

# NVC UTILITIES MEETING

## MINUTES

November 6, 2015

**Present:** Committee members: Steve Flowers, Judy Metcalf by phone, Denis Wang; Office Manager Paul Bartels; Superintendent Richard McElhaney, William Paige, D.O.

Denis Wang called the meeting to order at 2:30 PM.

### Minutes

Judy Metcalf moved to accept the revised minutes of the October meeting, seconded by Denis Wang – **Voted and approved.**

### 2016 Budgets:

Dick McElhaney reviewed the proposed budgets for water and sewer and pointed out that there will be a line item for Nitrate testing which is new this year. (See Superintendent's Report below for a more thorough discussion of the variances of this budget from the earlier draft and from the budget adopted for 2015)

Judy Metcalf moved to recommend the water and sewer budget to the Overseers for their approval, seconded by Denis Wang – **Voted, motion carried.**

He also reported that the Tidewater Level Transmitter was damaged during the major rain event experienced at the sewer plant. He said he will attempted to fix it but it's a solid state device and probably non-repairable. A new one will cost about \$1,000. Dick reported that if it can't be repaired we will need to buy a new one because it provides very useful data. The budget just recommended has sufficient money in it to absorb this probable expense.

### Bay Street Sewer Repairs:

Dick McElhaney discussed the Bay Street sewer project and pointed out that it was a good candidate for a pipe bursting application (trenchless removal of vitreous pipe) but recommended that the project be a separate project from Maple Street which is now attached to it. This technology had been used by the village before successfully when the sewer was replaced down Lower Maple Street to the Yacht Club building. (See Superintendent's Report below for a more thorough discussion of this project)

Steve Flowers moved to recommend to the Overseers that the two projects be "decoupled" from each other – **Voted, motion carried.**

### Financials:

Steve Kazilionis had earlier circulated the financials. The Trustees reported that, consistent with Steve's written report, all looked as though the spending and income was on track with the budget for 2015 in both utilities.

**SUPERINTENDENT'S REPORT  
NORTHPORT VILLAGE CORPORATION - UTILITIES DEPARTMENT**

November 6, 2015

**Sewer Department**

**September 2015 Effluent Monitoring Data**

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

September flow averaged 15,533 gpd compared to 15,300 gpd in 2014. Daily flow ranged from a low of 5,300 gpd to a high day of 235,000 gpd (8.65" of rain) during the month. Precipitation for the month was 11.83" versus 1.50" in 2014.

TSS and BOD<sup>5</sup> averaged 15.1lbs/day (39.2 mg/l) and 24.9lbs/day (113.4 mg/l), respectively compared to 0.9lbs/day (24 mg/l) and 11.3lbs/day (292 mg/l) in September of 2014.

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 (ss), and twice per day for total residual chlorine (May thru Sept).

**Monthly Performance Table**

Parameters	September	August	YTD Lo	YTD Hi	YTD Ave	2014 Ave	DEP Monthly Limit	Exceedances
Flow GPD	<b>15533</b>	15226	2618	34,940	<b>14953</b>	16113	< <b>63000</b>	0
Precip Inches	<b>11.83</b>	1.98	1.29	11.83	<b>3.63</b>	4.7	n/a	0
TSS lbs/day	<b>15.1</b>	6.9	0.3	15.1	<b>3.8</b>	2.43	< <b>76</b>	0
TSS mg/l	<b>39.2</b>	55	9.7	55.0	<b>30.6</b>	22.7	< <b>145</b>	0
BOD <sup>5</sup> lbs/day	<b>24.9</b>	20.3	1.6	24.9	<b>9.6</b>	8.8	< <b>107</b>	0
BOD <sup>5</sup> mg/l	<b>113.4</b>	160	16.2	195	<b>115.3</b>	95.6	< <b>203</b>	0
TSS% Removal	<b>86.5</b>	81.0	81.1	95.3	<b>89.4</b>	92.2	> <b>50</b>	0
BOD% Removal	<b>60.9</b>	44.8	32.8	94.4	<b>60.2</b>	67.6	> <b>30</b>	0
pH lo	<b>6.8</b>	6.8	6.8	7.0	<b>6.94</b>	6.95	> <b>6.0</b>	0
pH Hi	<b>7.1</b>	7.2	7.2	7.3	<b>7.19</b>	7.23	< <b>9.0</b>	0
S.S. ml/l	<b>0.1</b>	0.15	<0.1	0.15	< <b>0.1</b>	<0.1	<b>Report</b>	0
TRC mg/l	<b>.02</b>	.02	.02	.02	<b>.02</b>	0.02	< <b>.052</b>	0
F Col/100 ml	< <b>1</b>	<1	<1	<3.16	<1..26	<1	< <b>15-ave</b>	0
F Col/100 ml	< <b>1</b>	<1	<1	<10	<1.58	<1	< <b>50-max</b>	0

**Note:** The last exceedance for flow was **114 months ago (2/2006)**. The last exceedance for fecal coliform was **35 months ago (8/2012)**. The last exceedance for BOD was **12 months ago (9/2014)**.

**October 2015 Snapshot**

The NVC WTP was in full compliance with its license limits in October pending the DEP's completed review of the NVC's discharge monitoring report. Flow during the month averaged about 13,000 gpd. The report for precipitation as measured by the Belfast Water District (BWD) at the Little River Station was about 3-4 inches.

#### Maple Street Sewer Main Replacement Project

After reviewing a request from the Superintendent, Dirigo Engineering has agreed to reduce the length of the replacement sewer main on Maple Street needing replacement from about 415 linear feet to 305 feet and the number of new manholes from 3 to 2. These changes have effectively reduced the preliminary engineering project cost estimate to replace the Maple Street sewer main from about \$53,000 to \$41,000.

#### Bay Street Sewer Main Replacement Project

Following a walk along Bay Street that included the Superintendent, Bill Paige and Aaron Dyer of Dirigo Engineering, it was decided that it would be more appropriate to use a trenchless technology to replace the roughly 170 feet of sewer main between MH 2010 and MH 2015 rather than using the conventional trenching method. This recommendation, after confirming manhole elevations and a desire to save a mature tree next to the manhole at Rosenblum's, will immediately save the Sewer Department the cost of engineering.

Accordingly, Ted Berry, Inc. of Livermore Falls, has been contacted for a price estimate to pull a new HDPE sewer main through the existing clay pipe from manhole to manhole using a pipe bursting technique. This same procedure was used successfully to replace the sewer main from MH 2010 to the Yacht Club several years ago. This process should also be less expensive than the \$20,000 estimate for conventional trenching as the restoration costs typically are significantly lower. It is possible that the aforementioned above reduction/savings in costs from the Maple Street sewer project may very well pay for the lion's share, if not all, of the cost to replace the Bay Street sewer main.

The Department will try to coordinate the timing of the Bay Street project with Northport's Road Commissioner, Amon Morse just ahead of the town's plan to rework and repave Bay Street in the fall of 2016.

The Sewer Department, therefore asks the Board to withdraw its prior approval to include the Bay Street sewer replacement work as a part of the engineering project for Maple Street and approve the Bay Street sewer replacement work as a stand-alone job.

### **Drinking Water**

#### September 2015 Usage and Water Quality

Water consumption during September averaged 29,253 gpd compared to 26,502 in 2014. No leaks were reported.

The average weekly chlorine residual in the drinking water was .11 ppm/Cl<sup>2</sup> compared to the recommended goal of >.20 to <1.0 ppm/Cl<sup>2</sup>. The EPA MCL is 4.0 ppm.

The monthly coliform water sample test result was negative.

### **Proposed Utility Budgets for 2016**

The 1<sup>st</sup> draft of the proposed water and sewer budgets for the 2016 fiscal year was sent to Board members under separate cover for their review at their October meeting. Included under separate cover with today's November report is a 2<sup>nd</sup> or revised draft of the 2016 proposed budgets for their further review.

The **edited in red** changes in the second draft of the water and sewer budgets were made to more closely reflect the real cost of the updated Utility and NVC employee benefit package as were expertly outlined by the NVC Treasurer in his October 18 electronic message to Board members.

Treasurer, Steve Kazilionis estimates the extra employee benefit package for 2016 will be closer to \$1300 annually for the two utilities rather than the \$4,000 figured into the first drafted budgets. Accordingly, in addition to changes to the water and sewer line item accounts for "employee benefits", changes to the default line item accounts in the water budget for the "sinking fund" and in the sewer budget for the "repair mains" were also adjusted in order to maintain the goal of balance incoming revenues with outgoing expenses.

Next Meeting date set for December 11, 2015 @ 2:30 PM

**Voted to adjourn at 3:10 PM**