COLORADO
Division of Water Resources
Department of Natural Resources

John W. Hickenlooper
Governor

Robert Randall
Executive Director

Kevin G. Rein, P.E.
Director/State Engineer

November 1, 2018

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
SW1/4 SW1/4 of Section 14, SE1/4 SE1/4 of Section 15, NE1/4NE1/4 of Section 22, and NW1/4 NW 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 September 25, 2018 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 1.0 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 on the Walden Preserve 2 PUD, by our letter dated July 3, 2013. The proposed Walden Preserve 2 Filing 4 was included in the previously approved Walden Preserve 2 PUD. The Walden Preserve 2 Preliminary Plan was approved for 116 residential lots to use the Walden Corporation's central water supply system.

Water Supply Demand

The Water Supply Information Summary Sheet submitted in the referral material indicated that the estimated water requirements for the Walden Preserve 2 Filing 4 total 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 for the Walden Preserve 2 Filing 4 is the Walden Corporation ("Corporation"), a private water company. A letter of commitment from the Corporation dated August 14, 2018 was 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.

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. The Water Resource Report ("Report") dated September 11, 2018 prepared by JPS Engineering provided in the referral material, appears to agree with the State Engineer's findings regarding the total annual amount of water supply found to be available from the Dawson and Denver aquifers. We have previously noted that the Dawson Well No. 6 is currently capable of producing 26 gallons per minute or 41 acre-feet/year. 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 aquifers 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) transferred to the Corporation was approved on August 8, 2017 under consolidated Case Nos. 2016CW3103 (Division 1) and 2016CW3048 (Division 2) for up to 155 acre-feet/year for 100 year. 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 we note that 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.

The Corporation current water supply commitment status was presented in the Walden Water Supply Summary Table ("Walden Table"). According to the Walden Table, the Corporation central water system currently has total commitments to approximately 8,336 acre-feet of water committed to serve 239 single-family equivalents ("SFE") units and an elementary school (6.2 SFE), based on a 100-year water supply. An additional 20,094 acre-feet of water are 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.

Furthermore, the applicant should be aware that any proposed detention pond for this Residential Development, 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 Administrative Statement Regarding the Management of Storm Water Detention Facilities and Post-Wildland Fire Facilities in Colorado 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 https://maperture.digitaldataservices.com/gvh/?viewer=cswdif, 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 for Walden Preserve 2 Filing 4 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 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 SF1834 (El Paso)