

Northport Village Corporation

March 23, 2018

Utilities Meeting Minutes

**Attendees:**

Superintendent: Richard McElhaney  
Village Agent: William Paige  
Office Manager: Amy Eldridge

**Utilities Board Members Present:**

Chairman: Dr. David Crofoot  
Wendy Huntoon  
Gordon Fuller

**Visitors:** None

**Meeting Called to order:** At 2:30 pm

**Approval of Minutes:** Wendy H. moved to approve the February minutes, Gordon F. seconded the motion. All in Favor.

**Financials:** David C. went over financials that were provided by Steve K. Dick M. reported that the water budget is significantly in the red because he believes interest on a bond for line 6993 budgeted for February should have been budgeted to be paid in March or April. He also mentioned Water and Sewer were showing negative variances because no incomes from water or sewer sales have yet to be received. Overall Dick M. felt we are where we need to be financially at this time of the year. He reported that the bond for the water line to little river will be paid off in 2018. Dick M. mentioned he spoke with Dirigo to see about a preliminary budget for the proposed water and sewer projects to be completed in the fall of 2019. To start the discussion, he also suggested going to a local bank to take out a 4-5 year loan to finance the proposed water projects and to use sewer reserves to finance the proposed sewer projects.

**Visitor Concerns:** Dick M. mentioned that Gerry Reid sent an email about his December and March billing. Mr. Reid requested that the Utilities department provide an understanding of the billing. The Board discussed the situation and asked Dick M. to write a response letter back to Mr. Reid.

**Report of the Superintendent:**

**Sewer Department**

**January 2017 Effluent Monitoring Data**

The NVC Wastewater Treatment Plant (WTP) was in full compliance with its wastewater discharge license for the month. There were no license exceedances.

Flow averaged 21,181gpd compared to 21,174 gpd in 2017. Daily flow ranged from a low of 1,800 gpd to a high of 168,000 gpd during the month. Precipitation for the month was 8.05" versus 5.06" in 2017.

TSS and BOD<sup>5</sup> averaged 0.9 lbs/day (13.8 mg/l) and 1.8 lbs/day (35.4 mg/l), respectively compared to 2.0 lbs/day (5.7 mg/l) and 5.1 lbs/day (16.4 mg/l) in 2017.

See performance table below for this month's comparisons, averages, year-to-date highs and lows, permit limits, and year-to-date (YTD) exceedances. Testing frequency is continuous for flow, weekly for TSS, BOD<sup>5</sup> and fecal coliform (May thru Sept), daily for pH and settleable solids (S.S.), and twice per day for total residual chlorine (May thru Sept).

## Monthly Performance Table

Parameters	January	December	November	YTD Lo	YTD Hi	YTD Ave	2017 Ave	DEP Monthly Limit	Exceedances
Flow GPD	<b>21,181</b>	7906	3457				<b>12017</b>	<b>&lt;63000</b>	0
Precip Inches	<b>8.05</b>	3.63	2.34				<b>3.33</b>	<b>n/a</b>	0
TSS lbs/day	<b>0.9</b>	1.7	0.6				<b>1.90</b>	<b>&lt;76</b>	0
TSS mg/l	<b>13.8</b>	14.8	28.4				<b>27.0</b>	<b>&lt;145</b>	0
BOD <sup>5</sup> lbs/day	<b>1.8</b>	5.4	1.9				<b>5.34</b>	<b>&lt;107</b>	0
BOD <sup>5</sup> mg/l	<b>35.4</b>	47	80				<b>70.7</b>	<b>&lt;203</b>	0
TSS% Removal	<b>95.3</b>	94.9	90.2				<b>91.3</b>	<b>&gt;50</b>	0
BOD% Removal	<b>87.8</b>	83.9	72.4				<b>75.6</b>	<b>&gt;30</b>	0
pH lo	<b>6.7</b>	6.7	6.8				<b>6.7</b>	<b>&gt;6.0</b>	0
pH Hi	<b>7.0</b>	7.0	7.1				<b>7.0</b>	<b>&lt;9.0</b>	0
S.S. ml/l	<b>&lt;0.1</b>	<0.1	<0.1				<b>&lt;0.1</b>	<b>Report</b>	0
TRC mg/l	<b>na</b>	na	na				<b>0.02</b>	<b>&lt;.052</b>	0
F Col/100 ml	<b>na</b>	na	na				<b>&lt;1</b>	<b>&lt;15-ave</b>	0
F Col/100 ml	<b>na</b>	na	na				<b>&lt;1</b>	<b>&lt;50-max</b>	0

**Note:** The last exceedance for flow was **141 months ago (2/2006)**. The last exceedance for fecal coliform was **64 months ago (8/2012)**. The last exceedance for BOD was **39 months ago (9/2014)**. The record annual average low for flow was 12,017 gpd in 2017.

### February 2018 Snapshot

The NVC WTP is expected to be in full compliance with its license limits in February pending the DEP's completed review of the NVC's discharge monitoring report. Flow averaged 16,921 gpd. The report for precipitation as measured by the Belfast Water District (BWD) at their Little River Station was 3.05 inches.

## Drinking Water Department

### January 2017 Usage and Water Quality

Water consumption for the month averaged 14,739 gpd compared to 15,381 gpd in 2017.

The weekly free chlorine residual in the drinking water ranged from 0.26 - 0.31 ppm/Cl<sup>2</sup> compared to the recommended goal of >.20 to <1.0 ppm/Cl<sup>2</sup>. The EPA maximum concentration level (MCL) not to be exceeded is 4.0 ppm. The monthly total and e-coli water sample test results were negative.

There were two leaks in the water distribution system during the month totaling 142,000 gallons. Losses were billed to the customer since the leaks were found to be on the customer's side of the street shut-off valves.

### February - March Water Leak

Bill Paige located a 15 gpm water leak in the below ground service drop that feeds a 1 Auditorium Park summer cottage from the bottom of Clinton Lane. The 25 day leak that began on February 20 totaled 540,000 gallons before it was found and repaired on March 16.

Two large snow storms and unusually high snow banks during the course of this time span greatly hampered Bill in locating the leak. The cost of the goods sold to the NVC Water Department for water purchased from the Belfast Water District will be about \$1550. The expense of the repair will probably be in the vicinity of \$1,000 - \$2,000.

### Flow Recorder Replacement

The main circuit board, input card and possibly the transformer of the water flow recorder failed on February 19. The recorder, located inside the Belfast Vault, has been in use to monitor daily water purchases from the Belfast Water District (BWD) without interruption for 20 years.

Because of this, the NVC Water Department is seeking approval from the Board of Trustees to spend up to \$7,000 to replace and upgrade the recorder to monitor flow and going forward to include the system's water pressure as well. In addition to purchasing a new 2-pen Honeywell recorder, the Department would need to also purchase a Foxboro in-line water pressure transmitter to provide continuous, real-time monitoring to do this work.

The installation of a water pressure transmitter will enable the NVC staff to better understand and keep a close eye on the potential hydraulic impacts the proposed fish farm operations might have on the NVC's water distribution system. The fish farm's service drop to the BWD water main will be located right next to the NVC's interconnection. Accordingly, their close proximities to one another could cause pressure fluctuations and water quality issues if the farm's water draw was to become too sudden and/or it exceeded the farm's 500 gpm maximum permitted water usage amounts.

Notification of the recorder failure and Industrial Instruments' \$6,582.50 cost estimate to purchase, install and program the upgraded recorder and new pressure transmitter were sent to Board members and others under separate cover for their consideration of this request in advance of this March's Utility Board meeting.

Dick M. provided a recent 7 day flow chart of the sewer to the Board members for viewing. He also provided a comparison flow chart of when high tides / storm surges were happening to give the Board members a better understanding of false positives that can happen. David C. asked that Dick M. right up a brief report for the March report.

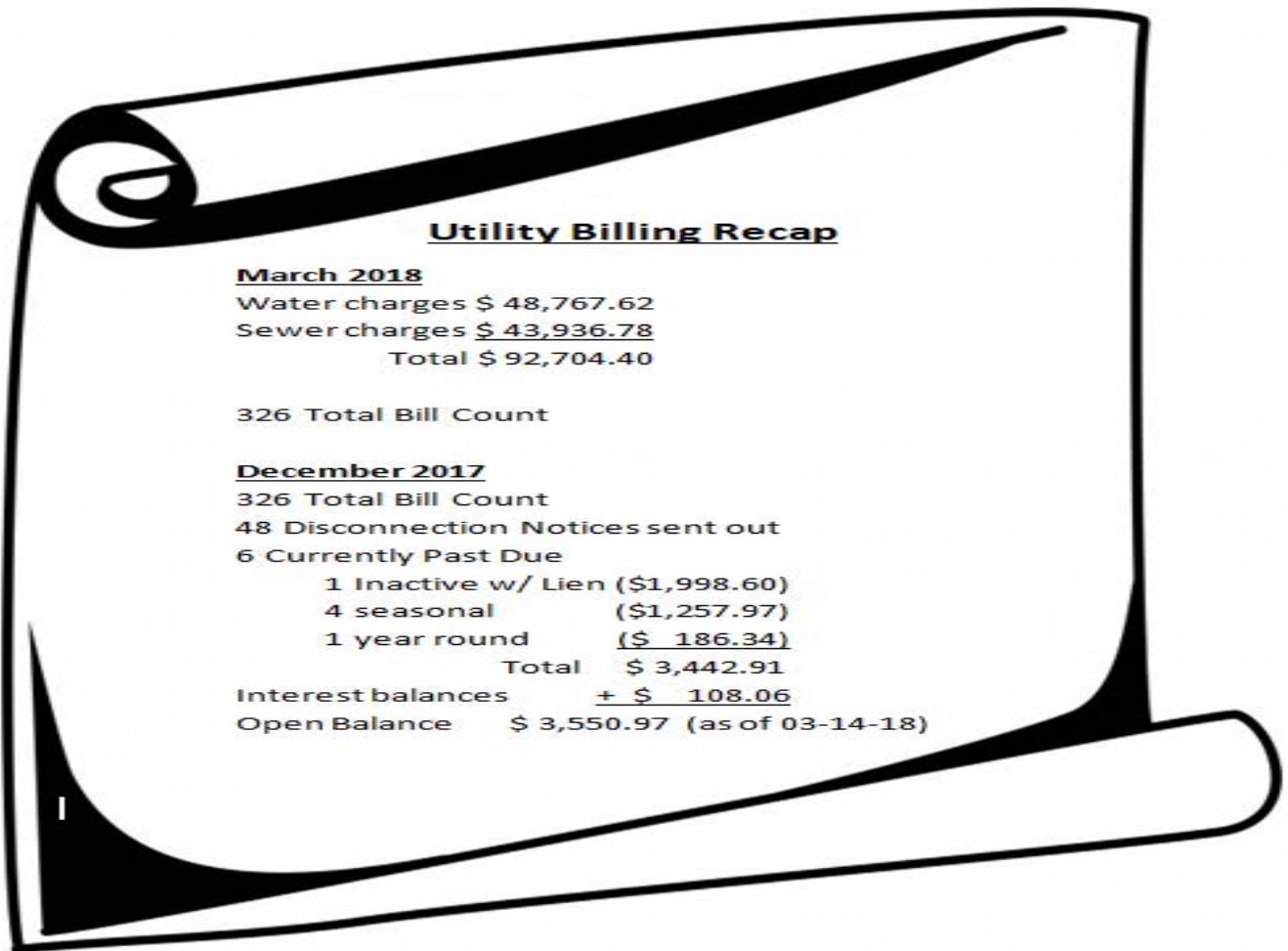
Keith Pooler the superintendent from Belfast Water District was hoping to be here today but was unable to attend due to previous obligations. David C. would like Dick M. to schedule Keith to come to the next meeting in April for a Q & A.

The utility Department is hoping the water leak season is over. Dick M. showed the Board the water line with the shut off valve from lower Clinton Ave. down to Auditorium Park which was the most recent water leak. The 540,000 gallons of water lost and supplies to repair the leak cost the Utility Department approximately \$ 2,700.00. He also showed a cracked meter from 5 North St. that caused a 36,000 gallon leak which was charged to the customer and lastly a meter which involved a 106,000 leak which was at 84 Bayside Road where the break was after the customer's meter and accordingly, was metered.

Wendy H. asked if the Utilities Department needed to ratify the purchase of the new water flow recorder. Wendy H. moved to ratify the purchase of the flow recorder at the vault up to \$7,000. Seconded by David C. All in Favor.

**Discussions:** Dick M. reported there has been no additional information provided from the EPA on the Sewer Department 301- waiver application from the secondary treatment requirement. Upon the request from David C., Dick M. will reach out to Stevens Pump and Electric again about maintenance on the pumps.

Amy E. provided the following Utility Billing recap to the board.



Next meeting is April 13th at 2:30 in the Community Hall conference room.

**Meeting Adjourned:** adjourned at 3:48 pm