

Objectives for Today

- Information Sharing with Community:
 - Capital Improvement Scenarios
 - Projected Relative Impact on Water Bills
- Get Feedback from Community on Capital Improvement Scenarios
=> to inform the scope of the Preliminary Engineering Report for USDA loan application

=> to further refine financial planning, including rates, member contribution level, and loan amount

Contributors to this Presentation

- Finance Committee
 - Steve Hill, Virginia Lohr, Ward Carson, Dan Schwartz, Doug Ostrom, Erik Assink, Kevin Strel, Vince Young, Chuck Weinstock, William Shadbolt
- Operations Committee
 - Ken Kirschling, John Burke, Dan Brown, Norm Seethoff, Ben Lee
- Membership Committee
 - Kim von Henkle, Merrilee Runyan, Nancy Murphy, James Culbertson, Lisa Fitzhugh
- Nick Simmons (system operator)
- Northwest Water Systems (contracted engineers)

	A	B	C
	<i>“Modest Fire Flow” Moderate Financing</i>	<i>“Significant Fire Flow” Moderate Financing</i>	<i>“Full Fire Flow” Maximum Financing</i>
Member Cost			
Upfront Contribution	\$1500	\$1500	\$1500
Usage Rate	Revised 4 tier	Revised 4 tier	Revised 4 tier
Base Rate (3/4” and 1” meters)	\$78/\$137	\$78/\$137	\$78/\$137
Capital Improvement Cost Year 1 and 11	\$10	\$10	\$30
Capital Improvement Cost Year 11 to 20	\$10	\$0	\$5
Reallocation of County ROW Fee (\$10/billing cycle)	MAYBE	YES	YES
Likely Fire Insurance Savings	NO	LIKELY	YES
Operating Risk			
Maintenance Cost Increases	MEDIUM	MEDIUM	LOWER
Service Disruption	MEDIUM	MEDIUM	LOWER
Uncompleted/Deferred Identified Capital Improvements from Needs Assessment	HIGHER	MEDIUM	LOWER
KC Fire Flow Current Standard Compliance	SOME	MOSTLY	YES
Financial Risk			
Rate Increases Above Inflation	HIGHER	MEDIUM	LOWER
Future Member Capital Contributions	MEDIUM	LOWER	LOWER
Exposure to Capital Improvement Inflation Cost Increases	MEDIUM	MEDIUM	LOWER
Amount of USDA Loan	MEDIUM \$2,378,097	MEDIUM \$3,110,000	HIGHER \$4,044,000
Total Project Cost	MEDIUM	MEDIUM	HIGHER
Operating Reserve	\$100,000	\$100,000	\$100,000
Debt Service Reserve	One Year (\$111,000)	One Year (\$147,000)	One Year (\$192,000)
Cash Balance at Year 20	\$583,000	\$532,000	\$214,000
Transaction Complexity			
Member plus USDA	MEDIUM	MEDIUM	MEDIUM
Construction Loan Required	YES	YES	YES
Capital Improvement Management			
Number of Projects in first 5 years	MEDIUM	MEDIUM	HIGHER
Completion of Fire Flow Upgrades	MEDIUM	LOWER	LOWER

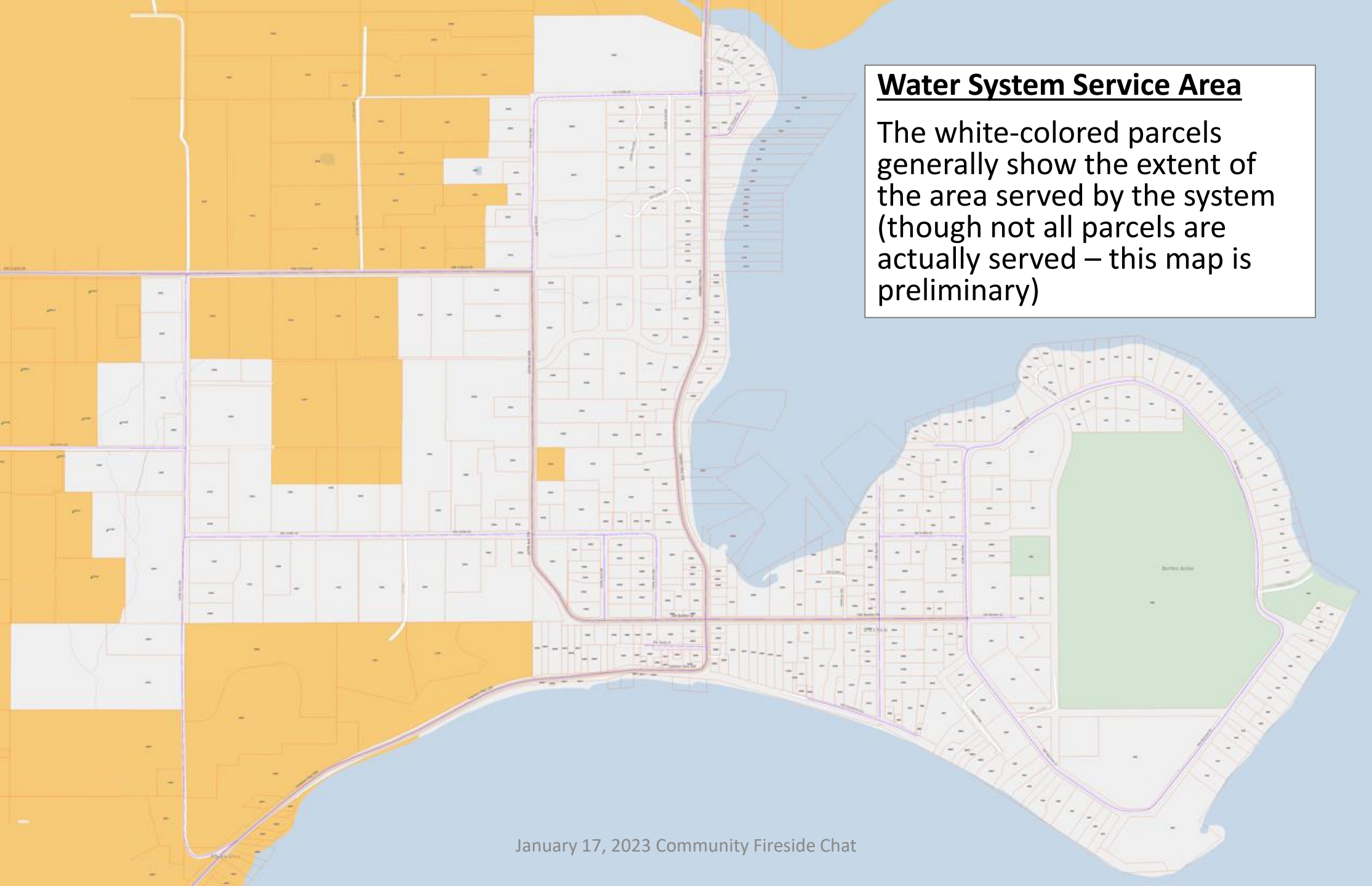
Based on a requirement from USDA all scenarios will require an interim loan from a bank until all projected USDA financed construction is complete. The cost of obtaining the loan and additional interest expense is not yet reflected in any of the scenarios. This expense would be higher in B and C due to the longer construction period.

Criteria for Feasible/Desirable Financing Plan

- Assumptions for projecting revenues and expenses are solid and well-supported
- The 'capital stack' (member contributions, debt, grants, other) can be obtained and is stable over time
- The plan has a predictable and reasonable impact on water rates
- The cost for someone to join the co-op and obtain water service is not an unreasonable financial burden and can be paid over several years
- There is cash available to cover reasonably projected capital needs over time (i.e., first 20 years) and balance leading into the next 20 years

Water System Service Area

The white-colored parcels generally show the extent of the area served by the system (though not all parcels are actually served – this map is preliminary)



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 Scenario Summary

- **Scenario A: “Modest Fire Flow”**
 - Keep the system largely as it is but work through the Years 1 through 20 capital improvement projects identified in CNA over time
 - Moderate financing (lowest of all scenarios)
- **Scenario B: “Significant Fire Flow”**
 - All of Scenario A projects plus two significant fire flow upgrades for 107th- Highway loop and Peninsula loop (fire flow pipe upgrades to ~90% of customers)
 - Moderate financing (middle of all scenarios)
- **Scenario C: “Full Fire Flow”**
 - All of Scenario B projects plus four additional smaller fire flow capacity upgrade projects to provide fire flow pipe upgrades/hydrant proximity to 100% of customers
 - Maximum financing (highest of all scenarios)

Projects Common in All Scenarios

- Water System Plan (document) update (\$25k in first year)
- Chlorination system upgrades and North Tank re-roofing (\$100k in early years)
- 30 psi solution for all customers – booster pump and pressure-reducing valve(s) (\$70k in first year)
- Replace 6-inch steel line on 115th/238th and hook up existing 8-inch main (\$180k in first year)
- GIS mapping of system (\$10k in first year)
- Additional new wells in upper wellfield (\$200k in out years)
- Water rights maintenance (\$30k in out years)
- Updates to source/well plumbing and controls, pump improvements (\$25k in early years)
- 8-inch line out of 150k gal tank (\$30k in mid-year range)
- Replace 6-inch asbestos cement (AC) line (\$760k)
- Other minor projects (\$3k to \$8k)

*All dollars in 2021 dollars

North/South Tank Upgrades

- New Roof (N Tank)
- Replumb (in series for chlorine contact time; inflow manifold)

30 psi for all connections

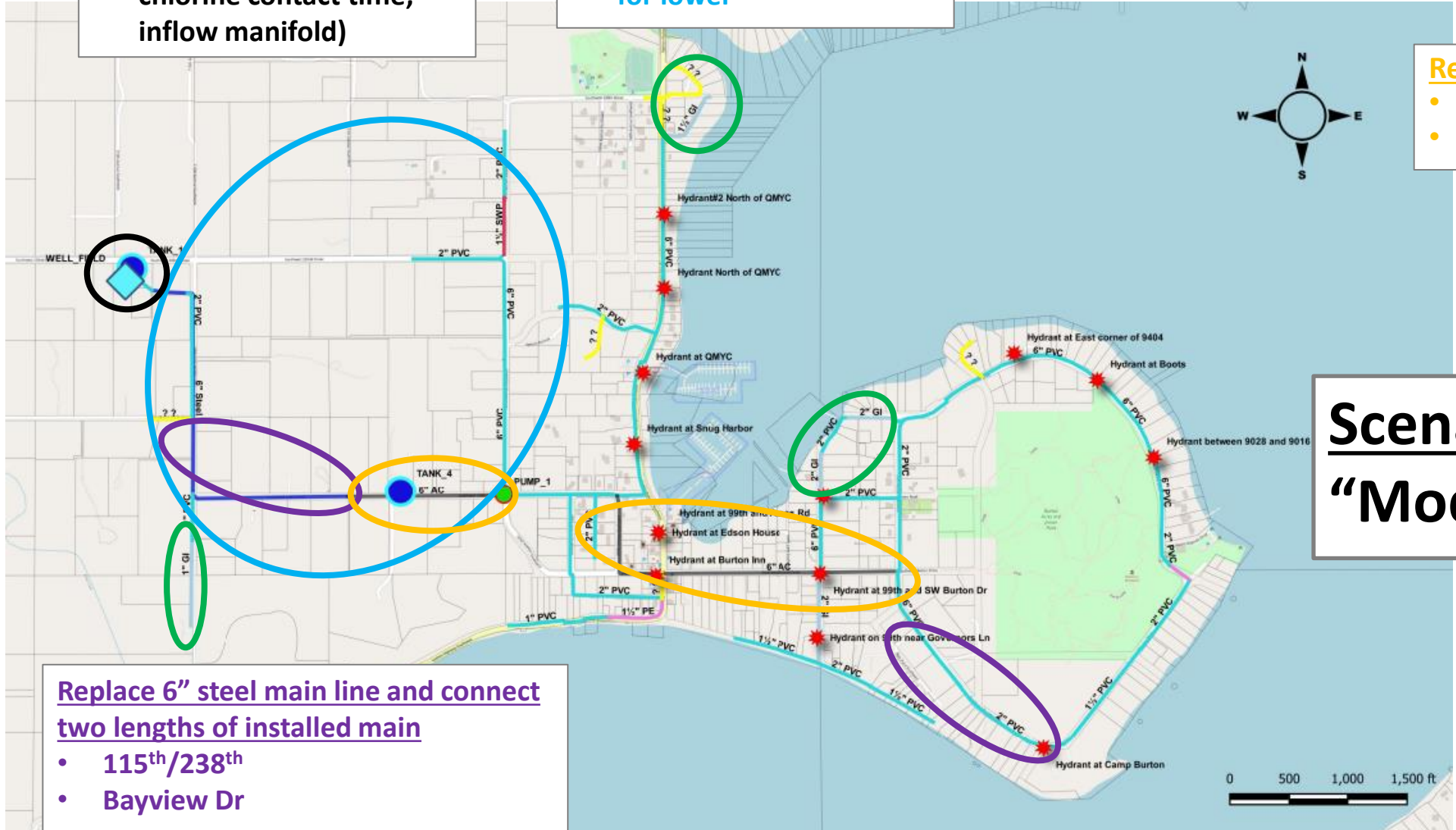
- Booster pump for upper
- Pressure-reducing valves for lower

Replace Galvanized Iron Pipe

- Prioritize areas of leaks
- All fire-flow positive

Replace Asbestos-Cement Main

- Lower and Upper segments
- Upsize 6" to 8"



Scenario A
“Modest Fire Flow”

Replace 6" steel main line and connect two lengths of installed main

- 115th/238th
- Bayview Dr

***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.**

North/South Tank Upgrades

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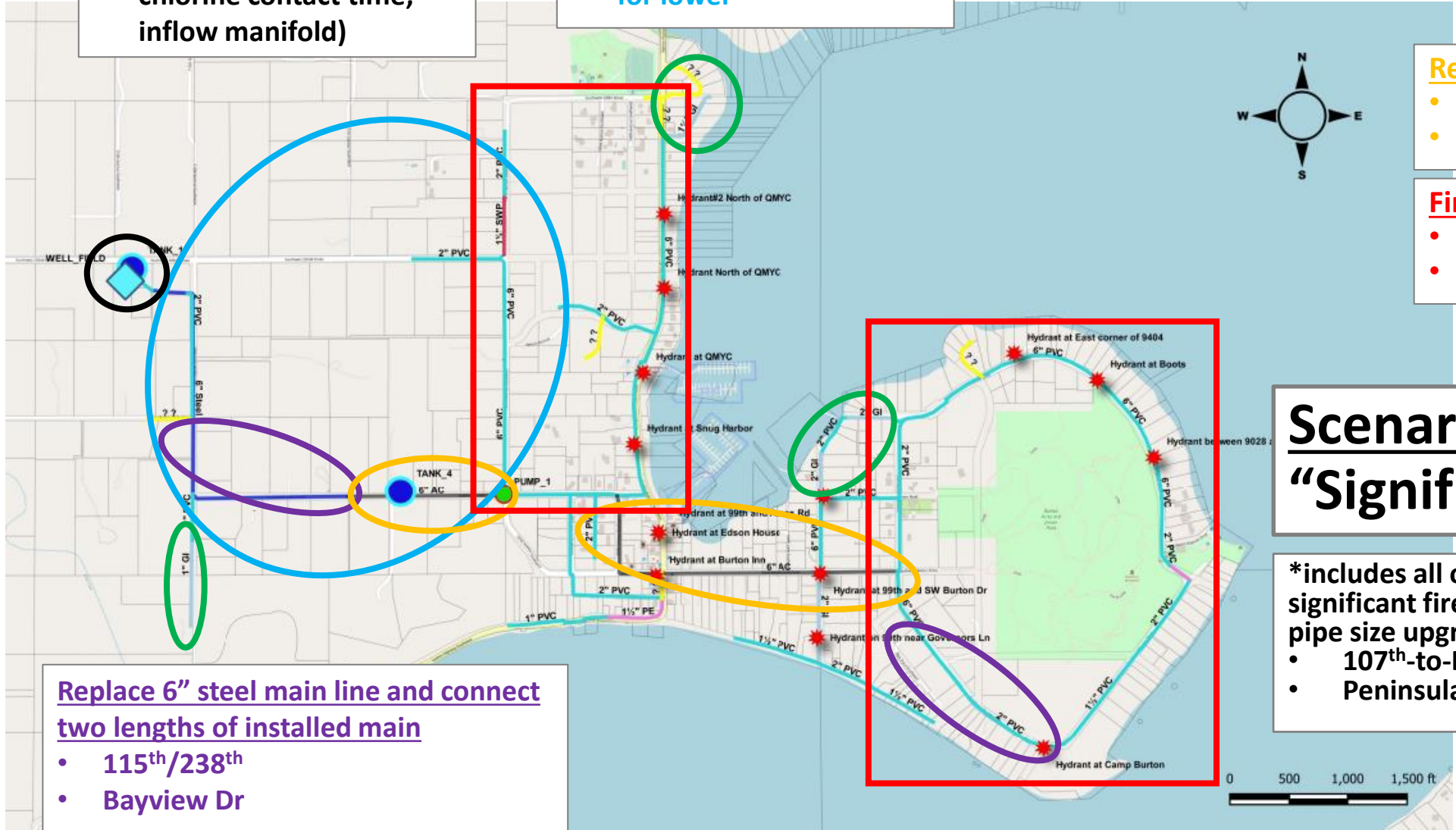
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Fire Flows

- 6" main for loops
- 8" main for dead-ends



Replace 6" steel main line and connect two lengths of installed main

- 115th/238th
- Bayview Dr

Scenario B

"Significant Fire Flow"

*includes all of Scenario A projects plus two significant fire flow projects to bring fire flow pipe size upgrades for ~90% of customers

- 107th-to-Highway 6" loop
- Peninsula 6" loop

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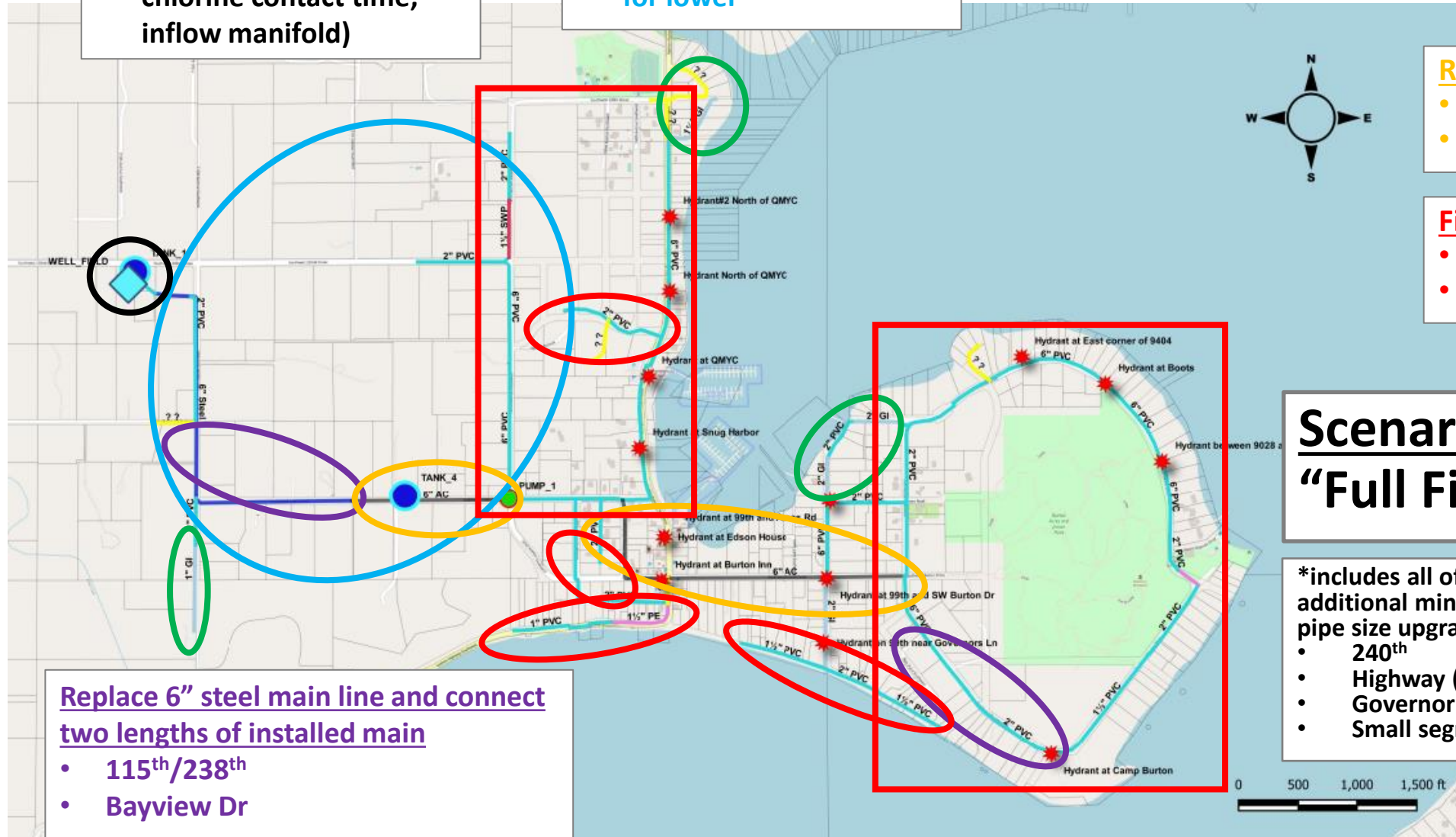
**Scenario C
"Full Fire Flow"**

- *includes all of Scenario B projects plus four additional minor fire flow projects to bring fire flow pipe size upgrades for ~100% of customers
- 240th
 - Highway (outer QM Harbor)
 - Governor's Lane
 - Small segment off Highway

Replace 6" steel main line and connect two lengths of installed main

- 115th/238th
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Scenario Comparison – ¾” Median Usage Bill Projections

¾” Median Usage Bi-Monthly Bill Summary Table

	Wintertime Bill (Feb-Mar) 500 CF	Summertime Bill (Aug-Sep) 1,250 CF	Total Annual Bill 5,510 CF
Current Rates	\$ 83.25	\$ 106.13	\$ 555.62
Scenario A "Modest Fire Flow"	\$ 113.65	\$ 136.53	\$ 738.02
Scenario B "Significant Fire Flow"	\$ 113.65	\$ 136.53	\$ 738.02
Scenario C "Full Fire Flow"	\$ 128.27	\$ 151.15	\$ 825.74

Details: Not updated since 2018; Base rate \$68 (¾")/\$114 (1") and 3-tier usage rates; **does not include KC ROW fee (\$60 per year)**

Comparison to how the median usage bills would compare at other utilities

	Wintertime Bill (Feb-Mar) 500 CF	Summertime Bill (Aug-Sep) 1,250 CF	
Heights Water	\$ 135.30	\$ 158.03	*These rates: a) are from 2022 (will be outdated) b) do not include KC ROW fee (\$10 per bill)
Dockton Water	\$ 107.92	\$ 126.67	
Maury Mutual	\$ 111.00	\$ 146.50	
KCWD19	\$ 91.89	\$ 119.74	

***Bill projections are based on ¾” connection, median usage based on detailed 2017 usage data we have (92% of the connections in the system are ¾”)**

****The “Median” is the mid-point of the dataset, where half of the users are below and half are above**

Requested Feedback

1. Which Scenario do you prefer?

Scenario A: Modest Fire Flow

Scenario B: Significant Fire Flow

Scenario C: Full Fire Flow

2. What are your Questions?

3. Other Input?

Contact us at info@burtonwater.org with additional input on the capital improvement scenario options by **January 24th**