



September 21, 2022

Matthew Fitzsimmons, Project Manager
 El Paso County Development Services Department
 Transmitted via the EPC EDARP Portal: <https://epcdevplanreview.com>

RE: Ivilo Minor Subdivision
 Part of the SW ¼ of the NE ¼ and the SE ¼ of the NW ¼, Section 6, T12S, R65W, 6th P.M.
 Water Division 1, Water District 8

Dear Matthew Fitzsimmons,

We have reviewed the submittal documents related to Ivilo Minor Subdivision, concerning the above referenced proposal to subdivide a 13.84 acre parcel into three single-family residential lots of 5.4 acres (Lot 1), 4.1 acres (Lot 2), and 4.6 acres (Lot 3). This office previously provided comments to a proposed subdivision for the same 13.84 acre property by our letter dated August 27, 2019, when the proposal was to subdivide the 13.84 acre parcel into two lots.

Water Supply Demand

Based on the water supply information summary and the March 2022 Water Resource Report from JDS-Hydro Consultants Inc. (“Report”) the estimated annual water requirements totals 0.78 acre-feet for in-house use (0.26 acre-feet/lot), 1.868 acre-feet for irrigation of up to 11,000 square-feet per lot (0.0566 acre-feet/1,000 square-feet) and 0.33 acre-feet for the watering of 30 horses (10 horses/lot assuming 0.011 acre-feet/horse). The total annual demand for the subdivision would be 3.0 acre-feet.

Source of Water Supply

The proposed water source is individual on lot wells constructed in the Dawson aquifer operating pursuant to the decreed augmentation plan in consolidated case nos. 2018CW3077 (Division 1) and 2018CW3035 (Division 2) amended by case no. 21CW3048 (Division 2). The decree consolidated case nos. 2018CW3077 (Division 1) and 2018CW3035 (Division 2) quantified the amount of water underlying the subject 13.84 acre parcel. The following amounts of water were determined to be available underlying the 13.84-acre parcel:

Aquifer	Annual amount available for 13.84 acre parcel (acre-feet)		Type
	Based on 100 year allocation approach	Based on 300 year allocation approach	
Dawson	11.6	3.87	Not-Nontributary
Denver	11.6	3.87	Not-Nontributary 4%
Arapahoe	5.53	1.84	Nontributary
Laramie-Fox Hills	3.84	1.28	Nontributary



The decreed augmentation plan in the amended case no. 21CW3048 allows for the total annual withdrawal of 3.0 acre-feet (1 acre-foot/year/lot) from the not nontributary Dawson aquifer, based on a 300 year allocation approach. The augmentation plan states that indoor use will utilize an estimated 0.26 acre-feet of water per year per residence, with remaining 0.74 acre-feet per year pumping entitlement available for other uses, including, irrigation of lawn and garden, and the watering of horses or equivalent livestock.

There is an existing well on the property operating under permit no. 82898-F. This well is constructed in the not nontributary Dawson aquifer and operates pursuant to the decreed augmentation plan in Division 2 Water Court case no. 18CW3035 as Woodard Well No. 1 and is permitted to withdraw 1.2 acre-foot per year for household use, irrigation of lawn and garden, greenhouse irrigation, equipment and structure washing and the watering of horses, chickens or equivalent livestock. Well permit no. 82898-F is required to be re-permitted pursuant to the amended augmentation plan in case no. 21CW3048. Our records show that the applicant submitted a new application (receipt no. 10024002) to re-permit the existing well for the uses and amount described in 21CW3048 and this application is pending evaluation.

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 in consolidated case nos. 18CW3035 and 18CW3077 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.

The *El Paso County Land Development Code*, Section 8.4.7.(B)(7)(b) states:

“(7) Finding of Sufficient Quantity

(b) Required Water Supply. The water supply shall be of sufficient quantity to meet the average annual demand of the proposed subdivision for a period of 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 proposed annual water demand equals the allowed average annual amount of withdrawal of 3 acre-feet per year, allowed by the augmentation plan in the amended case no. 21CW3048. 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 entities other than the water court Applicant in case no. 21CW3048 (Pawel Posorski) must include evidence that the Applicant has acquired the right to the portion of the water being requested on the application.

State Engineer's Office Opinion

Based upon the above and pursuant to Section 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 decreed water rights, provided well permit no. 82898-F is re-permitted to operate pursuant to the amended augmentation plan in case no. 21CW3048.

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 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 me at this office at 303-866-3581 x8246 or ioana.comaniciu@state.co.us

Sincerely,



Ioana Comaniciu, P.E.
Water Resource Engineer

Ec: Subdivision file: 30478
File permit no. 82898-F
Pending application receipt no. 10024002