COLORADO
Division of Water Resources
Department of Natural Resources

April 2, 2019

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

Re: Walden Preserve 2 Filing 4- Final Plat
File No. SF1834
SW 1/4 SW 1/4 of Section 14, SE 1/4 SE 1/4 of Section 15, NE 1/4 NE 1/4 of Section 22, and NW 1/4 NW 1/4 of Section 23, all in T11S, R66W, 6th P.M.
Water Division 1, Water District 8

Dear Ms. Ruiz:

We have reviewed your referral dated March 25, 2019 regarding the above-referenced request for approval of a subdivision final plat, to allow for the development of 23 single-family residential lots at a minimum lot size of 1.06 acres each and the development of 18.16 acres of open space, on an approximately 45.27 acre parcel. All lots within this filing will use central water and sanitation services. The State Engineer's Office previously provided comments to the Walden Preserve 2, Filing 4 final plat, by our letter dated November 1, 2018.

Water Supply Demand

The estimated water requirements for the Walden Preserve 2 Filing 4 remain at 7.82 acre-feet annually. This amount breaks down to 6.21 acre-feet/year for in house use or 0.27 acre-feet/year/lot, and 1.61 acre-feet/year for irrigation use or 0.07 acre-feet/year/lot for irrigation of approximately 2,000 square feet of home gardens and lawns.

Source of Water Supply

The proposed water supplier is still listed as the Walden Corporation ("Corporation"), a private water company. A letter of commitment from the Corporation dated August 14, 2018 was previously provided and was again included in the referral material. The Corporation operates seven Denver Basin ground water wells. Six of the wells withdraw ground water from the Dawson aquifer and were decreed as nontributary in Division 1 Water Court case nos. W-7843-74 and W-6220. The seventh well, permit no. 32697-F, withdraws ground water from the nontributary portion of the Denver aquifer.

As indicated in our previous letter, the current withdrawal capacity of the seven wells as previously determined by the State Engineer's Office ("SEO") is approximately 406.5 acre-feet/year, consisting of approximately 166.5 acre-feet/year from the Dawson aquifer and 240 acre-feet/year from the Denver aquifer. We have previously noted that the Dawson Well No. 6 is currently capable of producing 26 gallons per minute or 41 acre-feet/year and indicated that the Corporation could obtain a permit and re-drill the Dawson Well No. 6 to show that the well can produce the decree amount of 148 gallons per minute or 238 acre-feet/year. In addition, the Denver aquifer well is currently capable of producing 105 acre-feet per year. The Corporation has the ability to seek permits to construct additional wells into the Denver aquifer to withdraw the full allowed annual amount permitted to be withdrawn of 240 acre-feet per year. The Corporation's total annual amount of water that could be withdrawn would accordingly increase to 604 acre-feet.

In addition to the Dawson and Denver aquifer wells decreed in Cases W-7843-74 and W-6220, the Corporation obtained supplemental not nontributary Dawson aquifer water from the decree in consolidated Case Nos. 2002CW187 (Division 1) and 2002CW117 (Division 2). In the decree in consolidated Case Nos. 2002CW187

(Division 1) and 2002CW117 (Division 2), an augmentation plan was approved for the use of 93 individual wells in the not nontributary Dawson aquifer for the annual withdrawal of 0.47 acre-feet per well and 43.71 acre-feet total for 300 years (13,113 acre-feet total over 300 years). In Case No. 2015CW3007 the original augmentation plan was revised to reduce the number of Dawson aquifer wells which will operate pursuant to the plan from 93 to 22 lots. The balance of water previously allocated for individual on lot wells from the original augmentation plan was transferred to the Corporation for use in the central water system. An augmentation plan for the Dawson aquifer water decreed in consolidated Case Nos. 2002CW187 (Division 1) and 2002CW117 (Division 2) was approved on August 8, 2017 under consolidated Case Nos. 2016CW3103 (Division 1) and 2016CW3048 (Division 2). The augmentation plan allows for the withdrawal of up to 155 acre-feet/year for 100 years and was transferred to the Corporation. The referral material indicated that under the county's "300-year rule," the Dawson aquifer groundwater allocation provides for an additional water supply of 51.67 acre-feet/year for the Corporation's central water supply system. However, as previously noted the current augmentation plan allows for pumping for 100 years, not the 300 years, therefore the 155 acre-feet/year is adequate for 100 years of pumping. The augmentation plan allows for the ground water to be used for in-house, irrigation, commercial, fire protection, and stock watering purposes, including storage, through a central water supply system.

According to the information from our previous letter the Corporation has committed to serve 239 single-family equivalent ("SFE") units and an elementary school (6.2 SFE), which would require approximately 8,336 acre-feet of water, based on a 100-year water supply. An additional 20,094 acre-feet of water is committed to serving 197 single-family equivalents in the Walden Pines, Walden Preserve Filing 1 and the Walden Preserve 2 PUD, based on a 300-year water supply. Therefore, the Corporation has approximately 27,720 acre-feet (based on the actual amount determined by SEO) of Denver Basin ground water available for additional commitments.

The proposed source of water for this development is bedrock aquifers 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 allowed annual amount of water permitted to be withdrawn from the Denver aquifer is 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 this annual amount 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 allowed combined average annual amount of withdrawal would be reduced to one third of that amount, which is greater than the annual demand for this development.

State Engineer's Office Opinion

Based upon the above we reiterate that 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 previous comments regarding any storm water detention structure proposed for this subdivision still apply.

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 is greater than the annual amount of water required to supply existing water commitments and the demands of the proposed development.

Our opinion is qualified by the following:

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: 25273

JMW/idc: Walden Preserve 2 Filing 4 add SF1834 (El Paso)