

November 14, 2024

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

Re: Sterling Ranch Filing No. 3 File #: SP2428 Part of the SE 1/4 and the SE 1/4 of the SW 1/4 of Sec. 33, Twp. 12 South, Rng. 65 West, 6th P.M. Water Division 2, Water District 10 CDWR Subdivision # 32546

Dear Kari Parsons:

We have received the above-referenced submittal to divide 56.13 acres into 187 single-family lots and 0.86 acres irrigation. One tract is for a future elementary school whose water supply was previously reserved in the Branding Iron at Sterling Ranch Filing 2 letter, dated October 17, 2019, one tract is for a sub-regional detention basin, and 4 tracts for landscaping, public utilities, open space and/or public improvements.

Water Supply Demand

Water needs were estimated using the Single Family Equivalency ("SFE") factors established for the Sterling Ranch development. The projected demands are for 54 residential lots at an SFE of 0.318 acre-feet, 133 residential lots at an SFE of 0.353, and 0.86 acres of irrigation using 2.5 acre-feet per acre of water use; totaling 66.27 acres. Water needs for the 4 tracts reserved for landscaping, public utilities, open space and public improvements were not included in the submittal.

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 October 14, 2024, the FAWWA is committed to serving the Sterling Ranch East Filing No. 3 subdivision with 66.27 annual ac-ft.

According to the Water Resources Report prepared by RESPEC dated October 12, 2024 ("Report"), the FAWWA has a water supply of 1,962.23 acre-feet/year based on a 300-year supply. However, communication between the DWR office and John McGinn of RESPEC on October 21, 2024, indicated the total amount is 1962.03 acre-feet. This amount is similar to what our office calculates, 1962.05 acre-feet, with rounding differences. Therefore, as of November 14, 2024, FAWWA has 858.54 acre-feet of water currently without commitments. There appears to be more than a sufficient legal water supply for this development on a 300-year basis.

FAWWA's water rights consist 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), and 02CW3059. A summary of these water rights is provided in section 3.2 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.

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 <u>allocation</u> 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 <u>allocation</u> approach, the assis of an aquifer life of 100 years. Based on this <u>allocation</u> approach, the basis of an aquifer life of 100 years. Based on this <u>allocation</u> approach, the basis of an aquifer life of 100 years. Based on this <u>allocation</u> 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 <u>allocation</u> approach based on 300 years, the allowed average annual amount of withdrawal would be reduced to one third of that amount which is <u>greater</u> 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 nos. 80131-F and 80132-F, listed as a Water Supply Source for this application, are expired well permits. These have been repermitted under well permit nos. 81846-F and 85050-F. The water uses for these wells are limited to municipal, domestic, commercial, fire protection, industrial, residential, recreation, irrigation, augmentation, livestock watering, and agricultural uses.

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 <u>https://maperture.digitaldataservices.com/gvh/?viewer=cswdif</u>.

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 <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 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 Katharine.Anderson@state.co.us with any questions.

Sincerely,

Melissa A. van der foel

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

EC: subdivision file no. 32546 Martha Archuleta, Water Data Analyst