



December 17, 2020

John Green
El Paso County Development Services Department
DSDcomments@elpasoco.com

RE: Jeanette Mose Minor Subdivision
Part of the NW ¼ of the SE ¼ of Sec. 8, T12S, R64W, 6th P.M.
Water Division 2, Water District 10
Upper Black Squirrel Designated Basin
Upper Black Squirrel Groundwater Management District

Dear Mr. Green:

We have reviewed your November 25, 2020 submittal concerning the above referenced proposal to subdivide 6.12 acres into 2 residential lots.

Water Supply Demand

According to the submitted Water Supply Information Summary Sheet and Water Resources Report for Jeanette Mose Minor Subdivision dated August 3, 2020 by Julia Murphy (“Water Resources Report”) the total estimated water requirement is 0.92 acre-feet/year (0.46 acre-feet per year per residential lot). The estimated water requirement of 0.46 acre-feet/year per residential lot assumes that 0.3 acre-foot per year is required for in-house use; 0.11 acre-feet per year is required for irrigation of up to 1,600 square feet of lawn and garden; and 0.05 acre-feet per year is required for watering of four large domestic animals.

Source of Water Supply

According to the Water Resources Report, the proposed source of water supply is individual on-lot wells producing from the not-nontributary Dawson Aquifer that would be permitted pursuant to the replacement plan for Determination of Water Right no. 573-BD. The submitted information includes a Quitclaim Deed, Assignment and Assumption transferring to Gilber and Jeanette Mose, 276 acre-feet total, limited to 0.92 acre-feet per year and 0.46 acre-feet per year per well for no more than two wells from the Dawson aquifer subject to the terms and conditions of Determination of Water Right no. 573-BD dated August 25, 2004 and the Replacement Plan for Determination of Water Right No. 573-BD dated June 27, 2007.

Determination of Water Right no. 573-BD was issued by the Ground Water Commission (“Commission”) on August 25, 2004 for an allowed average annual amount of withdrawal of ground water of 26.5 acre-feet from the Dawson Aquifer (based on an aquifer life of 100 years) to be used on 60.17 acres described as the North Tract (which include the 6.12 acre subject subdivision) and 4.2 acre-feet from the Dawson Aquifer (based on an aquifer life of 100 years) to be used on 9.55 acres described as the South Tract.

On June 27, 2007 the Commission approved Replacement Plan for Determination of Water Right no. 573-BD. Replacement Plan No. 1 for Determination of Water Right no. 573-BD allows for



the withdrawal of 2.3 acre-feet per year of ground water from the Dawson aquifer for 300 years, through individual wells to be located on 5 residential lots on the 9.5 acres of the South Tract and a portion of the North Tract, of which the subject 6.12 acres is a part. Each well may withdraw 0.46 acre-feet per year of ground water to be used for use in-house use, the irrigation of 1,600 square feet of lawn and gardens and the watering of up to four large domestic animals. These allowed uses are consistent with the proposed uses specified in the Water Supply Report for the two lots of the minor subdivision.

The proposed source of water for this development is a bedrock aquifer allocation from the Denver Basin. The State Engineer's Office does not have evidence regarding the length of time for which the bedrock aquifer sources 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 Determination of Water Right No. 573-BD is 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.

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 the bedrock aquifer sources 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 average annual amount of withdrawal of 2.76 acre-feet/year of Determination of Water Right no. 573-BD would be reduced to one third of that amount, or 0.92 acre-feet/year. As a result, the water may be withdrawn in those annual amounts for a maximum of 300 years. In addition, 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.

State Engineer's Office Opinion

Based upon the above and pursuant to Sections 30-28-136(1)(h)(I), 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.

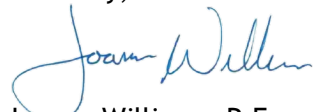
Our opinion is qualified by the following:

The Colorado Ground Water Commission has retained jurisdiction over the final amount of water available pursuant to the above-referenced Determination of Water Right(s), pending actual geophysical data from the aquifer.

The amounts of water in the Denver Basin aquifers, 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.

If you, or the applicant, have any questions, please contact Ailis Thyne at 303-866-3581 ext. 8216.

Sincerely,

A handwritten signature in blue ink that reads "Joanna Williams". The signature is fluid and cursive.

Joanna Williams, P.E.
Water Resources Engineer

Ec: Division 2
Project no. 27026

Jeanette Mose Minor.docx