



May 10, 2022

Kylie Bagley, Project Manager  
El Paso County Development Services Department  
Transmitted via the EPC EDARP Portal (epcdevplanreview.com)

**Re: Boyd Minor Subdivision**  
**File #MS224**  
Part of the SW ¼ SW ¼ of Sec. 7, Twp. 11 South, Rng. 65 West, 6<sup>th</sup> P.M.  
Water Division 1, Water District 8

Dear Kylie Bagley:

We have reviewed the May 9, 2022 referral concerning the above-referenced proposal to subdivide 35.88 acres in the SW ¼ SW ¼ of Sec. 7, Twp. 11 South, Rng. 65 West, 6<sup>th</sup> P.M. located at 18735 Brown Road into three single-family residential lots: Lot 1 will be 15.26 acres, Lot 2 will be 10.00 acres, and Lot 3 will be 10.62 acres.

### Water Supply Demand

According to the submittal, the estimated water requirements total 2.25 acre-feet annually (0.75 acre-feet/lot). The following uses are proposed for each lot: in-house use in one single-family dwelling (0.3 acre-feet/year/lot); irrigation of 8,000 square-feet of lawn, garden, trees, and use in greenhouses (0.4 acre-feet/year/lot); and watering of 4 large domestic animals (0.05 acre-feet/year/lot).

### Source of Water Supply

The proposed source of water is individual on-lot wells producing from the not-nontributary Dawson aquifer that will operate pursuant to the decree and plan for augmentation in case no. 21CW3156 approved by the Division 1 Water Court. The plan for augmentation decreed in case no. 21CW3156 allows for an average diversion of 2.25 acre-feet annually for a maximum of 300 years. The proposed uses are allowed by the decree.

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 section 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 in 21CW3156 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. Therefore, the water may be withdrawn in those annual amounts for a maximum of 100 years.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 allocation approach based on three hundred years, the allowed average annual amount of withdrawal of 33.4 acre-feet/year would be reduced to one third of that amount, or 11.13



acre-feet/year, which is greater than the annual demand for this subdivision. Additionally, the plan for augmentation allows for an average diversion of 2.25 acre-feet annually for a maximum of 300 years which is equal to the annual demand for this subdivision. As a result, the water may be withdrawn in that annual amount for a maximum of 300 years.

Applications for on lot well permits, submitted by an entity other than the current water right holder (Christopher and Jessica Boyd), must include evidence that the applicant has acquired the right to the portion of water being requested on the application.

### **State Engineer's Office Opinion**

Based upon the above and pursuant to section 30-28-136(1)(h)(l), 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 allocation approach, for the proposed uses is equal to 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 has retained jurisdiction over the final amount of water available pursuant to the above-referenced decree, pending actual geophysical data from the aquifer.

**The amounts of water in the Denver Basin aquifer, and identified in this letter, are calculated based on estimated current aquifer conditions. The source of water is from a non-renewable aquifer, 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.**

### **Additional Comments**

According to the submittal, there is a permitted livestock watering tank located on the property, receipt no. 5385. Note that a livestock water tank dam cannot expose groundwater. If the pond remains continuously filled with some water (not just filled by infrequent precipitation events), that may be evidence of a connection to groundwater and the area of exposed groundwater would need to be backfilled so as not to expose groundwater. In addition, the livestock watering tank must be used in accordance with statute including sections 35-49-101 through 116, C.R.S.

If you or the Applicant have any questions, please contact Wenli Dickinson at (303) 866-3581 x8206 or at [Wenli.Dickinson@state.co.us](mailto:Wenli.Dickinson@state.co.us).

Sincerely,



Joanna Williams, P.E.  
Water Resources Engineer