



May 5, 2023

Ryan Howser, Project Manager
El Paso County Community & Development Services
Transmitted via the EPC EDARP Portal: <https://epcdevplanreview.com>

Re: Falcon Highlands South Filing No. 3 - Phase 1 (2nd Letter)
Case No. PUDSP225, Planned Unit Development, Preliminary Plan & Early Grading
Part of SW ¼ of Section 12, Township 13 South, Range 65 West, 6th P.M.
Upper Black Squirrel Creek Designated Basin
Water Division 2, Water District 10

Dear Ryan Howser:

We have reviewed the above-referenced proposal for Phase 1 of the Falcon Highlands South Planned Unit Development, Preliminary Plan and Early Grading on approximately 17 acres in the SW ¼ of Section 12, Township 13 South, Range 65 West, 6th P.M. This phase proposes to plat the first 50 of 378 lots known as Falcon Highlands Filing No. 3. The Applicant is requesting a finding of sufficiency of water supply for the first 50 lots. The comments contained in this letter only address the water supply for the first phase concerning 50 lots and do not provide an opinion of adequacy on all phases of Filing 3.

The land within Filing No. 3 will be developed into 378 single-family residential lots, trail corridors, open space, park space, and for stormwater facilities in 4 phases on 125.56 acres. Falcon Highlands Filing No. 3 is part of the Falcon Highlands Sketch Plan, originally approved in 2004. The sketch plan encompassed 240 acres, most of which has been developed into single-family residential in Filing Nos. 1 and 2. This office previously provided comments on the Falcon Highlands Filing No. 3 (referral no. 28927) on July 25, 2022 and specifically Phase 1 of Filing No. 3 (this referral no. 30472) on September 20, 2022. This letter supersedes our September 20, 2022 letter.

Water Supply Demand

According to the referral materials, the estimated water demand for the 50 lots is 13,391 gallons per day or 15 acre-feet per year [50 single-family equivalents (SFEs)¹].

Source of Water Supply

The proposed water supply is service provided by the Falcon Highlands Metropolitan District (“District”). According to the letter dated April 18, 2023 from the District, Filing No. 3 is within its boundaries and is eligible to receive water service. The letter commits to providing service for 50 SFEs for the first 50 lots of Phase I. The letter states that the District currently has a supply of 710 SFEs and is currently committed to serve 450 SFEs, therefore the uncommitted supply is adequate to serve the additional 50 SFEs; however the uncommitted supply is not adequate to serve all 378 SFEs associated with the entire Filing 3. The District is seeking additional water rights to meet its commitments, including the development of Arapahoe Well No. 2 in 2023. Additionally, our office does not have up to date information on the District’s current commitments which must be provided prior to further review.

¹ The Applicant is using a conversion rate is 0.30 acre-feet per year per SFE based on current use data from the Falcon Highlands Metropolitan District.



According to the December 2022 Falcon Highlands Water Resources Report prepared by JDS-Hydro Consultants Inc. ("Report"), the District owns and/or controls various Determinations of Water Rights water court decrees, summarized in Table 3.2 of the Report, as follows: nontributary and not-nontributary groundwater allocated under Determination of Water Right nos. 141-BD, 142-BD, and 143-BD; nontributary groundwater decreed in Division 2 Water Court case nos. 83CW134 and 01CW065; and not-nontributary groundwater decreed in case nos. 83CW133 (augmented in case no. 06CW102) and 83CW135. The District has constructed wells under the following permit nos.: 57949-F (Determination of Water Right no. 141-BD), 57950-F (Determination of Water Right no. 142-BD), and 66364-F (Div. 2 Case No. 83CW134).

According to the Report, the total supply available to the District based on a 100-year supply is 638.20 acre-feet per year or based on a 300-year water supply is 212.73 acre-feet per year (approximately 709 SFEs using a conversion rate is 0.30 acre-feet per year per SFE based on current use data from the Falcon Highlands Metropolitan District), which account for the 2% relinquishment requirement for the nontributary Arapahoe aquifer decreed in case no. 01CW065. The 709 SFE amount is not consistent with the April 18, 2023 District will serve letter.

According to information available to our office, summarized in the attached table, the total supply available to the District based on a 100-year supply is 641.6 acre-feet per year or based on a 300-year water supply is 202.2 acre-feet per year², which do not account for the relinquishment requirements. Accounting for the relinquishment requirements which sum to 15.9 acre-feet per year, our office calculates that the total supply available to the District based on a 100-year supply is 625.7 acre-feet/year, which is not consistent with the amounts shown on Table 3.2 of the Report.

It appears that the inconsistencies between Table 3.2 of the Report and our calculations arise from two issues:

1. For nontributary (NT) designated groundwater allocated under Determination of Water Right nos. 141-BD and 142-BD, the relinquishment requirement was not accounted for by the Applicant because: "Roughly 90% of the water from the use of the NT water is discharged back into the UBS basin via the Woodmen Hills WWTP. Therefore much less than 98% of the water is actually consumed, and full withdrawal is allowable." For purposes of this review, this calculation is acceptable so long as the District complies with the relinquishment requirement and all other conditions of applicable permits and determinations.
2. The 34.90 acre-feet per year of water adjudicated in Division 1 Water Court case no. 83CW133 and augmented in case no. 06CW102 was augmented only for a period of 100 years, however the Applicant has counted this water as part of their 300-year supply. The Applicant must amend the 06CW102 augmentation plan in order to use this supply for a period of 300 years. Therefore for purposes of this review, the Applicant should not include this supply in calculating the 300-year supply until the augmentation plan is amended to allow withdrawal for a period of 300 years.

Lastly, a review of our records shows well permit no. 272880 may be located on the land area subject of this subdivision plan. Permit no. 272880 was issued March 6, 2007 for the historic domestic use of a well first put to beneficial use December 9, 1955 located in Sec. 12, Twp. 13S, Rng. 65W (previously permitted under 233-WCB). Upon approval of Falcon Highlands Filing No. 3, the well must either be plugged and abandoned or re-permitted as a large-capacity well pursuant to Determination of Water Right No. 143-BD. Prior to further review, the Applicant must clarify whether well permit no. 272880 is located on the subject land, and if so if the well will be plugged and abandoned or re-permitted as a large-capacity well pursuant to Determination of Water Right No. 143-BD.

² This amount does not include the water available under the 06CW102 augmentation plan since the plan is only approved for a period of 100 years.

State Engineer's Office Opinion

Based on the above and pursuant to sections 30-28-136(1)(h)(I) and 30-28-136(1)(h)(II), C.R.S., the State Engineer's Office has not received enough information to render an opinion regarding the potential for causing material injury to decreed water rights, or the adequacy of the proposed water supply. **Prior to further review of the subdivision water supply plan for Phase I of Filing 3 of the Falcon Highlands Subdivision, the following information is required.**

1. If the total supply currently available to the District is only 709 SFEs, the District should provide an amended will-serve letter and Report consistent with this value.
2. The District should provide amended calculations of its available 300-year supply that only includes sources that can legally be used for 300-years. A table of our office's calculations of the quantity of water available to the District based on a 100-year and 300-year supply, accounting for relinquishment requirements, is attached for reference.
3. The District's stated current commitments do not match the information we have on file for the District, therefore the District should clarify which subdivisions it is currently committed to supplying and the water demand for each subdivision. A table of the information our office last received in 2008 regarding the District's commitments is attached for reference.
4. The Applicant must clarify whether well permit no. 272880 is located on the subject land, and if so if the well will be plugged and abandoned or re-permitted as a large-capacity well pursuant to Determination of Water Right No. 143-BD.

Additional Comments

According to the submitted material, stormwater detention structure(s) will be developed on the site. The Applicant should be aware that, unless the structure can meet the requirements of a "storm water detention and infiltration facility" as defined in Designated Basin Rule 5.11, the structure may be subject to administration by this office. The Applicant should review Rule 5.11 to determine whether the structure meets the requirements of the Rule and ensure any notification requirement is met.

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

Sincerely,



Ioana Comaniciu, P.E.
Water Resource Engineer

Attachment: Table of Falcon Highlands Metro District Water Supply and Commitments DWR Calculations

Ec: Referral No. 30472
FHMD File
Well permit no. 272880 file
Upper Black Squirrel Ground Water Management District

Falcon Highlands Metropolitan District

Lasted Updated: Wenli Dickinson (07/25/2022), changes in yellow

Amounts available from sources within the Upper Black Squirrel Creek Designated Ground Water Basin

| Aquifer | Determination No. (permit no.) | Annual Quantification (af/yr) ¹ | Status ² | Replacement Plan | Volume Available (af) | 100-yr Availability (af/yr) | 300-yr Availability (af/yr) | 100-yr Annual Return Flow Obligation (af/yr) | Allowed Place of Use | Allowed Type of Use |
|------------------------|--------------------------------|--|---------------------|------------------|-----------------------|-----------------------------|-----------------------------|--|---|--|
| Denver | 143-BD | 189 | NNT-4% | na | 18,931 | 189.31 | 63.10 | 7.6 | The 449 acres of overlying land plus 355 additional acres described in the change of place of use for 141-BD, 142-BD and 143-BD | domestic, livestock, lawn irrigation commercial & replacement supply |
| Arapahoe | 142-BD (57950-F) | 118 | NT | na | 11,820 | 118.20 | 39.40 | 2.4 | | |
| Laramie-Fox Hills | 141-BD (57949-F) | 128 | NT | na | 12,796 | 127.96 | 42.65 | 2.6 | | |
| Total Det. NNT water = | | 189 | | | 18,931 | 189.31 | 63.10 | 7.6 | | |
| Total Det. NT water = | | 246 | | | 24,616 | 246.16 | 82.05 | 4.9 | | |
| Total Det. water = | | 435 | | | 43,547 | 435.47 | 145.16 | 12.5 | *Does not account for relinquishment requirement | |

Amounts available from sources outside the Upper Black Squirrel Creek Designated Ground Water Basin

| Aquifer | Quantification Decree | Annual Quantification (af/yr) ¹ | Status ² | Augmentation Plan Decree | Volume Available (af) | 100-yr Availability (af/yr) | 300-yr Availability (af/yr) | 100-yr Annual Replacement Obligation (af/yr) | Allowed Place of Use | Allowed Type of Use |
|--------------------------|-----------------------|--|---------------------|---------------------------|-----------------------|-----------------------------|-----------------------------|--|---|--|
| Denver | 83CW135 ³ | 32.8 | NNT | None (00CW110 vacated) | 0 | 0.00 | 0.00 | 0 | | municipal, domestic, agricultural, commercial, industrial, irrigation, stock watering, recreation, fire protection |
| | 01CW65 | 96.4 | NNT | None | 0 | 0.00 | 0.00 | 0 | | Municipal, domestic, industrial, agricultural, commercial, irrigation, stock watering, recreational, fish and wildlife, fire protection, augmentation, replacement |
| Arapahoe | 83CW133 ³ | 59.7 | NNT-4% | 06CW102 (00CW110 vacated) | 3,490 | 34.90 | 11.63 | | Municipal use at any location within the current and future boundaries of the Falcon Highlands Metropolitan District; | municipal, domestic, agricultural, commercial, industrial, irrigation, stock watering, recreation, fire protection |
| | 01CW65 | 57.6 | NT | | 5,760 | 57.60 | 19.20 | 1.15 | Anywhere (provided 2% return flows outside Basins are met) | Municipal, domestic, industrial, agricultural, commercial, irrigation, stock watering, recreational, fish and wildlife, fire protection, augmentation, replacement |
| Laramie-Fox Hills | 83CW134 ³ | 64.55 | NT | | 6,455 | 64.55 | 21.52 | 1.29 | Anywhere (provided 2% return flows outside Basins are met) | municipal, domestic, agricultural, commercial, industrial, irrigation, stock watering, recreation, fire protection |
| | 01CW65 | 49.1 | NT | | 4,910 | 49.10 | 16.37 | 0.98 | Anywhere (provided 2% return flows outside Basins are met) | Municipal, domestic, industrial, agricultural, commercial, irrigation, stock watering, recreational, fish and wildlife, fire protection, augmentation, replacement |
| Total Deceed NNT water = | | 188.9 | | | 3,490 | 34.90 | 11.63 | 0.0 | | |
| Total Deceed NT water = | | 171.3 | | | 17,125 | 171.25 | 57.08 | 3.4 | | |
| Total Deceed water = | | 360.2 | | | 20,615 | 206.15 | 68.72 | 3.4 | | |

| | | | | | | |
|--------------------|--|--|---------------|---------------|---------------|------|
| Total Water Supply | | | 64,162 | 641.62 | 213.87 | 15.9 |
|--------------------|--|--|---------------|---------------|---------------|------|

↑ doesn't include relinquishment

Last Edited By: Colorado Division of Water Resources 31-Dec-08

| Commitments | | | | | | | |
|--|--------|-----------------|--|-----------------------|-----------------------|--|--|
| Subdivision | Filing | Date of Opinion | | 100-yr Demand (af/yr) | 300-yr Demand (af/yr) | | Comments |
| Falcon Highlands, Phase I | 1 | 1/9/2004 | | 50.00 | 50.00 | | |
| Falcon Highlands, Phase II | 2 | 9/7/2006 | | 58.00 | 58.00 | | |
| Falcon Highlands, Phase III | 3 | 10/23/2006 | | 41.00 | 41.00 | | |
| Falcon Highlands Market Place (including replat of Lot 7), Phase III | 1 & 2 | 8/14/2006 | | 22.00 | 22.00 | | |
| Rolling Thunder Business Park ⁴ | | 11/15/2007 | | 8.00 | 8.00 | | Outside Upper Black Squirrel Creek. 01CW65 water allocations only. |
| The Shoppes | | 2/1/2008 | | 16.00 | 16.00 | | |
| Meridian Crossing | | 4/8/2008 | | 5.90 | 5.90 | | |
| Commitments Total | | | | 200.90 | 200.90 | | |
| Uncommitted Supply | | | | 440.72 | 12.97 | | |

- 1) Based on a 100-year aquifer life
 - 2) NT = Nontributary, NNT = Not-Nontributary
 - 3) The District's boundaries (which are not known) appear to include portions of the "Retained Parcel IIA"
 - 4) Allocations pursuant to 01CW65 only, not from determinations water
- Note: 01-CW-65 Return flow requirements to be made directly to Sand Creek in the amount of 0.712 AF/yr

Tract A: Within Designated Basins
Tract B: Outside Designated Basins