

AGENDA
NORTH SHORE WATER COMMISSION

400 West Bender Road
Glendale, WI 53217
Wednesday, October 11, 2017
8:00 A.M.

1. Call to order by the Chairman.
2. Approval of the minutes of the August meeting.
3. Monthly report of plant operations.
4. Discussion of annual operating budget.
5. Approval of monthly bills and estimated invoices.
6. Status report of current capital projects. Action may be taken to approve capital expenditures and authorize payment to vendors.
7. Discussion and possible action to approve 5 and 20 year capital improvement plans.
8. Recognition and acceptance of the Revised and Restated Agreement for Water Supply Agreement.
9. Manager's report.
10. Date and time of the next regular Commission Meeting.
11. Adjournment.

**MINUTES OF THE
NORTH SHORE WATER COMMISSION
MEETING OF Wednesday, September 13, 2017**

A meeting of the North Shore Water Commission was held at the Filtration Plant, 400 West Bender Road, Glendale, Wisconsin on Wednesday, September 13, 2017.

Meeting was called to order at 8:02 A.M. by Mr. Botcher.

Present: Scott Botcher, Chair; John Edlebeck, Member; Dave Eastman, Secretary; Rachel Reiss, Alternate for Glendale

Also present: Eric Kiefer, Plant Manager & Recording Secretary

Absent: Karen Schapiro, Alternate for Fox Point; Paul Boening, Alternate for Whitefish Bay

MINUTES

It was moved by Mr. Eastman, seconded by Mr. Edlebeck, and unanimously carried to approve the minutes for the meeting held August 16, 2017.

MONTHLY REPORT OF PLANT OPERATIONS

Mr. Kiefer provided the Commission with a report regarding plant operations. Mr. Edlebeck asked about the KWH/MG figure listed in Mr. Kiefer's report. Mr. Kiefer explained that when pumps operate at low speeds, as they have this summer, they operate less efficiently. He suspects that is why the KWH/MG figure is higher than normal. He explained that he would research the matter and get back to Mr. Edlebeck.

The report was placed on file without any motion.

ANNUAL OPERATING BUDGET

Mr. Kiefer presented the monthly financial reports and they were put on file without motion.

Mr. Botcher mentioned at this time that We Energies rates would not go up next year, but may increase steeply in 2 to 3 years.

MONTHLY BILLS

It was moved by Mr. Eastman, seconded by Mr. Edlebeck, and unanimously carried that the following payments be approved and authorization was given to the Fiscal Agent to make such payments:

<u>Vendor</u>	<u>Amount</u>
A.C. Engineering (repair and installation breaker for emergency power system)	4,410.00

Alexander Chemical (treatment chemicals: sodium hypochlorite and aluminum sulfate)	5,127.22
American Water Works Association (membership dues)	2,042.00
BMO Harris Bank (credit card)	660.82
-- Amazon (lab refrigerator, fans, paper, Prime membership): \$560.67	
-- Google (monthly charge for Google Suite Basic): \$54.16	
-- Straight Talk (monthly phone plan - Foreman): \$45.99	
Brooks Angell (reimbursement for conference registration)	103.95
Diversified Benefit Services (Section 125 Plan administration)	95.46
Earthlink (final bill for Bender phone)	44.80
Eurofins (compliance monitoring)	380.00
Fabrick Rents (rental of articulating boom)	1,906.50
Grainger (lab supplies, plumbing supplies, and custodial supplies)	618.16
Great America (lease payment for copier/printer)	100.00
Hawkins (treatment chemicals: aqueous ammonia and polymer)	3,153.66
Idexx (quality control supplies)	212.01
Lincoln Contractors Supply (sandblasting equipment rental and blasting media)	1,918.17
MMSD (sludge analysis)	664.00
Minnesota Life / Securian (employee life insurance)	128.92
Northern Lake Service (compliance monitoring)	707.00
Office Copying Equipment (maintenance payment for copier/printer)	26.08
R&R Insurance (renewal of liability and property insurance policies)	57,035.00
Rotroff Jeanson (monthly accounting services)	1,010.00
Spectrum Business (internet services, Bender phone, and Klode phone)	661.93
T-Mobile (mobile internet)	31.05
UPS Store (shipping of compliance samples)	44.38
US Cellular (cellular phone service)	4.25
USA Bluebook (reagents for testing chlorine residual)	1,093.44
Village Ace Hardware (painting supplies, paint, primer, and tape)	1,204.13
Village of Fox Point (gasoline)	121.84
We Energies (Bender Electric)	17,248.31
We Energies (Bender Gas)	107.10
We Energies (Green Tree Electric)	17.61
We Energies (Henry Clay Electric)	16.92
We Energies (Klode Electric)	4,421.95
We Energies (Klode Gas)	29.34
Wisconsin State Lab of Hygiene (fluoride analysis)	25.00
	SUB-TOTAL
	\$105,371.00
<u>Maintenance Reserve</u>	
Village Ace Hardware (paint sprayer)	825.40

SUB-TOTAL \$825.40

TOTAL \$106,196.40

CAPITAL PROJECTS

Mr. Kiefer provided a brief report about the capital improvement projects. He explained that plant staff has spent the last 2 months aggressively working on sandblasting and painting the filter room ceiling. Some progress was made in programming the SCADA system and in demolishing equipment in the old chemical feed room.

It was moved by Mr. Edlebeck, seconded by Mr. Eastman, and unanimously carried to approve the payment request for the SCADA Upgrade Project in the amount of \$1,846.57 and the payment request for the Chemical Feed Upgrade Project in the amount of \$247.49 as per Mr. Kiefer's memos dated September 13, 2017.

SALE OF UNUSED GROUNDSKEEPING EQUIPMENT

Mr. Kiefer explained that there is a pickup mower and a mower deck that is no longer used. He requested that the Commission authorize the sale of those pieces of equipment.

It was moved by Mr. Edlebeck, seconded by Mr. Eastman, and unanimously carried to authorize the Plant Manager to sell the surplus mowers as identified in Mr. Kiefer's memo dated 9/12/2017.

COST BENEFIT ANALYSIS OF SWITCHING BANK ACCOUNTS

Mr. Kiefer provided the Commission with a brief memo regarding the costs and benefits associated with switching bank accounts from BMO Harris Bank to WaterStone Bank. Both banks offered the the same services required by the Commission at approximately the same cost. WaterStone Bank, however, appeared to offer better customer service. Since Mr. Kiefer did not find there was any urgency in switching immediately to a different bank, he thought it would be best to defer any action until the inventory of checks decreased.

Ms. Reiss and Mr. Botcher suggested that Mr. Kiefer research multiple banks. Mr. Kiefer explained that he intends to thoroughly investigate multiple banks in winter or spring of 2018.

No action was taken regarding this matter.

2018 BUDGETS

Mr. Kiefer provided the Commission with an operating budget and capital improvement budget for 2018. The proposed operating budget was in the amount of \$1,321,650 (0.5% increase) and the capital improvement budget was in the amount of \$187,271 (9.3% decrease). He explained how additional information--regarding how the budget would be allocated to each member--was added to the budget pursuant to the revised and restated agreement.

Mr. Kiefer also provided the Commission with a form letter he intends to send each Village Manager

and City Administrator which explains how the budget affects each member.

After brief discussion, it was moved by Mr. Edlebeck, seconded by Mr. Eastman, and unanimously carried to approve the 2018 Operating Budget and 2018 Capital Improvement Budget dated 9/11/2017.

REVISED AND RESTATED AGREEMENT

Mr. Kiefer reported that the City of Glendale approved and signed the revised and restated agreement, and that the Village of Fox Point took action to approve the agreement on Tuesday, September 12.

Mr. Edlebeck announced that the Village of Whitefish Bay will discuss and possibly approve it at the meeting on Monday, September 18.

No action was taken regarding this matter.

MANAGER'S REPORT

1. A.C. Engineering repaired and installed breaker on the generator side of the transfer switch at the Bender facility.
2. Plant staff replaced the refrigerator in the lab because it was not maintaining a constant temperature.
3. Plant staff repaired a leak in the ammonia feed room and in the sodium hypochlorite bulk containment area.
4. Outdoor Lighting replaced lamps that were burnt on light poles by the north parking lot and the east reservoirs.
5. Plant staff painted the meter testing apparatus piping in basement.
6. Plant staff sandblasted and painted the middle section of the filter room ceiling.
7. Plant staff is cleaning in preparation for the open house on 9/16 and 9/20.
8. Russell Koenig completed the summer internship on August 25.

Mr. Eastman announced that the Sears building will be demolished in the near future and that the Commission should be concerned about the raw water main that is close to that property.

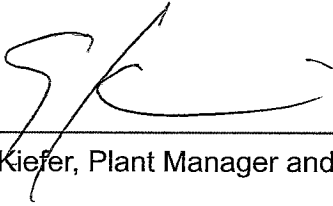
NEXT MEETING

The next regular meeting was scheduled for Wednesday, October 11 at 8:00 AM.

ADJOURNMENT

It was moved by Mr. Eastman, seconded by Mr. Edlebeck, and unanimously carried to adjourn at 8:38 A.M.

Submitted by:



Eric Kiefer, Plant Manager and Recording Secretary

9/14/2017

Date

NORTH SHORE WATER COMMISSION
 Monthly Summary of Operations
 Month of September, 2017
 10/10/2017

	WFB.	GLE.	FPT.	MEQ	Totals
M.G. Metered at Plant	36.647	51.786	35.841	0.000	124.274
M.G. Milwaukee Interconnect	0.000	0.000	0.000	0.000	0.000
M.G. Metered in System	1.121	6.252	-15.006	7.633	0.000
M.G. Charged to Members	37.768	58.038	20.835	0.000	116.641
M.G. Charged to All Users	37.768	58.038	20.835	7.633	124.274
M.G. Same Month Last Year (Members)	31.363	53.286	17.592	7.026	102.241
M.G. Same Month Last Year (All)	31.363	53.286	17.592	7.026	109.267
Accumulated M.G.	287.250	460.438	149.796	64.356	961.840
Accumulated M.G. Last Year	290.657	486.216	163.271	66.960	1007.104
Accumulated % of Total Pumped	29.86%	47.87%	15.57%	6.69%	100.00%
Monthly % of Total Pumped	30.39%	46.70%	16.77%	6.14%	100.00%
Accumulated % Pumped of Members	32.01%	51.30%	16.69%		100.00%
Monthly % Pumped of Members	32.38%	49.76%	17.86%		100.00%
Average Daily Pumpage in M.G.	1.259	1.935	0.695	0.254	4.142

	Sep. 2017	Sep. 2016
Maximum Day Pumpage (MG)	4.783	4.258
Date of Max. Pumpage (Day)	23	5
Maximum Flow Rate (MGD)	9.017	7.248
Date of Max Flow (Day)	25	7
Hour of Max Flow (24 Hour Clock)	6	5
Average Station Pressure (PSI)	83.5	84
Avg. Total Cl Residual (mg/L) - Tap	2.62	2.26
Raw Water Temperature (F) - Max	66	65
Raw Water Temperature (F) - Ave	57	52
Raw Water Temperature (F) - Min	45	43
Tap Hardness (mg/L as CaCO3) - Max	150	138
Tap Hardness (mg/L as CaCO3) - Ave	137	134
Tap Hardness (mg/L as CaCO3) - Min	130	114

	Sep. 2017	Sep. 2016
Bender On-Peak Consumption (KWH)	55,370	59,001
Bender Off-Peak Consumption (KWH)	162,127	120,791
Klode On-Peak Consumption (KWH)	15,908	15,520
Klode Off-Peak Consumption (KWH)	30,652	25,996
Electrical Charge / KWH	\$0.07979	\$0.07776
KWH / M.G.	2,125	2,025
\$ / M.G.	\$169.54	\$157.49

	Sep. 2017		Sep. 2016	
Chemicals Applied	mg/L	\$/MG	mg/L	\$/MG
Ammonium Hydroxide	0.834	\$8.78	0.524	\$5.75
Sodium Hypochlorite	3.846	\$18.49	3.046	\$15.33
Fluoride	0.786	\$6.29	0.869	\$7.11
Alum	7.509	\$7.17	6.979	\$14.03
Carbon (PAC)	0.000	\$0.00	0.000	\$0.00
Polymer - Mussel Control	0.853	\$7.89	0.595	\$5.50
Phosphates	2.569	\$9.42	2.479	\$9.69
Cationic Polymer	0.898	\$4.86	0.938	\$6.10
Total Chemical Cost		\$62.91		\$63.51

	Sep. 2017		Sep. 2016	
Water Metering	M.G.	% Diff.	M.G.	% Diff.
Corrected High Service (Filters)	127.679	2.7	109.886	0.6
Total High Service	118.720	-4.5	107.678	-1.5
Communities	124.274	0.0	109.267	0.0

NORTH SHORE WATER COMMISSION
Income Statement
For the Eight Months Ending August 31, 2017

	Current Month	Current Month Budget	Year to Date Actual	Year to Date Budget	Variance Budget to Actual	
Operating Revenues						
Sales for Resale						
466.01	Glendale-Operations	\$ 52,728.60	\$ 52,728.60	\$ 421,828.80	\$ 421,828.80	0.00
466.02	Whitefish Bay-Operations	32,129.57	32,129.57	257,036.56	257,036.56	0.00
466.03	Fox Point-Operations	17,726.66	17,726.66	141,813.28	141,813.28	0.00
466.05	Wholesale Water Sales	7,445.36	5,833.33	52,020.00	46,666.64	5,353.36
	Sales for Resale	110,030.19	108,418.16	872,698.64	867,345.28	5,353.36
Other Operating Revenue						
474.00	Lab Services Income	960.00	1,166.67	5,910.00	9,333.36	(3,423.36)
	Total Operating Income	110,990.19	109,584.83	878,608.64	876,678.64	1,930.00
Operation and Maintenance Expenses						
Source of Supply						
600.00	Operation Supvsn & Engrng	55.10	65.67	518.72	525.36	(6.64)
601.00	Operations Labor & Expenses	128.41	114.33	988.12	914.64	73.48
602.01	Purchased Water	0.00	833.33	9,194.00	6,666.64	2,527.36
603.00	Miscellaneous Expenses	100.45	84.25	310.71	674.00	(363.29)
610.00	Maint Supervisn & Engrng	123.25	125.83	1,434.32	1,006.64	427.68
611.00	Maint of Structures & Imprvmnt	128.41	114.33	988.12	914.64	73.48
613.00	Maint. of Crib & Wet Well	3,575.00	335.92	3,575.00	2,687.36	887.64
617.00	Maint of Mis Water Source Plnt	0.00	0.00	192.67	0.00	192.67
	Total Source of Supply Expenses	4,110.62	1,673.66	17,201.66	13,389.28	3,812.38
Pumping Expenses						
620.00	Operations Supvsn & Engrng	1,167.11	1,286.25	10,350.65	10,290.00	60.65
621.00	Fuel for Power Production	136.44	314.58	2,883.52	2,516.64	366.88
623.00	Fuel/Power Purchased for Pmpng	21,704.79	20,123.50	147,315.37	160,988.00	(13,672.63)
624.00	Pumping Labor & Expenses	10,812.79	11,201.92	79,223.19	89,615.36	(10,392.17)
626.00	Miscellaneous Expenses	2,080.90	2,261.67	17,177.20	18,093.36	(916.16)
630.00	Maint Supervisn & Engrng	616.17	738.92	5,163.96	5,911.36	(747.40)
631.00	Maint of Structures & Imprvmnt	3,548.33	1,202.08	11,583.96	9,616.64	1,967.32
632.00	Maint of Power Prod Eqpt	0.00	365.75	2,460.78	2,926.00	(465.22)
633.00	Maint of Pumping Eqpt	917.47	3,569.50	20,375.53	28,556.00	(8,180.47)
	Total Pumping Expenses	40,984.00	41,064.17	296,534.16	328,513.36	(31,979.20)
Water Treatment Expenses						
640.00	Operation Suprvsn & Engrng	1,167.11	1,286.25	10,350.65	10,290.00	60.65
641.00	Chemicals	10,277.77	7,130.00	48,536.10	57,040.00	(8,503.90)
642.00	Operation Labor & Expenses	15,607.97	15,759.00	114,053.32	126,072.00	(12,018.68)
643.00	Miscellaneous	1,881.02	2,250.58	17,467.38	18,004.64	(537.26)
650.00	Maint Supervision & Engrng	275.48	328.50	2,593.36	2,628.00	(34.64)
651.00	Maint of Structures & Imprvmnt	4,210.33	972.83	10,599.69	7,782.64	2,817.05
652.00	Operation Supvsn & Engrng	5,747.37	7,388.50	48,685.13	59,108.00	(10,422.87)
	Total Water Treatment Expenses	39,167.05	35,115.66	252,285.63	280,925.28	(28,639.65)

NORTH SHORE WATER COMMISSION
Income Statement
For the Eight Months Ending August 31, 2017

	Current Month	Current Month Budget	Year to Date Actual	Year to Date Budget	Variance Budget to Actual
Transmission & Distribution Expenses					
660.00 Operation Supvsn & Engrng	123.25	125.83	1,032.87	1,006.64	26.23
661.00 Storage Facilities Expenses	128.41	114.33	988.12	914.64	73.48
670.00 Maint Supervisn & Engrng	55.10	65.67	518.72	525.36	(6.64)
676.00 Maintenance of Meters	0.00	83.33	0.00	666.64	(666.64)
	<u>306.76</u>	<u>389.16</u>	<u>2,539.71</u>	<u>3,113.28</u>	<u>(573.57)</u>
Total Trans. & Distribution Expense					
Customer Accounts Expenses					
906.00 Customer Service & Infor Exps	55.10	65.67	518.74	525.36	(6.62)
	<u>55.10</u>	<u>65.67</u>	<u>518.74</u>	<u>525.36</u>	<u>(6.62)</u>
Total Customer Accounts Expenses					
Administration & General Expenses					
408.00 FICA Taxes	3,073.82	3,187.00	22,807.20	25,496.00	(2,688.80)
920.00 Admin & General Salaries	2,203.78	2,995.17	20,746.83	23,961.36	(3,214.53)
921.00 Office Supplies & Expenses	1,032.24	1,261.17	11,050.33	10,089.36	960.97
923.00 Outside Services Employed	1,010.00	7,546.42	50,855.74	60,371.36	(9,515.62)
923.01 Engineering Services	0.00	0.00	3,300.00	0.00	3,300.00
924.00 Prop & P.L. Insurance	0.00	1,777.67	0.00	14,221.36	(14,221.36)
925.00 Injuries & Damages	0.00	3,361.67	1,270.00	26,893.36	(25,623.36)
926.00 Employee Pensions & Benefits	8,968.28	10,511.50	70,264.88	84,092.00	(13,827.12)
930.00 Miscellaneous General Expenses	60.60	596.58	5,202.90	4,772.64	430.26
930.05 Storm Water Testing Supplies	0.00	0.00	29.88	0.00	29.88
932.00 Maintenance of General Plant	0.00	89.33	0.00	714.64	(714.64)
	<u>16,348.72</u>	<u>31,326.51</u>	<u>185,527.76</u>	<u>250,612.08</u>	<u>(65,084.32)</u>
Total Adm. & General Expenses					
	<u>100,972.25</u>	<u>109,634.83</u>	<u>754,607.66</u>	<u>877,078.64</u>	<u>(122,470.98)</u>
Total Operations & Maintenance					
	<u>10,017.94</u>	<u>(50.00)</u>	<u>124,000.98</u>	<u>(400.00)</u>	<u>124,400.98</u>
Net Operating Income					
Nonoperating Income and Expense					
419.00 Interest Income	35.17	50.00	221.01	400.00	(178.99)
421.00 Misc Income	0.00	0.00	8,069.00	0.00	8,069.00
	<u>35.17</u>	<u>50.00</u>	<u>8,290.01</u>	<u>400.00</u>	<u>7,891.01</u>
Net Income					
	<u>\$ 10,053.11</u>	<u>\$ 0.00</u>	<u>\$ 132,290.99</u>	<u>\$ 0.00</u>	<u>132,290.99</u>

NORTH SHORE WATER COMMISSION
Income Statement
For the One Month and the Eight Months Ended August 31, 2017 and 2016

	<u>Current Month</u>	<u>Prior Year Month</u>	<u>Year to Date Actual</u>	<u>Prior YTD Date Actual</u>
Operating Revenues				
Sales for Resale				
466.01 Glendale-Operations	\$ 52,728.60	\$ 55,672.67	\$ 421,828.80	\$ 445,381.36
466.02 Whitefish Bay-Operations	32,129.57	30,648.35	257,036.56	245,186.80
466.03 Fox Point-Operations	17,726.66	16,872.07	141,813.28	134,976.56
466.05 Wholesale Water Sales	7,445.36	8,333.79	52,020.00	55,216.55
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Sales for Resale	110,030.19	111,526.88	872,698.64	880,761.27
Other Operating Revenue				
474.00 Lab Services Income	960.00	1,470.00	5,910.00	7,170.00
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Total Operating Income	110,990.19	112,996.88	878,608.64	887,931.27
Operation and Maintenance Expenses				
Source of Supply				
600.00 Operation Supvsn & Engrng	55.10	77.74	518.72	584.38
601.00 Operations Labor & Expenses	128.41	117.74	988.12	852.99
602.01 Purchased Water	0.00	0.00	9,194.00	9,230.00
603.00 Miscellaneous Expenses	100.45	96.34	310.71	296.50
610.00 Maint Supervisn & Engrng	123.25	140.26	1,434.32	1,040.59
611.00 Maint of Structures & Imprvmnt	128.41	117.74	988.12	852.99
613.00 Maint. of Crib & Wet Well	3,575.00	3,555.00	3,575.00	3,555.00
617.00 Maint of Mis Water Source Plnt	0.00	67.35	192.67	248.22
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Total Source of Supply Expenses	4,110.62	4,172.17	17,201.66	16,660.67
Pumping Expenses				
620.00 Operations Supvsn & Engrg	1,167.11	1,478.73	10,350.65	11,047.52
621.00 Fuel for Power Production	136.44	112.13	2,883.52	1,341.83
623.00 Fuel/Power Purchased for Pmpng	21,704.79	22,881.13	147,315.37	157,407.90
624.00 Pumping Labor & Expenses	10,812.79	10,907.42	79,223.19	83,312.43
626.00 Miscellaneous Expenses	2,080.90	1,563.04	17,177.20	15,702.75
630.00 Maint Supervisn & Engrng	616.17	701.31	5,163.96	5,203.17
631.00 Maint of Structures & Imprvmnt	3,548.33	864.78	11,583.96	7,246.61
632.00 Maint of Power Prod Eqpt	0.00	0.00	2,460.78	3,399.77
633.00 Maint of Pumping Eqpt	917.47	977.38	20,375.53	14,422.90
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Total Pumping Expenses	40,984.00	39,485.92	296,534.16	299,084.88

NORTH SHORE WATER COMMISSION
Income Statement
For the One Month and the Eight Months Ended August 31, 2017 and 2016

	<u>Current Month</u>	<u>Prior Year</u> <u>Month</u>	<u>Year to Date</u> <u>Actual</u>	<u>Prior YTD</u> <u>Date Actual</u>
Water Treatment Expenses				
640.00	1,167.11	1,478.73	10,350.65	11,047.48
641.00	10,277.77	6,732.59	48,536.10	66,379.80
642.00	15,607.97	12,666.62	114,053.32	109,803.83
643.00	1,881.02	1,495.59	17,467.38	16,022.15
650.00	275.48	388.66	2,593.36	2,922.14
651.00	4,210.33	948.18	10,599.69	6,818.25
652.00	5,747.37	6,201.17	48,685.13	58,619.16
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Total Water Treatment Expenses	39,167.05	29,911.54	252,285.63	271,612.81
Transmission & Distribution Expenses				
660.00	123.25	140.26	1,032.87	1,040.59
661.00	128.41	117.74	988.12	852.99
670.00	55.10	77.74	518.72	584.38
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Total Trans. & Distribution Expenses	306.76	335.74	2,539.71	2,477.96
Customer Accounts Expenses				
906.00	55.10	77.74	518.74	584.38
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Total Customer Accounts Expenses	55.10	77.74	518.74	584.38
Administration & General Expenses				
408.00	3,073.82	3,048.28	22,807.20	23,210.93
920.00	2,203.78	3,109.65	20,746.83	23,377.09
921.00	1,032.24	993.61	11,050.33	9,821.67
923.00	1,010.00	3,865.20	50,855.74	64,878.85
923.01	0.00	0.00	3,300.00	0.00
924.00	0.00	21,878.00	0.00	21,878.00
925.00	0.00	32,957.00	1,270.00	34,239.00
926.00	8,968.28	8,243.39	70,264.88	67,336.78
930.00	60.60	66.40	5,202.90	5,397.51
930.05	0.00	105.03	29.88	105.03
	<hr/>	<hr/>	<hr/>	<hr/>
Total Adm. & General Expenses	16,348.72	74,266.56	185,527.76	250,244.86
	<hr/>	<hr/>	<hr/>	<hr/>
Total Operations & Maintenance	100,972.25	148,249.67	754,607.66	840,665.56
	<hr/>	<hr/>	<hr/>	<hr/>
Net Operating Income	10,017.94	(35,252.79)	124,000.98	47,265.71
Nonoperating Income and Expense				
419.00	35.17	19.35	221.01	135.03
421.00	0.00	845.22	8,069.00	4,989.22
	<hr/>	<hr/>	<hr/>	<hr/>
Net Income	\$ 10,053.11	\$ (34,388.22)	\$ 132,290.99	\$ 52,389.96
	<hr/> <hr/>	<hr/> <hr/>	<hr/> <hr/>	<hr/> <hr/>

NORTH SHORE WATER COMMISSION

Balance Sheet

August 31, 2017 and 2016

<u>Account</u>	<u>Description</u>	<u>Current Year</u>	<u>Prior Year</u>
Assets and Other Debits			
Cash			
131.01	Checking	\$ 322,924.04	219,232.97
131.02	Pay Pal Account	545.46	545.46
131.09	Petty Cash	50.00	50.00
135.01	LGIP - Emergency Fund	25,244.65	25,088.01
	Total Cash	348,764.15	244,916.44
142.00	Accounts Receivable	35,108.65	40,552.96
154.05	Storm Water Testing Inventory	410.74	428.17
165.00	Prepayments	7,342.04	6,696.10
174.01	Due (to)/from Utility Plant Fd	(89,272.69)	(17,635.40)
	Total Assets & Other Debits	\$ 302,352.89	274,958.27
Liabilities and Other Credits			
Liabilities			
232.00	Accounts Payable	\$ 44,590.43	106,557.58
233.00	Payable to Municipalities	3,152.76	3,571.61
234.00	Credit Card Payable-BMO Harris	535.84	(154.42)
	Sect125 Payable	1,332.00	1,204.16
242.07	Payroll Liabilities	923.60	1,032.73
242.09	Wages Payable	16,175.56	14,259.05
242.10	Accrued Payroll Taxes	1,237.43	1,090.82
	Total Liabilities	67,947.62	127,561.53
Earned Surplus			
Unappropriated Earned Surplus: Beginning of Year			
215.01	Glendale - Operations	24,420.50	20,586.70
215.02	Whitefish Bay - Operations	18,149.85	16,040.45
215.03	Fox Point - Operations	9,543.93	8,379.63
	Unappropriated Earned Surplus	52,114.28	45,006.78
Appropriations of Surplus			
215.11	Glendale Emergency	11,500.00	11,500.00
215.12	Whitefish Bay Emergency	8,127.50	8,127.50
215.13	Fox Point Emergency	5,372.50	5,372.50
216.91	Glendale Contingency	13,707.50	13,707.50
216.92	Whitefish Bay Contingency	7,100.00	7,100.00
216.93	Fox Point Contingency	4,192.50	4,192.50
	Total Appropriations of Surplus	50,000.00	50,000.00
Balance Transferred from Income			
	Net Income	132,290.99	52,389.96
	Total Earned Surplus	234,405.27	147,396.74
	Total Liabilities & Other Credits	\$ 302,352.89	274,958.27

NORTH SHORE WATER COMMISSION
 Plant Financing by Utility or Municipalities
 For the Eight Months Ending August 31, 2017 and 2016

	Current Month	Year to Date This Year	Current YTD Budget	PY Current Mo.	PY Year to Date
Capital Contributions from Members					
40-421.0 Glendale Charges for Plant	\$ 1,343.85	53,907.53	0.00	2,047.90	28,020.86
40-421.0 Whitefish Bay Charge for Pla	925.10	37,109.69	0.00	1,409.76	19,289.42
40-421.0 Fox Point Charges for Plant	520.86	20,893.79	0.00	793.74	10,860.47
Total Capital Contributions	2,789.81	111,911.01	0.00	4,251.40	58,170.75
Other Funding Sources					
40-466.0 Wholesale Water Sales	6,725.89	46,951.48	0.00	7,509.56	48,571.79
40-419.0 Interest	486.33	2,736.87	0.00	205.68	1,541.26
Other Funding Sources	7,212.22	49,688.35	0.00	7,715.24	50,113.05
Total Funding Sources	10,002.03	161,599.36	0.00	11,966.64	108,283.80
Utility Plant Expenditures					
Source of Supply					
	0.00	0.00	0.00	0.00	0.00
Pumping Plant					
40-323 Other Power Production Eqpt	0.00	0.00	0.00	13,652.50	13,652.50
40-325 Electric Pumping Equipment	0.00	0.00	0.00	19,782.00	48,909.32
	0.00	0.00	0.00	33,434.50	62,561.82
Water Treatment Plant					
40-332 Sand or Media Filtration Equ	745.25	23,411.43	52,844.64	0.00	0.00
40-334 Other Water Treatment Equi	229.70	3,555.94	12,080.00	4,890.17	31,914.28
	974.95	26,967.37	64,924.64	4,890.17	31,914.28
Tranmission & Distribution Plant					
	0.00	0.00	0.00	0.00	0.00
General Plant					
40-392 Transportation Equipment	0.00	21,796.39	16,666.64	0.00	0.00
40-394 Tools, Shop & Garage Eqpt-	825.40	825.40	0.00	0.00	0.00
40-395 Laboratory Equipment	0.00	0.00	0.00	1,305.90	40,599.40
40-396 Power Operated Eqpt-Gen Pl	0.00	0.00	0.00	0.00	5,569.00
40-397.1 SCADA Equipment	1,898.29	62,421.56	55,977.36	0.00	0.00
	2,723.69	85,043.35	72,644.00	1,305.90	46,168.40
Total Utility Plant Expenditu	3,698.64	112,010.72	137,568.64	39,630.57	140,644.50
Sources of Funding					
Over (Under) Expenditures	\$ 6,303.39	49,588.64	(137,568.64)	(27,663.93)	(32,360.70)

NORTH SHORE WATER COMMISSION
Utility Plant Assets and Contributed Capital
August 31, 2017 and 2016

<u>Account</u>	<u>Description</u>		<u>Current Year</u>	<u>Prior Year</u>
Assets				
40-131.00	Savings	\$	574,504.36	570,939.53
40-142.00	Receivable for Asset Additions		36,636.99	11,284.55
40-174.01	Due (to)/from Operations		89,272.69	17,635.40
			<hr/>	<hr/>
	Total Assets	\$	700,414.04	599,859.48
			<hr/> <hr/>	<hr/> <hr/>
Liabilities and Contributed Capital				
Liabilities				
40-232.00	Accounts Payable Utility Plant	\$	825.40	25,446.96
			<hr/>	<hr/>
	Total Liabilities		825.40	25,446.96
Contributed Capital				
Reserve Balances:				
40-215.01	Glendale Plant Reserve		313,103.78	249,710.47
40-215.02	Whitefish Bay Plant Reserve		215,541.42	218,823.04
40-215.03	Fox Point Plant Reserve		121,354.80	138,239.71
			<hr/>	<hr/>
	Total Reserve Balances		650,000.00	606,773.22
Current Year Capital Contributions and Other Funding Sources				
	Over (Under) Expenditures		49,588.64	(32,360.70)
			<hr/>	<hr/>
	Net Contributions to Capital		699,588.64	574,412.52
			<hr/>	<hr/>
	Total Liabilities & Contributed Capital	\$	700,414.04	599,859.48
			<hr/> <hr/>	<hr/> <hr/>

NORTH SHORE WATER COMMISSION
Storm Water Income Statement
For the Eight Months Ending August 31, 2017

	<u>Current Month</u>		<u>Year to Date</u>	
Total Revenues	<u>0.00</u>	0.00	<u>0.00</u>	0.00
Expenses				
Storm Water Testing Supplies	\$ <u>0.00</u>	0.00	\$ <u>29.88</u>	0.00
Revenues	<u>0.00</u>	0.00	<u>29.88</u>	0.00
Net Income	<u>\$ 0.00</u>	0.00	<u>\$ (29.88)</u>	0.00

BILLS TO BE APPROVED AT COMMISSION MEETING OF**10/11/2017**

Batteries Plus (AA batteries and lamps)	50.25
BMO Harris Bank (credit card)	944.35
-- Amazon (supplies for open house events and Prime membership): \$208.74	
-- Engineered Air (temperature sensor for dehumidifier): \$97.80	
-- FedEx Office (color copies): \$34.33	
-- Google (monthly charge for Google Suite Basic): \$54.16	
-- Redbooth (annual renewal of online app): \$420.00	
-- Straight Talk (monthly phone plan - Foreman): \$45.90	
-- Walmart (smartphone replacement): \$83.42	
Cintas (uniform shirts)	78.73
Concentra (pre-employment testing)	167.50
Diversified Benefit Services (Section 125 Plan administration)	95.00
Duane Ziege (reimb for mileage and conference fee)	258.77
Eurofins (compliance monitoring)	380.00
Fabrick Rents (rental of articulating boom)	1,431.50
Fuchs and Boyle (legal services)	19.50
Glendale Water Utilities (environmental and storm water charges)	591.60
Grainger (custodial supplies, painting supplies, v-belts, safety supplies, reagent water, air filters, plumbing supplies, brushes, ph probes, and packing)	2,562.71
Great America (lease payment for copier/printer)	100.00
Hawkins (treatment chemicals: aqueous ammonia and phosphates)	2,862.30
Home Depot (buckets, painting supplies, tape)	288.91
Idexx (quantitrays)	607.52
Mesa Labs (shipping)	7.41
Mulcahy Shaw Water (reagents for Swan chlorine analyzer)	452.60
Minnesota Life / Securian (employee life insurance)	128.92
Northern Lake Service (compliance monitoring)	627.00
Office Copying Equipment (maintenance payment for copier/printer)	13.38
Quill (marker, paper, pens, and pencils)	169.39
Rotroff Jeanson (monthly accounting services)	1,010.00
Rowell Chemical Corporation (treatment chemical: fluoride)	4,359.60
Spectrum Business (internet services, Bender phone, and Klode phone)	575.67
T-Mobile (mobile internet)	31.05
US Cellular (cellular phone service)	4.25
Village Ace Hardware (picture hangers, paint, and plumbing supplies)	68.34
We Energies (Bender Electric)	16,872.16
We Energies (Bender Gas)	150.24
We Energies (Green Tree Electric)	15.84
We Energies (Henry Clay Electric)	19.23
We Energies (Klode Electric)	4,197.65
We Energies (Klode Gas)	17.99

William Reid (hoses for periflow chemical feed pumps)	248.70
Wisconsin State Lab of Hygiene (fluoride analysis)	25.00
	<hr/>
	SUB-TOTAL
	\$39,433.06

Maintenance Reserve

	<hr/>
	SUB-TOTAL
	\$0.00
	TOTAL
	\$39,433.06
	<hr/>

9/30/2017 Checking account balance - Main	\$284,691.24
9/30/2017 Checking account balance - Secondary	\$545.46
9/30/2017 Local Government Investment Pool balance (Capital Funds)	\$574,990.51
9/30/2017 Local Government Investment Pool balance (Operating Reserve Funds)	\$25,266.01

**North Shore Water Commission
Payment Request
SCADA Upgrade Project (2017-1)**

Eric Kiefer
October 11, 2017

Expenses pertaining to the SCADA Upgrade Project were reviewed and approved by the Commission.

The Commission is requesting payment of \$1,399.31 for expenses assigned to this capital improvement project. The proportionate costs for the respective municipalities are as follows:

<i>Member</i>	<i>Capital Rate*</i>	<i>Amount Due</i>
<i>Fox Point</i>	<i>18.67%</i>	<i>\$261.25</i>
<i>Glendale</i>	<i>48.17%</i>	<i>\$674.05</i>
<i>Whitefish Bay</i>	<i>33.16%</i>	<i>\$464.01</i>

Respectfully,

Eric Kiefer

**Rates approved at the January 14, 2015 Commission Meeting.*

North Shore Water Commission
SCADA Upgrade Project (2017-1)

Labor Assigned to Project

Eric Kiefer

October 11, 2017

Pay Period	Employee Name	Hours	Cost
09/15/2017 to 09/29/2017	Eric Kiefer	34.00	1,166.13
09/15/2017 to 09/29/2017	Mark Peters	8.00	233.18
TOTAL			\$1,399.31

North Shore Water Commission
Payment Request
Filter Improvements (2017-2)

Eric Kiefer
October 10, 2017

Expenses pertaining to the filter improvements project were reviewed and approved by the Commission.

The Commission is requesting payment of \$34.37 for expenses assigned to this capital improvement project. The proportionate costs for the respective municipalities are as follows:

<i>Member</i>	<i>Capital Rate*</i>	<i>Amount Due</i>
<i>Fox Point</i>	<i>18.67%</i>	<i>\$6.42</i>
<i>Glendale</i>	<i>48.17%</i>	<i>\$16.56</i>
<i>Whitefish Bay</i>	<i>33.16%</i>	<i>\$11.40</i>

Respectfully,

Eric Kiefer

**Rates approved at the January 14, 2015 Commission Meeting.*

North Shore Water Commission

Filter Improvements (2017-2)

Labor Assigned to Project

Eric Kiefer

October 10, 2017

Pay Period	Employee Name	Hours	Cost
09/15/2017 to 09/29/2017	Duane Ziege	1.00	34.37
TOTAL			\$34.37

**North Shore Water Commission
Payment Request
Reservoir Improvements (2017-3)**

Eric Kiefer
October 11, 2017

Expenses pertaining to the filter improvements project were reviewed and approved by the Commission.

The Commission is requesting payment of \$5,590.47 for expenses assigned to this capital improvement project. The proportionate costs for the respective municipalities are as follows:

<i>Member</i>	<i>Capital Rate*</i>	<i>Amount Due</i>
<i>Fox Point</i>	<i>18.67%</i>	<i>\$1,043.74</i>
<i>Glendale</i>	<i>48.17%</i>	<i>\$2,692.93</i>
<i>Whitefish Bay</i>	<i>33.16%</i>	<i>\$1,853.80</i>

Respectfully,

Eric Kiefer

**Rates approved at the January 14, 2015 Commission Meeting.*

North Shore Water Commission
Reservoir Improvements (2017-3)
Invoices for Meeting
Eric Kiefer
October 11, 2017

Vendor	Invoice Number	Units	Qty	Description	Line Cost
SEH	339013	Hour	0.5	Engineering, Groundwater Monitoring Around Reservoirs	48.64
SEH	339013	Hour	3.0	Engineering, Groundwater Monitoring Around Reservoirs	299.23
SEH	339013	Application	1.0	Engineering, Groundwater Monitoring Around Reservoirs, Consultants	5242.60
TOTAL					\$5,590.47

NORTH SHORE WATER COMMISSION
2019 - 2023 PROPOSED CAPITAL IMPROVEMENT PLAN

(Staffing Level: 1 Manager, 1 Foreman, 1 Technician Mechanic, 4 Relief Op/Tech, Interns and Gardners)
 October 5, 2017

2019 - Captial Improvement Plan **\$139,000**

Raw Water Pump #2 and #4 Valve Replacements (2019-1)	PCT	COST
Self-performed Labor	7%	\$6,000
Contracted Services	2%	\$2,000
Direct Purchase of Materials and Equipment	83%	\$70,000
Engineering	2%	\$2,000
Contingency	5%	\$4,000
		\$84,000

2019 - Engineering of Reservoir Improvements Project (2019-2)	PCT	COST
Self-performed Labor	0%	\$0
Contracted Services	0%	\$0
Direct Purchase of Materials and Equipment	0%	\$0
Engineering	91%	\$50,000
Contingency	9%	\$5,000
		\$55,000

2020 - Captial Improvement Plan **\$1,117,000**

Reservoir Improvements - Major Construction (2020-1)	PCT	COST
Self-performed Labor	0%	\$0
Contracted Services	75%	\$833,000
Direct Purchase of Materials and Equipment	0%	\$0
Engineering	10%	\$117,000
Contingency	15%	\$167,000
		\$1,117,000

2021 - Captial Improvement Plan **\$168,000**

Filter Improvements (2021-1)	PCT	COST
Self-performed Labor	12%	\$12,000
Contracted Services	10%	\$10,000
Direct Purchase of Materials and Equipment	70%	\$70,000
Engineering	4%	\$4,000
Contingency	4%	\$4,000
		\$100,000

Security Camera Replacements (2021-2)	PCT	COST
Self-performed Labor	6%	\$2,000
Contracted Services	0%	\$0
Direct Purchase of Materials and Equipment	83%	\$30,000
Engineering	0%	\$0
Contingency	11%	\$4,000
		\$36,000

IT Improvements (2021-3)	PCT	COST
Self-performed Labor	6%	\$2,000

Contracted Services	0%	\$0
Direct Purchase of Materials and Equipment	88%	\$28,000
Engineering	0%	\$0
Contingency	6%	\$2,000
		\$32,000

2022 - Capital Improvement Plan **\$110,000**

Flat Roof Replacement (2022-1)	PCT	COST
Self-performed Labor	0%	\$0
Contracted Services	91%	\$100,000
Direct Purchase of Materials and Equipment	0%	\$0
Engineering	0%	\$0
Contingency	9%	\$10,000
		\$110,000

2023 - Capital Improvement Plan **\$216,000**

Raw Pump 3 Installation and VFD Cabinet (2023-1)	PCT	COST
Self-performed Labor	0%	\$0
Contracted Services	91%	\$100,000
Direct Purchase of Materials and Equipment	0%	\$0
Engineering	0%	\$0
Contingency	9%	\$10,000
		\$110,000

Filter Improvements (2023-2)	PCT	COST
Self-performed Labor	12%	\$6,000
Contracted Services	10%	\$5,000
Direct Purchase of Materials and Equipment	70%	\$35,000
Engineering	4%	\$2,000
Contingency	4%	\$2,000
		\$50,000

IT Improvements (2023-3)	PCT	COST
Self-performed Labor	7%	\$4,000
Contracted Services	0%	\$0
Direct Purchase of Materials and Equipment	89%	\$50,000
Engineering	0%	\$0
Contingency	4%	\$2,000
		\$56,000

TOTAL EXPENDITURES	\$1,750,000
NUMBER OF YEARS	5
AVERAGE ANNUAL EXPENDITURES	\$350,000

NORTH SHORE WATER COMMISSION
2019 - 2038 PROPOSED CAPITAL IMPROVEMENT PLAN

(Staffing Level: 1 Manager, 1 Foreman, 1 Technician Mechanic, 4 Relief Op/Tech, Interns and Gardners)
 October 5, 2017

2019 - Captial Improvement Plan **\$139,000**

Raw Water Pump #2 and #4 Valve Replacements (2019-1)	PCT	COST
Self-performed Labor	7%	\$6,000
Contracted Services	2%	\$2,000
Direct Purchase of Materials and Equipment	83%	\$70,000
Engineering	2%	\$2,000
Contingency	5%	\$4,000
		\$84,000

2019 - Engineering of Reservoir Improvements Project (2019-2)	PCT	COST
Self-performed Labor	0%	\$0
Contracted Services	0%	\$0
Direct Purchase of Materials and Equipment	0%	\$0
Engineering	91%	\$50,000
Contingency	9%	\$5,000
		\$55,000

2020 - Captial Improvement Plan **\$1,117,000**

Reservoir Improvements - Major Construction (2020-1)	PCT	COST
Self-performed Labor	0%	\$0
Contracted Services	75%	\$833,000
Direct Purchase of Materials and Equipment	0%	\$0
Engineering	10%	\$117,000
Contingency	15%	\$167,000
		\$1,117,000

2021 - Captial Improvement Plan **\$168,000**

Filter Improvements (2021-1)	PCT	COST
Self-performed Labor	12%	\$12,000
Contracted Services	10%	\$10,000
Direct Purchase of Materials and Equipment	70%	\$70,000
Engineering	4%	\$4,000
Contingency	4%	\$4,000
		\$100,000

Security Camera Replacements (2021-2)	PCT	COST
Self-performed Labor	6%	\$2,000
Contracted Services	0%	\$0
Direct Purchase of Materials and Equipment	83%	\$30,000
Engineering	0%	\$0
Contingency	11%	\$4,000
		\$36,000

IT Improvements (2021-3)	PCT	COST
Self-performed Labor	6%	\$2,000

Contracted Services	0%	\$0
Direct Purchase of Materials and Equipment	88%	\$28,000
Engineering	0%	\$0
Contingency	6%	\$2,000
		\$32,000

2022 - Captial Improvement Plan **\$110,000**

Flat Roof Replacement (2022-1)	PCT	COST
Self-performed Labor	0%	\$0
Contracted Services	91%	\$100,000
Direct Purchase of Materials and Equipment	0%	\$0
Engineering	0%	\$0
Contingency	9%	\$10,000
		\$110,000

2023 - Captial Improvement Plan **\$216,000**

Raw Pump 3 Installation and VFD Cabinet (2023-1)	PCT	COST
Self-performed Labor	0%	\$0
Contracted Services	91%	\$100,000
Direct Purchase of Materials and Equipment	0%	\$0
Engineering	0%	\$0
Contingency	9%	\$10,000
		\$110,000

Filter Improvements (2023-2)	PCT	COST
Self-performed Labor	12%	\$6,000
Contracted Services	10%	\$5,000
Direct Purchase of Materials and Equipment	70%	\$35,000
Engineering	4%	\$2,000
Contingency	4%	\$2,000
		\$50,000

IT Improvements (2023-3)	PCT	COST
Self-performed Labor	7%	\$4,000
Contracted Services	0%	\$0
Direct Purchase of Materials and Equipment	89%	\$50,000
Engineering	0%	\$0
Contingency	4%	\$2,000
		\$56,000

2024 - Captial Improvement Plan **\$110,000**

Raw Pump 3 Installation and VFD Cabinet (2024-1)	PCT	COST
Self-performed Labor	0%	\$0
Contracted Services	91%	\$100,000
Direct Purchase of Materials and Equipment	0%	\$0
Engineering	0%	\$0
Contingency	9%	\$10,000
		\$110,000

2025 - Captial Improvement Plan **\$100,000**

Filter Improvements (2025-1)	PCT	EXPENSE
Self-performed Labor	12%	\$12,000
Contracted Services	10%	\$10,000
Direct Purchase of Materials and Equipment	70%	\$70,000
Engineering	4%	\$4,000
Contingency	4%	\$4,000
		\$100,000

2026 - Captial Improvement Plan **\$280,000**

Basin 1 Rehabilitation (2026-1)	PCT	EXPENSE
Self-performed Labor	0%	\$0
Contracted Services	87%	\$200,000
Direct Purchase of Materials and Equipment	0%	\$0
Engineering	9%	\$20,000
Contingency	4%	\$10,000
		\$230,000

Filter Improvements (2026-2)	PCT	COST
Self-performed Labor	12%	\$6,000
Contracted Services	10%	\$5,000
Direct Purchase of Materials and Equipment	70%	\$35,000
Engineering	4%	\$2,000
Contingency	4%	\$2,000
		\$50,000

2027 - Captial Improvement Plan **\$280,000**

Basin 2 Rehabilitation (2027-1)	PCT	EXPENSE
Self-performed Labor	0%	\$0
Contracted Services	87%	\$200,000
Direct Purchase of Materials and Equipment	0%	\$0
Engineering	9%	\$20,000
Contingency	4%	\$10,000
		\$230,000

Filter Improvements (2027-2)	PCT	COST
Self-performed Labor	12%	\$6,000
Contracted Services	10%	\$5,000
Direct Purchase of Materials and Equipment	70%	\$35,000
Engineering	4%	\$2,000
Contingency	4%	\$2,000
		\$50,000

2028 - Captial Improvement Plan **\$280,000**

Basin 3 Rehabilitation (2028-1)	PCT	EXPENSE
Self-performed Labor	0%	\$0
Contracted Services	87%	\$200,000
Direct Purchase of Materials and Equipment	0%	\$0
Engineering	9%	\$20,000
Contingency	4%	\$10,000

\$230,000

Filter Improvements (2028-2)	PCT	COST
Self-performed Labor	12%	\$6,000
Contracted Services	10%	\$5,000
Direct Purchase of Materials and Equipment	70%	\$35,000
Engineering	4%	\$2,000
Contingency	4%	\$2,000
		\$50,000

2029 - Captial Improvement Plan **\$280,000**

Basin 4 Rehabilitation (2029-1)	PCT	EXPENSE
Self-performed Labor	0%	\$0
Contracted Services	87%	\$200,000
Direct Purchase of Materials and Equipment	0%	\$0
Engineering	9%	\$20,000
Contingency	4%	\$10,000
		\$230,000

Filter Improvements (2029-2)	PCT	COST
Self-performed Labor	12%	\$6,000
Contracted Services	10%	\$5,000
Direct Purchase of Materials and Equipment	70%	\$35,000
Engineering	4%	\$2,000
Contingency	4%	\$2,000
		\$50,000

2030 - Captial Improvement Plan **\$280,000**

Basin 5 Rehabilitation (2030-1)	PCT	EXPENSE
Self-performed Labor	0%	\$0
Contracted Services	87%	\$200,000
Direct Purchase of Materials and Equipment	0%	\$0
Engineering	9%	\$20,000
Contingency	4%	\$10,000
		\$230,000

Filter Improvements (2030-2)	PCT	COST
Self-performed Labor	12%	\$6,000
Contracted Services	10%	\$5,000
Direct Purchase of Materials and Equipment	70%	\$35,000
Engineering	4%	\$2,000
Contingency	4%	\$2,000
		\$50,000

2031 - Captial Improvement Plan **\$330,000**

SCADA Hardware Replacement (2031-1)	PCT	EXPENSE
Self-performed Labor	0%	\$0
Contracted Services	89%	\$250,000
Direct Purchase of Materials and Equipment	0%	\$0
Engineering	7%	\$20,000

Contingency	4%	\$10,000
		\$280,000

Filter Improvements (2031-2)	PCT	COST
Self-performed Labor	12%	\$6,000
Contracted Services	10%	\$5,000
Direct Purchase of Materials and Equipment	70%	\$35,000
Engineering	4%	\$2,000
Contingency	4%	\$2,000
		\$50,000

2032 - Captial Improvement Plan **\$176,000**

SCADA Software Update (2032-1)	PCT	EXPENSE
Self-performed Labor	0%	\$0
Contracted Services	91%	\$100,000
Direct Purchase of Materials and Equipment	0%	\$0
Engineering	0%	\$0
Contingency	9%	\$10,000
		\$110,000

IT Improvements (2032-2)	PCT	COST
Self-performed Labor	6%	\$4,000
Contracted Services	0%	\$0
Direct Purchase of Materials and Equipment	91%	\$60,000
Engineering	0%	\$0
Contingency	3%	\$2,000
		\$66,000

2033 - Captial Improvement Plan **\$200,000**

Remaining Filter Improvements (2033-1)	PCT	EXPENSE
Self-performed Labor	12%	\$12,000
Contracted Services	10%	\$10,000
Direct Purchase of Materials and Equipment	70%	\$70,000
Engineering	4%	\$4,000
Contingency	4%	\$4,000
		\$100,000

Basin Valve Actuator Replacements (2033-2)	PCT	EXPENSE
Self-performed Labor	12%	\$12,000
Contracted Services	10%	\$10,000
Direct Purchase of Materials and Equipment	70%	\$70,000
Engineering	4%	\$4,000
Contingency	4%	\$4,000
		\$100,000

2034 - Captial Improvement Plan **\$340,000**

Replace 2400V Electrical Equipment (2034-1)	PCT	EXPENSE
Self-performed Labor	0%	\$0
Contracted Services	88%	\$300,000
Direct Purchase of Materials and Equipment	0%	\$0

Engineering	9%	\$30,000
Contingency	3%	\$10,000
		\$340,000

2035 - Capital Improvement Plan **\$1,110,000**

UV Equipment Upgrade (2035-1)	PCT	EXPENSE
Self-performed Labor	0%	\$0
Contracted Services	90%	\$1,000,000
Direct Purchase of Materials and Equipment	0%	\$0
Engineering	9%	\$100,000
Contingency	1%	\$10,000
		\$1,110,000

2036 - Capital Improvement Plan **\$270,000**

Port Washington Road & Bradley Road Interconnection (2036-1)	PCT	EXPENSE
Self-performed Labor	0%	\$0
Contracted Services	93%	\$250,000
Direct Purchase of Materials and Equipment	0%	\$0
Engineering	4%	\$10,000
Contingency	4%	\$10,000
		\$270,000

2037 - Capital Improvement Plan **\$130,000**

IT Improvements (2037-1)	PCT	EXPENSE
Self-performed Labor	6%	\$4,000
Contracted Services	0%	\$0
Direct Purchase of Materials and Equipment	91%	\$60,000
Engineering	0%	\$0
Contingency	3%	\$2,000
		\$66,000

Security Camera Replacements (2037-2)	PCT	COST
Self-performed Labor	6%	\$4,000
Contracted Services	0%	\$0
Direct Purchase of Materials and Equipment	78%	\$50,000
Engineering	0%	\$0
Contingency	16%	\$10,000
		\$64,000

2038 - Capital Improvement Plan **\$145,000**

Generator Replacement at Klode Park (2038-1)	PCT	EXPENSE
Self-performed Labor	0%	\$0
Contracted Services	90%	\$130,000
Direct Purchase of Materials and Equipment	0%	\$0
Engineering	7%	\$10,000
Contingency	3%	\$5,000
		\$145,000

TOTAL EXPENDITURES **\$6,061,000**

NUMBER OF YEARS

20

AVERAGE ANNUAL EXPENDITURES

\$303,050

North Shore Water Commission Manager's Report of Operations

Period: September 12 - October 10

1. Operations staff started a new schedule that involves a 4-week rotation and sharing relief duties.
2. Basin 3 was cleaned, inspected, and put back into service.
3. Basin 4 was cleaned, inspected, and put back into service after minor repairs were made to boards on flocculator.
4. Open House events were held on September 16 and September 20.
5. Plant staff replaced a faulty temperature sensor in the dehumidification system.
6. Plant staff started a long-term bolt replacement project in the filter wing.
7. Kirk Hallberg started as Intern on September 26.

North Shore Water Commission

Extended Monthly Report (Page 2) September 2017
Flows Uncorrected for Distribution Activity

Date	High Service PSI (Gauge #1)			High Service PSI (Gauge #2)			WFB Tower PSI			Glen Standpipe PSI			FPT Standpipe PSI			WFB Standpipe Level (ft)			Glen Standpipe Level (ft)			FPT Tower Level (ft)			Monthly Pumpage RANK	Sum Master Meters (MGD)			WFB Flow (MGD)			Glen Flow (MGD)			FPT Flow (MGD)			
	Max	Ave	Min	Max	Ave	Min	Max	Ave	Min	Max	Ave	Min	Max	Ave	Min	Max	Ave	Min	Max	Ave	Min	Max	Ave	Min		Max	Ave	Min	Max	Ave	Min	Max	Ave	Min	Max	Ave	Min	Max
9/1/2017	84.77	83.12	80.96	85.30	83.51	81.48	69.32	67.07	64.22	48.47	40.65	34.17	62.82	51.62	37.01	23.02	18.40	12.64	77.61	65.72	52.21	22.17	19.40	16.49	17	7.91	4.04	0.92	2.51	1.19	0.05	3.08	1.68	0.61	2.49	1.17	0.17	
9/2/2017	85.27	83.06	81.13	85.33	83.43	81.74	69.48	67.11	63.67	43.90	41.21	35.78	61.75	51.59	36.96	23.02	18.05	12.16	77.38	66.48	53.33	22.21	19.39	16.52	29	6.17	3.48	0.78	2.18	1.01	0.00	2.13	1.44	0.61	1.92	1.04	0.08	
9/3/2017	85.90	83.05	80.72	86.22	83.41	81.13	69.86	67.10	63.00	44.65	41.44	36.04	63.14	51.87	37.01	23.03	18.04	12.28	77.45	67.57	54.74	22.19	19.39	16.50	30	5.25	3.13	1.09	1.97	0.92	0.06	1.90	1.27	0.63	1.76	0.94	0.21	
9/4/2017	84.86	82.98	80.07	85.27	83.35	80.69	71.03	66.98	63.00	44.94	41.23	30.76	62.24	51.42	35.15	23.00	17.89	12.31	77.45	66.58	52.15	22.20	19.44	16.71	22	6.71	3.89	0.00	2.39	1.19	0.00	2.35	1.53	0.00	2.10	1.17	0.00	
9/5/2017	85.34	83.09	80.53	84.96	83.44	80.87	69.38	67.11	63.78	47.89	41.08	36.55	62.10	51.86	36.90	23.00	17.98	12.13	77.64	65.75	51.91	22.19	19.49	16.61	26	8.17	3.74	1.26	2.86	1.08	0.08	2.78	1.57	0.77	2.97	1.08	0.17	
9/6/2017	84.41	83.13	80.86	85.49	83.49	81.32	69.52	67.07	64.05	44.00	40.76	34.96	61.63	51.77	37.06	23.01	18.06	12.38	76.73	65.02	51.91	22.19	19.48	16.67	20	9.01	3.99	1.29	3.15	1.18	0.09	3.06	1.70	0.89	2.83	1.12	0.17	
9/7/2017	84.96	83.16	80.72	84.85	83.51	80.93	69.13	67.16	63.87	44.10	40.98	36.36	62.13	51.78	0.00	23.02	18.15	12.23	77.28	65.70	52.24	22.21	19.38	-5.00	28	7.44	3.69	1.28	2.60	1.07	0.09	2.77	1.59	0.83	2.39	1.03	0.17	
9/8/2017	84.67	83.15	80.57	84.77	83.51	80.99	69.77	67.06	64.03	43.76	40.86	36.45	62.16	51.28	39.00	23.00	18.15	12.38	77.22	65.63	52.86	22.90	19.98	17.25	23	7.85	3.81	1.14	2.73	1.10	0.05	2.78	1.62	0.76	2.51	1.09	0.15	
9/9/2017	85.46	83.12	79.69	85.96	83.48	80.75	69.78	67.14	63.57	44.41	41.28	36.85	61.13	52.21	38.98	23.03	17.80	11.98	77.35	66.51	53.35	23.19	20.50	18.19	27	6.29	3.71	1.22	2.21	1.10	0.09	2.25	1.51	0.69	2.11	1.10	0.21	
9/10/2017	85.37	83.14	80.19	85.62	83.51	80.40	69.86	67.19	63.05	45.55	41.41	36.76	61.93	52.82	38.93	23.07	17.80	11.90	77.41	66.47	52.21	23.18	20.67	17.69	25	6.18	3.77	1.22	2.16	1.14	0.16	2.19	1.50	0.74	1.93	1.13	0.27	
9/11/2017	85.34	83.09	80.12	85.80	83.46	80.35	69.09	67.04	63.61	46.12	40.90	35.93	61.86	52.28	38.56	23.02	17.78	11.99	77.76	65.83	51.90	23.18	20.49	17.64	14	8.68	4.14	1.62	3.12	1.24	0.19	2.92	1.69	0.83	2.80	1.21	0.26	
9/12/2017	84.67	83.14	80.65	84.82	83.50	80.38	70.70	67.17	63.61	44.87	40.94	36.50	62.53	54.51	38.92	23.01	17.59	11.91	77.23	64.96	51.88	21.68	19.22	15.84	18	7.69	4.00	1.66	2.82	1.19	0.00	2.72	1.70	1.09	2.21	1.12	0.37	
9/13/2017	84.89	83.14	80.00	85.19	83.50	80.58	69.57	67.07	62.74	44.76	40.65	35.68	61.99	52.05	39.03	23.06	18.02	12.05	76.15	64.10	51.88	21.45	18.54	15.65	13	8.90	4.21	1.86	3.12	1.22	0.19	3.05	1.78	1.06	2.78	1.21	0.39	
9/14/2017	85.42	83.05	77.86	85.82	83.42	79.96	71.80	66.96	63.02	43.79	40.35	34.50	61.74	52.03	38.98	23.01	17.81	11.97	75.92	60.77	51.89	21.25	18.31	15.41	7	8.34	4.52	2.14	2.77	1.31	0.29	3.29	1.97	1.19	2.61	1.24	0.44	
9/15/2017	84.39	83.03	79.59	84.67	83.40	79.64	71.36	66.95	62.22	44.01	40.48	35.26	61.48	52.05	39.01	22.97	17.94	11.95	76.47	63.78	51.93	20.96	18.10	15.26	12	8.45	4.37	1.31	2.98	1.28	0.00	2.95	1.87	0.92	2.67	1.22	0.14	
9/16/2017	84.36	83.14	80.09	84.64	83.51	80.33	68.97	67.01	62.57	43.58	40.80	36.93	61.53	51.89	39.02	22.99	17.53	11.94	77.37	64.36	51.92	20.82	17.94	15.08	8	6.79	4.47	1.84	2.33	1.35	0.28	2.50	1.83	1.01	2.17	1.29	0.34	
9/17/2017	85.82	83.09	79.69	86.03	83.48	80.30	69.81	67.00	62.76	44.30	40.99	36.75	61.82	52.01	38.83	22.99	17.66	11.96	77.47	65.09	51.93	20.68	17.79	14.91	11	6.80	4.40	2.20	2.39	1.34	0.35	2.38	1.76	1.00	2.07	1.29	0.42	
9/18/2017	84.96	83.11	79.88	84.98	83.52	80.46	69.25	67.02	62.67	43.94	40.50	32.32	61.78	52.03	38.99	22.97	18.21	12.20	77.70	64.82	51.90	20.39	17.50	14.58	10	8.53	4.41	1.65	2.90	1.28	0.14	2.98	1.86	1.07	3.09	1.26	0.31	
9/19/2017	84.72	83.09	79.73	86.11	83.51	79.92	70.19	67.05	63.81	43.97	40.22	35.92	62.70	51.90	38.98	22.99	18.09	11.91	77.28	64.34	51.88	20.17	16.70	14.43	3	8.03	4.68	2.39	2.72	1.32	0.29	3.85	2.11	1.56	2.59	1.25	0.44	
9/20/2017	84.46	83.09	79.35	84.77	83.51	79.88	69.25	66.94	62.52	43.99	39.92	34.75	62.07	51.98	39.02	22.99	18.16	12.19	69.68	59.56	51.92	20.00	17.12	14.20	6	8.73	4.61	1.78	3.09	1.32	0.20	3.11	2.01	1.09	2.80	1.28	0.37	
9/21/2017	84.55	83.09	79.45	85.08	83.50	80.06	70.86	66.96	62.28	44.21	40.52	34.97	61.86	51.96	39.04	23.04	18.11	12.14	77.48	65.77	51.94	19.77	16.91	14.01	9	8.18	4.44	1.77	2.95	1.32	0.19	2.88	1.87	1.12	2.48	1.25	0.27	
9/22/2017	84.19	83.08	80.07	84.83	83.50	80.46	69.01	66.95	63.57	43.89	40.36	35.94	61.85	51.91	39.01	22.99	17.99	11.97	77.24	64.34	51.96	19.56	16.72	13.81	2	8.89	4.74	1.87	3.11	1.41	0.28	3.07	1.99	0.99	2.76	1.35	0.37	
9/23/2017	84.98	83.10	79.59	85.33	83.53	80.09	69.05	67.00	62.35	44.50	40.66	36.49	61.97	51.81	39.01	22.99	17.51	11.76	77.47	64.82	51.95	19.40	16.53	13.63	1	7.12	4.78	2.23	2.42	1.46	0.37	2.61	1.91	1.03	2.34	1.42	0.46	
9/24/2017	85.10	83.07	79.71	85.51	83.50	80.35	70.43	67.02	62.41	44.93	40.91	36.32	61.81	51.87	39.07	23.04	17.61	11.77	77.52	65.34	51.96	19.24	16.37	13.48	5	6.77	4.61	2.61	2.35	1.43	0.67	2.45	1.80	1.11	2.15	1.39	0.49	
9/25/2017	84.22	83.07	79.95	84.82	83.51	80.13	69.10	66.95	63.34	43.79	40.37	34.79	61.56	51.92	38.96	23.01	18.12	12.04	77.61	64.67	51.95	19.05	16.23	13.39	4	9.02	4.66	1.82	3.15	1.39	0.25	3.10	1.92	1.12	2.82	1.36	0.34	
9/26/2017	84.72	83.08	80.79	85.49	83.51	81.17	69.26	66.98	63.13	43.83	40.69	35.82	61.72	51.96	39.01	23.01	18.30	12.70	77.29	65.43	51.95	19.02	16.20	13.40	15	8.24	4.11	1.61	2.87	1.21	0.16	2.94	1.72	0.90	2.60	1.18	0.29	
9/27/2017	84.75	83.05	79.21	85.47	83.48	79.82	69.20	67.06	62.11	44.08	40.81	34.75	62.12	52.07	39.07	22.96	18.42	12.62	77.28	65.66	51.91	18.96	16.20	13.42	21	7.74	3.96	1.33	2.43	1.15	0.13	2.91	1.69	0.90	2.52	1.12	0.18	
9/28/2017	84.94	83.07	79.30	84.90	83.51	80.77	69.19	67.10	63.14	43.86	40.70	35.69	61.85	52.07	39.01	23.07	18.45	12.48	77.29	65.88	52.32	18.98	16.19	13.42	19	7.62	4.00	1.43	2.37	1.15	0.16	2.89	1.70	0.82	2.45	1.15	0.28	
9/29/2017	85.63	83.07	80.60	84.87	83.50	81.07	69.24	67.02	63.09	44.01	40.96	36.39	61.92	49.11	39.10	23.00	18.23	12.29	77.34	66.02	51.89	18.97	17.07	14.34	16	7.38	4.10	0.91	2.58	1.18	0.00	2.59	1.64	0.58	2.36	1.27	0.23	
9/30/2017	85.13	83.06	80.93	85.87	83.48	81.42	69.89	67.09	63.41	45.64	41.00	36.64	62.52	53.24	38.96	22.98	17.80	11.99	77.44	65.56	51.93	21.68	19.09	16.13	24	6.45	3.79	0.88	2.26	1.13	0.00	2.36	1.56	0.60	1.92	1.10	0.22	
MAX	85.90	83.16	81.13	86.22	83.53	81.74	71.80	67.19	64.22	48.47	41.44	36.93	63.14	54.51	39.10	23.07	18.45	12.70	77.76	67.57	54.74	23.19	20.67	18.19		9.017	4.78	2.61	3.15	1.46	0.67	3.850	2.111	1.56	3.093	1.420	0.49	
AVE	84.94	83.09	79.60	85.29	83.48	80.08	69.75	67.04	62.90	44.59	40.79	35.57	61.99	51.96	37.22	23.01	17.99	12.14	77.02</																			

NORTH SHORE WATER COMMISSION
 WHOLESALE WATER SALES
 FOR YEAR: 2017

WHOLESALE INCOME BY COMPONENT
 (Top: JAN-MAR, Bottom: APR-DEC)

FACILITIES CHARGE

FOR 2016 FACILITIES UPKEEP

MONTH	CUSTOMER	KGAL PURCHASED	WHOLESALE RATE (\$/KGAL)	TOTAL VOLUME CHARGE	CONVEYANCE			DISTRIBUTION OF CONVEYANCE CHARGE			\$500 / yr	NSWC REVENUE	AMOUNT BILLED
					\$0.820 / Kgal \$0.832 / Kgal	OPERATING \$ \$0.910 / Kgal \$0.921 / Kgal	\$0.390 / Kgal \$0.390 / Kgal	FOX PT: 0.60	GLEN: 0.20	WFB: 0.20			
JANUARY	Mequon Water	7,169	\$2.120	\$15,198.28	\$5,878.58	\$6,523.79	\$2,795.91	\$1,677.55	\$559.18	\$559.18	\$0.00	\$12,402.37	\$15,198.28
FEBRUARY	Mequon Water	6,118	\$2.120	\$12,970.16	\$5,016.76	\$5,567.38	\$2,386.01	\$1,431.61	\$477.20	\$477.20	\$0.00	\$10,584.15	\$12,970.16
MARCH	Mequon Water	6,885	\$2.120	\$14,596.20	\$5,645.70	\$6,265.35	\$2,685.15	\$1,611.09	\$537.03	\$537.03	\$500.00	\$12,411.05	\$15,096.20
APRIL	Mequon Water	6,127	\$2.143	\$13,130.16	\$5,097.66	\$5,642.97	\$2,389.54	\$1,433.72	\$477.91	\$477.91	\$0.00	\$10,740.62	\$13,130.16
MAY	Mequon Water	6,799	\$2.143	\$14,570.26	\$5,656.77	\$6,261.88	\$2,651.61	\$1,590.97	\$530.32	\$530.32	\$0.00	\$11,918.65	\$14,570.26
JUNE	Mequon Water	8,068	\$2.143	\$17,289.72	\$6,712.58	\$7,430.63	\$3,146.51	\$1,887.91	\$629.30	\$629.30	\$0.00	\$14,143.21	\$17,289.72
JULY	Mequon Water	7,473	\$2.143	\$16,014.64	\$6,217.54	\$6,882.63	\$2,914.46	\$1,748.68	\$582.89	\$582.89	\$0.00	\$13,100.18	\$16,014.64
AUGUST	Mequon Water	8,084	\$2.143	\$17,324.01	\$6,725.89	\$7,445.36	\$3,152.76	\$1,891.66	\$630.55	\$630.55	\$0.00	\$14,171.25	\$17,324.01
SEPTEMBER	Mequon Water	7,633	\$2.143	\$16,357.52	\$6,350.66	\$7,029.99	\$2,976.86	\$1,786.12	\$595.37	\$595.37	\$0.00	\$13,380.66	\$16,357.52
OCTOBER	Mequon Water		\$0.000	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
NOVEMBER	Mequon Water		\$0.000	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DECEMBER	Mequon Water		\$0.000	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
TOTALS		64,356		\$137,450.95	\$53,302.14	\$59,049.98	\$25,098.81	\$15,059.31	\$5,019.75	\$5,019.75	\$500.00	\$112,852.14	\$137,950.95