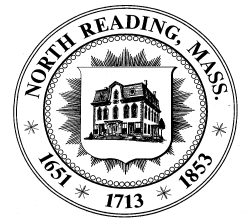


TOWN OF NORTH READING WASTEWATER PROJECT

Update to the Select Board
Monday, February 13, 2023
North Reading Middle/High School
Distance Learning Lab



Clean Water State Revolving Fund

- The Town has been notified that the wastewater project has been included on the Massachusetts State Revolving Fund (SRF) program 2023 Draft Intended Use plan.
- SRF is a federal-state partnership that provides communities low-cost financing for a wide range of water quality infrastructure projects.
- Construction Costs are Eligible for SRF Financing.
- Design Cost, Land Purchases, Administrative Costs and Fees are not.
- For Eligible Costs, the standard terms are 2% interest for a 20 year repayment period or 2.4% for a 30-year repayment period.
- Non-Eligible Project Cost is financed at the current market Interest rate.
- The Initial Project Borrowing will require a Short Term Interest Only Bond Anticipation Note (BAN) at current market interest rate.

Wastewater Project Cost Breakdown

- Total Project Cost Estimate = \$129,100,000
 - General Benefit Facilities Cost (To Pump Out of Town) = \$73,580,000
 - Special Benefit Facilities Cost (In Town Collection) = $\frac{\$55,520,000}{\$129,100,000}$
- Project Cost Eligible for Low Interest **SRF Loan** = \$112,600,000
- Project Cost Not Eligible for Low Interest **SRF Loan** = $\frac{\$16,500,000}{\$129,100,000}$

Wastewater Project Borrowing Over a 30 Year Repayment Period

112.6 Million in
SRF Eligible Cost
16.5 Million in
Non-Eligible Cost

4% BAN Rate
5% Market Rate
2.4% SRF Rate

Town of North Reading, Massachusetts \$129,100,000 Wastewater						Est. Tax Rate Impact Per \$1,000 in Property Value	
112,600,000	Est. MCWT Eligible Costs						
16,500,000	Est. Ineligible Costs						
1,750,000	Application of Grants (\$1.5M Federal Funds + \$250k State Funding)						
14,750,000	Est. Ineligible Costs, GOB Financing						
4.00	Est. BAN Rate						
5.00	Est. GOB 30yr Bond Rate						
2.40	Est. MCWT 30yr Rate						
Financing Plan 1 - 30yrs						Est. Tax Impact Per \$100,000 in Property Value	
Fiscal Year	Est. Short Term Interest	Est. MCWT 30yr dated June 2025	Est. \$7.7M GOB dated June 2026	Est. \$7.05M GOB dated June 2028	Projected Debt Service	Est. Tax Rate Impact Per \$1,000	Est. Impact per \$100,000 Home Valuation
06/30/2024	-	-	-	-	-	0.05	5.37
06/30/2025	228,000	-	-	-	228,000.00	1.41	151.26
06/30/2026	308,000	6,095,600	-	-	6,403,600.00	1.49	148.95
06/30/2027	16,000	5,474,873	510,000.00	-	6,000,872.50	1.52	151.64
06/30/2028	352,000	5,466,798	508,750.00	-	6,327,537.50	1.52	151.55
06/30/2029	-	5,467,173	507,250.00	467,500.00	6,441,922.50	1.51	151.40
06/30/2030	-	5,460,773	510,500.00	466,750.00	6,438,022.50	1.51	151.32
06/30/2031	-	5,457,715	508,250.00	465,750.00	6,431,715.00	1.51	151.17
06/30/2032	-	5,452,873	510,750.00	464,500.00	6,428,122.50	1.51	151.00
06/30/2033	-	5,448,245	507,750.00	468,000.00	6,421,995.00	1.51	150.82
06/30/2034	-	5,442,833	509,500.00	466,000.00	6,418,332.50	1.51	150.65
06/30/2035	-	5,437,508	506,750.00	463,750.00	6,407,007.50	1.51	150.57
06/30/2036	-	5,435,270	506,750.00	466,250.00	6,408,270.00	1.51	150.59
06/30/2037	-	5,425,993	507,250.00	463,250.00	6,396,492.50	1.51	150.41
06/30/2038	-	5,424,803	507,250.00	465,000.00	6,397,052.50	1.50	150.39
06/30/2039	-	5,416,445	506,750.00	466,250.00	6,389,445.00	1.50	150.30
06/30/2040	-	5,411,048	510,750.00	467,000.00	6,388,797.50	1.50	150.12
06/30/2041	-	5,408,483	509,000.00	467,250.00	6,384,732.50	1.50	149.99
06/30/2042	-	5,403,623	506,750.00	467,000.00	6,377,372.50	1.50	149.89
06/30/2043	-	5,396,468	509,000.00	466,250.00	6,371,717.50	1.50	149.59
06/30/2044	-	5,392,018	510,500.00	465,000.00	6,367,517.50	1.49	149.44
06/30/2045	-	5,385,145	506,250.00	463,250.00	6,354,645.00	1.49	149.21
06/30/2046	-	5,375,850	506,500.00	468,000.00	6,348,350.00	1.49	149.01
06/30/2047	-	5,374,133	511,000.00	463,000.00	6,348,132.50	1.49	148.95
06/30/2048	-	5,364,738	509,500.00	464,500.00	6,338,737.50	1.49	148.78
06/30/2049	-	5,357,793	507,250.00	465,250.00	6,330,292.50	1.49	148.63
06/30/2050	-	5,353,170	509,250.00	465,250.00	6,327,670.00	1.48	148.47
06/30/2051	-	5,345,743	510,250.00	464,500.00	6,320,492.50	1.48	148.21
06/30/2052	-	5,340,510	510,250.00	463,000.00	6,313,760.00	1.48	148.06
06/30/2053	-	5,332,345	509,250.00	465,750.00	6,307,345.00	0.11	147.90
06/30/2054	-	5,321,248	507,250.00	467,500.00	6,295,997.50	0.11	147.75
06/30/2055	-	5,317,218	509,250.00	463,250.00	6,289,717.50	0.11	147.60
06/30/2056	-	-	-	463,250.00	463,250.00	0.11	147.45
06/30/2057	-	-	-	467,250.00	467,250.00	0.11	147.30
Total	904,000	\$162,784,415.00	\$14,748,500.00	\$13,497,250.00	\$191,934,165.00		

NOTES:
FY23 Valuation = 4,248,113,076
Interest estimated, subject to change.

Averages
\$1.50/\$1,000 in
Assessed
Property Value
over 30 Years

Averages
\$150/\$100,000
in Assessed
Property Value
over 30 Years

Additional Financial Assistance Available

- **\$1.5 million** in federal funding for final design earmarked for the Town (Congressman Moulton; Senators Warren and Markey)
- **\$250,000** in state funding for design/permitting earmarked for the Town (Rep. Jones and Senator Tarr)
- It is anticipated that these grants will reduce the amount of funding to be borrowed.

Municipal Finance: Debt Exclusion

- A debt exclusion is a vote to exclude from the levy limit the costs of debt service for capital projects. This exclusion remains in effect for the life of the debt only.
- A project funded by a debt exclusion is paid for by raising property taxes townwide above and beyond what they would normally be in a given year or years.

Wastewater Project Borrowing as a Debt Exclusion

- Debt Exclusion Tax on Average Valued Single Family Home = \$745,319:
 - Average over the 30 Year Project Borrowing Period = \$1,116 per Year
- This Debt Exclusion Amount can be Reduced with the use of Other Revenues Sources to lower the Amount Borrowed or to Contribute to Payment of the Annual Debt Service Amount and includes:
 - Betterment Assessment Revenue
 - Privilege Fee Revenue
 - Use of Available Funds (ARPA, Sale of Town Land (Pulte), Etc)

Municipal Finance: Betterment

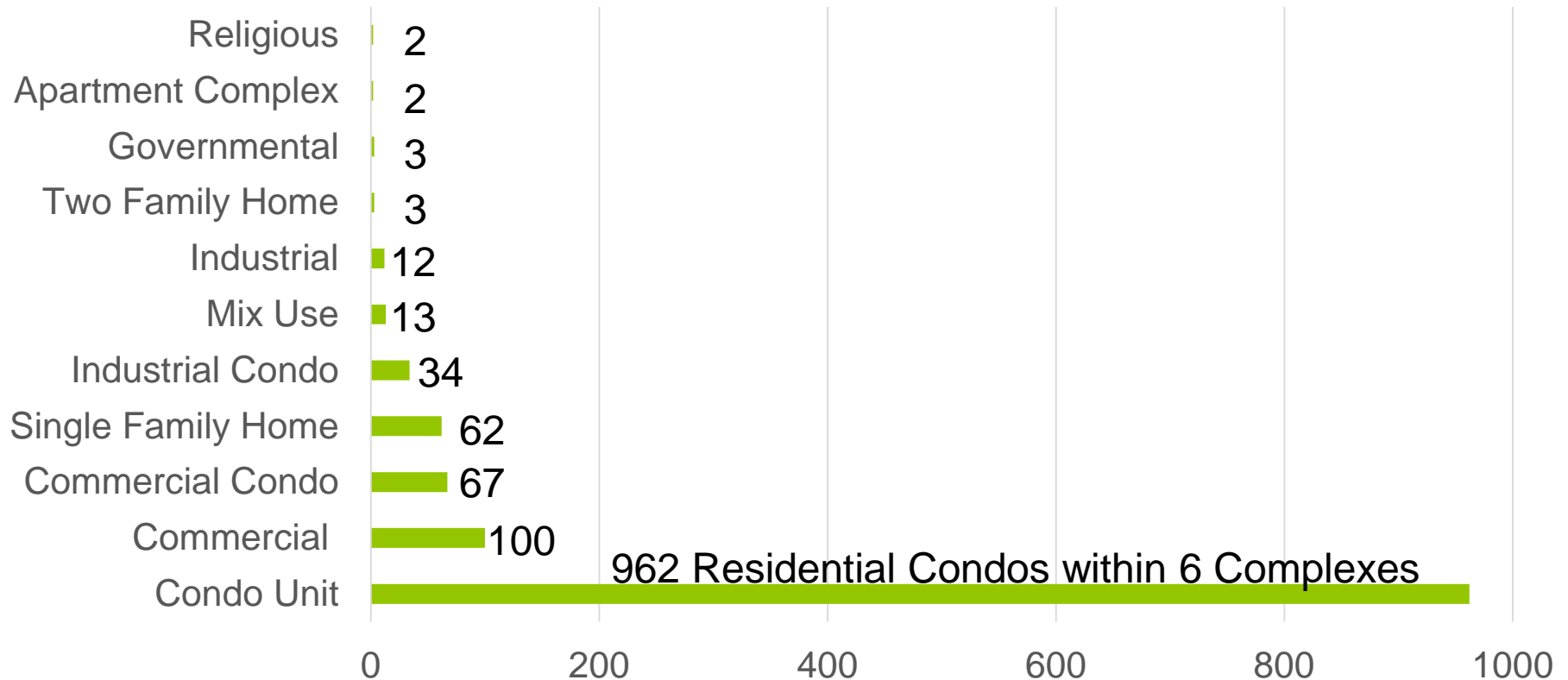
- A Betterment is a special property tax that is permitted where a special benefit or advantage is received from the construction of a public improvement. For sewers, these costs cover:
 - General Benefit Facilities, such as pumping stations, trunk sewers and force mains; and
 - Special Benefit Facilities, such as mains serving adjacent properties.
- A betterment is a municipal lien on a property, determined once all project costs are finalized. The property owner may elect to pay all or a portion of the lien when assessed, stretching the remainder over the bonding period, or portion thereof.
- Betterments can be assessed based on actual water usage or Title V septic requirements

Betterments and Privilege Fees

- Betterments are generally guaranteed revenue to offset the cost of a project. To assess a betterment, Town Meeting approval in the form of a bylaw or specific vote is required.
- Privilege Fees are not guaranteed and only occur when a property owner who was not subject to a betterment decides to connect. Privilege fees can also be assessed to a property that paid a betterment but is seeking more wastewater capacity than it was bettered for. To assess a privilege fee, Town Meeting approval in the form of a bylaw or specific vote is required. To assess a privilege fee to a property that has paid a betterment and is seeking additional wastewater flow, special legislation (approval from the state) is required.

Property Types in Phase I Area

Property Description



Decisions

- Should we bond (borrow) for this project?
 - In any scenario, the Town will have to seek a bond authorization at Town Meeting. The Town does not have sufficient funding on hand to pay for the cost of this project. The Town also does not have sufficient funding to make debt payments on a bond within the existing tax levy.
- Rely solely on funding from a townwide debt exclusion?
 - All taxpayers would pay for the project in the form of an additional cost in their tax bill with no portion of the cost assessed as a special benefit to property owners along the project route.
- Assess betterments to reduce the cost to the taxpayer townwide?
 - This would require abutting property owners to pay a portion of the overall project costs upfront or over the term of repayment of the bond, reducing the cost to taxpayers townwide. This assessment would be roughly equivalent to the increase in property value resulting from the availability of public sewer, and payments would be required regardless of whether or not a property owner chooses to connect to the system. The assessment of betterments requires Town Meeting approval in a bylaw or specific vote.
- If so, how much should the betterment be?
 - A series of scenarios will follow.
- Assess privilege fees?
 - This would require abutting property owners to pay a portion of the overall project costs only if they choose to connect to the sewer. They can connect at the time of construction or at a later time. The use of privilege fees requires Town Meeting approval in a bylaw or specific vote.

Financing Scenarios

Wastewater Project Funding from Debt Exclusion, Betterment Assessments & Sewer Privilege Fees

TABLE 1 BETTERMENTS & SEWER PRIVILEGE FEE ASSESSMENT COMPARISONS	No Betterments or Privilege Fees	Opt In & Pay Privilege Fees Upon Connection			Betterments Liened Upon Construction		
	100% Debt Exclusion With No Betterment Assessments	\$5,000 Single Family Sewer Privilege Fee	\$10,000 Single Family Sewer Privilege Fee	\$20,000 Single Family Sewer Privilege Fee	With \$5,000 Single Family Betterment Assessments	With \$10,000 Single Family Betterment Assessments	With \$20,000 Single Family Betterment Assessments
Property Description	Title V Current Design Flows	Title V Current Design Flows	Title V Current Design Flows	Title V Current Design Flows	Title V Current Design Flows	Title V Current Design Flows	Title V Current Design Flows
Project Cost to be Borrowed:	\$127,350,000	\$127,350,000	\$127,350,000	\$127,350,000	\$127,350,000	\$127,350,000	\$127,350,000
Project Cost Paid for as Debt Exclusion:	\$127,350,000	\$127,350,000	\$127,350,000	\$127,350,000	\$120,815,000	\$114,280,000	\$101,210,000
Debt Exclusion per \$1,000 in Assessed Property Value:	\$1.50	\$1.50	\$1.50	\$1.50	\$1.42	\$1.35	\$1.21
Debt Exclusion for Avg Single Family Home = \$745,319:	\$1,116	\$1,116	\$1,116	\$1,116	\$1,062	\$1,008	\$901
Project Cost Paid for as Betterments:					\$6,535,000	\$13,070,000	\$26,140,000
Total Number of Sewer Units Assessed:					1,307	1,307	1,307
Single Family Home Betterment Cost = 1 Sewer Unit :	\$0	\$5,000	\$10,000	\$20,000	\$5,000	\$10,000	\$20,000
Condominium Units, 1 Bedroom:	\$0	\$1,667	\$3,333	\$6,667	\$1,667	\$3,333	\$6,667
Condominium Units, 2 Bedroom:	\$0	\$3,333	\$6,667	\$13,333	\$3,333	\$6,667	\$13,333
Condominium Units, 3 Bedroom:	\$0	\$5,000	\$10,000	\$20,000	\$5,000	\$10,000	\$20,000
Condominium Units, 4 Bedroom:	\$0	\$5,000	\$10,000	\$20,000	\$5,000	\$10,000	\$20,000

ADDITIONAL INFORMATION

Septic System Repair/Replacement Costs

Ranges between \$25,000 - \$50,000 for the typical Single Family Home

Septic System Costs							
		Local Contractors		Town's Design Engineer		Local Design Engineer	
		NR Contractor 1	NR Contractor 2	Wright-Pierce 1	Wright-Pierce 2	Eng Costs	Const Costs
Repair	Replace Septic Tank	\$6,000 to \$7,000	\$8,500			\$0	\$5,000 to \$7,000
	Replace Leaching Field	\$20,000 to \$30,000	\$20,000			\$2,250 to \$2,750	\$20,000 to \$25,000
	Replace Raised Leaching Field	\$25,000 to \$40,000				\$2,250 to \$2,750	\$30,000 to \$35,000
New	Conventional (Gravity) Septic System	\$25,000 to \$40,000	\$38,500	\$30,000 to \$40,000	\$24,000 to \$28,000	\$2,250 to \$2,750	\$32,500 to \$40,000
	Pumped system with Raised Leaching Field	\$35,000 to \$45,000	\$60,000		\$32,000 to \$36,000	\$2,250 to \$2,750	\$37,500 to \$47,500
	Non-Conventional System (Alternative Technology)	\$30,000 to \$50,000				\$2,250 to \$3,250	Can add \$7,000 to \$8,000

Sewer Rates of the GLSD Municipalities

- Rates are shown per Hundred Cubic Feet (HCF) Quantities which is approximately 748 Gallons
 - Andover: \$4.45 per HCF
 - North Andover: \$9.24 per HCF
 - Lawrence: \$3.58 per HCF
 - Methuen: \$4.48 per HCF
 - Salem New Hampshire: \$4.65 per HCF
- Using Highest Sewer Rate of the GLSD Municipalities = \$9.24
- The Average Single Family Home using 130 GPD
- The Average Quarterly Sewer Bill = \$147

Next Steps: Meetings / Info Sessions

- | | |
|--|---|
| • Monday, February 13, 2023 | Select Board Update on Wastewater Project Financing |
| • Monday, February 27, 2023 | Select Board By-Law Warrant Article Informational Hearing and Wastewater Project Discussion |
| • Tuesday, February 28, 2023 | Town Boards & Committees Informational Meeting |
| • Monday, March 6, 2023 | Town Meeting on Sewer Betterment By-Law Petition |
| • Wednesday, March 8, 2023 | Public Outreach Meeting #1 (In Person) |
| • Monday, March 27, 2023 | Select Board Actions on WWP Financing |
| • Wednesday, April 5, 2023 | Public Information Session #2 (Virtual) |
| • Tuesday, April 11, 2023 | Public Information Session #3 (In Person) |
| • Monday, May 8, 2023 | Select Board Warrant Article Informational Hearing |
| • Monday, May 15, 2023 | Town Meeting for Wastewater Project Borrowing |
| • No More Than 90 Days Later | Special Election for Wastewater Project Debt Exclusion |

END