



To:	Tim Friday, Castle Rock Water Anne Glassman, Castle Rock Water	From:	Carol Malesky Siyuan Rao
Subject:	Independent Review of Retail Service to Bell Mountain Ranch	Date:	September 2, 2020

Summary

Castle Rock Water (CRW) engaged Stantec Consulting Services Inc. (Stantec) to perform an independent review of rates and fees that would apply to customers of Bell Mountain Ranch (BMR) as CRW's retail customers beginning in 2021. During the independent review, Stantec considered the following information:

1. BMR customer characteristics from 2019 billing report
2. BMR Metropolitan District 2019 Financial Statement
3. System Development Fees (SDF) to be charged to BMR based on meter size
4. Monthly rates and fees to be applied to BMR customers

Findings

BMR Customer Characteristics

In the 2019 Consumption and Charges Report, BMR currently serves 304 residential customers and 3 irrigation customers. Residential customers exhibit demand characteristics similar to ¾" meter customers in CRW, while irrigation customers demonstrate much higher water demands in the summer. In discussions between CRW and BMR staff, these irrigation customers will be billed based on 1.5" meters. It is expected that 14 additional customers (residential ¾") will be added by 2021. Table 1 summarizes the number of customers by meter size expected for BMR.

Table 1 BMR Count of Customers by Meter Size

Customer Class	Meter Size	Count of Customers
Residential	¾"	318
Irrigation	1.5"	3
Total		321

BMR Net Costs

System Development Fees

SDFs are one-time fees charged by CRW for new customers for the right to access system capacity. BMR customers will be connecting to CRW's water and renewable water system, the water and renewable water SDFs will be applied to these customers based on meter size. CRW's current SDF schedule is published online for 2020. Effective 1/1/2021, a 10% increase in water SDF and a 5% increase in renewable water SDF have been proposed to Town Council. To calculate the total SDFs (water and renewable water) required from BMR,

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therefore, proposed 2021 SDFs are applied to all BMR customers by meter size. Table 2 summarizes the 2021 SDF schedule and the total SDF charges calculated.

Table 2 System Development Fee Summary

Meter Size	SFE (Single Family Equivalency)	Water 2021	Renewable Water 2021	Count of Customers	Count of SFEs	Total SDF Charges
3/4"	1	\$4,030	\$18,504	318	318	\$7,165,987
1.5"	3.33	\$13,421	\$61,633	3	10	\$225,162
Total				321	328	\$7,391,149

Fixed Asset Valuation

Based on the BMR Metropolitan District 2019 financial statement, BMR's existing water fixed asset value (net of depreciation) is \$2.3 million (M). CRW also estimated BMR's water rights value at \$367,500, which is based on \$2,500/ acre foot (AF) for 147 AF of water rights. The total BMR water system value is estimated to be \$2.7M. To allow for the benefit of the existing BMR system, the water system value is credited against the total SDF charges required from BMR customers. Table 3 summarizes the BMR water system fixed assets valuation.

Table 3 Fixed Assets Valuation

Customer Class	Net Fixed Assets
Water System	\$2,359,043
Water Rights	\$367,500
Total	\$2,726,543

Existing and Projected Debt

BMR currently has one outstanding Colorado Water Resources and Power Development Authority (CWRPDA) loan. As of the beginning of 2021, the outstanding principal amount for the existing loan is projected to be \$619,629, and the total interest payments are \$163,834, as disclosed in BMR's 2018 financial statement. In addition to the existing loan, CRW is also projecting a new loan of \$2.3M for construction of a pump station and water lines to connect BMR customers to CRW's infrastructure. Assuming a 2% interest rate for 30 years, the projected total interest payment on this loan is \$760,449. The total loan payments (principal + interest) for these two loans are expected to total \$3.8M. Table 4 summarizes the projected debt obligation of BMR customers.

Table 4 Summary of Debt Obligation

Debt	Principal	Interest	Total
Existing Loan	\$619,629	\$163,834	\$783,463
Future Loan	\$2,300,000	\$760,449	\$3,060,449
Total	\$2,919,629	\$924,283	\$3,843,912

Net Costs

In summary, the net costs calculated to connect BMR customers to CRW's water system are \$8.5M. Table 5 summarizes the net connection costs calculated for BMR customers.

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Table 5 Net Connection Costs Summary

Description	Amount
System Development Fee	\$7,391,149
Less: Net Fixed Assets	(\$2,726,543)
Projected Debt	\$3,843,912
Total	\$8,508,518

Monthly Rates and Fees

Rather than requiring BMR to pay the net connection costs upfront, CRW evaluated scenarios where BMR customers would pay a monthly fixed charge based on a repayment schedule with a 3% interest rate. Stantec recommends a 30-year repayment period that mirrors a typical mortgage term for new customers in CRW. Given the long payback period, it is important for CRW to track the repayments associated with each address to ensure the full amounts will be collected if there is a change in home ownership. Table below summarizes the monthly payment for 1 SFE, assuming a 30-year payback period. Based on CRW's SDF schedule, one 1.5" meter customer has a single-family equivalency of 3.3. Irrigation customers' monthly payment is calculated to be 3.3x more than the ¾" residential customers.

Table 6 Monthly Connection Cost Repayment Schedule

Description	Repayment
Year	30 years
Month	360
Interest Rate	3%
Total Monthly Repayment	\$35,872
Total SFEs	328
Monthly Repayment per SFE	\$109.37
Summary	
Monthly Repayment Residential	\$109.37
Monthly Repayment Irrigation	\$360.92

Stantec also reviewed the bill impacts for a typical residential customer for 12 months under CRW's 2021 rate schedule for water and water resource services. CRW is evaluating a series of scenarios to apply an extraterritorial surcharge to BMR customers to compensate CRW customers for the risks assumed by owners of the water system.

Conclusion

Through the independent review process, Stantec has worked with CRW staff to review source data provided by BMR, validate the integrity of calculated rates and fees, and refine certain assumptions applied in this analysis. Overall, Stantec agrees with the approach CRW proposes to recover the costs of connecting BMR customers as retail customers.