



May 2, 2019

Nina Ruiz
El Paso County Development Services Department
Transmission via email: NinaRuiz@elpasoco.com

RE: Walker Minor Subdivision (aka Walker Reserve)
Case No. MS194
NE1/4 of the SW1/4 of Section 11, T11S, R66W, 6th P.M.
Water Division 1, Water District 8

Dear Ms. Ruiz:

We have reviewed your referral of April 23, 2019 concerning the above referenced proposal to subdivide a 40-acre parcel into three residential single-family lots of 5.10 acres (Lot 1), 5.10 acres (Lot 2) and 28.52 acres (Lot 3). The 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 Division 1 Water Court case no. 2018CW3004.

Water Supply Demand

According to a letter dated January 17, 2018 from the Applicants' water attorney Mr. James J. Petrock (water supply letter) each of the three lots with withdraw 0.75 acre-feet/year for 300 years for the in-house use (0.35 acre-feet/year), irrigation of 6,000 square-feet of home lawn, garden and trees (0.35 acre-feet/year) and the watering of four large domestic animals (0.05 acre-feet/year).

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 case nos. 2018CW3004 quantified the amount of water underlying the subject 40-acre parcel. 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 based on 100 year allocation approach (acre-feet)
Dawson	29.6*
Denver	36.4
Arapahoe	17.7
Laramie-Fox Hills	12.6

*Annual amount reduces by 4 acre-feet annually for well permit no. 174104

The plan for augmentation decreed in case no. 2018CW3004 allows for an average diversion of 2.25 acre-feet/year for 300 years. The decree allows the withdrawal from up to 3 wells (including the well currently operated under well permit no. 174104) 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 0.75 acre-feet/year/lot for in-house use (0.35 acre-feet/year), irrigation of 6,000 square-feet of home lawn, garden and trees (0.35 acre-feet/year) and the watering of four large domestic animals (0.05 acre-feet/year).



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 case nos. 2018CW3004 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 the same as the allowed average annual amount of withdrawal of 2.25 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.

Records in this office indicate that there is an existing well, operating under well permit no. 174104, located on the subject property. Well permit no. 174104 was issued on November 1, 1993 as the only well on a tract of land of 45.54 acres described as the NE1/4 of the SW1/4 and the South 165 feet of the of SE1/4 of the NW1/4 of Section 11, Township 11 South, Range 66 West of the 6th P.M. The use of ground water from this well is limited to fire protection, ordinary household purposes inside not more than three (3) single family dwellings, the watering of poultry, domestic animals and livestock on a farm or ranch and the irrigation of not more than one (1) acre of home gardens and lawns. The well was constructed on May 24, 1994, into the not nontributary Dawson aquifer. Section 37-92-602(3)(b)(III), C.R.S., requires that the cumulative effect of all wells in a subdivision be considered when evaluating material injury to decreed water rights. **The well must either be re-permitted pursuant to the augmentation plan in case no. 2018CW3004 or else be plugged and abandoned in accordance with the Water Well Construction Rules prior to subdivision approval.** Information in the augmentation plan, indicates that well permit no. 174104 will be re-permitted pursuant to the augmentation plan in case no. 2018CW3004.

Applications for on lot well permits submitted by entities other than the current water right holder in case no. 2018CW3004 (Scott and Susan Mikulecky) 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), 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, **provided the Applicant re-permits the existing well currently operated under well permit no. 174104, pursuant to the augmentation plan approved in case no. 2018CW3004, prior to 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 26468
Permit No. 174104