COLORADO
Division of Water Resources
Department of Natural Resources

January 16, 2024

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

Re: Sterling Ranch Filing No. 5
File #: SF241 and PUDSP232
Part of the SW ¼ of Sec. 33, Twp. 12 South, Rng. 65 West, 6th P.M.
Water Division 2, Water District 10
CDWR Assigned Subdivision File No. 31087 – 2nd Letter

Dear Kari Parsons:

We have received the above-referenced submittal to divide 11.66 acres known as Tract B of Sterling Ranch Filing No. 2 into 72 single-family lots. The proposed source of water supply is service provided by the Falcon Area Water and Wastewater Authority (FAWWA). This letter supersedes the comments provided by this office on December 11, 2023.

Water Supply Demand

The estimated water demand for residential use and irrigation is 24.26 acre-feet/year for all 72 lots.

Source of Water Supply

The proposed source of water supply is service provided by the Falcon Area Water and Wastewater Authority (FAWWA). According to the letter dated March 31, 2023, the FAWWA is committed to serving the 24.26 acre-feet/year of water required by Filing No. 5.

According to the Water Resources Report prepared by RESPEC dated August 2023 ("Report") and the information provided by John McGinn on September 25, 2023 to this office, the FAWWA has a water supply of 1,930.03 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, and 20CW3059 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 1,929.85 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 970.5 acre-feet/year of uncommitted supply available to the FAWWA based on our estimate of 1,929.85 acre-feet/year of supply and 959.35 acre-feet/year of commitments, including this filing. Therefore, there appears to be more than sufficient legal supply to supply this development on a 300-year basis.

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." Based on this **allocation** approach, the annual amounts of water decreed 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. 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 100 years." Based on this **allocation** approach, the annual amounts of water allocated in the determinations 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 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 **allocation** approach based on 300 years, the allowed average annual amount of withdrawal would be reduced to one third of that amount which is greater than the annual demand of FAWWA's commitments. As a result, the water may be withdrawn in those annual amounts for 300 years.

A review of our records shows well permit no. 86007 may be located on the subject property. This well was decreed as the West Well in case no. W-1309 and permitted with permit no. 86007 for livestock use with an appropriation date of December 31, 1953, and 0.022 cfs (10 gallons per minute). The well depth is unknown. 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. According to the letters dated January 5, 2024, the FAWWA is not able to locate this well. The FAWWA has filed an abandonment report and downgrade request with this office to abandon the well and its associated water right.

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/gvh/?viewer=cswdif.

State Engineer's Office Opinion

Based upon the above and pursuant to section 30-28-136(1)(h)(I) and section 30-28-136(1)(h)(II), 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, Division 2 Water Court, and Ground Water Commission have retained jurisdiction over the final amount of water available pursuant to the above-referenced water rights, pending actual geophysical data from the aquifer.

The amounts of water in the Denver Basin aquifers as identified in this letter are calculated based on estimated current aquifer conditions. The source of water is from non-renewable aquifers, 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 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.

Please contact Wenli.Dickinson@state.co.us or (303) 866-3581 x8206 with any questions.

Sincerely,

Ioana Comaniciu, P.E.
Water Resource Engineer

Attachments: *Administrative Statement Regarding the Management of Storm Water Detention Facilities and Post-Wildland Fire Facilities in Colorado*

Ec: Permit no. 86007 file