

Department of Public Service Staff Report
on its Investigation of the
Issues Raised by Complainants in
CASE 17-W-0049 - Complaint of Property Owners and Customers of
Bristol Water Works Corporation to Conduct a Survey of Water
Usage for both Commercial and Residential Customers
January 2018

INTRODUCTION

On January 3, 2017, the Bristol Harbour Village Association (BHVA)¹ filed a complaint under the provisions of Public Service Law (PSL) §89-i regarding the rates of the Bristol Water Works Corporation (Bristol Water or the Company).² The BHVA complaint consists of a petition signed by 30 Bristol Water ratepayers, satisfying the requirements of PSL §89-i, requesting that the Commission "...conduct a survey of water usage for both commercial and residential customers to determine if fair and equitable rates are being levied to all parties." In addition, the subject of metering individual condo buildings was raised by one of the speakers at a public statement hearing on August 29, 2017.

The purpose of this report is to provide background information on how the Company provides water to its customers; to summarize Department of Public Service Staff's (Staff) findings from its investigation; to describe and address the concerns raised by complainants and the public as part of this proceeding; and to present preliminary recommendations to alleviate the concerns raised by complainants and the public as part of this proceeding.

In summary, Staff found that the Company is providing and billing water service to its customers as prescribed by its Commission approved tariff. However, based on now available

¹ According to its website, <https://www.bhvainc.com/>, Bristol Harbour Village Association, Inc. is a master association that is responsible for the common elements shared by six subsidiary associations comprised of 92 single family homes, 30 single family patio homes, 36 townhome style units and 179 condominium style units.

² Case 17-W-0049, Bristol Water-Works Corporation - Customer Complaint, Bristol Harbour Village Association Complaint (filed January 3, 2017) (BHVA Complaint).

residential meter usage data that did not exist when rates were last set, Staff recommends that the Commission consider altering the revenue allocation between Service Classifications (S.C.s) to more closely match usage in the Company's ongoing Rate Case.³ Staff also recommends that customers served under S.C. No. 1 continue to be billed a service charge and, for single-family homes, a usage rate. Staff found that the benefit to metering the individual condo units does not outweigh the costs of such meter installations and therefore believes that the current metering situation is appropriate. In addition, the rates for S.C. No. 2 should be updated to include a meter charge for each meter size based on equivalent meter ratios. Finally, any comments and concerns not addressed herein should be addressed as part of the ongoing Rate Case.

COMPANY BACKGROUND

The Company provides a combination of metered and flat rate water service to approximately 363 single family (SF) residences, townhomes, cottages and condominium units within the Bristol Harbour Village development, located in the Town of South Bristol (Town), Ontario County; metered water service is also provided to four commercial facilities, specifically a lodge, a hotel, a sewer treatment plant, and a golf course.⁴ Public fire protection service is not provided.

System Description

The Company's sole source of supply is surface water from Canandaigua Lake, which is drawn from an intake structure that is located approximately 300 feet from the west shore of

³ Case 17-W-0293, Bristol Water-Works Corporation - Rates (the Rate Case).

⁴ The Company owners also own these four commercial facilities.

the lake at a depth of about 75 feet below the water surface. A raw water pump station located at lake shore level is equipped with three 240-gallon per minute (gpm) vertical turbine pumps that discharge raw water to the water treatment plant, which is located about 390 feet above the level of raw water pump station. Liquid sodium hypochlorite (pre-chlorination) is injected seasonally at the intake for zebra mussel control via a 50-gallon chlorine solution crock and a chemical metering pump located in the raw water pump station. Two of the raw water pumps are in regular alternating use while the third is reportedly used as a backup/auxiliary pump.

Appendix A includes a service area map, process flow schematic, and photos of the primary water system components. At the water treatment plant located on Spy Glass Hill Road, the raw water undergoes treatment for particulate removal via two vacuum diatomaceous earth filters⁵ and primary disinfection is provided using gaseous chlorine. Treated water from the filters is discharged to a 60,000-gallon clearwell located beneath the floor of the treatment plant. The clearwell is hydraulically connected to a 240,000-gallon partially buried concrete storage tank located outside the treatment plant.

There are three hydraulic distribution pressure zones known respectively as the low-, mid-, and high-elevation pressure zones.⁶ The low-elevation pressure zone (elevation 690 feet to 930 feet), which includes the five condominium units on

⁵ The water treatment plant was constructed in about 1969 and has a capacity to treat approximately 240 gpm through one of the two vacuum diatomaceous earth filters, with only one filter in use at any time.

⁶ These pressure zones are described in more detail in the "Bristol Harbour Feasibility Study" by Larsen Engineers dated March 23, 2015, which was prepared to present alternatives for a refurbished or new water tank.

Cliffside Drive and the sewer treatment plant, is served by gravity from the 240,000-gallon tank via an 8-inch main. The mid-elevation pressure zone (elevation 930 feet to 1,030 feet), which includes residential areas west of Seneca Point Road, is served by two 260-gpm vertical turbine pumps that draw finished water from the clearwell and discharge it via an 8-inch main to a 24-foot high, 120,000-gallon welded steel distribution storage tank (constructed in 1972) on the golf course near the lodge, with base and high-water elevations of 1,080 feet and 1,104 feet. The high-elevation pressure zone (elevation 1,030 feet to 1,130 feet), which includes the area north of Bristol Harbor Boulevard and Medalist Lane, including the golf course, lodge, hotel, and adjacent buildings (i.e., five cottages and a SF home)⁷ and a seasonal wash pad,⁸ is served by two booster pumps (a 25-gpm pump and a 50-gpm pump) and a 245-gallon hydropneumatic tank set at 85 pounds per square inch (psi) located in the water treatment plant that draw water from the line feeding the 120,000-gallon tank when the water treatment plant vertical turbine pumps are not operating. The original distribution system constructed between 1972 to 1976 consists mostly of 8-inch ductile iron pipe, with some 10-inch pipe, while newer sections consist of PVC pipe; there are 34 fire

⁷ The lodge and hotel also each have duplex booster pumps and pressure tanks that are used to increase operational pressures within the facilities above the pressures provided at the points of connection to the distribution system; these pump systems are not owned, operated or maintained by the Company.

⁸ The wash pad, located near the hotel, is used seasonally for washing golf carts in the summer.

hydrants located throughout the system for fire protection⁹ and flushing purposes.

Service Classifications

There are three separate service classifications.

S.C. No. 1 provides residential, small commercial, and general use service to 179 condominium units in five buildings that are billed a quarterly flat rate depending on the number of bedrooms (with rates ranging from \$49.00 for a one-bedroom unit to \$112.00 for four-bedroom and larger units) and 179 SF/townhomes and five cottages that are billed a quarterly metered rate of \$58.00 in advance plus \$2.75 per 1,000 gallons (TG) in arrears. S.C. No. 2 provides metered treated water service for general purposes to three year-round accounts including the lodge, hotel, sewer treatment plant, and the seasonal wash pad that is billed a quarterly metered rate of \$3.82 per TG in arrears for all consumption. S.C. No. 3 provides metered untreated water service for irrigation purposes only to a golf course that is billed a monthly metered rate of \$1.88 per TG in arrears for all consumption.¹⁰

Meters

The system utilizes a series of water meters, including production (non-revenue) and consumption (revenue) meters to monitor and record flow in the system. Production meters include three 4-inch water meters (i.e., a currently

⁹ While the distribution system was hydraulically designed to provide fire protection flows, the Company does not charge the Town a tariff rate for fire protection service.

¹⁰ The golf course is billed for raw water provided to a lagoon from May 1 to October 31 annually; during the remainder of the year, some raw water that bypasses the water treatment plant as part of routine plant operations is discharged to the lagoon, but there is no revenue associated with these periodic discharges.

inoperable raw water meter; a meter that measures filtered water flow to the clearwell; and a meter that measures finished water flow from the clearwell to the 120,000-gallon tank). In addition, there is an 8-inch master meter located in the basement of Condo Building No. 3 that measures all water flow to the five condominium buildings.¹¹ All S.C. No. 1 SF homes, townhomes and cottages are equipped with 5/8-inch x 3/4-inch meters installed subsequent to the rate order in Case 08-W-1272;¹² the S.C. No. 2 customers including the hotel and lodge each have 2-inch meters, while the sewer treatment plant and the seasonal wash pad each have 1-inch meters; the golf course served under S.C. No. 3 has a 4-inch meter that is located inside the water treatment plant.¹³

See Appendix B for a meter schematic and photos of representative customers and meters by service class.

PUBLIC NOTICE & COMMENTS

Pursuant to the State Administrative Procedure Act (SAPA) §202(1), a Notice of Proposed Rulemaking was published in the State Register on October 18, 2017 [SAPA No. 17-W-0049SP1]. The time for submission of comments pursuant to the Notice expired on December 18, 2017.

¹¹ This meter, installed in 2009, is used solely to monitor usage in the five condominium buildings; it is not a revenue meter.

¹² Case 08-W-1272, Bristol Water-Works Corporation, Order Regarding Tariff Filing (Issued March 17, 2009)

¹³ There are also other various meters including a 2-inch master meter for the cottages and the SF home located adjacent to the lodge and a 1-inch fire pump meter (both located within the lodge utility room); a 2-inch water meter at the water treatment plant to monitor in-plant process water use; a 1.5-inch meter installed in the basement of Condo Five that is not read, etc.

Twenty written comments were received from the Company's customers, including several that were in opposition to the 116% rate increase proposed in the Rate Case, noting that this increase exceeds the rate of inflation and that the rates would be much higher than those in local municipal systems. Some commenters raised issues involving the concurrent rate increase sought by the affiliated sewer company (Bristol Sewerage Disposal Corporation or BDSC), citing the proposed combined water and sewer rate increases as a concern or proposing that the two rate increase requests be carried out in tandem. Many comments expressed the belief that the current and prior owners of Bristol Water engaged in self-dealing by undercharging the commercial customers for water service,¹⁴ or used the water utility to offset losses in other businesses, and argued that a review of the Company's financial records should be done before granting a rate increase.

Some of the customers also raised objections to the current rate structure in which condo owners pay a flat rate depending on the size of their unit, with many arguing that because many of the condos are only seasonally or occasionally occupied, that it was unfair that they be charged the same base rates as year-round occupants in other parts of the system. Also raised was the fact that incremental growth in the customer base should be factored into the rate design. Concerns were also raised regarding a System Improvement Charge (SIC) mechanism for a new water tank that was mentioned in the Company's rate filing letter, and whether this new tank is only

¹⁴ The commercial customers, also owned by the Company owners, are the lodge, hotel, sewer treatment plant, and golf course.

needed to serve the Company owners' proposed Everwilde Inn & Spa (Everwilde) service area extension.¹⁵

In addition to the written comments, a public statement hearing was held on August 29, 2017 at the South Bristol Town Hall in Naples, NY to allow customers to voice their concerns regarding the BHVA Complaint and the Rate Case. Speakers complained that Staff visited the Company but did not contact members of the BHVA to meet with them. Speakers also raised concerns over the Company's management and professional fees, and salaries. An alternative to the flat rate charge to condo units was proposed in which each condominium building would be charged a metered rate for its residents' consumption and that the condo associations could then recover that amount from the fees charged to owners of the individual units in the condo buildings. Questions were raised about the level of water consumption for the Bristol Resorts, the finances of the BDSC, and potential municipalization of the system. Another speaker argued that the level of Bristol Water's rates, as compared to municipal systems, indicates that there are considerable inefficiencies in the Company's operation. Finally, the possibility that the proposed rate increase is the result of lower sales due to recent wet weather was raised by a speaker.

Following the public statement hearing, the BHVA President wrote a letter to the Secretary to the Commission dated August 31, 2017 expressing disappointment that Staff visited the Company on July 11, 2017 and August 30, 2017 without making arrangements to speak directly with representatives of

¹⁵ Everwilde would reportedly consist of a spa, a 50-room inn, restaurant, cafe-bakery, and banquet and reception areas, with indoor and outdoor pool facilities. According to the Company, local zoning approvals for Everwilde are contemplated to be received by the end of 2018.

the BHVA about its concerns as outlined in its petition in the instant proceeding. The BHVA President went on to say that,

“Pertaining to meter review, it has been stated to the BHVA Community by past and present employees of Bristol Harbour Resorts that there may be or may not have water meters for the Lodge, Hotel, Golf Course, and the five associated Cottages. Possibly, Bristol Harbour Resorts may be paying a flat rate instead of a meter rate that is charged to the Community.”

He closed the letter by saying that he was hoping the Commission will contact BHVA for a meter review conversation to make sure all consumers are metered appropriately.

LEGAL AUTHORITY

Under PSL §89-b, the Commission must ensure that all charges for water service are just and reasonable. Under PSL §89-i, a request from, among others, 25 ratepayers to review a water utility's rates and service quality requires the Commission to undertake such an investigation.

DISCUSSION

Staff's investigation in the Rate Case and the instant proceeding included an analysis of the costs of water production and consumption and revenues by service class, based on information gathered from a series of Information Requests (IRs),¹⁶ site visits to the Company on July 11 and August 30, 2017, and numerous teleconferences with the Company owner and water system operator. Staff's investigation also included an

¹⁶ Copies of Staff's IRs and the Company's responses to the IRS cited in this section are included in Appendix C; however, because each IR response contained numerous attachments and files that were in many cases too voluminous to reproduce here, only those attachments that are pertinent to the discussion are included in this Appendix.

analysis of the feasibility of installing meters at each of the condo buildings that currently receive flat rate service.

Water Production and Consumption and Revenues by Service Class

As a general principle, water rates should be designed to equitably recover the costs of providing service from each service classification. Bristol, as a small water company with limited resources, does not have a detailed cost of service study to determine the cost of providing service to each service classification. However, the Company tends to incur most of its expenses through its pumping, storage and water treatment facilities which are expenses that vary based on the amount of water that is treated and supplied to its customers. As a result, the amount of water usage per service classification provides a good estimate for the revenues that should be collected from each service classification.

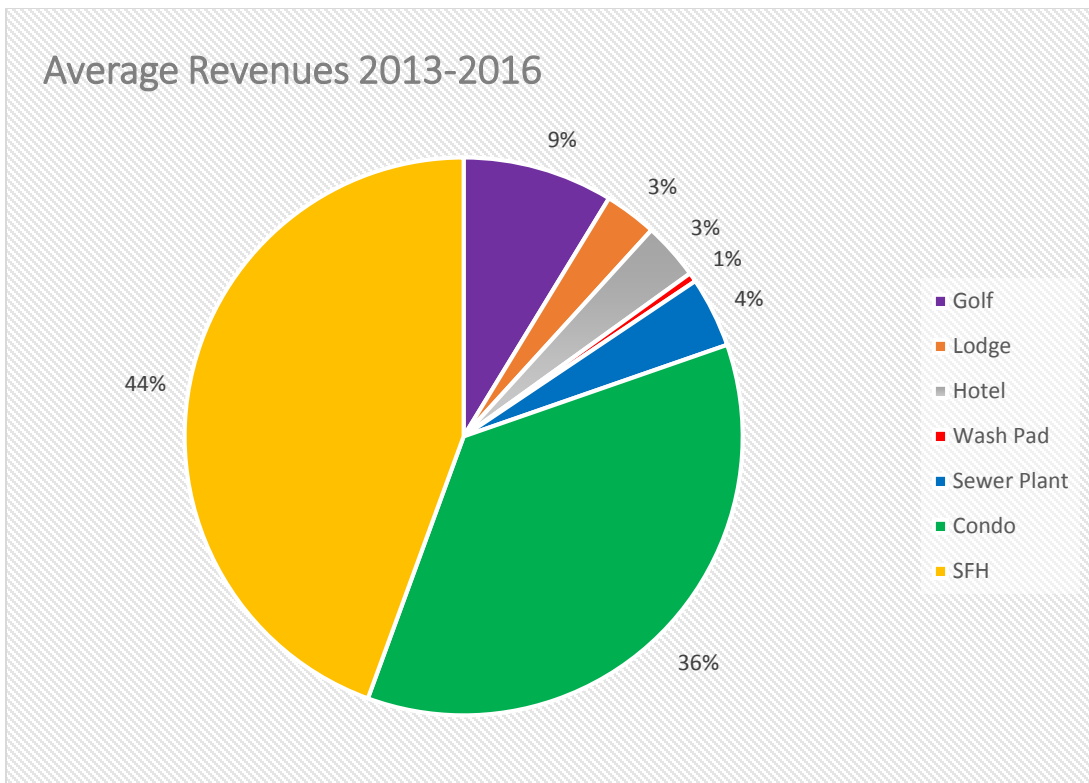
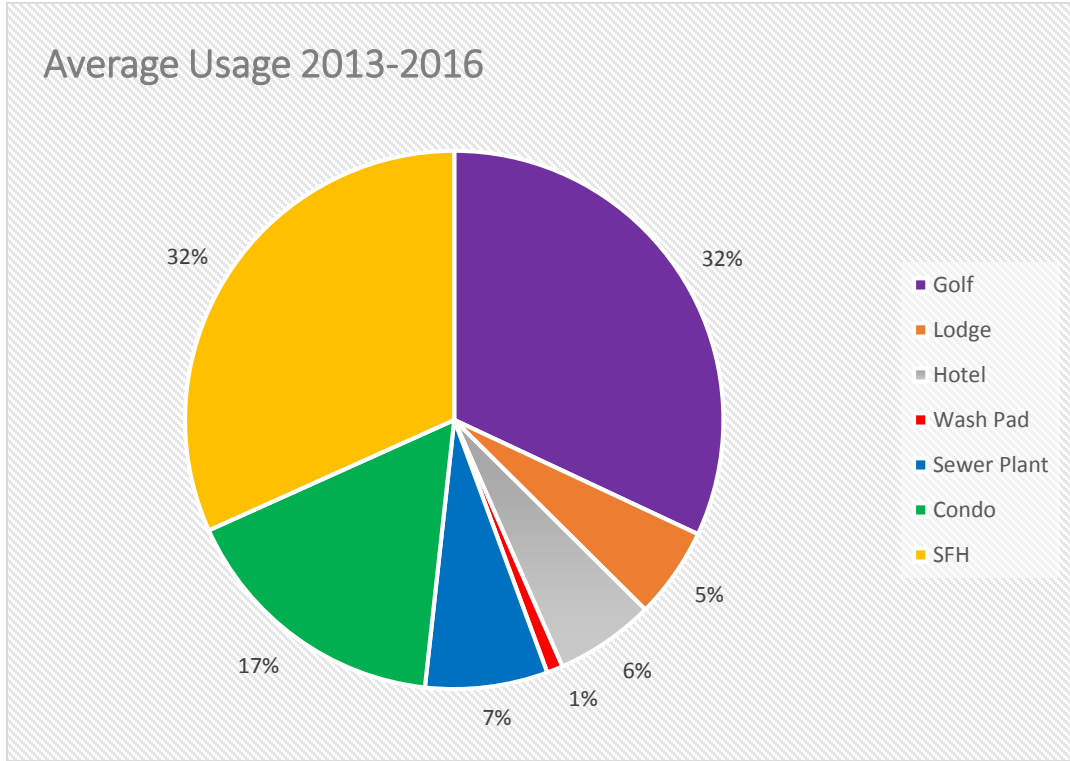
One exception is the golf course, because it receives untreated water service as opposed to the treated water service for S.C. No. 1 and S.C. No. 2. Providing service to the golf course does not require the Company to incur costs for water treatment like the other service classifications, and therefore the golf course should be expected to contribute less revenues proportionally. Staff's analysis showed that the cost to provide untreated water was about \$0.49 per thousand gallons (TG) while the cost of providing treated water was about \$0.99 per TG. Therefore, it should be expected that the percentage of revenues provided by the golf course should be approximately one-half of its percent of total water sales.

To analyze these rate design and revenue allocation concepts, Staff reviewed data provided by the Company in response to IRs MLT-1, MLT-9, MLT-10, and MLT-11, which show that the annual average lake withdrawals from 2013-2016 were

about 66,550 gallons per day (gpd).¹⁷ Using the consumption and billing data from 2013-2016, Staff developed the table and charts below comparing historic sales and revenues at current rates by customer type/service classification:

Service Class	Historic			
	2013-16 Sales	% Total Sales	2013-16 Revenues	% Total Revenues
SC1				
SFH + Cottages	5,766	32%	\$ 55,646	44%
Total Condo	3,005	17%	\$ 44,974	36%
SC2				
Lodge	993	5%	\$ 3,795	3%
Hotel	1,087	6%	\$ 4,152	3%
Wash Pad	175	1%	\$ 667	1%
Sewer Plant	1,337	7%	\$ 5,107	4%
SC3				
Golf Course	5,812	32%	\$ 10,926	9%
Total	18,176	100%	\$ 125,267	100%

¹⁷ The Company has a New York State (NYS) Department of Environmental Conservation (DEC) permit to withdraw up to 225,000 gpd from Canandaigua Lake (DEC Permit ID 8-3246-00199/00002/Water Supply Application No. 11003, effective July 2, 2007).



S.C. No. 1, the condos and single-family homes, accounts for 49% of sales, yet contributes 80% of revenues. S.C. No. 2 accounts for 19% of total sales, yet only contributes 11% of total revenues, a shortfall of 8%. Finally, S.C. No. 3, the golf course, accounts for 32% of sales and contributes 9% of revenues. Per the revenue allocation principles discussed above, S.C. No. 1 should be contributing less, while S.C. No. 2 and S.C. No. 3 should contribute more. An ideal revenue allocation would have S.C. No. 1 contributing between 55% and 60% of revenues, S.C. No. 2 contributing between 20% and 25% and S.C. 3 between 15% and 20%. This would allow S.C. No. 3, despite contributing less revenue than its share of total sales, to pay the appropriate amount of revenue by accounting for the lower costs of providing untreated water. The resulting revenue shortfall should be evenly distributed among all service classifications. Staff recommends that the revenue allocation be updated in the Company's ongoing Rate Case, while considering bill impacts. However, the Company is properly charging the rates approved by the Commission in its prior rate case, which used that best information available at that time.

Metering Individual Condo Units

Regarding the subject of metering individual condo buildings, which was raised by one of the speakers at the public statement hearing, Staff asked the Company in IR MLT-13 if the current piping configuration at each condominium complex would support the addition of individual meters for each building and, if not, to explain the reasons. In its response to IR MLT-13, the Company stated that it has one central water meter which meters water to all five condominiums combined; that it would not be practical to meter each building as the inbound water supply to Condominium 1 is underground and not accessible for

the addition of a meter; and that the current piping at each condominium complex does not permit the installation of individual meters for each building.¹⁸ See Appendix D for representative photos of the service piping conditions at each condo building.

In IR MLT-27, Staff asked the Company, that based on digital photos it provided showing that a meter was already installed at the service connection to Condo 5 and that the piping at Condo 4 was configured to allow the installation of a meter, to provide an estimate to retrofit the piping at Condos 2 and 3 to allow the installation of meters at each of these condos (*i.e.*, Condos 2, 3 & 4) including materials and labor and meter type/size. Staff also asked the Company to provide an estimate to install a meter at Condo 1. In its response to IR MLT-27, the Company provided a meter retrofit quote from Penfield Plumbing, which is summarized in the chart below:

¹⁸ All five condo units are served by a single 8-inch main that runs through the basements of each condo unit, and each condo unit is then served by one or more risers that are fed by this 8-inch main.

Scope of Work	Cost
Building #1: supply and install 4" meter on ductile iron water main in existing pit.	\$7,975
Building #2: supply and install qty 9 Badger 1-1/2" SS E-series meters. Vertical installation with isolation ball valves.	\$8,874
Building #3: supply and install qty 2 Badger 1-1/2" SS E-series meters. Horizontal installations w/ bypass. To include isolation ball valves.	\$2,426
Building #4: supply and install qty 2 Badger 1-1/2" SS E-series meters. Horizontal installations w/ bypass. To include isolation ball valves.	\$2,262
Building #5: supply and install qty 2 Badger 1-1/2" SS E-series meters. Horizontal installations w/ bypass. To include isolation ball valves.	\$2,262
Project Total	\$23,799

Upon review of the cost to install individual meters at each condo building,¹⁹ Staff does not believe that any potential benefits from such installations, namely issuing one bill to each condo building owner vs. continuing to bill the flat rate currently in effect, outweigh the capital expenditures to install the meters and the additional costs associated with meter reading, repairs and maintenance.²⁰ Further, even if this were done and each condo was treated by the Company as one customer, the individual condo boards would have to agree to pay the Company for the quarterly meter charges and then assess their members a share of those costs, essentially shifting the

¹⁹ The estimated cost to install a meter at Building #1 did not include any required excavation or other related costs.

²⁰ These potential capital and operation and maintenance costs were not included in the Company's filing in the Rate Case.

burden of billing from the Company to the condo boards with no practical benefit to the individual condo unit owners.

Public Comments

Because many of the comments addressed concerns related to both the BHVA Complaint and the Rate Case, those comments that would be more properly handled in the Rate Case will be discussed in that proceeding. More specifically, comments regarding the magnitude of the rate increase, the Company's financial records, the Company's management and operations including its management and professional fees and salaries, the existing flat rate structure, the level of water consumption for the Bristol Resorts, incremental growth in the customer base, lower sales due to recent wet weather, etc., will be discussed in the Rate Case proceeding. The remaining comments that were raised are discussed below.

As to whether the current and prior owners of the Company undercharged the commercial customers for water service, Staff found that the Company has been charging all customers the Commission approved tariff rates.

Regarding the current rate structure in which condo owners pay a flat rate depending on the size of their unit, it should be noted that water service is provided and available on a year-round basis to all condo units, even if they are only seasonally or occasionally occupied, and therefore the cost of providing year-round service to these customers must be recovered in rates.

With regard to the SIC mechanism for a new water tank and whether the tank is only needed to serve the Company owners' proposed Everwilde service area extension, the Company is not currently pursuing any action toward rehabilitating or replacing its existing steel storage tank and would have to seek

Commission approval for funding or cost recovery for any such project in a separate proceeding; further, it has not demonstrated that providing service to Everwilde would require additional or upgraded storage facilities.

Regarding the finances of the BDSC and the setting of sewer rates, neither the BDSC nor the setting of sewer rates, which is a function performed by the Town, are under the jurisdiction of the Commission.

In response to complaints recorded at the public statement hearing on August 29, 2017 that Staff visited the Company without contacting members of the BHVA, it should be noted that Staff engineers were doing on-site investigations of the Company's physical infrastructure as part of their investigation in both the instant proceeding and the Rate Case.

Regarding the proposed alternative to the flat rate charge to condo units, whereby each condominium building would be charged a metered rate for its residents' consumption, the feasibility of metering individual condominium buildings, as discussed in detail above, was found to be impractical from both a cost and billing perspective.

Regarding comparing Bristol Water's rates to those of municipal systems, it should be noted that the rates of municipal water systems are not directly comparable to those of privately owned water systems, in part because municipalities do not pay real estate taxes or income taxes, and they often have a much larger customer base from which to recover the costs associated with the construction and operation of their water systems.

Regarding the potential for municipalization of the water system, there are no municipal water systems in close enough proximity to Bristol Water that would make this a

feasible alternative to the present operation, and any proposed acquisition by a municipality would have to be approved by the Commission in a separate proceeding.

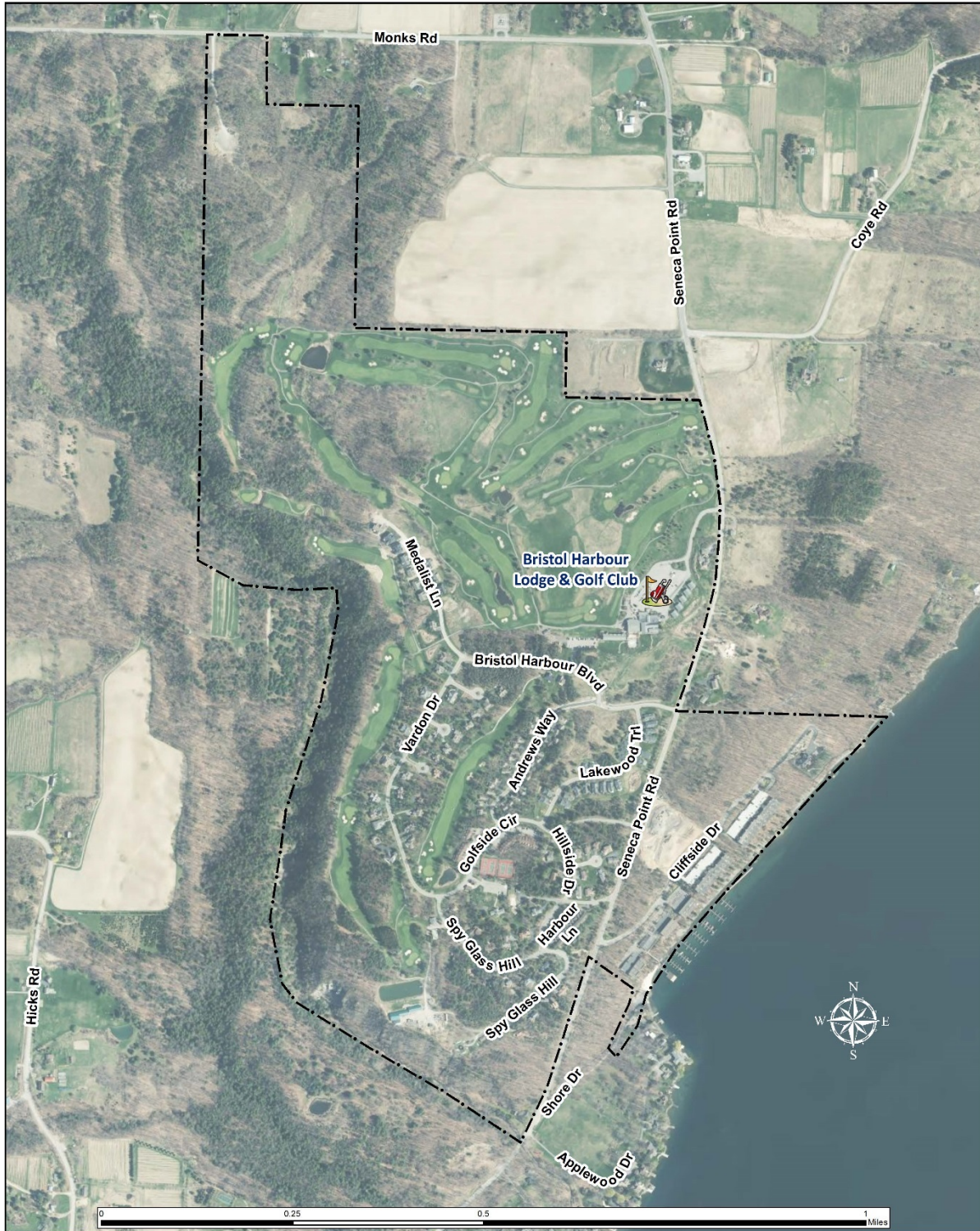
Finally, in response to the August 31, 2017 letter sent to the Secretary by the BHVA President, Staff Counsel wrote an email to the BHVA President on September 13, 2017 that acknowledged receipt of the August 31, 2017 letter and offered to arrange a conference call with Staff to discuss the BHVA's concerns; however, no response was received to Staff Counsel's email.

CONCLUSION

As described in the body of this report, the comments and concerns raised by complainants and the public have been analyzed by Staff as part of this proceeding and/or will be addressed as part of the Rate Case. The data show that the current rates should be updated based on now available residential meter usage information to equitably bill customers for their proportion of the Company's costs. While the Company is properly billing and metering its customers pursuant to its Commission approved tariff, the current revenue allocation and rate design creates some inequities that should be corrected using the most recent available meter usage data.

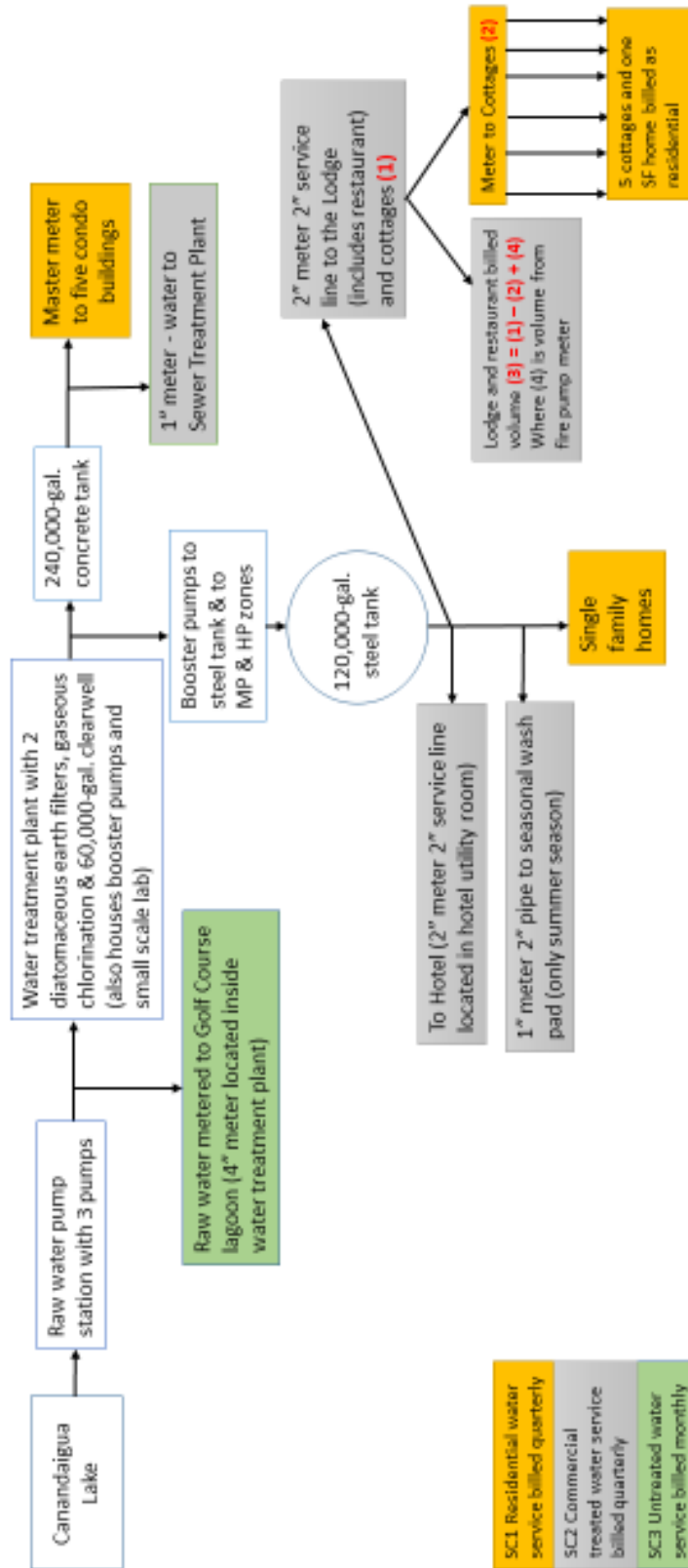
Also, due to the impracticality of installing meters at each condo building, both from a cost and billing perspective, Staff recommends that the condos served under S.C. No. 1 continue to be billed a flat rate. Staff also recommends that the SF homes, townhomes and cottages served under S.C. No. 1 continue to be billed using the current rate structure that includes a service charge and a usage rate. However, Staff recommends that new metered rates be set for the

hotel, lodge, sewer treatment plant and wash pad served under S.C. No. 2 that would include a meter charge for each meter size that is based on equivalent meter ratios in addition to a usage rate. Staff further recommends that the golf course served under S.C. No. 3 continue to be billed only for the water provided to it from May 1 to October 31 annually. The final revenue allocation and rate design for each service class should consider customer bill impacts and will be presented in the Rate Case.



--- Bristol Water Works Corporation Service Area

**Bristol Water Works Corporation
Process Flow Schematic**





Canandaigua Lake (above) and raw water pumps (below)





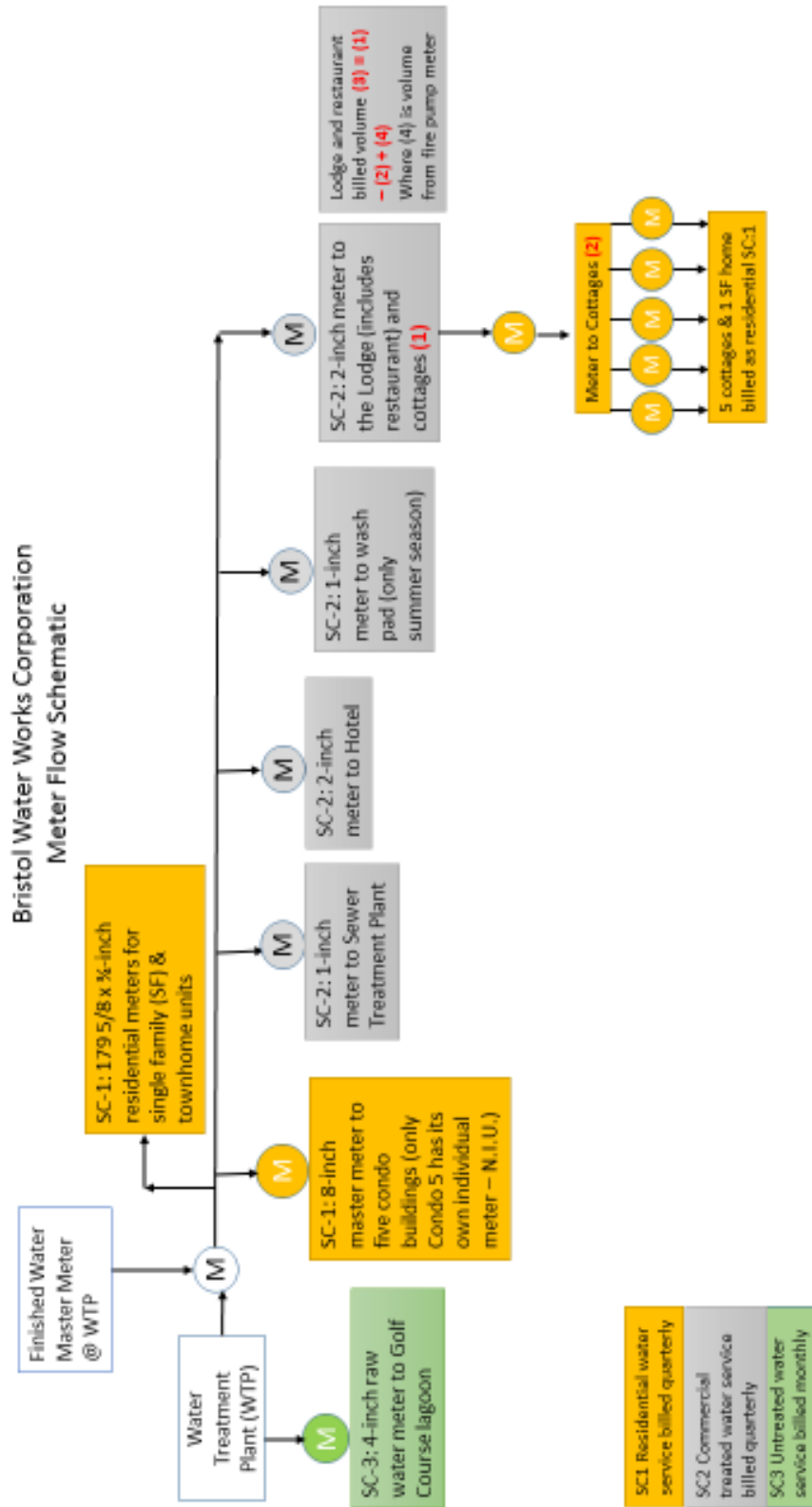
Water treatment plant (above) and finished water pumps (below)





240,000-gallon tank (above) and 120,000-gallon tank (below)







Typical residential home (above) and residential meter (below)





Condo units (above) and condo master meter (below)





The Lodge (above) and its meter (below)





The Hotel (above) and its meter (below)





Master meter to the Cottages (above) and sewer treatment plant meter (below)

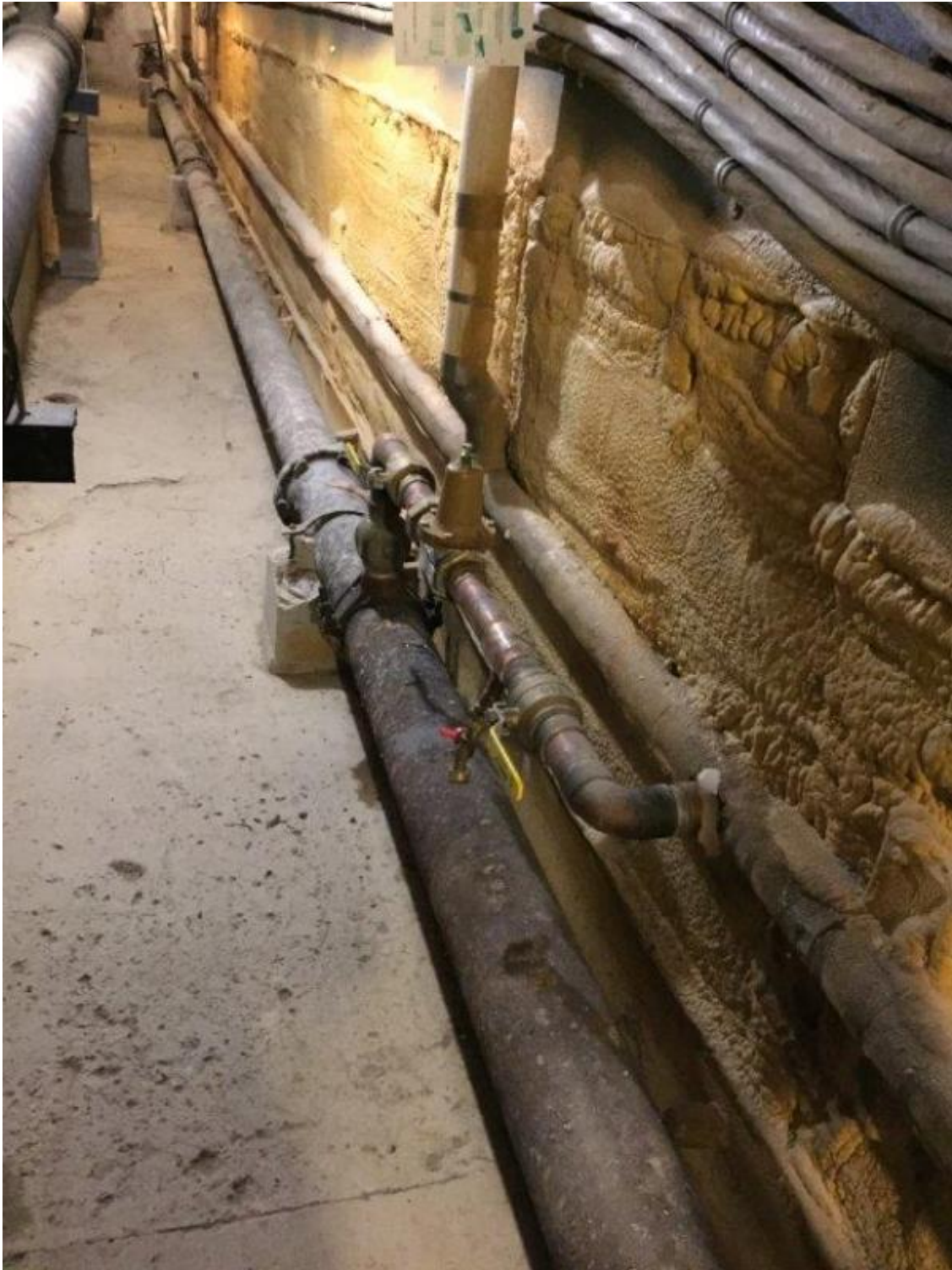




Lagoon meter located in water treatment plant



Condo 1 service location (buried underground)



Condo 2 service location photo



Condos 3 (above) and 4 (below) service location photos





Condos 5 service location photos

