

January 16, 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 Filing No. 1 (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 Subdivision File No. 31142

Dear Kari Parsons:

We have received the above-referenced submittal to subdivide 108.89 acres into 217 single-family lots as part of Phase 1 of the Retreat at Prairie Ridge Preliminary Plan. The proposed source of water supply for 211 high density lots of the 217 proposed lots is service provided by the Falcon Area Water and Wastewater Authority (FAWWA). The proposed water supply for 6 rural lots of the 217 proposed lots are individual on lot wells, 5 of which will operate pursuant to the pending augmentation plan in Division 2 Water Court case no. 23CW3009, and one of which will use the existing well with permit no. 285607.

Water Supply Demand

The water demand for this development is 77.41 acre-feet/year, of which 75.33 acre-feet will be provided by the FAWWA and 2.08 acre-feet/year will be provided by individual wells for the 5 rural lots which require new wells. The 6th lot, which has an existing well with permit no. 285607, is not included in this estimate. Water will be used for household purposes and irrigation.

Source of Water Supply

211 High Density Lots

The proposed source of water supply for the 211 high density lots is service provided by the Falcon Area Water and Wastewater Authority (FAWWA). According to the letter dated December 4, 2023, the FAWWA is committed to providing the 75.33 acre-feet/year of water required by the 211 high density lots in Filing No. 1.

According to the Water Resources Report prepared by RESPEC dated December 2023 ("Report"), the FAWWA has a water supply of 1,930.03 acre-feet/year based on a 300-year 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), 08CW113, 17CW3002, 18CW3002, and 20CW3059 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 3 of that Report. Because FAWWA anticipates serving 3,710 SFEs in 2040 and 7,310 SFEs in 2060, FAWWA may seek to connect with other water suppliers and investigate the use of lawn irrigation return flow (LIRF) credits and aquifer storage/recharge to increase its supply. Note that our office calculates that 1,929.85 acre-feet/year is available based on a 300-year supply. This discrepancy appears to originate from a difference in the quantity of water calculated to be available from case no. 91CW35. The FAWWA should be aware that they are limited to the decreed amounts in 91CW35 which are as follows: 3,400 acre-feet from the Dawson aquifer, 7,600 acre-feet from the Denver aquifer, 4,900 acre-feet (not the 4,936 acre-feet claimed in Table 3) from the Arapahoe aquifer, and 3,600 acre-feet (not the 3,623 acre-feet claimed in Table 3) from the Laramie-Fox Hills aquifer.



There are 893.09 acre-feet/year of uncommitted supply available to the FAWWA based on our estimate of 1,929.85 acre-feet/year of supply and 1,036.76 acre-feet/year of commitments, including the 77.41 acre-feet water demand for this filing. Therefore, there appears to be more than sufficient legal supply to supply this development on a 300-year basis.

<u>6 Rural Lots</u>

The proposed water supply for the 5 larger lots is individual on lot wells to operate pursuant to the pending augmentation plan filed in Division 2 Water Court case no. 23CW3009. The 6th lot will be served by an existing well with permit no. 285607. According to the letter dated December 4, 2023, the FAWWA is committed to providing the 2.08 acre-feet/year of water required by the 5 rural lots in Filing No. 1.

The augmentation plan pending in case no. 23CW3009 proposes to allow for the use of all Denver Basin supplies within the FAWWA Well Field in the same formations (Denver and Arapahoe) under the same augmentation plan. The 23CW3009 augmentation plan would amend the previous augmentation plan approved in 20CW3059 and include the water adjudicated under the subject property in case no. 07CW56 in the FAWWA Well Field. The 07CW56 water is pending purchase by the FAWWA. The proposed plan would allow for the withdrawal of up to 258.16 acre-feet/year of not-nontributary Denver aquifer (from various decrees including 07CW56) for 300 years for municipal uses including, without limitation, domestic, commercial, industrial, irrigation of any irrigable acreage within the District boundaries or District service area, stock water, recreation, fish and wildlife propagation, fire protection, central water supply for such uses and also for exchange, aquifer recharge, replacement, and augmentation purposes. At the time of this review, the decree has not been signed, therefore, this amount is not final.

Applications for on lot well permits, submitted by an entity other than the current water right holder (FAWWA), must include evidence that the applicant has acquired the right to the portion of water being requested on the application.

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 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 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 one percent of 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 1,929.85, which is <u>greater</u> than the annual demand of FAWWA's commitments of 1,036.76 acre-feet/year. As a result, the water may be withdrawn in those annual amounts for 300 years.

There are 893.09 acre-feet/year of uncommitted supply available to the FAWWA based on our estimate of 1,929.85 acre-feet/year of supply and 1,036.76 acre-feet/year of commitments, including this filing. Therefore, there appears to be more than sufficient legal supply to supply this development on a 300-year basis. However, in order for wells located on the rural lots to withdraw the not-nontributary Denver aquifer water decreed in case no. 07CW56, the augmentation plan in case no. 23CW3009 must first be approved. Additionally, if wells located on the rural lots will withdraw water not allocated beneath the lots as part of the FAWWA Well Field, a decree allowing such withdrawal must first be approved.

Existing Wells

Section 37-92-602(3)(b)(III), C.R.S. requires that the cumulative effect of all wells in a subdivision be considered when evaluating material injury to decreed water rights. Well permit no. 285607 is proposed to continue to operate upon subdivision approval and serve one of the rural lots. Permit no. 285607 was issued pursuant to section 37-92-602(3)(b)(II)(A), C.R.S. on May 5, 2011 as the only well on 35.12 acres described as a portion of the NW ¼ of Section 28, Twp. 12 South, Rng. 65 West, 6th P.M. The well is permitted to withdraw 3 acre-feet/year from the not-nontributary Dawson aquifer, excluded from case no. 07CW56. Additionally, a review of our records shows well permit no. 34030 may be located on the subject property. This well was issued on May 31, 1968 for livestock watering and produces from the not-nontributary Dawson aquifer. **Prior to further review, the Applicant must clarify** if well no. 34030 is located on the subject property; whether well no. 34030, (if located on the subject property), and well no. 285607 will be covered by a court-approved augmentation or be plugged and abandoned upon subdivision approval; and if well no. 285607 will be used in the subdivision and withdraw water rights owned by the FAWWA, an updated estimate of water demand for all 6 rural lots including the lot with this well and an updated will serve letter must be provided.

Additional Comments

The application materials indicate that a stormwater detention structure will be constructed as a part of this project. The Applicant should be aware that unless the structure 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 may be subject to administration by this office. The Applicant should review DWR's Administrative Statement Regarding the Management of Storm Water Detention Facilities and Post-Wildland Fire Facilities in Colorado, attached, to ensure that the notification, construction and operation of the proposed structure meets statutory and administrative requirements. The Applicant is encouraged to use Colorado Stormwater Detention and Infiltration Facility Notification Portal to meet the notification requirements, located at https://maperture.digitaldataservices.com/gyh/?viewer=cswdif.

State Engineer's Office Opinion

Based upon the above and pursuant to section 30-28-136(1)(h)(I) and 30-28-136(1)(h)(II), C.R.S., this office has not received enough information to render an opinion regarding whether the proposed water supply is adequate and can be provided without causing injury to decreed water rights. In order to obtain a favorable opinion, the Applicant must provide the following information:

- 1. Evidence that the augmentation plan in 23CW3009 has been approved to allow for the issuance of Denver well permits for the rural lots or the withdrawal of water from the lots from the FAWWA Well Field.
- 2. If well no. 34030 is located on the subject property.

- 3. Whether well no. 34030, (if located on the subject property), and well no. 285607 will be covered by a court-approved augmentation or be plugged and abandoned upon subdivision approval.
- 4. If well no. 285607 will be used in the subdivision and withdraw water rights owned by the FAWWA, an updated estimate of water demand for all 6 rural lots including the lot with this well and an updated will serve letter must be provided.

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

Sincerely,

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Ioana Comaniciu, P.E. Water Resource Engineer

Attachment: Administrative Statement Regarding the Management of Storm Water Detention Facilities and Post-Wildland Fire Facilities in Colorado

Ec: Permit nos. 285607 and 34030 files



1313 Sherman Street, Room 821 Denver, CO 80203

Administrative Statement Regarding the Management of Storm Water Detention Facilities and Post-Wildland Fire Facilities in Colorado

February 11, 2016

The Division of Water Resources (DWR) has previously administered storm water detention facilities based on DWR's "Administrative Approach for Storm Water Management" dated May 21, 2011. Since the passage of Colorado Senate Bill 15-212, that administrative approach has been superseded. This document describes SB 15-212, codified in section 37-92-602(8), Colorado Revised Statutes (C.R.S.), and how the law directs administrative requirements for storm water management. The document is for informational purposes only; please refer to section 37-92-602(8) for comprehensive language of the law.

Pursuant to section 37-92-602(8), storm water detention facilities and post-wildland fire facilities shall be exempt from administration under Colorado's water rights system only if they meet specific criteria. The provisions of SB15-212 apply to surface water throughout the state. SB15-212 *only* clarifies when facilities may be subject to administration by the State Engineer; all facilities may be subject to the jurisdiction of other government agencies and must continue to obtain any permits required by those agencies.

Storm Water Detention Facilities

Pursuant to section 37-92-602(8), a storm water detention and infiltration facility ("Detention Facility") is a facility that:

- Is owned or operated by a government entity or is subject to oversight by a government entity, including those facilities that are privately owned but are required by a government entity for flood control or pollution reduction.
- Operates passively and does not subject storm water to any active treatment process.
- Has the ability to continuously release or infiltrate at least 97 percent of all of the water from a rainfall event that is equal to or less than a five-year storm within 72 hours of the end the rainfall event.
- Has the ability to continuously release or infiltrate at least 99 percent of all of the water from a rainfall event that is greater than a five-year storm within 120 hours of the end the rainfall event.
- Is operated solely for storm water management.



Administrative Statement: Storm Water and Post-Wildland Fire Facilities, DWR February 11, 2016 Page 2 of 5

In addition, to qualify for the allowances provided in SB-212, the facility:

- Must not be located in the Fountain Creek watershed, unless the facility is required by or operated pursuant to a Colorado Discharge Permit System Municipal Separate Storm Sewer System Permit issued by the Department of Public Health and Environment pursuant to Article 8 of Title 25, C.R.S.
- Must not use water detained in the facility for any other purpose nor release it for subsequent diversion by the person who owns, operates, or has oversight over the facility. The facility cannot be operated as the basis for a water right, credit, or other water use right.
- Must not expose ground water.
- May include a structure or series of structures of any size.

If the Detention Facility was constructed *on or before* August 5, 2015 and meets all the requirements listed above, it does not cause material injury to vested water rights and will not be subject to administration by the State Engineer.

If the Detention Facility is constructed after August 5, 2015, meets the requirements listed above, and the operation of the detention facility does not cause a reduction to the natural hydrograph as it existed prior to the upstream development, it has a rebuttable presumption of non-injury pursuant to paragraph 37-92-602(8)(c)(II). A holder of a vested water right may bring an action in a court of competent jurisdiction to determine whether the operation of the detention facility is in accordance with paragraph 37-92-602(8)(c)(II)(A) and (B) has caused material injury. If the court determines that the vested water rights holder has been injured, the detention facility will be subject to administration.

In addition, for Detention Facilities constructed after August 5, 2015, the entity that owns, operates, or has oversight for the Detention Facility must, prior to the operation of the facility, provide notice of the proposed facility to the Substitute Water Supply Plan (SWSP) Notification List for the water division in which the facility is located. Notice must include: the location of proposed facility, the approximate surface area at design volume of the facility, and data that demonstrates that the facility has been designed to comply with section 37-92-602(8)(b) paragraphs (B) and (C). The State Engineer has not been given the statutory responsibility to review notices, however, DWR staff may choose to review notices in the course of their normal water administration duties. Not reviewing notices does not preclude the Division Engineer from

Administrative Statement: Storm Water and Post-Wildland Fire Facilities, DWR February 11, 2016 Page 3 of 5

taking enforcement action in the event that the above criteria are not met in design and/or operation.

To satisfy the notification requirement, operators are encouraged to use the Colorado Stormwater Detention and Infiltration Facility Notification Portal developed by Urban Drainage and Flood Control District ("UDFCD"), located at: <u>https://maperture.digitaldataservices.com/gvh/?viewer=cswdif</u>.

Types of detention Facilities contemplated under this statute include underground detention vaults, permanent flood detention basins,¹ extended detention basins,² and full spectrum detention basins.³ Storm Water Best Management Practices⁴ (BMPs) not contemplated above, including all Construction BMPs and non-retention BMPs, do not require notice pursuant to SB-212 and are allowed at the discretion of the Division Engineer. Green roofs are allowable as long as they intercept only precipitation that falls within the perimeter of the vegetated area. Green roofs should not intercept or consume concentrated flow, and should not store water below the root zone. BMPs that rely on retention, such as retention ponds and constructed wetlands, will be subject to administration by the State Engineer.

Any detention facility that does not meet all of the statutory criteria described above, in design or operation, is subject to administration by the State Engineer.

⁴ Best management practice: A technique, process, activity, or structure used to reduce pollutant discharges in stormwater (Urban Drainage and Flood Control, 2010).



¹ Flood detention basin: An engineered detention basin designed to capture and slowly release peak flow volumes to mitigate flooding (Urban Drainage and Flood Control, 2010).

² Extended detention basin: An engineered detention basin with an outlet structure designed to slowly release urban runoff over an extended time period (Urban Drainage and Flood Control, 2010).

³ Full spectrum detention basin: An extended detention basin designed to mimic pre-development peak flows by capturing the Excess Urban Runoff Volume and release it over a 72 hour period (Urban Drainage and Flood Control, 2010).

Administrative Statement: Storm Water and Post-Wildland Fire Facilities, DWR February 11, 2016 Page 4 of 5

Post-Wildland Fire Facilities

Pursuant to section 37-92-602(8), a post-wildland fire facility is a facility that:

- Includes a structure or series of structures that are not permanent.
- Is located on, in or adjacent to a nonperennial stream⁵.
- Is designed and operated to detain the least amount of water necessary, for the shortest duration of time necessary, to achieve the public safety and welfare objectives for which it is designed.
- Is designed and operated solely to mitigate the impacts of wildland fire events that have previously occurred.

In addition, to qualify for the allowances provided in SB-212, the facility:

- Must be removed or rendered inoperable after the emergency conditions created by the fire no longer exist, such that the location is returned to its natural conditions with no detention of surface water or exposure of ground water.
- Must not use water detained in the facility for any other purpose nor release it for subsequent diversion by the person who owns, operates, or has oversight over the facility. The facility will not be operated as the basis for a water right, credit, or other water use right.

If the post-wildland fire facility meets the requirements listed above, it does not cause material injury to vested water rights. While DWR recognizes that post-wildland fire facilities are essential to the protection of public safety and welfare, property, and the environment, DWR may, from time to time, request that the person who owns, operates, or has oversight of the post-wildland fire facility supply information to DWR to demonstrate they meet the criteria set forth above.

If a post-wildland fire facility does not meet all the criteria set forth above, it will be subject to administration by the State Engineer.



⁵ DWR may use the National Hydrography Dataset or other reasonable measure to determine the classification of a stream

Administrative Statement: Storm Water and Post-Wildland Fire Facilities, DWR February 11, 2016 Page 5 of 5

Resources and References

Colorado Stormwater Detention and Infiltration Facility Notification Portal: https://maperture.digitaldataservices.com/gvh/?viewer=cswdif

Colorado Senate Bill15-212: http://www.leg.state.co.us/CLICS/CLICS2015A/csl.nsf/fsbillcont3/13B28CF09699E67087257DE80 06690D8?Open&file=212_enr.pdf

United States Geological Survey National Hydrography Dataset: http://nhd.usgs.gov/

Urban Drainage and Flood Control District 37-92-602(8) explanation memo and FAQ's: http://udfcd.org/crs-37-93-6028-explanation-memo-and-faqs/

Urban Drainage and Flood Control District. (2010). Urban Storm Drainage Criteria Manual: Volume 3, Best Management Practices, updated November 2015. Located at: <u>http://udfcd.org/volume-three</u>

