

May 8, 2023

Kylie Bagley El Paso County Development Services Department 2880 International Circle, Suite 110 Colorado Springs, CO 80910-3127 Sent via online portal at: https://epcdevplanreview.com/Agencies/Home

RE: Shiloh Pines Vacation/Re-plat Sec. 15 and 16, Twp. 11S, Rng. 67W, Sixth P.M. Water Division 2, Water District 10 CDWR Assigned Referral No. 29259

To Whom It May Concern:

The Applicant is requesting approval of a vacation and re-plat of two lots and one unplatted parcel, resulting in three lots and one unplatted parcel. This action concerns only Lots 1 (2.53 acres), 2 (3.93 acres), and 3 (2.53 acres), which will be considered exempt from county subdivision rules, as confirmed by El Paso Planning & Community Development.

Proposed Lots 1 and 3 will continue to be provided water from Forest View Acres Water District. Detailed information was not provided. The unplatted parcel has an existing well with permit no. 48273-A. According to the submittal, the proposed supply of water for Lot 2 is to be served by an on-lot well, with wastewater disposed of through an on-site septic system.

This office previously provided comments on May 20, 2022. The county has requested a letter addressing water sufficiency for Lot 2, which was provided on November 22, 2022. A revised letter was provided on March 14, 2023. The water supply demand for the lot has been revised, therefore this letter shall supersede the letters dated November 22, 2022 and March 14, 2023.

Water Supply Demand

According to the revised Water Supply Information Sheet received by this office, the estimated water demand for the lot is 0.51 acre-feet/year. This includes 0.3 acre-feet/year for household use, 0.16 acre-feet/year for irrigation of 3,200 square-feet of lawn/garden (0.05 acre-feet/year per 1,000 square-feet), and 0.05 acre-feet/year for the watering of 4 horses (0.01 acre-feet/year per head).

Source of Water Supply

The water rights under the unplatted parcel were adjudicated in Division 2 Water Court Case no. 13CW3025. A deed conveying a portion of those water rights to the owner of proposed Lot 2 was included with the application. This deed should be recorded with the El Paso Clerk and Recorder. The water rights conveyed are summarized in Table 1, below:



Aquifer	Tributary Status	Volume (AF)	Annual Allocation 100 Year (AF/Year)	Annual Allocation 300 Year (AF/Year)
Dawson	NNT	251	2.51	0.83
Denver	NNT	150	1.50	0.50
Arapahoe	NT	313	3.13	1.04
Laramie-Fox Hills	NT	120	1.20	0.40

Table 1 - Denver Basin Ground Water Rights

The Arapahoe aquifer at this location, based on site specific information, is located approximately between 1200 feet to 1750 feet below ground surface, depending on the surface elevation. According to Rule 10.4.5.2 of the Rules and Regulations for Water Well Construction, Pump Installation, Cistern Installation, and Monitoring and Observation Hole/Well Construction (2 CCR 402-2) solid steel casing must be installed from the base of the confining layer directly above the Arapahoe aquifer to either the top of the well or at least 10 feet above the base of the surface casing. Given the depth interval for the Arapahoe aquifer wells, and the minimum construction requirements of Rule 10.4.5.2, we note for the County's consideration, that the well construction expense will be substantially greater than for wells in similar developments that are proposed to be completed in shallower aquifers.

The applicant should be aware that a **plan for augmentation must be approved by the water court before the water can be withdrawn from the Dawson or Denver aquifers.**

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 is equal to one percent of the total amount available 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 amounts 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 <u>allocation</u> approach based on three hundred years, the annual estimated demand is less than what is available in the subject water right from the Arapahoe aquifer.

The estimated water demand for the new lots are within the limitation of the amount of water available underlying each individual lot listed in Table 2 above.

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Applications for on lot well permits, submitted by entities other than the current water right holder must include evidence that the Applicant has acquired the right to the portion of the water being requested on the application.

The application materials indicate that the water supply may alternatively be provided by Forest View Acres Water District ("District), under a future agreement to join the District. The lot is not currently within the service area of the District. The Applicant did not provide a letter of commitment from the District documenting that the District commits to serving the proposed development an amount of water that is greater than or equal to the estimated demand.

Our office does not have up to date information on the ability of the District to supply water to this lot. As outlined in the statutes, Section 30-28-133(3)(d), C.R.S., the subdivider is required to submit evidence that a water supply that is sufficient in terms of quality, quantity, and dependability will be available to ensure an adequate supply of water <u>and</u> <u>periodically update said evidence</u>. Adequate evidence is usually provided in the form of a water resource report, prepared by a professional engineer, which addresses the quality, quantity, and dependability issues. An updated report of this nature was not provided with the submittal. Please see the State Engineer's March 4, 2005 and March 16, 2005 memorandums, available on the Colorado Division of Water Resources webpage at https://dwr.colorado.gov/services/<u>water-administration/land-divisions-and-water-</u>supply, for the necessary information.

Additional Comments

Should the development include construction and/or modification of any storm water structure(s), the applicant should be aware that, unless the structure can meet the requirements of a "storm water detention and infiltration facility" as defined in section 37-92-602(8), Colorado Revised Statutes, the structure may be subject to 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, located at https://dnrweblink.state.co.us/dwr/ElectronicFile.aspx?docid=3576581&dbid=0

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 <u>https://maperture.digitaldataservices.com/gvh/?viewer=cswdif</u>, to meet the notification requirements.

State Engineer's Office Opinion

Based on the above, and pursuant to CRS 30-28-136(1)(h)(I), it is our opinion that the proposed water supply can be provided without causing material injury to decreed water rights, and is **adequate**.

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 <u>allocation</u> approach, for the proposed uses is greater than the annual amount of water required to supply the demands of the proposed subdivision.

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The Division 2 Water Court has retained jurisdiction over the final amount of water available pursuant to the above-referenced decrees, pending actual geophysical data from the aquifer.

The amounts of water in the Denver Basin aquifers, and identified in the subject Division 2 Water Court cases were 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 <u>allocation</u> 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. Furthermore, that applicant will need to apply for, and obtain a new well permit issued pursuant to Section 37-90-137(4) C.R.S.

Should you or the applicant have questions regarding any of the above, please contact me at this office.

Sincerely,

1. Jully

Kate Fuller, P.E. Water Resource Engineer

ec: Rachel Zancanella, Division 2 Engineer Jacob Olson, District 10 Water Commissioner Permit File No. 48273-A