

December 11, 2023

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

Re: Sterling Ranch Filing No. 5 File #: SP235 Part of the SW ¼ of Sec. 33, Twp. 12 South, Rng. 65 West, 6<sup>th</sup> P.M. Water Division 2, Water District 10 CDWR Assigned Subdivision File No. 31087

Dear Kari Parsons:

We have received the above-referenced submittal to divide 11.66 acres known as Tract B of Sterling Ranch Filing No. 2 into 72 single-family lots. The proposed source of water supply is service provided by the Falcon Area Water and Wastewater Authority (FAWWA).

#### Water Supply Demand

The estimated water demand for residential use and irrigation is 24.26 acre-feet/year for all 72 lots.

### Source of Water Supply

The proposed source of water supply is service provided by the Falcon Area Water and Wastewater Authority (FAWWA). According to the letter dated March 31, 2023, the FAWWA is committed to serving the 24.26 acrefeet/year of water required by Filing No. 5.

According to the Water Resources Report prepared by RESPEC dated August 2023 ("Report") and the information provided by John McGinn on September 25, 2023 to this office, 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 acrefeet/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 970.5 acre-feet/year of uncommitted supply available to the FAWWA based on our estimate of 1,929.85 acre-feet/year of supply and 959.35 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.

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." Based on this <u>allocation</u> approach, the annual amounts of water decreed 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. 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 total amounts of water allocated in the determinations 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 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 which is <u>greater</u> than the annual demand of FAWWA's commitments. As a result, the water may be withdrawn in those annual amounts for 300 years.

A review of our records shows well permit no. 86007 may be located on the subject property. This well was decreed as the West Well in case no. W-1309 and permitted with permit no. 86007 for livestock use with an appropriation date of December 31, 1953, and 0.022 cfs (10 gallons per minute). The well depth is unknown. 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. As such, provided the well is completed into a tributary or not-nontributary source an augmentation plan is required to offset depletions caused by the pumping of all wells or else the well must be plugged and abandoned.

## 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 <a href="https://maperture.digitaldataservices.com/gvh/?viewer=cswdif">https://maperture.digitaldataservices.com/gvh/?viewer=cswdif</a>.

### 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 clarify whether well no. 86007 is located on the property and if so, clarify whether the well will be covered by a court-approved augmentation plan (provided the well is completed into a tributary or not-nontributary source) or plugged and abandoned upon subdivision approval. The Applicant may need to provide information regarding the well depth and perforated casing interval in order to determine whether a court-approved augmentation plan is required if the well will continue to operate after subdivision approval.

Please contact Wenli.Dickinson@state.co.us 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 no. 86007 file



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.



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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

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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,<sup>1</sup> extended detention basins,<sup>2</sup> and full spectrum detention basins.<sup>3</sup> Storm Water Best Management Practices<sup>4</sup> (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.

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



<sup>&</sup>lt;sup>1</sup> 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).

<sup>&</sup>lt;sup>2</sup> 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).

<sup>&</sup>lt;sup>3</sup> 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).

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## 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 stream<sup>5</sup>.
- 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.



<sup>&</sup>lt;sup>5</sup> DWR may use the National Hydrography Dataset or other reasonable measure to determine the classification of a stream

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## **Resources and References**

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

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: <a href="http://udfcd.org/crs-37-93-6028-explanation-memo-and-faqs/">http://udfcd.org/crs-37-93-6028-explanation-memo-and-faqs/</a>

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>

