

SEWER ADMINISTRATORS REPORT LELAND TOWNSHIP SEWER SYSTEM April 2021

Prepared by Steve Patmore, Sewer Administrator
For May 2021 Meetings

The influent flows for April 2021 were about the same as last month, and 13% lower than the influent flows last year in March 2020. Flows are monitored weekly.

Effluent flows are being managed in order to maintain the lagoon level between 10 and 12 feet for the 2021 sludge removal project.

The lagoon level is now at 11.85 feet, which is 3.5 feet lower than it was at this time last year, and 13" lower than last month.

SEWER OPERATIONS (IAI report attached)

- STEP Pump call-out and float replacement at The Cove STEP system.
- STEP Pump call-out and part replacement at 3162 N. Manitou Trail.
- Nighttime high well alarm at Popp Road Lift Station – I responded to assist IAI. Temporary wiring was done that night and faulty float was replaced the next day.
- The curb-stop (shut-off valve) at the STEP Pump near Fishtown was found to be leaking. The septic tank was pumped immediately to stop the flow. EGLE and the Health Department had to be notified. KAL Excavating was called and had a new larger curb stop and check valve installed two days later. There was no check valve installed with the original installation. Fishtown is still having issues with their internal piping, and I have been assisting them with troubleshooting and coordination.
- Asphalt patch work done on River Street in front of The Cove.
- Septic tank at 104 W. Main (Nittolo's) in Lake Leelanau was treated for dried grease build-up and pumped.

SEWER REPAIR LIST

- One of the pumps at the Thompson Street Lift Station is not seated in the flange properly, causing it not to discharge correctly. IAI pulled the pump and found that a rubber seal between the pump and the flange needs to be replaced. The part has been ordered and work scheduled.
- Two aerators at the WWTP lagoon are out of service and need to be pulled and evaluated. Possible electrical issues with one, and possible re-build of the other.
- The level sensor for the ferric chloride tank needs to be replaced. Part has been ordered.
- STEP pump/curb stop at 3409 N. Manitou Trail scheduled for work.

ON-GOING SCHEDULED PROJECTS / MAINTENANCE / REPAIRS

- Hydrogen Sulfide Control Project: IAI is monitoring the Hydrogen Sulfide levels at the lift stations. Some treatment equipment has arrived. EGLE must approve the addition to the wastewater as a condition of our wastewater discharge permit – Working with Gosling Czubak to get EGLE approval.
- Biotech has a signed contract for lagoon sludge pumping – do not have a firm start date. EGLE has just established new testing requirements for PFAS. Our biosolids will need to be tested for PFAS. I attended a webinar last week sponsored by EGLE.
- WWTP Dosing Station repair work planned for the period that WWTP lagoon is empty – IAI compiling costs.

SYSTEM ADMINISTRATION

- Questions on connections and the sewer system in general, including properties outside the district.
- Miss Dig staking requests have increased in volume.
- Working on Rate Study Proposal and Capacity Study Update.
- New remote meter reader installed at Nittolo's. April was a billing month. Sewer Permit on West Street.



INFRASTRUCTURE ALTERNATIVES, INC.

Leland Township WWTP Operations Report

April 2021

Prepared by Tom Lutke, Operations Specialist
For May 2021 Sewer Commission Meeting

Operations Summary:

- Freeboard is within target range
 - Flow has been reduced to 45 gpm to hold the freeboard between 11 and 12 ft. Effluent flow will be increased as influent flow increases to maintain freeboard.
- Biotech Agronomics Inc., has been awarded the bid for lagoon dredging. A specific date has not been given yet.
- Aerators #1 and #2 are currently off. They will need to be pulled and inspected to see if they can be rebuilt or need to be replaced. Aerators #3 and 4 are still running well.
- H2S pilot study is in process with weekly sampling.
 - Only Popp and Duck Lake lift stations are showing measurements. Popp lift shows an average of **147 ppm** with a high of 200 ppm and a low of 94 ppm. Duck Lake lift shows an average of **55ppm** with a high of 84 ppm and a low of 30 ppm.
- H2S implementation proposal plan is on hold until recommendations can be made from Gosling Czubak as to procedures in notifying the EGLE and supplying quantity feed rates of Calcium Nitrate to the system.
- Implemented a procedure to add air to the sludge pump cylinders as needed. This procedure needs to be done periodically to eliminate the sludge buildup in the cylinders. Once completed, the pump no longer starts hard and does not trip the breaker.
- Maintenance items:
 - Seal at Pump #2 of Thompson St. LS has failed and needs to be replaced. Parts are ordered. Pump currently just cycles water inside the wet well.
 - A computer board at Duck Lake LS is going bad and will need to be replaced. Parts are ordered but the lift station is running as it should.
 - A new transducer for the bulk ferric tank has been ordered. The current transducer works intermittently.
 - 4/19/21 Popp Rd and Duck Lake Generators were filled with diesel.
- Lin will be off until at least 5/17/2021. Rounds and on-call coverage will be covered by Tom Lutke, Nathan Filley, and Gabe Walker.



**INFRASTRUCTURE
ALTERNATIVES, INC.**

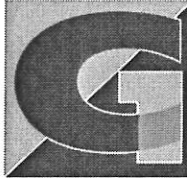
Totals:

	<i>MARCH 9P</i> February2021	<i>APRIL 9P</i> March2021	Year to Date	Units
Effluent	2.36	1.65	8.93	MG
Influent	1.48	1.45	5.99	MG
Freeboard	+.9	-.2	+ 4.1	FT
Propane	150	5	585	GAL
Ferric Chloride	178.25	183.61	602.27	GAL
Electric	7524	6337	32,430	KWH

**Estimate Only*

Call-outs:

4/1/2021	The Cove Restaurant	Nuisance Low Level alarms, Adjusted floats.
4/15/2021	Popp Rd LS.	High level alarm. Steve Patmore and Nathan Filley responded. Stop float had failed. Float was replaced the next day.
4/23/2021	The Cove Restaurant	Low level nuisance alarms still occurring, replaced stop float and sealed lid to prevent odor issues.
4/23/2021	3162 N Manitou Trail.	Resident called due to an alarm with the step chamber. High level alarm caused by a breakage of the connection from the pump to the sewer lead. Replaced corroded metal with PVC and tested system. Septic tank was pumped.
4/25/2021	WWTP	Low flow alarm. Duckweed was building up in effluent line. Flushed line at 100 gpm to clear out duckweed.
4/27/2021	WWTP	Sludge pump tripped breaker. Reset and cleared the sludge pump with air compressor.
4/28/2021	205 River St.	Caller reported septic tank effluent leaking from a pipe in the ground. Confirmed that leak was coming from the curb stop from the STEP chamber. KAL Excavating was called in to fix the leak. EGLE Sanitary Sewer Overflow report was made and the Record Eagle and the Leelanau County Health Department were notified. 10lbs of lime was added to disinfect.



CONTRACT FOR SERVICES

Sewer Rate Study

Client: Leland Township
Client's Agent: Susan Och
Address: P.O. Box 238
Lake Leelanau, MI 49653

Date: April 9, 2021
Re: Sewer Rate Study
From: Mark J. Hurley, M.S., P.E.

cc:

Gosling Czubak Engineering Sciences, Inc. (GCES) and Leland Township (CLIENT) agree that GCES will perform the professional services described in the Proposed Scope of Work, subject to GCES's Terms and Conditions, attached.

Project Name and Location

Project Name: Sewer Rate Study

Section 9, T 30 N, R 12 W

Proposed Scope of Work

Gosling Czubak will provide the professional services described below:

1. Compile and review existing rates and charges agreements or Ordinances
2. Compile and review the past 3 year's audits
3. Identify all existing fund balances
4. Identify all sources of income (Sewer hook-ups, ready to serve charges, use charges, etc.)
5. Document historical O&M expenses and operating budgets
6. Collect capital improvement plan and associated costs
7. Develop a recommended OM&R budget for the fiscal year; and
8. Establish a rate calculation demonstrating sufficient revenues to cover OM&R expenses
9. Summarize findings and recommendations in report memo
10. Present results of rate analysis to the Sewer committee and / or Township Board

Proposed Schedule

The scope of work can be completed within 120 days of authorization.

Proposed Fee


The total fee to provide these services is \$ 8,600.

- Will be based on a time and materials basis in accordance with GCES's normal rates and charges
- An initial deposit to be applied to the final invoice is required in the amount of \$

Approval

Client

Gosling Czubak Engineering Sciences, Inc



Name: _____

Mark J. Hurley, M.S., P.E.

Title: _____

Director of Engineering Services

Dated: _____

Dated April 9, 2021

Terms and Conditions

Description of Services: GCES agrees to perform those professional services described in the attached Contract for Services which is incorporated herein by reference as if the same had been fully set forth.

Payment for Services: The estimated total fee for the services set forth in the Contract for Services. The Client understands and agrees that the aforementioned amount is an estimate for the scope of work described in the Contract. Additional fees may be billed if the scope of the work is changed. A statement for work done in a month will be billed in the following month, and that payment is to be made by the Client within 30 days of the invoice.

Estimated Date of Completion: GCES will complete the performance of the services as indicated with the dates provided in the Contract for Services absent an act, condition, or event beyond the control of the parties.

Ownership of Documents: All original documents, drawings, computer files and survey notes represent the product of training, experience and professional skill. All such items are, and will remain, the property of GCES, regardless if the project is completed. Upon full payment of all amounts due hereunder, GCES will furnish copies of suitable, original drawings and other final work products in the form required by applicable law to the Client. Such documents furnished to the Client are not intended or represented to be suitable for reuse by the Client or others on extensions of the project or any other project. Any unauthorized reuse of documents will be at the Client's sole risk and without liability or exposure to GCES.

Scope of Services Rendered: Client assumes full responsibility for determining the suitability of the described services to meet its needs. If indicated on the attached Contract for Services, such services may include preparation and attendance at public hearings or informational meetings, when so requested by the Client; but this Agreement does not include services that would pertain to the preparation or appearance on behalf of the Client in litigation.

Assignment of Contract: GCES will be solely responsible for all services performed under this Agreement and will supervise and direct the work in accordance with in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances and in the same locality. Neither the Client nor GCES may assign, sublet, or transfer their interest in this Agreement, without the prior written consent of the other.

Lien for Services/Attorney's Fees: GCES reserves the right to file any statutorily authorized lien against the property which is the subject of this contractual Agreement in the event payment is not received for services rendered. If GCES is required to file suit to secure payment, GCES shall be entitled to receive its actual attorney's fees and costs incurred in such litigation.

Termination of Services: This contract may be terminated by the Client or GCES should the other fail to perform its obligations under this contract. In the event of termination, the Client shall pay GCES for all services and expenses rendered to the date of the termination.

Limitation of Liability: The Client agrees to limit the liability of GCES on this project for claims, losses or damages and claims expenses to a sum not to exceed \$25,000 or GCES's total fee for services on this project, whichever is greater.

Consequential Damages: Neither the Client nor GCES shall be liable to the other, shall make any claim for any incidental, indirect, or consequential damages arising out of this Agreement. This mutual waiver of

consequential damages shall include any consequential damages that either party may have incurred from any cause of action including negligence, strict liability, breach of contract and breach of strict or implied warranty. Both the Client and GCES shall require similar waivers of consequential damages in all contracts and subcontracts with others involved in this project.

Dispute Resolution: Any claims or disputes between the Client and GCES shall be submitted to non-binding mediation. The Client and GCES agree to include a similar mediation agreement with all contracts, subcontractors, suppliers and fabricators that provides for mediation as the primary method for dispute resolution between all parties.

Entire Agreement: This Agreement constitutes the entire Agreement of the parties and no alteration or amendment shall be effective until such time as it is reduced to writing and signed by both parties.

Permits: GCES will assist the Client with preparation and submittal of permit applications to the approving agencies listed in the description of services. GCES's contract fee estimate for permitting assistance is based on its experience working with the listed agencies. The Client and GCES acknowledge that permitting requirements are subject to the opinions of the permit review official(s) and may result in unforeseen conditions imposed by the permitting official. Any permitting assistance, design changes or inspections made necessary by newly enacted laws, codes, regulations, or interpretations of codes made by permitting and code officials that are not described in the contract services or were unforeseen by GCES at the time that this contract was signed, can be provided by GCES for additional fees. The amount of additional fees required by unexpected permitting or inspection requirements will be presented to the Client for the Client's approval before the additional work is undertaken.

LELAND TOWNSHIP SEWER COMMISSION

Friday, February 5, 2021 – 10:00 a.m.

Meeting by Remote Electronic Access

MINUTES

PRESENT: Treasurer Shirley Garthe, Chair Jim Redmond, Steve Patmore, Frank Migda, Susan Och, Lisa Brookfield.w

ABSENT: Richard Roberts

GUESTS: Lin Marolf

CALL TO ORDER/PLEDGE OF ALLEGIANCE: Mr. Redmond called the meeting to order at 10:03 a.m. with the Pledge of Allegiance.

APPROVAL OF AGENDA: The agenda had the wrong title: it should be a “Regular Meeting” rather than a “Special Meeting.”

ACTION: Mr. Migda moved to approve the agenda as presented and amended; supported by Ms. Garthe.

Voice Roll Call (not necessarily in the order called at the meeting)

Shirley Garthe	Yes	
Jim Redmond	Yes	
Frank Migda	Yes	
Robert Roberts	Absent	Motion carried.

DECLARATION OF POTENTIAL CONFLICTS OF INTEREST: None

PUBLIC COMMENT - None

REPORTS

1. Treasurer (report on file in Leland Township Office)

Ms. Garthe reported on income and expenses in the Sewer Operating and Improvement funds. Reports will be distributed to the Board from Ms. Brookfield.

ACTION: Ms. Garthe moved to accept the Treasurer’s report as presented; supported by Mr. Migda.

Voice Roll Call (not necessarily in the order called at the meeting)

Shirley Garthe	Yes	
Jim Redmond	Yes	
Frank Migda	Yes	
Robert Roberts	Absent	Motion carried.

2. Sewer Administrator (report on file in Leland Township Office)

Influent flows are low. The lagoon is lower than last month and last year. Measurements are in the report. The phosphorus levels in the monitor pumps are trending down but not yet in compliance. They have gone down significantly. The problem with the alarms has been rectified. IAI has provided a work scope. Supplies are being ordered now. There was a question about the delivery of the chemicals. There will initially be a delivery of 7 barrels each week. It will reduce as time goes on. A shed will be put in place to store the chemical. The shed will be made as unobtrusive as possible. The shed is vinyl with a vinyl floor. This will be temporary for chemical storage. Homeowners should be notified that shed will be placed. The chemical being stored is somewhat corrosive but does not present any dangers. It is like fertilizer. The Fire Department will receive the information about the shed and its contents. Ms. Och and the Fire Department will be sent the MSDS information. This

system has been used elsewhere and has worked very well in reducing the odor. This will be an ongoing treatment. The operation of the system with this additive was discussed.

Sludge pumping

The Board approved the work proposal for the sludge pumping. We are on the schedule. It will be done in June or July. When the lagoon is emptied, we will also have the pumping station worked on.

The budget was reviewed by the Board. March 27 is the Annual Meeting. In response to a question, Dick's Pour House will be inspected in April.

3. Operation Reports – Infrastructure Alternatives Inc. (report on file in Leland Township Office)
Mr. Marolf reviewed items from his report. Most items had been covered in the Sewer Administrator report.
Mr. Marolf reported that an aerator iced up and tripped the breaker. Once it thaws out, it will be turned on again. Mr. Migda asked if there were any cautions with the use of calcium nitrate. Mr. Marolf said that a moat could be put around the container as a precaution. It is not flammable. It works as an oxidizer. However, you would not want it to leak in the river. A fill container could be put under the shed. Mr. Marolf had the MSDS sheet and read aloud the precautions.

DISCUSSION/ACTION ITEMS:

1. Update on Sewer Projects for 2021.
No action is needed. This was discussed in Mr. Patmore's report.
2. Capital Improvement Plan
Mr. Patmore is working on next year's plan. He wants to extend it out 5-15 years. Gosling Czubak needs to be contacted.

OTHER BUSINESS/COMMISSIONER COMMENT

- Mr. Migda commented that the IAI report was very good.
- Ms. Och appreciates all the work that is being done.

PUBLIC COMMENT: None

NEXT MEETING: Friday, April 2, 2021 at 10:00 a.m. There was discussion about April 2 being Good Friday and some would not be present at the meeting.

ACTION: Mr. Migda move to change the meeting date from April 2, 2021 to April 9, 2021; supported by Ms. Garthe.

Voice Roll Call (not necessarily in the order called at the meeting)

Shirley Garthe	Yes	
Jim Redmond	Yes	
Frank Migda	Yes	
Robert Roberts	Absent	Motion carried.

ADJOURNMENT: Mr. Redmond adjourned the meeting at 10:44 a.m.

Respectfully Submitted,
Cindy Kacin, Recording Secretary

Date Approved: _____

Jim Redmond, Chair

Lisa Brookfield, Township Clerk