

**County Water District of Billings Heights**

**PREPARATION OF AGENDA ITEMS**

**BOARD POLICY NO.**

**MEETING DATE:** November 29, 2021

**AGENDA ITEM:** Raftelis Update

**SUMMARIZED BY:** Pam Ellis

**RECOMMENDATION:**

1) The board may move to accept Andrew Rheem’s recommendation (undated), received 10-20-2021 “Regardless of the path chosen in "Step 3", it is prudent for the District to prepare for the rate to be effective July 1, 2022 as proposed” and the responses to the questions sent by Jennifer Duray

3) Other motions may be made.

**BACKGROUND:**

Interstate Engineering	10/18/2021	\$2,771.00	Project support to Raftelis for Rate Study & NW Transmission Modeling
Interstate Engineering	9/23/2021	\$2,440.50	Project support to Raftelis for Rate Study & NW Transmission Modeling
Raftelis	10/11/2021	\$10,332.50	Billings to date
	<b>TOTAL</b>	<b>\$15,544.00</b>	

Amount remaining on the Raftelis contract (10/15/2021) \$39,667.50

**From:** [Andrew Rheem](#)  
**To:** [Duray, Jennifer](#)  
**Cc:** [duke@heightswaterdistrict.com](mailto:duke@heightswaterdistrict.com); [peyton@heightswaterdistrict.com](mailto:peyton@heightswaterdistrict.com); [Harold Smith](#)  
**Subject:** [EXTERNAL] City of Billings FY 2022 and FY 2023 Water Rate Study Report Review - Data and Clarification Questions  
**Date:** Friday, November 5, 2021 7:17:57 AM  
**Attachments:** [Heights Water District Request to City of Billings - FY 22 and FY 23 Rate Report Review.pdf](#)

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Good morning Jennifer,

I hope you are doing well.

Please find attached our formal request submitted on behalf of the County Water District of Billing Heights. We are formally requesting additional data and clarification questions regarding the proposed adjustments to the resale water rate assessed to the County Water District of Billing Heights in FY 2022 and FY 2023. The questions and additional data requests center around the primary drivers of the proposed substantial increase in the resale water rate assessed to the District for wholesale water services provided by the City subject to the terms of the agreement, as amended, between the City and the District.

Please let us know if you or City representatives have questions regarding this request and/or you would like to set up a time to discuss the requested items. Raftelis, District staff, and District representatives are available and willing to meet virtually or in person.

Regards,  
Andrew

**Andrew Rheem Senior Manager**

📞 303 305 1137 / 📠 303 898 8377 / ✉ [arheem@raftelis.com](mailto:arheem@raftelis.com)  
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[raftelis.com](http://raftelis.com)

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November 5, 2021

Jennifer Duray, CPA

Deputy Public Works Director

City of Billings

210 North 27<sup>th</sup> Street

Billings, MT 59101

**Subject: FY 2022 and FY 2023 City of Billings Water Rate Report Review**

Dear Ms. Duray,

As you are aware, the County Water District of Billing Heights (Heights Water District or District) retained Raftelis to review the City's most recent water rate study report completed by AE2S Nexus. The District would like to ensure that the rate recommendations are fair and equitable and consistent with the cost of providing wholesale water services to the District.

We were provided a copy of the *Retail/Resale Water Rate Study Report FY 2022 and 2023* dated March 31, 2021. We have reviewed the report including the appendices and resulting

recommendation to adjust the water rate assessed to the Heights Water District effective July 1, 2021 and July 1, 2022. On behalf of the District, Raftelis is requesting additional data not incorporated within the report as well as additional clarification questions regarding the underlying cost and rate drivers. The request is to better understand the basis and justification underlying the rate recommendations.

Please see the below for the requested items.

1. Please provide an electronic copy of the City's current Water System Master Plan. Please also provide a map of City water facilities including the connection point with the Heights water system.
2. Please provide monthly water production at City Water Treatment Plant for 2016 through 2020.

3. How much of the capacity of planned West End facilities are for growth and how much is for existing customers? Which zones will be served by the existing Water Treatment Plant and which zones will be served by the new West End Water Treatment Plant?
4. With regard to the timing and sequencing of the West End Capital projects:
  - a. What is the driver or need for each new major facility?
  - b. Why is the Water Treatment Plant being constructed before the reservoir?
  - c. How are District customers being served from West End facilities?
  - d. When will each project be completed and be in service?
  - e. The Water Treatment Plant and Reservoir include design costs with a oneyear construction completion for these major projects. Which contracts have been issued and what is the construction schedule included in the signed contracts?
  - f. What is the City's practice for accounting for capital facilities under construction and when facilities are formally booked as City assets?
5. In addition to what the City has identified in the adopted capital plan, what grant funding has been applied for by the City? Have any grants been approved? Are there applications submitted that are pending approval?
6. Table 2.3 of the March 2021 Retail / Resale Water Rate Study Report identifies peaking factors for Owner and Non-Owner customer classifications. What is the basis for the Resale water customer classification maximum day peaking factor of 2.60 times average day and maximum hour peaking factor of 3.83 times average day?

We appreciate your willingness to provide the requested information and address the questions we have posed. The District's goal is to better understand the major drivers of the substantial rate increases proposed to be effective July 1, 2022 to ensure that the rates are just and equitable. Toward that end, Raftelis, District staff, and District representatives are willing to meet with City staff and City representatives to discuss the rate report and the requested items after receiving a response from the City.

Please do not hesitate to contact me or the District if you have questions regarding this request and/or to schedule a time to meet in person or virtually.

My contact information is [arheem@raftelis.com](mailto:arheem@raftelis.com) or 303.305.1137.

Sincerely,



Andrew A. Rheem

Senior Manager

# RE: City of Billings FY 2022 and FY 2023 Water Rate Study Report Review - Data and Clarification Questions

**Duray, Jennifer**

Fri, Nov 19, 4:32 PM  
(2 days ago)

to Andrew, duke@heightswaterdistrict.com, peyton@heightswaterdistrict.com, Harold, me

Andrew,

The following are the responses to your request for information.

1. The water master plan is not complete yet; however, it is fairly close and I have attached all of the chapters that are finished. A map of the water system is also attached.
2. Water production for 2016-2020 is attached.
3. The west end project provides both redundancy in the system and growth. During the winter, we will be able to take the old plant offline and serve the entire community (approximately 90% existing and 10% growth). During the summer, we are almost exceeding capacity already as we saw this summer. Thus, during the summer months when we have both plants running, a portion of the west end project is needed to service existing customers (approximately 10%) and the remaining is for growth. This is only taking into consideration actual new plant capacity. The plant, reservoirs, intake, and pipeline also provides redundancy for existing and future customers. The West End plant will feed Zone 2 which is the same pressure zone that the Heights Water District is fed from. Large Pipelines (42" and 36") connect the West End WTP and existing WTP and Walter Pump Station, which is location of the connection to the Heights Water District. A bypass will be installed in the "HSPS Improvements Project" in FY23 allowing connection between Zone 2 and Zone 2E at the existing WTP. Effectively Zone 2E and Zone 2 will become one pressure zone which can be fed by either the existing WTP or the West End WTP. A schematic of the process flow is shown on the attached (black arrows) indicating how this will work (Pages from 06\_Operational Analysis Final Draft). Both plants are capable of serving the entire City.
4.
  - a. See FY22-26 CIP at <https://ci.billings.mt.us/2662/Capital-Improvement-Plan-CIP>.
  - b. We changed the order of construction to construct the plant first because a reservoir without a plant to be able to use that water did not make sense. The plant will be able to function along with the intake/pump station/pipeline before the reservoir is constructed.
  - c. See #3 above.
  - d. The following is the current schedule for construction completion:
    - Pipeline            March 2023
    - Intake & PS        May 2023
    - WTP                June 2023
    - Reservoir         June 2024
  - e. Contracts are attached.
  - f. We book assets when they are substantially complete/in-use. Thus, if the schedule changes from above, we would revise the FY23 rates for the HWD. We are currently value engineering the project in an attempt to reduce costs because our estimates are much higher than budgeted with the inflationary #s that we are seeing. Thus, it is quite possible that the schedule changes. We will have an updated schedule in the next 2-3 months.

5. We applied for several ARPA grants. The District already has that list so I will not repeat it. We received \$2M for the west end plant. We also applied for a \$50M BRIC grant and were not successful. We are in the process of applying for the BRIC grant again and will not know whether or not we are successful until July 2022.

6. The peaking factors are based on recent historical maximums. A peak hour value of 2.6 times average day was recorded for both 2014 and 2015, and a peak hour value of 3.83 time the average day was recorded for 2011.

Please let me know if you have additional questions.

- Emails to Duke Nieskens from Jennifer Duray

- 4/01/2021 Attached is the rate study report that recommends rates for fiscal years 22 and 23. My plan is to go to City Council on 4/19 to present the results of both water and wastewater studies and then to have the adoption of the rates at the 5/24 meeting. Please let me know if you would like to meet with the City and our rate consultant to go over this report and the rates.
- 5/05/2021 Attachments: Billings FY22-FY23 Water Rate Study - Final.pdf  
Duke, this is a reminder that rates will be at City Council for approval on May 24th. Please let me know if you have any questions.
- 5/09/2021 In response to your first comment, we fill only Hilltop (2 MG) and Lanier (2 MG), but we monitor Oxbow (4 MG) as well because when the Heights Water District fills Oxbow, it greatly affects the City's pumps at High Service Pump Station and affects our operations. Thus, the plant monitors when the Heights Water districts fills Oxbow.

In response to your second comment, the contract specifies that the City will be responsible for cost of purchasing, installing, and operating the telemetry system. This is standard, and similar to the statement that the City will "... at all times furnish, operate, and maintain, at its own expenses, water transmission mains and pumping facilities capable of providing water at a pressure and quantity sufficient to meet the demands of the District...". It means the Heights Water District is not responsible for installing and maintaining the infrastructure necessary to get the water to it, but it doesn't mean the water will be delivered to it at no cost. Section II of the water contract specifies that the District shall pay reasonable and just rates for water purchased and the City shall receive reasonable and just compensation for water sold to the District. The City's cost of service-based approach, utilized since 1998 and reviewed/revised in 2009 according to the MOU, fairly identifies the O&M and capital revenue requirements associated only with system components/operations that provide a benefit to Heights Water District. The telemetry system is critical to ensure the reliable delivery of water to the Heights. As a result, the portion of capital and O&M costs associated with the telemetry system that enables delivery of water to the District is a reasonable component of the water rate charged to the District.

Please let me know if you have additional questions or comments.

6/09/2021

Duke,

In response to your first comment, we fill only Hilltop (2 MG) and Lanier (2 MG), but we monitor Oxbow (4 MG) as well because when the Heights Water District fills Oxbow, it greatly affects the City's pumps at High Service Pump Station and affects our operations. Thus, the plant monitors when the Heights Water districts fills Oxbow.

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Section II of the water contract specifies that the District shall pay reasonable and just rates for water purchased and the City shall receive reasonable and just compensation for water sold to the District. The City's cost of service-based approach, utilized since 1998 and reviewed/revised in 2009 according to the MOU, fairly identifies the O&M and capital revenue requirements associated only with system components/operations that provide a benefit to Heights Water District. The telemetry system is critical to ensure the reliable delivery of water to the Heights. As a result, the portion of capital and O&M costs associated with the telemetry system that enables delivery of water to the District is a reasonable component of the water rate charged to the District.

Please let me know if you have additional questions or comments.

- Emails to Jennifer Duray from Duke Nieskens

- 4/01/2021 We will go to the Board 4/14 and to our consultant for review. Once our consultant reviews we will get back to you about meeting with the City and your consultant as soon as possible
- 5/05/2021 Our consultant is reviewing and we are waiting for their comments.
- 5/05/2021 Asked if I have questions concerning the rate study, I do have some questions and comments.

Under 3.1 Operations and Maintenance Costs, states the City manages the District's storage tanks, which have a total volume of 8MG. The total is not 8MG it is 4MG, the City only monitors our 4MG storage tank.

As per the Agreement under General Provisions, states the telemetering controls are necessary, it also states the City shall bear all costs and expenses as well in operating, repairing, maintaining, replacing, and enlarging all mains and pumping facilities owned by the City that provide service to the District. Repair, maintenance, and replacement of the telemetering facilities, transmitters, receivers, control stations, and associated equipment, shall also be the City's responsibility. These items stand out and I think our consultant will have some additional concerns. I would hope any concerns would be addressed prior to approval of the Resale Rate Increase.

- May 6, 2021  
Jennifer,



Asked if I have questions concerning the rate study, I do have some questions and comments. Under 3.1 Operations and Maintenance Costs, states the City manages the District's storage tanks, which have a total volume of 8MG. The total is not 8MG it is 4MG, the City only monitors our 4MG storage tank. As per the Agreement under General Provisions, states the telemetering controls are necessary, it also states the City shall bear all costs and expenses as well in operating, repairing, maintaining, replacing, and enlarging all mains and pumping facilities owned by the City that provide service to the District. Repair, maintenance, and replacement of the telemetering facilities, transmitters, receivers, control stations, and associated equipment, shall also be the City's responsibility. These items stand out and I think our consultant will have some additional concerns. I would hope any concerns would be addressed prior to approval of the Resale Rate Increase.

- May 9, 2021 Last Communication between Jennifer Duray and CWDBH staff In response to your first comment, we fill only Hilltop (2 MG) and Lanier (2 MG), but we monitor Oxbow (4 MG) as well because when the Heights Water District fills Oxbow, it greatly affects the City's pumps at High Service Pump Station and affects our operations. Thus, the plant monitors when the Heights Water districts fills Oxbow.

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- CWDBH Board Minutes
  - COUNTY WATER DISTRICT OF BILLINGS HEIGHTS BOARD OF DIRECTORS MEETING April 14, 2021

[https://www.co.yellowstone.mt.gov/Boardminutes/CountyWaterSewer/2021/April\\_14\\_2021.pdf](https://www.co.yellowstone.mt.gov/Boardminutes/CountyWaterSewer/2021/April_14_2021.pdf)

Received the Rate Study from the City of Billings for the resale rate on March 1, 2021. Duke forwarded the study to the FCS Group in Denver (Jason Mumm, Executive Consultant) to make sure the rate study is following the agreement the District has with the City.

○ COUNTY WATER DISTRICT OF BILLINGS HEIGHTS BOARD OF DIRECTORS MEETING June 9, 2021

▪ Manager's Report – Peyton Brookshire (May and June)

City's rate study with FCS group. There was a conflict of interest because the City of Billings currently has a project with FCS group. The City's rate study has been forwarded to Raftelis. This study would need to be done before we can do the comprehensive review of all the districts rates and fees, and capital improvement plan which Interstate Engineering will do.

▪ Unfinished Business:

Raftelis: Peyton gave an overview of the rate study. The reason one needs done is to make sure the District's contract with the City is being followed. Peyton mentioned two glaring issues:

a) the charge for the west end water plant which is not completed. The contract clearly states that the City can't charge the District until it is completed; and that the water plant has to directly serve the Heights;

b) there is a charge of \$50,000 for maintenance of Oxbow reservoir. The city monitors the levels in the tank, but they do not maintain it.

• Emails to Jennifer Duray from Pam Ellis

○ I have had no communications with Raftelis, Peyton, or Duke regarding Raftelis's review of the rate study nor have any questions been submitted to me. I've attached the last communication I have had with CWDBH staff regarding rates. This is an email between Duke and I and you would have received this email with your previous PRR. There has been no communication with CWDBH staff (and never with Raftelis) since this last May 9, 2021 email.

• Emails from Andrew Rheem, Raftelis

○ UNDATED EMAIL FROM ANDREW RHEEM TO PEYTON BROOKSHIRE

Good morning Peyton,

Sorry for the delay in getting back to you. I likely missed the cutoff, but below are the next steps. The timeline is more difficult to estimate since the City will very likely take some time to respond and I don't have a good sense for how long that may be.

Raftelis has finalized questions and additional data requests for the City based on the District rates identified within the rate study report completed. The study included rate recommendations for rate effective July 1, 2021 and July 1, 2022. Below are the next steps:

1. Submit questions, clarification requests and additional data to the City in October 2021
2. Receive and review responses from the City
3. Determine next steps
  - a. Accept explanations and results of the City's rate study and proposed rates effective July 1, 2022
  - b. Complete further discussions with the City with the intention that it will result in a lower proposed rate increase than what is current proposed to be effective July 1, 2022
  - c. Invoke the arbitration clause of the contract with the City and pursue an arbitrated outcome

Regardless of the path chosen in "Step 3", it is prudent for the District to prepare for the rate to be effective July 1, 2022 as proposed if options 3B or 3C are chosen. Options 3B and 3C will likely result in the same rate or a lower rate than proposed.

Questions or to discuss, please let me know.

Thanks! Andrew

#### **FINANCIAL IMPACT:**

**SUPPORT DOCUMENTS:** emailed to Duke Nieskens, Peyton Brookshire and Pam Ellis by Jennifer Duray, November 19, 2021 Digital copies should be available from the district

- 2\_Water System Overview Final Draft
- 3\_Water Demand Forecasting Final Draft
- 4\_Water System Evaluation Criteria Final Draft
- 05\_Hydraulic Water Model Final Draft
- 06\_Operation Analysis\_Final Final Draft
- 08\_Storage Analysis Final Draft
- 09\_Distribution System Expansion Final Final Draft

- 10\_Water System Resiliency Final Draft
- Water Map
- WTP to Distribution
- Pages from 06\_Operation Analysis\_Final Final Draft
- WO1942 WEWTP Preconstruction Contract (executed)
- WO1912 WERWP Pre-Construction Contract, COP (executed)