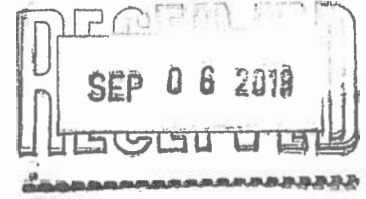


11672

**From:** Rebecca Marshall <RMarshall@ocwa.com>  
**Sent:** Thursday, September 6, 2018 11:40 AM  
**To:** craig.d; Roxanne St. Germain  
**Cc:** Victor Legault; Yvan Rondeau; Rebecca Marshall  
**Subject:** Temagami Operations Report - 2018 2nd Quarter  
**Attachments:** Temagami Operations Report 2018 2ndQ.pdf



Good Morning,

Please find attached: the second quarter Operations Report for the Temagami water and wastewater systems.

Regards,  
**Rebecca Marshall** | Process and Compliance Technician | North Eastern Ontario Hub | Ontario Clean Water Agency | Tel: 705-648-4267 | Fax: 705-567-7974 | Email: [rmarshall@ocwa.com](mailto:rmarshall@ocwa.com)

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- Public Wks  S  C
- PPP
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## Temagami North & South Water & Wastewater Systems

### SYSTEM HIGHLIGHTS

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- All preventative maintenance completed as per the work management system
- Regular weekly microbiological and quarterly chemical testing completed – no exceedances
- Municipal Sewage Reporting and Wastewater Systems Effluent Regulation reporting completed for the first quarter of 2018

### 2018 CAPITAL WORK & PROGRESS

---

- Temagami South WTP Generator – In Progress
- Temagami South WTP – Replaced faulty dialer
- Temagami North WTP – Intake Inspection completed (CWWF)
- Chemical tank level transmitters have been installed at both of the water plants
- Pressure Relief Valve servicing for both water plants is ongoing

Temagami North WTP	
Proposed Expenditure from the 2018 Capital Letter	Status
The clear wells should be inspected and if required cleaned	Waiting for Response
A submersible pump is required to supply water pressure and flow to the plant in order for it to operate when the high lift pumps are unavailable	Waiting for Response
The emergency generator should be load tested.	Waiting for Response
Chlorination system should be installed at the tower	Waiting for Response
The turbidity meters need to be replaced. The current meters are failing. Process pH will be added at the same time	Waiting for Response
The pH adjustment for the distribution water should be relocated and a pH meter installed.	Waiting for Response
Chemical pump parts	Waiting for Response
Soda Ash pumps	Waiting for Response
Generator Water Treatment/Pump Station – Annual Service	Waiting for Response
Painting of Floors	Waiting for Response
Repairing doors	Waiting for Response
Insulating of the Plant	Waiting for Response
SCADA programming repair	Waiting for Response
DWQMS External Audit	Completed

<b>Temagami North Lagoon</b>	
<b>Proposed Expenditure from Capital Letter</b>	<b>Status</b>
Generator at Spruce Drive Pump Station – Annual Service	Waiting for Response
Spruce Drive Pumping station clean out	Waiting for Response

<b>Temagami South WTP</b>	
<b>Proposed Expenditure from Capital Letter</b>	<b>Status</b>
Computer and Printer	Completed
The pH adjusted for the distribution water should be relocated and a pH meter added.	Waiting for Response
Chemical pump parts	Waiting for Response
DR3900 Spectrophotometer	Waiting for Response
Painting of Floors	Waiting for Response
Repairing doors	Waiting for Response
Insulating of the Plant	Waiting for Response
DWQMS External Audit	Completed

<b>Temagami South Lagoon</b>	
<b>Proposed Expenditure from Capital Letter</b>	<b>Status</b>
Sludge needs to be removed from the sewage lagoon.	CWWF - Ongoing
Chemical tank valves and piping renewal	Waiting for Response
Ferric tank clean out	Waiting for Response

**QUALITY & ENVIRONMENTAL MANAGEMENT SYSTEM (QEMS) PROGRESS**

- The Operational Plan is in the process of being updated to reflect the recent revision of the Drinking Water Quality Management Standard to Version 2.0 and corporate changes.
- The third party re-accreditation audit was conducted by SAI Global on May 18 and June 8. The off-site desk top portion was completed first and then there was an on-site visit by the auditor. One Minor Non-Conformance was identified due to calibration standards being expired but this has been resolved and all expired chemicals and reagents have been disposed of and operators have been instructed to check expiration dates every time a chemical or reagent is used and dispose if expired. Several Opportunities for Improvement were also noted and these will be considered during the current revision of the Operational Plan.

## MOECC INSPECTIONS & FINDINGS

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- There were no inspections during the quarter.

## HEALTH & SAFETY

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- The monthly Health and Safety inspections were completed.
- Training Topics: Heat Stress, Near Miss Reporting, Respiratory Protection

## INCIDENTS & COMPLAINTS

---

### Temagami North WTP

- On February 10 there was a category 1 watermain break at Hydrant #13 on Birch Crescent. The valve to the hydrant was turned off right away and there was no suspected contamination. No reporting required.

### Temagami South WTP

- March 14 - 16 there was an adverse water quality incident (AWQI #138928) due to loss of coagulant. The alum pump was accidentally paused and did not run when called for by the PLC so on every second cycle of the plant there was no coagulant added. The pump was paused from March 14 at 11:30 to March 16 at 14:30. Operational parameters started shifting so the operator knew there was a problem and investigated to find that the pump was paused. CT was met during the time the coagulant was not being added. Two sets of samples were taken in the distribution system, 24 hours apart and results were zero for E.coli and total coliforms. Operators are looking into alarming the pumps but if that cannot be done a visual check of chemical pumps will be added to the rounds sheet.

### Temagami South Lagoon

- The seasonal average concentration of TSS exceeded the limit of 25 mg/L with a result of 33 mg/L and the seasonal loading limit of 71.9 kg was exceeded with a result of 75.6 kg. The Ministry of the Environment was notified as per the ECA. The exceedances are likely due to the sludge build up in the lagoon.

## CALL-BACK SUMMARY

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System	Call-Backs this Quarter	Total Call-Backs to Date
Temagami North WTP	3	7
Temagami North Lagoon	5	9
Temagami South WTP	2	13
Temagami South Lagoon	0	2
Total	10	31

Please see Appendix A for Call-Back details

**DRINKING WATER SYSTEM PERFORMANCE SUMMARY**

Temagami North Drinking Water System		April	May	June	Compliance
Maximum Daily Raw Flow Volume (m <sup>3</sup> /d)		216	248	295	Max 460
Maximum Peak Raw Flow Rate (L/min)		383	390	413	Max 456
Maximum Treated Flow (m <sup>3</sup> /d)		194	214	288	Max 328
Total Treated Flow (m <sup>3</sup> /d)		4263	4468	4728	-
Free Chlorine Residual from analyzer (mg/L)		0.95 to 2.03	1.15 to 1.56	0.93 to 1.70	Min 0.85
Distribution Chlorine Residual (mg/L)		0.27 to 1.56	0.20 to 1.52	0.24 to 1.48	Min 0.05
Percent of time turbidity was below 0.3 NTU	Filter 1	100	100	100	Min 95%
	Filter 2	100	100	100	

Temagami South Drinking Water System		April	May	June	Compliance
Maximum Daily Raw Flow Volume (m <sup>3</sup> /d)		247	263	413	Max 1,005
Maximum Peak Raw Flow Rate (L/min)		578	598	665	Max 700
Maximum Treated Flow (m <sup>3</sup> /d)		215	212	418	Max 950
Total Treated Flow (m <sup>3</sup> /d)		5730	5057	5777	-
Free Chlorine Residual from analyzer (mg/L)		1.10 to 1.57	1.39 to 1.73	0.96* to 1.78	Min 1.00
Distribution Chlorine Residual (mg/L)		0.69 to 1.36	0.77 to 1.78	0.66 to 1.45	Min 0.05
Percent of time turbidity was below 0.3 NTU (filter 2)		100	100	100	Min 95%

\*low chlorine – CT calculation completed and CT met

**WASTE WATER TREATMENT SYSTEM PERFORMANCE SUMMARY**

Temagami North Lagoon	April	May	June	Compliance (ECA)
<b>AS PER THE ENVIRONMENTAL CERTIFICATE OF APPROVAL</b>				
Average Daily Flow - Influent (m <sup>3</sup> /day)	390	466	212	Max 390 ( <i>annual average</i> )
Max Daily Flow (m <sup>3</sup> /day)	1,016	1,314*	265	Max 1,200/day
Total Volume Treated (m <sup>3</sup> )	11,696	17,525	6,359	-
cBOD <sub>5</sub>	2.7	3	3	25 mg/L ( <i>annual average</i> )
Total Suspended Solids	2	3	1.5	25 mg/L ( <i>annual average</i> )
Total Phosphorous	0.13	0.114	0.069	1.0 mg/L ( <i>annual average</i> )
(Ammonia + Ammonium) Nitrogen	2.9	1.43	0.373	-
pH	7.4 to 7.6	7.7 to 8.7	7.6 to 8	6.0 to 9.5 (inclusive)
<i>Escherichia coli</i> ( <i>E. coli</i> ) (cfu/100mL)	135	20	5	Geometric Mean of 200 ( <i>objective</i> )
<b>AS PER WASTEWATER SYSTEM EFFLUENT REGULATIONS (WSER)</b>				
cBOD <sub>5</sub>	2.7	3	3	25 mg/L ( <i>quarterly average</i> )
Total Suspended Solids	2	3	1.5	25 mg/L ( <i>quarterly average</i> )

\*exceeded on May 2 due to rain and snow melt

Temagami South Lagoon	April	May	June	Compliance (ECA)
<b>AS PER THE ENVIRONMENTAL CERTIFICATE OF APPROVAL</b>				
Average Daily Flow - Influent (m <sup>3</sup> /day)	160	161	143	Annual Average of 232
Total Volume Treated (m <sup>3</sup> )	4,794	4,983	4,279	-
Discharge Flow (m <sup>3</sup> /day)		2,290	2,290	Max 2877.12
BOD5 (mg/L)		16.05	7.9	25 mg/L (seasonal average)
Total Suspended Solids (mg/L)		37*	25	25 mg/L (seasonal average)
Total Phosphorous (mg/L)		0.207	0.28	1.0 mg/L (seasonal average)
Total Ammonia Nitrogen (mg/L)		18.2	6.74	-
<b>Prior to Discharge Sampling</b>				
Total Phosphorous (mg/L)		0.171		-
Hydrogen Sulphide (mg/L)		<0.02		-
<i>Escherichia coli</i> ( <i>E. coli</i> ) (cfu/100mL)		5		-
<b>AS PER WASTEWATER SYSTEM EFFLUENT REGULATIONS (WSER)</b>				
cBOD5		18		25 mg/L (annual average)
Total Suspended Solids (TSS)		33		25 mg/L (annual average)

Discharge Period: May 16-26 (Cell 1) and June 7-15 (Cell 2)

Total Discharged: 43,510 m<sup>3</sup>

\*see Incidents and Complaints section

**APPENDIX A**  
**CALL BACK REPORTS**



## Work Order Call Back Details Report

741057: BCA shutdown Temagami N 6030

Asset:

Location: 6030-WTTM-P-FI 6030, Temagami North WTP, Process, Filtration

Page Time:	04/07/2018 12:00 PM
Arrive time:	04/07/2018 01:00 PM
Leave time:	04/07/2018 02:45 PM
Finish Time:	04/07/2018 10:42 PM
Report Date:	4/7/18
Reported By:	Chris Barkhouse
Supervisor:	

Site:	OCWASITE
Priority:	5
Work Type:	CALL
Status:	CLOSE
Classification:	REFURBISH/REPLACE
GL Account:	TEMAGM6030W-000

Actual Labor				
Task ID	Craft	Labor	Regular Hours	Premium Hours
	INSTTECH	Chris Barkhouse	00:00	04:00

Log		
Date	Created By	Description
4/7/18	Chris Barkhouse	Arrived to find number one filter shut down. Could find no apparent reason except that it had just done a backwash. Reset alarms and started plant to monitor operation for a bit. Turned chlorine up a bit 4.8 to 5.0 on BCA.

## Work Order Call Back Details Report

742251: call bca shut down temagami north WTP 6030

Asset: 0000277317 ANALYZER PH LAB / PORTABLE  
 Location: 6030-WTTM-P 6030, Temagami North WTP, Process

Page Time:	04/19/2018 03:45 AM
Arrive time:	04/19/2018 04:45 AM
Leave time:	04/19/2018 05:10 AM
Finish Time:	04/19/2018 06:00 AM
Report Date:	4/19/18
Reported By:	Claude Mongrain
Supervisor:	

Site:	OCWASITE
Priority:	5
Work Type:	CALL
Status:	CLOSE
Classification:	REFURBISH/REPLACE
GL Account:	TEMAGM6030W-000

Actual Labor				
Task ID	Craft	Labor	Regular Hours	Premium Hours
	MECHANIC	Claude Mongrain	00:00	04:00

Log		
Date	Created By	Description
4/19/18	Claude Mongrain	call bca shut down
found bca #1 plant shut down on backwash reset and restart backwash all ok		

## Work Order Call Back Details Report

780293: HI Level alarm Sruce pumping station 6029

Asset:  
 Location: 6029-WWSP      6029, Temagami North Lagoon Spruce Pumping Station

<b>Page Time:</b>	05/05/2018 09:15 PM
<b>Arrive time:</b>	05/05/2018 10:00 PM
<b>Leave time:</b>	05/05/2018 11:30 PM
<b>Finish Time:</b>	05/06/2018 10:06 PM
<b>Report Date:</b>	5/6/18
<b>Reported By:</b>	Chris Barkhouse
<b>Supervisor:</b>	

<b>Site:</b>	OCWASITE
<b>Priority:</b>	5
<b>Work Type:</b>	CALL
<b>Status:</b>	CLOSE
<b>Classification:</b>	REFURBISH/REPLACE
<b>GL Account:</b>	TEMAGM60295-000

Actual Labor				
Task ID	Craft	Labor	Regular Hours	Premium Hours
	INSTTECH	Chris Barkhouse	00:00	04:00

Log		
Date	Created By	Description
5/6/18	Chris Barkhouse	Arrived to find station level within operating limits. Tried each pump in Hand to measure performance. Found number two pump working very slowly. Reversed pump a couple of times to maybe flush it out. It seemed to be working noticeably better after this but still not great. Lowered on setpoints to give a little more time to catch up. Lead pump. 1.60 to 1.20 m. Lag pump 1.80 to 1.40m. Will check pit in daylight.

## Work Order Call Back Details Report

780308: Major alarm Spruce Dr. Pumping station 6029

Asset:

Location: 6029-WWSP      6029, Temagami North Lagoon Spruce Pumping Station

Page Time:	05/06/2018 08:00 PM
Arrive time:	05/06/2018 08:45 PM
Leave time:	05/06/2018 10:00 PM
Finish Time:	05/06/2018 10:18 PM
Report Date:	5/6/18
Reported By:	Chris Barkhouse
Supervisor:	

Site:	OCWASITE
Priority:	5
Work Type:	CALL
Status:	CLOSE
Classification:	REFURBISH/REPLACE
GL Account:	TEMAGM6029S-000

Actual Labor				
Task ID	Craft	Labor	Regular Hours	Premium Hours
	INSTTECH	Chris Barkhouse	00:00	04:00

Log		
Date	Created By	Description
5/6/18	Chris Barkhouse	Respond to HI level alarm. Check pump operation, both pumps working OK. Level was at 0.60 m. Check well level, heavy flow coming in to station. Pumps having a hard time keeping up. Lowered ON setpoints, lead 1.2 to 1.0 and lag 1.4 to 1.2m.

## Work Order Call Back Details Report

780733: High level Spruce Drive SPS - 6029

Asset:

Location: 6029-WWSP 6029, Temagami North Lagoon Spruce Pumping Station

Page Time:	05/07/2018 06:00 PM
Arrive time:	05/07/2018 06:30 PM
Leave time:	05/07/2018 08:30 PM
Finish Time:	05/07/2018 08:30 PM
Report Date:	5/8/18
Reported By:	Josh Dubois
Supervisor:	

Site:	OCWASITE
Priority:	5
Work Type:	CALL
Status:	CLOSE
Classification:	REFURBISH/REPLACE
GL Account:	TEMAGM6029S-000

Actual Labor				
Task ID	Craft	Labor	Regular Hours	Premium Hours
	OPERATOR	Josh Dubois	00:00	04:00

Log		
Date	Created By	Description
5/8/18	Josh Dubois	High Level Spruce SPS

Call for high level at Spruce SPS. Upon arrival level at approximately 0.92m. Pump 1 was running and system pumped down no problem. Watched system cycle 3 times. Approximate time to fill up from 0.60m to 1.0m was 10 minutes. Pump down times varied and it was noticed pump 2 was significantly slower than pump 1. Due to no trending on site and no additional problems while on site it is believed the LIT head malfunctioned causing the alarm.

## Work Order Call Back Details Report

780744: Spruce Drive SPS Hi Level Alarm - 6029

Asset:

Location: 6029-WWSP      6029, Temagami North Lagoon Spruce Pumping Station

Page Time:	05/08/2018 05:30 AM
Arrive time:	05/08/2018 05:45 AM
Leave time:	05/08/2018 06:00 AM
Finish Time:	05/08/2018 06:00 AM
Report Date:	5/8/18
Reported By:	Josh Dubois
Supervisor:	

Site:	OCWASITE
Priority:	5
Work Type:	CALL
Status:	CLOSE
Classification:	REFURBISH/REPLACE
GL Account:	TEMAGM6029S-000

Actual Labor				
Task ID	Craft	Labor	Regular Hours	Premium Hours
	OPERATOR	Josh Dubois	00:00	04:00

Log		
Date	Created By	Description
5/8/18	Josh Dubois	Spruce Dr SPS Hi Level Alarm

See WO# 780733 Log. No trending, unsure if system has high flows or if LIT is malfunctioning. To be scheduled as a confined space entry during regular work hours to determine problem.

## Work Order Call Back Details Report

782156: BCA Shut Down Alarm 6030

Asset:  
 Location: 6030-WTTM      6030, Temagami North WTP

Page Time:	05/20/2018 05:00 PM
Arrive time:	05/20/2018 06:00 PM
Leave time:	05/20/2018 08:00 PM
Finish Time:	05/20/2018 08:00 PM
Report Date:	5/22/18
Reported By:	Bryce Logan
Supervisor:	

Site:	OCWASITE
Priority:	5
Work Type:	CALL
Status:	CLOSE
Classification:	REFURBISH/REPLACE
GL Account:	TEMAGM6030W-000

Actual Labor				
Task ID	Craft	Labor	Regular Hours	Premium Hours
	INSTTECH	Bryce Logan	00:00	04:00

Log		
Date	Created By	Description
5/22/18	Bryce Logan	BCA Shut Down
Call for BCA Shut down, low flow on backwash caused plant shut down. reset plant and manually backwashed and turned back online everything operating properly.		

## Work Order Call Back Details Report

782559: tem. north SPS 6029 high level

Asset:

Location: 6029-WWSP      6029, Temagami North Lagoon Spruce Pumping Station

Page Time:	05/24/2018 10:10 PM
Arrive time:	05/24/2018 11:05 PM
Leave time:	05/24/2018 11:15 PM
Finish Time:	05/25/2018 12:05 AM
Report Date:	5/26/18
Reported By:	Claude Mongrain
Supervisor:	

Site:	OCWASITE
Priority:	5
Work Type:	CALL
Status:	CLOSE
Classification:	REFURBISH/REPLACE
GL Account:	TEMAGM6029S-000

Actual Labor				
Task ID	Craft	Labor	Regular Hours	Premium Hours
	MECHANIC	Claude Mongrain	00:00	04:00

Log		
Date	Created By	Description
5/26/18	Claude Mongrain	high level
check station all ok		



## Work Order Call Back Details Report

821604: Low CL2 alarm Air locked pump 6028

Asset:

Location: 6028-WTTM-P-DI 6028, Temagami South WTP, Process, Disinfection

<b>Page Time:</b>	06/09/2018 01:30 AM
<b>Arrive time:</b>	06/09/2018 02:45 AM
<b>Leave time:</b>	06/09/2018 06:00 AM
<b>Finish Time:</b>	06/09/2018 12:00 PM
<b>Report Date:</b>	6/9/18
<b>Reported By:</b>	Chris Barkhouse
<b>Supervisor:</b>	

<b>Site:</b>	OCWASITE
<b>Priority:</b>	5
<b>Work Type:</b>	CALL
<b>Status:</b>	COMP
<b>Classification:</b>	REFURBISH/REPLACE
<b>GL Account:</b>	TEMAGM6028W-000

Actual Labor				
Task ID	Craft	Labor	Regular Hours	Premium Hours
	INSTTECH	Chris Barkhouse	00:00	04:30

Log		
Date	Created By	Description
6/9/18	Chris Barkhouse	

Respond to call in for Low treated CL2. Residual at 0.99 and plant shut down. Looks like chlorine has slowly been decreasing over the day before. Performed a CT calculation, plant easily met CT. Found MP1 hypo pump air locked. Could find no leaks on plumbing but lots of air in hypo in tank. Bled pumps and started plant. Turned CL2 up and monitored the plant until chlorine had risen above setpoint.

## Work Order Call Back Details Report

823270: Low clearwell alarm - 6028

Asset:

Location: 6028-WTTM      6028, Temagami South WTP

<b>Page Time:</b>	06/21/2018 06:45 PM
<b>Arrive time:</b>	06/21/2018 07:00 PM
<b>Leave time:</b>	06/21/2018 08:30 PM
<b>Finish Time:</b>	06/21/2018 08:30 PM
<b>Report Date:</b>	6/22/18
<b>Reported By:</b>	Josh Dubois
<b>Supervisor:</b>	

<b>Site:</b>	OCWASITE
<b>Priority:</b>	5
<b>Work Type:</b>	CALL
<b>Status:</b>	COMP
<b>Classification:</b>	REFURBISH/REPLACE
<b>GL Account:</b>	TEMAGM6028W-000

Actual Labor				
Task ID	Craft	Labor	Regular Hours	Premium Hours
	OPERATOR	Josh Dubois	00:00	04:00

Log		
Date	Created By	Description
6/22/18	Josh Dubois	Low clearwell alarm 6028

Call for low clearwell alarm temagami south. Log into system and review both trends and live data. Notice system had been recovering from high water usage (flushing during the day) and while attempting to recover it initiated a backwash. This backwash caused a low clearwell alarm due to the additional treated water usage. Since the level was below 2.20m, a CT calculation was performed which passed. Monitored the system for another hour to confirm proper operation.