



March 21, 2022

Kari Parsons, Project Manager, Planner III
Elbert County Community & Development Services
Transmitted via the EPC EDARP Portal: <https://epcdevplanreview.com>

Re: Waterbury PUD Preliminary Plan - Amendment to Filings 1 & 2 - 2nd Letter
Case No. PUDSP215
Part of the SE ¼ of Sec. 29, SW ¼ of Sec. 28, and NW ¼ of Sec. 33, T12S, R64W, 6th P.M.
Upper Black Squirrel Creek Designated Basin
Water Division 2, Water District 10

Dear Kari Parsons:

We have reviewed the March 17, 2022 above-referenced proposal for a Major Amendment to the existing PUD and for a combined PUD preliminary plan approval to develop 198 single-family residential lots for the Waterbury Subdivision Filing Nos. 1 & 2. The subject land area is 61.9 acres, of which 37.26 acres is single-family lots and the remaining area is dedicated to rights-of-way, developed parks, and open space, located in the SE ¼ of Sec. 29, SW ¼ of Sec. 28, and NW ¼ of Sec. 33, T12S, R64W, 6th P.M. The application proposes a revised PUD, preliminary plan, and final plat of Waterbury Filing Nos. 1 & 2. This office previously reviewed the water supply plan for the Waterbury Preliminary Plan on May 2, 2013 and Filings 1 & 2 on November 4, 2021.

Water Supply Demand

According to the Subdivision Summary Form dated March 9, 2022 and the Water Resource Report prepared by HR Green and updated March 3, 2022 ("Report"), the estimated water demand is 73.35 acre-feet/year for single-family residential use including irrigation of 1.4 acres (65,481 gallons/day). The estimated water demand for the single-family residential use is based on a rate of 0.353 acre-feet/year per Single Family Equivalent (SFE).

Source of Water Supply

The proposed water supply source is service provided by the 4-Way Metropolitan District No. 2 ("District").

Water Rights Owned and Controlled by the District

According to the Report, the District controls 610 acre-feet/year (based on a 300-year water supply) of nontributary Denver Basin groundwater. The District plans to provide such supply using well permit nos. 64017-F and 64018-F and new Arapahoe and Laramie-Fox Hills wells which will operate pursuant to Determination of Water Right Nos. 510-BD and 511-BD, summarized as follows:

- Determination of Water Right no. 510-BD allocated 2,429 acre-feet/year, based on a 100 year aquifer life, from the nontributary Laramie-Fox Hills aquifer allowing municipal use by 4-Way Ranch Metropolitan District and Woodmen Hills Metropolitan District on the 8,905-acre Overlying Land.
- Determination of Water Right no. 511-BD allocated 2,615 acre-feet/year, based on a 100 year aquifer life, from the nontributary Arapahoe aquifer allowing municipal use by 4-Way Ranch Metropolitan District and Woodmen Hills Metropolitan District on the 8,905-acre Overlying Land.

According to the Report the 610 acre-feet/year is described in the Second Amendment to the 2006 lease agreement. Based that lease agreement if the purchase described in the lease agreement was not executed



by May 7, 2018, then the first amended lease would be in full force and effect, and the amount leased would be amended to be 71,400 acre-feet of Arapahoe aquifer water (238 acre-feet/year based on a 300-year supply) and 111,600 acre-feet of Laramie-Fox Hills aquifer water (372 acre-feet/year based on a 300-year supply), or a total of 183,000 acre-feet (610 acre-feet/year based on a 300-year supply).

Present and Anticipated Demand

According to the January 21, 2021 letter, the District is committed to providing 78 acre-feet/year to serve the proposed water uses for Filings 1 & 2. According Report, the District has a present demand of 17.64 acre-feet per year based on its current commitment to serving 42 developed residential lots. The anticipated demand due to its future commitments consist of serving the Waterbury Filings 1 & 2 is 73.35 acre-feet/year. Therefore the total anticipated demand of future commitments by the District is 90.99 acre-feet/year.

Uncommitted Firm Supply

Based on a firm supply of 610 acre-feet/year and a present commitment of 90.99 acre-feet/year, the amount of uncommitted firm supply is 519.01 acre-feet/year.

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 37-90-107(7)(a), C.R.S., "Permits issued pursuant to this subsection (7) shall allow withdrawals on the basis of an aquifer life of 100 years." Based on this allocation approach, the annual amounts of water determined in 510-BD and 511-BD are equal to one percent of the total amount, as determined by rule 5.3.2.1 of the Designated Basin Rules, 2 CCR 410-1. Therefore, the water may be withdrawn in those annual amounts for a maximum of 100 years.

The *El Paso County Land Development Code*, Section 8.4.7.(B)(7)(b) states:

"(7) Finding of Sufficient Quantity (b) Required Water Supply. The water supply shall be of sufficient quantity to meet the average annual demand of the proposed subdivision for a period of 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 allowed average annual amount of withdrawal of 1,830 acre-feet/year would be reduced to one third of that amount, or 610 acre-feet/year, which is greater than the anticipated annual demand for this subdivision and the District's present commitments. As a result, the water may be withdrawn in that annual amount for a maximum of 300 years.

Additionally, the proposed filings are within the allowed place of use of Determination of Water Right Nos. 510-BD and 511-BD, and the proposed uses are uses allowed by those Determinations.

State Engineer's Office Opinion

Based upon the above and pursuant to sections 30-28-136(1)(h)(I) and 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 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.

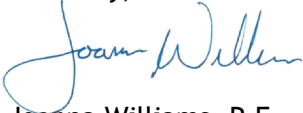
Our opinion is qualified by the following:

The Ground Water Commission has retained jurisdiction over the final amount of water available pursuant to the above-referenced decree, 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. The source of water is from a non-renewable aquifer, the allocations of which are based on a 100 year aquifer life. 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.

If you or the Applicant have any questions, please contact Wenli Dickinson at (303) 866-3581 x8206 or at Wenli.Dickinson@state.co.us.

Sincerely,

A handwritten signature in blue ink that reads "Joanna Williams". The signature is fluid and cursive, with the first name "Joanna" and last name "Williams" clearly distinguishable.

Joanna Williams, P.E.
Water Resource Engineer

Ec: Referral No. 27684
Upper Black Squirrel Ground Water Management District