

	Approved DW19-084 Revenues	QCPAC For 2019 Capital Additions	QCPAC Surcharge for 2019 Capital Additions	QCPAC For 2020 Capital Additions pro forma	QCPAC Surcharge for 2020 Capital Additions	QCPAC For 2021 Capital Additions pro forma	QCPAC Surcharge for 2021 Capital Additions	QCPAC For 2022 Capital Additions pro forma	QCPAC Surcharge for 2022 Capital Addition	QCPAC For 2023 Capital Additions pro forma	QCPAC Surcharge for 2023 Capital Additions	QCPAC For 2023 Capital Additions pro forma	QCPAC Surcharge for 2023 Capital Additions
City Bond Fixed Revenue Requirement (CBFRR)	\$ 7,729,032	\$ -	\$ 7,729,032	\$ -	\$ 7,729,032	\$ -	\$ 7,729,032	\$ -	\$ 7,729,032	\$ 7,729,032	\$ -	\$ 7,729,032	\$ -
DW19-084 Operating Expense Revenue Requirement	\$ 21,296,618 (1)	\$ 416,593	\$ 21,713,211	\$ 155,083 (4)	\$ 21,868,294	\$ 175,423 (4)	\$ 22,043,718 (4)	\$ 288,585 (4)	\$ 22,332,303	\$ 221,462 (4)	\$ 22,553,764	\$ 257,112 (4)	\$ 22,810,876
DW19-084 Annual Principal and Interest Payments	\$ 6,176,477 (2)	\$ 854,442	\$ 7,030,919	\$ 351,395 (5)	\$ 7,382,314	\$ 394,345 (6)	\$ 7,776,659	\$ 778,703 (10)	\$ 8,555,362	\$ 523,272 (10)	\$ 9,078,634	\$ 755,942 (6)	\$ 9,834,576
Principal and Interest Coverage Requirement	1.10 (3)		1.10		1.10		1.10		1.10		1.10		1.10
DW19-084 Principal and Interest Revenue Requirement	\$ 6,794,124		\$ 7,734,011		\$ 8,120,546		\$ 8,554,325		\$ 9,410,898		\$ 9,986,497		\$ 10,818,034
DW19-084 Revenue Requirement	\$ 35,819,774		\$ 37,176,254		\$ 37,717,871		\$ 38,327,075		\$ 39,472,233		\$ 40,269,293		\$ 41,357,942
DW19-084 Revenue Requirement less Other Revenues	\$ 35,399,062 (12)		\$ 36,755,541		\$ 37,297,159		\$ 37,906,362		\$ 39,051,521		\$ 39,848,581		\$ 40,937,230
DW19-084 Revenue Requirement less Other Revenues less Fixed Special Contract Revenues	\$ 34,792,618 (8)		\$ 36,149,098		\$ 36,690,716 (8)		\$ 37,299,919 (8)		\$ 38,445,077		\$ 39,242,138		\$ 40,330,786
Percent QCPAC Surcharge (7)			3.90%		1.56%		1.75%		3.29%		2.29%		3.13%
Cumulative QCPAC Surcharge (11)			3.90%		5.46%		7.21%		10.50%		12.79%		15.92%
Cumulative QCPAC monthly increase in average single family residential bill			\$ 2.17		\$ 3.04		\$ 4.01		\$ 5.84		\$ 7.12		\$ 8.86
Average monthly single family residential bill with QCPAC	\$ 55.65		\$ 57.82		\$ 58.69		\$ 59.66		\$ 61.50		\$ 62.77		\$ 64.51

Notes:  
 (1) Operating Expense Revenue requirement is the sum of the Total Operating Expenses, Property Tax Expense, Amortization Expense and Payroll Tax Expenses approved in NHPUC Order #26,425.  
 (2) Annual Principal and interest payments for PWW debt associated with all plant in service as approved in DW 19-084.  
 (3) Principal and interest coverage of 1.10 is as approved in DW 16-806.  
 (4) QCPAC operating expenses are based on the property taxes for used and useful plant added during the year.  
 (5) Portion of Annual Principal and interest payments for debt associated with plant placed in service between 1/1/2020 and 12/31/2020 based on a 30 year bond with interest rate of 4.50% for 2021 through 2024 Capital Expenditures unless funding is via an SRF/DWGTFF financing.  
 (6) QCPAC Principal and Interest expenses for Bonds to be sold in April 2022 to pay for 2021 QCP's are based on 4.056692% based on a bond issuance in April 2021.  
 (7) QCPAC percent revenue surcharges based on increase in revenues from the revenues granted in DW 19-084.  
 (8) Reduction in revenues associated with fixed contracts as follows:  
 (9) QCPAC Principal and Interest expenses for DWGTFF financing are based on a 30 year bond with interest rate of 3.38%  
 (10) QCPAC Principal and Interest expenses for 2023, 2024 and 2025 Bonds to be 2022, 2023 and 2024 QCP's are based on 5.00% for 2022 through 2024 Capital Expenditures unless funding is via an SRF/DWGTFF financing.  
 (11) Cumulative surcharge percentage is based on total surcharge revenues collected divided by the revenues granted in DW 19-084 that are impacted by the QCPAC.  
 (12) Operating expense revenues approved in DW 19-084 less total Other Revenues of \$ 420,712

**Impact on Single Family Residential Home:**

	DW19-084
Monthly meter charge approved in DW 19-084 -	\$ 24.34
Average Single Family Consumption per DW 19-084 (CCF) -	7.77
Volumetric Charge approved in DW 19-084 -	\$ 4.03
Ave. Single Family monthly bill with rates approved in DW 19-084 -	\$ 55.65



Item	Description	Workorder #	DW17-183	26,101	2/2/2018	\$ 40,000	\$ 15,445	Yes	\$ 11,260	Various	Yes	\$ 27.02	\$ 304	0 pumps replaced, 5 rebuilds through 12/31/2019.
Booster Pump replacement/rebuild	Booster Pump replacement/rebuild	60, 61, 62 & 63 workorders	DW17-183	26,101	2/2/2018	\$ -	\$ 24,555	Yes	\$ 24,554	Nashua	Yes	\$ 26.23	\$ 644	Pump Bearings failed on Intermediate Booster Pump at WTP.
Well Pump replacements	Well Pump replacements	60, 61, 62 & 63 workorders	DW17-183	26,101	2/2/2018	\$ 15,000	\$ 15,000	Yes	\$ 16,995	Various	Yes	\$ 27.02	\$ 459	4 replaced through 12/31/2019.
Chemical Feed pump replacements	Chemical Feed pump replacements	60, 61, 62 & 63 workorders	DW17-183	26,101	2/2/2018	\$ 10,000	\$ 10,000	Yes	\$ -	Various	Yes	\$ 27.02	\$ -	No replacements occurred during 2019.
Upgrade SCADA historian software, new hardware	Upgrade SCADA historian software, new hardware	n/a	DW17-183	26,101	2/2/2018	\$ 150,000	\$ 150,000	Yes	\$ -	Various	Yes	\$ 27.02	\$ -	Scope of project was more clearly defined resulting in a reduction in cost.
Twin Ridge rebuild softener system, install radon treatment.	Twin Ridge rebuild softener system, install radon treatment.	1907731	DW17-183	26,101	2/2/2018	\$ 50,000	\$ 50,000	Yes	\$ 11,112	Plaistow	Yes	\$ 25.93	\$ 288	Project scope was limited to MTM media replacement.
Misc. Structural Improvements	Misc. Structural Improvements	n/a	DW17-183	26,101	2/2/2018	\$ 20,000	\$ 10,700	Yes	\$ -	Various	Yes	\$ 27.02	\$ -	Reduced by replacement of failed Fire Alarm CPU.
Misc. Structural Improvements	Replace Fire Alarm System CPU.	1907102, 1910221	DW17-183	26,101	2/2/2018	\$ -	\$ 9,300	Yes	\$ 9,251	Nashua	Yes	\$ 26.23	\$ 243	Fire Alarm CPU failed due to electrical surge.
Misc. Structural Improvements	Replace Natural Gas Heater, High Pine Station.	1917491	DW17-183	26,101	2/2/2018	\$ -	\$ -	Yes	\$ 4,050	Nashua	Yes	\$ 26.23	\$ 106	Failed heater. Part of run rate Misc Structural Improvements.
Miscellaneous Equipment Purchased	Miscellaneous Equipment Purchased	n/a	DW17-183	26,101	2/2/2018	\$ 17,500	\$ 9,928	Yes	\$ -	Various	Yes	\$ 27.02	\$ -	
Miscellaneous Equipment Purchased	Purchase 2 Gas Monitors for WS Confined Space Program.	1907611	DW17-183	26,101	2/2/2018	\$ -	\$ 4,568	Yes	\$ 4,568	Nashua	Yes	\$ 26.23	\$ 120	Routine Miscellaneous Equipment purchase
Miscellaneous Equipment Purchased	Purchase Entry Tripod and Winch for WS Confined Space Program.	1910296	DW17-183	26,101	2/2/2018	\$ -	\$ 3,004	Yes	\$ 3,004	Nashua	Yes	\$ 26.23	\$ 79	Routine Miscellaneous Equipment purchase
Miscellaneous Equipment Purchased	Replace Chlorine Analyzer, Twin Ridge	1915362	DW17-183	26,101	2/2/2018	\$ -	\$ -	Yes	\$ 4,449	Nashua	Yes	\$ 26.23	\$ 117	Routine Miscellaneous Equipment purchase
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical	n/a	DW17-183	26,101	2/2/2018	\$ 30,000	\$ 30,000	Yes	\$ -	Various	Yes	\$ 27.02	\$ -	
Miscellaneous SCADA/Electrical	Replace VFD, Pump #1 Bowers Landing	1916547	DW17-183	26,101	2/2/2018	\$ -	\$ -	Yes	\$ 2,118	Various	Yes	\$ 27.02	\$ 57	
WTP Structural/HVAC	WTP Structural/HVAC	n/a	DW17-183	26,101	2/2/2018	\$ 10,000	\$ 10,000	Yes	\$ -	Nashua	Yes	\$ 26.23	\$ -	
WTP Structural/HVAC	Replace Heat Exchanger, WTP Office	1917470	DW17-183	26,101	2/2/2018	\$ -	\$ -	Yes	\$ 8,328	Nashua	Yes	\$ 26.23	\$ 218	WTP Structural/HVAC project
Purchase new lab equipment	Purchase new lab equipment	n/a	DW17-183	26,101	2/2/2018	\$ 20,000	\$ 18,500	Yes	\$ -	Nashua	Yes	\$ 26.23	\$ -	Reduced by purchase of HACH DR 900 below
Purchase new lab equipment	HACH DR 900	1908450	DW17-183	26,101	2/2/2018	\$ -	\$ 1,500	Yes	\$ 1,435	Nashua	Yes	\$ 26.23	\$ 38	
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects	n/a	DW17-183	26,101	2/2/2018	\$ 10,000	\$ 10,000	Yes	\$ -	Various	Yes	\$ 27.02	\$ -	
Miscellaneous Fencing and Security projects	WTP Perimeter Fence Carryover	1901608	DW17-183	26,101	2/2/2018	\$ -	\$ -	Yes	\$ 6,744	Various	Yes	\$ 27.02	\$ 182	
Purchase new vehicle for Water Supply Electrician.	Purchase of a new vehicle for the Water Supply Electrician.	1918314	DW17-183	26,101	2/2/2018	\$ -	\$ -	Yes	\$ 28,897	Nashua	No	\$ 26.23	\$ -	Unbudgeted. Made necessary due to the premature retirement of 2 dept. vehicles.
Replace Ferric Chloride Feed pump.	Replace Ferric Chloride Feed pump.	1901613	DW17-183	26,101	2/2/2018	\$ -	\$ -	Yes	\$ 1,713	Nashua	Yes	\$ 26.23	\$ 45	Pump rebuild was determined to be best course.
Carbon media changeout-filters 1 & 2.	Carbon media changeout-filters 1 & 2	1901614 & 1916780	DW17-183	26,101	2/2/2018	\$ 1,000,000	\$ 1,050,000	Yes	\$ 990,662	Nashua	Yes	\$ 26.23	\$ 25,985	New PFAS regulations require that all filter media be changed out to ensure compliance with the new PFOA standard which is slated to go into effect on October 1, 2019. Filter media replacement being staged over 6 month intervals. 8 of 12 filters to be replaced in 2019, remaining four filters to be replaced in Spring 2020.
Add 3rd pump at Main Dunstable Booster, replace 1 existing.	Add 3rd pump at Main Dunstable Booster, replace 1 existing.	n/a	DW17-183	26,101	2/2/2018	\$ 120,000	\$ -	Yes	\$ -	Nashua	Yes	\$ 26.23	\$ -	Addition of 3rd pump deferred or eliminated until future date subject to performance of rebuilt 2nd pump.
Rebuild Main Dunstable pump #1	Rebuild Pump #1, Main Dunstable, Nashua	1901615	DW17-183	26,101	2/2/2018	\$ -	\$ -	Yes	\$ 15,995	Nashua	Yes	\$ 26.23	\$ 420	
Replace Kessler Farm booster pump package.	Replace 20 year old package booster station pumps and piping. Piping is steel which is beginning to pit.	n/a	DW17-183	26,101	2/2/2018	\$ 75,000	\$ 75,000	Yes	\$ -	Nashua	Yes	\$ 26.23	\$ -	Project deferred until 2020
Stump Pond Subwatershed assessment	Stump Pond Subwatershed assessment	n/a	0.1 DSRR			\$ 25,000	\$ 25,000	No	\$ -	Merrimack	No	\$ 28.86	\$ -	Study - Pay for with 0.1 DSRR
Stump Pond Stormwater BMP	Stump Pond Stormwater BMP	1908373	0.1 DSRR			\$ 20,000	\$ 20,000	No	\$ 1,310	Merrimack	No	\$ 28.86	\$ -	Study - Pay for with 0.1 DSRR
Public Education -Watershed signage	Public Education -Watershed signage	n/a	0.1 DSRR			\$ 20,000	\$ 20,000	No	\$ -	Merrimack	No	\$ 28.86	\$ -	Study - Pay for with 0.1 DSRR
Replace 2 Hach Turbidimeters and associated control module	Replace 2 Hach Turbidimeters and associated control module.	1901618	DW17-183	26,101	2/2/2018	\$ 10,000	\$ 10,000	Yes	\$ 7,978	Nashua	Yes	\$ 26.23	\$ 209	
Camera System Upgrade	Carryover Costs from 2018 Project.	1819073, 1900413	0.1 DSRR			\$ -	\$ 7,500	No	\$ 9,756	Nashua	Yes	\$ 26.23	\$ 256	Carry over costs from project completed in 2018, pay for with 0.1 DSRR
Dredging Feasibility Study	Carryover Costs from 2018 study.	1807145, 1901939	0.1 DSRR			\$ -	\$ 24,600	No	\$ 39,520	Merrimack	No	\$ 28.86	\$ -	Study - Pay for with 0.1 DSRR
Source Water Protection Study	Carryover Costs from 2018 study.	1901740	0.1 DSRR			\$ -	\$ 12,000	No	\$ 11,000	Merrimack	No	\$ 28.86	\$ -	Study - Pay for with 0.1 DSRR
Aquatic Vegetation Assessment	Carryover Costs from 2018 study.	1807147, 1906080	0.1 DSRR			\$ -	\$ 4,200	No	\$ 9,545	Merrimack	No	\$ 28.86	\$ -	Study - Pay for with 0.1 DSRR
Fiber Conduit between WTP and Dist	Install Fiber Conduit between Water Treatment Plant and Distribution to eliminate ongoing Comcast Ethernet line to one of the buildings.	1901619	DW17-183	26,101	2/2/2018	\$ 40,000	\$ 40,000	Yes	\$ 22,896	Nashua	Yes	\$ 26.23	\$ 601	
Munis FER Enhancements	Munis FER Enhancements	n/a	DW17-183	26,101	2/2/2018	\$ 35,000	\$ 35,000	Yes	\$ -	Merrimack	No	\$ 28.86	\$ -	No upgrades/enhancements will be completed in 2019.
Wireless Access Points for Main Office	Wireless Access Points for Main Office	n/a	DW17-183	26,101	2/2/2018	\$ 14,000	\$ -	Yes	\$ -	Merrimack	No	\$ 28.86	\$ -	Monies moved to Veam Backup Project.
KVM for Data Center	Keyboard Video Mouse for Data Center so that multiple servers can be accessed by one console without having to move the Monitor/Keyboards/ Mouse connections each time.	n/a	DW17-183	26,101	2/2/2018	\$ 2,500	\$ -	Yes	\$ -	Merrimack	No	\$ 28.86	\$ -	
IOS Charging Station	Charging Station for multiple iPads to allow for upgrades across multiple devices concurrently.	n/a	DW17-183	26,101	2/2/2018	\$ 1,200	\$ -	Yes	\$ -	Merrimack	No	\$ 28.86	\$ -	
Digital Signage for Distribution	Digital Signage for Distribution allowing notices and schedules to be more prominently displayed.	1908376	0.1 DSRR	26,101	2/2/2018	\$ 2,000	\$ 1,270	No	\$ -	Merrimack	No	\$ 28.86	\$ -	
VDI Pilot	A pilot to determine whether a Virtual Desktop Infrastructure would be feasible for our environment.	n/a	DW17-183	26,101	2/2/2018	\$ 12,000	\$ -	Yes	\$ -	Merrimack	No	\$ 28.86	\$ -	
Misc Hardware	Misc Hardware	n/a	DW17-183	26,101	2/2/2018	\$ 20,000	\$ 20,000	Yes	\$ -	Merrimack	No	\$ 28.86	\$ -	
Misc Hardware	Mount in Vehicles	1908308	0.1 DSRR			\$ -	\$ -	No	\$ 1,248	Merrimack	No	\$ 28.86	\$ -	
Misc Hardware	2 iPad Pros for IS Testing	1908309	0.1 DSRR			\$ -	\$ -	No	\$ 2,298	Merrimack	No	\$ 28.86	\$ -	
Misc Software	n/a	n/a	DW17-183	26,101	2/2/2018	\$ 12,000	\$ 12,000	Yes	\$ -	Merrimack	No	\$ 28.86	\$ -	
Website upgrades	Website upgrades	n/a	DW17-183	26,101	2/2/2018	\$ 8,000	\$ 8,000	Yes	\$ -	Merrimack	No	\$ 28.86	\$ -	
Implement Customer Balances over the phone	Implement Customer Balances over the phone.	n/a	DW17-183	26,101	2/2/2018	\$ 4,000	\$ 25,500	Yes	\$ -	Merrimack	No	\$ 28.86	\$ -	Deferred
Click Resource Assistant	Allow for the moving of customer Appointment from an generic resource to a named resource.	1907952	0.1 DSRR			\$ -	\$ 22,828	No	\$ 22,828	Merrimack	No	\$ 28.86	\$ -	
Database Server License for GIS and other Apps	Purchase Server license for Virtual Environment.	1915920	DW17-183	26,101	2/2/2018	\$ -	\$ -	Yes	\$ 7,305	Merrimack	No	\$ 28.86	\$ -	Previously licensed software was not suitable for Virtual environment.
Veam Backup Software	Replacement of existing backup software due to exorbitant vendor fees to keep original system running.	1909216	0.1 DSRR			\$ -	\$ 25,550	No	\$ 15,530	Merrimack	No	\$ 28.86	\$ -	
New RCO Manager Computer	New RCO Manager Computer	1917001	0.1 DSRR			\$ -	\$ -	No	\$ 1,797	Merrimack	No	\$ 28.86	\$ -	Replace failed desktop computer.
Kessler Farm Tank Design	Kessler Farm Tank Design	1915117	0.1 DSRR	26,101	2/2/2018	\$ -	\$ -	No	\$ 36,355	Nashua	No	\$ 26.23	\$ -	Engineering for tank to be constructed in 2020.
Retainage	Payment of Retainage for projects that were used and useful in 2018.	n/a	DW17-183	26,101	2/2/2018	\$ -	\$ -	Yes	\$ 33,586	Merrimack	No	\$ 28.86	\$ -	Retainage paid in 2019 for 2018 QCPAC projects.
Short term interest on the PWV Fixed Asset Line of Credit.	Capitalized interest incurred on FALOC draws to fund 2019 Capex from 1/1/2019 thru 4/2/2020.	n/a	DW17-183	26,101	2/2/2018	\$ -	\$ -	Yes	\$ 230,645	Various	No	\$ -	\$ -	
Performance Management Platform Implementation & Technical Integration	Performance Management Platform Implementation & Technical Integration	1916551	DW17-183	26,101	2/3/2018	\$ -	\$ -	Yes	\$ 13,804	Merrimack	No	\$ 28.86	\$ -	
Papercut MF Software for copiers	Papercut MF Software for copiers	1918363	DW17-183	26,101	2/3/2018	\$ -	\$ -	Yes	\$ 3,708	Merrimack	No	\$ 28.86	\$ -	

Pennichuck Water Works Projected 2019 Total Capital Expenditure Budget - \$ 14,968,170 \$ 16,902,524 \$ 15,801,867 Projected Property Tax Expense associated with \$ 416,593

Total Projected PWV QCPAC Capex for 2019 - \$ 16,832,524 \$ 14,898,170 \$ 15,374,227  
Amount funded by DWGTF Merrimack River Intake - \$ 8,819,800 \$ 8,819,800 \$ 5,359,625  
Amount funded by DWGTF Northwest System Improvements - \$ 2,859,754  
Amount to be funded by 2020 Bond Issue - \$ 8,012,724 \$ 6,078,370 \$ 7,154,848

- 1. Tax rate is the sum of the local community rate plus the Statewide Utility tax rate of \$6.60/\$1000
- 2. Projects funded by 0.1 DSRR funds are not QCPAC eligible because the cash to fund these projects is not bonded. Total 2019 Capex to be funded by 0.1 DSRR funds - \$ 427,640 The 12/31/2019 0.1 DSRR amount has been increased by \$ 21,175 to reflect the Staff DR21 response indicating that the project costs being funded with DWGTF is being funded with 0.1 DSRR monies.
  - 30 year bond with an actual total all in interest rate of 4.261869% resulting in annual P&I expenses of \$ 427,022
  - 30 year bond with interest rate of 2.704% resulting in annual P&I expenses of \$ 140,376
  - 30 year bond with interest rate of 3.380% resulting in annual P&I expenses of \$ 287,045
- 3. Portion of Annual Principal and interest payments for debt associated with plant placed in service between 1/1/2019 and 12/31/2019 based on a
- 4. QCPAC Principal and Interest expenses for DWGTF financing for the North West System improvements are based on a
- 5. QCPAC Principal and Interest expenses for DWGTF financing for the Merrimack River Intake are based on a







Project Name/Description	Project Description	Work Order #	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	QCPAC Eligible?	Estimated Project Cost as of 6/30/2021	Estimated Project Cost as of 9/30/2021	Estimated Project Cost as of 11/30/2021	Final Project cost as of 12/31/2021	Community	Taxable	Tax Rate (I)	QCPAC Eligible Property Tax Expense	Explanation for Change/Addition/Deletion since Feb 2021 Filing
Bowers Dam 2021 Permitting and design	Bowers Dam 2021 Permitting and design	2107806		0.1 DSRR		\$ -	No	\$ -	\$ 154,000	\$ 154,000	\$ 39,917	Merriam/Nashua	No	\$ 25.11	\$ -	Dam construction will occur in 2022
CMMS replacement project	Replace Synergen/WAM with newer more cost effective/improved functionality system	2101757	DW20-157	26,459	3/2/2021	\$ 100,000	Yes	\$ 100,000	\$ 100,000	\$ 100,000	\$ 65,010	Nashua	No	\$ 27.70	\$ -	
Infoweb Licenses	Infoweb Licenses	2104021		Excess 0.1 DSRR funds as of 12/31/2021 per noted 3&6		\$ 65,000	Yes	\$ 53,450	\$ 53,450	\$ 53,450	\$ 53,450	Nashua	No	\$ 27.70	\$ -	
Redundant Internet	The new phone system, these phone lines use the internet to make and receive telephone calls. We currently only have a single internet feed for the office and the WTP/Distribution facilities. This project provides a secondary internet feed into the Distribution facility which internet will provide us a redundant path to the internet in case one fails. This secondary internet feeds the internet load from the 3 major locations between the 2 internet connections instead of one.	2102395		Excess 0.1 DSRR funds as of 12/31/2021 per noted 3&7 with remainder via Bond approved in NHPUC Order #23,459		\$ 69,000	Yes	\$ 69,000	\$ 44,832	\$ 44,832	\$ 43,470	Nashua	No	\$ 27.70	\$ -	
Treatment Plant and Distribution security retrofit	Update both the Treatment plant and Distribution to the same security system that the new HQ is using so that there is one badge procedure and system to maintain. It will also give us better analytics and notifications of access to each of the buildings.	2103934	DW20-157	26,459	3/2/2021	\$ 37,000	Yes	\$ 120,000	\$ 126,000	\$ 126,000	\$ 128,419	Nashua	Yes	\$ 27.70	\$ 3,557	Change of Scope for 2 remote facilities. Existing wiring at Distribution not adequate for new system. Add gate, request for Exit, change int keypad functionality.
IT Storage Room / Work Room	Add tool box, work bench and parts storage to the IT room to keep things organized to provide a place to work on physical computers and perform repairs.	2105690	DW20-157	26,459	3/2/2021	\$ 4,000	Yes	\$ 4,000	\$ 4,000	\$ 4,000	\$ 1,255	Nashua	No	\$ 27.70	\$ -	
Cybernetics Disk Array	Replace 7 year of device used for system back ups.	2104055		Excess 0.1 DSRR funds as of 12/31/2021 per noted 3&4		\$ 20,000	Yes	\$ 12,000	\$ 20,000	\$ 20,000	\$ 10,943	Nashua	No	\$ 27.70	\$ -	
Virtual Desktops	The majority of the office computers will be 5 years old in 2021. The plan is create a Virtual Desktop that will support up to 50 concurrent users. By shifting the computing and disk requirements to a client server will increase computer speed that will allow the existing desktops to remain in service for several more years. Additionally the client server provides more flexibility to the end user to allow them to work at other locations and still get all their settings and programs to perform their job.	2104056		Excess 0.1 DSRR funds as of 12/31/2021 per noted 3&4		\$ 106,000	Yes	\$ 60,000	\$ 96,000	\$ 96,000	\$ 48,839	Nashua	No	\$ 27.70	\$ -	
Computer Updates	There are 30 Computers that are due for replacement in 2023. These computers have very slow hard drives which make these computer frustrating for the end user to use. The systems decrease production from the user because of the time that programs open or being responsive. We should at least update these computers with new SSD drives to increase the productivity of the end user and give them a better end user experience.	NTD	DW20-157	26,459	3/2/2021	\$ 6,000	Yes	\$ 6,000	\$ -	\$ -	\$ -	Nashua	No	\$ 27.70	\$ -	Went to all virtual systems instead of PC's
Snow Station Switch Replacement	Replace the outdated switch that connects the fiber optic cable from outside to the inside of the WTP	NTD	DW20-157	26,459	3/2/2021	\$ 1,000	Yes	\$ 1,000	\$ 1,000	\$ 1,000	\$ -	Nashua	Yes	\$ 27.70	\$ -	Project Deferred
Munis FER Enhancements	Munis FER Enhancements	NTD	DW20-157	26,459	3/2/2021	\$ 35,000	Yes	\$ 35,000	\$ 20,384	\$ 25,000	\$ -	Nashua	No	\$ 27.70	\$ -	Project Deferred
Click to Munis Data interfaces	Implement connection between ClickSoft and Munis to reduce the need of user to duplicate data entry into Munis from information captured in ClickMobile.	NTD	DW20-157	26,459	3/2/2021	\$ 20,000	Yes	\$ 20,000	\$ -	\$ -	\$ -	Nashua	No	\$ 27.70	\$ -	Project Deferred
CMMS PLL Implementation	Implementation of Cityworks PLL. Cityworks PLL simplifies applications for customers a	2103213		Excess 0.1 DSRR funds as of 12/31/2021 per noted 3&4		\$ 170,000	Yes	\$ 125,595	\$ 170,000	\$ 170,000	\$ 140,049	Nashua	No	\$ 27.70	\$ -	
Cityworks PLL License	License for above (Estimate)	NTD	DW20-157	26,459	3/2/2021	\$ 40,000	Yes	\$ 13,875	\$ -	\$ -	\$ -	Nashua	No	\$ 27.70	\$ -	This project got cancelled since it was only for licenses.
Misc Hardware	Misc Hardware	NTD	DW20-157	26,459	3/2/2021	\$ 20,000	Yes	\$ 8,082	\$ 9,527	\$ 5,000	\$ -	Various	No	\$ 24.96	\$ -	
Misc Hardware	Small MFP's at Distribution	2101826		Excess 0.1 DSRR funds as of 12/31/2021 per noted 3&4		\$ -	Yes	\$ 2,195	\$ 2,195	\$ 2,195	\$ 1,895	Various	No	\$ 24.96	\$ -	
Misc Hardware	Replacement Laptops - CS	2102671		Excess 0.1 DSRR funds as of 12/31/2021 per noted 3&4		\$ -	Yes	\$ 3,500	\$ 3,500	\$ 3,500	\$ 4,995	Various	No	\$ 24.96	\$ -	
Misc Hardware	New Laptops for Engineering Interns	2103177		Excess 0.1 DSRR funds as of 12/31/2021 per noted 3&4		\$ -	Yes	\$ 3,349	\$ 2,454	\$ 2,454	\$ 2,782	Various	No	\$ 24.96	\$ -	
Misc Hardware	4 iPads & iPad cases	2105019		Excess 0.1 DSRR funds as of 12/31/2021 per noted 3&4		\$ -	Yes	\$ 2,874	\$ 2,874	\$ 2,874	\$ 2,874	Various	No	\$ 24.96	\$ -	
Misc Hardware	Windows Server License	2109595		Excess 0.1 DSRR funds as of 12/31/2021 per noted 3&4		\$ -	Yes	\$ -	\$ -	\$ -	\$ 1,099	Nashua	No	\$ 27.70	\$ -	
Misc Hardware	Laptops for Remote Workers	2109754		Excess 0.1 DSRR funds as of 12/31/2021 per noted 3&4		\$ -	Yes	\$ -	\$ -	\$ -	\$ 6,726	Various	No	\$ 24.96	\$ -	
Remote User Laptops	Remote User Laptops	2104113		Excess 0.1 DSRR funds as of 12/31/2021 per noted 3&4		\$ -	Yes	\$ 36,000	\$ 36,000	\$ 36,000	\$ 37,897	Various	No	\$ 24.96	\$ -	
Misc Software	Misc Software	NTD	DW20-157	26,459	3/2/2021	\$ 12,000	Yes	\$ 12,000	\$ 12,000	\$ -	\$ -	Various	No	\$ 24.96	\$ -	
WTP Wifi expansion	WTP Wifi expansion	NTD	DW20-157	26,459	3/2/2021	\$ 15,000	Yes	\$ -	\$ -	\$ -	\$ -	Nashua	No	\$ 27.70	\$ -	Determined that the need was not there for the use of this technology.
Redundant VPN Installation	Redundant VPN Installation	2108090	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ -	\$ 14,616	\$ 14,616	\$ -	Nashua	No	\$ 27.70	\$ -	Equipment not available until 2022 so not eligible for 2021 QCPAC
Laptop for Scada/Electrical Tech	Laptop for Scada/Electrical Tech	2108558		Excess 0.1 DSRR funds as of 12/31/2021 per noted 3&4		\$ -	Yes	\$ -	\$ -	\$ -	\$ 1,129	Nashua	No	\$ 27.70	\$ -	
RCCO Call Recording		2108554		0.1 DSRR		\$ -	No	\$ -	\$ -	\$ -	\$ 7,560	Nashua	No	\$ 27.70	\$ -	
Union Negotiations 2021	Negotiations for 2021 to 2023 Union Contract	2200472		0.1 DSRR		\$ -	No	\$ -	\$ -	\$ -	\$ 1,356	Various	No	\$ 24.96	\$ -	
Retainage	Paid out in 2021 on retainage held on 2020 projects.	N/A	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ -	\$ -	\$ -	\$ 35,292	Various	No	\$ -	\$ -	
Retainage	Held on various projects listed above. Will be paid out in 2022.	N/A	DW20-157	26,459	3/2/2021	\$ -	Yes	\$ -	\$ -	\$ -	\$ (432,409)	Various	No	\$ -	\$ -	
Projected short term interest on FALOC	Interest incurred to finance 2021 Capex until permanent financing is achieved	N/A		Excess 0.1 DSRR funds as of 12/31/2021 per noted 3&4		\$ -	Yes	\$ 128,379	\$ 128,379	\$ 128,379	\$ 105,244	N/A	No	\$ -	\$ -	
<b>Pennichuck Water Works Projected 2021 Total Capex</b>						<b>\$ 12,015,200</b>	<b>\$ -</b>	<b>\$ 11,171,559</b>	<b>\$ 9,200,600</b>	<b>\$ 8,698,989</b>	<b>\$ 7,585,454</b>	<b>Projected Property Tax Expense associated with</b>		<b>\$ 175,423</b>		
<b>Total for 0.1 DSRR 2021 Projects -</b>						<b>\$ 1,296,000</b>	<b>\$ -</b>	<b>\$ 1,316,200</b>	<b>\$ 698,500</b>	<b>\$ 698,500</b>	<b>\$ 447,447</b>					
<b>Total Projected Bond funded PWW QCPAC Capex for 2021 (3) (4) -</b>						<b>\$ 10,369,200</b>	<b>\$ -</b>	<b>\$ 9,855,359</b>	<b>\$ 8,502,100</b>	<b>\$ 8,000,489</b>	<b>\$ 6,423,445</b>					
<b>Total Projected NHDES SRF/DWGTf funded PWW QCPAC Capex for 2021 -</b>						<b>\$ 350,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>					
Estimated Bond Terms (Bonds to be sold in April 2022) -						30	Years @	4.5%	resulting in P&I of	\$ 636,581	\$ 605,036	\$ 521,957	\$ 491,162	\$ 394,345		
DWGTf Terms -						30	Years @	3.38%	resulting in P&I of	\$ 18,745	\$ -	\$ -	\$ -	\$ -		

1. Tax rate is the sum of the local community rate plus the Statewide Utility tax rate of \$6.60/\$1000  
 2. NTD - No Work Order Established to Date  
 3. 0.1 DSRR cash balance as of 12/31/2021 after funding 2021 0.1 DSRR capital expenditures - \$ 714,562  
 4. Amount to be bonded for in April 2022 is reduced by the 0.1 DSRR cash balance in Note 3 above.

which exceeds the desired impressed combined RSF level of \$ 3,920,000





Project Name/Description	Project Description	Work Order #	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	QCPAC Eligible?	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense	Explanation for Change/Addition/Deletion since Feb 2022 Filing
Cameras for Plant	Update and add additional cameras at WTP and pond intakes to enhanced security		DW20-157	26,459	3/2/2021	\$ 137,000	Yes	Nashua	No	\$ 27.70	\$ -	
Virtualization of Engineering Applications	Virtual desktop environment for Engineering so that a user can work anywhere with an network connection without the need for high end desptops or laptops.		DW20-157	26,459	3/2/2021	\$ 83,000	Yes	Nashua	No	\$ 27.70	\$ -	
Secondary Production Storage	Additional storage to our production environment		DW20-157	26,459	3/2/2021	\$ 52,000	Yes	Nashua	No	\$ 27.70	\$ -	
Veeam Back Licensing to support SCADA Servers	Standardization of Backup software for SCADA servers to be what the rest of the Company uses.		DW20-157	26,459	3/2/2021	\$ 16,000	Yes	Nashua	Yes	\$ 27.70	\$ 443	
5th Virtual Server	Due to our strategy of moving towards a virtualized infrastructure, this would give us the necessary redundancy incase on of our existing Virtual servers fails.		DW20-157	26,459	3/2/2021	\$ 45,000	Yes	Nashua	No	\$ 27.70	\$ -	
Boardroom Camera and Microphone	Needed as the equipment currently used from the previous facility is not providing a quality experience		DW20-157	26,459	3/2/2021	\$ 15,000	Yes	Nashua	No	\$ 27.70	\$ -	
Update Audio in Distribution Lunch/Training room	As we are doing more training at this location, additional configuration changes are needed.		DW20-157	26,459	3/2/2021	\$ 14,000	Yes	Nashua	No	\$ 27.70	\$ -	
Miscellaneous Software	Miscellaneous Software		DW20-157	26,459	3/2/2021	\$ 12,000	Yes	Nashua	No	\$ 27.70	\$ -	
Miscellaneous Hardware	Miscellaneous Hardware		DW20-157	26,459	3/2/2021	\$ 22,000	Yes	Nashua	No	\$ 27.70	\$ -	
Projected short term interest on FALOC	Interest incurred to finance 2022 Capex until permanent financing is achieved	N/A	DW20-157	26,459	3/2/2021	\$ 166,700	Yes	N/A	No	N/A	\$ -	
<b>Pennichuck Water Works Projected 2022 Total Capital Expenditure Budget -</b>						<b>\$ 12,158,200</b>					<b>\$ 285,772</b>	

Total for 0.1 DSRR 2022 Projects - \$ 150,000  
 Total Projected Bond funded PWW QCPAC Capex for 2022 - \$ 11,628,200 less \$ 60,000 for Milford Booster. Milford to pay the 1.1x P&I  
 Total Projected NHDES SRF/DWGTF funded PWW QCPAC Capex for 2022 - \$ 320,000

\$ 11,991,500

Estimated Bond Terms (Bonds to be sold in April 2023) -	30	Years @	5.0%	resulting in P&I of	\$ 756,431
Estimated SRF Terms -	20	Years @	3.38%	resulting in P&I of	\$ 22,272
<b>Total Projected P&amp;I -</b>					<b>\$ 778,703</b>

1. Tax rate is the sum of the local community rate plus the Statewide Utility tax rate of \$6.60/\$1000

Project Name/Description	Project Description	Work Order #	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	QCPAC Eligible?	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense
2023 New Services (10)	Single Family, Owner Build, New Homes		DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Various	Yes	\$ 24.96	\$ 1,248
2023 Renewed Services (20)	Replacement of Failed Services		DW20-157	26,459	3/2/2021	\$ 110,000	Yes	Various	Yes	\$ 24.96	\$ 2,746
2023 Hydrants (10)	Replacement of non functional hydrants		DW20-157	26,459	3/2/2021	\$ 60,000	Yes	Various	Yes	\$ 24.96	\$ 1,498
2023 Gates (20)	Replacement of Failed Gate Valves		DW20-157	26,459	3/2/2021	\$ 80,000	Yes	Various	Yes	\$ 24.96	\$ 1,997
2023 Radios (250)	New Radios for new customers (250)		DW20-157	26,459	3/2/2021	\$ 25,000	Yes	Various	Yes	\$ 24.96	\$ 624
2023 Radios (2800)	Yr 3 of 10 Year Replacment of all PWW Radios installed in 2007 (2800) by contractor		DW20-157	26,459	3/2/2021	\$ 364,000	Yes	Various	Yes	\$ 24.96	\$ 14,795
2023 Meters (Growth) 5/8"-2" - Core & CWS (TBD)	New meters for new customers, including PFOA (250). Replacement of failed meters(250)		DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Various	Yes	\$ 24.96	\$ 1,248
Replacement Utility Truck	New Utility Truck to replace existing high mileage/maintenance vehicles		DW20-157	26,459	3/2/2021	\$ 70,000	Yes	Merrimack	No	\$ 22.51	\$ -
Replacement Utility Truck	New Utility Truck to replace existing high mileage/maintenance vehicles		DW20-157	26,459	3/2/2021	\$ 70,000	Yes	Merrimack	No	\$ 22.51	\$ -
Replacment 1/2 Ton Pickup	New Full Sized Pickup to Replace existing high mileage/maintenance pickup		DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Merrimack	No	\$ 22.51	\$ -
Replacement Utility Van	New Utility Van to replace existing high mileage/maintenance vehicles		DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Merrimack	No	\$ 22.51	\$ -
Protectus Meter Upgrade	Protectus Meter Upgrade		DW20-157	26,459	3/2/2021	\$ 22,000	Yes	Nashua	Yes	\$ 27.70	\$ 609
Miscellaneous Construction Equipment	Miscellaneous Construction Equipment		DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Merrimack	No	\$ 22.51	\$ -
Replacement Boom Crane Truck	New Boom Crane truck to replace #19, 2011 Ford F-450, failing hydraulic Crane, body rot & 100K+ miles		DW20-157	26,459	3/2/2021	\$ 150,000	Yes	Merrimack	No	\$ 22.51	\$ -
Replacement Dump Truck	New Dump Truck to replace #10, 2008 Peterbilt 335, 100K+ miles, 9000hrs, body rot & high Maint & repair costs		DW20-157	26,459	3/2/2021	\$ 150,000	Yes	Merrimack	No	\$ 22.51	\$ -
Chataqua Ave	Broad St. to End Replace/Add 780 feet of 1.25"/4"/6" Installed in 1915-1963 with 4"/6" - Paving & Restoration		DW20-157	26,459	3/2/2021	\$ 106,480	Yes	Nashua	Yes	\$ 27.70	\$ 2,949
Niquette Dr.	E. Dunstable to service 12 Niquette Replace/Add 525 feet of 2" installed in 1960 with 4" - Paving&Restoration		DW20-157	26,459	3/2/2021	\$ 72,540	Yes	Nashua	Yes	\$ 27.70	\$ 2,009
Pine Hill Ave	Wright Rd. to End Replace/Add 300 feet of 1.25" installed in 1953 with 4" - Paving&Restoration		DW20-157	26,459	3/2/2021	\$ 42,592	Yes	Nashua	Yes	\$ 27.70	\$ 1,180
Mt. Pleasant St.	Merrimack St. to Manchester St. Replace/Add 400 feet of 1.5" installed in 1955 with 8" - Paving&Restoration		DW20-157	26,459	3/2/2021	\$ 55,902	Yes	Nashua	Yes	\$ 27.70	\$ 1,548
French St.	Merrimack St. to 10 French Replace/Add 340 feet of 2"/6" installed in 1887 & 1926 with 4"/6" - Paving&Restoration		DW20-157	26,459	3/2/2021	\$ 47,916	Yes	Nashua	Yes	\$ 27.70	\$ 1,327
Dudley St.	June St. to E. Hobart St. Replace/Add 830 feet of 1.25"/8" CI/AC installed in 1957-1971 with 8" - Paving&Restoration		DW20-157	26,459	3/2/2021	\$ 113,135	Yes	Nashua	Yes	\$ 27.70	\$ 3,134
Ledgewood Hills Dr. /Heather	To Intersection Replace/Add 10 feet of Unconnected installed in with 8 - Paving&Restoration		DW20-157	26,459	3/2/2021	\$ 3,993	Yes	Nashua	Yes	\$ 27.70	\$ 111
Rita St.	Allds St. to 6 Rita Replace/Add 210 feet of 1.5" CICAL installed in 1956 with 4" - Paving&Restoration		DW20-157	26,459	3/2/2021	\$ 30,613	Yes	Nashua	Yes	\$ 27.70	\$ 848
Salem St.	Whitney St. to Summer St. Replace/Add 855 feet of 4"/6" installed in 1888-1927 with 6" - Paving&Restoration		DW20-157	26,459	3/2/2021	\$ 116,463	Yes	Nashua	Yes	\$ 27.70	\$ 3,226
Walnut St.	W. Pearl St. to W. Hollis St. Replace/Add 830 feet of 6"/8" installed in 1888-1931 with 12" - Paving&Restoration		DW20-157	26,459	3/2/2021	\$ 113,135	Yes	Nashua	Yes	\$ 27.70	\$ 3,134
City Sewer Projects (2022)	Replace CI, AC, and other older main disrupted by sewer construction - Paving&Restoration		DW20-157	26,459	3/2/2021	\$ 100,000	Yes	Nashua	Yes	\$ 27.70	\$ 2,770
Coburn Tank Area HP Zone Watermain	Create new HP area with 1600 LF of Water Main and Check Valves		DW20-157	26,459	3/2/2021	\$ 200,000	Yes	Nashua	Yes	\$ 27.70	\$ 5,540
Milford Booster Station	Replace/Relocate Milford Booster Station (Construction)		DW20-157	26,459	3/2/2021	\$ 850,000	Yes	Amherst	Yes	\$ 26.29	\$ 22,347
City Sewer Projects (2023)	Replace CI, AC, and other older main disrupted by sewer construction		DW20-157	26,459	3/2/2021	\$ 300,000	Yes	Nashua	Yes	\$ 27.70	\$ 8,310
Swan St.	Cote Ave to Easterly Replace/Add 156 feet of 2" installed in 1953		DW20-157	26,459	3/2/2021	\$ 49,000	Yes	Nashua	Yes	\$ 27.70	\$ 1,357
Chapman St.	Cote Ave to End Replace/Add 156 feet of 1.25" installed in 1948 with 4"		DW20-157	26,459	3/2/2021	\$ 49,000	Yes	Nashua	Yes	\$ 27.70	\$ 1,357
Savoy St.	Euclid Ave to existing 8" Replace/Add 142 feet of 1.25" installed in 1947 with 6"		DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Nashua	Yes	\$ 27.70	\$ 1,385
Palm St.	Lovewell St. to Southerly Replace/Add 420 feet of 4" installed in 1890 with 6"		DW20-157	26,459	3/2/2021	\$ 130,000	Yes	Nashua	Yes	\$ 27.70	\$ 3,601
Almont St.	Forest Park Dr. to Fairlane Ave Replace/Add 370 feet of unknown installed in unknown with 8"		DW20-158	26,459	3/2/2021	\$ 120,000	Yes	Nashua	Yes	\$ 27.70	\$ 3,324
D St.	E. Hollis St. to Bridge St. Replace/Add 500 feet of 4" installed in 1898 with 8"		DW20-157	26,459	3/2/2021	\$ 158,000	Yes	Nashua	Yes	\$ 27.70	\$ 4,377
Union St.	Amory St. to Bridge St. Replace/Add 520 feet of 1.25"-4" installed in 1909-1978 with 12"		DW20-157	26,459	3/2/2021	\$ 210,000	Yes	Nashua	Yes	\$ 27.70	\$ 5,817
Cherry St.	McKean St. to Haines St. Replace/Add 340 feet of 4" installed in 1926 with 4" PVC		DW20-157	26,459	3/2/2021	\$ 97,000	Yes	Nashua	Yes	\$ 27.70	\$ 2,687
Union St.	Amory St. to Bridge St. Replace/Add 520 feet of 1.25"-4" installed in 1909-1978 with 12"		DW20-157	26,459	3/2/2021	\$ 210,000	No	Nashua	Yes	\$ 27.70	\$ 5,817
Cherry St.	McKean St. to Haines St. Replace/Add 340 feet of 4" installed in 1926 with 4" PVC		DW20-157	26,459	3/2/2021	\$ 97,000	Yes	Nashua	Yes	\$ 27.70	\$ 2,687
Snow Station Transmission Main	Add Approximately 1,500LF of 24 inch Snow Station to end of 16 inch cross country		DW20-157	26,459	3/2/2021	\$ 850,000	Yes	Nashua	Yes	\$ 27.70	\$ 23,545
Nashua Water Treatment Facility	New Chemical Storage Building (Design & Permitting)			0.1 DSRR		\$ 300,000	No	Nashua	No	\$ 27.70	\$ -
Snow Station Building Addition	Addition of a third High Lift Pump (Construction)		DW20-157	26,459	3/2/2021	\$ 1,200,000	Yes	Nashua	Yes	\$ 27.70	\$ 33,240
Merrimack River Watershed Council	Grant Match with other Stakeholders \$40k for five years.			0.1 DSRR		\$ 40,000	No	Various	No	\$ 24.96	\$ -
Trimble GPS and Monitoring Equipment	Level Monitors, Pressure Monitors and Flow Monitors		DW20-157	26,459	3/2/2021	\$ 32,000	Yes	Various	No	\$ 24.96	\$ -
Investment in Developer Services	1x Annual Revenue		DW20-157	26,459	3/2/2021	\$ 100,000	Yes	Various	Yes	\$ 24.96	\$ 2,496
Replace Engineering SUV	Replace vehicle with high mileage.		DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Nashua	No	\$ 27.70	\$ -
Replace Engineering Pickup	Replace vehicle with high mileage.		DW20-157	26,459	3/2/2021	\$ 45,000	Yes	Nashua	No	\$ 27.70	\$ -
Booster Pump replacement/rebuild	Booster Pump replacement/rebuild		DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Various	Yes	\$ 24.96	\$ 998
Well Pump replacements	Well Pump replacements		DW20-157	26,459	3/2/2021	\$ 25,000	Yes	Various	Yes	\$ 24.96	\$ 624
Chemical Feed pump replacements	Chemical Feed pump replacements		DW20-157	26,459	3/2/2021	\$ 10,000	Yes	Various	Yes	\$ 24.96	\$ 250
Replace Rotork Pakscan valve control system	Replace Rotork Pakscan valve control system		DW20-157	26,459	3/2/2021	\$ 400,000	Yes	Nashua	Yes	\$ 27.70	\$ 11,080
Install/replace treatment systems in small CWS	Install/replace treatment systems in small CWS		DW20-157	26,459	3/2/2021	\$ 20,000	Yes	Various	Yes	\$ 24.96	\$ 499
Misc. Structural Improvements	Misc. Structural Improvements		DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Various	Yes	\$ 24.96	\$ 749
Miscellaneous Equipment Purchased	Miscellaneous Equipment Purchased		DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Various	Yes	\$ 24.96	\$ 749
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical		DW20-157	26,459	3/2/2021	\$ 60,000	Yes	Various	Yes	\$ 24.96	\$ 1,498
Well Rehabilitation	Well Rehabilitation		DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Various	Yes	\$ 24.96	\$ 1,248
WTP Structural/HVAC	WTP Structural/HVAC		DW20-157	26,459	3/2/2021	\$ 20,000	Yes	Nashua	Yes	\$ 27.70	\$ 554
Purchase new lab equipment	Purchase new lab equipment		DW20-157	26,459	3/2/2021	\$ 20,000	Yes	Nashua	No	\$ 27.70	\$ -
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects		DW20-157	26,459	3/2/2021	\$ 10,000	Yes	Various	Yes	\$ 24.96	\$ 250
Replace Vehicle	Replace Vehicle		DW20-157	26,459	3/2/2021	\$ 65,000	Yes	Nashua	No	\$ 27.70	\$ -
Replace Vehicle	Replace Vehicle		DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Nashua	No	\$ 27.70	\$ -
Carbon Filter Media	Carbon Filter Media		DW20-157	26,459	3/2/2021	\$ 500,000	Yes	Nashua	Yes	\$ 27.70	\$ 13,850
New Customer Appointment Scheduling Software(Click Replacement)	New Customer Appointment Scheduling Software(Click Replacement)		DW20-157	26,459	3/2/2021	\$ 240,000	Yes	Nashua	No	\$ 27.70	\$ -
Runrate Business needs	Runrate Business needs		DW20-157	26,459	3/2/2021	\$ 230,000	Yes	Nashua	No	\$ 27.70	\$ -
Miscellaneous Software	Miscellaneous Software		DW20-157	26,459	3/2/2021	\$ 12,000	Yes	Nashua	No	\$ 27.70	\$ -

Project Name/Description	Project Description	Work Order #	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	QCPAC Eligible?	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense
Miscellaneous Hardware	Miscellaneous Hardware		DW20-157	26,459	3/2/2021	\$ 22,000	Yes	Nashua	No	\$ 27.70	\$ -
Projected short term interest on FALOC	Interest incurred to finance 2022 Capex until permanent financing is achieved	N/A	DW20-157	26,459	3/2/2021	\$ 159,200	Yes	N/A	No	N/A	\$ -
<b>Pennichuck Water Works Projected 2023 Total Capital Expenditure Budget -</b>						<b>\$ 9,233,968</b>		<b>Projected Property Tax Expense associated with</b>			<b>\$ 207,236</b>

Total for 0.1 DSRP 2023 Projects - \$ 340,000  
 Total Projected Bond funded PWW QCPAC Capex for 2023 - \$ 8,043,968 minus investment in Milford Booster Station of \$ 850,000  
 Total Projected NHDES SRF/DWGTF funded PWW QCPAC Capex for 2023 - \$ - Milford to pay 1.1x P&I for booster station  
 Estimated Bond Terms (Bonds to be sold in April 2024) - 30 Years @ 5.0% resulting in P&I of \$ 523,272

Project Name/Description	Project Description	Work Order #	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Approved Budgeted Amount	QCPAC Eligible?	Community	Taxable	Tax Rate (1)	QCPAC Eligible Property Tax Expense
2024 New Services (10)	Single Family, Owner Build, New Homes		DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Various	Yes	\$ 24.96	\$ 1,248
2024 Renewed Services (20)	Replacement of Failed Services		DW20-157	26,459	3/2/2021	\$ 110,000	Yes	Various	Yes	\$ 24.96	\$ 2,746
2024 Hydrants (10)	Replacement of non functional hydrants		DW20-157	26,459	3/2/2021	\$ 60,000	Yes	Various	Yes	\$ 24.96	\$ 1,498
2024 Gates (20)	Replacement of Failed Gate Valves		DW20-157	26,459	3/2/2021	\$ 80,000	Yes	Various	Yes	\$ 24.96	\$ 1,997
2024 Radios (250)	New Radios for new customers (250)		DW20-157	26,459	3/2/2021	\$ 25,000	Yes	Various	Yes	\$ 24.96	\$ 624
2024 Radios (4000)	Yr 4 of 10 Year Replacment of all PWW Radios installed in 2007 (2800) by contractor		DW20-157	26,459	3/2/2021	\$ 364,000	Yes	Various	Yes	\$ 24.96	\$ 14,795
2024 Meters (Growth) 5/8"-2" - Core & CWS (TBD)	New meters for new customers, including PFOA (250). Replacement of failed meters(250)		DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Various	Yes	\$ 24.96	\$ 1,248
Replacement Utility Truck	New Utility Truck to replace existing high mileage/maintenance vehicles		DW20-157	26,459	3/2/2021	\$ 70,000	Yes	Merrimack	No	\$ 22.51	\$ -
Replacement Utility Truck	New Utility Truck to replace existing high mileage/maintenance vehicles		DW20-157	26,459	3/2/2021	\$ 70,000	Yes	Merrimack	No	\$ 22.51	\$ -
Replacment 1/2 Ton Pickup	New Full Sized Pickup to Replace existing high mileage/maintenance pickup		DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Merrimack	No	\$ 22.51	\$ -
Replacement Utility Van	New Utility Van to replace existing high mileage/maintenance vehicles		DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Merrimack	No	\$ 22.51	\$ -
Protectus Meter Upgrade	Protectus Meter Upgrade		DW20-157	26,459	3/2/2021	\$ 22,000	Yes	Nashua	Yes	\$ 27.70	\$ 609
Miscellaneous Construction Equipment	Miscellaneous Construction Equipment		DW20-156	26,459	3/2/2021	\$ 40,000	Yes	Merrimack	No	\$ 22.51	\$ -
Replacement Excavator	New Excavator to replace #330, 2015 Volvo EC-55C, 5000+ Hrs, Body Rot, High Maint & Repair Cost		DW20-157	26,459	3/2/2021	\$ 150,000	Yes	Various	No	\$ 24.96	\$ -
Coburn Woods (all side streets) Phase 2	Replace 4200 LF of 2 inch PVC with 4 inch DIPCL.		DW20-157	26,459	3/2/2021	\$ 1,600,000	Yes	Nashua	Yes	\$ 27.70	\$ 44,320
City Sewer Projects (2023)	Replace CI, AC, and other older main distrupted by sewer construction - Paving		DW20-157	26,459	3/2/2021	\$ 100,000	Yes	Nashua	Yes	\$ 27.70	\$ 2,770
Swan St.	Cote Ave to Easterly Replace/Add 156 feet of 2" installed in 1953 - Paving&Restoration		DW20-157	26,459	3/2/2021	\$ 23,430	Yes	Nashua	Yes	\$ 27.70	\$ 649
Chapman St.	Cote Ave to End Replace/Add 156 feet of 1.25" installed in 1948 with 4"-Paving&Restoration		DW20-157	26,459	3/2/2021	\$ 23,430	Yes	Nashua	Yes	\$ 27.70	\$ 649
Savoy St.	Euclid Ave to existing 8" Replace/Add 142 feet of 1.25" installed in 1947 with 6" - Paving & Restoration		DW20-157	26,459	3/2/2021	\$ 21,560	Yes	Nashua	Yes	\$ 27.70	\$ 597
Palm St.	Lovewell St. to Southerly Replace/Add 420 feet of 4" installed in 1890 with 6" - Paving & Restoration		DW20-157	26,459	3/2/2021	\$ 58,560	Yes	Nashua	Yes	\$ 27.70	\$ 1,622
Almont St.	Forest Park Dr. to Fairlane Ave Replace/Add 370 feet of unknown installed in unknown with 8"-Paving&Restoration		DW20-157	26,459	3/2/2021	\$ 51,910	Yes	Nashua	Yes	\$ 27.70	\$ 1,438
D St.	E. Hollis St. to Bridge St. Replace/Add 500 feet of 4" installed in 1898 with 8"-Paving&Restoration		DW20-157	26,459	3/2/2021	\$ 69,210	Yes	Nashua	Yes	\$ 27.70	\$ 1,917
Union St.	Amory St. to Bridge St. Replace/Add 520 feet of 1.25"-4" installed in 1909-1978 with 12" - Paving&Restoration		DW20-157	26,459	3/2/2021	\$ 71,870	Yes	Nashua	Yes	\$ 27.70	\$ 1,991
Cherry St.	McKean St. to Haines St. Replace/Add 340 feet of 4" installed in 1926 with 4" PVC - Paving&Restoration		DW20-157	26,459	3/2/2021	\$ 47,920	Yes	Nashua	Yes	\$ 27.70	\$ 1,327
Union St.	Amory St. to Bridge St. Replace/Add 520 feet of 1.25"-4" installed in 1909-1978 with 12"-Paving&Restoration		DW20-157	26,459	3/2/2021	\$ 71,870	Yes	Nashua	Yes	\$ 27.70	\$ 1,991
Replace Small Dia Water Main (2024)	Replace approx. 9,000 LF ofsmall diameter water main associated with the lead and copper rule and city paving		DW20-157	26,459	3/2/2021	\$ 3,200,000	Yes	Nashua	Yes	\$ 27.70	\$ 88,640
City Sewer Projects (2024)	Replace CI, AC, and other older main distrupted by sewer construction		DW20-157	26,459	3/2/2021	\$ 600,000	Yes	Nashua	Yes	\$ 27.70	\$ 16,620
Nashua Water Treatment Facility	New Chemicall Storage Building (Construction)		SRF		Petition must be filed	\$ 3,000,000	Yes	Nashua	Yes	\$ 27.70	\$ 83,100
Merrimack River Watershed Council	Grant Match with other Stakeholders \$40k for five years.				0.1 DSRR	\$ 40,000	No	Nashua	No	\$ 27.70	\$ -
Trimble GPS and Monitoring Equipment	Level Monitors, Pressure Monitors and Flow Monitors		DW20-157	26,459	3/2/2021	\$ 32,000	Yes	Nashua	Yes	\$ 27.70	\$ 886
Investment in Developer Services	1x Annual Rvenue		DW20-157	26,459	3/2/2021	\$ 110,000	Yes	Nashua	Yes	\$ 27.70	\$ 3,047
Replace Engineering Pickup	Replace vehicle with high mileage.		DW20-156	26,459	3/2/2021	\$ 45,000	Yes	Various	No	\$ 24.96	\$ -
Booster Pump replacement/rebuild	Booster Pump replacement/rebuild		DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Merrimack	Yes	\$ 22.51	\$ 900
Well Pump replacements	Well Pump replacements		DW20-157	26,459	3/2/2021	\$ 15,000	Yes	Various	Yes	\$ 24.96	\$ 374
Chemical Feed pump replacements	Chemical Feed pump replacements		DW20-157	26,459	3/2/2021	\$ 15,000	Yes	Various	Yes	\$ 24.96	\$ 374
rebuild High lift pump, WTP	rebuild High lift pump, WTP		DW20-157	26,459	3/2/2021	\$ 100,000	Yes	Various	Yes	\$ 24.96	\$ 2,496
Install/replace treatment systems in small CWS	Install/replace treatment systems in small CWS		DW20-157	26,459	3/2/2021	\$ 15,000	Yes	Various	Yes	\$ 24.96	\$ 374
Misc. Structural Improvements	Misc. Structural Improvements		DW20-157	26,459	3/2/2021	\$ 20,000	Yes	Various	Yes	\$ 24.96	\$ 499
Miscellaneous Equipment Purchased	Miscellaneous Equipment Purchased		DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Various	Yes	\$ 24.96	\$ 749
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical		DW20-157	26,459	3/2/2021	\$ 60,000	Yes	Nashua	Yes	\$ 27.70	\$ 1,662
Well Rehabilitation	Well Rehabilitation		DW20-157	26,459	3/2/2021	\$ 50,000	Yes	Various	Yes	\$ 24.96	\$ 1,248
WTP Structural/HVAC	WTP Structural/HVAC		DW20-157	26,459	3/2/2021	\$ 30,000	Yes	Various	Yes	\$ 24.96	\$ 749
Purchase new lab equipment	Purchase new lab equipment		DW20-157	26,459	3/2/2021	\$ 20,000	Yes	Various	No	\$ 24.96	\$ -
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects		DW20-157	26,459	3/2/2021	\$ 10,000	Yes	Various	Yes	\$ 24.96	\$ 250
Replace Vehicle	Replace Vehicle		DW20-157	26,459	3/2/2021	\$ 65,000	Yes	Various	No	\$ 24.96	\$ -
Replace Vehicle	Replace Vehicle		DW20-157	26,459	3/2/2021	\$ 40,000	Yes	Nasnua	No	\$ 27.70	\$ -
Runrate Business needs	Runrate Business needs		DW20-157	26,459	3/2/2021	\$ 400,000	Yes	Nashua	No	\$ 27.70	\$ -
Miscellaneous Software	Miscellaneous Software		DW20-157	26,459	3/2/2021	\$ 12,000	Yes	Various	No	\$ 24.96	\$ -
Miscellaneous Hardware	Miscellaneous Hardware		DW20-157	26,459	3/2/2021	\$ 22,000	Yes	Nashua	No	\$ 27.70	\$ -
Projected short term interest on FALOC	Interest incurred to finance 2022 Capex until permanent financing is achieved	N/A	DW20-157	26,459	3/2/2021	\$ 159,190	Yes	N/A	No	N/A	\$ -
<b>Pennichuck Water Works Projected 2020 Total Capital Expenditure Budget -</b>						<b>\$ 11,450,950</b>	<b>Projected Property Tax Expense associated with</b>			<b>\$ 257,112</b>	
<b>Total for 0.1 DSRR 2024 Projects -</b>						<b>\$ 40,000</b>					
<b>Total Projected Bond funded PWW QCPAC Capex for 2024 -</b>						<b>\$ 8,410,950</b>					
<b>Total Projected NHDES SRF/DWGTf funded PWW QCPAC Capex for 2024 -</b>						<b>\$ 3,000,000</b>					
Estimated Bond Terms (Bonds to be sold in April 2025) -						30	Years @	5.0%	resulting in P&I of	\$	547,144
Estimated SRF Terms -						20	Years @	3.38%	resulting in P&I of	\$	208,798
								Total Projected P&I -	\$	755,942	

1. Tax rate is the sum of the local community rate plus the Statewide Utility tax rate of \$6.60/\$1000



25 Walnut Street  
PO Box 428  
Nashua, NH 03061-0428

(800) 553-5191  
Fax (603) 913-2362

[customer-service@pennichuck.com](mailto:customer-service@pennichuck.com)

**Pennichuck Water Works Qualified Capital Project Adjustment Charge (QCPAC)  
Customer Notice for February 2022 filing at the New Hampshire Public Utilities Commission**

Pennichuck Water Works, Inc.'s ("Pennichuck") primary goal is to provide exceptional service and delivery of quality water 24 hours a day, 365 days a year. We regularly evaluate the infrastructure of our systems to identify areas that require improvement. Pennichuck was granted approval by the New Hampshire Public Utilities Commission (PUC) in DW16-806 (Order #26,070) to implement a Qualified Capital Project Adjustment Charge (QCPAC). The QCPAC allows Pennichuck to bill a monthly surcharge based on a percentage of your monthly bill. The surcharge is directly linked to and based upon the costs of Pennichuck's ongoing investment in Qualified Capital Projects (QCPs) necessary to provide service to its customers, in compliance with State and Federal regulations, and to maintain its overall water supply and treatment infrastructure in a proactive and responsive manner.

The QCPAC surcharge allows Pennichuck to recover 1.10 times the annual principal and interest for the debt funds raised each year to pay for Pennichuck's QCP expenditures made on plant and equipment placed into service during the prior year, plus the incremental property taxes associated with the value of those QCPs. As a part of this annual process, Pennichuck's QCP expenditures are audited by the PUC for prudence and confirmation of actual expenditure levels.

Our customers benefit from the QCPAC program as it provides the necessary funding for Pennichuck to maintain a consistent plan for the replacement of aging infrastructure, increasing the reliability and quality of service provided to customers. The QCPAC program also results in smaller annual rate changes for customers by permitting Pennichuck to recover the costs associated with debt financing the replacement of aging infrastructure between rate cases, as well as the ability to continue to access lowest cost debt funding for these projects, based upon this QCPAC program.

As part of the ongoing annual QCPAC process, Pennichuck will be filing a proposed three-year capital expenditure plan for 2022-2024 QCPs with the PUC on or before February 15, 2022. The proposed 2022-2024 QCPs submitted will update Pennichuck's 2021 through 2023 proposed QCP expenditures plan, which was placed on file with the PUC in February of 2021, in conjunction with its DW 21-023 QCPAC filing. As part of the impending February 2022 QCPAC filing, Pennichuck will be requesting the PUC to allow it to increase the QCPAC surcharge from the 5.46% requested in DW 21-023 (3.94% associated with 2019 QCP expenditures and 1.50% associated with 2020 QCP expenditures) to an overall surcharge value of 8.43%. The referenced 3.94% and the 1.50% QCPAC surcharges are still awaiting approval in dockets DW 20-020 and DW21-023. It is expected that the QCPAC surcharge sought in those dockets will be approved by the PUC in the spring of 2022 and go into effect in the April 2022 timeframe, and the first bills reflecting the 3.94% and 1.50% QCPAC surcharges are expected to be issued in April of 2022. The February 2022 filing described in this notice is requesting an additional 2.80% increase in rates, over and above the 5.44%, to fund the QCPs placed in service during 2021. The proposed QCPAC surcharge will apply to meter classes and charges for service rendered after April 2, 2022 and will most likely go into effect in the fall of 2022.

The requested QCPAC surcharge for 2021 QCPs, if approved, would result in a cumulative QCPAC surcharge of about \$4.58 per month on the average single-family residential bill of \$55.65, which would result in a total average single family residential monthly bill of \$60.24. The cumulative QCPAC surcharge consist of the \$2.19 surcharge proposed for the 2019 QCPs, the \$0.83 surcharge for the 2020 QCP's and an additional surcharge of \$1.56 per month for the 2021 QCPs.

If you have any questions or concerns related to Pennichuck's February 2021 QCPAC filing, please contact Pennichuck Customer Service at 800-553-5191 or the New Hampshire Public Utilities Commission at 800-852-3793.

**Attachment B - PWW Draft QCPAC Tariff Language**

NHPUC NO. 6 Water  
PENNICHUCK WATER WORKS, INC.

Third Revised Page 52  
Superseding Second Revised Page 52

**QUALIFIED CAPITAL PROJECT ADJUSTMENT CHARGE**

In addition to the net charges provided for in this Tariff, a Qualified Capital Project Adjustment Charge ("QCPAC") surcharge of 7.21% will apply on a service rendered basis to all bills issued after April 26, 2022.

I. General Description

Purpose: To recover the fixed costs (1.1 times principal and interest plus property taxes) of Commission-approved capital expenditures needed to operate maintain, insure regulatory compliance and to replace aging infrastructure which were completed and placed in service and to be recorded in the individual accounts, as noted below, between base rate cases. In addition, QCPAC provides the Company with the resources to complete essential asset replacement for infrastructure for the purpose of improving or protecting water quality and the reliability of service and to comply with evolving regulatory requirements imposed by the Safe Drinking Water Act.

QCPAC Eligible Property will encompass all Assets acquired by the Company as part of its annual capital improvements plan. Any regulatory asset that is recovered through an amortization expense is not eligible for QCPAC treatment.

Computation of the QCPAC

The charge will be effective on a service rendered basis for all bills issued after April 26, 2022 and will be calculated to recover the fixed costs of eligible plant additions not previously reflected in the Company's rate base and placed in service between January 1, 2019 and December 31, 2021. Thereafter, the QCPAC will be updated on an annual basis to reflect eligible plant additions placed in service during the prior calendar year. Thus, changes in the QCPAC surcharge percentage will occur as follows:

<u>Effective Date of QCPAC Change</u>	<u>Date To Which QCPAC Eligible Plant Additions Reflected</u>
April 26, 2022	December 31, 2021

The QCPAC will be applied on a service rendered basis to all bills rendered after April 26, 2022. The QCPAC will be applied uniformly to all customer classes and charges with the exception that the QCPAC will not be applied against the monthly fixed contract charges associated with Anheuser-Busch, Town of Milford, Pennichuck East Utility and Town of Hudson special contracts.

Issued: _____	Issued by: _____
Effective: _____	Name: Donald L. Ware
	Title: Chief Operating Officer

Authorized by NHPUC Oder No. xx,xxx in Docket No. DW 22-xxx dated October xx, 2022

NHPUC NO. 6 Water  
PENNICHUCK WATER WORKS, INC.

Third Revised Page 53  
Superseding Second Revised Page 53

The fixed costs of eligible infrastructure system improvement projects will consist of principal and interest payments and property taxes calculated as follows:

Principal and Interest: The principal and interest expense will be based on the annual principal and interest associated with the Bonds sold on April 26, 2022 to pay for the QCPAC qualified projects that were completed and used and useful by December 31, 2021 in addition to the principal and interest associated with NHDES SRF and DWGTF loans. The Debt Instruments Principal and interest of the Bond will be multiplied by 1.1 to determine this portion of the QCPAC surcharge. The debt service revenues collected via the QCPAC surcharge shall be divided into two revenue streams with the revenues associated with 1.0 times the QCPAC principal and interest being part of the Company’s Debt Service Revenue Requirement (“DSRR”) and the revenues associated with 0.1 times the QCPAC principal and interest being part of the Company’s 0.1 Debt Service Revenue Requirement (“0.1 DSRR”).

Property Taxes: Incremental property taxes associated with the specific capital projects, as determined in the year of the granting of the QCPAC for such projects. The property tax expense will reflect an estimate of the tax expense for such projects based on the tax rate then in effect at the end of the year the QCP was used and useful times the final audited cost of the eligible QCP’s.

QCPAC Surcharge Amount: The charge will be expressed as a percentage carried to two decimal places and will be applied to the effective portion of the total amount billed to each customer under the Company's otherwise applicable rates and charges.

The QCPAC Surcharge Amount approved by the Commission will be recouped back to the effective date of this tariff. The recoupment will be calculated based on actual charges incurred between the effective date of this tariff and the issued date of this tariff and shall be collected as a lump sum on the first bill rendered after the issuance date of this tariff.

Issued: \_\_\_\_\_

Issued by: \_\_\_\_\_

Effective: \_\_\_\_\_

Name: Donald L. Ware

Title: Chief Operating Officer

Authorized by NHPUC Oder No. xx,xxx in Docket No. DW 22-xxx dated October xx, 2022

NHPUC NO. 6 Water  
PENNICHUCK WATER WORKS, INC.

Third Revised Page 54  
Superseding Second Revised Page 54

Formula: The formula for calculation of the QCPAC surcharge is as follows:

$$\text{QCPAC} = \frac{1.1 \times (\text{AP} + \text{AI}) + \text{PT}}{\text{BRWR}}$$

Where:

AP = the annual principal payments associated with the debt instruments issued to fund QCPAC eligible projects that were used and useful before the end of the preceding year.

AI = the annual interest payments associated with the debt instruments issued to fund QCPAC eligible projects that were used and useful before the end of the preceding year the pre-tax return rate applicable to eligible infrastructure system improvement projects.

PT = annual property taxes related to eligible infrastructure system improvement projects.

BRWR= base retail water revenues as approved by the Commission in the Company's last rate proceeding, DW 19-084, or a subsequent docket.

Annual updates: Supporting data for each annual update will be filed with the Commission and the Office of Consumer Advocate no later than the end of the February 15th of each year.

Audits: The QCPAC will be subject to audit prior to the determination by the Commission.

New Base Rates: The QCPAC charge will be reset at zero as of the effective date of new base rates that provide for prospective recovery of the annual costs that had theretofore been recovered under the QCPAC. Thereafter, only the fixed costs of new eligible plant additions that have not previously been reflected in the Company's rate base would be reflected in the annual updates of the QCPAC.

Issued: \_\_\_\_\_ Issued by: \_\_\_\_\_  
Effective: \_\_\_\_\_ Name: Donald L. Ware  
Title: Chief Operating Officer

Authorized by NHPUC Oder No. xx,xxx in Docket No. DW 22-xxx dated October xx, 2022



NHPUC NO. 6 Water  
PENNICHUCK WATER WORKS, INC.

Third Revised Page 55  
Superseding Second Revised Page 55

Customer Notice: At least thirty (30) days in advance of a QCPAC filing, the Company will notify Customers of the filing by including an explanatory bill insert with the bills. Before sending, the Company will review the notice with the Commission's Consumer Services and External Affairs division. Customers shall also be notified of changes in the QCPAC by including appropriate information with the first bill they receive following any change.

Notice of Project Substitution: If, after the Company has received Commission approval for Year 1 QCPAC projects, because of changed circumstances or significant new information the Company plans to undertake projects in Year 1 that were not included on the list of approved QCPAC projects for that year or it has decided not to proceed with one or more projects that were included on the Commission-approved list, it shall notify the Commission and all parties to the proceeding in which the list of QCPAC projects was approved that the Company plans to add to or delete projects and the reason for the proposed changes, in accordance with the following schedule. The Company will submit updates for approved QCPAC projects for that year, based upon information known on a year-to-date basis, from the beginning of the year through the following effective dates, on the associated reporting dates:

**Effective Date**

**Reporting Date**

September 30  
November 30

November 15  
January 15

Issued: \_\_\_\_\_  
Effective: \_\_\_\_\_

Issued by: \_\_\_\_\_  
Name: Donald L. Ware  
Title: Chief Operating Officer

Authorized by NHPUC Oder No. xx,xxx in Docket No. DW 22-xxx dated October xx, 2022

The screenshot shows a web browser window with the URL <https://pennichuck.com>. The page header includes the Pennichuck logo, a search bar with the text "Search...", and a customer service phone number: "Customer Service (800) 553-5191". The main heading is "[Pennichuck Water Works Qualified Capital Project Adjustment Charge](#)".

[order nisi.](#)

November 17, 2021 Update – As part of the ongoing annual QCPAC process, Pennichuck will be filing a proposed three-year capital expenditure plan for 2022-2024 QCPs with the PUC on or before February 15, 2022. For more information, see [QCPAC Customer Notice here\(PDF\)](#).

June 3, 2021 Update – Supplemental Order of Notice – Petition for Approval of Proposed Qualified Capital Project Annual Adjustment Charge – Prehearing Conference to be held via web-enabled remote session on July 14, 2021 at 3:00 pm. For more information see [Order of Notice here\(PDF\)](#).

June 30, 2021 Update – On June 3, 2021, the Commission issued a Supplemental Order of Notice scheduling a web-enabled remote prehearing conference on July 14, regarding Pennichuck Water Works, Inc.'s petition for approval of a 2021 Qualified Capital Project Annual Adjustment Charge (QCPAC), that if approved, would be included in PEU customer bills. [This supplemental order of notice\(PDF\)](#) updates the previous notice due to the expiration of the declared State of Emergency on June 11, 2021.



PENNICHUCK CORPORATION

CORPORATE SECRETARY'S CERTIFICATE


I, Suzanne L. Ansara, do hereby certify that I am the duly elected Corporate Secretary of Pennichuck Corporation (the "Corporation"), a New Hampshire corporation, and that I am authorized to execute and deliver this Certificate on behalf of the Corporation. In that capacity, I do hereby further certify that:

1. The following resolution was adopted by the Board of Directors of the Corporation on January 28, 2022; and such resolution has not been altered, amended or repealed, and is in full force and effect, as of the date hereof:

Resolved: that the 2022 Capital Expenditure Budget and 2023/2024 Capital Expenditure Plans, as presented at this meeting, are hereby approved.

2. Attachment A to this Corporate Secretary's Certificate is a true copy of the Pennichuck Water Works, Inc. 2022 Capital Expenditure Budget and 2023/2024 Capital Expenditure Plans presented to the Board of Directors of the Corporation on January 28, 2022 and approved by said Board.

In Witness Whereof, I have hereunto set my hand this 2<sup>nd</sup> day of February, 2022.

  
Suzanne L. Ansara  
Corporate Secretary

Pennichuck Water Works  
 2022 Capital Expenditure Budget, including 2023 and 2024 Plans  
 (In thousands)

	Total Budgeted for 2021	Total Budgeted in 2022 for Carryover/Multi-year Projects	Total Budgeted in 2022 for New Projects	Total Budgeted for 2022	Total Planned in 2023 for Carryover & New Projects	Total Planned in 2024 for Carryover & New Projects
Mains and Main Replacements	\$ 2,851	\$ 673	\$ 2,718	\$ 3,391	\$ 2,273	\$ 4,340
Booster Stations, Tanks, Generators and Pumps	40	-	-	-	-	-
Water Treatment Media and Miscellaneous Water Supply Upgrades	-	-	-	-	-	-
Service, Hydrants and Meters	765	-	680	680	739	739
IT, Applications and System Monitoring	720	87	436	523	504	434
All Other	1,924	14	1,914	1,928	1,259	1,179
<b>Subtotals</b>	<b>6,300</b>	<b>774</b>	<b>5,748</b>	<b>6,522</b>	<b>4,775</b>	<b>6,692</b>
Bowers Pond Spillway Reconstruction	-	-	1,850	1,850	-	-
Coburn Woods Mains	-	300	-	300	200	1,600
Coburn Woods Booster Station	-	-	1,350	1,350	-	-
Milford Booster Station Rebuild	-	-	60	60	850	-
Kessler Farm Tank Replacement	4,000	300	-	300	-	-
Supply Pond Spillway	750	-	-	-	-	-
WTP - Carbon Media Filter Bed Replacement	-	-	1,300	1,300	500	-
WTP Chemical Storage Bldg.	-	-	-	-	300	3,000
Harris Dam	965	-	-	-	-	-
Rotork Pakscan Valve Control	-	-	-	-	400	-
Snow Station Addition	-	-	-	-	1,200	-
Snow Station Main	-	-	-	-	850	-
English Woods Interconnect	-	-	310	310	-	-
Capitalized Interest (FALOC)	-	-	-	155	147	114
<b>Total Capex Budgeted 2022-2024</b>	<b>\$ 12,015</b>	<b>\$ 1,374</b>	<b>\$ 10,618</b>	<b>\$ 12,147</b>	<b>\$ 9,222</b>	<b>\$ 11,406</b>
<b>Total Capex Budgeted 2022 - 2024 approved 12/17/21</b>	<b>\$ 12,015</b>	<b>\$ 1,364</b>	<b>\$ 10,618</b>	<b>\$ 12,137</b>	<b>\$ 9,222</b>	<b>\$ 11,406</b>
<b>Variances</b>	<b>\$ 0</b>	<b>\$ 10</b>	<b>\$ -</b>	<b>\$ 10</b>	<b>\$ 0</b>	<b>\$ (0)</b>

Amount	Funding
11,462.00	Bond
155.00	FALOC Interest
-	DWGTf
210.00	DSRR 0.1
320.00	SRF
<b>12,147.00</b>	



**Pennichuck Water Works, Inc.**  
**DW 21-023**  
 2021 QCPAC - Qualified Capital Project Adjustment Charge  
 Responses to DOE Data Requests –Set 3

Date Request Received: 11/29/21  
 Request No. DOE 3-1

Date of Response: 12/2/21  
 Witness: Donald L. Ware

**REQUEST:**

**Re: Company’s 9/30/2021 Update, Exhibit DLW-1, Page 4 (2021 CapEx), Lines 38, 74, 75, and 102:** Please provide detailed explanations for the indicated increases in project costs between 6/30/2021 (Column I) and 9/30/2021 (Column J) for the following:

	<u>6/30/2021</u>	<u>9/30/2021</u>	<u>Increase</u>
a) Line 38: Kessler Farm Tank Replacement	\$4,000,000	\$4,344,000	\$ 344,000
b) Line 74: Supply Pond Spillway Improve’s	\$ 0	\$ 52,820	\$ 52,820
c) Line 75: Harris Dam raise earthen emb’mnt	\$ 0	\$ 42,000	\$ 42,000
d) Line 102: Bowers Dam 2021 Perm / Design	\$ 0	\$ 154,000	\$ 154,000

**RESPONSE:**

a) The original project budget going into 2020 was \$3,388,000 including approximately 10% for internal project management and engineering plus a modest construction contingency. The actual bids from contractors resulted in a low bid of \$3,761,787 whereby the project budget for 2021 was adjusted to \$4,000,000 which included approximately 6% in internal project management and engineering.

Draining of the tank prior to demolition required the removal and disposal of bottom sediments at a cost of approximately \$20,000. The test shutdown of the tank revealed the need for a temporary standby generator at the Company’s Snow Station, in order to ensure flow to the Northwest System during an extended power outage, as the other tank in the system is not large enough to support flow and pressure during a power outage. The temporary standby emergency generator added \$60,000 in electrical costs to the project budget. The project also included a significant amount of ledge removal. Condominium units are near the work and there were concerns expressed regarding possible damage due to vibration. A consultant was called in to monitor and assess vibration levels to ensure that the contractor maintained them to levels below which would not cause damage. This consultant added \$21,000 to the project budget.

The project budget increase of also \$344,000 includes two contractor change orders issued. One for the removal of an existing 8-inch diameter water main that ran into the required excavation area for the new tank, installation of temporary water main to feed existing customers and to support fire flows, as well as subsequent replacement of the permanent water main at an approximate cost of \$54,000. The second contractor change order was for the additional excavation to remove a deeper/taller than expected reinforced concrete foundation and footing at an additional cost of approximately \$18,400.

The added costs described in the above two paragraphs total approximately \$173,400 which results in a difference of \$170,600 (\$344,000-\$173,400) less than the current budget estimate of \$4,344,000; however, this does not consider costs associated with three months of construction remaining.

b) The Supply Pond Spillway improvement had an initial 2021 Board approved budget of \$750,000. As described in previous data responses (DOE Tech Session 2-3, 2-4, DOE DR 1-9, DR 2-8) in this docket, this project was deleted in favor of the rebuilding of the Bowers Pond Spillway based on the Company's consultant's recommendations. The decision to delete this project in favor of the Bower Pond Spillway had been made by the June 30, 2021 updates, but the costs of the preliminary engineering associated with this decision relative to the Supply Pond Dam Spillway had not yet been made so \$0 was carried in the 6/30/21 update. Between the 6/30/21 update and the 9/30/21 update, the consultant costs of \$52,840 associated with the evaluation of the Supply Pond Dam Spillway were assigned to this project work order number.

c) The Harris Pond Dam improvements had an initial 2021 Board approved budget of \$965,000. As described in previous data responses (see above) in this docket, this project was deleted in favor of the rebuilding of the Bowers Pond Spillway based on the Company's consultant's recommendations. The decision to delete this project in favor of the Bower Pond Spillway had been made by the June 30, 2021 updates, but the costs of the preliminary engineering associated with this decision relative to the Harris Pond Dam improvements had not yet been made so \$0 was carried in the 6/30/21 update. Between the 6/30/21 update and the 9/30/21 update, the consultant costs of \$42,000 associated with the evaluation of the Harris Pond Dam improvements were assigned to this project work order number.

d) The Bowers Pond Dam Permitting and Design had \$0 allocated in the initial 2021 Board based on the initial consultant recommendation that no work would be required on this dam based on the recommended improvements to the Harris and Supply Pond Dams. As described in previous data responses (see above) in this docket, this project became the most cost effective way to comply with the NHDES Dam Letter of Deficiencies; therefore, it was added when the Harris and Supply Pond dam projects were deleted in favor of the rebuilding of the Bowers Pond Spillway. This decision was based on the Company's consultant's recommendations. The decision to add this project in lieu of the Harris and Supply Pond upgrades had been made by the June 30, 2021 updates, but the cost of the Permitting and Design engineering associated with this decision had not yet been determined as of the 6/30/21 update. Between the 6/30/21 update and the 9/30/21 update, the projected consultant permitting and design costs of \$154,000 associated with Bowers Pond Dam improvements were assigned to this project work order number.

**Pennichuck Water Works, Inc.**  
**DW 21-023**  
2021 QCPAC - Qualified Capital Project Adjustment Charge  
Responses to DOE Data Requests –Set 3

Date Request Received: 11/29/21  
Request No. DOE 3-2

Date of Response: 12/2/21  
Witness: John J. Boisvert

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**REQUEST:**

**Re: Company’s 9/30/2021 Update, Exhibit DLW-1, Page 4 (2021 CapEx), Line 39, Coburn Woods:**

Please provide further explanation of the comment in the final column (Explanation) indicating “Project scope reduced to 5 of the 28 side roads do to excavation difficulties”, including what difficulties were encountered and whether there are any plans to address the remaining streets in the future.

**RESPONSE:**

Coburn Woods is a private condominium complex. The land and roadways within Coburn Woods are owned by the owner’s association. When the Company acquired the system very little was known about the water distribution system and the only plan for it was what could be called a sketch drawing at best. The exact location of the existing water mains and services (except for where services enter each condominium unit) was unknown. There were very few distribution valves, there were no as-built information regarding the locations of private sewers, buried electric power, telecommunications, and cable (all are direct buried cable not in conduit) utilities. Beginning at the start of construction, the contractor began to damage buried utilities that were unmarked/located, mismarked/located, or simply could not be located specifically in the case where sewer manholes were paved over. There was no logical means to identify where sewer service laterals ran between the condominium units and the main sewer lines. These difficulties caused construction delays and resulted in legitimate claims by the contractor for changed conditions. Rather than proceed in the current manner, it was decided to reduce the contract scope and to reassess the overall project scope over the next year based on the conditions that were encountered. After that assessment the plan is to reissue a project with a scope and information more reflective of the conditions at Coburn Woods, based on what was learned during the initial construction phase. The overall project will be completed but in more, smaller project phases that can be adapted to the specific on-site below ground conditions, as best as they can be understood.

**Pennichuck Water Works, Inc.**  
**DW 21-023**  
2021 QCPAC - Qualified Capital Project Adjustment Charge  
Responses to DOE Data Requests –Set 3

Date Request Received: 11/29/21  
Request No. DOE 3-3

Date of Response: 12/2/21  
Witness: John J. Boisvert

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**REQUEST:**

**Re: Company’s 9/30/2021 Update, Exhibit DLW-1, Page 4 (2021 CapEx), Lines 48, 50, 51, and 52:**

The four referenced main replacements (Miami Street, Kendrick Street, Faxon Avenue, and Faxon Street) contain a note in the final column (Explanation) indicating “Materials not available in 2021 - design only”. Please indicate generally what materials were unavailable, why they were unavailable, and whether the unavailability may impact future main replacements.

**RESPONSE:**

Specifically, 8-inch diameter ductile iron pipe and certain fittings had longer than normal delivery lead times of 12 to 14 weeks, as opposed to 2 to 4 weeks thus they were unavailable in what were historic timeframes for delivery. The delivery of the 8-inch pipes and fittings would have been received by the contractor in the middle of the winter. The construction work was therefore pushed to late winter or early spring of 2022 for construction start.

A busier than normal construction season, Covid-19 interruptions at manufacturing facilities, and transportation delays were cited as the reasons for the long lead times for delivery. Though speculative, we anticipate materials to be available going forward just with extended delivery schedules. We offer this opinion based on informal discussions with material suppliers and construction contractors. This could lengthen construction schedules from contract execution to project completion. Work will still be completed, but it may just take longer.