



January 25, 2021

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

RE: Studer Minor Subdivision
NE1/4 of Sec. 33, Twp. 11S, Rng. 66W, 6th P.M.
Water Division 2, Water District 10
CDWR Assigned Subdivision No. 27488

To Whom It May Concern,

We have received additional materials concerning the above referenced proposal to subdivide a 15.28± acre tract of land into three new lots, of approximately 5 acres each. The proposed supply of water to the subdivision will be three individual on-lot wells operating pursuant to a court decreed plan for augmentation, with wastewater being disposed of through individual on-site septic disposal systems.

Water Supply Demand

According to the updated Water Supply Information Summary received in the submittal, the estimated water demand for the development is incorrectly identified as 3 acre-feet/year for the subdivision.

The actual subdivision waters supply should be recognized as 1.59 acre-feet/year for the entire development. Based on the consolidated water court case nos. 04CW61 (Division 1) / 04CW189 (Division 2), this amount breaks down 0.53 acre-foot/year for each of the three lots. The decree notes that the 0.59 acre-foot can be used for a combination of household use, where 0.27 acre-feet is assumed to be utilized by each residence, with remaining pumping entitlements are available for other uses on the property. Should the applicant require more supply than what is provided in case nos. 04CW61 (Division 1) / 04CW189 (Division 2), a new application should be made to the Division 2 Water Court to amend the plan for augmentation.

It should be noted that water use rates, as found in the Water Court decrees, are 0.27 acre-foot per year for each ordinary household, 0.011 acre-foot per year for horse, and 0.046 acre-foot per year for each 1,000 square feet of lawn and garden irrigation.

The submitted Water Resources Report appears to erroneously reference Division 2 Water Court Case no. 09CW17. This augmentation plan is for a different parcel of land and cannot be applied to this subdivision.



Source of Water Supply

The anticipated source of water is to be provided by three on-lot wells producing from the Dawson aquifer that will operate pursuant to the augmentation plan decreed in Division 1 Water Court case no. 04CW61 (Division 2 Water Court case no. 04CW189). The water underlying this property was adjudicated and the applicant is owner of a pro-rata allocation of the Dawson, Denver and Laramie Fox-Hills aquifers.

According to the decree entered by the in Division 1 Water Court case no. 04CW61 (Division 2 Water Court case no. 04CW189), the following amounts of water shown in Table 1, below, were determined to be available underlying the 15.28 ± acre tract of land and owned by the applicant.

Table 1 - Denver Basin Ground Water Rights

Aquifer	Tributary Status	Volume (AF)	Annual Allocation 100 Year (AF/Year)
Dawson	NNT	947	9.47
Denver	NT	1,380	13.80
Arapahoe	NT	584	5.84
Laramie-Fox Hills	NT	435	4.35

The plan for augmentation decreed in Division 1 Water Court case no. 04CW61 (Division 2 Water Court case no. 04CW189) allows for diversion of 1.59 acre-feet annually from Dawson aquifer for a maximum of 300 years.

Permit No. 63422-F was issued pursuant to CRS 37-90-137(4) for use in ordinary household purposes inside not more than one single family dwelling, the irrigation of not more than 5,174 square-feet of home gardens and lawns, and the watering of not more than two head of livestock. It appears that this well is located on proposed Lot 1 of the property and the applicant has proposed to continue to utilize the existing well pursuant to the decreed plan for augmentation.

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 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 annual estimated demand, for the entire subdivision, is 1.59 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)(I), that the anticipated water supply can be provided without causing material injury to decreed water rights so long as the applicant obtains well permits issued pursuant to C.R.S. 37-90-137(4) and the plan for augmentation noted herein, for all wells in the subdivision and operates the wells in accordance with the terms and conditions of any future well permits.

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 Division 1 Water Court case no. 04CW61 (Division 2 Water Court case no. 04CW189), 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,



Kate Fuller, P.E.
Water Resource Engineer

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