

**COLORADO Division of Water Resources** Department of Natural Resources John W. Hickenlooper Governor

Robert Randall Executive Director

Dick Wolfe, P.E. Director/State Engineer

June 20, 2017

Kari Parsons El Paso County Development Services Department Submitted online

## RE: Jackson Ranch Filing No. 4 A portion of Section 21, T11S, R66W, 6<sup>th</sup> P.M. Water Division 1, Water District 8

Dear Ms. Parsons:

We have reviewed your referral dated June 8, 2017 concerning the above referenced proposal to subdivide 31.18 acres into 8 rural residential single-family lots at a minimum lot size of 2.5 acres each and two open space & drainage tract. Residential lots will be served by individual on-lot wells and septic systems.

## Water Supply Demand

According to the water supply plan each lot will use 0.7 acre-feet per year for 300 years, which consists of 0.35 acre-feet for in-house uses, 0.3 acre-feet for the irrigation of 5,000 square feet of home lawns or gardens, and 0.05 acre-feet for use in a water feature. The total water requirement for all 8 lots will be 5.6 acre-feet per year.

## Source of Water Supply

Based on the information provided, the proposed source of water is on-lot wells producing from the not-nontributary Dawson aquifer that will operate pursuant to the augmentation plan decreed in Division 1 Water Court in consolidated case nos. 15CW3119 (Division 1) and 15CW3047 (Division 2)("Augmentation Decree").

According to the Augmentation Decree, 13.3 acre-feet per year over a 300 year period and 14.25 acre-feet per year over a 100 year period of not-nontributary Dawson aquifer groundwater decreed in case nos. 08CW206, 08CW315, 08CW316, 08CW317, 08CW318 and 08CW319 will be augmented. The Augmentation Decree also amended the prior decrees to allow the decreed water to be withdrawn from any of the lands claimed by the decrees.

The annual amount of 13.3 acre-feet is to be used to serve 19 residential lots through individual wells, with each well limited to an annual amount of 0.70 acre-feet/year. According to the water supply plan, 8 of the 19 augmented wells will be used to serve this subdivision. The allowed average annual amount of withdrawal associated with the 8 wells is 5.6 acre-feet. The proposed uses are allowed by the Augmentation Decree.



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 <u>allocation</u> approach, the annual amounts of water decreed in case nos. 08CW206, 08CW315, 08CW316, 08CW317, 08CW318 and 08CW319 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 <u>allocation</u> approach based on three hundred years, the augmentation plan allows for the withdrawal of the 5.6 acre-feet per year for a maximum of 300 years.

Applications for on lot well permits, submitted by an entity other than the current decree holder (Morgan and Christine Brown, Gwilym Brown, Marlene Brown and Marshal and Sara Brown), must include evidence that the applicant has acquired the right to the portion of water being requested on the application.

The applicant should be aware that any proposed detention pond for this project, 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 <u>Administrative Statement Regarding the Management of</u> <u>Storm Water Detention Facilities and Post-Wildland Fire Facilities in Colorado</u> 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 <u>https://maperture.digitaldataservices.com/gvh/?viewer=cswdif</u>, 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 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.

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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 <u>allocation</u> 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 <u>allocation</u> 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 have any questions, please contact me at 303-866-3581 x8265.

Sincerely,

oam /1

Joanna Williams, P.E. Water Resource Engineer

Cc: Subdivision File 24065

jmw: Jackson Ranch Filing 4 Subdivision (El Paso)