

March 24, 2022

Ryan Howser
El Paso County Development Services Department

<u>DSDcomments@elpasoco.com</u>

**RE:** Walden Preserve 2, Filing No. 5- Final Plat Part of the E  $\frac{1}{2}$ , Sec. 15, and Part of the SW  $\frac{1}{4}$  of the SW  $\frac{1}{4}$ , Sec. 14, all in T115, R66W, 6<sup>th</sup> P.M. Water Division 1, Water District 8

Dear Ryan Howser,

We have reviewed the information received by this office on March 17, 2022 regarding the above referenced referral. The Applicant is proposing to subdivide 91.85 acres into 50 single family residential lots, open space and right of way. 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 5 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

According to the Water Supply Information Summary Sheet the proposed water demand for each lot is 0.34 acre-feet per year for household use (0.27 acre-feet per year) and irrigation of approximately 2,000 square-feet of lawn and garden (0.07 acre-feet per year), for a total water demand of 17 acre-feet per year.

## Source of Water Supply

The proposed water supplier for the Walden Preserve 2 Filing 5 is the Walden Corporation ("Corporation"), a private water company. A letter of commitment from the Corporation dated January 4, 2022 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. 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 per year.

In addition to the Dawson and Denver aguifers wells decreed in Cases W-7843-74 and W-6220), the Corporation obtained supplemental not nontributary Dawson aguifer 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 aguifer 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 aguifer 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 years. 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 Report, the Corporation central water system currently has total commitments to approximately 8,336 acre-feet of water committed to serve 245.2 single-family equivalents ("SFE") units, 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 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 37-90-137(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 <u>allocation</u> approach, the annual amounts of water decreed in consolidated Case Nos. 2002CW187 (Division 1) and 2002CW117 (Division 2), and water available for withdrawal under permit no. 32697-F are 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 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 <u>allocation</u> approach based on three hundred years, the allowed average annual amount of would be reduced to one third of that amount, which is greater than the annual demand for this subdivision, which is included

in the current water commitments. As a result, the water may be withdrawn in that annual amount for a maximum of 300 years.

## State Engineer's Office Opinion

Based upon the above and pursuant to Section 30-28-136(1)(h)(l), 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 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 Division 1 Water Court 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 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 Ailis Thyne of this office at 303-866-3581 x8216.

Sincerely,

Joanna Williams, P.E. Water Resource Engineer

Ec: Subdivision file: 29131