



April 19, 2023

Ryan Howser
El Paso County Development Services Department
DSDcomments@elpasoco.com

RE: Miles Subdivision AKA Terra Ridge North
Part of the E ½ of the SW ¼, Section 29, T11S, R65W, 6th P.M.
Water Division 1, Water District 8

Dear Ryan Howser,

We have reviewed the additional information received by this office on April 12, 2023 regarding the above referenced referral. The Applicant is proposing to create a 13 lot subdivision on 52.63 acres, to subdivide 39.72 acres portion into 11 lots and to vacate and re-plat of two adjacent existing lots known as Lots 5 and 6 of Terra Ridge Subdivision. This office previously commented on subject referral in a letter dated December 30, 2020 and July 1, 2021 for a 9 lot subdivision and letters dated January 23, 2023 and March 9, 2023 for a 13 lot subdivision. This letter supersedes the previous letters.

Water Supply Demand

According to the Water Supply Information Summary and the Terra Ridge North Minor Subdivision Water Resources Report & Wastewater Treatment Report by JDS-Hydro Consultants dated December 2022 (“Water Resources Report”), the estimated annual demand for the 11 lots is 0.825 acre-feet per year per lot, which will be used for domestic indoor use (0.26 acre-feet), irrigation of 9,220 square-feet of lawn, garden and trees (0.522 acre-feet), and watering of up to 4 large domestic animals (0.044 acre-feet). The total estimated water requirement for the 11 lots is 9.08 acre-feet per year (0.825 acre-feet per year per lot) with the 11 lots on the 39.72 acres having a 300 year water supply. The two existing lots being replatted will continue to operate under the existing water supply operating pursuant to Division 2 Water Court case no. 96CW068 (Division 1 Court Case No. 96CW146).

Source of Water Supply

The proposed water source for the 11 lots on the 39.72 acres is individual on lot wells constructed in the Dawson aquifer operating pursuant to the decreed augmentation plan in Division 1 Water Court Case no. 22CW3066.

The decreed augmentation plan in Division 1 Water Court Case no. 22CW3066 allows for the annual withdrawal of 9.08 acre-feet per year from the not nontributary Dawson aquifer, based on a 300 year allocation approach. The augmentation plan states the ground water will be used for in house use in up to 11 residences (0.825 acre-foot per well) with remaining pumping entitlements available for other uses on the property.

According to the Water Resources Report the proposed water source for one of replatted lots of Terra Ridge Subdivision will be an existing Dawson aquifer well permitted under well permit no. 53112-F. The proposed water source for the remaining replatted lot is an individual on lot well



constructed in the Dawson aquifer operating pursuant to the decreed augmentation plan in Division 2 Water Court Case no. 96CW068 (Division 1 Court Case No. 96CW146).

Well permit no. 53112-F is constructed in the Dawson aquifer and operates pursuant to the decreed augmentation plan in Division 2 Water Court Case no. 96CW068 (Division 1 Water Court Case No. 96CW146) and may withdraw 1.0 acre-foot per year for ordinary household purposes inside one single family dwelling, the watering of not more than four (4) domestic animals and the irrigation of not more than 13,000 square feet of home lawn and garden.

The decreed augmentation plan in Division 2 Water Court Case no. 96CW068 allows for the annual withdrawal of 40 acre-feet from the not nontributary Dawson aquifer for 40 individual lots, based on a 300 year allocation approach for a total withdrawal of 12,000 acre-feet. This augmentation plan was for Terra Ridge Subdivision.

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 37-90-137(4)(b)(I), C.R.S., "Permits issued pursuant to this subsection (4) shall allow withdrawals on the basis of an aquifer life of one hundred years." Based on this allocation approach, the annual amounts of water decreed in case nos. 96CW068 and 22CW3066 are equal to one percent of the total amount, as determined by rules 8.A and 8.B of the Statewide Nontributary Ground Water Rules, 2 CCR 402-7. 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 annual demand for the eleven lots discussed above is the same as the allowed average annual amount of withdrawal allowed by the augmentation plan in case no. 22CW3066. As a result, the water may be withdrawn in that annual amount for a maximum of 300 years. In addition the annual demand for the re-plated Lots 5 and 6 of Terra Ridge Subdivision is the same as the allowed average annual amount of withdrawal allowed by the augmentation plan in case no. 96CW068.

Applications for on lot well permits, submitted by an entity other than the current water right holder, must include evidence that the applicant has acquired the right to the portion of water being requested on the application.

Storm Water Detention

The applicant should be aware that any proposed water quality and detention pond for this Planned Development, must meet the requirements of a "storm water detention and infiltration facility" as defined in section 37-92-602(8), Colorado Revised Statutes, to be exempt from

administration by this office. The applicant should review DWR's [Administrative Statement Regarding the Management of Storm Water Detention Facilities and Post-Wildland Fire Facilities in Colorado](#) to ensure that the notification, construction and operation of the proposed structure meets statutory and administrative requirements. The applicant is encouraged to use Colorado Stormwater Detention and Infiltration Facility Notification Portal, located at <https://maperture.digitaldataservices.com/gvh/?viewer=cswdif>, to meet the notification requirements.

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 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 Division 1 Water Court 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 aquifer, and identified in this letter, are calculated based on estimated current aquifer conditions. The source of water is from a non-renewable aquifer, 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 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 or the Applicant have any questions, please contact Ailis Thyne of this office at 303-866-3581 x8216.

Sincerely,



Ioana Comaniciu, P.E.
Water Resource Engineer

Ec: Subdivision file: 27451
File permit no. 53112-F