



May 3, 2019

Gabe Sevigny, Project Planner
 El Paso Planning & Community Development
 Transmitted via email: GabeSevigny@elpasoco.com

RE: Loudermilk Minor Subdivision, MS192
 S1/2 of the SE1/4 of the NE1/4 of Section 23, T11S, R65W, 6th P.M.
 Kiowa Bijou Designated Basin
 Water Division 1, Water District 1

Dear Mr. Sevigny:

We have reviewed the information received on April 11, 2019 regarding the above referenced proposal to subdivide a 19.873-acre property into two lots.

Water Supply Demand

According to the December 18, 208 letter from James J. Petrock (Water Supply Letter), the estimated annual water requirements for each lot total 1 acre-foot for in-house use (0.3 acre-feet per year), irrigation of 10,000 square-feet of home lawn, garden and trees (0.65 acre-feet per year) and the watering of 4 large domestic animals (0.05 acre-feet per year). The total annual demand for the subdivision would be 2 acre-feet.

Source of Water Supply

According to the Water Supply Letter each lot will be served by an individual well in the not nontributary Dawson aquifer which will be permitted pursuant Determination of Water Right no. 3619-BD and its associated replacement plan.

Determination of Water Right nos. 3616-BD, 3617-BD, 3618-BD and 3619-BD were issued by the Ground Water Commission (“Commission”) on December 11, 2018, for the parcel that is the subject of this referral. The following amounts of water were determined to be available:

Aquifer	Determination of Water Right Number	Annual amount available based on 100 yr. allocation approach (acre-feet/year)	Type
Dawson	3619-BD	17.1	Not Nontributary-Actual
Denver	3618-BD	12.2	Nontributary
Arapahoe	3617-BD	8.84	Nontributary
Laramie-Fox Hills	3616-BD	6.0	Nontributary

The proposed source of water for this development 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 37-90-107(7)(a), C.R.S., "Permits issued pursuant to this subsection (7) shall allow withdrawals on the basis of an aquifer life of 100 years." Based on this allocation approach, the annual amounts of water determined in 3616-BD, 3617-BD, 3618-BD and 3619-BD are equal to one percent of the total amount, as determined by Rule 5.3.2.1 of the Designated Basin Rules, 2 CCR 410-1. Therefore, the water may be withdrawn in those annual amounts for a maximum of 100 years.

Withdraw of the not-nontributary Upper Dawson Aquifer ground water that is the subject of Determination of Water Right no. 3619-BD requires Ground Water Commission ("Commission") approval of a replacement plan. That replacement plan was approved by the Commission on December 11, 2018. The replacement plan allows for 2 wells with each well limited to use in 1 single family residence, irrigation of 10,000 square feet of lawn, garden and trees and watering of 4 domestic animals. These allowed uses are consistent with the proposed uses specified in the Water Supply Letter.

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 Applicant's replacement plan allows withdrawal of Dawson aquifer water for 300 years, therefore withdrawals under that plan would meet the county's requirement of providing the average annual demand of the subdivision for a period of 300 years.

Well permit no. 83011-F was issued on March 18, 2019 for use of an existing well located on the subject property, that was previously operated under well permit no. 171879. The well permit is issued pursuant to Determination of Water Right No. 3619-BD and its associated Replacement Plan. Based on the Water Supply Letter this well will be used to serve one of the proposed lots.

State Engineer's Office Opinion

Based upon the above and pursuant to Sections 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 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 on the subdivided land 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 amounts of water in the Denver Basin aquifer, 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 Joanna Williams at (303) 866-3581 x8265.

Sincerely,



Ec: Division 1 Division Engineer
District 1 Water Commissioner
Loudermilk Minor Sub_May2019.docx
Subdivision File 26474
Permit No. 171879

Keith Vander Horst, P.E.
Chief of Water Supply, Basins