COLORADO
Division of Water Resources
Department of Natural Resources

July 8, 2020

Ms. Kari Parsons
El Paso County Development Services Department
2880 International Circle, Suite 110
Colorado Springs, CO 80910
Sent via online portal at: https://epcdevplanreview.com/Agencies/Home

RE: Sterling Ranch Filing No. 2
Final Plat
Sec. 33, Twp. 12S, Rng. 65W, Sixth P.M.
Water Division 2, Water District 10
CDWR Assigned Subdivision No. 27182

Dear Ms. Parsons,

We have received a referral regarding the above-referenced submittal to divide a 29.37 +/- acre tract of land (Tract A, Sterling Ranch Phase No. 1) into 49 single-family lots, which are to be located within the Sterling Ranch Phase I Preliminary Plan for which this office most recently provided comments dated March 19, 2015. The 49 single-family lots are a portion of the 457 residential lots and 6 commercial lots in the Sterling Ranch Phase I Preliminary Plan. The proposed source of water supply and wastewater disposal is to be served by the Sterling Ranch Metropolitan District No. 1.

Water Supply Demand

According to the Water Supply Information Summary, the estimated water demand for the development is 17.30 acre-feet/year for 49 residential lots (0.35 acre-feet/year per residential lot, including 0.173 acre-feet/year for outdoor use), which is a portion of the total estimated water demand of 255.96 acre-feet/year for Sterling Ranch Phase I Preliminary Plan.

It should be noted that standard water use rates, as found in the *Guide to Colorado Well Permits, Water Rights, and Water* Administration, are 0.3 acre-foot per year for each ordinary household, 0.05 acre-foot per year for four large domestic animals, and 0.05 acre-foot per year for each 1,000 square feet of lawn and garden irrigation.

Source of Water Supply

The source of water for the proposed development is to be served by the Sterling Ranch Metropolitan District No. 1 ("District"). A letter of commitment dated May 29, 2020 from the District was provided with the referral materials. According to the submittal, the District will provide water from Arapahoe and Laramie-Fox Hills aquifer wells to a central system utilizing the water rights shown in Table 1, below.

Table 1 – Denver Basin Ground Water Rights

Aquifer	Decree	Tributary Status	Volume (AF)	Annual Allocation 100 Year (AF/Year)	Annual Allocation 300 Year (AF/Year)
Laramie-Fox Hills	86CW19	NT	53,900	539	179.67
Laramie-Fox Hills	08CW113	NT	40	0.4	0.13
Arapahoe	86CW18	NT	57,500	575	191.67
Total			111,440	1,114.4	**371.47**

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 is equal to one percent of the total amount available 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 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 1,114.4 acre-feet/year would be reduced to one third of that amount, or 371.47 acre-feet/year, which is greater than the annual estimated demand of 255.96 acre-feet/year for Sterling Ranch Phase I. As a result, the water may be withdrawn in that annual amount for a maximum of 300 years.

Additional Comments

Should the development include construction and/or modification of any storm water structure(s), 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), Colorado Revised Statutes, 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*, 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

Pursuant to the provision of C.R.S. 30-28-136(1)(h)(II), it is the opinion of this office that the proposed water supply is expected to be adequate and can be provided without injury to existing 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 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 estimated 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 decrees, 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 or the applicant have questions regarding any of the above, please contact Kate Fuller of this office.

Sincerely,

K. Fuller

Kate Fuller, P.E.
Water Resource Engineer

ec: Bill Tyner, Division 2 Engineer
Doug Hollister, District 10 Water Commissioner