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July 11, 2011

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

Grattan Township and Grattan/Vergennes Sewer Systems
June 2011 Monthly Operations Report

Dear Frank,

The electrical and mechanical capital improvement projects have begun. The replacement of the Grattan WWTF discharge flow meter at the DNRE's request and installation of a rainfall-tipping bucket with Mission dialer telemetry has been completed. The site clearing from the irrigation upgrade has entered its first stage.

The initial inquiry into the Grattan WWTF under drains repair/replacement is currently in process.

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:

Grattan Township Wastewater System

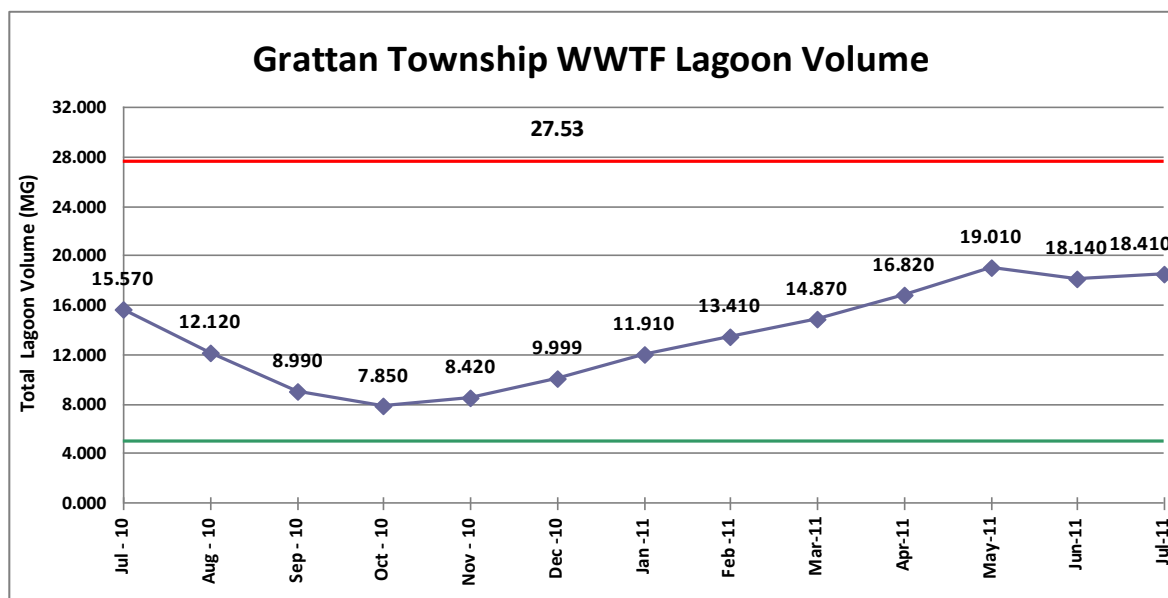
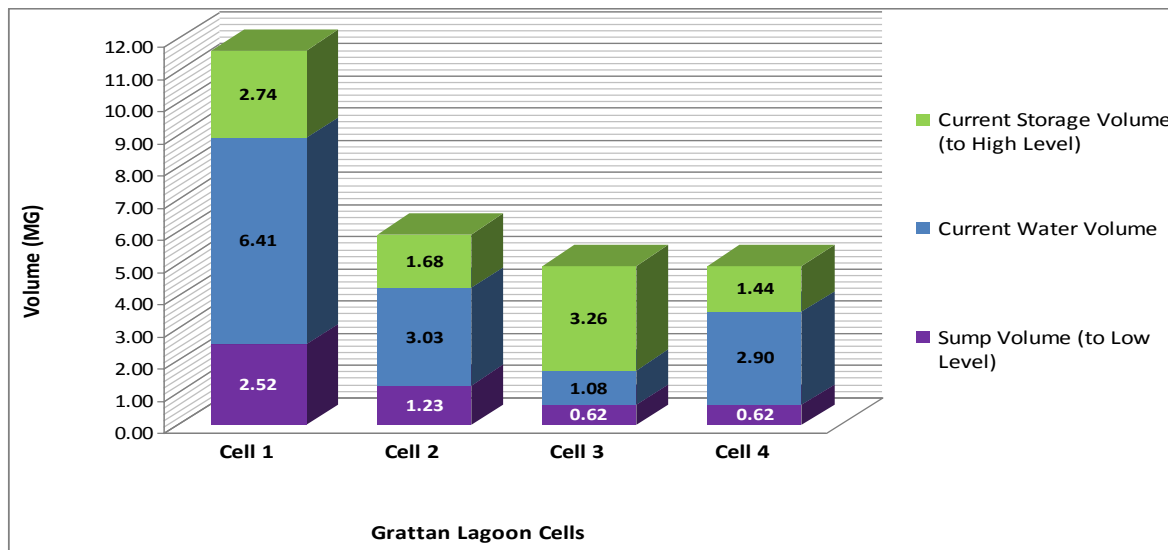
Executive Summary:

The monthly CMR for June 2011 is currently being prepared for submission to the DNRE. There was 1.731MG discharged throughout the month of June. The wastewater influent flow for the month of June was 1.302MG. The Grattan WWTF total lagoon volume had an increase of 0.27MG over the month of June. This increase was due to the number of days either no or partial irrigation allowable because of the farmer's request or rainfall.

- There were 10 days of rainfall that affected the irrigation application rate (total of 3.34" for June)
- The farmer requested 6 days of no irrigation to dry the field for crop planting and 6 days with partial application rates until the soybeans had sprouted.
- This left a total of 8 full days of irrigation for the month of June.

The following shows the relationship of these variables (which now combines the net rainfall and evaporation):

$$0.270\text{MG (Tot. Lag. Inc.)} = 1.302\text{MG (Inf.)} - 1.731\text{MG (Irr.)} + 0.699\text{MG (Net Precip/Evap)}$$



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Emergency Call-Outs:

- None

Preventative Maintenance:

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

Corrective Action / Significant Tasks Completed:

- Wednesday June 8, 2011: Grandtech, Inc completed the installation of the new flow meter and rainfall-tipping bucket at the Grattan WWTF. The tipping bucket has been connected to the Mission alarm telemetry system to notify operators of any rain events to remotely disable the irrigation system.
- Wednesday June 8, 2011: the field at the Grattan WWTF was plated with soybeans.
- On Wednesday June 29, 2011: IAI operator Chris Chambers took apart and cleaned the air release valve on the effluent pipe entering the irrigation field at the Grattan WWTF.
- IAI Operator, Chris Chambers found BPI-PS#5 pump #1 tripped out during routine lift station checks. On Thursday June 30, 2011 IAI staff Russ Johnson and Chris Chambers pulled the pump through troubleshooting it was determined that the windings in the pump were the problem. The pump was dropped off at Fixall Electric for repair on 6/30/2011.

Pending Projects:

- New Influent [magnetic] flow meter at BPI-PS #1 to monitor influent flow and log to Mission dialer.
- 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 9.26MG discharged during the month of June. The wastewater influent flow for the month of June was 2.047MG. The CMR for June 2011 is being prepared for submission.

Emergency Call-Outs:

- Wednesday June 1, 2011 6:30p.m-8:00p.m. ML-GPS#17 HIGH LEVEL ALARM: IAI on-call operator, Robert Carlstrom, received call from the call service. Robert arrived on-site and found the pump station functioning properly but the high level light was on. The high level float was adjusted on 6/6/2011 solving the problem. No sewer overflow occurred from this event.
- Wednesday June 8, 2011 8:30 p.m.-10:30p.m. ML-PS#9 ALARM LIGHT ON: IAI operator Chris Chambers, received a call from the call service about the light being on. Chris arrived on-site to find the pump station was operating properly. The next the station was checked out by IAI staff Robert Carlstrom and Chris Chambers, it was found that the station was intermittently running on only the low level float. Grandtech Inc was called in to help with the troubleshooting of the panel. The lag float was found to bad and was replaced promptly. No sanitary sewer overflow occurred from this event.
- Thursday June 9, 2011 12:20 a.m.-4:20 a.m. ML-PS #12 LOW LEVEL ALARM: IAI operators Bob Stephens and Chris Chambers responded to the Alarms from the stations sensephone dialer. Upon arriving on-site it was found that the low level float was on top of pump #1 and tangled up in the other float wires. The float was untangled and moved from the pump solving the condition. The pump station was observed to verify that it was functioning properly. No sanitary sewer overflow occurred from this event.
- Sunday June 19, 2011 9:30 p.m.-11:30p.m. ML-PS#9 LAG LEVEL ALARM: IAI operator, Bob Stephens, received the call from the station's Sensephone dialer. Bob arrived on-site finding the station was functioning properly. The lag/high level float was adjusted to avoid false alarms. No sanitary sewer overflow occurred from this event.
- Tuesday June 21/22, 2011 7:00 p.m. – 4:00 a.m. BCL-1, ML-2, ML-3, ML-5, ML-6, ML-7, ML-8, ML-8A, ML-9, ML-11, ML-12, ML-13, ML-14, 5MILE-15, BCL-17. POWER OUTAGE: IAI operators Robert Carlstrom and Chris Chambers received the power outage alarms from the stations' respective alarm dialers. Both operators, in addition to Mike Lillie of IAI, provided station level, controls inspection, and standby power to all stations for all stations. The "old green" generator was unable to provide power which later was determined to be caused by a loose power wire in the cord receptacle. Tom Powers of Rockford Electrical was on-site from 12:00 a.m. – 2:30 a.m. to assist with electrical controls troubleshooting and repair of 5MILE-PS #15. Plummer's Environmental provided standby pumping for 5MILE-PS #15 during the electrical controls repair. Following the power restore at 4:00 a.m., ML-PS #8 still had its controls configured for stand-by power. The inability for the pump station to resume from normal power resulted in a small sewer back-up in the residence of the closest home to the station. The affected area in the home was properly cleaned and sanitized to meet the satisfaction of the homeowner. In the future, a comprehensive checklist has been created for follow-up personnel to prevent issues created during severe weather and extensive power outages (see attached form).

General Operation Information / Housekeeping:

- The clearing of the irrigation site at the Grattan-Vergennes WWTF has begun. In the month of June, zone 4 and 5 of the irrigation field were cleared and zone 2 was started. On June 27, 2011 the equipment for the center pivot irrigation unit were delivered.

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Preventative Maintenance:

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

Corrective Action / Significant Tasks Completed:

- The new pump mounts for BCL-PS#1 were replaced by Grandtech Inc on Wednesday June 22, 2011
- The new pump mounts for ML-PS#6 were replaced by Grandtech Inc on Thursday June 23, 2011
- During routine lift station checks it was found that the overloads on pump#2 at BCL-PS#17 was tripped out. On Friday June 24, 2011 IAI staff Robert Carlstrom and Chris Chambers pulled and unplugged the pump.

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.