



December 18, 2023

Ryan Howser, Project Manager
El Paso County Development Services Department
Sent via online portal at: epcdevplanreview.com

Re: The Shops Filing No. 2 at Meridian Ranch
File #: VR2314
Part of the SW $\frac{1}{4}$ of the SW $\frac{1}{4}$ of Sec. 30, Twp. 12 South, Rng. 64 West, 6th P.M.
Water Division 2, Water District 10
Upper Black Squirrel Creek Designated Basin
CDWR Assigned Subdivision No. 30994 - 2nd Letter

Dear Ryan Howser:

We have received the above-referenced proposal to subdivide 2.43 acres known as Lot 2 of The Shops Filing No. 1 at Meridian Ranch, into two lots and additional information provided by Tom Kerby dated December 14, 2023. Lot 2A will be 0.9718 acres and Lot 2B will be 1.4614 acres. The proposed water supply is service provided by the Meridian Service Metropolitan District (MSMD). This letter supersedes our October 19, 2023 comments.

Water Supply Demand

The proposed water uses are presumably commercial but were not clearly defined. According to the information provided by Tom Kerby on December 14, 2023 the estimated water demand for this subdivision is 0.8 acre-feet/year, which is in addition to the 3.5 acre-feet/year of demand for the entire development for The Shops. The total water demand for The Shops is 4.3 acre-feet/year.

Source of Water Supply

The proposed water supply is service provided by the Meridian Service Metropolitan District (MSMD). According to the December 14, 2023 will serve letter ("Letter"), MSMD is committed to serving the development.

According to information available to this office, MSMD obtains their supply from nontributary Denver Basin bedrock aquifer wells and alluvial wells which withdraw groundwater under various determinations of water rights or final permits owned and controlled by MSMD as summarized below:

1. Meridian Ranch (Determination of Water Right nos. 154-BD, 155-BD, 156-BD, and 157-BD),
2. Guthrie Ranch (230-BD/4438-BD, 50% interested in 229-BD/4437-BD, 50% interest in 230-BD/4436-BD, and Final Permit nos. 612-RFP and 27554-FP),
3. Latigo Trails (568-BD, 569-BD, 570-BD, and 46406-F), and
4. Hart Ranch (2099-BD and 2100-BD).

According to information available to this office, the Letter, and additional information provided to this office on December 14, 2023 by Tom Kerby, MSMD owns and controls 2,089 acre-feet/year based on a 300-year supply. According to the Letter, the district's supply is 2,022 acre-feet/year after subtracting the district's replacement and relinquishment requirements.



The current total demand on MSMD is approximately 1,687 acre-feet/year.¹ According to information available to this office, with the additional 137.7 acre-feet/year of demand from the Rolling Hills Ranch North Filings No. 1 & 2 which are currently being proposed under application file # PUDSP235, the demand on MSMD will be approximately 1,824 acre-feet/year. Therefore, it appears there are 198 acre-feet/year of surplus supply available to MSMD after meeting its commitments, replacement, and relinquishment requirements.

Well nos. 612-RFP and 27554-FP withdraw water from the Upper Black Squirrel Creek alluvial aquifer, which is currently considered to be a renewable source. The other proposed source of water for this subdivision is bedrock aquifers in the Denver Basin. The State Engineer's Office (SEO) does not have evidence regarding the length of time for which this source will be a physically and economically viable source of water. 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 allocation approach, the annual amounts of water determined in MSMD's determinations of water rights are equal to one percent of the total amount or 6,135 acre-feet as shown on the attached SEO's Table and 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 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 of allocated Denver Basin aquifer water would be reduced to one third of that amount. The available supply of 2,089 acre-feet/year or 2,022 acre-feet/year after accounting for replacement and relinquishment requirements based on a 300-year supply is greater than the annual demand on MSMD of 1,824 acre-feet/year. As a result, the water may be withdrawn in that annual amount for a maximum of 300 years. Note that it is anticipated that the demand from Meridian Ranch at full build out will be 1,952 acre-feet/year which is less than MSMD's available supply.

Additional Comments

The submittal indicates that a stormwater detention structure is 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 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.

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., it is our opinion that the proposed water supply is adequate and can be provided without causing injury to decreed water rights.

¹ This office calculates the district has a demand of 1,686 acre-feet/year, but this difference may be due to a rounding error.

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 **allocation** approach, for the proposed uses on the subdivided land is greater than the annual amount of water required to supply the district's commitments.

Our opinion is qualified by the following:

The Ground Water Commission has 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 majority of MSMD's source of water is from non-renewable aquifers, 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,



Ioana Comaniciu, P.E.
Water Resource Engineer

Attachment: SEO's MSMD Supply and Commitment Table

Ec: Meridian Ranch Metro District file
Upper Black Squirrel Creek Ground Water Management District (ubscgwmd@gmail.com)

MERIDIAN METRO SERVICES DISTRICT	Determination or Permit no.	Aquifer	Status	Repl. Plan	Total Allocation (af)	100-yr Availability (af/yr)	300-yr Availability (af/yr)	Replacement Obligations (af/yr)	Comments	
Supply	Meridian Ranch Rights									
	157-BD	Tdw	NNT-Actual	Yes (with 570-BD)	82000	820	273.3	26	Replacement Plan allows 273 af/yr for 300 yrs	
	157-BD	Tdw	NT		3190	31.9	10.6	0.2	Permit No. 60140-F	
	156-BD	Tkd	NNT-4%		117100	1171	390.3	15.6	Permit No. 64496-F	
	155-BD	Ka	NT		94200	942	314.0	6.3	Permit Nos. 56516-F, 56517-F, 59680-F, 59681-F, 84844-F, 82465-F, 84556-F, 84557-F	
	154-BD	Klf	NT		75500	755	251.7	5.0	Permit Nos. 56513-F, 56514-F, 56515-F, 59678-F, 59679-F, 84845-F, 82766-F, 84558-F, 84559-F	
	Guthrie Ranch Rights									
	4438-BD/230-BD	TKd	NNT-actual	No		26870	268.70	0	0	Replacement Plan required first
	4437-BD/229-BD	Ka	NT			48320	241.60	80.53	1.6	Well permits 61236-F, 61237-F. District only owns 50% of water allocated in this combined determination.
	4436-BD/228-BD	Klf	NT			57900	289.5	96.5	1.9	Well permits 61234-F, 61235-F. District only owns 50% of water allocated in this combined determination.
	612-RFP & 27554-FP	Alluvium	Renewable			200	200	200	0	MSMD has 200 af/yr out of the 289 af/yr of these two rights.
	Latigo Trails (RMBG LLC #1) Rights									
	570-BD	Tdw	NNT-Actual	Yes (with 157-BD)		22380	223.8	74.6	0.4	Replacement Plan allows 74.6 af/yr for 300 yrs
	570-BD	Tdw	NT			13000	130	43.3	0.9	Permit nos. 74409-F, 74410-F
	569-BD	Tkd	NNT-4%			27690	277	92.3	3.7	
	569-BD	Tkd	NT			9270	93	30.9	0.6	
	568-BD	Ka	NT			12460	125	41.5	0.8	
	46406-F	Klf	NT			45300	453	151	3	Findings and Order of Aug. 7, 2006 approved 453 af/yr for MSMD and 10 af/yr for replacement supply
	Hart Rights									
	2100-BD	KA	NT			5150	51.5	17.2	0.3	Full allocation of 2100-BD = 103 af/yr, split equally between MSMD and Woodmen Hills MD.
	2099-BD	KLF	NT			6250	62.5	20.8	0.4	Full allocation of 2099-BD = 125 af/yr, split equally between MSMD and Woodmen Hills MD.
	Total Supply (af/yr)					646,780	6,135	2,089	67	
	Total Supply after Replacement Obligations (af/yr)							2022		Based on 300-year supply

Commitments	Name	Filing	Total Commitment (af/yr)	Subtotal	Comments
	Meridian Ranch	1	253	1667.20	
	Meridian Ranch	2	211		
	Meridian Ranch	3	37.9		
	Meridian Ranch	4	49.3		
	Meridian Ranch	5	0		Never constructed
	Meridian Ranch	6	16.7		
	Meridian Ranch	7	40.7		
	Meridian Ranch	8	45.4		
	Meridian Ranch	9	56.3		
	Meridian Ranch	10	0		
	Meridian Ranch	11	62		
	Meridian Ranch Estates	2 & 3	19.2		
	Estates at Rolling Hills Ranch (RHR)	1 & 2	35.3		
	Rolling Hills Ranch (RHR) PUD	1-3	363.7		Based on 12/14/23 email from Tom Kerby
	Stonebridge	1, 2, 3 & 4	171		
	The Vistas	1	69		
	Winding Walk	1 & 2	126		
	The Sanctuary		106.4		
	The Shops	1	4.3	Based on 12/14/23 email from Tom Kerby	
	Latigo Trails	2A	15	46.50	
Latigo Trails	7	6.5			
Latigo Trails	8	13			
Latigo Trails	9	12			
Latigo Trails	10	10	Project was dropped by developer, not included in overall total.		
To Paint Brush Hills MD		85	85.00		
Country Regional Park		25	25.00		
Total		1823.7	1823.7	From July 18, 2022 MSMD Will Serve Letter	
Uncommitted Supply (af/yr)			198		

Last Updated by: Wenli Dickinson (12/14/2023)