COLORADO
Division of Water Resources
Department of Natural Resources
1313 Street, Room 821
Denver, CO 80203

November 28, 2017

Raimere Fitzpatrick
El Paso County Development Services Department
Trasmitted via email:
raimerefitzpatrick@elpasoco.com

RE: Waterbury Phase 2 Preliminary Plan
Parts of Sections 28 and 29, T12S, R64W, 6th P.M.
Upper Black Squirrel Creek Designated Ground Water Basin
Water Division 8, Water District 10

Dear Mr. Fitzpatrick:

This review focuses on the current October 2017 submittal concerning the proposal for the Waterbury Phase 2 Preliminary Plan, consisting of 235 proposed residential lots within an 80-acre subdivision (within an overall 322-acre development).

Water Supply Demand

According to the July 2017 Water Resources and Wastewater Report by JDS-Hydro Consultants, Inc., the estimated annual water demand for the 235 residential lots is 82.3 acre-feet or 0.35 acre-feet/year per lot (irrigation included in residential uses).

Source of Water Supply

The proposed water supplier is the 4-Way Ranch Metropolitan District No. 1 ("District"). The District has provided a commitment letter dated July 14, 2017, committing to service Waterbury Subdivision with 82.3 acre-feet of water per year. Information in our files indicates the District has approximately 631.5 acre-feet per year of Denver Basin ground water available for future commitments.

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."

According to our records, 2,391 acre-feet/year of the District's 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 **allocation** approach based on three hundred years, the allowed average annual amount of withdrawal of 2,391 acre-feet/year would be reduced to one third of that amount, or 797 acre-feet/year. As a result, the water may be withdrawn in that annual amount for a maximum of 300 years.

Records in our office indicate that the District's current commitments total 165.5 acre-feet per year, based on a 300-year aquifer life allocation.

The remaining uncommitted annual water supply of 631.5 acre-feet is more than the estimated annual demand of 82.3 acre-feet for the Waterbury Subdivision.

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 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 above-referenced Determinations of Water Right, 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 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 have any questions, please contact Neelha Mudigonda of this office.

Sincerely,

Keith Vander Horst

Keith Vander Horst, P.E.
Designated Basins Team Leader

cc: Division 2 Division Engineer
District 10 Water Commissioner
Upper Black Squirrel GWMD
510-BD and 511-BD

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