



September 1, 2023

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

Re: Sterling Ranch East Filing No. 5
Part of the E ½ SE ¼ of Sec. 33 and W ½ SW ¼ of Sec. 34, Twp. 12S, Rng. 65W, 6th P.M.
Water Division 2, Water District 10

Dear Kari Parsons:

We have received the above-referenced submittal to divide 47.1 acres located in the E ½ of the SE ¼ of Sec. 33 and part of the W ½ of the SW ¼ of Sec. 34, Twp. 12S, Rng. 65W, 6th P.M. into 160 single-family lots, ROWs, community parks, open space, and tracts for detention facilities. This filing is directly east of Phase 1 consisting of Filings 1-4. 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 is 54.66 acre-feet/year for all 160 lots. The estimated water demand for irrigated landscaping is 2.42 acre-feet/year. Therefore, the total annual demand for this filing is 57.08 acre-feet/year.

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 August 11, 2023, FAWWA is committed to serving the 57.08 acre-feet/year of water required by Filing No. 5.

According to the Water Resources Report for the Sterling Ranch East Filing 5 Preliminary Plan dated August 2023 ("Report"), 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 (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. However, our office calculates that 1,944.40 acre-feet/year is available based on a 300-year supply summarized in Table 1, attached. This discrepancy appears to originate from a difference in the quantity of water calculated to be available from case no. 91CW35 and the Report's total does not appear to include the quantity augmented in the Dawson aquifer under case nos. 16CW3095, 17CW3002, and 18CW3002. Additionally, information that FAWWA has acquired ownership or control of the water decreed in case nos. 16CW3095, 17CW3002, and 18CW3002 and determination nos. 1689-BD, 1690-BD, and 1691-BD was not provided in the Report.

The proposed uses are allowed by the above decrees. However, the place of use of determination nos. 1689-BD, 1690-BD, and 1691-BD is limited to the 900.52 acres of land subject of the determinations and the boundaries of the Sterling Ranch Metropolitan District (SRMD). It is not clear whether the property is within the SRMD's service area or whether SRMD is part of FAWWA.

According to the Report, FAWWA has a total of 957.84 acre-feet/year of commitments, including all subdivisions committed through August 11, 2023. This number differs from the number the State Engineer's office (SEO) has on file. A list of FAWWA's different commitments was not provided in the Report. Based on the SEO's estimate 1,944.40 acre-feet/year of water supply, there is 986.56 acre-feet of uncommitted



supply available to FAWWA. Therefore, there appears to be more than sufficient legal supply to supply this development on a 300-year basis.

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.

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 allocation 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 100 years." Based on this allocation approach, the annual 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 allocation approach based on 300 years, the allowed average annual amount of withdrawal would be reduced to one third of that amount which is greater than the annual demand of FAWWA's commitments. As a result, the water may be withdrawn in those annual amounts shown on attached Table 1 for a maximum of 300 years.

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 determine whether the proposed water supply is adequate and can be provided without causing injury to decreed water rights. **Prior to further review, the Applicant must provide the following information:**

1. The FAWWA must clarify resolve discrepancies between the Report and the SEO's calculations of the quantity of water available to FAWWA.
2. The FAWWA must provide a summary of its commitments.
3. The FAWWA must clarify whether water from determination nos. 1689-BD, 1690-BD, and/or 1691-BD will be used in the subdivision and if so, either provide evidence that the subdivision lies within the allowed place of use or submit a change application to change the allowed place of use of these determinations.
4. The FAWWA must provide evidence of ownership or control of the water decreed in case nos. 16CW3095, 17CW3002, and 18CW3002.

5. If determination nos. 1689-BD, 1690-BD, and 1691-BD will be used within this development, the FAWWA must provide evidence of ownership and control of such water rights and provide evidence that the determinations can be used within the development (e.g. change the place of use).

Additional Comments

The application materials indicate that a storm water 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/gvh/?viewer=cswdif>.

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

Sincerely,



Ioana Comaniciu, P.E.
Water Resource Engineer

Attachment: Table 1 SEO Calculation of FAWWA’s Water Supply
Administrative Statement Regarding the Management of Storm Water Detention Facilities and Post-Wildland Fire Facilities in Colorado

Ec: Subdivision Referral No. 30925
Applicant (abarlow@nescolorado.com)

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	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	
9/1/2023	86CW19	NT	53900.00	539.00	179.67	FAWWA Assignment from SR Water	Under 1410 acres	
	91CW35	NT	3600.00	36.00	12.00	Quit Claim	Does not match May 20, 2023 Table 3	
Laramie Fox Hills	08CW113	NT	40.00	0.40	0.13	FAWWA Assignment from SR Water	Under 41.44 acres, reduced to 1.44 acres;	
	17CW3002	NT	6440.00	64.40	21.47		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		
	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	Under 1410 acres	
	91CW35	NT	4900.00	49.00	16.33	Quit Claim	Does not match May 20, 2023 Table 3	
Arapahoe	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	
	08CW113	NNT	60.00	0.60	0.20	FAWWA Assignment from SR Water	Augmented under 20CW3059	
	17CW3002	NT	9796.00	97.96	32.65		Under 225.97 acres	
	20CW3059	NNT	4311.00	43.11	14.37	FAWWA Assignment from SR Water	Augmented under 20CW3059	
	1690-BD	NT	39800.00	398.00	132.67	Special Warranty Deed		
	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	
Denver	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	
	93CW18	NT	-82167.00	-821.67	-273.89	-	Post-pumping depletions reservation under 20CW3059; note that 821.67/300 = 273.89, not 272.73	
	08CW113	NNT	72890.00	728.90	242.98	FAWWA Assignment from SR Water	Augmented under 20CW3059	
	20CW3059	NNT	4556.00	45.56	15.19	FAWWA Assignment from SR Water	Requires Permit 26947-F to be re-permitted (has not happened as of 2022); augmented under 20CW3059	
	1691-BD	NT	51300.00	513.00	171.00	Special Warranty Deed		
	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	
Dawson	08CW113	NNT	39250.00	0.00	0.00	FAWWA Assignment from SR Water	Not included in FAWWA's calculations of water supply.	
	16CW3095	NNT	1567.50	522.50	5.23		Augments 10 residential wells for 300 years, does not match May 20, 2023 Table 3	
	18CW3002	NNT	2796.00	27.96	9.32		Augmentation Plan for 17CW3002 for 300 years, does not match May 20, 2023 Table 3	
	20CW3059	NNT	975.00	0.00	0.00	FAWWA Assignment from SR Water	Not included in FAWWA's calculations of water supply.	
Determination Total			117400.00	1174.00	391.34			
Water Court Total			803936.50	8039.37	2679.79		Includes water that is not augmented.	
Total Currently Available			583319.50	5833.20	1944.40		The total in May 20, 2023 Table 3 appears to exclude the water augmented under 16CW3095, 18CW3002, 20CW3059	
Commitments			287352.00	2873.52	957.84		As of August 11, 2023	
Total Supply Remaining			295967.50	2959.68	986.56			



COLORADO

Division of Water Resources

Department of Natural Resources

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.



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



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:

<https://maperture.digitaldataservices.com/gvh/?viewer=cswdif>.

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.

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).

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



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



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/fsbillcont3/13B28CF09699E67087257DE8006690D8?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:
<http://udfcd.org/volume-three>

