



October 31, 2023

Kylie Bagley
El Paso County Planning and Community Development
Transmission via EDARP portal

**Re: The Ranch at Woodlake Minor Subdivision/Grapner Subdivision EA223 MS237
Sec. 32, T11S, R64W of the 6th PM
Water Division 2, Water District 10**

Dear Kylie Bagley,

We have reviewed your October 23, 2023 submittal concerning the above referenced proposal to subdivide 41.016 acres into 4 lots ranging in size from 5 acres to 26 acres.

Water Supply Demand

According to the submittal, the proposed uses and estimated water requirements for the four lots are per lot 0.26 acre-feet per year for household use, 0.105 acre-feet per year for irrigation of 1,800 square feet of lawn or garden, 0.12 acre-feet per year for watering 2 horses or equivalent livestock which totals 1.94 acre-feet per year.

Source of Water Supply

The proposed source of water is individual on lot wells producing from the not-nontributary Dawson aquifer that will operate pursuant to the Determination of Water Right and replacement plan) No. 4232-BD. The allowed average annual amount of withdrawal provided for in Determination of Water Right no. 4232-BD is 9.67 acre-feet. The replacement plan approved for Determination of Water Right 4232-BD allows for an average diversion of 3.88 acre-feet annually for a maximum of 300 years.

The subdivision lies within the allowed place of use of Determination of Water Right no. 4232-BD, and the proposed uses are uses allowed by that Determination.

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 allocation approach, the annual amounts of water determined in 4232-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 Therefore, the water may be withdrawn in those annual amounts for a maximum of 100 years.

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 9.67 acre-feet/year would be reduced to one third of that amount, or



3.22 acre-feet/year, which is greater than the annual demand for this subdivision. 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 Section 30-28-136(1)(h)(I), 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.

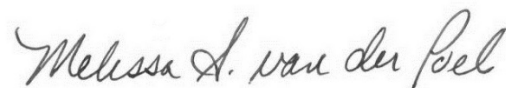
Our opinion is qualified by the following:

The Ground Water Commission has retained jurisdiction over the final amount of water available pursuant to the above-referenced decree, pending actual geophysical data from the aquifer.

The amounts of water in the Denver Basin aquifers, 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 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.

Should you have any questions, please contact me in this office at 303-866-3581.

Sincerely,



Melissa A. van der Poel, P.E.
Water Resources Engineer

cc: Subdivision File 31014
Water well permit nos. 86101-F