

November 12, 2021

Ryan Howser El Paso County Development Services Department 2880 International Circle, Suite 110 Colorado Springs, CO 80910

RE: Koinonia Ranch Preliminary Plan

Part of the SW1/4 of Sec. 19, Twp. 12S, Rng. 65W, 6th P.M.

Water Division 2, Water District 10 CDWR Assigned Subdivision No. 28940

To Whom It May Concern,

We have received the submittal to create 6 single-family residential lots and three tracts. These lots and tracts total 39.079± acres in total with each lot being approximately 5.1 acres in size. The water supply will be provided by one existing on-site well and five proposed on-site wells along with individual septic systems for wastewater disposal.

## **Water Supply Demand**

The Water Supply Information Summary, included with the submittal, estimated a total annual use for the development of 3.21 acre-feet. The total annual use is composed of single-family use, irrigation of lawn and garden, and watering of up to four horses or equivalent livestock, per residence. The plan for augmentation decreed in case no. 2019CW3051 approved a plan for augmentation, which would allow for the operation of up to seven wells for a maximum total of 3.21 acre-feet being withdrawn from the Dawson aquifer.

## **Source of Water Supply**

The anticipated source of water is to be provided individual on-lot wells. These wells will produce from the Dawson aquifer. The wells will operate pursuant to the augmentation plan decreed in case no. 2019CW3051 (Division 2). The water underlying this property was adjudicated and the applicant is the owner of the Dawson, Denver, Arapahoe, and Laramie Fox-Hills aquifers.

According to the decree referenced above, the following amounts of water shown in Table 1, below, were determined to be available underlying the 39.079-± acre tract of land owned by the applicant.



Table 1 - Denver Basin Ground Water Rights

Aquifer	Tributary Status	Volume (AF)	Annual Allocation 100 Year (AF/Year)	Annual Allocation 300 Year (AF/Year)
Dawson	NNT	963	9.63	3.21
Denver	NNT 4%	2,050	20.5	6.83
Arapahoe	NNT 4%	1,810	18.1	6.03
Laramie-Fox Hills	NT	1,110	11.1	3.7

The plan for augmentation decreed in case no. 2019CW3051 allows for annual diversion of 3.21 acre-feet from the Dawson aquifer for the uses proposed in the subdivision referral.

This office has record of one existing well located on the property. Well permit no. 87527 is an exempt well permitted pursuant C.R.S. 37-92-602 for household use only inside one signal family dwelling. The applicant will have to re-permit this well pursuant non-exempt statute and 2019CW3051 in order to continue utilizing this well.

The proposed source of water for this subdivision is a bedrock aquifer 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 37-90-137(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 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 <u>allocation</u> approach based on three hundred years, the annual estimated demand, for the entire subdivision, is a maximum of 3.21 acre-feet as allowed by the augmentation plan. As a result, the water may be withdrawn in that annual amount for a maximum of 300 years.

## State Engineer's Office Opinion

Based on the above, it is our opinion, pursuant to CRS 30-28-136(1)(h)(l), that the anticipated water supply can be provided without causing material injury to decreed water rights so long as the applicant obtains a well permit for all existing, and proposed, wells pursuant to the plan for augmentation noted herein.

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 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 decrees, pending actual geophysical data from the aquifer.

The amounts of water in the Denver Basin aquifers, and identified in case no. 2019CW3051 (Division 2), was 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. Furthermore, that applicant will need to apply for, and obtain a new well permits issued pursuant to Section 37-90-137(4) C.R.S.

Should you or the applicant have questions regarding any of the above, please contact me at this office.

Sincerely,

Ivan Franco, P.E.

Water Resource Engineer

cc: Bill Tyner, Division 2 Engineer

Doug Hollister, District 10 Water Commissioner