



September 5, 2017

Kari Parsons  
El Paso County Development Services Department  
Transmission via email: [kariparsons@elpasoco.com](mailto:kariparsons@elpasoco.com)

**RE: Abert Ranch Preliminary Plan**  
**Part of the NE1/4 of Section 23 and part of the NW1/4 of Section 24, all in T11S, R66W, 6<sup>th</sup> P.M.**  
**Water Division 1, Water District 8**

Dear Ms. Parsons:

We have reviewed your referral of August 21, 2017 concerning the above referenced proposal to subdivide a 39.83-acre parcel into 10 residential single-family lots ranging in size from 2.5 acres to 6.0 acres. Residential lots will be served by individual on-lot wells and septic systems. The Applicant obtained a decree for underground water rights and an augmentation plan for Dawson aquifer wells in Water Court in consolidated case nos. 2015CW3153 (Division 1) and 2015CW3062 (Division 2).

#### Water Supply Demand

According to the Water Supply Information Summary Sheet ("Summary Sheet") provided, household uses for the 10 lots will require 2,320 gallons per day or 2.6 acre-feet/year, irrigation uses of up to 1.0 acre will require 2.25 acre-feet/year, the watering of 20 domestic animals will require 220 gallons per day or 0.25 acre-feet/year, and other uses would require 2.9 acre-feet/year totaling 8.0 acre-feet/year for the entire subdivision. Additional information submitted with the application in a letter dated April 14, 2017 from the Applicants' water attorney Mr. Henry D. Worley indicates that 0.26 acre-feet/year/lot will be used for indoor sanitary and drinking purposes, 2.25 acre-feet/year for irrigation proposes ( based on 0.225 acre-feet/year for the irrigation of approximately 4,356 square feet of landscaping per lot, at a rate of 2.25 acre-feet/acre), 0.25 acre-feet/year for watering of domestic animals (based on the demand of 11 gallons per animals per day and 2 animals per lot), and 0.29 acre-feet/year/lot for other uses, which could include more water for indoor use, more water for irrigation use and more water for animals use or for other unspecified uses such as a guest cottage, a swimming pool, spa or hot tub. The Applicant must ensure that the other unspecified uses are allowed by the decree in consolidated case nos. 2015CW3153 (Division 1) and 2015CW3062 (Division 2). We recommend that Applicant provide clarification to the county on all the proposed uses within the subdivision prior to the subdivision approval.

#### Source of Water Supply

The proposed source of water for this subdivision is on lot wells producing from the not nontributary Dawson aquifer. The decree granted in consolidated case nos. 2015CW3153 (Division 1) and 2015CW3062 (Division 2) quantified the amount of water underlying the subject 39.83 acres. According to the decree the following amounts of water were determined to be available underlying the 39.83-acre parcel:



Aquifer	Annual amount available for 39.83 acre parcel (acre-feet)	
	Based on 100 year allocation approach	Based on 300 year allocation approach
Dawson	37.8	12.6
Denver	36.2	12.0
Arapahoe	16.6	5.5
Laramie-Fox Hills	12.3	4.1

The plan for augmentation decreed in consolidated case nos. 2015CW3153 (Division 1) and 2015CW3062 (Division 2) allows for an average diversion of 12.0 acre-feet annually and 3,600 acre feet total over a 300-year period. The decree allows the withdrawal from up to 15 wells in the Dawson aquifer pursuant to the decreed augmentation plan. According to the decree, the allowed withdrawal from each Dawson aquifer well will be limited to 0.8 acre-feet/year/lot regardless of the number of lots ultimately platted. According to the decree, the uses for the Dawson aquifer wells are expected to be, but shall not be limited to, indoor uses for drinking and sanitation purposes in the principal house and in stand-alone office or guest cottages, livestock watering, landscape and garden irrigation, hot tub, swimming pool, decorative ponds and fountains and 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 in consolidated case nos. 2015CW3153 (Division 1) and 2015CW3062 (Division 2) 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 less than the allowed average annual amount of withdrawal of 12 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.

Pursuant to the April 14, 2017 letter from the Applicant’s attorney, water in the Dawson aquifer will be transferred to homeowners by separate and specific water deeds. Accordingly, this office will require that the current water right owner provide a deed showing that 0.8 acre-feet/year or a total of 240 acre-feet for the 300 years of water in the Dawson aquifer has been transferred to the property owner when they apply for a well permit in the Dawson aquifer, as described in this water supply plan.

The application materials indicate that the proposed development will have a detention pond. The applicant should be aware that, unless the structure can meet the requirements of a “storm water detention and infiltration facility” as defined in section 37-92-602(8), Colorado Revised Statutes, the structure may be subject to administration by this office. The applicant should review DWR’s *Administrative Statement Regarding the Management of Storm Water Detention Facilities and Post-Wildland Fire Facilities in Colorado*, to ensure that the notification, construction and operation of the proposed structure meets statutory and administrative requirements. The applicant is encouraged to use *Colorado Stormwater Detention and*

*Infiltration Facility Notification Portal*, located at <https://maperture.digitaldataservices.com/gvh/?viewer=cswdif>, to meet the notification requirements.

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

Based upon the above and pursuant to Section 30-28-136(1)(h)(I), C.R.S., it is our opinion that the proposed water supply for the Settlers View preliminary plan is adequate and can be provided without causing injury to decreed water rights, **provided Applicants provide clarification to the county on all the proposed uses within the subdivision prior to the subdivision approval.**

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 Ioana Comanicu at (303) 866-3581 x8246.

Sincerely,



Joanna Williams, P.E.  
Water Resource Engineer

Ec: Subdivision File 24099