

September 17, 2024

Kari Parsons, Project Manager El Paso County Development Services Department Sent via online portal at: <u>https://epcdevplanreview.com</u>

Re: Retreat at Prairie Ridge Phase 1, Filings 1-3 (a.k.a. Jaynes) File #: SP239 Part of Sections 28 and 33, Twp. 12 South, Rng. 65 West, 6th P.M. Water Division 2, Water District 10 CDWR Assigned Referral No. 31142 - 3rd Letter (also related to referral no. 30457)

Dear Kari Parsons:

We have received the re-referral to subdivide 142.13 acres (previously 108.89 acres) into 193 singlefamily lots, a community park, open space, detention facilities, and two future development tracts as part of Phase 1 of the Retreat at Prairie Ridge Preliminary Plan. Phase 1 is for the development of Filings 1-3 which include the 193 single-family lots, whereas the two future development tracts will be platted in future filings. The proposed source of water is service provided by the Falcon Area Water and Wastewater Authority (FAWWA).

These comments supersede our previous letter dated August 21, 2024.

Water Supply Demand

The water demand for this development is 70.93 acre-feet/year for household purposes and irrigation, including irrigation of common areas, for all 193 lots.

Source of Water Supply

The proposed source of water supply for all 193 is central service provided by the FAWWA. The alternate supply proposed for the 6 larger lots is individual on lot wells, including well no. 285607 which will be re-permitted, withdrawing Dawson water available to FAWWA as described in the Water Resources Report dated September 11, 2024 ("Report"). The Dawson aquifer water underlying the subject lots was decreed in case no. 07CW56 and included as part of the FAWWA's Well Field in case no. 23CW3009, and pending augmentation in case no. 24CW3007. Well no. 285607 must be plugged and abandoned or augmented under case no. 24CW3007 upon subdivision approval.

According to the letter dated September 11, 2024, the FAWWA is committed to providing the 70.93 acre-feet/year of water required by all 193 lots and miscellaneous landscaping.



According to the Report, the FAWWA has a water supply of 1,962.23 acre-feet/year¹ based on a 300year supply consisting of Denver Basin aquifer water adjudicated in Water Court case nos. 85CW131 (Shamrock West water), 86CW19, 91CW35, 93CW18/85CW445 (Bar-X Ranch water), 07CW56 (augmentation plan pending approval in 24CW3007), 08CW113, 17CW3002, 18CW3002, 20CW3059, 23CW3009 (Well Field and Augmentation Plan), and Determination of Water Right nos. 1689-BD, 1690-BD, and 1691-BD (McCune water). A summary of these water rights is provided in Table 2 of that Report.

According to the Report, the FAWWA has 1,033.87 acre-feet/year based on a 300-year supply in commitments as of September 11, 2024, resulting in 928.36 acre-feet/year based on a 300-year supply of uncommitted supply.²

Allocation Approach

The proposed source of water for this subdivision is 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. The Denver Basin water rights adjudications have been decreed by the State of Colorado, Water Division 1 District Court, Water Division 2 District Court, and the Colorado Groundwater Commission. According to section 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." Additionally, according to section 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 <u>allocation</u> approach, the annual amounts of water allocated in the decrees and determinations are equal to one percent of the total amount, and as determined by Rules 8.A and 8.B of the Statewide Nontributary Ground Water Rules, 2 CCR 402-7 and 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 shown on attached Table 1 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 <u>allocation</u> approach based on 300 years, the allowed average annual amount of withdrawal would be reduced to one third of that amount or 1,970.53 acrefeet/year, which is <u>greater</u> than the annual demand of FAWWA's commitments of 1,033.87 acre-

¹ Note that our office calculates that 1,970.53 acre-feet/year is available based on a 300-year supply. The discrepancy appears to be in part due to the amounts in Table 2 of the Report for case nos. 91CW35 and 07CW56 which are not consistent with the decreed amounts. FAWWA is limited to the decreed amounts. ² This calculation is not consistent with our estimate of 938.50 acre-feet/year available based on 1,032.03 acre-feet/year of commitments. The reason for this discrepancy is unclear.

feet/year. As a result, the water may be withdrawn in those annual amounts for 300 years. Therefore, there appears to be more than sufficient legal supply to supply this development on a 300-year basis.

Well No. 34030

A review of our records previously showed well permit no. 34030 may be located on the subject property. The Applicant has performed a field search and found what is believed to be remnants of this well. According to the Report, this well will be abandoned. This office has no concerns so long as an activity to plug, seal, and abandon the well are in accordance with the <u>Well Construction</u> <u>Rules</u> and a <u>Well Abandonment Report</u> is filed with this office.

Additional Comments

The application materials indicate that stormwater detention structure(s) may be part of this project. The Applicant should be aware that unless the structure(s) can meet the requirements of a "storm water detention and infiltration facility" as defined in section 37-92-602(8), C.R.S., the structure(s) may be subject to administration by this office. The Applicant should review DWR's <u>Administrative Statement Regarding the Management of Storm Water Detention Facilities and Post-Wildland Fire Facilities in Colorado</u> to ensure that the notification, construction and operation of the proposed structure meets statutory and administrative requirements. The Applicant is encouraged to use the <u>Colorado Stormwater Detention and Infiltration Facility Notification Portal</u> to meet the notification requirements.

State Engineer's Office Opinion

Based upon the above and pursuant to section 30-28-136(1)(h)(I) and section 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 **so long as:**

- 1. Well no. 34030 is properly plugged and abandoned upon subdivision approval and the <u>Well</u> <u>Abandonment Report</u> is filed with this office; and
- 2. Well no. 285607 is either augmented under case no. 24CW3007 or properly plugged and abandoned upon subdivision approval and the <u>Well Abandonment Report</u> is filed with this office upon subdivision approval.

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 <u>allocation</u> 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 Water Court and Ground Water Commission have retained jurisdiction over the final amount of water available pursuant to the above-referenced water rights, pending actual geophysical data from the aquifer.

The amounts of water in the Denver Basin aquifer, 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 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.

Please contact Wenli.Dickinson@state.co.us or (303) 866-3581 x8206 with any questions.

Sincerely,

Suaucin

Ioana Comaniciu, P.E. Water Resource Engineer

Attachments: Table 1 - SEO Calculations of FAWWA Supplies

Ec: Permit nos. 285607 and 34030 files

Sterling Ranch Metropolitan District Water Supplies	Aquifer	Finding / Determination / Decree	Tributary Status	Volume (AF)	Annual Allocation 100 Year (AF/yr)	Annual Allocation 300 Year (AF/yr)	Evidence of Ownership	Notes
Last Updated		85CW131	NT	0.00	0.00	0.00	Special Warranty Deed	Not included in FAWWA's calculations of water supply.
Wenli Dickinson	n	93CW18/85CW445	NT	55200.00	552.00	184.00	Special Warranty Deed	Applicant was deeded 552af of NT KLF water decreed in 85CW445 in two separate transactions
9/16/2024		86CW19	NT	53900.00	539.00	179.67	FAWWA Assignment from SR Water	Under 1410 acres
	Laramie Fox Hills	91CW35	NT	3600.00	36.00	12.00	Quit Claim	Does not match Table 2 of Report
		07CW0056	NT	3850.00	33.70	11.23	Quit Claim	480af reserved for augmentation under 24CW3007
		08CW113	NT	40.00	0.40	0.13	FAWWA Assignment from SR Water	
		17CW3002	NT	6440.00	64.40	21.47	Assignment/Assumption Agreement	Applicant only deeded 64.4af of 98af of NT KA)
		17CW3002	NT	-612.00	-6.12	-2.04	-	PPD Augmenting 29 wells; relinquished
		17CW3002	NT	-2796.00	-27.96	-9.32	-	Reserved for post-pumping for 18CW3002
		20CW3059	NT	2780.00	27.80	9.27	FAWWA Assignment from SR Water	
		1689-BD	NT	26300.00	263.00	87.67	Special Warranty Deed	
	Arapahoe	85CW131	NT	47400.00	474.00	158.00	Special Warranty Deed	Presumably applicant only owns 474af of the 616 af of NT KA decreed in 85CW131
		85CW131	NNT	2500.00	0.00	0.00	Special Warranty Deed	Needs Augmentation, presumably applicant only owns 25af of 237af NNT KA decreed in 85CW131
		86CW18	NT	57500.00	575.00	191.67	FAWWA Assignment from SR Water	
		91CW35	NT	4900.00	49.00	16.33	Quit Claim	Does not match Table 2 of Report
		93CW18/85CW445	NT	79050.00	790.50	263.50	Special Warranty Deed	Applicant was deeded 790.50af of 813 NT KA water decreed in 85CW445 in two separate transactions
		07CW0056	NT	5800.00	58.00	19.33	Quit Claim	Does not match Table 2 of Report
		08CW113	NNT	60.00	0.60	0.20	FAWWA Assignment from SR Water	5
		17CW3002	NT	12828.00	128.28	42.76		Under 225.97 acres, does not appear to be a proportional amount.
		20CW3059	NNT	4311.00	43.11	14.37	FAWWA Assignment from SR Water	5
		1690-BD	NT	39800.00	398.00	132.67	Special Warranty Deed	Place of use includes Sterling Ranch Metro's boundaries; Sterling Ranch assigned all water/sanitary service to FAWWA via Assigr
		85CW131	NT	18700.00	187.00	62.33	Special Warranty Deed	
		85CW131	NNT	105700.00	0.00	0.00	Special Warranty Deed	Needs Augmentation, presumably applicant only owns 1057af of 1945af of NT TKD water decreed in 85CW131
		91CW35	NNT	7600.00	0.00	0.00	Quit Claim	Needs Augmentation, not included in FAWWA's calculations of water supply
		93CW18/85CW445	NT	126000.00	1260.00	420.00	Special Warranty Deed	Applicant was deeded 1,260af of 1,360 NT TKD water decreed in 85CW445 in two separate transactions
	Denver	93CW18	NT	-82167.00	-821.67	-273.89	-	Post-pumping depletions reservation under 20CW3059
		07CW0056	NNT	6920.00	0.00	0.00	Quit Claim	Pending augmentation under 23CW3009
		08CW113	NNT	72890.00	728.90	242.98	FAWWA Assignment from SR Water	5
		20CW3059	NNT	4556.00	45.56	15.19	FAWWA Assignment from SR Water	Requires Permit 26947-F to be repermitted (has not happened as of 2022); augmented under 20CW3059
		1691-BD	NT	51300.00	513.00	171.00	Special Warranty Deed	Place of use includes Sterling Ranch Metro's boundaries; Sterling Ranch assigned all water/sanitary service to FAWWA via Assign
	Dawson	85CW131	NNT	49800.00	0.00	0.00	Special Warranty Deed	Needs Augmentation, presumably applicant only owns 498af of 1710af of NNT TDW water decreed in 85CW131
		91CW35	NNT	3400.00	0.00	0.00	Quit Claim	Needs Augmentation, not included in FAWWA's calculations of water supply
		93CW18/85CW445	NNT	128800.00	0.00	0.00	Special Warranty Deed	Needs Augmentation
		07CW0056	NNT	3490.00	0.00	0.00	Quit Claim	Augmented under 23CW3009
		08CW113	NNT	39250.00	0.00	0.00	FAWWA Assignment from SR Water	Not included in FAWWA's calculations of water supply.
		16CW3095	NNT	0.00	0.00	0.00	Not owned by FAWWA	Augments 10 residential wells for 300 years; private wells not owned by FAWWA
		18CW3002	NNT	0.00	0.00	0.00	Not owned by FAWWA	Augmentation Plan for 17CW3002 for 300 years, private wells not owned by FAWWA
		20CW3059	NNT	975.00	9.75	0.00	FAWWA Assignment from SR Water	Not included in FAWWA's calculations of water supply.
	1	Determination Total		117400.00	1174.00	391.34		
		Water Court Total		822665.00	4747.25	1582.42		Includes water that is not augmenated.
	Tot	al Currently Available		591159.00	5911.59	1970.53		The total in May 20, 2023 Table 3 appears to exclude the water augmentated under 16CW3095, 18CW3002, 20CW3059
	_	Commitments		309609.80	3096.10	1032.03		As of September 2024
	То	tal Supply Remaining		281549.20	2815.49	938.50		

Notes

1 The Sterling Ranch Metropolitan District is wholly contained within FAWWA and is the largest part of FAWWA