



May 13, 2019

El Paso County Development Services Department
2880 International Circle, Suite 110
Colorado Springs, CO 80910

RE: Retreat at TimberRidge Subdivision Filing 1
Sec. 27, Twp. 12S, Rng. 65W, 6th P.M.
Water Division 2, Water District 10
CDWR Assigned Subdivision No. 25172

To Whom It May Concern,

We have received the submittal concerning the above referenced proposal to subdivide a 68.135± acre tract of land into 70 new lots. All of the lots will be a minimum of 5± acres in size. Our records indicate that there are no existing wells located on the property. The proposed supply of water to the subdivision will be individual on-lot wells for each of the 11 lots, with wastewater being disposed of through individual on-lot septic disposal systems (“rural lots”, previously “Phase 2”); and in 59 lots by the proposed TimberRidge Metropolitan District via an IGA with the Sterling Ranch Metropolitan District using the SRMD Well Site #1 (“urban lots”, previously “Phase 3”).

Water Supply Demand

According to the Water Supply Information Summary received in the submittal, the estimated water demand for the development is 0.353 acre-feet/year/household, with an indoor household demand of 0.18 acre-feet/year/household and 0.173 acre-feet/year for outdoor use (total of 24.71 acre-feet/year with 3.88 acre-feet from on-lot wells).

However, Division 2 Water Court case no. 2018CW3002 reduced the volume of water for on-lot wells to 0.321 acre-feet/year/household, with up to 0.26 acre-feet/year for indoor household use, with the additional volume available for other beneficial uses specified in 17CW3002. For the 11 rural lots that are the subject of this submittal, that would be a total of 3.53 acre-feet/year of the 9.32 acre-feet/year that was allotted in Division 2 Water Court case no. 2018CW3002.

Please note that standard water use rates, as found in the Guide to Colorado Well Permits, Water Rights, and Water Administration, are 0.3 acre-foot/year for each ordinary household, 0.05 acre-foot/year for four large domestic animals, and 0.05 acre-foot/year for each 1,000 square feet of lawn and garden irrigation.

Source of Water Supply

For the rural lots (Lots 1-11), the anticipated source of water is to be provided by on-lot wells producing from the Dawson aquifer that will operate pursuant to augmentation plans decreed



by the Division 2 Water Court in case no. 18CW3002 using water adjudicated in Case No. 17CW3002.

According to the decree entered by the Division 2 Water Court in case no. 17CW3002, the following amounts of water shown in Table 1, below, were determined to be available underlying the 225.97 acre property that includes the 68.135 acre property that is the subject of this proposal.

Aquifer	Tributary Status	Volume (AF)	Annual Allocation 100 Year (AF/Year)	Annual Allocation 300 Year (AF/Year)
Dawson	NNT	12,202	122.0	40.7
Denver	NNT	11,909	119.1	39.7
Arapahoe	NT	9,796	98.0	32.7
Laramie-Fox Hills	NT	6,440	64.4	21.5
Total		40,347	403.5	134.6

The plan for augmentation decreed in Division 2 Water Court case no. 18CW3002 allows for diversion of 9.32 acre-foot annually from the Dawson aquifer for a maximum of 300 years.

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 **allocation** 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 **allocation** approach based on three hundred years, the annual estimated demand, for The Retreat at TimberRidge is 9.32 acre-feet as allowed by the augmentation plan. As a result, the water may be withdrawn in that annual amount for a maximum of 300 years.

For the urban lots (Lots 12-70), the proposed water supplier is the proposed TimberRidge Metropolitan District via an intergovernmental agreement with the Sterling Ranch Metropolitan District No. 1 ("District") and an April 12, 2018 letter of commitment from the District was included with the submittal.

According to the submittal, the Retreat at TimberRidge will convey water rights from the Arapahoe and Laramie-Fox Hills aquifers to the District utilizing the water rights shown in Table 2, below.

Table 2 – Denver Basin Ground Water Rights

Aquifer	Decree	Tributary Status	Volume (AF)	Annual Allocation 100 Year (AF/Year)	Annual Allocation 300 Year (AF/Year)
Laramie-Fox Hills	17CW3002 18CW3002	NT	3,644 (6,440 total, 2,796 reserved for augmentation)	36.44	12.15
Arapahoe	17CW3002	NT	9,796	97.96	32.65
Laramie-Fox Hills	16CW3095	NT	1,005	10.05	3.35
Arapahoe	16CW3095	NT	175 (1,499 total, 1,324 reserved for augmentation)	1.75	0.58
Total			14,620	146.20	48.73

According to the submittal, in addition to the water that will be conveyed from the Applicant, the District will provide additional water to a central system on a 300 year basis to make up the estimated 9.16 annual acre-foot shortfall out of the District’s overall sources of supply. An April 12, 2018 letter from the District was included with the submittal which states that the District will contribute an estimated 14.11 acre-feet to the subdivision and provide water and wastewater services to 164 lots in the Retreat at TimberRidge.

Additional Comments

Should the development include construction and/or modification of any storm water structure(s), the Applicant should be aware that, unless the storm water structure(s) 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, available on the website for the Colorado Division of Water Resources at: <http://water.state.co.us/DWRIPub/Documents/DWR%20Storm%20Water%20Statement.pdf>, to ensure that the notice, construction and operation of the proposed structure meets statutory and administrative requirements.

State Engineer’s Office Opinion

At this time, it appears that the District has 57.89 acre-feet per year of obligation to deliver for the proposed development, The Retreat at TimberRidge. The Preliminary Plan estimated a demand of 57.89 acre-feet per year, of which 20.827 acre-feet/year is committed in Filing 1, the subject of this submittal.

Based on the above, and pursuant to CRS 30-28-136(1)(h)(l), it is our opinion that the proposed water supply can be provided without causing material injury to decreed water rights, and is **adequate**, so long as the plan for augmentation is operated according to its decreed terms and 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 the demands of the proposed subdivision.

Our opinion is qualified by the following:

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 Division 2 Water Court case no. 16CW3095, 17CW3002, 18CW3002, and 18CW3005 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 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. Furthermore, that applicant will need to apply for, and obtain a new well permits 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,



Kate Fuller, P.E.
Water Resource Engineer

cc: Bill Tyner, Division 2 Engineer
Doug Hollister, District 10 Water Commissioner