



DEPARTMENT OF NATURAL RESOURCES

 DIVISION OF WATER RESOURCES
John W. Hickenlooper
GovernorMike King
Executive DirectorDick Wolfe, P.E.
Director/State Engineer

June 4, 2013

Kari Parsons
DSDcomments@elpasoco.com

RE: Reserve at Corral Bluffs – Preliminary Plan; SP-12-001
 Reserve at Corral Bluffs – Filing 1, Final Plat; SF-13-006
 Sections 31 & 32, T13S, R64W, 6th P.M.
 Water Division 8, Water District 10

Dear Ms. Parsons:

This current March 9, 2013 submittal answers questions in our previous letter dated April 13, 2012 regarding which water rights are relied upon for on-lot wells, allowing this office to revise our opinion of the entire Preliminary Plan – SP-12-001. Your March 9, 2013 submittal is also for a final plat of the first filing within the Reserve at Corral Bluffs Preliminary Plan.

The March 12, 2012 Preliminary Plan submittal proposed to subdivide 186.38 acres into 31 residential lots comprised of 5+ acres. The March 9, 2013 submittal proposes the final plotting of 6 lots in Filing 1.

Water Supply Demand

According to the March 2012 submittal, the estimated water requirements are 0.50 acre-feet annually per lot, for in-house use in one single family dwelling, irrigation of 2,700 square feet of home lawn and garden, and the watering of four large domestic animals per lot. Water demand for 31 homes with 2,700 square-foot lawns and 4 horses each is calculated at 15.5 acre-feet per year according to the submitted Wm. Curtis Wells & Co. report dated November 28, 2011. This concurs with the submitted Water Supply Information Summary.

Source of Water Supply

The proposed source of water is individual on-lot wells producing from the non-tributary (4% replacement) Arapahoe and Denver aquifers that will operate pursuant to Determination of Water Right nos. 516-BD and 517-BD, respectively.

The allowed average annual amount of withdrawal provided for in Determination of Water Right no. 516-BD is 55.1 acre-feet from the Arapahoe aquifer and for Determination of Water Right no. 517-BD is 31.5 acre-feet from the Denver aquifer. The allowed use of ground water for each well under this plan is domestic, livestock watering, irrigation, commercial and replacement supply.

Office of the State Engineer

1313 Sherman Street, Suite 818 • Denver, CO 80203 • Phone: 303-866-3581 • Fax: 303-866-3589
www.water.state.co.us

The subdivision lies within the allowed place of use of Determination of Water Right nos. 516-BD and 517-BD, and the proposed uses are uses allowed by those Determinations.

According to the March 2013 submittal, in a letter dated April 9, 2013 from Land Resource Associates, Lots 1-21 will access either the Denver aquifer or the Arapahoe aquifer and Lots 22-31 will access only the Arapahoe aquifer.

The proposed source of water for this subdivision are bedrock aquifers 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 1940-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.

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 allowed average annual amount of withdrawal of 55.1 acre-feet from the Arapahoe aquifer pursuant to 516-BD would be reduced to one third of that amount, or 18.4 acre-feet, and the allowed average annual amount of withdrawal of 31.5 acre-feet from the Denver aquifer pursuant to 517-BD would be reduced to one-third of that amount, or 10.5 acre-feet. As a result, the water may be withdrawn in that annual amount for a maximum of 300 years.

The annual supply of 18.4 acre-feet from the Arapahoe aquifer is more than the annual demand of 15.5 acre-feet from the Arapahoe aquifer should all 31 lots utilize the Arapahoe aquifer. The annual supply of 10.5 acre-feet from the Denver aquifer would meet the annual demand of 10.5 acre-feet from the Denver aquifer should all of lots 1-21 utilize the Denver aquifer.

Applications for on lot well permits, submitted by an entity other than the current water right holder, 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 Sections 30-28-136(1)(h)(I) and 30-28-136(1)(h)(II), 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 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 Ground Water Commission has retained jurisdiction over the final amount of water available pursuant to the relevant determinations and well permits, pending actual geophysical data from the aquifer.

The amounts of water in the Denver Basin aquifer, 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 Justina P. Mickelson of this office.

Sincerely,



Keith Vander Horst, P.E.
Designated Basins Team Leader

cc: Division 2 Division Engineer
District 10 Water Commissioner
Upper Black Squirrel Creek GWMD

KVH/JPM: ReserveatCorralBluffs_2013April.doc