

Denver, CO 80203

February 22, 2018

Kari Parsons El Paso County, Planning and Community Development Transmitted via email: kariparsons@elpasoco.com

> Largent Subdivision Final Plat RE:

Part of NW1/4 of SW1/4 of Sec. 7, T13S, R64W, 6th P.M., and part of NE1/4 of SE1/4 of Sec. 12, T13S, R65W, 6th P.M.

Water Division 2, Water District 10

Upper Black Squirrel Creek Designated Basin

Dear Ms. Parsons:

We have received your January 30, 2018 submittal concerning the above-referenced proposal to create a one-lot subdivision of 1.22 acres.

Water Supply Demand

The estimated water requirement for this proposed subdivision for a future commercial building is 0.525 acre-feet per year for sanitary and irrigation purposes.

Source of Water Supply

The proposed water supplier is the Woodmen Hills Metropolitan District (WHMD or District). The District has provided a letter dated January 9, 2018 committing to provide a total of 0.73 acre-feet of water per year (2 single family equivalents at 0.365 acre-feet/year per SFE).

Permit no. 115022 was issued July 14, 1980 as a small capacity well permit on what was claimed by the applicant at that time as a 1/2-acre parcel. Available information now indicates there was not a 1/2-acre parcel in existence at the location of the well in 1980, but rather the parcel on which the well permit was issued was the currently existing parcel.

Permit no. 115022 was issued without consideration of material injury to other water rights for in-house use. Because the parcel on which well permit no. 115022 would be located would be within a post-June 1, 1972 subdivision, material injury to other water rights is now a consideration. The Denver aguifer at this location is not-nontributary, within one mile of a contact with the alluvial aquifer with an actual impact replacement requirement, the diversion from which would injure other water rights absent a replacement plan approved by the Ground Water Commission. Therefore, the well could not continue to operate under permit no. 115022. The well could continue to operate only if it is re-permitted as a large capacity well pursuant to a Determination of Water right and Replacement Plan approved by the Colorado Ground Water Commission.

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."



Approximately 2,963 acre-feet/year of WHMD water supply comes from Denver Basin bedrock aquifers, based on a 100 year aquifer life. 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 allowed average annual amount of withdrawal of 2,963 acre-feet/year would be reduced to one third of that amount, or 988 acre-feet/year. As a result, the water may be withdrawn in that annual amount for a maximum of 300 years.

Approximately 439 acre-feet of the WHMD's supply is water produced from alluvial sources, which are currently considered to be renewable. Therefore, based on a 300-year aquifer life allocation, the WHMD has a potential annual water supply of approximately 1,427 acre-feet.

Records in our office indicate that WHMD's current commitments total 964.18 acre-feet per year, based on a 300-year aquifer life allocation.

The uncommitted annual water supply of 462.37 acre-feet is more than the estimated annual demand of 0.73 acre-feet for Largent Subdivision.

State Engineer's Office Opinion

Based upon the above and pursuant to Section 30-28-136(1)(h)(II) C.R.S., it is our opinion that the proposed water supply is adequate and 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 <u>allocation</u> approach, for the proposed uses on the subdivided land 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 Ground Water Commission has retained jurisdiction over the final amount of water available pursuant to the relevant determinations and well permits, pending actual geophysical data from the aquifer.

The amounts of water in the Denver Basin aquifer, 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.

Any applications for a Determination of Water Right, Replacement Plan or large capacity well permit would be evaluated pursuant to the applicable statutes and rules at the time they are submitted to this office.

Should you have any questions, please contact Neelha Mudigonda at neelha.mudigonda@state.co.us.

Sincerely,

Keith Vander Horst, P.E. Chief of Water Supply, Basins

Keich Vander Horst

cc: Upper Black Squirrel Creek Ground Water Management District Well Permit no. 115022