

August 27, 2019

Gabe Sevigny El Paso County Development Services Department <u>DSDcomments@elpasoco.com</u>

RE: Woodard Minor Subdivision Part of the SW ¼ of the NE ¼ and the SE ¼ of the NW ¼, Section 6, T12S, R65W, 6th P.M. Water Division 1, Water District 8

Dear Mr. Sevigny,

We have reviewed the submittal documents related to Woodard Minor Subdivision, concerning the above referenced proposal to subdivide a 14 acre parcel into two single-family residential lots of 5 acres (Lot 1) and 8.6 acres (Lot 2) and one tract.

Water Supply Demand

Based on the water supply information summary and the letter dated May 17, 2018 from HRS Water Consultants Inc. the estimated annual water requirements for each lot totals 0.59 acrefeet for in-house use (0.26 acre-feet), irrigation of up to 5,000 square-feet (0.28 acre-feet) and the watering of stock and poultry (0.05 acre-feet). The total annual demand for the subdivision would be 1.19 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. 2018CW3077 (Division 1) and 2018CW3035 (Division 2). The decree quantified the amount of water underlying the subject 13.84 acre parcel. According to the decree the following amounts of water were determined to be available underlying the 13.84-acre parcel:

Aquifer	Annual amount available for 13.84 acre parcel (acre-feet)		Tuno
	Based on 100 year	Based on 300 year	Туре
	allocation approach	allocation approach	
Dawson	11.6	3.87	Not-Nontributary
Denver	11.6	3.87	Not-Nontributary
Arapahoe	5.53	1.84	Nontributary
Laramie-Fox Hills	3.84	1.28	Nontributary

There is an existing well on the property with well permit no. 82898-F. This well is constructed in the Dawson aquifer and operates pursuant to the decreed augmentation plan in Division 1 Water Court Case no. 18CW3035 and Woodard Well No. 1 and may withdraw 0.60 acre-foot per year for household use, irrigation of lawn and garden, greenhouse irrigation, equipment and structure washing and the watering of horses, chickens or equivalent livestock. The application material indicates this well is located on the proposed Lot 2.



The decreed augmentation plan in Division 1 Water Court Case no. 18CW3035 allows for the total annual withdrawal of 1.20 acre-feet from the not nontributary Dawson aquifer, based on a 300 year allocation approach. The augmentation plan states the ground water allocation for each well will be a combination of household use irrigation of lawn and garden, greenhouse irrigation, equipment and structure washing and the watering of horses, chickens or equivalent livestock. Where the quantified amount planned for each use if 0.26 acre-feet per year per residence for in home use, 0.05 acre-feet per year for up to four large animals or a combination of large animals and other livestock such as pigs and chickens, 0.28 acre-feet per year for watering of lawn an gardens, greenhouse irrigation and structure and equipment washing.

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)(l), 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 in consolidated case nos. 18CW3035 and 18CW3077 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 *EI 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 demand for the subdivision is less than the allowed average annual amount of withdrawal of 4.89 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 <u>allocation</u> approach, for the proposed uses is greater than the annual amount of

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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 <u>allocation</u> 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