



July 25, 2018

Nina Ruiz
 El Paso County Development Services Department
DSDcomments@elpasoco.com

RE: High Plains, Filing No. 1 Subdivision
 Part of the SW ¼ of the SE ¼, Section 19, T11S, R65W, 6th P.M.
 Water Division 1, Water District 8

Dear Ms. Ruiz,

We have reviewed the submittal documents related to High Plains Filing 1 Subdivision, concerning the above referenced proposal to subdivide a 39.4 acre parcel into 7 single-family residential lots (approximately 5 acres per lot).

Water Supply Demand

Based on the water supply information summary provided, the estimated annual demand for each residential lot is 0.54 acre-feet per year for 300 years, of which 0.26 acre-feet per year will be used for in house use, and 0.28 acre-feet per year for other uses such as irrigation of 4,920 square-feet of lawn and garden and the watering of up to four horses or equivalent livestock. The total annual water requirement for the seven proposed lots is 3.78 acre-feet.

Source of Water Supply

The proposed water source is individual on lot wells constructed in the Dawson aquifer operating pursuant to the decreed augmentation plan in consolidated case nos. 2018CW3017 (Division 1) and 2018CW3006 (Division 2). The decree quantified the amount of water underlying the subject 39.4 acre parcel. According to the decree the following amounts of water were determined to be available underlying the 39.4-acre parcel:

Aquifer	Annual amount available for 39.4 acre parcel (acre-feet)	
	Based on 100 year allocation approach	Based on 300 year allocation approach
Dawson	38.2	12.7
Denver	33.5	11.1
Arapahoe	16.2	5.4
Laramie-Fox Hills	11.5	3.8

The decreed augmentation plan in Division 1 Water Court Case no. 18CW3017 allows for the annual withdrawal of 3.78 acre-feet from the not nontributary Dawson aquifer for up to seven individual on lot wells, based on a 300 year allocation approach. The augmentation plan states the ground water allocation for each well lot is 0.54 acre-feet per year for 300 years, which will be used for household use (0.26 acre-feet per year) and 0.28 acre-feet per year per residence is available for other uses, for example irrigation of approximately 4,920 square feet of lawn and garden and the watering of up to four horses or equivalent livestock.



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 in consolidated case nos. 18CW3017 and 18CW3006 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.

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 demand for the subdivision is equal to the allowed average annual amount of withdrawal of 3.78 acre-feet/year, allowed by the augmentation plan. 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 entities other than the water court Applicants, must include evidence that the Applicant has acquired the right to the portion of the water being requested on the application.

State Engineer's Office Opinion

Based upon the above and pursuant to Section 30-28-136(1)(h)(I) and Section 30-28-136(1)(h)(II), 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 greater than 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:

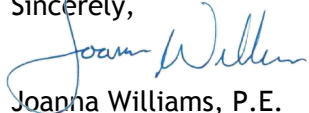
The Division 1 Water Court has retained jurisdiction over the final amount of water available pursuant to the above-referenced decree, pending actual geophysical data from the aquifer.

The amounts of water in the Denver Basin 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 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.

Should you or the Applicant have any questions, please contact Ailis Thyne of this office at 303-866-3581 x8216.

Sincerely,



Joanna Williams, P.E.
Water Resource Engineer