feet per year from the Denver aquifer in Determination of Water Right No. 679-BD as evidenced by the deeds submitted with the Letter.

The subdivision lies within the allowed place of use of Determination of Water Right no. 679-BD, and the proposed uses are uses allowed by that Determination. To meet the 4% return flow requirements of Determination of Water Right no. 679-BD, the return flow from the in house use of water must be through an individual waste water disposal system of a non-evaporative type.

The proposed source of water for this development is a bedrock aquifer allocation from the Denver Basin. The State Engineer's Office does not have evidence regarding the length of time for which the bedrock aquifer sources 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 in Determination of Water Right No. 679-BD is 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 the bedrock aquifer sources 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 14.7 acre-feet/year from the Denver aquifer from 679-BD aquifer for a maximum of 100 years would be reduced to one-third of those amounts, or 4.9 acre-feet/year. As a result, the water may be withdrawn in that annual amount for a maximum of 300 years, and is sufficient to supply the requirement of 4.9 acre-feet/year.

A Well Location Amendment was approved on May 29, 2019 for well permit no, 143638, correcting the permitted well location to the property to the east of the subject property.

State Engineer’s Office Opinion

Based upon the above and pursuant to Sections 30-28-136(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 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 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.

If you, or the applicant, have any questions, please contact Ailis Thyne at 303-866-3581 ext. 8216.

Sincerely,

A handwritten signature in black ink that reads "Keith Vander Horst". The signature is written in a cursive style with a large initial 'K'.

Keith Vander Horst, P.E.
Chief of Water Supply, Designated Basins

Cc: Upper Black Squirrel Creek GWMD
Division 2

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