

March 15, 2024

Ryan Howser El Paso County Planning and Community Development 2880 International Circle, Suite 110 Colorado Springs, CO 80910

RE: Peerless Farms Preliminary Plan Project No. SP217/EA20165 NW1/4 of Section 13, T13S, R64W, 6<sup>th</sup> P.M. Water Division 2, Water District 10 Upper Black Squirrel Creek Designated Basin

Dear Mr. Howser:

We have reviewed the above referenced proposal to subdivide a parcel of approximately 40 acres. This proposal is for seven residential lots. The water supply will be provided by individual on-lot wells.

## Water Supply Demand

According to the submittal, the proposed uses and estimated water requirements for the seven lots will be 0.26 acre-feet per year for household use, and 0.5 acre-feet per year for irrigation per lot, totaling 5.32 acre-feet for the entire subdivision per year.

## Source of Water Supply

The proposed source of water is individual on lot wells producing from either the nontributary Arapahoe aquifer or the nontributary Laramie-Fox Hills aquifer that will operate pursuant to the Determination of Water Rights Nos. 4475-BD and 4476-BD. The allowed average annual amount of withdrawal provided for in Determination of Water Right no. 4475-BD is 12.9 acre-feet, and for 4476-BD is 13.6 acre-feet.

The subdivision lies within the allowed place of use of Determination of Water Right nos. 4475-BD and 4476-BD, and the proposed uses are uses allowed by those Determinations.

The proposed source of water for this subdivision are 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. 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 annual amounts of water determined in 4475-BD and 4476-BD 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 Therefore, the water may be withdrawn in those annual amounts for a maximum of 100 years.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 <u>allocation</u> approach based on three hundred years, the allowed average annual amount of withdrawal of 12.9 acre-feet/year would be reduced to one third of that amount, or 4.3 acre-feet/year, and an annual amount of withdrawal of 13.6 acre-feet would be reduced to 4.53 acre-feet which is not greater than the annual demand for this subdivision. As a result, the water may be withdrawn in that annual amount for a maximum of 300 years.

## State Engineer's Office Opinion

Based upon the above and pursuant to section 30-28-136(1)(h)(I), C.R.S. and section 30-28-136(1)(h)(II), C.R.S. it is our opinion that the proposed water supply is **not adequate** and **cannot** be provided without causing injury to decreed water rights. **Prior to further review of the subdivision** water supply plan the following information is required:

The Applicant must specify how the two sources will be used to satisfy the 300 year aquifer life.

- If some lots will be limited to the Arapahoe aquifer and some lots to the Laramie-Fox Hills aquifer, then which lots will use which sources must be added to the plat so that the information is available to future lot owners. The Laramie-Fox Hills aquifer is located between approximately 1460 and 1760 feet below ground surface, which may be economically infeasible for many people.
- A second option would be to allow use of the Arapahoe aquifer for 242 years and the Laramie-Fox Hills aquifer for the remaining 58 years of the 300 year period.

## Additional Comments

The application materials indicate that the project will collect storm flows in a detention pond. 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/gyh/?viewer=cswdif, to meet the notification requirements.

Should you have any questions, please contact me in this office at 303-866-3581.

Sincerely,

Melissa A. wan der foel

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

cc: Subdivision File 29052