212/1

## STATE OF COLORADO

OFFICE OF THE STATE ENGINEER

Division of Water Resources
Department of Natural Resources

1313 Sherman Street, Room 818 Denver, Colorado 80203 Phone (303) 866-3581 FAX (303) 866-3589

http://www.water.state.co.us

August 6, 2007



Bill Ritter, Jr. Governor

Harris D. Sherman Executive Director

(Vacant) State Engineer

Raimere Fitzpatrick El Paso County Planning Dept. 2880 International Circle, Suite 110 Colorado Springs, CO 80910-3127

RF.

SP-07-014 - Prairie Ridge Subdivision

Section 12, T11S, R66W, 6<sup>th</sup> P.M. Water Division 1, Water District 8

Dear Mr. Fitzpatrick:

We have reviewed your July 17, 2007 submittal concerning the above referenced proposal to subdivide 40.67 acres into seven residential lots ranging in size from 5.1 acres to 6.18 acres.

## **Water Supply Demand**

The water supply information summary states that each lot will require 1.0 acre-foot of water annually for inhouse use in one dwelling, the watering of 2 large domestic animals and other uses that were not defined. According to the decree granted in Division 1 Water Court case no. 2006CW100 (Division 2 Water Court case no. 2006CW20), inhouse use will require 0.3 acre-feet of water annually, landscape irrigation will require 0.04 acre-feet of water annually per 1,000 square feet of lawn and garden, livestock watering will require 0.011 acre-feet of water annually per large domestic animal, hot tubs will require 0.004 acre-feet of water annually and swimming pools will require 0.025 acre-feet of water annually. Since the water supply information summary that you submitted did not identify specific uses for each lot, the well permit applicants must clearly specify their proposed uses on the well permit application. The applications must specify the number of dwellings, square-feet of lawn and garden, number of domestic animals and whether a hot tub and/or swimming pool will be filled. The uses proposed on the application must be limited so that the annual proposed water use of 1.0 acre-foot per lot will not be exceeded, based on the water use requirements specified above and in the decree. Furthermore, at lease one-single family dwelling must be indicated on the applications and the first home per lot must be occupied prior to using the well for the other uses.

## Source of Water Supply

The proposed source of water is individual on lot wells producing from the notnontributary Dawson aquifer that will operate pursuant to the decree and plan for augmentation in Division 1 Water Court case no. 2006CW100. The allowed average annual amount of withdrawal decreed in case no. 2006CW100 from the Dawson aquifer is 36.6 acre-feet of which 21 acre-feet is included in the augmentation plan. The plan for augmentation decreed in case no. 2006CW100 allows for an average annual diversion of 7 acre-feet 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 <u>allocation</u> approach, the annual amounts of water decreed in 2006CW100 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.

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 allowed average annual amount of withdrawal of 21 acre-feet/year would be reduced to one third of that amount, or 7 acre-feet/year, which is equal to the annual demand for this subdivision. As a result, the water may be withdrawn in that annual amount for a maximum of 300 years.

Applications for on lot well permits, submitted by an entity other than the current decree holder (Kennith I. Rushing and Carol A. Rushing Revocable Trust Under Instrument Dated March 13, 1998), must include evidence that the applicant has acquired the right to the portion of water being requested on the application.

## 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 aquifers, 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 have any questions, please contact Joanna Williams of this office.

Sincerely,

Kevin G. Rein, P.E. Chief of Water Supply

Novin A. Rein

KGR/JMW

CC:

Jim Hall, Division 1 Office Water Supply Branch Subdivision File