

June 24, 2024

Kari Parsons, Project Manager El Paso County Development Services Department Sent via online portal at: <u>https://epcdevplanreview.com</u>

Re: Retreat at Prairie Ridge Filing No. 1 (a.k.a. Jaynes) File #: SP239 Part of Sections 28 and 33, Twp. 12 South, Rng. 65 West, 6th P.M. Water Division 2, Water District 10 CDWR Assigned Subdivision File No. 31142

Dear Kari Parsons:

We have received the above-referenced submittal to subdivide 108.89 acres into 217 single-family lots as part of Phase 1 of the Retreat at Prairie Ridge Preliminary Plan. This office has previous commented on this proposal by letter dated January 16, 2024. The proposed source of water supply for 211 high density lots of the 217 proposed lots is service provided by the Falcon Area Water and Wastewater Authority (FAWWA). The proposed water supply for 6 rural lots of the 217 proposed lots are individual on lot wells, 5 of which will operate pursuant to the decreed augmentation plan in Division 2 Water Court case no. 23CW3009, and one of which will use the existing well with permit no. 285607.

Water Supply Demand

The water demand for this development is 77.41 acre-feet/year, of which 75.33 acre-feet will be provided by the FAWWA and 2.08 acre-feet/year will be provided by individual wells for the 5 rural lots which require new wells. The 6th lot, which has an existing well with permit no. 285607, is not included in this estimate. Water will be used for household purposes and irrigation.

Source of Water Supply

211 High Density Lots

The proposed source of water supply for the 211 high density lots is service provided by the Falcon Area Water and Wastewater Authority (FAWWA). According to the letter dated December 4, 2023, the FAWWA is committed to providing the 75.33 acre-feet/year of water required by the 211 high density lots in Filing No. 1.

According to the Water Resources Report prepared by RESPEC dated June, 2024 ("Report"), the FAWWA has a water supply of 1,963.54 acre-feet/year based on a 300-year supply consisting of Denver Basin aquifer water adjudicated in Water Court case nos. 85CW131 (Shamrock West water), 86CW19, 91CW35, 93CW18/85CW445 (Bar-X Ranch water), 08CW113, 17CW3002, 18CW3002, 20CW3059, 23CW3009 and Determination of Water Right nos. 1689-BD, 1690-BD, and 1691-BD (McCune water). A summary of these water rights is provided in Table 3 of that Report. Because FAWWA anticipates serving 3,710 SFEs in 2040 and 7,310 SFEs in 2060, FAWWA may seek to connect with other water suppliers and investigate the use of lawn irrigation return flow (LIRF) credits and aquifer storage/recharge to increase its supply. Note that our office calculates that 1,963.36 acre-feet/year is available based on a 300-year supply. This discrepancy appears to originate from a difference in the quantity of water calculated to be available from case no. 91CW35. The FAWWA should be aware that they are limited to the decreed amounts in 91CW35 which are as follows: 3,400 acre-feet from the Dawson aquifer, 7,600 acre-feet from the Denver aquifer, 4,900 acre-feet (not the 4,936 acre-feet claimed in Table 3) from the Arapahoe aquifer, and 3,600 acre-feet (not the 3,623 acre-feet claimed in Table 3) from the Laramie-Fox Hills aquifer.



There are 923.4 acre-feet/year of uncommitted supply available to the FAWWA based on our estimate of 1,963.36 acre-feet/year of supply and 1039.96 acre-feet/year of commitments, including the 77.41 acre-feet water demand for this filing. Therefore, there appears to be more than sufficient legal supply to supply this development on a 300-year basis.

<u>6 Rural Lots</u>

The proposed water supply for the 5 larger lots is individual on lot wells to operate pursuant to the decreed augmentation plan filed in Division 2 Water Court case no. 23CW3009. The 6th lot will be served by an existing well with permit no. 285607. According to the letter dated December 4, 2023, the FAWWA is committed to providing the 2.08 acre-feet/year of water required by the 5 rural lots in Filing No. 1.

The augmentation plan decreed in case no. 23CW3009 allows for the use of all Denver Basin supplies within the FAWWA Well Field in the same formations (Denver and Arapahoe) under the same augmentation plan. The 23CW3009 augmentation plan amends the previous augmentation plan approved in 20CW3059 and include the water adjudicated under the subject property in case no. 07CW56 in the FAWWA Well Field. The 07CW56 water is pending purchase by the FAWWA. The proposed plan would allow for the withdrawal of up to 346.22 acre-feet/year of not-nontributary Denver aquifer (from various decrees including 07CW56) for 300 years for municipal uses including, without limitation, domestic, commercial, industrial, irrigation of any irrigable acreage within the District boundaries or District service area, stock water, recreation, fish and wildlife propagation, fire protection, central water supply for such uses and also for exchange, aquifer recharge, replacement, and augmentation purposes.

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

Allocation Approach

The proposed source of water for this subdivision is bedrock aquifers 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. The Denver Basin water rights adjudications have been decreed by the State of Colorado, Water Division 1 District Court, Water Division 2 District Court, and the Colorado Groundwater Commission. 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." Additionally, 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 one percent of the annual amounts of water allocated in the decrees and determinations are equal to one percent of the total amount, and as determined by Rules 8.A and 8.B of the Statewide Nontributary Ground Water Rules, 2 CCR 402-7 and 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 shown on attached Table 1 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 would be reduced to one third of that amount or 1,963.36, which is <u>greater</u> than the annual

demand of FAWWA's commitments of 1,039.96 acre-feet/year. As a result, the water may be withdrawn in those annual amounts for 300 years.

Existing Wells

Section 37-92-602(3)(b)(III), C.R.S. requires that the cumulative effect of all wells in a subdivision be considered when evaluating material injury to decreed water rights. Well permit no. 285607 is proposed to continue to operate upon subdivision approval and serve one of the rural lots. Permit no. 285607 was issued pursuant to section 37-92-602(3)(b)(II)(A), C.R.S. on May 5, 2011 as the only well on 35.12 acres described as a portion of the NW ¼ of Section 28, Twp. 12 South, Rng. 65 West, 6th P.M. The well is permitted to withdraw 3 acre-feet/year from the not-nontributary Dawson aquifer, excluded from case no. 07CW56. Well no. 285607 will not be covered under this commitment, but will be covered under pending case no. 24CW3007.

Additional Comments

The application materials indicate that a stormwater detention structure will be constructed as a 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 section 37-92-602(8), C.R.S., the structure may be subject to 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, attached, 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 to meet the notification requirements, located at https://maperture.digitaldataservices.com/gyh/?viewer=cswdif.

State Engineer's Office Opinion

Based upon the above and pursuant to Section 30-28-136(1)(h)(l) 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 <u>allocation</u> 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 2 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 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 <u>allocation</u> 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.

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Sincerely,

Melissa A. van der Poel

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

Ec: Permit nos. 285607 Martha Archuleta, Water Data Analyst