



July 31, 2017

Kari Parsons
El Paso County Development Services Department
Transmission via email: kariparsons@elpasoco.com

**RE: Settlers View Preliminary Plan
Part of the NE1/4 of Section 23, T11S, R66W, 6th P.M.
Water Division 1, Water District 8**

Dear Ms. Parsons:

We have reviewed your referral dated July 25, 2017 concerning the above referenced proposal to subdivide an approximately 40-acre parcel into 14 residential single-family lots at a minimum lot size of 2.5 acres each. Residential lots will be served by individual on-lot wells and septic systems. There is an existing home and an existing well operating under with permit no. 75798-F located on the property. The home and the well will continue to be used on what will become Lot 2 of the Settlers View subdivision. The Applicants obtained a decree for underground water rights and an augmentation plan for Dawson aquifer wells in Water Court in consolidated case nos. 2011CW045 (Division 1) and 2011CW023 (Division 2). We have previously provided comments to a Brinkman Minor Subdivision (MS-11-005) by our letter dated November 23, 2011, when the proposal was to subdivide the 40.61 acre parcel into two lots of 5 acres and 35 acres.

Water Supply Demand

According to the Water Supply Information Summary Sheet ("Summary Sheet") provided, household uses for the 14 lots will require 3250 gallons per day or 3.64 acre-feet/year, irrigation uses of up to 1.4 acres will require 3.15 acre-feet/year, the watering of 28 domestic animals will require 308 gallons per day or 0.345 acre-feet/year, and other uses would require 6.475 acre-feet/year. Additional information submitted with the application in a letter dated April 4, 2017 from the Applicants' water attorney Mr. Henry D. Worley indicates that 3.64 acre-feet/year will be used for indoor sanitary and drinking purposes (based on 0.26 acre-feet/year per lot), 3.15 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), 0.345 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 6.475 acre-feet/year for other specified or unspecified uses. Since, the other uses are not specifically spell out, the Applicants must ensure that the other specified or unspecified uses are allowed by the decree in consolidated case nos. 2011CW045 (Division 1) and 2011CW023 (Division 2). We recommend that Applicants 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. 2011CW045 (Division 1) and 2011CW023 (Division 2) quantified the amount of water underlying the subject 40 acres. According to the decree the following amounts of water were determined to be available underlying the 40-acre parcel:



Aquifer	Annual amount available for 40 acre parcel (acre-feet)	
	Based on 100 year allocation approach	Based on 300 year allocation approach
Dawson	49.6	16.5
Denver	37.1	12.3
Arapahoe	16.3	5.4
Laramie-Fox Hills	12.0	4.0

The plan for augmentation decreed in consolidated case nos. 2011CW045 (Division 1) and 2011CW023 (Division 2) allows for an average diversion of 13.6 acre-feet annually and 4,081 acre feet total over a 300-year period. The decree allows the withdrawal from up to 15 wells in the Dawson aquifer, including the existing well with permit no. 75798-F (previous permit no. 238092 canceled), and one well in each other aquifer underlying the property (Denver, Arapahoe, and Laramie-Fox Hills). According to the decree, the allowed withdrawal from each well depends on the eventual number of lots in the subdivision. Annual diversions from the existing Dawson aquifer well with permit no. 75798-F are limited to 1.0 acre-foot annually by decree. For the proposed fourteen lot subdivision, the decree would allow pumping of up to 0.97 acre-feet per year for the remaining thirteen Dawson aquifer wells. The decreed uses are one single family dwelling on each lot, commercial uses (drinking and sanitation purposes), stand-alone office or guest cottage, hot tub/spa and/or swimming pool, stock water, and landscape irrigation.

Permit no. 75798-F was issued on January 6, 2012 for the change/expansion of use of an existing well constructed under permit no. 238090 (canceled). The use of ground water from well permit no. 75798-F is limited to in-house use in one single family dwelling, irrigation of 10,000 square feet of home gardens and lawns, and the watering of domestic animals and livestock, with an annual withdrawal not to exceed 1 acre-foot.

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. 2011CW045 (Division 1) and 2011CW023 (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 13.6 acre-feet per 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 4, 2017 letter from the Applicants’ 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 0.97 acre-feet/year or a total of 291 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.

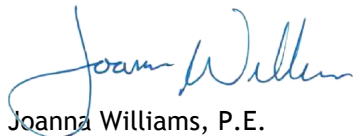
Our opinion is qualified by the following:

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 Comaniciu at (303) 866-3581 x8246.

Sincerely,



Joanna Williams, P.E.
Water Resource Engineer

Ec: Subdivision File 24079
File for permit no. 75798-F