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February 14, 2011

Township Supervisor  
12050 Old Belding Road  
Belding, MI 48809-9318

***Grattan Township and Grattan/Vergennes Sewer Systems***  
**January 2011 Monthly Operations Report**

Dear Frank,

The final electrical and mechanical capital improvement projects are currently being completed according to the prioritized Assessment of Facilities report. A final list of proposed projects will be available soon.

As always I would be happy to elaborate on any of the submitted information or provide any additional information that would assist the township board. Please do not hesitate in contacting me.

Sincerely,



John Rydbeck  
(616) 890-5768  
Infrastructure Alternatives - Grattan Township Sewer System Operations Manger

Attachments: Requested Purchase Orders

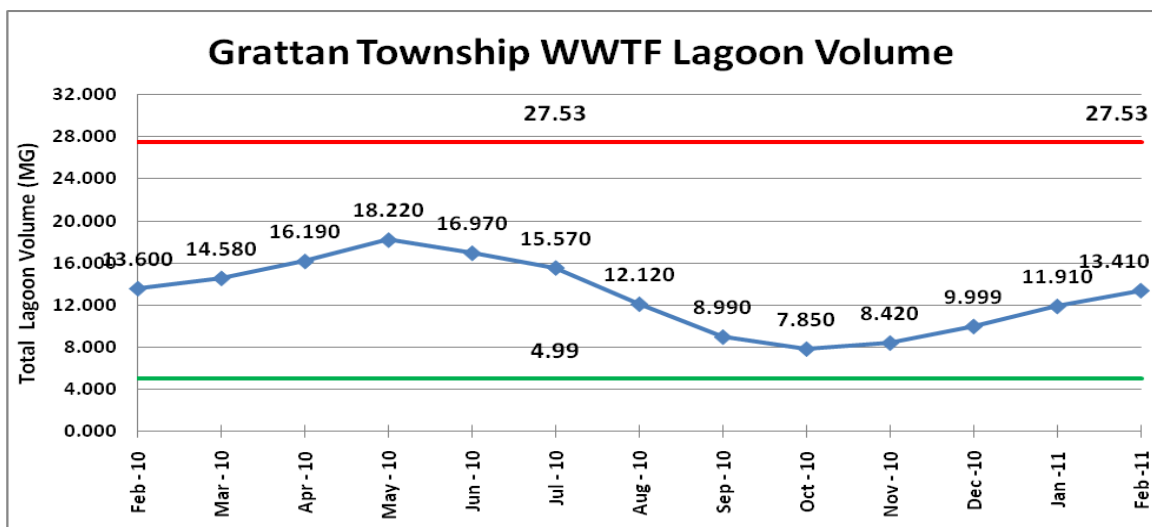
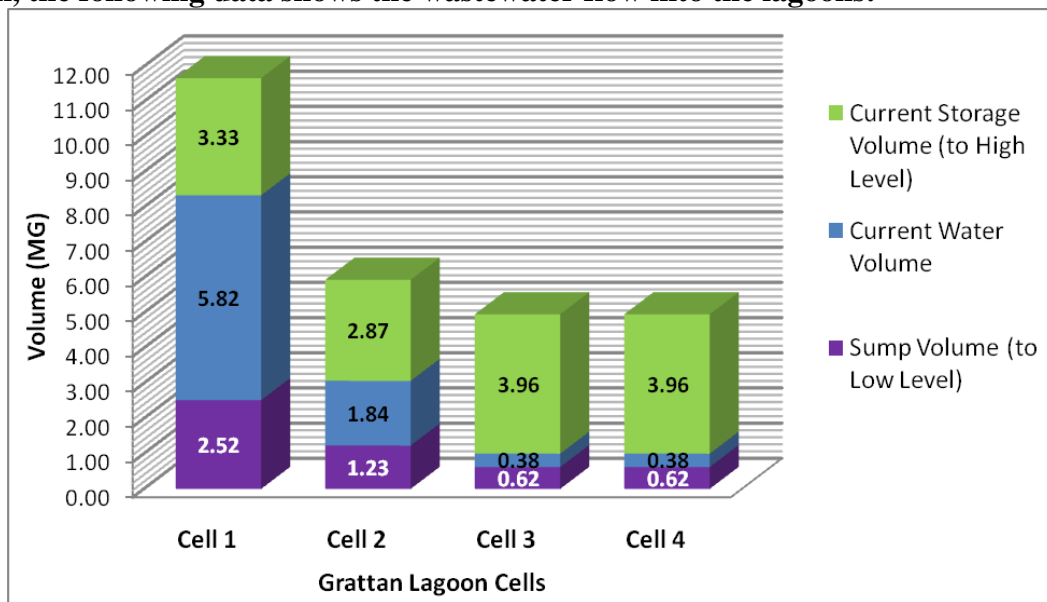
## Grattan Township Wastewater System

### Executive Summary:

The monthly CMR for January 2011 is currently being prepared for submission to the DNRE. The wastewater influent flow for the month of January was 0.892MG, with an additional 0.042MG from rainfall<sup>1</sup> (calculated from 1.31" rainfall over ~280,000ft<sup>2</sup> lagoon surface areas). The following shows the relationship of these variables:

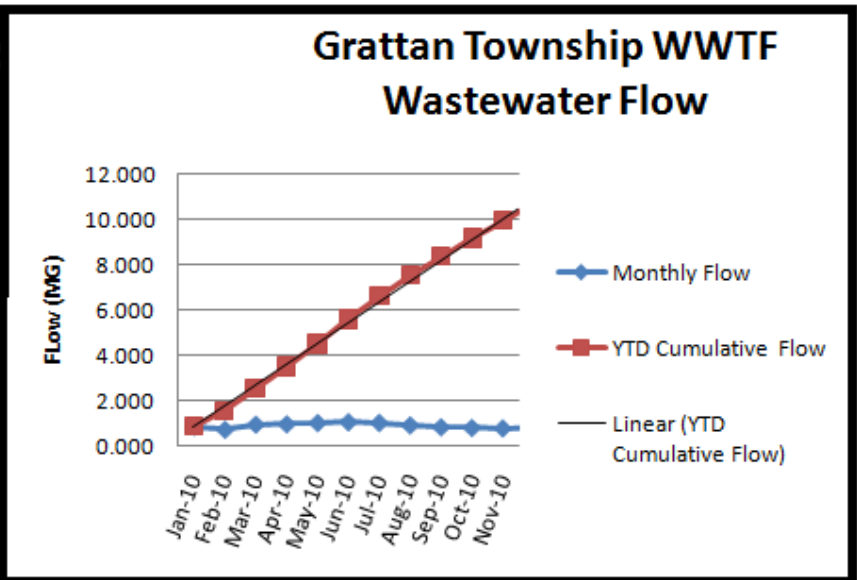
$$1.50+MG \text{ (Tot. Lag. Dec.)} = 0.892MG \text{ (Inf.)} + 0.031MG \text{ (Rain)} - 0.000MG \text{ (Irr.)} + 0.577MG \text{ (Ice/snow)}$$

In addition, the following data shows the wastewater flow into the lagoons:



<sup>1</sup> Rainfall data taken from the National Weather Service Kent County Airport Station

Grattan Township WWTF Wastewater Flow		
Month/Year	Monthly Flow	YTD Cumulative Flow
Jan-10	0.853	0.853
Feb-10	0.713	1.566
Mar-10	0.955	2.521
Apr-10	0.964	3.486
May-10	1.023	4.509
Jun-10	1.060	5.569
Jul-10	1.031	6.600
Aug-10	0.916	7.516
Sep-10	0.832	8.348
Oct-10	0.799	9.147
Nov-10	0.782	9.929
Dec-10	0.822	10.751
Jan-11	0.892	11.643
	2010 Storage Season	
	2010 Irrigation Season	
	2011 Storage Season	



**Emergency Call-Outs:**

- Sunday January 23, 2011 PHASE LOSS ALARM 6:00 a.m. BPI-PS#3, BPI-PS#3a, BPI-PS#5: IAI On-call operator Bob Stephens received phase loss alarms from the stations mission and Sensaphone dialers. After arriving on-site it was found that the frigid weather was causing the power monitors to read a phase loss. An adjustment was made on the power monitor’s tolerance to allow the pumps to function.

**General Operation Information / Housekeeping:**

- None

**Preventative Maintenance:**

- The preventative maintenance tasks have been completed for January 2011 and available for review upon request.

**Corrective Action / Significant Tasks Completed:**

- Addition of redundant high level floats to BPI-PS#1, BPI-PS#2, BPI-PS#3, BPI-PS#3a, BPI-PS#5 have been completed.

**Pending Projects:**

- New Influent [magnetic] flow meter at BPI-PS #1 to monitor influent flow and log to Mission dialer.
- Replace Grattan WWTF discharge flow [propeller] flow meter at the DNRE’s request and replace with a magnetic flow meter to log daily/hourly flow to the Mission dialer.
- Install a rainfall tipping bucket at the Grattan WWTF to monitor daily/hourly rainfall at the site and establish alarm notification through the Mission dialer. The irrigation system will have the ability to be remotely disabled after receiving alarm notifications of a rainfall event.
- The replacement of control panels according to the prioritized list obtained from the Assessment of Facilities report.

## Grattan/Vergennes Township Wastewater System

**Executive Summary:** There was no monitoring or discharge during the month of January. There was no construction on irrigation upgrade project. The CMR for January 2011 is being prepared for submission.

### **Emergency Call-Outs:**

- Friday January 14, 2011 ML PS #10: The Mission Dialer pump runtime variance report stated that pump #2 had no runtime indicating a problem with the pump. IAI operators Russ Johnson and Robert Carlstrom arrived on-site to pull and then unplug the pump.
- Sunday January 16, 2011 1:30a.m. ML PS#3 LAG/HIGH LEVEL ALARM: IAI on-call operator, Robert Carlstrom, received a from the pump station Sensaphone dialer. Robert traced down a bad float and replaced it. No sewer overflow occurred during this event.
- Saturday January 22, 2011 ML PS#11: IAI On-call operator, Bob Stephens, received High Level Alarm from the pump stations mission dialer. Upon arriving on-site it was found that both pumps were plugged. The pumps were pulled and unplugged. Shop towels were the cause of the plug. No sewer over flow occurred from this event.
- Wednesday January 26, 2011 1:00p.m. BCL PS#14 HIGH LEVEL ALARM: IAI on-call operator, Robert Carlstrom, received alarm call from the pump station's mission dialer. Robert arrived on-site to find pump#2 was tripped out. The stations pump alternator by-pass was turned on. IAI operators Robert Carlstrom and Russ Johnson pulled and unclogged the pump on Thursday January 27, 2010. No sewer overflow occurred from this event.

### **General Operation Information / Housekeeping:**

- The construction permit for the irrigation upgrade is currently being reviewed by the MDNRE. Funding and presenting construction bids will formally begin after a construction permit is issued.

### **Preventative Maintenance:**

- The preventative maintenance tasks have been completed for January 2011 and the report is available upon request.

### **Corrective Action / Significant Tasks Completed:**

- Addition of redundant high level floats to BCL-PS#1, ML-PS#2, ML-PS#3, ML-PS#4, ML-PS#5, ML-PS#6, ML-PS#7, ML-PS#8, ML-PS#8a, ML-PS#9, ML-PS#10, ML-PS#12, ML-PS#13, BCL-PS#14, RL-PS#15, RL-PS#16, BCL-PS#17 has been completed.
- Circuit breakers on the new portable generator have been replaced with circuit breakers that meet electrical code for the gauge wire of the generator cords.

### **Pending Projects:**

- A new influent [magnetic] flow meter at BCL-PS #1 for influent monitoring.
- Grattan/Vergennes WWTF irrigation upgrade.
- The replacement of control panels according to the prioritized project list from the Assessment of Facilities Report.
- New pump mounts installed at BCL-PS #1 and ML-PS 6.
- A spare parts inventory is being generated.