Burton Water Cooperative
Capital Improvement and Financing Plans

June 26, 2023 Community Meeting

Agenda:

6:00 Welcome and Housekeeping

Meeting Topics

6:10 VIFR Levy and Strategic Plan with Chief Matt Vinci

(20 minutes presentation with 10 minutes Q&A)

6:40 Co-op Proposed Capital Improvement Plan

7:00 Financing Options

7:20 Questions and Discussion

8:00 Wrap and Next Steps

Capital Improvement Plan

What infrastructure upgrades are needed?

Primary Water System Infrastructure

Wells (7) and Wellpoints (17)

150k Gal Tank (peak demand)

North and South Tanks (chlorination)

100k Gal Tank (supplemental storage)

Booster Pump for 107th

- 412 connections (415 approved), including
  - 403 active usage connections
  - 9 'ready to serve' connections
- Pumped Annual Volume
  - ~2.8M-3.7M CF
  - ~20.8M-28M Gal
  - ~64-86 Acre-Ft
- Sold Annual Volume
  - ~2.7M-3.5M CF
  - ~20.3M-26.2M Gal
  - ~62-80 Acre-Ft
- Water Rights
  - 245 gpm
  - 152.4 Acre-Ft per yr

Capital Improvement Planning

- **Capital Needs Assessment (Northwest Water Systems 2022)**
  - Operations Committee Review
  - Review by current system operators
  - Further analysis by NWS
  - Capital Improvement Working Group (OC, FC, NWS, Nick Simmons)
  - Community input from fireside chat January 2023
- **This defined and refined our suite of potential project needs**

Capital Improvement Planning (continued)

- **Identified Regulatory Requirements (e.g., WDOH, KC)**
- **Identified Operational Risks**
  - service disruption, higher O&M costs, system centrality
- **Assessed fire flow improvement upgrades**
  - life safety, property protection, WA Ratings Bureau and insurance costs
- **Considered logical project sequencing and packaging**
  - Manage service and traffic disruptions
  - Reduce excess contractor mobilizations (i.e., cost)
  - Economies of scale with fewer individual projects when possible

Capital Improvement Planning (continued)

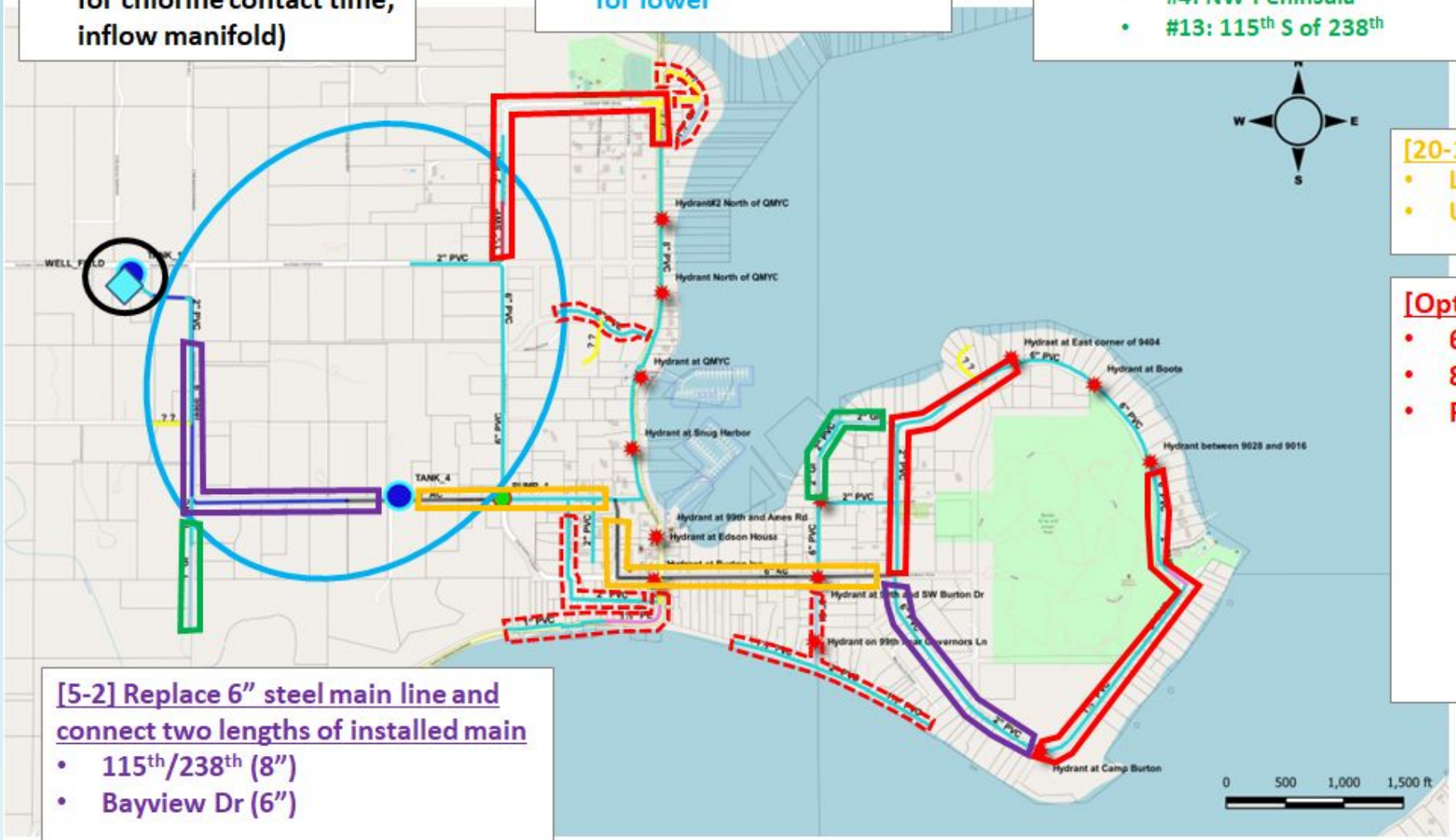
- **Priorities:**
  1) **Projects that address Regulatory Requirements** - do as soon as practical
  2) **Projects that reduce Operational Risk in water delivery and potential for significant financial cost** - start with central distribution system from wells/storage and main trunk line
  3) **Projects that upgrade fire flow capacity and reliability across the system** - general sequence and timing based on number of connections served but also get to all within 20 years

North/South Tank Upgrades
- [5-4] New Roof (N Tank)
- [1-1] Replumb (in series for chlorine contact time; inflow manifold)

[5-3] 30 psi for all connections
- Booster pump for upper
- Pressure-reducing valves for lower

[5-1] Replace Galvanized Iron Pipe
- Prioritize areas of leaks
- Projects:
  - #4: NW Peninsula
  - #13: 115th S of 238th

***[X-Y] refers to CNA project ID**



[20-1] Replace Asbestos-Cement Main
- Lower and Upper segments
- Upsize 6" to 8"

[Opt-3] Fire Flows
- 6" main for loops
- 8" main for dead-ends
- Projects:
  - #2: 6" loop from 107th to Vashon Hwy
  - #3: 6" loop Burton Peninsula
  - #5: Tillicum Ln and 227th
  - #6: Governor's Ln
  - #7: 240th and 105th
  - #8: Vashon Hwy south of Burton
  - #11: Uphill from yacht club

[5-2] Replace 6" steel main line and connect two lengths of installed main
- 115th/238th (8")
- Bayview Dr (6")

***The location of an improvement does not always equal its benefit. Some projects provide system-wide benefits; others are local but are required to meet new regulations.**

CNA Project Number	Coop Project Number	Project Description	Comment	Relative Cost $ ≤ 10K $$ ≤ 100K $$$ < 500K $$$$ > 500K	Benefit: Regulatory Compliance (WDOH, KC, or Other)	Benefit: Increased System Reliability / Reduced Risk	Benefit: Positive Fire Flow Contribution	Implementation Timing (per OC)	Coop Funded: First 3 Years / w/in 10 Years / w/in 20 years; USDA Loan Funded In First Two Years; Not Funded; Plan Year: Early Fire Flow Upgrade with Higher Financing	Coop Funded: Plan Year: Deferred Fire Flow Upgrade with Reduced Financing
1-1		Chlorination system upgrades to meet CT6 - Includes replumbing of north and south tanks in series, new pump house extension on north tank to house chlorination equipment, source manifold, valves, and controls - linked to 5-4	WDOH required; will improve overall system disinfection and water quality; started but not completed by current owners.	$$	**Yes**	**Yes**		Early	2024	2024
1-2		Waterproof labeling to replace paper or nonexistent labels	Not included - incorporate into maintenance activities					N/A		
1-3		Electrical and water system operational manual	Need soon for resiliency in case of operator staffing turnover and WDOH operational documentation	$	**Yes**	**Yes**		Early	2024	2024
1-4		Comprehensive facilities map	Included as part of Opt-5 GIS Record Collection System					N/A		
2-1		Update source plumbing and controls - replace repair couplings, splices, and corroded components and remove any abandoned pipe.	Improve sanitary integrity of water, reduce repairs, and improve operability of the site	$$		**Yes**		Early	2024	2024
2-2		Build/re-build source pump enclosures - create locking enclosures with concrete floors for all pumps	Increase pump life; make maintenance of pumps easier and more sanitary	$$		**Yes**		Early	2024	2024
2-3		Re-build 107th pump station	Not required if 5-3 (30 psi minimum) is completed					N/A		
2-4		Investigate reasons for short pump lives		$		**Yes**		Early	2024	2024
2-5		Resolve short pump lives		$		**Yes**		Early	2024	2024
2-6		Update electrical for for safety, maintainability, and code compliance	Consultant report indicated likelyhood of some electrical code violations	$	**Yes**	**Yes**		Early	2024	2024
5-1	Replace remaining galvanized pipe									
	4	Replace small galvanized iron and small mixed pipe on NW Burton Peninsula with 6" PVC for reliability and fire flow	This section has experienced multiple leaks per year	$$$		**Yes**	**Yes**	Early	2023	2023
	13	Replace small galvanized iron and small PVC on 115th south of 238th with 8" PVC for reliability and fire flow	Relatively small number of customers served by this segment	$$$		**Yes**	**Yes**	Flexible	2041	2041
5-2	1B	Replace 6" steel line along 115th to AC line on 238th with 8" PVC - Connect customers on 115th to existing 8" PVC line. - Connect customers on 97th Ave SW south of Burton Dr. to existing 6" PVC line.	The 6" steel line has developed nodules indicating near term need for replacement. This is the first segment of pipe leaving the source area and is critical for all downstream capacity improvements and system reliability. An existing inactive 8" PVC line parallels the 6" steel line along most of 115th.	$$$		**Yes**	**Yes**	Early	2024	2024
5-3		Booster station and PRV for 30 psi minimum to all customers. Install booster pumps to provide WDOH required 30 psi throughout upper elevation service area. Install pressure reducing valve(s) ahead of lower elevation service area to avoid exceeding maximum pressure of 80 psi.	WDOH requires 30 psi minimum throughout the service area.	$$	**Yes**	**Yes**		Early	2023	2023
5-4		North resevoir roof replacement - linked to 1-1	Planned but not executed by current owners	$$		**Yes**		Early	2024	2024
5-5		New Water System Plan document	Required by both WDOH and KC	$$	**Yes**			Early	2023	2023
5-6		Water rights processing	Will need to be done as we continue transition away from wellpoints (authorized by surface water rights) to modern wells (authorized by groundwater rights). Related to Opt-6.	$$	**Yes**			Flexible	2039, 2040	2039, 2040
20-1	1A	Replace main line 6" AC and 6" PVC linking AC segments with 8" PVC for reliability and fire flow	The AC pipe segments will be 50 to 55 years old next year. NWS stated that the *typical* AC pipe lifespan is about 50 years. This is the second segment of pipe leaving the source area and is critical for all downstream capacity improvements and system reliability.	$$$$		**Yes**	**Yes**	Early	2024	2024

CNA Project Number	Coop Project Number	Project Description	Comment	$ ≤ 10K $$ ≤ 100K $$$ < 500K $$$$ > 500K	Regulatory Compliance (WDOH, KC, or Other)	Increased System Reliability / Reduced Risk	Positive Fire Flow Contribution	Implementation Timing (per OC)	Plan Year	
									Early Fire Flow Upgrade with Higher Financing	Deferred Fire Flow Upgrade with Reduced Financing
20-2		8" transmission line out of 150K tank	The existing 1 1/4" line out of the 150K gallon tank prevents its capacity from being available to support fire flow or service during a major leak.	$$		**Yes**	**Yes**	Flexible but Early-ish	2030	2030
20-3		Update source and tank controls to support 8" transmission line out of 150K gallon tank		$		**Yes**	**Yes**	Early	2029	2029
20-4		10 year Water System Plan update	WDOH requires 10 year updates to water system plans	$	**Yes**			Flexible	2033	2033
20-5		Boardwalk/trail/path maintenance in well field	The path passing by the well points to the lower tanks is over swampy ground	$				Flexible	2034	2034
Opt-1		Standardize booster pumps	Already done					N/A		
Opt-2		Back-up power	Not included. Current system can operate on gravity through most power outages where the system will revert back to gravity flow. Auxillary power will be required for pumps providing 30 psi to upper elevation customers.					TBD		
Opt-3	Upgrade small PVC for fireflow									
	2	Create 6" PVC loop along 107th to Vashon Hwy for fire flow	Not a regulatory requirement for existing systems, but would improve system performance and VIFR's ability to fight fires. Over the multiple phases, these projects would improve fire flow capacity and add nearby hydrants throughout the system. Recommended sequence of upgrades is based upon the number of customers that would benefit.	$$$		**Yes**	**Yes**	Early	2025	2026
	3	Complete 6" PVC loop on Burton Peninsula for fire flow		$$$		**Yes**	**Yes**	Early	2025	2027, 2031
	5	Replace small galvanized iron and small mixed pipe on Tillicum Lane and 227th with 8" PVC for fire flow		$$$		**Yes**	**Yes**	Flexible	2025	2032
	6	Replace small PVC on Governor's Lane and 6" PVC along 99th south of Harbor Dr with 8" PVC for fire flow		$$$		**Yes**	**Yes**	Flexible	2030	2037
	7	Replace small mixed pipe along 240th to 105th with 6" PVC loop for fire flow		$$$		**Yes**	**Yes**	Flexible	2039	2039
	8	Replace small mixed pipe along Vashon Hwy south of Burton DR with 8" PVC for fire flow		$$$		**Yes**	**Yes**	Flexible	2034	2040
	11	Replace small mixed pipe off Vashon Hwy across from Yacht Club westwards up hill with 8" PVC for fire flow		$$$		**Yes**	**Yes**	Flexible	2042	2042
	12	Replace 2" PVC on 104th	Thought to not be needed - covered by other hydrants					N/A		
Opt-4		Security fencing and locks	New fencing and locks already installed which may be adequate		**Yes**	**Yes**		N/A		
Opt-5		GIS record collection system and comprehensive facilities map - subsumes 1-4	Provide a centralized repository for asset information , including GPS physical location	$		**Yes**		Early	2023	2023
Opt-6		Drill multiple new wells in well field to meet WDOH requirement to move off of shallow wells	Anticipate WDOH will require us to move off the wellpoints to modern wells. Related to 5-6.	$$$	**Yes**			Flexible	2033, 2036, 2039,2042	2033, 2036, 2039,2042
Opt-7		Small backhoe/tractor	Not included based upon input from Jim and Evan					N/A		

Financing Options

How can we pay for this?

Overview

- **Presenting results of the work of the Finance Committee over the last year**
- **Two options that address the costs for purchase and future requirements as well as regular operations**
- **Seeking a plan that is logical, coherent, affordable**
  - **The assumptions for projecting revenues and expenses are solid and well supported.**
  - **The capital stack (member equity, debt, grants, other) can be obtained and is stable over time.**
  - **The plan has a predictable and reasonable impact on water rates.**
  - **The cost to someone for water service is not an unreasonable financial burden and can be paid over several years, if need be.**
  - **There is cash available to cover reasonably projected capital needs over time (first 20 years)**

Overview (continued)

- **Based on the Straw Poll results no plan will be everyone's first preference**
  - **Straw Poll Results-75% prefer an approach that has moderate to maximum amount financed and low to moderate initial member contribution**
  - **35%: Maximum Debt-Maximum USDA Loan + low member contribution (<$1000)**
  - **39%: Moderate Debt-Moderate UDSA Loan + moderate member contribution ($1,000-$3,000)**
  - **9%: No Debt-No debt and high member contribution (>$5,000)**
  - **12%: Don't Know**
  - **5%: No Preference**
- **Natural that we compare everything cost wise to now, but that is not the future no matter who buys BWC**
- **Today we are presenting work since last Community Meeting for information sharing and feedback**
- **Not deciding today, but critical input point**
- **Follow up meeting July 13 to inform the USDA application**

Key Assumptions

- **Total Costs**
  - Purchase Price
  - Closing
  - Feasibility
  - Start-Up
  - Capital Improvements
- **Sources must cover Total Costs** - mix of member contribution and USDA loan
- **Member Contribution**
  - One-time charge per connection
  - Paid in lump sum or installments (working on providing options to pay in over time)
- **USDA Loan**
  - 40-year, fixed rate (currently 3.75%), fully amortizing, may pre-pay at any time

Key Assumptions (continued)

- **Revenues (same under both scenarios)**
  - Base Rate
  - Usage Rate (tiers based on water volume consumed)
  - Capital Improvement Surcharge
  - KC ROW Fee
- **Operating Expenses (same under both scenarios)**
  - Historical operating costs adjusted for 2023 and cooperative “cost of service” model
  - Revenue from the Base and Usage rates cover operating costs and debt service
  - Assumes 3.1% average annual inflation
- **Capital Improvements (overall menu of projects the same, but implementation timing different)**
  - Uses priority categories to sequence (regulatory, operational risk, fire flow)
  - All projects funded in 20 years
  - Assumes 3.1% average annual inflation

Higher USDA Loan / Lower Member Contribution Option

- **<u>USDA Loan: $4,358,148</u>**
  - Incorporates purchase, closing, feasibility, start-up costs ($1,388,640)
  - Capital improvements financed include all regulatory requirements, most operational risk projects, and some fire flow ($2,969,508)
- **<u>Member Contribution: $2,500</u>**
  - Funds Operating Reserve ($100,000) and Debt Service Reserve (one year of loan payments)
  - Covers capital improvements not financed along with funds from operations

Lower USDA Loan/
Higher Member Contribution Option

- **USDA Loan: $2,840,398**
  - Incorporates purchase, closing, feasibility, start-up costs ($1,377,342)
  - Includes only regulatory requirements and several key operational risk projects ($1,463,056)
  - USDA loan is $1,571,750 lower than Higher Loan scenario
  - Other projects and fire flow funded by member funds over 20-year period
  - Loan payments are lower. However, water rates are the same as Higher Loan scenario in order to have sufficient funds in future years for projects now not financed
- **Member Contribution: $4,250**
  - Funds Operating Reserve ($100,000) and Debt Service Reserve (one year of loan payments)
  - Covers capital improvements not financed along with funds from operations
  - Amount is $1,750 higher than Higher Loan scenario
  - Contribution level must be higher to offset cost of projects no longer financed as part of the USDA loan and higher overall construction cost due to inflation
  - A number of projects, especially fire flow improvements, happen later in time due to cash flow constraints

Bi-Monthly Water Rates (projected)

	Current	*Proposed*	*Difference*
Base[1] 3/4" Meter (375 connections)	$68	$ 49	-$19
Usage[2]			
Capital Surcharge[3]	$ 0	$ 60	+$60
KC Right of Way Fee[4]	$ 0	$ 10	+$10
Total (before Usage)	$68	$119	+$51
Base 1" Meter (32 connections)	$113	$121	+$ 8
Usage[1]			
Capital Surcharge[2]	$ 0	$ 60	+$60
KC Right of Way Fee[3]	$ 10	$ 10	+$10
Total (before Usage)	$113	$191	+$78

Notes

[1]Base charge covers general, administrative, maintenance, and system purchase.

[2] Usage covers personnel and operational costs. The amount depends on individual use. Proposed usage rates are the same for low/moderate use and higher for higher use.

[3] Capital surcharge is the amount needed to pay the amount of the USDA loan attributable to capital improvement costs plus fund more projects from Coop funds.

[4] King County ROW is a new County imposed fee. We charge it but can get a credit when we use for fire flow improvements.

Scenario Comparison

	Financial Model v9.62 Full Finance	Financial Model v9.62 Lower Loan
Rates (Base, Usage, ROW)	Same	Same
Capital Surcharge	Same Surcharge is needed to cover debt service for the portion of USDA loan allocated to capital improvement projects plus future improvements	Same Surcharge is needed to pay for capital improvement projects that are not financed by USDA loan. Capital surcharge attributable to the USDA loan for capital improvements is less, but more funds are needed to pay for the projects no longer financed.
Operating Costs	Same	Same
Member Contribution Level	$2,500	$4,250
Capital Improvement Menu	Same	Same
Capital Improvement Schedule		More projects are deferred until latter part of the first 20 years
Interest expense over life of USDA Loan	Higher (due to higher loan amount- $4.3M to $2.8M)	
Capital Improvement Cost Over 20 Years		Higher cost (due to inflation cost impact on deferred capital improvements). Higher cost if inflation turns out to be higher than projected.
Risks	Must complete designated USDA financed projects within 3 years with 2- year extension available.	Increased construction costs if inflation is greater than projected. Emergency repairs might be needed before deferred projects are completed. Possible additional regulatory requirements for later projects.

Questions and Input

- Questions and Discussion until 8:00

Please provide input on your preference in the chat box:

1. Higher Loan/Lower Member Contribution
2. Lower Loan/Higher Member Contribution

Next Steps

- **Follow-Up (in-person!) meeting July 13 from 6:30 to 8:30 pm at Camp Burton (Grisham Hall)**
  - Cold beverages provided
  - Please bring snack/bites to share (potluck style)
- Purchase and Sale Agreement Status
- Engineering for Capital Improvements
- See website and sign up for more information at www.burtonwater.org
- Additional questions to info@burtonwater.org

Community Support - Now is the Time

- Need fundraising for next steps
- Volunteer via Committees and/or Board
- Talk to your neighbors

Show Your Vote of Confidence!