CITY OF
BAINBRIDGE ISLAND

UTILITY ADVISORY COMMITTEE
REGULAR MEETING
WEDNESDAY, JUNE 9, 2021
5:45 PM
ZOOM MEETING

THE UTILITY ADVISORY COMMITTEE WILL HOLD THIS MEETING USING
A VIRTUAL, ZOOM WEBINAR, PER GOVERNOR INSLEE'S
"STAY HOME, STAY HEALTHY" ORDERS

PLEASE CLICK THE LINK BELOW TO JOIN THE WEBINAR:

HTTPS://BAINBRIDGEWA.ZOOM.US/J/97357473020
OR TELEPHONE: 1-253-215-8782
WEBINAR ID: 973 5747 3020

AGENDA

1. CALL TO ORDER / ROLL CALL / ACCEPT OR MODIFY AGENDA / CONFLICT OF INTEREST DISCLOSURE
   5:45 PM
2. APPROVE MINUTES FOR APRIL 14 – 5 MIN.
3. CERTIFICATES OF APPRECIATION – AVERILL AND NOLAN – 5 MIN.
4. FERNCLIFF WATER SYSTEM – 45 MIN
5. WASTEWATER TREATMENT PLANT STUDY – 15 MIN
6. PUBLIC WORKS UPDATE – 5 MIN
7. NEXT MEETING AGENDA PLANNING – 5 MIN.
8. ADJOURNMENT

Utility Advisory Committee
April 14, 2021
Meeting (Zoom) Minutes

Meeting called to order at 5:30 pm, Ted Jones chairing

Members present: Charlie Averill, Sheina Hughes, Susan Hume, Ted Jones, Andy Maron, Nancy Nolan, Martin Pastucha

Also present: Council Liaison, Rasham Nassar; Public Works Director, Chris Wierzbicki; COBI hydrogeologist, Maureen Whalen

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1. Call to Order/ Roll Call/ Acceptance of Agenda/Conflict of Interest Disclosure

No conflict of interest declared.

2. Approval of March 10, 2021 Minutes

Not yet available for approval.

3. Introduction of COBI's new hydrogeologist, Maureen Whalen *(Chris Wierzbicki)*

Chris Wierzbicki introduced Maureen Whalen as COBI's new hydrogeologist. Maureen participated in the Zoom meeting from New Zealand where she is currently telecommuting until she moves to Bainbridge Island in July. Her work will initially focus on further developing the Ground Water Management Plan.

Maureen provided the meeting a summary of her professional experience and qualifications as a groundwater scientist. Her work has involved extensive experience in an environmental consultancy practice especially in the areas of contaminated ground water and soil. Since 2015 Maureen has held several positions with Environment Canterbury (New Zealand), involving surface and ground water issues and supporting science-informed decision-making. Maureen holds undergraduate and graduate degrees in geology and "quaternary studies" (explained by Maureen as the study of the earth's geology for the last two million years).

4. Public Works Update

A. Water System/Tank Modeling (Chris Wierzbicki)

Chris updated the Committee on the pre-design analysis to improve Reservoir 1. The model used to calculate water flow requirements, specifically related to fire fighting, needs to be tweaked to ensure better accuracy. Chris shared maps highlighting high and low water pressure zones, explaining that the key challenge is to maintain sufficient pressure in the mains, while allowing for enough flow to fight a fire. Water connection fees related to development and new connections are calibrated every five years or so to ensure that such fees are current. Regarding the size of the planned tank, Chris said he thought it would be big enough although some adjustment to its height may need to be made.

B. Coordinated Water System Plan Map (Andy Maron and Chris Wierzbicki)

Chris showed a map outlining the various water systems in the south part of the island. This includes the Bill Point system whose residents had been considering how to renovate their aging system. Options include remaining a stand-alone system or becoming a part of the COBI (Rockaway Beach) system or the Kitsap Public Utility District ((the old Island Utility System). Although not yet finalized, the preliminary decision is that the Bill Point system will be taken over by KPUD. Chris said that one potential future outcome is that if KPUD can develop a new well for its South Bainbridge systems , an "inter-tie" agreement could be established in order to serve the adjacent COBI Rockaway Beach households (about 90) that are physically isolated from other parts of the COBI system.

5. PSE Franchise Negotiation Update *(Ted Jones and Chris Wierzbicki)*

Ted and Chris discussed the key parameters agreed to by a joint UAC and Climate Change Advisory Committee (CCAC) to guide COBI's negotiation of the franchise agreement with Puget Sound Energy (PSE). These include goals for ten key areas: collaboration, transparency, demand reduction, energy supply, local generation, green building fund, electrify transportation, reliability, undergrounding, franchise term.

The meeting went on to discuss the specific goal of reducing total energy demand. [If successful, the need for a new sub-station could be extended from 10 to 15 years (or longer).] A key challenge will be balancing a reduction in carbon-emitting vehicles with an increase in the use of electronic cars, and thus a concomitant increase in demand for electricity.

Related to reliability, several meeting attendees noted that this is mostly related to falling trees. In that respect, undergrounding should be a key goal. In any case, it was emphasized that PSE needs to be more transparent in sharing reliability statistics by neighborhood.

The goals related to the establishment of a Green Building Fund were discussed. It was explained that such a fund would be partially targeted to low-income, affordable, and senior housing which are less likely to adopt energy-saving improvements due to costs and affordability.

6. Next Meeting Agenda

The next meeting of the UAC will be held on Wednesday, May 12, 2021 at 5:30 pm (consistent with the normally scheduled meeting the second Wednesday of each month). The UAC will consider how to determine the appropriate fees associated with properties connecting to COBI's water system, specifically in any Ferncliff-Casey street extension. The agenda will also include the next steps for the study on the wastewater treatment plant.

7. Adjournment

The meeting adjourned at 7:20 pm

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Co-Chair Date

FCS GROUP
Solutions-Oriented Consulting

| Memorandum

To: Chris Wierzbicki, City of Bainbridge Island **Date:** June 7, 2021

From: Chris Gonzalez, Senior Project Manager
John Ghilarducci, Principal

RE Funding Alternatives for Ferncliff Water Main Extension

The City of Bainbridge Island's Comprehensive Plan generally calls for managing utility services in an efficient, effective, and safe manner that preserves local water resources. To this end, the City Council asked the City's Utility Advisory Committee (UAC) to "study and recommend a process for facilitating consolidation of small water systems." The UAC released a memo in September 2020 recommending that the City adopt a policy of actively responding to requests for assistance from small water systems on Bainbridge Island and, where appropriate, encouraging voluntary consolidation of those systems into the City's water utility. Bainbridge Island is home to 35 active Group A water systems serving 15 connections or more, as well as 135 Group B water systems that serve fewer than 15 connections.

Ferncliff Water Association, a Group A system with 18 connections, recently reached out to the City and expressed interest in potentially having the City take over its infrastructure. In accordance with the City's pro-consolidation policy, the City has conducted a preliminary assessment of the infrastructure that would be needed to connect the Ferncliff water system (as well as the neighboring Casey Street water system, which serves 9 connections) to the City's water system. The infrastructure needed includes:

- A main extension along Ferncliff Avenue NE that runs north from NE Garibaldi Loop to Grand Avenue NE.
- A main extension and service lines to the homes that will receive service. The City has identified two alternative routes for the extension beyond the intersection of Ferncliff Avenue NE and Grand Avenue NE:
  - One alternative runs the extension southeast to NE Fenton Road along Grand Avenue NE.
  - The other alternative runs the extension north along Ferncliff Avenue NE.
- A main extension to the Casey Street Water System.

Exhibit 1 provides a map illustrating these alternatives. Initial estimates from City staff suggest that the necessary mains and service lines could cost between $570,000 and $800,000, depending in part on which route the extension follows (southeast along Grand Avenue versus north along Ferncliff Avenue).

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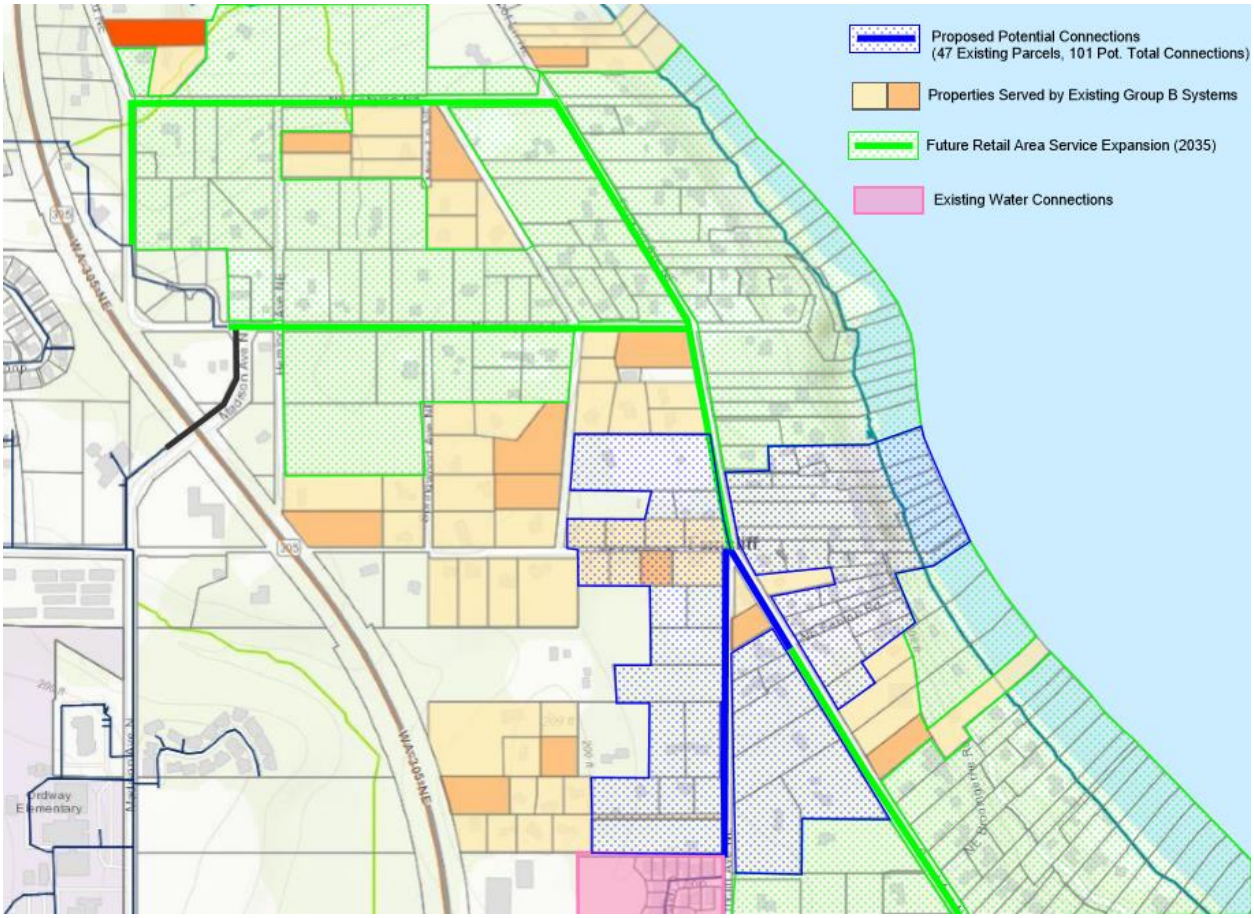
Redmond Town Center
7525 166th Ave NE, Ste D-215
Redmond, Washington 98052

Locations
Washington | 425.867.1802
Oregon | 503.841.6543
Colorado | 719.284.9168

Exhibit 1: Water System Extension Alternatives



The City has several options for recovering the cost of this main extension, which are discussed in further detail below. When determining how to recover the cost of this project, it is important to recognize that this water main extension will enable the City to serve more than the 27 connections from the Ferncliff and Casey Street Water Systems. Because Section 13.08.050 of the Bainbridge Island Municipal Code (BIMC) requires new development or redevelopment occurring within 300 feet of an existing water main to connect to that water main rather than drilling a well, City staff decided to focus on properties that are located within 300 feet of the main extension. This analysis excludes properties that are located more than 300 feet from the water main because (a) the main is not explicitly being sized to meet their demands and (b) the process of estimating if and when these homes will connect to the City's water system would be highly speculative in nature.

Including the connections from the Ferncliff and Casey Street Water Systems, City staff estimate that this water main extension could accommodate up to 101 connections under the Grand Avenue route and up to 104 connections under the Ferncliff Avenue route. The City recently surveyed 60 properties near the Ferncliff and Casey Street Water Systems to gauge their interest in connecting to the new water main. Of the 23 responses that the City received, 7 homes expressed interest in connecting to the main along the Grand Avenue Route and 5 homes expressed interest in connecting to the main along the Ferncliff Avenue Route.

A. Local Facilities Charge

Under this alternative, the City would charge the benefitting properties for a proportionate share of the cost of the main extension. Based on the estimated range of costs discussed above and the number of potential connections within 300 feet of the proposed main, the cost per connection would vary from $5,481 – $7,921.

Pros:

- This is the least expensive option for the City overall, as the new connections will eventually pay for the entire cost of the project.
- The upfront cash funding received from the new connections would reduce the amount that the City would need to fund from its own resources.

Cons:

- This alternative results in the most adverse impacts to the benefitting properties. In addition to the local facilities charge, they would have to pay the City's system participation fee (SPF) as well as other upfront charges for the physical service connection, which together could add up to an additional $4,750 – $6,300 per connection. An upfront cost on the order of $10,000 – $14,000 could be prohibitive for at least some of the benefitting properties.
- The policy decision to target the recovery of these costs to the properties specifically benefitting from this water main extension calls into question the extent to which these properties should pay for a proportionate share of other facilities. The need to account for facilities that do not serve these properties can increase the complexity of calculating and administering SPFs.
- There is also the potential for a consistency issue, given that other properties in the City might not have had to pay directly for the local mains serving them.
- While the cost of the project is appropriately allocated across the broader base of customers that would benefit from the main extension (rather than being allocated solely to the properties that are currently looking to connect to the City's water system), this introduces a degree of uncertainty as to when the City will be able to recover the cost of the project from the benefitting properties. Until the connections occur, the City and its ratepayers will have to fund the project.

B. Monthly Water Rate Surcharge

This alternative would roll the local facilities charge into a monthly rate surcharge with specified terms, with the goal of spreading the recovery of the cost over time. At least several jurisdictions impose their connection charges in this way, including:

- ***City of Bellevue:*** Property owners pay a capital recovery charge in monthly installments over a ten-year period. The charge is assessed to the property and stays with it; if the property sells before the charge is paid, the outstanding balance is transferred to the new owner. The payment due in the month of the transaction is prorated between the previous owner and the new owner.

- ***King County:*** Property owners pay a monthly capacity charge over a fifteen-year period. The charge is assessed to the property and stays with it; if the property sells during the payment period, the outstanding balance is transferred to the new owner. King County recommends that sellers consult with a real estate agent regarding the disclosure of any outstanding balances to prospective buyers.

- ***Spokane County:*** Properties that benefit from localized main extensions pay a capital facilities rate over a twenty-year period. If the property is sold before the balance is fully paid off, the balance can be paid in full or transferred to the new owner.

Based on the range of cost estimates provided above and assuming an interest rate of 2.5% (which is consistent with current bond interest rates), the monthly surcharge per connection would fall into the range of $36.89 – $53.31. As a variation of this alternative, the City could issue bonds to fund the project and build the related principal and interest payments into a monthly surcharge applicable to the benefitting properties.

Pros:

- Because this alternative still targets full cost recovery from the benefitting properties, the City and its ratepayers would eventually be made whole.

- This alternative results in a lower upfront cost impact to the benefitting properties, increasing the likelihood that they would be able to afford connecting to the new water main.

Cons:

- Even though the rate surcharge spreads the financial impact out over time, the monthly cost per connection is still significant. Assuming 700 cubic feet per month of water usage, a single-family home with a 3/4" meter would pay $22.81 per month for water service. A monthly rate surcharge of $36.89 – $53.31 would be roughly twice the water bill.

- Unless the City issues bonds to fund the cost of the project, spreading the recovery of the project cost over time would require the City's water utility to use its funds to cover the cost until it can be reimbursed. Given the potential for customer delinquency and uncertainty about when the benefitting properties will connect and begin paying the surcharge, this alternative would also subject the City to a greater degree of risk (especially if it issues debt to fund the project) than spreading cost recovery across the City's entire water customer base would.

- City staff would need to undertake an accounting process to monitor customer payments of the surcharge and ensure that the correct amounts are paid. Combined with a heightened potential for customer service calls, this would increase the administrative burden on City staff.

- The policy decision to target the recovery of these costs to the properties specifically benefitting from this water main extension calls into question the extent to which these properties should pay for a proportionate share of other facilities. The need to account for facilities that do not serve these properties can increase the complexity of calculating and administering SPFs.

- There is also the potential for a consistency issue, given that other properties in the City might not have had to pay directly for the local mains serving them.

C. System Participation Fee (SPF)

The City imposes SPFs on new development to recover an equitable share of system infrastructure. The cost basis for the SPF includes existing assets as well as planned capital projects – given that the City's SPF reflects an "average cost" methodology, the decision to include the cost of this water main extension as an existing asset (once it is completed) or as a future project (until it is completed) does not impact the calculated charge. At an estimated cost of $570,000 – $800,000, incorporating the cost of the water main extension into the SPF calculation would increase the City's water SPF by $100 – $141 per meter capacity equivalent (MCE).

Given that the City's 2018 Rate Study projected near-term growth on the order of 55 – 60 MCEs per year, this increase would generate between $5,500 and $8,500 per year in additional SPF revenue. The City could use this revenue to recover the cost of the main extension over time – based on the estimated capacity of the system and the projected annual growth rates, the City could recover approximately 40% of the cost of the main extension by 2050. Alternatively, if the City were to issue 20-year bonds with an interest rate of 2.5% to fund the main extension, the additional SPF revenue would cover roughly 15 – 20% of the annual principal and interest payments.

Pros:

- This alternative reduces the upfront cost impact to the benefitting properties, increasing the likelihood that they would be able to afford connecting to the new water main.

- Building the cost of this project into systemwide charges is simpler to administer than determining and tracking area-specific charges. It is also consistent with the City's decision in the 2018 Rate Study to move away from area-specific charges.

Cons:

- Embedding the cost of the water main extension in the SPF would shift the recovery of costs associated with this project to other customers. There could be a consistency issue if the City requires developers in other parts of the City to fund comparable infrastructure to serve their properties while embedding the cost of this water main extension in the SPF paid by all development. The incremental SPF associated with this project will only recover about 40% of the total cost, requiring either the benefitting properties or the City's entire base of ratepayers to cover the remainder.

- Planning to use the incremental SPF revenue to repay debt attributable to the project would expose the City to risks associated with year-to-year volatility in SPF revenue collections. If growth slows down and the City receives less SPF revenue than expected, its ratepayers would have to cover the shortfall.

D. Monthly Water Rates

Another option would be for the City to include the cost of the water main extension in the water utility capital improvement plan (CIP) and fund it as part of the water utility's ongoing obligations. The financial plan developed as part of the 2018 Rate Study anticipated the issuance of about $1.7 million in revenue bonds around 2024 to fund the six-year CIP, given planned investments in a new storage tank and treatment improvements. The City could decide to use its existing water utility cash balances to cover the cost of the main extension, increasing the bond issue to compensate for the reduction in cash funding available for the planned treatment improvements. Depending on the rate at which the City completes planned capital projects over the next several years, it might need to accelerate the bond issue to 2023.

Assuming 20-year bonds, an interest rate of 4.0% (conservative assuming that interest rates will increase over the next couple of years), issuance costs equal to 1.0% of the amount issued, and a reserve requirement equal to one year's debt service payment, the water utility's annual debt service would increase by $46,000 – $64,000 depending on the cost of the water main extension. This equates to roughly 4 – 6% of the City's budgeted annual water rate revenue, which the City could potentially spread over a five-year period.

Pros:

- This alternative reduces the upfront cost impact to the benefitting properties, increasing the likelihood that they would be able to afford connecting to the new water main. This would ultimately increase the number of ratepayers across which the City could spread the water utility's largely fixed costs.

- Building the cost of this project into systemwide charges is simpler to administer than determining and tracking area-specific charges. It is also consistent with the City's decision in the 2018 Rate Study to move away from area-specific charges, consolidating the residential water rate structure for customers in the Winslow and Rockaway Beach systems.

Cons:

- Embedding the cost of the water main extension in the financial plan underlying systemwide water rates would shift the recovery of costs associated with this project to other customers. There could be a consistency issue if the City requires customers in other parts of the City to fund comparable infrastructure to serve their properties while embedding the cost of this water main extension in the rates paid by all customers.

E. Hybrid Approach

The City can choose a combination of the funding alternatives discussed above, with the key question pertaining to how the City sets a targeted level of cost recovery from the benefitting properties as a matter of policy. **Exhibit 2** summarizes the charges that would apply under five scenarios:

- No direct cost recovery from the benefitting properties. The cost of the main extension is built into the SPF applicable to all customers.

- 25% direct cost recovery from the benefitting properties. 75% of the cost of the main extension is built into the SPF; the remainder is rolled into a monthly surcharge applicable to the benefitting properties for a 15-year period.

- 50% direct cost recovery from the benefitting properties. 50% of the cost of the main extension is built into the SPF; the remainder is rolled into a monthly surcharge applicable to the benefitting properties for a 15-year period.

- 75% direct cost recovery from the benefitting properties. 25% of the cost of the main extension is built into the SPF; the remainder is rolled into a monthly surcharge applicable to the benefitting properties for a 15-year period.

- Full direct cost recovery from the benefitting properties. The cost of the main extension is not built into the SPF but is rolled into a monthly surcharge applicable to the benefitting properties for a 15-year period.

Given that the City only expects a limited number of benefitting properties to connect in the near future, these scenarios envision increasing water rates as needed to cover the incremental costs associated with the main extension.

Exhibit 2: Summary of Charges Under Various Levels of Direct Cost Recovery

If Direct Cost Recovery Occurs Upfront	0% Direct Cost Recovery	25% Direct Cost Recovery	50% Direct Cost Recovery	75% Direct Cost Recovery	100% Direct Cost Recovery
Upfront Cost to Benefitting Properties Within 300 Feet of Main					
Local Facilities Charge (If Paid Upfront)	$ -	$1,980	$3,961	$5,941	$ 7,921
SPF per Meter Equivalent (Applies to Citywide Development)	3,947	3,912	3,877	3,841	3,806
Total	$3,947	$5,892	$7,838	$9,782	$11,727
Ongoing Monthly Cost for Benefitting Properties Within 300 Feet of Main					
2027 Monthly Water Bill @ 7 ccf (Applies to All City Water Customers)[1]	$25.27	$25.17	$24.98	$24.86	$24.79

If Direct Cost Recovery Occurs Over Time	0% Direct Cost Recovery	25% Direct Cost Recovery	50% Direct Cost Recovery	75% Direct Cost Recovery	100% Direct Cost Recovery
Upfront Cost to Benefitting Properties Within 300 Feet of Main					
SPF per Meter Equivalent (Applies to Citywide Development)	$3,947	$3,912	$3,877	$3,841	$3,806
Ongoing Monthly Cost for Benefitting Properties Within 300 Feet of Main					
Monthly Surcharge (For 15 Years)	$ -	$13.33	$26.66	$39.98	$53.31
2027 Monthly Water Bill @ 7 ccf (Applies to All City Water Customers)[1]	25.27	25.17	24.98	24.86	24.79
Total (Assuming 7 ccf per Month of Water Usage)	$25.27	$38.50	$51.64	$64.84	$78.10

[1]Sample bills shown for 2027, after phasing in the rate increase needed to cover debt service related to the main extension.

All of the scenarios shown in **Exhibit 2** assume that the 27 connections from the Ferncliff and Casey Street Water Systems and the additional 5 – 7 properties that expressed interest during the City's recent survey will connect to the main within the next year – based on input from City staff, this analysis assumes that an additional property will connect every two years. As only a limited number of properties are expected to connect in the near future, there is a rate impact in all scenarios. This impact ranges from $1.28 – $1.76 per month above the forecast developed in the 2018 rate study, depending on the level of direct cost recovery. **Exhibit 2** indicates that based on the high-end estimate of the cost of the main extension ($800,000), the decision to embed the full cost of the main extension in systemwide rates and SPFs would cost an average ratepayer up to $0.48 per month relative to a policy decision that targets full cost recovery from the benefitting properties.

Pros:

- Balancing the pros and cons of the other approaches, this approach mitigates the upfront cost to the benefitting properties while limiting the impact of the project on other customers.

Cons:

- Because it includes multiple variables and parameters, the hybrid method is more complex to administer than the other approaches.

When considering whether to recover the cost of the water main extension directly from the benefitting properties or from the City's water customer base as a whole, it is important to consider how this decision will impact the affordability of the City's rates for its existing customers (especially as a precedent for similar water system acquisitions in the future). Rate affordability has traditionally been evaluated as a percentage of median household income, with water and sewer rates being defined as "affordable" if the bill of a typical resident is less than or equal to 4.5% of median household income. 2019 data from the American Community Survey indicates that the median household income in Bainbridge Island is $117,990 (this evaluation uses median income for residents of Bainbridge Island because it is more representative of the income level of customers paying the City's rates than data for the Bremerton-Silverdale Metropolitan Statistical Area that the City uses in other affordability evaluations). A typical single-family residence using 7 ccf per month would pay a combined water/sewer bill of $116.46 per month, which represents approximately 1.2% of median household income.

While this would suggest that the City's rates are well within the range defined as "affordable," there has been a growing consensus in the industry that median household income is a flawed metric to use in evaluating the affordability of utility rates. Dr. Manuel Teodoro (a professor at the University of Wisconsin) has been a key contributor in the discussion of alternative metrics that can inform a more meaningful assessment of affordability, with his work appearing in multiple industry publications. Dr. Teodoro's proposed metrics include:

- ***Hours at Minimum Wage (HM):*** This metric quantifies the amount of time that someone earning minimum wage would need to work in order to pay their bill. Dr. Teodoro has recommended 8.0 hours as an upper limit when evaluating the relative affordability of a utility's water and sewer rate structures. For the purpose of this evaluation, Dr. Teodoro focuses on an assumed "lifeline" volume of 50 gallons per capita per day (which equates to roughly 5 ccf based on the City's

average household size of 2.4 persons). At 5 ccf, the combined monthly water/sewer bill would be $97.84 – someone earning the 2021 minimum wage of $13.69 per hour would need to work 7.1 hours to pay this bill.

- ***Affordability Ratio at the 20th Income Percentile (AR_{20}):*** This metric expresses the combined bill as a percentage of the discretionary income of a home in the 20th income percentile after accounting for the cost of food, housing, power, and healthcare. Dr. Teodoro has recommended 10.0% as an upper limit when evaluating the relative affordability of a utility's water and sewer rate structures. Based on 2019 data from the American Community Survey and the Bureau of Labor Statistics' Consumer Expenditure Survey, we estimate that a household at the 20th income percentile in Bainbridge Island has approximately $1,750 in discretionary monthly income. The combined water, sewer, and surface water bill of $97.84 represents 5.6% of the discretionary income of a home in the 20th income percentile.

Exhibit 3 provides a forecast of the combined utility bill and projected values of HM and AR_{20}:

Exhibit 3: Forecast of Utility Rate Affordability

2018 Rate Study Forecast	2021	2022	2023	2024	2025	2026
Annual Water Rate Increases		2.0%	2.0%	2.0%	2.0%	2.0%
Annual Sewer Rate Increases		2.0%	2.0%	2.0%	2.0%	2.0%
Monthly Single-Family Bill @ 5 ccf	$97.84	$99.84	$101.86	$103.91	$105.98	$108.12
Projected HM (Target: ≤ 8.0)	7.1	7.2	7.2	7.2	7.2	7.2
Projected AR_{20} (Target: ≤ 10.0%)	5.6%	5.7%	5.8%	5.9%	6.1%	6.2%

With Main Extension[1]	2021	2022	2023	2024	2025	2026
Annual Water Rate Increases		3.0%	3.0%	3.0%	3.0%	3.0%
Annual Sewer Rate Increases		2.0%	2.0%	2.0%	2.0%	2.0%
Monthly Single-Family Bill @ 5 ccf	$97.84	$100.01	$102.21	$104.45	$106.72	$109.06
Projected HM (Target: ≤ 8.0)	7.1	7.2	7.2	7.2	7.2	7.2
Projected AR_{20} (Target: ≤ 10.0%)	5.6%	5.7%	5.8%	6.0%	6.1%	6.2%

[1]Based on the scenario with the greatest potential rate impacts (Grand Avenue Route, No Direct Cost Recovery).

Note that the calculation of HM in **Exhibit 3** assumes that the prevailing minimum wage increases by 2.0% per year, consistent with the annual adjustments provided for by RCW 49.46.020 (2)(b) based on the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W). The calculation of AR_{20} assumes that the net monthly disposable income of a household in the 20th income percentile remains at $1,750, reflecting the assumption that income and expenses increase at comparable rates of inflation.

With these assumptions, **Exhibit 3** suggests that the City's rates will remain affordable under both of these measures over the next five years. It also indicates that funding the cost of the water main extension through rates will have a negligible impact on the overall affordability of the City's rates, assuming that the City can spread the recovery of the cost over time through interfund or external borrowing. A key reason for this finding is that the sewer bill for a single-family home using 5 ccf per month is $79.09, or about 81% of the current monthly bill of $97.84 – modest increases to the water bill do not materially impact the combined total bill. **Exhibit 3** indicates that in the scenario where the City funds the water main extension through the water utility, the cumulative impact to the

projected monthly water bill by 2026 is only $0.94. If the City were to fund multiple main extensions through its water utility and affordability became an issue, it could consider revisiting its sewer rate structure and reducing the base charge per account (currently $42.69 per month) while increasing its volume-based sewer rate (currently $7.28 per ccf).

While the City can set the level of cost recovery from the benefitting properties as a matter of policy, it appears reasonable to conclude that the water utility would need to share the cost in order for the main extension to be financially feasible for the properties that it would serve. The City may need to amend Section 13.10.050 (A) of the Bainbridge Island Municipal Code, which indicates that "the installation of water mains to properties not previously served shall be at the benefitted property owner's or developer's expense," to pursue this path.

The City would be able to justify such investments on the grounds that consolidating systems like the Ferncliff and Casey Street systems into the municipal water system:

- Provides the potential for better economies of scale and improves efficiency of service, benefitting existing ratepayers by expanding the customer base across which the utility's overhead costs can be spread;
- Provides the City with greater control over local water resources;
- Provides valuable redundancy in infrastructure; and
- Promotes consistency in the level of service that the City's residents receive.

If the City decides to pursue a hybrid funding approach for future extensions, we would recommend establishing a consistent policy regarding what the City expects benefitting properties to pay through direct assessments versus through systemwide water rates and SPFs. The City may also wish to consider ways in which it might structure its implementation of these fees to encourage properties that can connect to the main to do so. For example, phasing the charges in over multiple years will mitigate the upfront impact to existing properties but incentivize them to connect before the charges increase. The City can also limit how long it offers the monthly surcharge option, requiring properties seeking to connect to the main after that period to pay the full charges upfront.