



City of St. Helena
Water and Wastewater Rate Study Advisory
Committee
Special Meeting
Fire Department Training Room, 1500 Main
Street, St. Helena, CA 94574
Thursday, February 9, 2023 @ 10:00 AM

PLEASE NOTE: Any person who wishes to speak regarding an item on the agenda or make a comment under the "Oral Communication" portion of the agenda may do so, but please observe the time limit of four minutes.

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1. CALL TO ORDER
2. ROLL CALL
Chair: Mario Trinchero
Vice Chair: Walter Nirenberg
Committee Members: Arlene Corsetti, Garry Rose, Sean Maher, Mark Smithers and Peter McCrea.
Staff Liaison: Mandy Kellogg, Assistant Administrative Services Director

Vice Chair Walter Nirenberg will be teleconferencing from 1896 Pacific Ave., Apt 702, San Francisco, CA .

3. PUBLIC FORUM:
An opportunity for the public to directly address the Committee on items of interest to the public that are not listed on the agenda. Any person addressing the Committee should provide his or her name and address, and limit comments to four minutes. Because of restrictions imposed by **the Brown Act, the Committee may not engage in substantive discussion, nor take action on matters not described on the agenda.**
4. REPORTS BY STAFF AND BOARD
Reports by staff and/or Committee on items of general interest. Brief questions for clarification may be posed and answered, and Committee may request that items be placed on a future agenda. Except under certain circumstances, **the Brown Act prohibits any other discussion or action by the Water and Wastewater Rate Study Advisory Committee.**

5. NEW BUSINESS:
 - 5.1. Review and discuss questions submitted by the Committee Members pertaining to the Water and Wastewater Rate Study. 3 - 38
[February 9 2023 Committee Member QA 02.08.23 Attachment A](#)
[Public Comment.Chris Warner](#)
[Public Comment.Tracy McBride](#)
 - 5.2. Consideration and proposed approval recommending the proposed Water and Wastewater Capital Improvement Program (CIP) schedules and funding requirements.

5.3. Consideration and proposed approval recommending the proposed Water Financial Plan Scenario 2 and proposed Wastewater Financial Plan Scenario 2, which omits \$6.1 million in recycled water projects from the Water and Wastewater CIP.

5.4. Consideration and proposed approval recommending Raftelis to present three rate structure options that achieve the Capital Improvement Program goals and are compliant with Proposition 218 at the February 16th Committee Meeting.

6. ADJOURNMENT

The next regular Water and Wastewater Rate Study Advisory Committee meeting is scheduled for February 16, 2023 at 5:00 p.m.

This agenda was posted at City Hall, 1572 Railroad Avenue, and at Fire Department Training Room, 1500 Main Street, St. Helena, CA 94574 on February 6, 2023.

Cindy Tzaopoulos, City Clerk

In Compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please call the City Clerk's Office (707) 968-2742. Notification 72 hours prior to the meeting as required by Section 202 of the Americans with Disabilities Act will enable the City to make reasonable arrangements to ensure accessibility to this meeting.

Water and Wastewater Rate Study Committee Questions

QUESTION SET 1

1.1 QUESTION: When calculating averages to decide tier break points, were any outliers rejected? If so, what criteria was used? If not, why not?

RESPONSE: No, Raftelis does not exclude outliers when calculating the tier break points. There is a large enough population of connections and billing periods to calculate averages per connection with confidence.

1.2 QUESTION: Regarding the tier 1 residential break point, it appears the 55gal/day/person was used, using 2 people per residence as the estimate. (Please correct me if I'm wrong) That said, I thought I heard you mention that per the last census the average was 2.3 people per household. So if I re-create that math using a 60 day billing cycle: $(55 \text{ gal/day-person}) \times (60 \text{ days/cycle}) \times (2.3 \text{ people}) / (748 \text{ gal/HCF}) = 10.1 \text{ HCF/cycle}$ (suggest rounding to 10). By that metric it seems like 10 HCF is a better break point per cycle. Of course, the validity of my 60 day and 2.3 resident assumptions should be questioned, but in any case I think being very explicit about the math behind the breakpoints will be important for public clarity.

RESPONSE: Per the US Census Bureau there is 2.21 persons per household. See below.

Families & Living Arrang...	St. Helena city, California
Population Estimates, July 1 2022, (V2022)	NA
Population Estimates, July 1 2021, (V2021)	5,386
PEOPLE	
Families & Living Arrangements	
Households, 2017-2021	2,466
Persons per household, 2017-2021	2.21
Living in same house 1 year ago, percent of persons age 1 year+, 2017-2021	90.3%
Language other than English spoken at home, percent of persons age 5 years+, 2017-2021	25.5%

Based on recommendation at the January 12th committee meeting, Raftelis prepared an alternative break point.

1.3 QUESTION: Based on what I observed at the last meeting, on Nextdoor, and my own analysis I think the presentation of some form of sample calculation on the how tier break points are determined and how the unit cost per tier is determined would be immensely helpful in clarifying the rate structure. Most folks seem to be looking at the rates and thinking "The numbers don't match, so X group is getting favored." Based on my own thinking and rereading I can see how the aggregate rates are functionally equal, but I had to do a lot of thinking on it and most residents are not engineers. I don't believe anyone on the City Council is, either.

RESPONSE: At the February 9th Committee Meeting, Raftelis will illustrate the steps in calculating one of the rate components.

1.4 QUESTION: Any ideas on how to provide clarity on the difference billing tiers and drought restrictions and penalties?

RESPONSE: Tiers are based on their own logic during normal conditions and drought allocations are based on a separate logic during shortage conditions, which is a common practice. The only example structures

where the two align would be a water budget rate structure which the City is not in a position to entertain, and which does not rank highly on the City's top pricing objectives.

QUESTION SET 2

2.1 QUESTION: Why is there not a third tier for commercial and industrial?

RESPONSE: It is not common practice to have a tiered rate structure for commercial and industrial customer classes. A recent survey, which included the City of Napa, City of American Canyon, Town of Yountville, City of Calistoga, and City of Sonoma, showed that none of the surrounding agencies have a tiered billing structure for commercial and industrial customer classes. While not typical, Raftelis prepared a tiered billing structure at the request of the committee which was presented at the January 12th committee meeting. Because there is vastly different usage between the different commercial and industrial accounts, Raftelis recommended two tiers for these customer classes. When this was presented at the January 12th committee meeting, committee members additionally requested a rate structure that had three tiers for the commercial and industrial classes. Based on this direction Raftelis is currently preparing a three-tiered rate structure for all customer classifications to be presented at the February 16th committee meeting.

2.1 QUESTION: Why are there punitive rates for residential in the third tier, but there are no punitive rates for commercial and industrial?

RESPONSE: The calculated rates are a result of the costs allocated to each customer class and then to each tier in the structure. Where there are tiers, the lowest rate in Tier 1 is offset to a degree by the rate in the upper most tier. This is a function of the supply costs available (low cost to high cost), the peaking characteristics of the demand within each tier, and the allocation of conservation costs. The rates are ultimately a function of the estimated water use in each tier. There is less projected water use in Residential Tier 3 than in Non-Residential Tier 2. Ultimately there is no apples-to-apples comparisons of the tiered rates between classes.

2.3 QUESTION: Do the industrial and commercial classes pay for the overhead at the same percentage that they use water. In other words, if commercial and industrial use 50% of the water do they pay 50% of the overhead

RESPONSE: All water users pay for indirect/general system costs proportionally based on their demand (for water use rates) and the size of their meter (for fixed charges).

2.4 QUESTION: Is the money for CIP and revenue derived from the bond put in a separate account that can only be used for CIP projects?

RESPONSE: Bond proceeds remain in an investment account until a drawdown of proceeds is requested. Drawdowns are requested on a reimbursement basis and recorded to the Capital Fund in which the expenditures were recorded. Bond proceeds cannot be used for operating expenses.

2.5 QUESTION: Why do we have such large reserves? Can those be taken down to 6 months reserves?

RESPONSE: This is a policy decision that is associated with the level of risk the City is comfortable with. The proposed reserve policy includes one year of capital. Since the Water Enterprise has a larger Capital Program it results in a larger reserve requirement. The committee can recommend a lower reserve requirement but should understand that the risk level is increased. Based on feedback comments received at the January 12th committee meeting, Raftelis is modeling a lower reserve requirement for the Water Enterprise.

2.6 QUESTION: Are costs for the Wastewater distributed equitably based on water usage?

RESPONSE: Estimated wastewater generation (correlated with water use) is the primary driver in cost allocation. Strength of wastewater generation is a secondary driver.

2.7 QUESTION: I don't believe that the calculations for the cost of pumping water uphill was calculated correctly. There was no charge for wear and tear on the pumping facilities, personnel checking the water system at such places such as Meadowood on a daily basis etc. It was also noted that water to Meadowood cannot be pumped back down the hill, so it is not true that it acts as a backup system.

RESPONSE: Pending

QUESTION SET 3

3.1 QUESTION: With respect to the most recent bond issue, how does the funding flow and how is it attributed to CIP by project? Who oversees how the money from Measure H is spent? And is there fiscal oversight on that project?

RESPONSE: Bond proceeds remain in an investment account until a drawdown of proceeds is requested. Drawdowns are requested on a reimbursement basis and recorded to the Capital Fund in which the expenditures were recorded. State law requires funds from Measure H can only be spent on making improvements to critical City infrastructure as identified in the Object and Purpose of the Bonds (see below). Funds cannot be used to purchase or pay for operations and maintenance. In addition, a local independent citizens' oversight committee is being established to ensure that bond funds are properly spent. The City is currently recruiting for this committee:

<https://www.cityofsthelena.org/community/page/city-st-helena-seeking-volunteers-serve-boards-and-committees-0>

Object and Purpose of Bonds (Impartial Analysis of Measure H)

The measure authorizes the bond proceeds to finance the costs of municipal improvement projects of the City (the "Improvements"), consisting of drinking water system improvements, including but not limited to Bell Canyon Spillway repairs, water main rehabilitation and replacements, valve replacements, installing monitoring equipment at Bell Canyon in accordance with requirements of the State Division of Dam Safety, lower reservoir rehabilitation, and replacing pipes to increase fire flow, sewer system improvements, including but not limited to replacing pipes and making Crinella Lift Station improvements, stormwater system improvements, including but not limited to replacing pipes, drains, culverts and other components of the stormwater system, and recycled water system improvements, including but not limited to providing pump station and pipes to distribute recycled water. The authorized Improvements also include all work, facilities and expenditures necessary and incidental to the projects described above. The final costs, locations, designs, layouts and other components of the Improvements will be determined as plans are finalized, construction bids are awarded, and projects are completed. Therefore, the City cannot guarantee that the Bonds will provide sufficient funds to allow completion of all needed Improvements.

3.2 QUESTION: What projects would a proposed rate increase cover... and how are they distinguished from the work the bond measure will address.

RESPONSE: The water and wastewater proposed rate increase will cover the following Water and Wastewater Capital Projects:

WATER CAPITAL PROJECTS
W-109 Bell Canyon Intake Tower Replacement
W-80 Dwyer Road Booster Pump Station
W18-113 SCADA Improvements - Offsite Communications
W-86 Spring Mountain Pressure Zone Improvements (Holmes Tank Upgrade)
PWTM-1 Napa Intertie Pipeline Replacement
Smart Water Meters
W21-01 Kearney & Andrea Water Main Replacement
W-101 Rehabilitate Tank 2 at Lower Reservoir
W18-111 WTP Condition Assessment
Napa Intertie Pump Station Replacement
Water Treatment Plant (Water Treatment Plant Rehabilitation)
PWTM-2 Water Treatment Plant Transmission Main Replacement
PWRR-1 YEAR 6-10 - Water Main Annual Replacement Program allowance
PWRR-1 Future Allowance for Pipeline R/R (YEAR 11-15)
PFAS Sampling Project
Disinfection By Products Project
Risk and Resilience Assessment Report dated January 2022 - Additional recommended items
Cyber-Security Implementation
Asset Management Program Development
Asset Management Software Assessment & Optimization planning
CMMS Purchase & Setup
Arc Commercial IS Purchase & Setup
Allocated RW CIP

WASTEWATER CAPITAL PROJECTS
S-52 WWTP Phase I Upgrades
S23-01 Recycled Water - Deliver Recycled Water to Crane Park's Irrigation (Design only)
WWTP Pond Cleaning, Decommissioning, and Repurpose
WWRR-2 Flow Monitoring Program
WWRR-3 High Priority Pipeline Replacement
WWRR-4 Model Update and System Analysis
WWRR-5 CCTV Inspection Phase 2
WWRR-6 Address R/R needs from Phase 1 CCTV Program Years 6-10 & 11-20
Asset Management Program Development
Asset Management Software Assessment & Optimization planning
CMMS Purchase & Setup
ArcGIS Purchase & Setup
S21-01 WWTP Recycled Pipeline and Pump Station (design only)

The GO Bond proceeds will cover the following Water and Waster Capital Projects:

W18-118 Water Main Annual Replacement Program Allowance
W20-01 Bell Canyon Spillway Repairs
W-85 Bell House Valve Replacement
W18-120 Bell Canyon Phreatic Surface Monitoring
W-108 Lower Reservoir Rehab
S18-70 Sewer Replacement Program
S18-71 Crinella Lift Station Improvements
WWGM-6 Del Campo Curt
WWRR-1CCTV Inspection Program, Phase 1

Bond proceeds remain in an investment account until a drawdown of proceeds is requested. Expenditures for each of the projects are recorded to the specific projects that the funds are spent on. When a drawdown of the bond is requested a report that indicates the project and the amount expended is furnished with the request. Drawdowns can only be requested for projects that the bonds were intended for.

3.3 QUESTION: Will the rates considered have a tier structure for low-income residents?

RESPONSE: Proposed rates will not have a tier structure for low-income residents. However, the City does have a program for income eligible residents that provides a 50% reduction to the water and wastewater base fees.

QUESTION SET 4

4.1 QUESTION: Review the fund reserve policies for both water and wastewater.

- This has significant effects on rates. The revenue obtained by fixed charges/commodity charges should be considered. Increased fixed charges percentage will add financial stability which may justify lower reserves, which in turn may reduce required rates.

RESPONSE: This is a policy decision that is associated with the level of risk the City is comfortable with. The proposed reserve policy includes one year of capital. Since the Water Enterprise has a larger Capital Program it results in a larger reserve requirement. The committee can recommend a lower reserve requirement but should understand that the risk level is increased. Based on feedback received at the January 12th committee meeting, Raftelis is modeling a lower reserve requirement for the Water Enterprise.

4.2 QUESTION: Carefully consider the potential for meaningful elevation surcharges and outside of city surcharges for all customers that are not within the city limits.

- Other cities have these surcharges, and they provide consequential revenue. The argument that the costs associated with providing and maintaining pumps, tanks, and other infrastructure benefits the other users, so should not be passed on to those who directly benefit is something that other cities have obviously faced also. Yet, those other cities have determined that a significant surcharge is appropriate.

RESPONSE: The development of the draft rate structure did take into consideration elevation surcharges as well as outside of City surcharges for customers that are not within the City limits.

Per California Constitution Article 13D, water rates imposed must meet several requirements, one of which provides that the amount of a fee or charge imposed upon any customer shall not exceed the

proportional cost of the service attributable to the parcel. What this means is that the City cannot charge a higher rate for a customer based on location unless it can be justified that it costs more to deliver water to a particular geographical region, such as elevation or outside of City limits.

Each agency has its own philosophy on charging, or not, for something like water delivery at elevation. In Raftelis' experience elevation surcharges are uncommon; however, when they are implemented, the surcharges account for the variable costs of delivering water to users at elevation, but not the capital costs of the associated facilities. In review of St. Helena customers, the pumping surcharges previously calculated (based off electric charges) was shown to be minimal and did not take into consideration the associated facility costs based on previous experience.

4.3 QUESTION: Resolve the Carpenter Agreement situation.

- This is potentially a large water user that is not paying for water. This will have an impact on all other rate payers and should be a part of this rate study.

RESPONSE: The City Attorney is aware of the concerns raised with regard to the Carpenter agreement and is preparing to provide a recommendation to the City Council in connection with the agreement and the subject property. It is important to note, however, that the owner of the Carpenter property has certain water rights secured through the State Water Board, and the agreement provides that the water that is conveyed to the Carpenter property is only that water for which the property owner has secured water rights. In that sense the owner of the Carpenter property is different than other water customers.

4.4 QUESTION: Verify the number and size of fire connections.

- This has a significant effect on fixed rates depending on what fire connection rates.

RESPONSE: The City has verified from our billing data base that there are a total of 98 fire service connections. The model will be updated to reflect the accurate number of fire service connections.

4.5 QUESTION: Explain in more detail how fire connection charges were determined for the preliminary presentation of rates.

RESPONSE: Private fire charges depend on system fire flow requirements and a private connections' share of fire flow capacity relative to total capacity (public fire protection, private fire protection, and customer water demands). Water system fire flow is estimated by utilizing the Water Master Plan engineering estimates. Next, the proportional share of fire capacity is allocated to private fire (relative to total capacity). The result is a charge per equivalent private fire connection. Lastly, private fire charges are differentiated based on the diameter of the fire line utilizing an equation that relates the flow of water through a conduit of a specified size (which is exponential).

4.6 QUESTION: Can the fire connection charge be based primarily on meter size?

- Other nearby cities fixed charge ranges between 20% and 35% of domestic meter fixed rates by meter size. The proposed charge appears to be much less than this (approximately 4%). Please verify.

RESPONSE: No, private fire lines and metered connections are two entirely different connections on the system. The meter considers different costs of the system in serving water to customers. Fire lines are allocated and recover other costs. Therefore, the numerator (costs), the denominator (equivalent fire lines), and ratios differentiating each diameter are different. For instance, there is no relationship between a 2" fire connection and a 2" meter.

All agencies charge, or not, for fire differently. Some agencies adhere to the philosophy that private fire protection benefits the entire system by having mutual protection of neighboring properties. Others

choose to charge as much as is reasonable for the additional fire flow designed and maintained in the water system to provide private fire suppression in a fire/emergency. More agencies take a middle-ground approach and recover the costs of billing fire service customers, reading and maintaining the associated bypass meter, and/or the costs of administering a backflow prevention program. There is no one size fits all approach and the degree of private fire costs in a system (and therefore potential fire service charges) is largely dependent on the size of the system, the share of private fire connections within the system, the characteristics of the customer base (i.e. more/less residential, commercial, or industrial), and the philosophy of the agency.

4.7 QUESTION: Verify the quantity of each water meter size. Are 5/8", 3/4", and 1" single family residential all considered as having a meter ratio of 1.0? If so, should 3/4" and 1" nonresidential have meter ratios of 1.5 and 2.5 respectively?

- Accurate counts of meters by size affects the fixed charge considerably. This should be verified. Are the AWWA meter capacities acceptable? Does using the specification data from the meters that are installed make more sense?

RESPONSE: Pending – It is common that 5/8", 3/4" and even 1" residential connections are grouped as "base" meters with a ratio of 1.00. Most City connections are at the 5/8" size which will always have a ratio of 1.00. There are a handful of 3/4" meters on the system, however, these are legacy meters that will be 5/8" meters when replaced. Lastly, 1" residential meters are often a result of state-level fire flow requirements and not due to projected customer demands. Essentially, absent the mandate for fire flow requirements these connections would be served by a 5/8" connection. The City's current policy, and the current proposal, maintains this logic.

4.8 QUESTION: Does Proposition 218 allow for all water customers to be on the same rate structure for commodity rates? This would assume NO customer classes.

- Can Raftelis show a rate calculation assuming all water customers have the same rate and tier boundaries for commodity rates. The tier boundaries can be set to provide conservation benefits to lower volume customers. For large volume customers the effect of this would be similar to a single fixed commodity rate, because the tiers would have little effect on the final charges. I think Raftelis originally proposed a single rate for commercial and industrial users. Eliminating customer classes and applying a single commodity rate structure to all customers simplifies the rate structure, provides conservation ability to lower volume customers and provides essentially a single fixed rate to large water volume customers.

Assumptions for Commodity Rates:

Total Sales less Raw Water (HCF): 559,391

Required Revenue (0.65*\$9,232,589) \$6,001,183

Average Cost (\$6,001,183/559,391) \$10.73/HCF

Average use per customer (559,391/2,783/12) 16.75 HCF/customer/month

Tiers 1 and 2 should be less than \$10.73/HCF

Example:

Tier 1 8 \$6.75

Tier 2 16 \$10.10

Tier 3 >16 \$12.83

The above example will provide \$6,001,183 revenue with a consumption of 55,391 HCF per year applying the above tiered rate to all water users. Tier 1 and tier 2 were set to be about

50% and 75% of tier 3 respectively. Tier 3 is then calculated to provide the remaining revenue, assuming each of the 2,783 customers use the average.

RESPONSE: Pending

4.9 QUESTION: May we have a Wastewater Pro Forma similar to the Water Pro Forma showing the 10-year Financial Plan Model?

RESPONSE: Raftelis will provide the Wastewater Pro Forma at the scheduled committee meeting.

4.10 QUESTION: Can you show detailed expenses justifying a 50% one-year rate increase?

RESPONSE: Detailed expenses are shown in the St. Helena Model Wastewater Expenses Attachment A.

QUESTION SET 5

5.1 QUESTION: What is Raftelis's experience modeling and developing rates for a community with such extreme water customer use as St Helena where nearly 90% of the customers use 50% of the water supply and approximately 10% of customers (non-residential) use the other 50% of the water supply, and where there are such extreme differences in the cost of water supplies. If they have any similar recent experience, what rate structures were accepted.

RESPONSE: Our data for St. Helena shows residential customers constitute 83% of the accounts/connections and 53% of water demand. Raftelis has a broad range of experience, one of which is an agency where agricultural water use is 50% of total demands with fewer than 10% of connections. This agency has low-cost groundwater up through expensive, fixed cost State Project Water. The agency has a three tier Residential rate structure and a uniform agricultural rate. Some fixed costs of water supply are recovered on the fixed charge- this is not something that Raftelis proposed, but a legacy item that works for this agency but leads to very high fixed charges for all users and less control over a customer's bill. Ultimately, they treat Agriculture and Municipal & Industrial (M&I) almost as two sub-systems.

5.2 QUESTION: To what extent have the modeled rates considered the safe water yield analysis prepared by the City of St Helena?

RESPONSE: The latest alternative (Alternative #3 / Three-Tier for All) which will be presented at the February 16th committee meeting considers the estimated available supply, from each source, in normal conditions. However, it is important to note the current safe yield analysis was completed in 2011 and is something the City will be revisiting.

5.3 QUESTION: The safe water yield analysis provides for "allowable" water use of 1,658 AF of water to the customers. The projected 2024 water use is 1,297 AF. Our expensive Napa water contract delivers 600 AF; nearly half of the projected water consumption. What portion of our water supply and consumption is associated with the 40 largest customers (representing 1.2% of all customers)?

RESPONSE: Over the past four years, the top 40 water account users accounted for approximately 38.2% of the overall water usage on average. While the City cannot release specific customer information, the top 40 water customers include schools and multifamily households.

5.4 QUESTION: What was the water revenue split between fixed rate (meter charge) and consumption (water use) for fiscal years ending 2022 and 2023? It appears to be 45% fixed and 55% use.

RESPONSE: For fiscal year ending 2022, the water revenue split was 46% base revenue and 54% consumption revenue. For fiscal year ending 2023, the current (through January 2023) water revenue split is 43% base revenue and 57% consumption revenue. Under the current rate model, the projected revenue

split in normal conditions is 40% base revenue and 60% consumption revenue. However, during drought conditions, the City has realized a decline on the consumption revenue and therefore impacting the split.

5.5 QUESTION: Please confirm the current existing preliminary rate model for water provides for 35% fixed rate revenue charges and 65% of revenue derived from use charges. Moving to a reduced emphasis on fixed rate charges (especially given obvious future droughts) would make our revenue less stable which is inconsistent with the objective rankings of the City Council and the Advisory Committee.

RESPONSE: Confirmed, the cost allocations achieve a 35% fixed rate revenue. This is consistent with the prior rate study and is still relatively high within the industry. Historically fixed charges recovered only 20-25% of rate revenues. Through increased concerns of drought, demand hardening, and revenue stability, that number has crept up into the 30% range. There is a trade-off between revenue stability and conservation: every additional dollar that is recovered from fixed charges is a dollar that cannot be recovered through commodity/water use rates. Additionally, the City utilizes drought rates in times of shortage. This additional tool helps mitigate the risk of revenue instability without increasing fixed charges during normal conditions.

5.6 QUESTION: Fully differentiated rates (vs partial differentiated rates) encourage greater water conservation consistent with both the City Council and Advisory Committee placing this as a top three objectives. Please provide a full analysis of fully differentiated rates.

RESPONSE: As part of their work, Raftelis has already completed a full analysis of the fully differentiated rates and will provide their mathematical calculations at an upcoming Committee meeting. The analysis and mathematical calculations illustrate that it is consistent with both the City Council and Advisory Committee placing this as a top three objectives.

5.7 QUESTION: Please provide the data and information behind the checkmarks noted on the Commodity Rate Components schedule provided on page 24 of the presentation provided on January 12. For instance, the consultants spoke to the percentage of water being assigned to each water supply source within tiers and customer class but it wasn't clear what those assigned percentages were.

RESPONSE: Raftelis will provide the mathematical calculations of one of the rate components at the Committee Meeting.

5.8 QUESTION: Please provide the data used to develop the impact of "peaking" as well as the math behind the impacts the conservation category. Of particular note, our November 9 meeting (page 37) provided the "peaking factor" for industrial and landscape was much greater than SFR or MFR, but the information on page 25 of the January 12 presentation has the highest tier for industrial and landscape much lower than the highest tier for residential. Is this because you didn't include a third tier for nonresidential? Is that equitable?

RESPONSE: The peaking factors presented on November 9, 2022 were at the class level (irrespective of any tiers which are then treated as sub-classes). The peaking analysis utilizes the most recent data from FY 2021-22 (July 2021 through June 2022). Where tiers are developed, Raftelis then calculates the peak for the given tier by identifying the actual water use within that tier, had the tier been in place at the time of the billing data was generated. Then, the maximum period of use is related to the average period of use to come up with a peaking ratio (i.e. peaking factor).

5.9 QUESTION: Please confirm the customer types included in the water rate classes for Commercial and Industrial. I assume our consultants can use the business groups noted in the non-residential user classes from the wastewater groups. This would sufficiently help me have a better understanding to support the data behind the peaking impacts in the Commodity Rate Component schedule.

RESPONSE: The Industrial category is comprised the following:

- Mixed Use
- Wineries

The Commercial category is comprised of the following types of businesses:

- Bed & Breakfast
- Car Wash
- Cemetery
- Commercial Office
- Financial Institutions
- Government
- Grocery
- Homeowner Associations
- Hotels/Motels
- Laundry
- Mixed Use
- Professional
- Restaurants
- Retail
- Schools
- Service Stations
- Storage
- Tasting Rooms
- Tennis Club

5.10 QUESTION: Please provide a schedule similar to the one on page 25 of the January 12 presentation (page 25 is Commodity Rates – Partial Supply Differential) for the fully differentiated rates?

RESPONSE: Raftelis will provide a schedule for the fully differentiated rates at the February 16th meeting.

5.11 QUESTION: Please provide the support for the HCF quantities used to develop the tiers for the Commercial, Industrial and Landscape. Industry standard, history, conservation considerations, arbitrary?

RESPONSE: Raftelis utilized historical data and identified the average use within the class during a low winter period. The tier breakpoints are approximate, not exact, to the winter water use on a per connection basis. There is no industry standard for tiering non-residential customers.

5.12 QUESTION: Why are there three tiers presented for residential while only two tiers presented for nonresidential customers?

RESPONSE: It is not common practice to have a tiered rate structure for commercial and industrial customer classes. A recent survey, which included the City of Napa, City of American Canyon, Town of Yountville, City of Calistoga, and City of Sonoma, showed that none of the surrounding agencies have a tiered billing structure for commercial and industrial customer classes. While not typical, Raftelis prepared a tiered billing structure at the request of the committee which was presented at the January 12th committee meeting. Because there is vastly different usage between the different commercial and industrial accounts, Raftelis recommended two tiers for these customer classes. When this was presented at the January 12th committee meeting, committee members additionally requested a rate structure that had three tiers for the commercial and industrial classes. Based on this direction Raftelis is currently preparing a three-tiered rate structure for all customer classifications to be presented at the February 16th committee meeting.

5.13 QUESTION: Please provide a list of all the areas with subjective decision making and qualify as “policy” decisions. It appears there are many, the least of which are: uniform rates, tiers, uniform tiers, customer classes, tier volume break points, peaking impact, conservation, water supply allocation among tiers or customer classes, etc.

RESPONSE:

- The number of customer classes
- The number of tiers and tier allotment, for classes with tiers
- How we allocate and recover water supply costs
- How we recover conservation costs
- Proposed elevation surcharges
- Degree of fixed-rate revenue, with limitations based on the cost-of-service framework and industry norms

5.14 QUESTION: Given that we will need to affirm and recommend rate structures to City Council as noted in our responsibilities, we will need to see alternative rate structures including tiered uniform rates, tiered uniform rate structures with 50% fixed rate revenue, uniformed tiered rate structures with 50% fixed rates revenues with fully differentiated rates, etc.

RESPONSE: While Raftelis can model a variety of scenarios, additional scenarios will require substantially more time and effort from everyone involved in the rate study. Raftelis and staff have brought forth options for consideration based on several factors including: the results of the pricing objectives, the discussion and direction from the committee and City Council, rate-setting and cost of service principles, and the constraints on the City’s customer billing systems and administrative abilities.

5.15 QUESTION: We need to see models that reduce the reserve requirement to a similar six months of operating expenses as wastewater given that our capital projects are more or less fully funded by debt (not cash from rates) and if we have a more stable rate structure that provides 50% of revenue from fixed charges, there is no need for a larger reserve requirement as currently presented.

RESPONSE: Raftelis is modeling and will present water and wastewater scenarios with a lower level of reserves. Ultimately reserve policies are a function of informed risk tolerance and risk management. While the proposed financial plans rely heavily on borrowing, design costs are generally cash funded and then reimbursed through bond proceeds. More, a capital component can help insulate a utility from costs coming in over plan, expediting projects if favorable terms are available, and guarding against emergency capital needs. There is no one size fits all approach as each agency is unique and has their own risk preferences. However, 365 days cash on hand (one-year reserves) is one benchmark, of many, that credit ratings agencies look to.

5.16 QUESTION: What was the wastewater revenue split between fixed rate (meter charge) and flow charges for fiscal years ending 2022 and 2023?

RESPONSE: For fiscal year ending 2022, the water revenue split was 64% base revenue and 36% consumption revenue. For fiscal year ending 2023, the current (through January 2023) water revenue split is 67% base revenue and 33% consumption revenue.

5.17 QUESTION: What is the wastewater revenue split in the proposed rate model.

RESPONSE: Fixed (residential base charges and non-residential meter charges) are projected to recover approximately 62% of rate revenues.

5.18 QUESTION: Why do the residential flow rates increase 84% while the flow rate increases for nonresidential increase much less (on average about 50%).

RESPONSE: Changes in flow rates are a function of several factors including the total cost of service, cost allocations to the system components, changes in class characteristics (i.e. total connections), dwelling units, metered non-residential connections, non-residential water use, and estimated residential wastewater generation. The changes to the residential flow rates noted above are a result of updating the cost-of-service analysis, while maintaining the existing rate structure and degree of fixed and variable revenues.

5.19 QUESTION: Financial scenario 1 suggests there will be excess reserves of \$2 million or more in many years. Please provided a rate schedule that brings the reserves into balance with the suggested reserve policy of six months of operating expenses. Scenario 2 seems to provide this so why is scenario 1 suggested?

RESPONSE: Scenario 1 was provided to show a comparison. As stated in a previous response, this is a policy decision that is associated with the level of risk the City is comfortable with. The proposed reserve policy includes one year of capital. Since the Water Enterprise has a larger Capital Program it results in a larger reserve requirement. The committee can recommend a lower reserve requirement but should understand that the risk level is increased. Based on feedback comments received at the January 12th committee meeting, Raftelis is modeling a lower reserve requirement for the Water Enterprise which will be presented on February 16th.

5.20 QUESTION: Provide a financial scenario that removes (and repays) the internal borrowings; this could be accomplished with outside short-term borrowings or additional tranches.

RESPONSE: Unfortunately the City does not have debt capacity to do short-term borrowing for the amount necessary to complete the Wastewater Treatment Plant Upgrade. The City Council did approve the use of the internal borrowings in November 2021.

If Raftelis omits the assumed \$1M general fund borrowing for next year, there would need to be an 80% rate increase in Year 1 to end at approximately the same cash position (\$1.5M cash on hand), which is necessary to meet debt coverage. If Raftelis also omits the traffic impact fee borrowing, there would need to be a 100% rate increase in Year 1.

Raftelis was able to adjust the model to repay the internal borrowings two years earlier and still meet the debt coverage requirements, which will be presented to the committee on February 16th.

City of St. Helena - Financial Plan Model				FY 2024	
Expense Summary				FY 2024	
Operating Expenses				\$3,596,090	
Non Departmental				\$252,168	
Council				\$23,171	
Administration				\$211,490	
Finance				\$479,078	
Attorney				\$27,825	
Public Works				\$2,602,358	
Temp/Part Time (WWTP temp operators)				\$600,000	
Total Expenses				\$4,196,090	
Key Assumptions				FY 2024	
Expense Inflation Assumptions					
Expense Inflation					
General				5.0%	
Salary				4.0%	
Benefits				6.0%	
Supplies				5.0%	
Utilities				5.0%	
Supplemental Water				0.0%	
Capital				5.0%	
Expenses	Account	Fixed/Variable	Inflate	FY 2024	Functions
Operating Expenses					
Non Departmental					
Dept. 40				\$252,168	
Administration					
00					
Post-Employment Disbursement	571-40-00-20-08	Fixed	Salary	\$0	General
Pension Expense	571-40-00-20-45	Fixed	Salary	\$0	General
PERS Unfunded Liability	571-40-00-20-47	Fixed	Salary	\$37,851	General
Communication	571-40-00-21-10	Fixed	Salary	\$2,080	General
Postage	571-40-00-21-15	Fixed	Benefits	\$212	General
Equipment Lease Exp	571-40-00-21-27	Fixed	Benefits	\$8,904	General
Professional Contracts	571-40-00-21-30	Fixed	Benefits	\$0	General
Professional Fees	571-40-00-21-40	Fixed	Benefits	\$0	General
Other Contract Services	571-40-00-21-45	Fixed	Benefits	\$2,417	General
Website Support	571-40-00-21-46	Fixed	Salary	\$0	General
Training & Conference	571-40-00-21-55	Fixed	Benefits	\$0	General
Copies	571-40-00-22-07	Fixed	Benefits	\$3,710	General
Safety Committee Supplies	571-40-00-22-09	Fixed	General	\$0	General
Computer Equipment	571-40-00-22-12	Fixed	Benefits	\$0	General
Office Supplies	571-40-00-22-13	Fixed	Benefits	\$2,650	General
Special Department Supplies	571-40-00-22-15	Fixed	Benefits	\$795	General
Software Maintenance	571-40-00-23-35	Fixed	Salary	\$1,290	General
Uncollectable Debt	571-40-00-24-24	Fixed	Salary	\$0	General
Taxes & Other Charges	571-40-00-24-25	Fixed	Salary	\$0	General
REMIF/Block Party Insurance	571-40-00-24-45	Fixed	Benefits	\$192,260	General
Capital Equipment	571-40-00-26-30	Fixed	Benefits	\$0	General
Furniture & Fixtures	571-40-00-26-40	Fixed	Benefits	\$0	General
Council					
Dept. 41				\$23,171	
Administration					
00					
Temp/Part Time	571-41-00-20-20	Fixed	Salary	\$2,808	General
FICA/Medicare	571-41-00-20-40	Fixed	Benefits	\$285	General
Employer PERS	571-41-00-20-45	Fixed	Benefits	\$0	General
PERS Unfunded Liability	571-41-00-20-47	Fixed	Benefits	\$0	General
Employee PERS	571-41-00-20-50	Fixed	Benefits	\$0	General
Health Insurance	571-41-00-20-55	Fixed	Benefits	\$19,149	General
Deferred Comp	571-41-00-20-75	Fixed	Salary	\$929	General
Communications	571-41-00-21-10	Fixed	General	\$0	General
Administration					
Dept. 42				\$211,490	
Administration					
00					
Post-Employment Disbursement	571-42-00-20-08	Fixed	Utilities	\$0	General

Salary-Regular	571-42-00-20-10	Fixed	Salary	\$116,449	General
Temp/Part Time	571-42-00-20-20	Fixed	Salary	\$0	General
Overtime	571-42-00-20-30	Fixed	Salary	\$0	General
FICA/Medicare	571-42-00-20-40	Fixed	Benefits	\$6,942	General
Employer PERS	571-42-00-20-45	Fixed	Benefits	\$8,811	General
PERS Unfunded Liability	571-42-00-20-47	Fixed	Benefits	\$13,168	General
Employee PERS	571-42-00-20-50	Fixed	Benefits	\$0	General
Health Insurance	571-42-00-20-55	Fixed	Benefits	\$15,762	General
Workers Comp	571-42-00-20-61	Fixed	Benefits	\$2,139	General
SDI	571-42-00-20-65	Fixed	Benefits	\$912	General
Deferred Comp	571-42-00-20-75	Fixed	Benefits	\$1,487	General
Auto Allowance	571-42-00-20-85	Fixed	Benefits	\$2,162	General
Charity Event Reimbursement	571-42-00-20-89	Fixed	Benefits	\$0	General
Housing Allowance	571-42-00-20-97	Fixed	Benefits	\$0	General
Professional Contracts	571-42-00-21-30	Fixed	General	\$0	General
Other Contract Services	571-42-00-21-45	Fixed	General	\$0	General
Training & Conference	571-42-00-21-55	Fixed	General	\$0	General
Admin Recruitment	571-42-00-21-56	Fixed	General	\$0	General
Computer Equipment	571-42-00-22-12	Fixed	General	\$0	General
Special Department Supplies	571-42-00-22-15	Fixed	General	\$0	General
Software Maintenance	571-42-00-23-35	Fixed	General	\$0	General

City Clerk	10				
FICA/Medicare	571-42-10-10-40	Fixed	Benefits	\$0	General
Post-Employment Disbursement	571-42-10-20-08	Fixed	Salary	\$0	General
Salary-Regular	571-42-10-20-10	Fixed	Salary	\$21,834	General
Temp/Part Time	571-42-10-20-20	Fixed	Salary	\$0	General
Overtime	571-42-10-20-30	Fixed	Salary	\$0	General
FICA/Medicare	571-42-10-20-40	Fixed	Benefits	\$1,727	General
Employer PERS	571-42-10-20-45	Fixed	Benefits	\$1,603	General
PERS Unfunded Liability	571-42-10-20-47	Fixed	Benefits	\$2,396	General
Health Insurance	571-42-10-20-55	Fixed	Benefits	\$4,753	General
Workers Comp	571-42-10-20-61	Fixed	Benefits	\$778	General
SDI	571-42-10-20-65	Fixed	Benefits	\$245	General
Deferred Comp	571-42-10-20-75	Fixed	Benefits	\$336	General
Auto Allowance	571-42-10-20-85	Fixed	Benefits	\$254	General
Other Contract Services	571-42-10-21-45	Fixed	General	\$8,819	General
Training & Conference	571-42-10-21-55	Fixed	General	\$914	General
Computer Equipment	571-42-10-22-12	Fixed	Supplies	\$0	General
Software Maintenance	571-42-10-23-35	Fixed	Supplies	\$0	General

Finance	Dept. 43			\$479,078	
Administration	00				
Post-Employment Disbursement	571-43-00-20-08	Fixed	Salary	\$0	General
Salary-Regular	571-43-00-20-10	Fixed	Salary	\$157,881	Customer Billing
Temp/Part Time	571-43-00-20-20	Fixed	Salary	\$0	Customer Billing
Overtime	571-43-00-20-30	Fixed	Salary	\$1,040	Customer Billing
FICA/Medicare	571-43-00-20-40	Fixed	Benefits	\$12,166	Customer Billing
Employer PERS	571-43-00-20-45	Fixed	Benefits	\$12,051	Customer Billing
PERS Unfunded Liability	571-43-00-20-47	Fixed	Benefits	\$18,012	Customer Billing
Employee PERS	571-43-00-20-50	Fixed	Benefits	\$0	Customer Billing
Health Insurance	571-43-00-20-55	Fixed	Benefits	\$35,145	Customer Billing
Workers Comp	571-43-00-20-61	Fixed	Benefits	\$5,950	Customer Billing
SDI	571-43-00-20-65	Fixed	Benefits	\$1,715	Customer Billing
Unemployment	571-43-00-20-71	Fixed	Benefits	\$0	Customer Billing
Deferred Comp	571-43-00-20-75	Fixed	Benefits	\$2,242	Customer Billing
Auto Allowance	571-43-00-20-85	Fixed	Benefits	\$1,526	General
Charity Event Reimbursement	571-43-00-20-89	Fixed	Benefits	\$0	General
Communications	571-43-00-21-10	Fixed	General	\$1,890	Customer Billing
Postage	571-43-00-21-15	Fixed	Supplies	\$5,752	Customer Billing
Professional Contracts	571-43-00-21-30	Fixed	General	\$10,500	General
Professional Fees	571-43-00-21-40	Fixed	General	\$0	General
Banking Fees	571-43-00-21-42	Fixed	General	\$25,515	General
Online Transaction Fee	571-43-00-21-44	Fixed	General	\$3,150	Customer Billing
Other Contract Services	571-43-00-21-45	Fixed	General	\$36,014	General
Memberships & Publications	571-43-00-21-53	Fixed	General	\$1,063	General
Training & Conference	571-43-00-21-55	Fixed	General	\$1,885	Customer Billing
Other Travel	571-43-00-21-60	Fixed	General	\$0	General

Copies	571-43-00-22-07	Fixed	Supplies	\$0	General
Computer Equipment	571-43-00-22-12	Fixed	Supplies	\$0	General
Office Supplies	571-43-00-22-13	Fixed	Supplies	\$893	General
Special Department Supplies	571-43-00-22-15	Fixed	Supplies	\$4,200	Customer Billing
Maint Machine/Equipment	571-43-00-23-15	Fixed	Supplies	\$0	General
Software Maintenance	571-43-00-23-35	Fixed	Supplies	\$17,795	Customer Billing
Taxes & Other Charges	571-43-00-24-25	Fixed	Supplies	\$2,625	General
Furniture & Fixtures	571-43-00-26-40	Fixed	Supplies	\$210	General
Human Resources	10				
Salary Regular	571-43-10-20-10	Fixed	Salary	\$33,182	General
Overtime	571-43-10-20-30	Fixed	Salary	\$0	General
FICA/Medicare	571-43-10-20-40	Fixed	Benefits	\$2,737	General
Employer PERS	571-43-10-20-45	Fixed	Benefits	\$2,434	General
PERS Unfunded Liability	571-43-10-20-47	Fixed	Benefits	\$3,638	General
Health Insurance	571-43-10-20-55	Fixed	Benefits	\$8,446	General
Workers Comp	571-43-10-20-61	Fixed	Benefits	\$1,167	General
SDI	571-43-10-20-65	Fixed	Benefits	\$372	General
Deferred Comp	571-43-10-20-75	Fixed	Benefits	\$504	General
Auto Allowance	571-43-10-20-85	Fixed	Benefits	\$382	General
Advertising	571-43-10-21-05	Fixed	Benefits	\$2,650	General
Professional Contracts	571-43-10-21-30	Fixed	Benefits	\$0	General
Training & Conference	571-43-10-21-55	Fixed	Benefits	\$6,784	General
Admin Recruitment	571-43-10-21-56	Fixed	Benefits	\$3,975	General
Office Supplies	571-43-10-22-13	Fixed	Supplies	\$263	General
Special Department Supplies	571-43-10-22-15	Fixed	Supplies	\$5,775	General
Software Maintenance	571-43-10-23-35	Fixed	Supplies	\$5,033	General
Sewer Collections	20				
Professional Contracts	571-43-20-21-30	Fixed	General	\$18,453	General
Software Maintenance	571-43-20-23-35	Fixed	General	\$12,201	General
Computer Equipment	571-43-20-22-12	Fixed	General	\$11,865	General
Attorney	Dept. 44			\$27,825	
Administration	00				
Professional Contracts	571-44-00-21-30	Fixed	General	\$12,075	General
Litigation Cost	571-44-00-21-32	Fixed	General	\$15,750	General
Other Contract Services	571-44-00-21-45	Fixed	General	\$0	General
Public Works	Dept. 50			\$2,602,358	
Administration	00				
Post-Employment Disbursement	571-50-00-20-08	Fixed	Salary	\$0	General
Salary-Regular	571-50-00-20-10	Fixed	Salary	\$339,680	General
Temp/Part Time	571-50-00-20-20	Fixed	Salary	\$0	General
Overtime	571-50-00-20-30	Fixed	Salary	\$312	General
Holiday Pay	571-50-00-20-37	Fixed	Salary	\$0	General
FICA/Medicare	571-50-00-20-40	Fixed	Benefits	\$24,889	General
Employer PERS	571-50-00-20-45	Fixed	Benefits	\$25,348	General
PERS Unfunded Liability	571-50-00-20-47	Fixed	Benefits	\$37,885	General
Employee PERS	571-50-00-20-50	Fixed	Benefits	\$0	General
Health Insurance	571-50-00-20-55	Fixed	Benefits	\$62,904	General
Workers Comp	571-50-00-20-61	Fixed	Benefits	\$9,450	General
SDI	571-50-00-20-65	Fixed	Benefits	\$3,371	General
Unemployment	571-50-00-20-71	Fixed	Benefits	\$0	General
Deferred Comp	571-50-00-20-75	Fixed	Benefits	\$5,691	General
Auto Allowance	571-50-00-20-85	Fixed	Benefits	\$4,325	General
Charity Event Reimbursement	571-50-00-20-89	Fixed	Benefits	\$0	General
Advertising	571-50-00-21-05	Fixed	General	\$0	General
Communications	571-50-00-21-10	Fixed	General	\$3,150	General
Postage	571-50-00-21-15	Fixed	Supplies	\$630	General
Equipment Lease Exp	571-50-00-21-27	Fixed	Supplies	\$1,785	General
Professional Contracts	571-50-00-21-30	Fixed	General	\$168,000	General
Professional Fees	571-50-00-21-40	Fixed	General	\$0	General
Other Contract Services	571-50-00-21-45	Fixed	General	\$5,670	General
Memberships & Publications	571-50-00-21-53	Fixed	General	\$3,020	General
Training & Conference	571-50-00-21-55	Fixed	General	\$5,303	General
Copies	571-50-00-22-07	Fixed	Supplies	\$1,785	General
Computer Equipment	571-50-00-22-12	Fixed	Supplies	\$0	General

Office Supplies	571-50-00-22-13	Fixed	Supplies	\$525	General
Special Department Supplies	571-50-00-22-15	Fixed	Supplies	\$4,132	General
Small Tools	571-50-00-22-20	Fixed	Supplies	\$0	General
Software Maintenance	571-50-00-23-35	Fixed	Supplies	\$716	General
Taxes & Other Charges	571-50-00-24-25	Fixed	General	\$0	General
Capital Equipment	571-50-00-26-30	Fixed	Capital	\$2,520	General
Furniture & Fixtures	571-50-00-26-40	Fixed	General	\$0	General
Street Maintenance	15				
Other Contract Services	571-50-06-21-45	Fixed	General	\$10,500	General
Maint Buildings/Grounds	571-50-06-23-30	Fixed	General	\$4,200	General
Maintenance Supplies	571-50-15-23-12	Fixed	General	\$26,250	Collection
Maint Machine Equip	571-50-15-23-15	Fixed	General	\$8,820	Collection
Sewer Collections	20				
Salary-Regular	571-50-20-20-10	Fixed	Salary	\$120,851	Collection
Standby	571-50-20-20-25	Fixed	Salary	\$4,011	Collection
Overtime	571-50-20-20-30	Fixed	Salary	\$3,120	Collection
FICA/Medicare	571-50-20-20-40	Fixed	Benefits	\$10,052	Collection
Employer PERS	571-50-20-20-45	Fixed	Benefits	\$8,704	Collection
PERS Unfunded Liability	571-50-20-20-47	Fixed	Benefits	\$13,009	Collection
Employee PERS	571-50-20-20-50	Fixed	Benefits	\$0	Collection
Health Insurance	571-50-20-20-55	Fixed	Benefits	\$43,530	Collection
Workers Comp	571-50-20-20-61	Fixed	Benefits	\$5,833	Collection
SDI	571-50-20-20-65	Fixed	Benefits	\$1,435	Collection
Deferred Comp	571-50-20-20-75	Fixed	Benefits	\$1,042	Collection
Uniform Allowance	571-50-20-20-95	Fixed	Benefits	\$0	Collection
Communications	571-50-20-21-10	Fixed	Benefits	\$424	Collection
Utilities	571-50-20-21-22	Variable	Benefits	\$5,457	Collection
Equipment Rental	571-50-20-21-25	Fixed	Benefits	\$18,550	Collection
Other Contract Services	571-50-20-21-45	Fixed	Benefits	\$196,100	Collection
Memberships & Publications	571-50-20-21-53	Fixed	Benefits	\$5,300	Collection
Training & Conference	571-50-20-21-55	Fixed	Benefits	\$8,480	Collection
Certifications	571-50-20-21-57	Fixed	Benefits	\$2,650	Collection
Other Travel	571-50-20-21-60	Fixed	Benefits	\$0	Collection
Copies	571-50-20-22-07	Fixed	Supplies	\$0	Collection
Office Supplies	571-50-20-22-13	Fixed	Supplies	\$105	Collection
Special Department Supplies	571-50-20-22-15	Fixed	Supplies	\$36,750	Collection
Small Tools	571-50-20-22-20	Fixed	Supplies	\$2,940	Collection
Maintenance Supplies	571-50-20-23-12	Fixed	Supplies	\$26,250	Collection
Maint Machine/Equipment	571-50-20-23-15	Fixed	General	\$39,375	Collection
Maint Buildings/Grounds	571-50-20-23-30	Fixed	General	\$0	Collection
Vehicle Alloc Expense	571-50-20-23-50	Fixed	General	\$7,915	Collection
Taxes & Other Charges	571-50-20-24-25	Fixed	General	\$0	Collection
Capital Equipment	571-50-20-26-30	Fixed	General	\$28,035	Collection
Capital Imp Land	571-50-20-26-50	Fixed	General	\$0	Collection
Transfer to other Funds	571-50-20-29-99	Fixed	General	\$0	Collection
Sewer Maintenance Operations	29				
Salary-Regular	571-50-29-20-10	Fixed	Salary	\$500,000	Treatment
Temp/Part Time	571-50-29-20-20	Fixed	Salary	\$0	Treatment
Standby	571-50-29-20-25	Variable	Salary	\$8,921	Treatment
Overtime	571-50-29-20-30	Fixed	Salary	\$14,040	Treatment
Holiday Pay	571-50-29-20-37	Fixed	Salary	\$0	Treatment
FICA/Medicare	571-50-29-20-40	Fixed	Benefits	\$17,028	Treatment
Employer PERS	571-50-29-20-45	Fixed	Benefits	\$12,882	Treatment
PERS Unfunded Liability	571-50-29-20-47	Fixed	Benefits	\$19,254	Treatment
Employee PERS	571-50-29-20-50	Fixed	Benefits	\$0	Treatment
Health Insurance	571-50-29-20-55	Fixed	Benefits	\$71,782	Treatment
Workers Comp	571-50-29-20-61	Fixed	Benefits	\$8,944	Treatment
SDI	571-50-29-20-65	Fixed	Benefits	\$2,433	Treatment
Unemployment	571-50-29-20-71	Fixed	Benefits	\$0	Treatment
Deferred Comp	571-50-29-20-75	Fixed	Benefits	\$1,597	Treatment
Uniform Allowance	571-50-29-20-95	Fixed	Benefits	\$0	Treatment
Education Reimbursement	571-50-29-20-96	Fixed	Benefits	\$0	Treatment
Communications	571-50-29-21-10	Fixed	General	\$4,200	Treatment
Postage	571-50-29-21-15	Fixed	Supplies	\$53	Treatment
Utilities	571-50-29-21-22	Variable	Supplies	\$103,411	Treatment

Equipment Rental	571-50-29-21-25	Fixed	Supplies	\$26,250	Treatment
Equipment Lease Exp	571-50-29-21-27	Fixed	General	\$0	Treatment
Professional Contracts	571-50-29-21-30	Fixed	General	\$0	Treatment
Professional Fees	571-50-29-21-40	Fixed	General	\$0	Treatment
Fines & Penalties	571-50-29-21-43	Fixed	General	\$31,500	Treatment
Other Contract Services	571-50-29-21-45	Fixed	General	\$111,090	Treatment
Memberships & Publications	571-50-29-21-53	Fixed	General	\$1,575	Treatment
Training & Conference	571-50-29-21-55	Fixed	General	\$2,625	Treatment
Certifications	571-50-29-21-57	Fixed	General	\$1,575	Treatment
Other Travel	571-50-29-21-60	Fixed	General	\$0	Treatment
Copies	571-50-29-22-07	Fixed	Supplies	\$0	Treatment
Computer Equipment	571-50-29-22-12	Fixed	Supplies	\$0	Treatment
Office Supplies	571-50-29-22-13	Fixed	Supplies	\$525	Treatment
Special Department Supplies	571-50-29-22-15	Fixed	Supplies	\$15,750	Treatment
Small Tools	571-50-29-22-20	Fixed	Supplies	\$2,625	Treatment
Fuel/Oil	571-50-29-22-25	Variable	Supplies	\$5,406	Treatment
Process Chemicals	571-50-29-22-35	Variable	Supplies	\$75,684	Treatment
Lab Supplies	571-50-29-22-37	Fixed	Supplies	\$15,750	Treatment
Maintenance Supplies	571-50-29-23-12	Fixed	Supplies	\$78,750	Treatment
Maint Machine/Equipment	571-50-29-23-15	Fixed	General	\$28,560	Treatment
Maint Buildings/Grounds	571-50-29-23-30	Fixed	General	\$7,875	Treatment
Vehicle Alloc Expense	571-50-29-23-50	Fixed	General	\$23,745	Treatment
Taxes & Other Charges	571-50-29-24-25	Fixed	General	\$23,100	Treatment
Capital Equipment	571-50-29-26-30	Fixed	General	\$34,650	Treatment
Capital Imp Land	571-50-29-26-50	Fixed	General	\$0	Treatment

Total - Operating Expenses	\$3,596,090
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Capital Expenses**One Time Expenses**

Temp/Part Time (WWTP temp operators)	571-50-29-20-20	Fixed	Salary	\$600,000	Treatment
Capital Equipment	571-50-29-26-30	Fixed	Capital	\$0	

Total - Capital Expenses	\$600,000
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Fund 773 Wastewater Capital Fund

Services	\$0
Transfers	\$0

Fund 774 Wastewater Impact Fee Fund

Services	\$1,296
Transfer to Other Funds	\$0

END OF WORKSHEET



Christopher J Warner <chrisjwarner52@gmail.com>

Re: Water Utility Rate Design and Advisory Committee - CIP Projects' Capital Costs, Asset Lives and Debt Capacity for Financing

1 message

Christopher J Warner <chrisjwarner52@gmail.com>

Mon, Jan 30, 2023 at 12:26 PM

To: April Mitts <AMitts@cityofsthelena.org>, jleach@cityofsthelena.org

Cc: Mandy Kellogg <mkellogg@cityofsthelena.org>, Anil Comelo <acomelo@cityofsthelena.org>

April, Joe - as I believe you know, I am following the Water Rates Advisory Committee and providing comments from time to time, as a personal volunteer based on my 30+ years of utility ratemaking experience (not in any official capacity). I've reviewed the video April put out for the public and it is excellent at simplifying the tasks for updated St. Helena water rates in a common-sense, understandable manner - nice job!

However, my review of the recent materials presented by the City's consultants as part of their "financial plan" and "rate scenarios" still appear confusing and missing several key elements that I previously have recommended be included in the financial and rate design "engineering" for the updated water rates that the City and the public should consider.

In particular, for each of the needed CIP projects in the attached table, could you provide the following details on each project? In my opinion, this info is needed to evaluate the overall cost of service of the water enterprise which should be realistic, current, and consistent with each project's asset lives before a final reasonable cost of service can be used as the building block for rate design and class specific rates:

1. Date of each project's cost estimate; contingency costs included in the cost estimate; and whether the project cost estimate is based on actual bids or needs to be updated because "stale" or not reflective of current construction unit costs.
2. If any projects labeled as "needed" on the list are recommended to be "deferred" from immediate financing, construction and completion, what specific reasons are there for any such deferral?
3. What are the asset lives and resulting annual depreciation costs for each project, and what City debt capacity is available, needed and planned to finance the depreciation costs over periods no longer than the asset lives?
4. Using the data for each project above, what is the forecast annual revenue requirement for these project capital costs assuming none of the "needed" projects are deferred for reasons unrelated to "need."

Thx and I would be happy to answer any questions regarding this request, and feel free to share with the Water Rates Advisory Committee if appropriate.

Chris Warner
1434 Grayson Avenue
415-309-9572

On Mon, Jul 25, 2022 at 11:47 AM Christopher J Warner <chrisjwarner52@gmail.com> wrote:

Mandy, I am writing this not as a member of the Planning Commission, but as an individual resident and water ratepayer of St. Helena. As you may know and as I have discussed with Mayor Ellsworth, I have had extensive experience in my professional career with public utility ratemaking and rate design, including consideration of the information necessary to develop a current results of operations and cost of service study for a public utility enterprise, and then determining an appropriate, fact-based/cost trend-based forecast of future cost of service for the utility, on which cost of service forecast the future revenue requirements to allocate to customers via rate design principles are based.

In this regard, the role and activities of the Water Utility Rate Design Advisory Committee seems a bit confusing to me. If the Committee waits for the City's consultant to develop a full RO and forecast cost of service for use in designing rates, the level of detail developed by the consultant may create questions and further needs for cost of service detailed data that the consultant has failed to provide in their initial report, thus delaying evaluation of the consultant's cost of service data until further data is made available. On the other hand, if the consultant provides the Advisory Committee

with status reports on the updated cost of service and RO, e.g. asset/book lives; depreciation rates and expenses; O&M and A&G recorded and forecast expenses, both direct and indirect and the methodology for allocating any such common costs; and costs of debt, both current and forecast; this info should help the Advisory Committee ensure that its particular questions and interests are addressed by the consultant in advance of finalizing the report.

My sense is that the consultant will do an excellent job on the cost of service study and RO, but that the forecast cost of service for water and wastewater enterprises may require more detailed decisions by the City that will also require advice from the Advisory Committee and other water and wastewater ratepayers that are based on not only rate design principles, but also just as importantly on ensuring that the water and wastewater enterprises are on a path to be fully self-supporting and not subject to any significant deferral of necessary O&M and capital infrastructure costs.

Thx for your consideration of this request, and please feel free to share this email with the Water Rate Design Advisory Committee.

I would also be happy to answer any questions you might have.

Chris

 **20-year_comprehensive_list_for_website_final.pdf**
25K

WATER			
20-Year Project Summary			
	0-5 Year	0-20 Year	Estimated Project
	Total Est. Costs	Total Est. Costs	Implementation
1 W-109 Bell Canyon Inlet Tower Replacement	3,283,227	3,283,227	FYs 2025-2028
2 W-80 Dwyer Road Booster Pump Station	900,000	900,000	FYs 2025-2028
3 W18-113 SCADA Improvements - Offsite Communications	800,000	800,000	FYs 2025-227
4 W-86 Spring Mountain Pressure Zone Improvements (Holmes Tank Upgrade)	3,044,935	3,044,935	FYs 2026-2028
5 PWTA-1 Napa Inlet Pipeline Replacement	5,715,000	5,715,000	FYs 2025-2027
6 Smart Water Meters	1,970,000	1,970,000	FYs 2025-2027
7 W21-01 Kearney & Andrea Water Main Replacement	875,705	875,705	FY 2024
8 W-101 Rehabilitation Tank 2 at Lower Reservoir	940,000	940,000	FY 2024
9 W18-111 WTP Condition Assessment	200,000	200,000	FY 2024
10 Napa Inlet Pump Station Replacement (Construction)	800,000	10,800,000	FYs 2026-2028
11 Napa Inlet Pump Station Replacement (DESIGN)	2,300,000	2,300,000	FYs 2024-2025
12 Water Treatment Plant (Water Treatment Plant Rehabilitation)	-	8,400,000	FYs 2029-2031
13 PWTM-2 Water Treatment Plant Transmission Main Replacement	7,954,000	7,954,000	FYs 2025-2027
14 W18-118 Water Main Annual Replacement Program Allowance	1,440,000	1,440,000	FYs 2024-2028
15 PWRR-1 Yr 6-10 - Water Main Annual Replacement Program Allowance	-	988,750	FYs 2029-2033
16 PWRR-1 Future Allowance for Pipeline R/R (Years 11-15)	-	4,243,500	FYs 2034-2042
17 PFAS Sampling Project	25,000	25,000	FY 2024
18 Disinfection By Products Project	896,000	896,000	FY 2025, FYs 2027-2028
19 Risk and Resilience Assessment Report dated January 2022 - Add'l recommended items	150,000	150,000	FYs 2024-2025
20 Cyber-Security Implementation	50,000	50,000	FYs 2024-2026
21 Asset Management Program Development	50,000	50,000	FY 2026
22 Asset Management Software Assessment & Optimization planning	15,000	15,000	FY 2026
23 CIMS Purchase & Setup	50,000	50,000	FY 2027
24 ArcGIS Purchase & Setup	50,000	50,000	FYs 2024-2025
25 Allocated RW CIP	250,000	250,000	FY 2024
26 W-85 Bell House Valve Replacement	-	520,000	TBD
27 W18-120 Bell Canyon Pressure Surface Monitoring	100,000	100,000	FY 2024
28 Water Distribution Fire Flow Improvements	312,000	1,500,000	FY 2024
29 Replace WTP Residence	500,000	500,000	FYs 2024-2025
TOTALS	32,480,867	57,819,117	

WASTEWATER			
20-Year Project Summary			
	0-5 Year	0-20 Year	Estimated Project
	Total Est. Costs	Total Est. Costs	Implementation
1 S-52 WWTP Phase 1 Upgrades	13,402,000	13,402,000	FYs 2023-2024
2 S23-01 Recycled Water - Deliver Recycled Water to Crans Park's Irrigation (Design)	50,000	50,000	FY 2024
3 WWTP Pond Cleaning, Decommissioning, and Repurpose	1,000,000	1,000,000	FYs 2027-2028
4 S18-70 Sewer Replacement Program	1,240,000	1,240,000	FYs 2024-2026
5 S18-71 Crinella Lift Station Improvements	1,140,000	1,140,000	FYs 2025-2026
6 WVG-6 Del Campo Curt	608,000	608,000	FY 2025
7 WWRR-1 CCTV Inspection Program, Phase 1	222,000	222,000	FY 2024
8 WWRR-2 Flow Monitoring Program	80,000	80,000	FY 2025
9 WWRR-3 High Priority Pipeline Replacement	3,348,000	3,348,000	FYs 2024-2028
10 WWRR-4 Model Update and System Analysis	50,000	50,000	FY 2026
11 WWRR-5 CCTV Inspection Phase 2	-	857,000	FYs 2028-2030
12 WWRR-6 Address RIR needs from Phase 1 CCTV Program Years 6-10 & 11-20	-	5,002,900	FYs 2028-2042
13 Asset Management Program Development	50,000	50,000	FY 2026
14 Asset Management Software Assessment & Optimization planning	15,000	15,000	FY 2026
15 CIMS Purchase & Setup	50,000	50,000	FY 2027
16 ArcGIS Purchase & Setup	50,000	50,000	FYs 2024-2025
17 S21-01 WWTP Recycled Pipeline and Pump Station (design only)	250,000	250,000	FY 2024
18 S21-01 WWTP Recycled Pipeline and Pump Station (Construction)	1,489,000	1,489,000	FY 2025
TOTALS	23,004,000	28,683,900	



mcbride22@gmail.com>

ary 8, 2023 11:47 AM

Kellogg@cityofsthelena.org>

Feb 9, 2023 Water/Wastewater Committee

, Please share my comments with the committee.

Committee:

. realize your job is difficult, and not only water but water rates are a sensitive subject. Thank you for your service.

Raftelis Report comments:

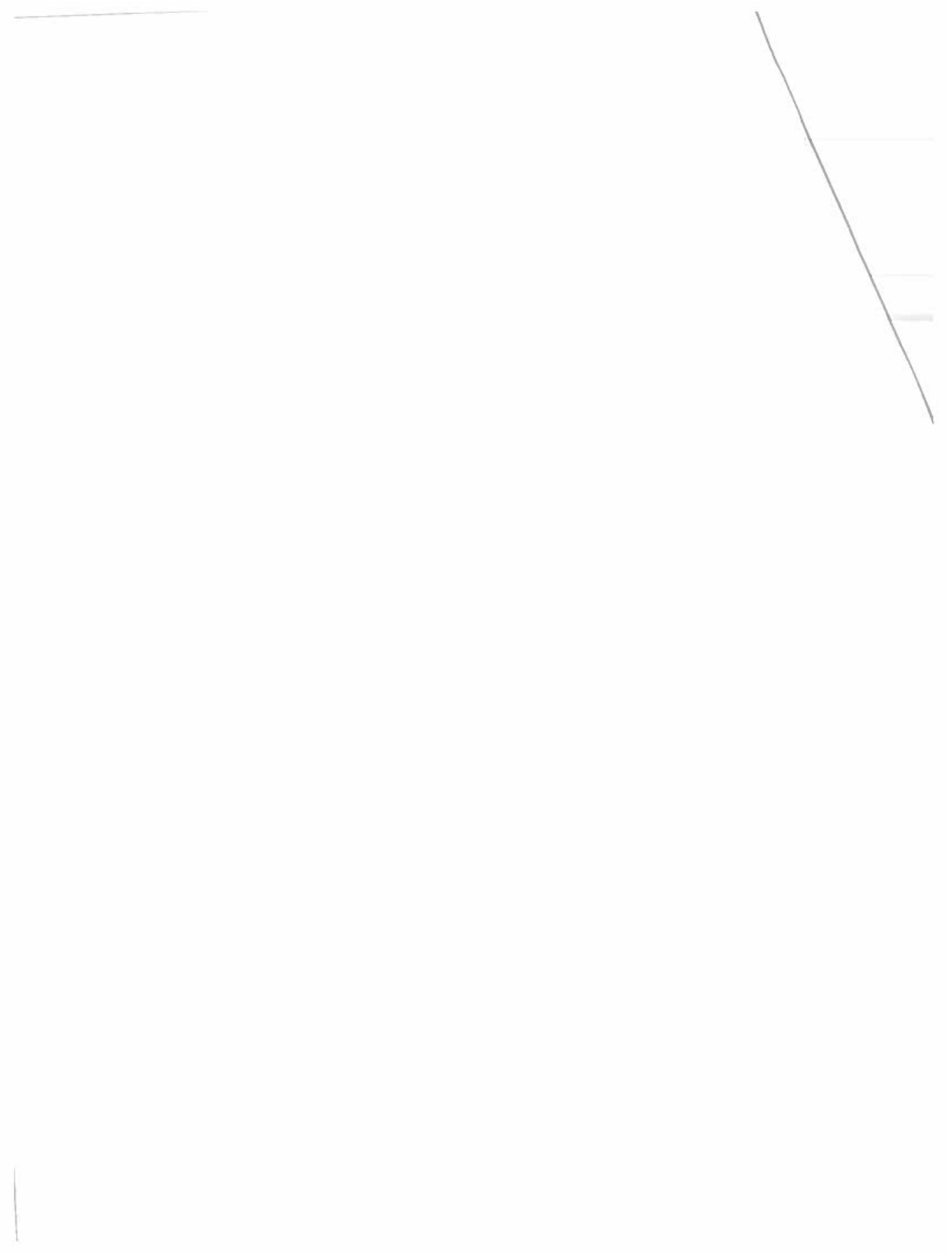
- Is it realistic to assume zero growth in industrial & Commercial? If so should the City Council adopt a resolution zero industrial & commercial for the next 5 years? Then what? This presumption seems incorrect. (page 4)
- Residents are already in conservation mode almost 100% of the time. Please note in your key findings about conservation hardening, and at least acknowledge the residents have actually been reducing water usage. This is one bit of positive news in this issue.
- What constitutes "Landscaping" water in the report (I presume this is non-residential, and perhaps city water?) and what is being done to reduce this "Landscaping" water? This should be part of the rate study to allocate this water to other uses. I recommend changing the title of this category to be more explanatory.
- Mr. Ponte said at the 2/7/23 Planning Commission meeting that over 200 (approx 250) units were needed to be built in the next 8 years (per State of CA). How are these projected new residences accounted for in the rate study? (page 12 of the report does not account for the needed new residences). Only 56 new residences are shown in the report in the next 5 years.
- Am I reading this correctly for the recommended rate increase: will the residents get a 30% rate increase 2024, followed by a 8% increase in 2025, then 5% per year thereafter to 2032 for Scenario 1 water rate proposal? **This is equivalent to an inflation rate of over 7.5% over this ten year period!** Water costs will double in 10 years for residents. **Has the impact on property values been evaluated?**
- Has the committee or consultant reached out to Mike Thompson to see if there are funds in Binden's Infrastructure Bill to help St Helena with water? If funds are available on an income restricted basis, they should be applied for. Is Mike Thompson informed of St Helena's water problems and is he offering any other solutions?
- It doesn't make sense there is zero growth in wastewater for the next 5 years. (see above)(page 24)
- "Revenue Adjustment" is an unpleasant phrase, and the report should be clear where there are rate increases, where there are bond payments. "Revenue Adjustment" hides the actual facts.

Separately, please see my comments (noted in red) on your Q&A for the 2/9/23 meeting. Thank you.

Tracy McBride,

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email: tracymcbride22@gmail.com



Water and Wastewater Rate Study Committee Questions

QUESTION SET 1

1.1 QUESTION: When calculating averages to decide tier break points, were any outliers rejected? If so, what criteria was used? If not, why not? **Can median be used instead of average?**

RESPONSE: No, Raftelis does not exclude outliers when calculating the tier break points. There is a large enough population of connections and billing periods to calculate averages per connection with confidence.

1.2 QUESTION: Regarding the tier 1 residential break point, it appears the 55gal/day/person was used, using 2 people per residence as the estimate. (Please correct me if I'm wrong) That said, I thought I heard you mention that per the last census the average was 2.3 people per household. So if I re-create that math using a 60 day billing cycle: $(55 \text{ gal/day-person}) \times (60 \text{ days/cycle}) \times (2.3 \text{ people}) / (748 \text{ gal/HCF}) = 10.1 \text{ HCF/cycle}$ (suggest rounding to 10). By that metric it seems like 10 HCF is a better break point per cycle. Of course, the validity of my 60 day and 2.3 resident assumptions should be questioned, but in any case I think being very explicit about the math behind the breakpoints will be important for public clarity.

RESPONSE: Per the US Census Bureau there is 2.21 persons per household. See below.

Families & Living Arrang...	St. Helena city, California
Population Estimates, July 1 2022, (V2022)	NA
Population Estimates, July 1 2021, (V2021)	6,385
PEOPLE	
Families & Living Arrangements	
Households, 2017-2021	2,466
Persons per household, 2017-2021	2.21
Living in same house 1 year ago, percent of persons age 1 year+, 2017-2021	90.3%
Language other than English spoken at home, percent of persons age 5 years+, 2017-2021	25.5%

Based on recommendation at the January 12th committee meeting, Raftelis prepared an alternative break point. **Please note in the final report median household income (\$122K I believe) and a typical water bill over time for a typical household, showing rate increases.**

1.3 QUESTION: Based on what I observed at the last meeting, on Nextdoor, and my own analysis I think the presentation of some form of sample calculation on the how tier break points are determined and how the unit cost per tier is determined would be immensely helpful in clarifying the rate structure. Most folks seem to be looking at the rates and thinking "The numbers don't match, so X group is getting favored." Based on my own thinking and rereading I can see how the aggregate rates are functionally equal, but I had to do a lot of thinking on it and most residents are not engineers. I don't believe anyone on the City Council is, either.

RESPONSE: At the February 9th Committee Meeting, Raftelis will illustrate the steps in calculating one of the rate components. **Please show sample calculation for single family, multi family, commercial, industrial using the actual median usage sample from 2022.**

1.4 QUESTION: Any ideas on how to provide clarity on the difference billing tiers and drought restrictions and penalties?

RESPONSE: Tiers are based on their own logic during normal conditions and drought allocations are based on a separate logic during shortage conditions, which is a common practice. The only example structures

The water bill and understanding the rate structure should not be so complicated that it takes hours to figure out. Okay if there need to be different structures, but this clearly needs to be communicated to residents on their bill. To the committee: please consider how rates are communicated on the bi-monthly bill. The water bill should be completely understandable/explanatory as to how the bill is derived.

where the two align would be a water budget rate structure which the City is not in a position to entertain, and which does not rank highly on the City's top pricing objectives.

QUESTION SET 2

2.1 QUESTION: Why is there not a third tier for commercial and industrial?

RESPONSE: It is not common practice to have a tiered rate structure for commercial and industrial customer classes. A recent survey, which included the City of Napa, City of American Canyon, Town of Yountville, City of Calistoga, and City of Sonoma, showed that none of the surrounding agencies have a tiered billing structure for commercial and industrial customer classes. While not typical, Raftelis prepared a tiered billing structure at the request of the committee which was presented at the January 12th committee meeting. Because there is vastly different usage between the different commercial and industrial accounts, Raftelis recommended two tiers for these customer classes. When this was presented at the January 12th committee meeting, committee members additionally requested a rate structure that had three tiers for the commercial and industrial classes. Based on this direction Raftelis is currently preparing a three-tiered rate structure for all customer classifications to be presented at the February 16th committee meeting.

2.1 QUESTION: Why are there punitive rates for residential in the third tier, but there are no punitive rates for commercial and industrial?

RESPONSE: The calculated rates are a result of the costs allocated to each customer class and then to each tier in the structure. Where there are tiers, the lowest rate in Tier 1 is offset to a degree by the rate in the upper most tier. This is a function of the supply costs available (low cost to high cost), the peaking characteristics of the demand within each tier, and the allocation of conservation costs. The rates are ultimately a function of the estimated water use in each tier. There is less projected water use in Residential Tier 3 than in Non-Residential Tier 2. Ultimately there is no apples-to-apples comparisons of the tiered rates between classes. I'd like the consultant to think out of the box and apply equal # of tiers to both residential and non-residential.

2.3 QUESTION: Do the industrial and commercial classes pay for the overhead at the same percentage that they use water. In other words, if commercial and industrial use 50% of the water do they pay 50% of the overhead

RESPONSE: All water users pay for indirect/general system costs proportionally based on their demand (for water use rates) and the size of their meter (for fixed charges).

2.4 QUESTION: Is the money for CIP and revenue derived from the bond put in a separate account that can only be used for CIP projects?

RESPONSE: Bond proceeds remain in an investment account until a drawdown of proceeds is requested. Drawdowns are requested on a reimbursement basis and recorded to the Capital Fund in which the expenditures were recorded. Bond proceeds cannot be used for operating expenses.

2.5 QUESTION: Why do we have such large reserves? Can those be taken down to 6 months reserves?

RESPONSE: This is a policy decision that is associated with the level of risk the City is comfortable with. The proposed reserve policy includes one year of capital. Since the Water Enterprise has a larger Capital Program it results in a larger reserve requirement. The committee can recommend a lower reserve requirement but should understand that the risk level is increased. Based on feedback comments received at the January 12th committee meeting, Raftelis is modeling a lower reserve requirement for the Water Enterprise.

2.6 QUESTION: Are costs for the Wastewater distributed equitably based on water usage?

RESPONSE: Estimated wastewater generation (correlated with water use) is the primary driver in cost allocation. Strength of wastewater generation is a secondary driver. **Please explain further with examples.**

2.7 QUESTION: I don't believe that the calculations for the cost of pumping water uphill was calculated correctly. There was no charge for wear and tear on the pumping facilities, personnel checking the water system at such places such as Meadowood on a daily basis etc. It was also noted that water to Meadowood cannot be pumped back down the hill, so it is not true that it acts as a backup system.

RESPONSE: Pending

QUESTION SET 3

3.1 QUESTION: With respect to the most recent bond issue, how does the funding flow and how is it attributed to CIP by project? Who oversees how the money from Measure H is spent? And is there fiscal oversight on that project?

RESPONSE: Bond proceeds remain in an investment account until a drawdown of proceeds is requested. Drawdowns are requested on a reimbursement basis and recorded to the Capital Fund in which the expenditures were recorded. State law requires funds from Measure H can only be spent on making improvements to critical City infrastructure as identified in the Object and Purpose of the Bonds (see below). Funds cannot be used to purchase or pay for operations and maintenance. In addition, a local independent citizens' oversight committee is being established to ensure that bond funds are properly spent. The City is currently recruiting for this committee:

<https://www.cityofsthelena.org/community/page/city-st-helena-seeking-volunteers-serve-boards-and-committees-0>

Object and Purpose of Bonds (Impartial Analysis of Measure H)

The measure authorizes the bond proceeds to finance the costs of municipal improvement projects of the City (the "Improvements"), consisting of drinking water system improvements, including but not limited to Bell Canyon Spillway repairs, water main rehabilitation and replacements, valve replacements, installing monitoring equipment at Bell Canyon in accordance with requirements of the State Division of Dam Safety, lower reservoir rehabilitation, and replacing pipes to increase fire flow, sewer system improvements, including but not limited to replacing pipes and making Crinella Lift Station improvements, stormwater system improvements, including but not limited to replacing pipes, drains, culverts and other components of the stormwater system, and recycled water system improvements, including but not limited to providing pump station and pipes to distribute recycled water. The authorized Improvements also include all work, facilities and expenditures necessary and incidental to the projects described above. The final costs, locations, designs, layouts and other components of the Improvements will be determined as plans are finalized, construction bids are awarded, and projects are completed. Therefore, the City cannot guarantee that the Bonds will provide sufficient funds to allow completion of all needed Improvements.

How is the decision made to fund from the bond or from rate revenue?

3.2 QUESTION: What projects would a proposed rate increase cover... and how are they distinguished from the work the bond measure will address.

RESPONSE: The water and wastewater proposed rate increase will cover the following Water and Wastewater Capital Projects:

WATER CAPITAL PROJECTS
W-109 Bell Canyon Intake Tower Replacement
W-80 Dwyer Road Booster Pump Station
W18-113 SCADA Improvements - Offsite Communications
W-86 Spring Mountain Pressure Zone Improvements (Holmes Tank Upgrade)
PWTM-1 Napa Intertie Pipeline Replacement
Smart Water Meters
W21-01 Kearney & Andrea Water Main Replacement
W-101 Rehabilitate Tank 2 at Lower Reservoir
W18-111 WTP Condition Assessment
Napa Intertie Pump Station Replacement
Water Treatment Plant (Water Treatment Plant Rehabilitation)
PWTM-2 Water Treatment Plant Transmission Main Replacement
PWRR-1 YEAR 6-10 - Water Main Annual Replacement Program allowance
PWRR-1 Future Allowance for Pipeline R/R (YEAR 11-15)
PFAS Sampling Project
Disinfection By Products Project
Risk and Resilience Assessment Report dated January 2022 - Additional recommended items
Cyber-Security Implementation
Asset Management Program Development
Asset Management Software Assessment & Optimization planning
CMMS Purchase & Setup
Arc Commercial IS Purchase & Setup
Allocated RW CIP

WASTEWATER CAPITAL PROJECTS
S-52 WWTP Phase I Upgrades
S23-01 Recycled Water - Deliver Recycled Water to Crane Park's Irrigation (Design only)
WWTP Pond Cleaning, Decommissioning, and Repurpose
WWRR-2 Flow Monitoring Program
WWRR-3 High Priority Pipeline Replacement
WWRR-4 Model Update and System Analysis
WWRR-5 CCTV Inspection Phase 2
WWRR-6 Address R/R needs from Phase 1 CCTV Program Years 6-10 & 11-20
Asset Management Program Development
Asset Management Software Assessment & Optimization planning
CMMS Purchase & Setup
ArcGIS Purchase & Setup
S21-01 WWTP Recycled Pipeline and Pump Station (design only)

The GO Bond proceeds will cover the following Water and Waster Capital Projects:

W18-118 Water Main Annual Replacement Program Allowance
S18-70 Sewer Replacement Program
S18-71 Crinella Lift Station Improvements
WWGM-6 Del Campo Curt
WWRR-1CCTV Inspection Program, Phase 1

Bond proceeds remain in an investment account until a drawdown of proceeds is requested. Expenditures for each of the projects are recorded to the specific projects that the funds are spent on. When a drawdown of the bond is requested a report that indicates the project and the amount expended is furnished with the request. Drawdowns can only be requested for projects that the bonds were intended for.

3.3 QUESTION: Will the rates considered have a tier structure for low-income residents?

RESPONSE: Proposed rates will not have a tier structure for low-income residents. However, the City does have a program for income eligible residents that provides a 50% reduction to the water and wastewater base fees.

Please link to the low-income program for water rates in your documentation. This satisfies very low income such as 1-2 people making under \$36,620, which is less than 1/3 of the average income (census 2020). What about people making low or workforce income?

QUESTION SET 4

4.1 QUESTION: Review the fund reserve policies for both water and wastewater.

- This has significant effects on rates. The revenue obtained by fixed charges/commodity charges should be considered. Increased fixed charges percentage will add financial stability which may justify lower reserves, which in turn may reduce required rates.

RESPONSE: This is a policy decision that is associated with the level of risk the City is comfortable with. The proposed reserve policy includes one year of capital. Since the Water Enterprise has a larger Capital Program it results in a larger reserve requirement. The committee can recommend a lower reserve requirement but should understand that the risk level is increased. Based on feedback received at the January 12th committee meeting, Raftelis is modeling a lower reserve requirement for the Water Enterprise.

4.2 QUESTION: Carefully consider the potential for meaningful elevation surcharges and outside of city surcharges for all customers that are not within the city limits.

- Other cities have these surcharges, and they provide consequential revenue. The argument that the costs associated with providing and maintaining pumps, tanks, and other infrastructure benefits the other users, so should not be passed on to those who directly benefit is something that other cities have obviously faced also. Yet, those other cities have determined that a significant surcharge is appropriate.

RESPONSE: The development of the draft rate structure did take into consideration elevation surcharges as well as outside of City surcharges for customers that are not within the City limits.

Per California Constitution Article 13D, water rates imposed must meet several requirements, one of which provides that the amount of a fee or charge imposed upon any customer shall not exceed the proportional cost of the service attributable to the parcel. What this means is that the City cannot charge a higher rate for a customer based on location unless it can be justified that it costs more to deliver water to a particular geographical region, such as elevation or outside of City limits.

It was not clear to me what the rates are for out of city limits customers or customers at higher elevations. Please note these differences clearly in your report.

Each agency has its own philosophy on charging, or not, for something like water delivery at elevation. In Raftelis' experience elevation surcharges are uncommon; however, when they are implemented, the surcharges account for the variable costs of delivering water to users at elevation, but not the capital costs of the associated facilities. In review of St. Helena customers, the pumping surcharges previously calculated (based off electric charges) was shown to be minimal and did not take into consideration the associated facility costs based on previous experience.

4.3 QUESTION: Resolve the Carpenter Agreement situation.

- This is potentially a large water user that is not paying for water. This will have an impact on all other rate payers and should be a part of this rate study.

RESPONSE: The City Attorney is aware of the concerns raised with regard to the Carpenter agreement and is preparing to provide a recommendation to the City Council in connection with the agreement and the subject property. It is important to note, however, that the owner of the Carpenter property has certain water rights secured through the State Water Board, and the agreement provides that the water that is conveyed to the Carpenter property is only that water for which the property owner has secured water rights. In that sense the owner of the Carpenter property is different than other water customers.

4.4 QUESTION: Verify the number and size of fire connections.

- This has a significant effect on fixed rates depending on what fire connection rates.

RESPONSE: The City has verified from our billing data base that there are a total of 98 fire service connections. The model will be updated to reflect the accurate number of fire service connections.

4.5 QUESTION: Explain in more detail how fire connection charges were determined for the preliminary presentation of rates.

RESPONSE: Private fire charges depend on system fire flow requirements and a private connections' share of fire flow capacity relative to total capacity (public fire protection, private fire protection, and customer water demands). Water system fire flow is estimated by utilizing the Water Master Plan engineering estimates. Next, the proportional share of fire capacity is allocated to private fire (relative to total capacity). The result is a charge per equivalent private fire connection. Lastly, private fire charges are differentiated based on the diameter of the fire line utilizing an equation that relates the flow of water through a conduit of a specified size (which is exponential).

4.6 QUESTION: Can the fire connection charge be based primarily on meter size?

- Other nearby cities fixed charge ranges between 20% and 35% of domestic meter fixed rates by meter size. The proposed charge appears to be much less than this (approximately 4%). Please verify.

RESPONSE: No, private fire lines and metered connections are two entirely different connections on the system. The meter considers different costs of the system in serving water to customers. Fire lines are allocated and recover other costs. Therefore, the numerator (costs), the denominator (equivalent fire lines), and ratios differentiating each diameter are different. For instance, there is no relationship between a 2" fire connection and a 2" meter.

All agencies charge, or not, for fire differently. Some agencies adhere to the philosophy that private fire protection benefits the entire system by having mutual protection of neighboring properties. Others choose to charge as much as is reasonable for the additional fire flow designed and maintained in the water system to provide private fire suppression in a fire/emergency. More agencies take a middle-ground approach and recover the costs of billing fire service customers, reading and maintaining the associated bypass meter, and/or the costs of administering a backflow prevention program. There is no one size fits

all approach and the degree of private fire costs in a system (and therefore potential fire service charges) is largely dependent on the size of the system, the share of private fire connections within the system, the characteristics of the customer base (i.e. more/less residential, commercial, or industrial), and the philosophy of the agency.

4.7 QUESTION: Verify the quantity of each water meter size. Are 5/8", 3/4", and 1" single family residential all considered as having a meter ratio of 1.0? If so, should 3/4" and 1" nonresidential have meter ratios of 1.5 and 2.5 respectively?

- Accurate counts of meters by size affects the fixed charge considerably. This should be verified. Are the AWWA meter capacities acceptable? Does using the specification data from the meters that are installed make more sense?

RESPONSE: Pending – It is common that 5/8", 3/4" and even 1" residential connections are grouped as "base" meters with a ratio of 1.00. Most City connections are at the 5/8" size which will always have a ratio of 1.00. There are a handful of 3/4" meters on the system, however, these are legacy meters that will be 5/8" meters when replaced. Lastly, 1" residential meters are often a result of state-level fire flow requirements and not due to projected customer demands. Essentially, absent the mandate for fire flow requirements these connections would be served by a 5/8" connection. The City's current policy, and the current proposal, maintains this logic.

4.8 QUESTION: Does Proposition 218 allow for all water customers to be on the same rate structure for commodity rates? This would assume NO customer classes.

- Can Raftelis show a rate calculation assuming all water customers have the same rate and tier boundaries for commodity rates. The tier boundaries can be set to provide conservation benefits to lower volume customers. For large volume customers the effect of this would be similar to a single fixed commodity rate, because the tiers would have little effect on the final charges. I think Raftelis originally proposed a single rate for commercial and industrial users. Eliminating customer classes and applying a single commodity rate structure to all customers simplifies the rate structure, provides conservation ability to lower volume customers and provides essentially a single fixed rate to large water volume customers.

Assumptions for Commodity Rates:

Total Sales less Raw Water (HCF): 559,391

Required Revenue (0.65*\$9,232,589) \$6,001,183

Average Cost (\$6,001,183/559,391) \$10.73/HCF

Average use per customer (559,391/2,783/12) 16.75 HCF/customer/month

Tiers 1 and 2 should be less than \$10.73/HCF

Example:

Tier 1 8 \$6.75

Tier 2 16 \$10.10

Tier 3 >16 \$12.83

The above example will provide \$6,001,183 revenue with a consumption of 55,391 HCF per year applying the above tiered rate to all water users. Tier 1 and tier 2 were set to be about 50% and 75% of tier 3 respectively. Tier 3 is then calculated to provide the remaining revenue, assuming each of the 2,783 customers use the average.

RESPONSE: Pending

4.9 QUESTION: May we have a Wastewater Pro Forma similar to the Water Pro Forma showing the 10-year Financial Plan Model?

RESPONSE: Raftelis will provide the Wastewater Pro Forma at the scheduled committee meeting.

4.10 QUESTION: Can you show detailed expenses justifying a 50% one-year rate increase?

RESPONSE: Detailed expenses are shown in the St. Helena Model Wastewater Expenses Attachment A.

QUESTION SET 5

5.1 QUESTION: What is Raftelis's experience modeling and developing rates for a community with such extreme water customer use as St Helena where nearly 90% of the customers use 50% of the water supply and approximately 10% of customers (non-residential) use the other 50% of the water supply, and where there are such extreme differences in the cost of water supplies. If they have any similar recent experience, what rate structures were accepted.

RESPONSE: Our data for St. Helena shows residential customers constitute 83% of the accounts/connections and 53% of water demand. Raftelis has a broad range of experience, one of which is an agency where agricultural water use is 50% of total demands with fewer than 10% of connections. This agency has low-cost groundwater up through expensive, fixed cost State Project Water. The agency has a three tier Residential rate structure and a uniform agricultural rate. Some fixed costs of water supply are recovered on the fixed charge- this is not something that Raftelis proposed, but a legacy item that works for this agency but leads to very high fixed charges for all users and less control over a customer's bill. Ultimately, they treat Agriculture and Municipal & Industrial (M&I) almost as two sub-systems.

5.2 QUESTION: To what extent have the modeled rates considered the safe water yield analysis prepared by the City of St Helena?

RESPONSE: The latest alternative (Alternative #3 / Three-Tier for All) which will be presented at the February 16th committee meeting considers the estimated available supply, from each source, in normal conditions. However, it is important to note the current safe yield analysis was completed in 2011 and is something the City will be revisiting.

5.3 QUESTION: The safe water yield analysis provides for "allowable" water use of 1,658 AF of water to the customers. The projected 2024 water use is 1,297 AF. Our expensive Napa water contract delivers 600 AF; nearly half of the projected water consumption. What portion of our water supply and consumption is associated with the 40 largest customers (representing 1.2% of all customers)?

RESPONSE: Over the past four years, the top 40 water account users accounted for approximately 38.2% of the overall water usage on average. While the City cannot release specific customer information, the top 40 water customers include schools and multifamily households.

5.4 QUESTION: What was the water revenue split between fixed rate (meter charge) and consumption (water use) for fiscal years ending 2022 and 2023? It appears to be 45% fixed and 55% use.

RESPONSE: For fiscal year ending 2022, the water revenue split was 46% base revenue and 54% consumption revenue. For fiscal year ending 2023, the current (through January 2023) water revenue split is 43% base revenue and 57% consumption revenue. Under the current rate model, the projected revenue split in normally conditions is 40% base revenue and 60% consumption revenue. However, during drought conditions, the City has realized a decline on the consumption revenue and therefore impacting the split.

Are the proposed rate increases for consumption or base fee or both?

5.5 QUESTION: Please confirm the current existing preliminary rate model provides for 35% fixed rate revenue charges and 65% of revenue derived from use charges. Moving to a reduced emphasis on fixed

Please clarify, the top 40 users. with a pie chart. Are the multifamily users 1 connection serving many households? What classification are city schools and private schools (ie commercial?)

rate charges (especially given obvious future droughts) would make our revenue less stable which is inconsistent with the objective rankings of the City Council and the Advisory Committee.

RESPONSE: Confirmed, the cost allocations achieve a 35% fixed rate revenue. This is consistent with the prior rate study and is still relatively high within the industry. Historically fixed charges recovered only 20-25% of rate revenues. Through increased concerns of drought, demand hardening, and revenue stability, that number has crept up into the 30% range. There is a trade-off between revenue stability and conservation: every additional dollar that is recovered from fixed charges is a dollar that cannot be recovered through commodity/water use rates. Additionally, the City utilizes drought rates in times of shortage. This additional tool helps mitigate the risk of revenue instability without increasing fixed charges during normal conditions. **I support lower fixed rate fees, such as 30%, and put more burden on actual usage.**

5.6 QUESTION: Fully differentiated rates (vs partial differentiated rates) encourage greater water conservation consistent with both the City Council and Advisory Committee placing this as a top three objectives. Please provide a full analysis of fully differentiated rates.

RESPONSE: As part of their work, Raftelis has already completed a full analysis of the fully differentiated rates and will provide their mathematical calculations at an upcoming Committee meeting. The analysis and mathematical calculations illustrate that it is consistent with both the City Council and Advisory Committee placing this as a top three objectives.

5.7 QUESTION: Please provide the data and information behind the checkmarks noted on the Commodity Rate Components schedule provided on page 24 of the presentation provided on January 12. For instance, the consultants spoke to the percentage of water being assigned to each water supply source within tiers and customer class but it wasn't clear what those assigned percentages were.

RESPONSE: Raftelis will provide the mathematical calculations of one of the rate components at the Committee Meeting.

5.8 QUESTION: Please provide the data used to develop the impact of "peaking" as well as the math behind the impacts the conservation category. Of particular note, our November 9 meeting (page 37) provided the "peaking factor" for industrial and landscape was much greater than SFR or MFR, but the information on page 25 of the January 12 presentation has the highest tier for industrial and landscape much lower than the highest tier for residential. Is this because you didn't include a third tier for nonresidential? Is that equitable?

RESPONSE: The peaking factors presented on November 9, 2022 were at the class level (irrespective of any tiers which are then treated as sub-classes). The peaking analysis utilizes the most recent data from FY 2021-22 (July 2021 through June 2022). Where tiers are developed, Raftelis then calculates the peak for the given tier by identifying the actual water use within that tier, had the tier been in place at the time of the billing data was generated. Then, the maximum period of use is related to the average period of use to come up with a peaking ratio (i.e. peaking factor). **Please provide a definition of peaking in the final report.**

5.9 QUESTION: Please confirm the customer types included in the water rate classes for Commercial and Industrial. I assume our consultants can use the business groups noted in the non-residential user classes from the wastewater groups. This would sufficiently help me have a better understanding to support the data behind the peaking impacts in the Commodity Rate Component schedule.

RESPONSE: Pending **Again, please show where public and private schools, and city water is classified. If city water is not included in the report it should be, and also designated.**

5.10 QUESTION: Please provide a schedule similar to the one on page 25 of the January 12 presentation (page 25 is Commodity Rates – Partial Supply Differential) for the fully differentiated rates?

RESPONSE: Raftelis will provide a schedule for the fully differentiated rates at the February 16th meeting.

We are in a new era of water usage and payment. It is time for non-residential customers to also be tiered if residential customers are tiers as part of a community effort to repair our water infrastructure.

5.11 QUESTION: Please provide the support for the HCF quantities used to develop the tiers for the Commercial, Industrial and Landscape. Industry standard, history, conservation considerations, arbitrary?

RESPONSE: Raftelis utilized historical data and identified the average use within the class during a low winter period. The tier breakpoints are approximate, not exact, to the winter water use on a per connection basis. There is no industry standard for tiering non-residential customers.

5.12 QUESTION: Why are there three tiers presented for residential while only two tiers presented for nonresidential customers?

RESPONSE: It is not common practice to have a tiered rate structure for commercial and industrial customer classes. A recent survey, which included the City of Napa, City of American Canyon, Town of Yountville, City of Calistoga, and City of Sonoma, showed that none of the surrounding agencies have a tiered billing structure for commercial and industrial customer classes. While not typical, Raftelis prepared a tiered billing structure at the request of the committee which was presented at the January 12th committee meeting. Because there is vastly different usage between the different commercial and industrial accounts, Raftelis recommended two tiers for these customer classes. When this was presented at the January 12th committee meeting, committee members additionally requested a rate structure that had three tiers for the commercial and industrial classes. Based on this direction Raftelis is currently preparing a three-tiered rate structure for all customer classifications to be presented at the February 16th committee meeting.

5.13 QUESTION: Please provide a list of all the areas with subjective decision making and qualify as "policy" decisions. It appears there are many, the least of which are: uniform rates, tiers, uniform tiers, customer classes, tier volume break points, peaking impact, conservation, water supply allocation among tiers or customer classes, etc.

RESPONSE:

- The number of customer classes
- The number of tiers and tier allotment, for classes with tiers
- How we allocate and recover water supply costs
- How we recover conservation costs and reward conservation
- Proposed elevation surcharges and out of the city limit surcharges
- Degree of fixed-rate revenue, with limitations based on the cost-of-service framework and industry norms

5.14 QUESTION: Given that we will need to affirm and recommend rate structures to City Council as noted in our responsibilities, we will need to see alternative rate structures including tiered uniform rates, tiered uniform rate structures with 50% fixed rate revenue, uniformed tiered rate structures with 50% fixed rates revenues with fully differentiated rates, etc.

RESPONSE: While Raftelis can model a variety of scenarios, additional scenarios will require substantially more time and effort from everyone involved in the rate study. Raftelis and staff have brought forth options for consideration based on several factors including: the results of the pricing objectives, the discussion and direction from the committee and City Council, rate-setting and cost of service principles, and the constraints on the City's customer billing systems and administrative abilities.

5.15 QUESTION: We need to see models that reduce the reserve requirement to a similar six months of operating expenses as wastewater given that our capital projects are more or less fully funded by debt (not cash from rates) and if we have a more stable rate structure that provides 50% of revenue from fixed charges, there is no need for a larger reserve requirement as currently presented.

RESPONSE: Raftelis is modeling and will present water and wastewater scenarios with a lower level of reserves. Ultimately reserve policies are a function of informed risk tolerance and risk management. While the proposed financial plans rely heavily on borrowing, design costs are generally cash funded and then reimbursed through bond proceeds. More, a capital component can help insulate a utility from costs coming in over plan, expediting projects if favorable terms are available, and guarding against emergency capital needs. There is no one size fits all approach as each agency is unique and has their own risk preferences. However, 365 days cash on hand (one-year reserves) is one benchmark, of many, that credit ratings agencies look to.

5.16 QUESTION: What was the wastewater revenue split between fixed rate (meter charge) and flow charges for fiscal years ending 2022 and 2023?

RESPONSE: For fiscal year ending 2022, the water revenue split was 64% base revenue and 36% consumption revenue. For fiscal year ending 2023, the current (through January 2023) water revenue split is 67% base revenue and 33% consumption revenue.

5.17 QUESTION: What is the wastewater revenue split in the proposed rate model.

RESPONSE: Fixed (residential base charges and non-residential meter charges) are projected to recover approximately 62% of rate revenues. **Doesn't Question 5.5 state the base fee/fixed rate is to be 35%?**

5.18 QUESTION: Why do the residential flow rates increase 84% while the flow rate increases for nonresidential increase much less (on average about 50%).

RESPONSE: Changes in flow rates are a function of several factors including the total cost of service, cost allocations to the system components, changes in class characteristics (i.e. total connections), dwelling units, metered non-residential connections, non-residential water use, and estimated residential wastewater generation. The changes to the residential flow rates noted above are a result of updating the cost-of-service analysis, while maintaining the existing rate structure and degree of fixed and variable revenues.

5.19 QUESTION: Financial scenario 1 suggests there will be excess reserves of \$2 million or more in many years. Please provided a rate schedule that brings the reserves into balance with the suggested reserve policy of six months of operating expenses. Scenario 2 seems to provide this so why is scenario 1 suggested?

RESPONSE: Pending

5.20 QUESTION: Provide a financial scenario that removes (and repays) the internal borrowings; this could be accomplished with outside short-term borrowings or additional tranches.

RESPONSE: Pending

