



March 21, 2018

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

RE: Dancing Wolf Estates Replat (Filing IV)
S ½ of the SE ¼, Section 22, T11S, R66W, 6th P.M.
Water Division 1, Water District 8

Dear Ms. Ruiz,

We have reviewed the submittal documents related to Dancing Wolf Estates Replat IV, concerning the above referenced proposal to replat Lot 1 of Dancing Wolf Estates into two commercial lots of approximately 2.5 acres, replat Lot 2 of Dancing Wolf Estates into two residential lots of approximately 2.5 acres and replat Lot 2 of Dancing Wolf Estates III into two residential lots of approximately 2.5 acres.

Water Supply Demand

Based on the water supply plan from James J. Petrock dated January 18, 2018 (water supply plan) the estimated annual demand for each residential lot is 0.57 acre-feet per year for 300 years, which will be used for in house use (0.35 acre-feet), irrigation of 2400 square-feet of irrigated area (0.17 acre-feet), and stockwatering of up to 4 large domestic animals (0.05 acre-feet). The two commercial lots will have a total of approximately 14,000 square-feet of commercial space, which requires approximately 1.56 acre-feet per year for 300 years based on the El Paso County value of 0.1 gallons per day for each square foot of space. The total annual water requirement for the six proposed lots is 3.84 acre-feet.

According to the Water Requirements for Dancing Wolf Estates All Filings the estimated water requirements for filing 1- 4 of Dancing Wolf Estates is a total of 6.69 acre-feet for nine residential units, 14,000 square feet of commercial use, 29,300 square-feet of irrigation and stock watering of 21-28 animals.

Source of Water Supply

The proposed water source is individual on lot wells constructed in the Dawson or Denver aquifers operating pursuant to the decreed augmentation plans in Division 1 Water Court Case nos. 94CW198 and 99CW065.

According to the water supply plan the proposed water source for two of the proposed lots will be existing Dawson aquifer wells permitted under well permit nos. 78470-F and 60477-F. The remaining proposed lots will be served by proposed individual on lot wells to be constructed into the Denver aquifer.

The applicant states there are existing wells on the property with well permit nos. 46995-F, 52988-F, 60477-F, 78470-F. These wells, in addition to the well constructed under permit no.



50391-F in filings 1-4 of Dancing Wolf Estates, are constructed in the Dawson aquifer and operate pursuant to the decreed augmentation plan in Division 1 Water Court Case no. 94CW198 and may withdraw 0.57 acre-foot/year for in house use in one single family dwelling, animal watering and lawn and garden irrigation. The number of animals that can be watered and allowed irrigation varies based on the terms and conditions of the well permits.

The decreed augmentation plan in Division 1 Water Court Case no. 94CW198 allows for the annual withdrawal of 12 acre-feet from the not nontributary Dawson aquifer for seven individual lots, based on a 100 year allocation approach. For a 300 year allocation approach the annual withdrawal would be limited to 4 acre-feet (0.57 acre-foot per lot).

The decreed augmentation plan in Division 1 Water Court Case no. 99CW065 allows for the annual withdrawal of 5.26 acre-feet per year from the not nontributary Denver aquifer, based on a 300 year allocation approach. The augmentation plan states the ground water will be used for in house use in three houses (0.3 acre-foot per house), the irrigation of not more than 30,000 square feet (1.8 acre-feet), the filling of a swimming pool (0.26 acre-foot) and commercial use of 2.3 acre-feet per year.

The augmentation plans decreed in Division 1 Water Court Case nos. 94CW198 and 99CW065 would allow for 10 residential lots, served by seven wells in the Dawson aquifer and three wells in the Denver aquifer and 2.3 acre-feet of water available for commercial use from the Denver aquifer.

The Applicant has an application pending in Division 1 Water Court Case no. 18CW3006 to change the augmentation plan in Court Case no. 99CW065, to withdraw the in house, irrigation and swimming pool uses from the augmentation plan. Court Case no. 18CW3006 is requesting an augmentation plan to withdraw 2.96 acre-feet per year from the Dawson aquifer based on a 300 year allocation approach for two residences (0.57 acre-foot per residence), for in house use (0.35 acre-foot), the irrigation of 2,400 square feet of home lawn, garden and trees (0.17 acre-foot), the stockwatering of up to four large domestic animals (0.05 acre-foot) and commercial use (1.82 acre-feet), which could alternatively be used for in house use, irrigation and stockwatering for two residences.

If the augmentation plan in Division 1 Water Court Case no. 18CW3006 is approved as proposed, 9 -11 residential lots could be served by Dawson aquifer wells (seven lots pursuant to Court Case no. 94CW198 and two pursuant to 18W3006) to withdraw 0.57 acre-feet/year per lot and commercial lots could withdraw a total of 1.82 acre-feet/year of Denver aquifer water.

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 no. 94CW198 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 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.

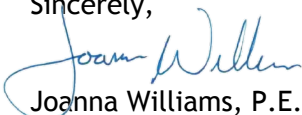
Our opinion is qualified by the following:

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