



COLORADO
Division of Water Resources
Department of Natural Resources

John W. Hickenlooper
Governor

Robert Randall
Executive Director

Kevin G. Rein, P.E.
Director/State Engineer

September 19, 2018

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

RE: Flying Horse North Preliminary Plan
File No. SP-17-012
Portions of the Sections 34, 35 and 36, T11S, R66W and portions of Section 30 and 31, T11S, R65W, 6th P.M.
Water Division 1, Water District 8

Dear Ms. Ruiz:

We have reviewed your referral of September 17, 2018 concerning the above referenced proposed preliminary plan for a planned community of 283 single-family residential lots on a 1417.8-acre parcel. Our office previously provided comments on the Flying Horse North Preliminary Plan (SF-17-012) by our letters dated January 17, 2018, May 17, 2018, and July 3, 2018. Residential lots will be served by individual on-lot wells and septic systems. The Applicant obtained an augmentation plan for Dawson aquifer wells in Division 1 Water Court case no. 2016CW3190 (pending amendment in case no. 2017CW3209).

Water Supply Demand

The total demand for this development remains at 198 acre-feet/year based on in-house demand of 0.3 acre-feet/year/lot (84.9 acre-feet/year total), with the remaining of 113.1 acre-feet available for irrigation of residential lawn and common open space. According to the March 15, 2018 letter from the Applicant's water attorney Mr. Alan G. Hill the on-lot residential wells will be limited to 5,000 square feet of lawn and garden by covenants. In addition, the letter states that 28.06 acre-feet per year will be used for common area irrigation, which would leave 85.04 acre-feet for residential lot irrigation (0.3 acre-feet/year/lot). Therefore the total water requirement for the residential lots would be 0.6 acre-feet/year. The Applicant has amended the proposed water supply plan to remove livestock watering as a proposed use. In addition the total demand for the irrigation of the golf course is estimated at 180 acre-feet/year.

Source of Water Supply

The proposed source of water for this subdivision is individual on lot wells producing from the not nontributary Dawson aquifer for the residential lots and the irrigation of the common areas. An existing Arapahoe aquifer well operating under permit no. 81145-F will be used to irrigate the golf course and the clubhouse grounds.

The decree granted in case nos. 94CW023(B) (Division 1) (amended case no. 85CW446) quantified the amount of water underlying 701 acres generally located in Sections 30 and 31, Township 11 South, Range 65 West of the 6th P.M. and the decree in case no. 2004CW098 (Division 2) quantified the amount of water underlying 640 acres located in Section 36, Township 11 South, Range 66 West of the 6th P.M. According to the decrees the following amounts of water were determined to be available underlying the 701 acres parcel and the 640 acre parcel respectively:



Aquifer	Status	Annual amount available for case no. 94CW023(B) for the 701 acre parcel (acre-feet)	Status	Annual amount available for case no. 2004CW098 for the 640 acre parcel (acre-feet)
		Based on 100 year allocation approach		Based on 100 year allocation approach
Dawson	NNT*	591	NNT	515
Denver	NT**	600	NNT	577
Arapahoe	NT	280	NT	239
Laramie-Fox Hills	NT	210	NT	182

*NNT=Not nontributary

**NT=Nontributary

According to the information previously provided the Applicant owns a portion of the ground water adjudicated in case no. 94CW023(B) underlying the 701 acres. Also, the Applicant's predecessor-in-interest entered into a Groundwater Production Lease, No. OT-109328 with the State Board of Land Commissioners. Based on the Groundwater Production Lease, the Applicant leased the not nontributary and nontributary groundwater underlying the 640 acres decreed in case no. 2004CW098 through February 27, 2048. On that date all of the groundwater rights from case no. 2004CW098 revert to the Applicant. The estimated amounts owned and leased by the Applicant are listed in the table below:

Aquifer	Annual amount available to Applicant from case nos. 94CW023(B) and 2004CW098 (acre-feet)
	Based on 100 year allocation approach
Dawson	716
Denver	577
Arapahoe	239
Laramie-Fox Hills	386

The proposed not nontributary Dawson aquifer wells will be operated in accordance with the terms and conditions of the augmentation plan in case no. 2016CW3190. The decreed plan for augmentation in case no. 2016CW3190 allows for an average diversion of 198 acre-feet annually and 59,400 acre-feet total over a 300-year period. According to the decree, the allowed withdrawal from each Dawson aquifer well will be limited to 0.7 acre-feet/year/lot totaling 198 acre-feet/year for the 283 lots. The in-house use is limited 84.9 acre-feet/year while the irrigation of individual lots and open space land is limited to 113.1 acre-feet/year. According to the augmentation plan no Dawson aquifer well approved pursuant to the plan for augmentation shall be allowed to pump water for any purpose unless it is also used in a residence on the lot on which such well is located, or for irrigation of open space lands.

An application to amend the decree in case no. 2016CW3190 was filed with the Division 1 Water Court in case no. 2017CW3209 on December 28, 2017, to include livestock watering of up to 300 horses on certain residential lots. Lots allowing for domestic animals would have a reduced number of square-feet of lawn and garden irrigation. In our previous letters we requested that Applicant provides information to this office on how the horses will be allocated to the lots and how many horses will be allowed per lot. According to the information provided by Mr. Allan G. Hill in a letter dated September 17, 2018, the preliminary development approved by the El Paso County does not allow horses on any of the 283 lots and future use for stock watering would only be done pursuant to case no. 2017CW3209 when decreed. The September 17, 2018 letter further indicates that after a decree is entered in case no. 2017CW3209, the Applicant may pursue additional land

use approvals to allow stock watering on certain lots. **At the time a decree is entered in case no. 2017CW3209 and the Applicant is seeking to add stock watering use to the development, unless clarified by the decree, the Applicant must provide information to this office on the number of horses that will be allocated to each lot so that the well permits can be properly approved.**

Previous information provided to this office clarified that the Arapahoe well operating under permit no. 81145-F will be used to irrigate the golf course and the clubhouse grounds. Well permit no. 81145-F was issued for the amount of water transferred to the Applicant in case no. 2004CW098 in the Arapahoe aquifer (239 acre-feet). As previously noted the annual demand for the golf course is currently sufficient to cover approximately 132 years of the total demand. The not nontributary Denver aquifer water proposed to cover the shortfall for the remaining 168 years will not be available until the proposed augmentation plan is approved by the water court.

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. 94CW023(B) and 2004CW098 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 residential lots and common space irrigation equals the allowed average annual amount of withdrawal of 198 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. As noted above the Applicant has not shown that they have a currently legal supply of water to satisfy the irrigation requirements of the golf course and the clubhouse grounds for 300 years.

Applications for on lot well permits, submitted by entities other than the Applicant (PRI #2, LLC) must include evidence that the well permit Applicant has acquired the right to the portion of the water being requested on the application.

Furthermore, the applicant should be aware that any proposed detention pond for this Planned Development, must meet the requirements of a "storm water detention and infiltration facility" as defined in section 37-92-602(8), Colorado Revised Statutes, to be exempt from 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](http://water.state.co.us/DWRIPub/Documents/gws-09.pdf) 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.

The September 17, 2018 letter also clarified that the existing wells with permit nos. 17278-A, 17279, 17280, 75882, and 2132 will be plugged prior to subdivision approval. The Applicant is required to submit a Well Abandonment Report (Form GWS-09 available at <http://water.state.co.us/DWRIPub/Documents/gws-09.pdf>) for each well to affirm that the wells were plugged.

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 in-house use, residential lot lawn and garden irrigation and irrigation of common open space is adequate and can be provided without causing injury to decreed water rights, provided well nos. 17278-A, 17279, 17280, 75882, and 2132 are plugged and abandoned prior to the subdivision approval. In addition at the time the Applicant is seeking to add stock watering use to the development, the **Applicant must provide information to this office on the number of horses that will be allocated to each lot**, unless this information is provided in the decree in case no. 2017CW3029 (when entered). **The Division of Water Resources will provide an opinion to the county on the stock watering use at the time the decree in case no. 2017CW3029 is approved by the water court and the Applicant is seeking to add stock watering use to the development.** Furthermore, as previously mentioned, the proposed water supply for the golf course is adequate to meet the statutory requirement of 100 years but not the County's requirement of 300 years, until such time as the proposed augmentation plan for the not nontributary Denver aquifer is approved by the water court.

Our opinion that the water supply is **adequate** is based on our determination that the amount of water required annually to serve the in-house use, residential lot lawn and garden irrigation and irrigation of common open space 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 in-house use, residential lot lawn and garden irrigation and irrigation of common open space demands of the proposed subdivision.

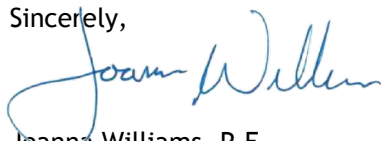
Our opinion is qualified by the following:

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 24155
File for permit nos. 17278-A, 17279, 17280, 75882, and 2132