

	DW17-128 Approved Step Revenue Requirements	QCPAC Revenues approved in DW19-035	Projected QCPAC Surcharge for 2018 Capital Additions	Projected QCPAC For 2019 Capital Additions pro formas	Projected QCPAC Surcharge for 2019 Capital Additions	Projected QCPAC For 2020 Capital Additions pro formas	Projected QCPAC Surcharge for 2020 Capital Additions	Projected QCPAC For 2021 Capital Additions pro formas	Projected QCPAC Surcharge for 2021 Capital Additions	Projected QCPAC For 2022 Capital Additions pro formas	Projected QCPAC Surcharge for 2022 Capital Additions
City Bond Fixed Revenue Requirement (CBFRR)	\$ 926,309		\$ 926,309	\$ -	\$ 926,309	\$ -	\$ 926,309	\$ -	\$ 926,309	\$ -	\$ 926,309
Operating Expense Revenue Requirement	\$ 5,851,582 (1)	\$ (40,866) (4)(8)	\$ 5,810,716	\$ 45,231 (4)	\$ 5,855,947	\$ (1,434) (10)(11)	\$ 5,854,514	\$ 82,466 (4)	\$ 5,936,980	\$ 34,106 (4)	\$ 5,971,086
Annual Principal and Interest Payments	\$ 1,362,154 (2)	\$ 261,114 (5)(6)	\$ 1,623,268	\$ 107,314 (12)	\$ 1,730,582	\$ 260,555 (12)	\$ 1,991,137	\$ 164,534 (12)	\$ 2,155,670	\$ 86,465 (12)	\$ 2,242,135
Principal and Interest Coverage Requirement	1.10 (3)		1.10		1.10		1.10		1.10		1.10
Principal and Interest Revenue Requirement	\$ 1,498,370		\$ 1,785,595		\$ 1,903,640		\$ 2,190,250		\$ 2,371,237		\$ 2,466,349
Proposed Revenue Requirement excluding NCCRS	\$ 8,276,261		\$ 8,522,620		\$ 8,685,896		\$ 8,971,073		\$ 9,234,526		\$ 9,363,743
Current Water Revenues excluding CBFRR and NCCRS	\$ 5,947,707		\$ 7,349,952		\$ 7,596,311		\$ 7,759,587		\$ 8,044,764		\$ 8,308,217
Add: City Bond Fixed Revenue Requirement	\$ 926,309		\$ 926,309		\$ 926,309		\$ 926,309		\$ 926,309		\$ 926,309
Current Water Revenues with CBFRR less NCCRS	\$ 6,874,016		\$ 8,276,261		\$ 8,522,620		\$ 8,685,896		\$ 8,971,073		\$ 9,234,526
Proposed Percent Revenue Increase	20.40%										
ADD: NC Capital Surcharge Revenue	\$ 178,915		\$ 178,915		\$ 178,915		\$ 178,915		\$ 178,915		\$ 178,915
Proposed New Revenue Requirement	\$ 8,455,176		\$ 8,701,535		\$ 8,864,811		\$ 9,149,987		\$ 9,413,441		\$ 9,542,658
Projected QCPAC Increase <sup>7</sup>			2.98%		1.97%		3.45%		3.18%		1.50%
Cumulative QCPAC increase <sup>8</sup>			2.98%		4.95%		8.40%		11.58%		9.87%
Cumulative QCPAC monthly increase in average single family residential bill			\$ 2.25		\$ 3.73		\$ 6.33		\$ 8.74		\$ 7.45
Average monthly single family residential bill with QCPAC			\$ 77.69		\$ 79.18		\$ 81.78		\$ 84.18		\$ 82.89

Notes:

- (1) Operating Expense Revenue requirement is the sum of the Total Operating Expenses, Property Tax Expense and Amortization Expense approved in DW17-128
- (2) Annual Principal and interest payments for PEU debt associated with all plant in service as approved in DW17-128
- (3) Principal and interest coverage of 1.10 is as approved in DW17-128
- (4) QCPAC operating expense proformas are based on the property taxes for plant added during the year.
- (5) See Calculation of annual principal and interest payments on spreadsheet titled "2018 QCPAC PEU Additions"
- (6) Portion of Annual Principal and interest payments paid to CoBank for debt associated with plant placed in service between 1/1/2018 and 12/31/2018 based on a 25 year term loan with an actual total all in interest rate of 4.38% that was not recovered in DW17-128
- (7) QCPAC percent revenue surcharges based on increase in revenues over the step revenues granted in DW17-128, exclusive of prior QCPAC surcharges.
- (8) 2018 Proforma Operating Expenses include a reduction in purchased water expenses associated with the completion of the PWW-PEU Interconnection in the amount of \$ 180,500
- (9) Cumulative surcharge percentage is based on total surcharge revenues collected divided by the step revenues granted in DW17-128
- (10) QCPAC operating expense proforma associated with property taxes is reduced by \$ 70,000 to reflect reduction in purchased water costs associated with the completion of the Londonderry Storage Tank
- (11) QCPAC operating expense proforma associated with property taxes is reduced by \$ 28,000 to reflect reduction in arsenic treatment costs associated with the completion of the Locke Lake raw water well line to the Peacham Road Treatment plant
- (12) Portion of Annual Principal and interest payments paid to CoBank for debt associated with plant placed in service between 1/1 and 12/31 for designated year based on a 25 year term loan with an actual total all in interest rate of 5.50% that was not recovered in DW17-128

Impact on PEU Single Family Residential Home:

Monthly meter charge granted in DW17-128, inclusive of Step increase -	\$ 20.70
Average Single Family Consumption (CCF) -	7.29
Consumption Charge granted in DW17-128, inclusive of Step increase -	\$ 7.51 per CCF
Average Single Family monthly bill with rates granted in DW17-128, inclusive of step -	\$ 75.45

Project Name/Description	Project Description	Work Order #	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	2018 Board Approved Budgeted Amount	Estimated Project Cost as of 10/31/2018	Final Project cost as of 12/31/2018	Community	Eligible for 2018 QCPAC Surcharge?	Taxable	Tax Rate (%)	QCPAC Eligible Property Tax Expense	Explanation for Change/Addition/Deletion since 1/30/2018
Brady Avenue <sup>6</sup>	Replace 2,400 linear feet of existing 1.5" thin wall HDPE water main with new 8" diameter ductile iron water main	1703684 & 1807069	DW17-055	26,006	4/19/2017	\$ 379,600	\$ 598,000	\$ 618,983	Derry	Yes	Yes	\$ 30.59	\$ 18,935	
Hillcrest Road	Replace approximately 1,200 linear feet of existing 12" thin wall ductile iron water main with high break history through swamp with 12" HDPE.	1707188 & 1807072	DW17-055	26,006	4/19/2017	\$ 242,000	\$ 240,000	\$ 254,860	Litchfield	Yes	Yes	\$ 26.84	\$ 6,840	
PEU-PWW Interconnection <sup>8</sup>	Interconnect PEU to PWW under Merrimack River	See Below	DW17-055/Pending filing <sup>7</sup>	26,006	4/19/2017	\$ 3,300,000	See Below		Merrimack/Litchfield	Yes	Yes	\$ 27.88		
PEU-PWW Interconnection	Interconnecting Water Main - Owned by PEU	1807155, 1807362, 1608938, 1701789	See above	See above	See above	\$ \$ Included above	\$ 3,515,850	\$ 3,335,078	Merrimack/Litchfield	Yes	Yes	\$ 27.88	\$ 92,982	
PEU Contribution toward PWW water main upgrade	Interconnecting Water Main - Owned by PWW (50% PEU paid portion)	1807148				\$ 33,925	\$ 33,925	\$ 33,925	Merrimack/Litchfield	Yes	No	\$ 27.88	\$ -	No property tax obligation for PEU as this is a PWW asset. PEU contribution to this PWW asset per NHPUC Order #26/049 on DW17-071.
PEU-PWW Interconnection Station Building & Construction	Booster Station, including purchase of building and meter from PWW	1813395				\$ 340,000	\$ 339,864	\$ 339,864	Merrimack	Yes	Yes	\$ 28.92	\$ 9,829	
Locke Lake Treatment Design	Design treatment for new Source of Supply required by NHDES Corrective Action Plan	1813409	DW18-132			\$ 100,000	\$ -	\$ -	Barnstead	No	Yes	\$ 27.10	\$ -	Design work for project that is not used and useful is not eligible for QCPAC Surcharge
Atkinson Commerce Park Station Imp.	Rebuild Booster Station, Replace Atmospheric Storage Tanks	Deferred	Pending Filing <sup>7</sup>			\$ 330,000	\$ -	\$ -	Atkinson	Yes	Yes	\$ 22.35	\$ -	Project deferred due to Engineering resources being diverted to design Bedford/Litchfield PFOA facilities
Booster/Well/Chem Feed pump replacements	Replace small booster/well/chemical feed pumps as they fail (run rate) (21)	760 - 763 workorders	Pending Filing <sup>7</sup>			\$ 60,000	\$ 100,200	\$ 92,476	Various	Yes	Yes	\$ 27.72	\$ 2,563	24 through December 31, 2018
Install/replace treatment systems in small CWS	Replace failed CWS treatment systems. Install new CWS treatment system if water quality or standards requires it.	n/a	Pending Filing <sup>7</sup>			\$ 25,000	\$ 5,000	\$ -	Various	Yes	Yes	\$ 27.72	\$ -	
Misc. Structural Improvements	Repair/replace aging/failed station structures as needed	n/a	Pending Filing <sup>7</sup>			\$ 20,000	\$ -	\$ -	Various	Yes	Yes	\$ 27.72	\$ -	
Miscellaneous Fencing and Security projects	Install fencing/security facilities as needed	n/a	Pending Filing <sup>7</sup>			\$ 10,000	\$ -	\$ -	Various	Yes	Yes	\$ 27.72	\$ -	
Miscellaneous SCADA/Electrical	Install/repair/replace SCADA/Electrical equipment as needed		Pending Filing <sup>7</sup>			\$ 30,000	See Below	\$ -	Various	Yes	Yes	\$ 27.72	\$ -	2 more VFD failures are projected through year end.
Miscellaneous SCADA/Electrical	Replace Pump #4 VFD at Castle Reach	1819462	Pending Filing <sup>7</sup>			\$ \$ for these projects from annual run rate budget above	\$ 3,944	\$ 3,944	Various	Yes	Yes	\$ 27.72	\$ 109	
Miscellaneous SCADA/Electrical	Replace Pump #2 VFD at W&E	1816163	Pending Filing <sup>7</sup>			\$ 3,013	\$ 3,013	\$ 3,013	Various	Yes	Yes	\$ 27.72	\$ 84	
Miscellaneous SCADA/Electrical	Replace Pump #5 VFD at Castle Reach	1807058	Pending Filing <sup>7</sup>			\$ 4,145	\$ 4,145	\$ 4,145	Various	Yes	Yes	\$ 27.72	\$ 115	
Miscellaneous SCADA/Electrical	Replace Well Pump #13 VFD at Locke Lake	1818296	Pending Filing <sup>7</sup>			\$ 2,639	\$ 2,684	\$ 2,684	Various	Yes	Yes	\$ 27.72	\$ 74	
Well Rehabilitation	Rehab wells as necessary to restore efficiency as needed	n/a	Pending Filing <sup>7</sup>			\$ 60,000	\$ 15,000	\$ -	Various	Yes	Yes	\$ 27.72	\$ -	Only one projected well rehab to occur in 2018 vs. 4 in budget.
5 New Services	Single Family, Owner Build, New Homes	720 workorders	Pending Filing <sup>7</sup>			\$ 23,000	\$ 32,800	\$ 27,558	Various	Yes	Yes	\$ 27.72	\$ 764	8 services added through December
10 Renewed Services	Replacement of failed services	721 & 722 workorders	Pending Filing <sup>7</sup>			\$ 40,000	\$ 17,400	\$ 18,667	Various	Yes	Yes	\$ 27.72	\$ 517	9 services replaced through December
2 Hydrants	Replacement of non functional hydrants	730 & 731 workorders	Pending Filing <sup>7</sup>			\$ 10,000	\$ 10,000	\$ -	Various	Yes	Yes	\$ 27.72	\$ -	None Repaired in 2018.
10 Valve Replacements	Replacement of Failed Gate Valves	712 workorders	Pending Filing <sup>7</sup>			\$ 30,000	\$ 12,000	\$ -	Various	Yes	Yes	\$ 27.72	\$ -	None Repaired in 2018.
75 New Meters (growth) 5/8"-2"	New meters for new customers	750 workorders	Pending Filing <sup>7</sup>			\$ 22,500	\$ 14,500	\$ 70,429	Various	Yes	Yes	\$ 27.72	\$ 1,952	531 replacements through December 31, 2018 inclusive of new and replacement meters
719 New Meters for Lead Meter exchanges 5/8"-6"	Replace High lead brass meter with new no lead brass meter	750 workorders	Pending Filing <sup>7</sup>			\$ 144,000	\$ 143,400	\$ -	Various	Yes	Yes	\$ 27.72	\$ -	
Radio Reads	New and replaced radios for meter reading (123)	754 workorders	Pending Filing <sup>7</sup>			\$ -	\$ 17,100	\$ 18,606	Various	Yes	Yes	\$ 27.72	\$ 516	249 Radio replacements were completed through December 31, 2018
Investment in Developer Installed Services	One time revenue tariffed amount (57)	n/a	Pending Filing <sup>7</sup>			\$ -	\$ 42,500	\$ 47,838	Various	Yes	Yes	\$ 27.72	\$ 1,326	Required by Tariff. Not in 2018 Board Approved Budget
Insertion Valve Install	Installation of Insertion Valve on 16" Main MWW	1824544	Pending Filing <sup>7</sup>			\$ -	\$ 25,000	\$ -	Londonderry	Yes	No	\$ 26.15	\$ -	MWW was going to shut service off for all of Londonderry for a hydrant repair. Insertion valve allowed hydrant replacement without losing service to any of Londonderry. Not included in QCPAC as this will be funded with 0.1 DSRB cash.
Chlorine Transfer Pump for NC Operations	Purchase new chlorine transfer pump to transfer bleach solution from large drum containers to smaller transportable containers	1817322	Pending Filing <sup>7</sup>			\$ -	\$ 2,587	\$ 2,587	Various	Yes	Yes	\$ 27.72	\$ 72	
Handwood New Source	Handwood New Source	1701877	Pending Filing <sup>7</sup>				\$ 6,285	\$ -	Windham	Yes	Yes	\$ 27.57	\$ 173	
Locke Lake, Varney Rd Area	Locke Lake, Varney Rd Area - Clean up and final Paving	1817280	Pending Filing <sup>7</sup>				\$ 94,050	\$ -	Barnstead	Yes	Yes	\$ 27.10	\$ 2,549	
Locke Lake Well 14 VFD	Locke Lake Well 14 VFD	1900391	Pending Filing <sup>7</sup>				\$ 8,608	\$ -	Barnstead	Yes	Yes	\$ 27.10	\$ 233	
<b>Short term interest</b>	<b>Short term interest on FALOC and SRF loans to fund 2018 Capex</b>									Yes	No		\$ -	
<b>Total 2018 Board Approved PEU Capital Expenditures</b>						\$ 4,826,100	\$ 5,179,004	\$ 5,023,146					\$ 139,634	
						<b>Projected 2018</b>	\$ 5,179,004							

Projected Annual P&I Payments

Amount to be funded with 2019 Loan from CoBank <sup>27</sup> -	\$ 1,153,000	\$ 76,800
Amount to be funded SRF loan for Brady Avenue watermain replacements <sup>4</sup> -	\$ 570,000	\$ 23,215
Amount to be funded SRF loan for PWW/PEU Interconnection <sup>4</sup> -	\$ 2,400,000	\$ 146,210
Amount to be funded SRF loan for Hillcrest Road watermain replacements <sup>4</sup> -	\$ 244,389	\$ 14,888
Amount to be funded with Drinking Water and Groundwater Trust Fund Grant -	\$ 600,000	\$ -
<b>Total Projected 2018 QCPAC P&amp;I -</b>		<b>\$ 261,114</b>

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

2. Final CoBank Loan Terms are 25 Years at 4.38%

3. Projected Brady Ave. SRF Terms are 30 Years at 1.96% with 10% Principal forgiveness

4. Projected PWW/PEU Interconnection SRF Terms are 20 Years at 1.96%

5. Projected Hillcrest Road SRF Terms are 20 Years at 1.96%

6. Brady Ave was budgeted in 2 phases by the Board, Phase I was in the 2017 Capital Budget and Phase II was in the 2018 Capital Budget with the total project budget estimated at \$ 254,860 of which \$ 10,471 is internal engineering that can not be funded with SRF funds.

7. The cash to fund the "pending filing" projects in 2018 was borrowed from CoBank through the short term Fixed Asset Line of Credit (FALOC) approved in DW17-157. PEU will be filing for approval to borrow long term funds from CoBank in the Winter of 2019 to repay the CoBank FALOC.

8. Eliminate AFDUC on PWW-PEU Interconnect Project in the amount of \$ 95,807

Project Name/Description	Project Description	Work Order #	Board Approved 2019 Capex Budget	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order	Source of Funding	Eligible for 2020 QCPAC Surcharge	Eligible for 2020 QCPAC Surcharge	Estimated Project Cost as of 6/30/2019	Estimated Project Cost as of 9/30/2019	Estimated Project Cost as of 11/30/2019
Elevated Storage Tank in Londonderry <sup>2</sup>	Construct 1.25 MG Elevated Storage Tank	1818349, 1901641	\$ 700,000	DW19-069	26,253	5/22/2019	Cobank Loan	No	\$ -	\$ 700,000	\$ -	\$ -
Airstrip alternative arsenic treatment	Raw Water Pipeline from Air Strip well to Peacham Road WTP	1901642	\$ 440,000	DW18-132	26,006	11/16/2018	SRF	No	\$ -	\$ 595,088	\$ -	\$ -
Locke Lake Surface Water Treatment	Design and Permitting of treatment and intake for Locke Lake surface water	combined with below	\$ 200,000	DW18-132	26,006	11/16/2018	SRF	No	\$ -	\$ 200,000	\$ -	\$ -
Locke Lake treatment evaluation	Pilot different treatment technologies to treat Locke Lake surface water	1813409, 1900433	\$ 75,000	DW18-132	26,006	11/18/2018	SRF	No	\$ -	\$ 75,000	\$ -	\$ -
Georgetown Area water main replacements	2018 Surveying costs	1917479	\$ -	DW18-132	26,006	11/16/2018	SRF	Yes	\$ -	\$ -	\$ -	\$ 20,845
Georgetown Drive water main replacement	Replace 4600 LF of 4 inch schedule 40 PVC with 6 inch C900 PVC	1901644	\$ 619,300	DW18-132	26,006	11/16/2018	SRF	Yes	\$ 619,300	\$ 682,478	\$ 640,567	\$ 580,142
Bradford Lane water main replacement	Replace 1825 LF of 4 inch schedule 40 PVC with 6 inch C900 PVC	1901645	\$ 253,000	DW18-132	26,006	11/18/2018	SRF	Yes	\$ 253,000	\$ 278,810	\$ 278,810	\$ 219,136
N.Barnstead Road - Eliminate deadend piping	Add 680 LF of 4 inch C-900 PVC to eliminate dead end. Replace 275 LF of 4 inch sch 40 PVC with 6 inch C900 PVC	1901646	\$ 132,000	DW18-132	26,006	11/16/2018	SRF	Yes	\$ 132,000	\$ 145,466	\$ 265,466	\$ 415,239
Belmont Drive water main replacement	Replace 500 LF of 4 inch schedule 40 PVC with 6 inch C900 PVC	1901647	\$ 68,200	DW18-132	26,006	11/16/2018	SRF	Yes	\$ 68,200	\$ 75,157	\$ 75,157	\$ 41,868
PEU-PWW Interconnection (Merrimack to Litchfield)	Carryover Costs (over 2018 SRF Funding)	1900424, 1900434, 1908514	\$ -	DW19-069	26,253	5/22/2019	Cobank Loan	Yes	\$ -	\$ -	\$ -	\$ 59,691
Upgrade Michells Way PRV Pit	Add additional pit with power and motor control valve to work with dist. System.		\$ -	DW19-069	26,253	5/22/2019	Cobank Loan	Yes	\$ -	\$ 45,000	\$ 45,000	\$ -
Rolling Hills Water Main Replacement	Replace substandard 2 inch diameter pipe with 4 inch C900 PVC	1825265, 1901649, 1918198	\$ 150,000	DW19-069	26,253	5/22/2019	Cobank Loan	Yes	\$ 150,000	\$ 150,000	\$ 165,000	\$ 210,000
1x revenue investments Normal Run Rate with two months of PFOA in Litchfield	Per Tariff	n/a	\$ 96,000	DW19-069	26,253	5/22/2019	Cobank Loan	Yes	\$ 96,000	\$ 94,880	\$ 44,000	\$ 37,500
Alexander Road, Water Main Upsizing	Alexander Road, Water Main Upsizing	1908374	\$ 26,253	DW19-069	26,253	5/22/2019	0.1 DSRR	No	\$ 1,120	\$ 1,120	\$ 1,120	\$ 1,120
Nashua Rd 4" Main Relocation - Carryover Charges	Nashua Rd 4" Main Relocation - Carryover Charges	1829926 & 1906036	\$ -	DW19-069	26,253	5/22/2019	0.1 DSRR	No	\$ -	\$ -	\$ 1,201	\$ 16,676
Weinstein/Dame Station Upgrades	Weinstein/Dame Station Upgrades	1506139, 1603114, 1703756, 1813249, 1907079		DW19-069	26,253	5/22/2019	Cobank Loan	Yes		\$ 108,286	\$ 108,286	\$ 108,286
Booster Pump replacement/rebuild	Replace small booster pumps as they fail (run rate)	760 - 763 workorders	\$ 40,000	DW19-069	26,253	5/22/2019	Cobank Loan	Yes	\$ 40,000	\$ 40,000	\$ 32,000	\$ 30,000
Booster Pump replacement/rebuild	W&E Booster, Replace 3 pump motors, install 3 VFD drives	1915423	\$ -	DW19-069	26,253	5/22/2019	Cobank Loan	Yes	\$ -	\$ -	\$ 8,000	\$ 8,000
Well Pump replacements	Replace well pumps as they fail (run rate)	760 - 763 workorders	\$ 40,000	DW19-069	26,253	5/22/2019	Cobank Loan	Yes	\$ 40,000	\$ 40,000	\$ 48,000	\$ 48,000
Chemical Feed pump replacements	Replace Chemical feed pumps as they fail (run rate)	760 - 763 workorders	\$ 10,000	DW19-069	26,253	5/22/2019	Cobank Loan	Yes	\$ 10,000	\$ 10,000	\$ 8,200	\$ 10,000
Install/replace treatment systems in small CWS	Install/replace treatment systems in small CWS	n/a	\$ 25,000	DW19-069	26,253	5/22/2019	Cobank Loan	Yes	\$ 25,000	\$ 25,000	\$ 25,000	\$ 15,000
Misc. Structural Improvements	Misc. Structural Improvements	n/a	\$ 20,000	DW19-069	26,253	5/22/2019	Cobank Loan	Yes	\$ 20,000	\$ 20,000	\$ 20,000	\$ 10,000
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects	n/a	\$ 10,000	DW19-069	26,253	5/22/2019	Cobank Loan	Yes	\$ 10,000	\$ 10,000	\$ 10,000	\$ -
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical	n/a	\$ 30,000	DW19-069	26,253	5/22/2019	Cobank Loan	Yes	\$ 30,000	\$ 30,000	\$ 10,000	\$ 2,500
Miscellaneous SCADA/Electrical	Replace VFD Booster #3, Liberty Tree	1910159	\$ -	DW19-069	26,253	5/22/2019	Cobank Loan	Yes	\$ -	\$ -	\$ 1,720	\$ 1,720
Miscellaneous SCADA/Electrical	Replace VFD, Booster #2 - Forest Ridge	1915363	\$ -	DW19-069	26,253	5/22/2019	Cobank Loan	Yes	\$ -	\$ -	\$ 1,742	\$ 1,742
Miscellaneous SCADA/Electrical	Replace VFD, Booster #1 - Spruce Pond	1915856	\$ -	DW19-069	26,253	5/22/2019	Cobank Loan	Yes	\$ -	\$ -	\$ 2,156	\$ 2,156
Miscellaneous SCADA/Electrical	Replace Generator Control Unit, Hardwood	1916937	\$ -	DW19-069	26,253	5/22/2019	Cobank Loan	Yes	\$ -	\$ -	\$ -	\$ 2,115
Well Rehabilitation	Well Rehabilitation	n/a	\$ 60,000	DW19-069	26,253	5/22/2019	Cobank Loan	Yes	\$ 60,000	\$ 60,000	\$ 60,000	\$ -
Atkinson Booster pump station design	Atkinson Booster pump station design	n/a	\$ 30,000	DW19-069	26,253	5/22/2019	Cobank Loan	No	\$ -	\$ -	\$ -	\$ -
Replace softner media, W and E	Replace softner media, W and E	1901650	\$ 10,000	DW19-069	26,253	5/22/2019	Cobank Loan	Yes	\$ 10,000	\$ 10,000	\$ -	\$ -
Add communications between remote facility and Nashua WTP	Install web based communication equipment, 4 locations	n/a	\$ 20,000	DW19-069	26,253	5/22/2019	Cobank Loan	Yes	\$ 20,000	\$ 20,000	\$ 20,000	\$ -
Add communications between remote facility and Nashua WTP	Install web based communication equipment, Forest Ridge	1901651	\$ -	DW19-069	26,253	5/22/2019	Cobank Loan	Yes	\$ -	\$ -	\$ -	\$ 4,488
Pennichuck East Survey Work	Pennichuck East Survey Work	1702834						No				
New Services (5)	Single Family, Owner Build, New Homes	720 workorders	\$ 23,000	DW19-069	26,253	5/22/2019	Cobank Loan	Yes	\$ 23,000	\$ 23,000	\$ 13,200	\$ 14,560
Renewed Services (10)	Replacement of failed services	721 & 722 workorders	\$ 46,000	DW19-069	26,253	5/22/2019	Cobank Loan	Yes	\$ 46,000	\$ 46,000	\$ 35,000	\$ 35,824
Hydrants (5)	Replacement of non functional hydrants	730 & 731 workorders	\$ 25,000	DW19-069	26,253	5/22/2019	Cobank Loan	Yes	\$ 25,000	\$ 25,000	\$ 11,000	\$ 9,911
Gates (8)	Replacement of Failed Gate Valves	712 workorders	\$ 32,000	DW19-069	26,253	5/22/2019	Cobank Loan	Yes	\$ 32,000	\$ 32,000	\$ 21,500	\$ 27,255
Radios (550)	New and replaced radios for meter reading	754 workorders	\$ 55,000	DW19-069	26,253	5/22/2019	Cobank Loan	Yes	\$ 15,000	\$ 15,000	\$ 16,500	\$ 21,500
Meters (Growth) 5/8"-2" - PEU (220)	New meters for new customers	750 workorders	\$ 22,000	DW19-069	26,253	5/22/2019	Cobank Loan	Yes	\$ 22,000	\$ 22,000		
Meters 5/8"-6" Lead Meter Exchange - PEU (550)	Replace High lead brass meter with new no lead brass meter	750 workorders	\$ 55,000	DW19-069	26,253	5/22/2019	Cobank Loan	Yes	\$ 55,000	\$ 55,000	\$ 90,000	\$ 85,000
PEU Capitalized short term project interest	Short term interest on CoBank FALOC from July 2019 through July 2020							Yes				

Pennichuck East Utilities Board approved 2019 Capital Expenditures - \$ 3,286,500

Pennichuck East Utilities Projected 2019 QCPAC Eligible Capital Investment (Based on Board approved 2019 Budget) - \$ 1,841,500

Pennichuck East Utilities Projected 2019 QCPAC Eligible Capital Investment, June 30 Update - \$ 2,063,077

Pennichuck East Utilities Projected 2019 QCPAC Eligible Capital Investment, Sept 30 Update - \$ 2,056,304

Pennichuck East Utilities Projected 2019 QCPAC Eligible Capital Investment, Nov 30 Update - 2,022,478

Pennichuck East Utilities Projected 2019 QCPAC Eligible Capital Investment, Final Update<sup>7</sup> -

Funded with SRF Funds -	\$ 1,072,500	\$ 1,100,000	\$ 1,100,000	\$ 1,100,000
Amount to be funded with 2020 Loan from CoBank <sup>1</sup> -	\$ 769,000	\$ 963,077	\$ 956,304	\$ 922,478

1. Tax rate is the sum of the local community rate plus the Statewide Utility tax rate of \$6.60/\$1000  
 2. The Londonderry Tank will not be used and useful in 2019 and hence it is not qualified to be included in QCPAC  
 3. The 2020 PEU Capital Expenditures Budget presented were approved by the Board in January of 2020.  
 4. Projected CoBank Loan Terms are 25 Years at 5.5%  
 5. Projected SRF Terms for Locke Lake project are 30 Years at 2.704%  
 6. Amount of 2019 projects funded with 0.1 DSRR funds  
 7. This is the QCPAC eligible project costs less any that were funded with 0.1 DSRR funds

resulting in Annual P&I of \$ 59,884 based on 011/30/2019 update  
 resulting in Annual P&I of \$ 47,430 based on 011/30/2019 update

Project Name/Description	Project Description	Work Order #	Board Approved 2020 Capex Budget	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order
Londonderry Storage, Booster Station, and Transmission Main	Construct 1.25 MG Ground Level Storage Tank, 3,500 gpm Booster Station and 6300 LF 16 inch Transmission Main		\$ 1,545,000	CoBank		Pending Filing
Airstrip alternative arsenic treatment	Raw Water Pipeline from Air Strip well to Peacham Road WTP		\$ 540,000	DW18-132	26,006	11/16/2018
Georgetown Drive water main replacement	Replace 4600 LF of 4 inch schedule 40 PVC with 6 inch C900 PVC		\$ 10,000	DW18-132	26,006	11/18/2018
Bradford Lane water main replacement	Replace 1825 LF of 4 inch schedule 40 PVC with 6 inch C900 PVC		\$ 10,000	DW18-132	26,006	11/20/2018
N.Barnstead Road - Eliminate deadend piping	Add 680 LF of 4 inch C-900 PVC to eliminate dead end. Replace 275 LF of 4 inch sch 40 PVC with 6 inch C900 PVC		\$ 239,000	DW18-132	26,006	11/22/2018
Belmont Drive water main replacement	Replace 500 LF of 4 inch schedule 40 PVC with 6 inch C900 PVC		\$ 5,000	DW18-132	26,006	11/24/2018
Route 28 Replacement	Replace 720 LF of 2" PE with 720 LF of 4" C-900 PVC.		\$ 80,000	DW18-132	26,006	11/26/2018
Rolling Hills Water Main Replacement - Site Restoration from 2019 Project	Replace substandard 2 inch diameter pipe with 4 inch C900 PVC		\$ 32,000			
Locke Lake Surface Water Treatment	Intake & Treatment Facility Construction		\$ 835,000	DW18-132	26,006	11/26/2018
Pelham Main Replacement/Addition	Replace 1600 LF of 3 inch PE with 12 in C-900 and add 775 LF of 12 in C-900 Monticello & Lane		\$ 285,000	CoBank		Pending Filing
1 x revenue investments Normal Run Rate	Per Tariff		\$ 100,000	CoBank		Pending Filing
Sunrise Estates	Station Replacement (design)		\$ 40,000	0.1 DSRR		
Londonderry Core Re-Chloramination	Re-chloramination Evaluation and Preliminary Design		\$ 35,000	0.1 DSRR		
Atkinson Booster pump station design	Atkinson Booster pump station design		\$ 30,000	0.1 DSRR		
Booster Pump replacement/rebuild	Booster Pump replacement/rebuild		\$ 40,000	CoBank		Pending Filing
Well Pump replacements	Well Pump replacements		\$ 40,000	CoBank		Pending Filing
Chemical Feed pump replacements	Chemical Feed pump replacements		\$ 10,000	CoBank		Pending Filing
Install/replace treatment systems in small CWS	Install/replace treatment systems in small CWS		\$ 25,000	CoBank		Pending Filing
Misc. Structural Improvements	Misc. Structural Improvements		\$ 20,000	CoBank		Pending Filing
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects		\$ 10,000	CoBank		Pending Filing
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical		\$ 30,000	CoBank		Pending Filing
Well Rehabilitation	Well Rehabilitation		\$ 60,000	CoBank		Pending Filing
Atkinson Station Rebuild	Station cannot provide required fire flow. Hydropneumatic tank is in need of replacement		\$ 500,000	CoBank		Pending Filing
Install web based communication equipment, 4 locations	Install web based communication equipment, 4 locations		\$ 20,000	CoBank		Pending Filing
New Services (5)	Single Family, Owner Build, New Homes		\$ 25,000	CoBank		Pending Filing
Renewed Services (10)	Replacement of failed services		\$ 55,000	CoBank		Pending Filing
Hydrants (5)	Replacement of non functional hydrants		\$ 30,000	CoBank		Pending Filing
Gates (8)	Replacement of Failed Gate Valves		\$ 32,000	CoBank		Pending Filing
Radios (300)	New Customers (220) and replaced failed radios (80) for meter reading		\$ 32,000	CoBank		Pending Filing
Meters (Growth) 5/8"-2" - PEU (220)	New meters for new customers (220)		\$ 22,000	CoBank		Pending Filing

Pennichuck East Utilities Projected 2020 Total Capital Expenditure Budget - \$ 4,737,000

Pennichuck East Utilities Projected 2020 C

1. Tax rate is the sum of the local community rate plus the Statewide Utility tax rate of \$6.60/\$1000
2. The 2020 PEU Capital Expenditures Budget presented were approved by the Board in January of 2020.
3. Projected CoBank Loan Terms are 25 Years at 5.5% resulting in P&I of \$ 217,162
4. Projected SRF Terms for Locke Lake project are 30 Years at 2.704% resulting in P&I of \$ 43,393
5. Locke Lake Surface Water Treatment project completed in late 2021 at a total projected cost of

**Pennichuck East Utilities, Inc.**  
**DW 20-xxx**  
**2020 QCPAC Filing**  
**Board Approved 2021 Capital Expenditures<sup>2</sup>**

Project Name/Description	Project Description	Work Order #	Board Approved 2021 Capex Budget	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order
Locke Lake Surface Water Treatment <sup>5</sup>	Intake & Treatment Facility Construction		\$ 1,065,000	DW18-132	26,006	11/26/2018
1 x revenue investments Normal Run Rate	Per Tariff		\$ 72,000	CoBank		Pending Filing
Booster Pump replacement/rebuild	Booster Pump replacement/rebuild		\$ 40,000	CoBank		Pending Filing
Well Pump replacements	Well Pump replacements		\$ 40,000	CoBank		Pending Filing
Chemical Feed pump replacements	Chemical Feed pump replacements		\$ 10,000	CoBank		Pending Filing
Middleton Station Re-build	Middleton Station Re-build		\$ 300,000	CoBank		Pending Filing
Install/replace treatment systems in small CWS	Install/replace treatment systems in small CWS		\$ 25,000	CoBank		Pending Filing
Misc. Structural Improvements	Misc. Structural Improvements		\$ 20,000	CoBank		Pending Filing
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects		\$ 10,000	CoBank		Pending Filing
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical		\$ 30,000	CoBank		Pending Filing
Well Rehabilitation	Well Rehabilitation		\$ 60,000	CoBank		Pending Filing
New Services (5)	Single Family, Owner Build, New Homes		\$ 25,000	CoBank		Pending Filing
Renewed Services (10)	Replacement of failed services		\$ 55,000	0.1 DSR		Pending Filing
Hydrants (5)	Replacement of non functional hydrants		\$ 30,000	CoBank		Pending Filing
Gates (8)	Replacement of Failed Gate Valves		\$ 32,000	CoBank		Pending Filing
Radios (300)	New Customers (220) and replaced failed radios (80) for meter reading		\$ 32,000	CoBank		Pending Filing
New meters for new customers (220). Replacement of failed meters (80)	New meters for new customers (220)		\$ 30,000	CoBank		Pending Filing
Meters 5/8"-6" Lead Meter Exchange - PEU (400)	Replace High lead brass meter with new no lead brass meter		\$ 40,000	CoBank		Pending Filing
2021 Radios (1000)	Begin 7 year replacement of all PEU radios (all initial radios installed in 2007)		\$ 130,000	CoBank		Pending Filing
2021 Meters (Growth) 5/8"-2" (220), Replacement (80)	New meters for new customers (220). Replacement of failed meters (80)		\$ 30,000	CoBank		Pending Filing

Pennichuck East Utilities Projected 2020 Total Capital Expenditure Budget - \$ 2,076,000

Pennichuck East Utilities Projected 2020 Total Capital Expenditure Budget - \$ 2,076,000

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

2. The 2021 PEU Capital Expenditures Budget presented were approved by the Board in January of 2020.

3. Projected CoBank Loan Terms are 25 Years at 5.5%

4. Projected SRF Terms for Locke Lake project are 30 Years at 2.704%

5. Locke Lake Surface Water Treatment project started in 2020. Expected 2020 expense of \$ 835,000 in 2020. Project will be used and useful in 2021 with a total expected cost of \$ 1,900,000 resulting in P&I of \$ 71,269 resulting in P&I of \$ 93,265

**Pennichuck East Utilities, Inc.**  
**DW 20-xxx**  
**2020 QCPAC Filing**  
**Board Approved 2022 Capital Expenditures<sup>2</sup>**

Project Name/Description	Project Description	Work Order #	Board Approved 2021 Capex Budget	Financing Docket No.	NHPUC Order No.	Date of NHPUC Order
New Services (5)	Single Family, Owner Build, New Homes		\$ 25,000	CoBank		Pending Filing
Renewed Services (10)	Replacement of failed services		\$ 55,000	0.1 DSRR		Pending Filing
Hydrants (5)	Replacement of non functional hydrants		\$ 30,000	CoBank		Pending Filing
Gates (8)	Replacement of Failed Gate Valves		\$ 32,000	CoBank		Pending Filing
Radios (300)	New Customers (220) and replaced failed radios (80) for meter reading		\$ 31,500	CoBank		Pending Filing
New meters for new customers (220). Replacement of failed meters (80)	New meters for new customers (220)		\$ 30,000	CoBank		Pending Filing
2022 Radios (1000)	Year 2 of a 7 year replacement of all PEU radios (all initial radios installed in 2007)		\$ 130,000	CoBank		Pending Filing
2022 Meters (Growth) 5/8"-2" - Core & CWS (TBD)	New meters for new customers (220). Replacement of failed meters (80)		\$ 30,000	CoBank		Pending Filing
Wellesley Drive water main replacement <sup>5</sup>	Replace 1760 LF of 2 inch PE with 1760 LF of C900 PVC		\$ 240,000	SRF		Pending Filing
Radcliffe Drive water main replacement <sup>5</sup>	Replace 720 LF of 1.5 inch PE with 720 LF of C900 PVC		\$ 100,000	SRF		Pending Filing
Vassar Drive water main replacement <sup>5</sup>	Replace 1740 LF of 2 inch PE with 1740 LF of C900 PVC		\$ 250,000	SRF		Pending Filing
1 x revenue investments Normal Run Rate	Per Tariff		\$ 72,000	CoBank		Pending Filing
Booster Pump replacement/rebuild	Booster Pump replacement/rebuild		\$ 40,000	CoBank		Pending Filing
Well Pump replacements	Well Pump replacements		\$ 40,000	CoBank		Pending Filing
Chemical Feed pump replacements	Chemical Feed pump replacements		\$ 10,000	CoBank		Pending Filing
Install/replace treatment systems in small CWS	Install/replace treatment systems in small CWS		\$ 25,000	CoBank		Pending Filing
Misc. Structural Improvements	Misc. Structural Improvements		\$ 20,000	CoBank		Pending Filing
Miscellaneous Fencing and Security projects	Miscellaneous Fencing and Security projects		\$ 10,000	CoBank		Pending Filing
Miscellaneous SCADA/Electrical	Miscellaneous SCADA/Electrical		\$ 30,000	CoBank		Pending Filing
Well Rehabilitation	Well Rehabilitation		\$ 60,000	CoBank		Pending Filing

Pennichuck East Utilities Projected 2020 Total Capital Expenditure Budget - \$ 1,260,500

Pennichuck East Utilities Projected 2020 Total Capital Expenditure Budget - \$ 1,260,500

1. Tax rate is the sum of the local community rate plus the Statewide Utility tax rate of \$6.60/\$1000
2. The 2022 PEU Capital Expenditures Budget presented were approved by the Board in January of 2020.
3. Projected CoBank Loan Terms are 25 Years at 5.5% resulting in P&I of \$ 45,885
4. Projected SRF Terms for Locke Lake project are 20 Years at 3.250% resulting in P&I of \$ 40,580
5. The Wellesley, Radcliffe and Vassar Drive water main replacements will be completed over 2 years with water main replacement occurring in 2022 and final pavement in 2023