



# NORTHERN MORaine WASTEWATER RECLAMATION DISTRICT

113 Timber Trail, Island Lake, Illinois 60042

## REGULAR MEETING MINUTES

March 10, 2020

Present: Trustees: Ken Michaels, John Ragland, Timothy Brunn, Lydia Ryberg  
District Manager: Mohammed Haque; District Clerk: Deborah Martin  
Others: Superintendent Luke Markko; EIT/Staff Engineer: Joe Lapastora

President Michaels called the meeting to order at 7:30 p.m.

### 1. CALL TO ORDER:

Roll Call: Timothy Brunn – Present  
John Ragland - Present  
Dena Battaglia - Absent  
Lydia Ryberg – Present  
Ken Michaels – Present

### 2. PLEDGE OF ALLEGIANCE:

Those present stood and pledged allegiance to the flag.

### 3. PRESENTATION & APPROVAL OF MINUTES:

#### a. Regular Meeting, February 11, 2020

Motion by Trustee Brunn to approve the Regular Meeting minutes of February 11, 2020 as presented.

2nd by Trustee Ragland

4 ayes 0 nays 0 abstain

**MOTION CARRIED**

### 4. TREASURER'S REPORT:

#### a. Approval of the Monthly Treasurer's Report for month ending January 31, 2020

Trustee Ryberg presented the Monthly Treasurer's Report for month ending January 31, 2020 for Board approval.

Motion by Mr. Ragland to approve the Treasurer's Report for month ending January 31, 2020 as presented.

2<sup>nd</sup> by Mr. Brunn

4 ayes 0 nays 0 abstain

**MOTION CARRIED**

### 5. PUBLIC COMMENTS: none

### 6. MANAGER'S REPORT:

District Manager Haque informed the Board that on February 14<sup>th</sup> he had received a call from Mike Lesperance with Nunda Township concerning a project on Lily Lake Road. The District had not been informed of this project, even though work was underway. Manager Haque met with Mike and a member of the township's engineering firm, HR Green. Manager Haque told them that the District has 2 force mains on Lily Lake Road and that he did not want a repeat of the incident where our main was damaged during the roundabout project. Manager Haque's concerns were about the cost and how long it would take to move those mains. HR Green acknowledged that they did not know the District had sewer mains on Lily Lake Road. The engineering firm agreed to re-engineer their ditch lines to provide adequate cover. The revised prints are currently under review. Manager Haque reported to the Board that shortly after the call concerning the Township project, he received a call from Condon and Associates about a project on Wegner Road, east of Lily Lake Road. Proposed stormwater improvements are being planned and Manager Haque has sent Condon and Associates our plans showing our sewers so that Condon and Associates can incorporate them in their designs. Manager Haque



Northern Moraine Wastewater Reclamation District  
Regular Meeting Minutes  
March 10, 2020

brought to the Board's attention a draft version of the District's Capacity, Management, Operation and Maintenance Plan. This is a special condition requirement of our recent NPDES Permit Renewal. He informed the Board that Joe Lapastora, our Engineer In Training, and our engineering intern, Miranda Durbin have been following a template that is used in the majority of CMOM plans in the state. The plan is being finalized and will be submitted to the State of Illinois by April 1, 2020. Because of Joe and Miranda's efforts using this template, the District has been able to save approximately \$5-10k, the standard cost of putting such a plan together. Manager Haque brought to the Board's attention that a requirement of this CMOM is the cleaning and televising of our system. He stated that requirement will be an added expense and will necessitate the District to invest in a better Vactor and a televising arrangement. Manager Haque brought the Board up to date on repairs underway for the North Clarifier, including a purchase order for the new clarifier mechanism with removal of the old one and installation, as well as dome removal. Additional steps are being taken to determine the cause of the failure in order to determine if the center pier will need to be moved. Manager Haque reported that Greenfield Construction is applying for permits with McHenry County for the Sludge Bed cover and Conveyor and that quotes are being finalized for a greenhouse to cover the conveyor to protect it during harsh winters. Manager Haque also reported that he attended a luncheon on February 10<sup>th</sup> where he met with Representative Weber concerning the Member Initiative Funding for the Lakemoor Lift Station Improvements project. He informed the Board that the District will be advertising for a 4<sup>th</sup> Operator and a part time Office Clerk. Manager Haque reported the progress being made on the Floodproofing of the Control Building and Generator Modifications project as well as the other various projects underway at the treatment plant. He reminded the Board that their packets included a Septage Receiving Tracking Report showing the amount of revenue received for this fund along with a Report on Connection fees received. Manager Haque then turned the floor over to Superintendent Luke Markko for his Operations Report.

Superintendent Markko expanded more on the repairs to the North Clarifier along with a repair recently completed on the crane truck. Mr. Markko also informed the board that Chris Molitor has received Class 3 Certification from the IEPA. He also reported on progress with the Lift Station Automatic Transfer Switches project, the SCADA Panels project, the Disinfection System Improvements project, and the Phosphorous Removal project. Superintendent Markko informed the Board of staff's concerns about higher levels of ammonia being detected from Lift Station 7 in Lakemoor on Sundays. Staff is collecting sampling in this area and will continue to investigate. He also reported that with Nunda Township's Lily Lake Road improvement plans, the District is finding that locating these old force mains to be a challenge. He feels that air relief valves that are underwater will need to be replaced. He then turned the floor over to Joe Lapastora, the District's EIT.

Engineer in Training Lapastora reported that most of his report had been discussed by both Manager Haque and Superintendent Markko, but he wanted the Board to know that both the Woodman's construction project and the Route 176 right turn lane project are very near completion. Mr. Lapastora also wanted the Board to be aware that although the District has had some difficulty in locating any old pertinent GEO-spatial data on the sewer mains for the Lily Lake Road improvement project being done by Nunda Township, one positive caveat is that Staff is now able to get this information recorded on our sewer atlas. EIT Lapastora also wanted the Board to be aware of how helpful the engineering intern, Miranda, has been in assisting with all these projects.

**7. TRUSTEE REPORTS - none**

**8. LEGAL BUSINESS - none**

**9. OLD BUSINESS**

**a. Trustee Appointments for the term beginning May 1, 2020 through April 20, 2030**

Manager Haque reported to the Board that the required Public Notice had been placed in the Northwest Herald for the two Trustee openings. He reported that Lydia Ryberg and Ken Michaels had submitted their letters of request to be reappointed as Trustees for the Northern Moraine Wastewater Reclamation District. Although packet information stated this agenda item was informational only, Manager Haque reminded the Board that the next step would be a motion to accept the nominations and to direct the District Manager to forward these nominations to the legislative body for appointment.



Northern Moraine Wastewater Reclamation District  
Regular Meeting Minutes  
March 10, 2020

Motion by Trustee Ragland to accept the nomination of Lydia Ryberg as Trustee for Northern Moraine Wastewater Reclamation District for the term beginning May 1, 2020 through April 20, 2030 and to authorize the District Manager to forward her nomination to the legislative body for appointment.

2<sup>nd</sup> Mr. Brunn

3 ayes 0 nays 1 abstain (Lydia Ryberg) **MOTION CARRIED**

Motion by Trustee Ragland to accept the nomination of Kenneth Michaels Jr. as Trustee for Northern Moraine Wastewater Reclamation District for the term beginning May 1, 2020 through April 20, 2030 and to authorize the District Manager to forward his nomination to the legislative body for appointment.

2<sup>nd</sup> Mr. Brunn

3 ayes 0 nays 1 abstain (Ken Michaels) **MOTION CARRIED**

**10. NEW BUSINESS**

- b. a. Adoption of a Resolution Designating Surplus Equipment and Authorizing Disposal through Auction

Motion by Mr. Brunn to adopt a resolution designating items presented to the Board as surplus equipment to be sold through an on-line auction administered by Obenauf Auction Services, Inc.

2<sup>nd</sup> Mrs. Ryberg

4 ayes 0 nays 0 abstain **MOTION CARRIED**

Roll Call Vote: Dena Battaglia - Absent  
Timothy Brunn - Aye  
John Ragland - Aye  
Lydia Ryberg - Aye  
Ken Michaels - Aye

- b. Renewal of the District's Property, Liability and Flood Insurance

Motion by Mrs. Ryberg to award the contract for Property, Flood and General Liability Insurance to Corkill Insurance Agency, Inc and to adopt a resolution authorizing the District Manager to bind coverage and also to execute an agreement for said insurance coverage with Corkill for the coverage period of May 23, 2020 to May 23, 2021 at the renewal rate of \$56,288.00.

2<sup>nd</sup> by Mr. Brunn

Roll Call Vote: Dena Battaglia - Absent  
Timothy Brunn - Aye  
John Ragland - Aye  
Lydia Ryberg - Aye  
Ken Michaels - Aye

4 ayes 0 nays 0 abstain **MOTION CARRIED**

- c. Annual Commodity and Services Bids and Contracts

Manager Haque reported to the Board that there are no contracts that the District will need to bid this year and will keep with the existing renewable contracts. No action required.

- d. Presentation on the Proposed Annual Budget, Fiscal Year 2020-2021

The Board listened to a presentation by District Manager Haque concerning the Proposed Annual Budget for the upcoming Fiscal Year 2020-2021. The presentation included detailed graphics as to the perceived timeline of what may have caused the damage, the results of the insurance claim, and the options to having the North Clarifier repaired or replaced. After a brief discussion the Board requested that Manager Haque add in the purchase of a Vactor and other line items. To be discussed again at April board meeting.



Northern Moraine Wastewater Reclamation District  
Regular Meeting Minutes  
March 10, 2020

**11. MISCELLANEOUS CORRESPONDENCE**

a. MCCG Membership Meeting: Wednesday, March 18, 2020 at Biaggi's in Algonquin  
President Michaels reminded all Board members to inform District Clerk Debi Martin if they wished to attend this membership meeting for MCCG.

**12. APPROVAL OF BILLS**

Motion by Mrs. Ryberg to approve payment of bills on the March 10, 2020 bill list as presented, in the amount of \$150,212.00.

2<sup>nd</sup> Mr. Brunn

Roll Call Vote: Dena Battaglia - Absent  
Timothy Brunn - Aye  
John Ragland - Aye  
Lydia Ryberg - Aye  
Ken Michaels - Aye

4 ayes 0 nays 0 abstain

**MOTION CARRIED**

**13. OTHER BUSINESS - none**

**ADJOURNMENT**

Motion by President Michaels to adjourn at 9:05 p.m.

2<sup>nd</sup> Mrs. Ryberg

4 ayes 0 nays 0 abstain

**MOTION CARRIED**



March 10, 2020

To: NMWRD Board of Trustees

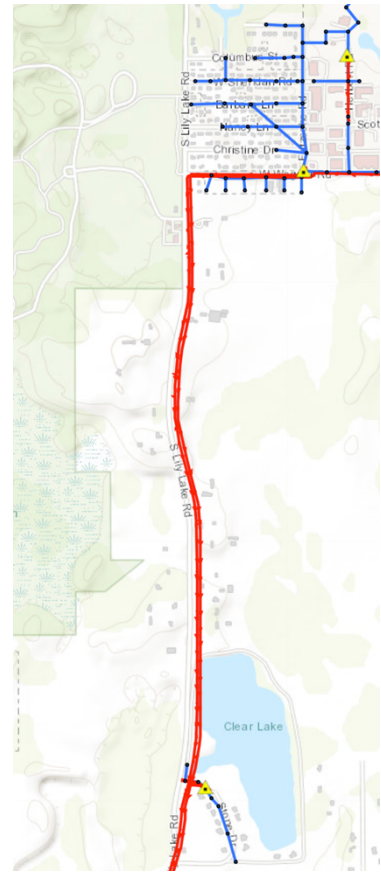
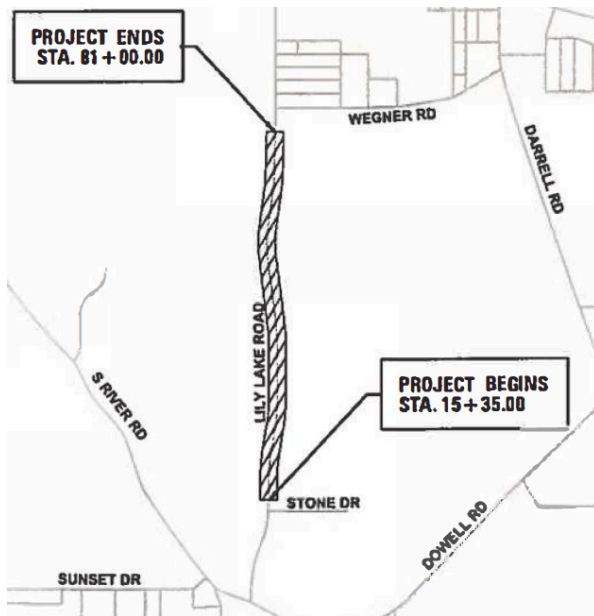
From: Mohammed Haque, District Manager

Subject: Manager's Report

*All update items are in italics.*

### **Lily Lake Road Improvements – Nunda Township**

*On February 14<sup>th</sup> I received a call from Mike Lesperance with Nunda Township about a project he was doing on Lily Lake Road to shave down some dangerous hills on the road. I was quite surprised because this was my first knowledge of it and it appeared that the project was underway. He sent over plans. We scheduled a meeting on February 18 at his engineer's office – HR Green where I met with Mike Lesperance, Akram Chaudhry (Principal – HR Green) and Benjamin Hartman (Engineer – HR Green). I informed them of our two force mains that come down Lily Lake Road and told them about the incident where the 12" force main was damaged during the roundabout project. I informed them that those are critical force mains and that moving them, as was being implied was impossible on short notice and the costs were not something the District would bear right now. They indicated that the project was being funded in whole or part by grants through IDOT and was being bid out by DOT and that they wanted to maintain the schedule due to construction season and school closures. During the meeting, I asked for some cross sections of the road showing me where our force mains (based on our as-builts) have less than 42" of cover on them. They would respond to me a few days later indicating that there were six locations where the sewer would not have adequate cover. Through email correspondence I informed them that there was no way we would move those in their short time period and that they had no idea how much effort it takes to patch a 12" force main 12 times (6 locations – 2 splices per cut). Each location would cost over \$100,000 per location (\$600,000 total) and take more than 24 hours just for the force main to fully drain. The overall moving of the force main would take several weeks. HR Green was under the impression that it would be considerably less and they also did acknowledge that they did not realize we had sewers there and assumed that there were no utilities on Lily Lake Road. After much back and forth they agreed to re-engineer their ditch lines to provide us adequate cover. The revised prints have been received and are currently under review.*



### **Wegner Road Stormwater Improvements – Nunda Township**

*A week after the Lily Lake Road discovery, I received a call J Condon and Associates, who are designing a storm sewer for Nunda Township on Wegner Road, east of Lily Lake Road. This area also has both of our Lakemoor force mains as well as a gravity line. We have sent them plans for the sewers so that they can incorporate them in their designs.*

### **CMOM Plan – IEPA NPDES Permit - Special Condition 23**

*Attached you will find a draft version of our Capacity, Management, Operation and Maintenance Plan for the District. This was a special condition requirement of our recent NPDES Permit Renewal. I have previously setup CMOM plans in other agencies and helped establish CMOM in the Northwest Lake County sewer area. The attached draft CMOM plan was put together by Joe Lapastora and Miranda Durbin, our Engineering Intern and follows a standard template that is used in the majority of CMOM plans in the state. Their efforts have saved the District \$5k - \$10k, the standard cost of putting one of these plans together. The plan will be reviewed and finalized in the next two weeks and submitted by April 1, 2020, when it is due. The requirement of Special Condition 23, as well as our entire NPDES permit is included as Appendix A of the CMOM Plan. What is of significance is the requirement for cleaning and televising the system. This ends up being the most expensive component. Our plan, calls for us cleaning and televising 20% of our system on a yearly basis. This will need us to invest in a better vactor and televising arrangement or do annual cleaning and televising contracts for this work. I anticipate the annual cost of this to be in the range of \$100,000 – \$150,000 yearly for the proper operations and maintenance of a sewer system.*





### **North Clarifier Issue**

*The District has moved forward on issuing a purchase order for the clarifier mechanism as well as dome removal and replacement and clarifier mechanism removal and installation. We have taken additional steps to determine the cause of the failure in order to determine if the center pier will need to be moved. Work included taking camera video and photos in the center feed column and doing an inspection inside the center manifold. Based on that additional work, we still feel we need to wait to determine the outcome of the center pier until we can remove some concrete and after the mechanism is removed.*

*The work on the clarifier should work out well with our plant paving project, so we plan on doing some sight grading in the near future to prep for both projects. We are currently waiting on shop drawing submittals for the Clarifier mechanism from Walker Process Equipment. In the meantime, we have met with DPS Equipment Services to discuss the schedule for the dome removal and clarifier mechanism demolition and staging of the crane.*

### **Woodmans [Force Main + Gravity Sewer Extension + Lift Station]**

*District board has approved the project improvements, contingent on punchlist item completion. The final inspection was completed and passed. We will formally accept the improvements per past board direction and action. There are still some paperwork items that will need to be wrapped up.*

### **Sludge Bed Cover and Conveyor**

*Greenfield Contractors was awarded the bid for the Sludge bed covers. We are currently in the process of submittal review and finalization. Once submittal is approved, we expect that it will be installed in 60-90 days. We have moved the sludge conveyor to directly discharge to the sludge bed to the east of the Dewatering building and are currently setting up the conveyor to dump into the bed. Once the system works and the covers are installed, we expect to order a full stainless conveyor with cleated belts that should function well long-term. We are getting quotes for concrete blocks that the structure will sit on. Greenfield is working with McHenry County for the permits. We are also finalizing quotes for a greenhouse to cover the area between the existing dewatering building and the new cover. This would protect the conveyor from freezing during harsh winters.*

### **Capital Bill**

*I have been working with the staff at Representative Weber's office to get them information on the member initiative funding for Lakemoor Lift Station improvements. I continue to work with Mike Tryon to identify other sources of funding for Darrell Road Interceptor, Holiday Hills, Clarifier Repair and Maintenance Garage. Plans for the lift station work in Lakemoor have been reviewed and comments provided to Trotter & Associates to incorporate. I attended a luncheon on February 10<sup>th</sup> and met with Representative Weber. Steps are being taken by staff to ensure we are ready to receive the grant, including following notice of funding opportunities through the Illinois DCEO.*



### **User Rate Study**

*Eric Rothstein will provide his final report next month. He was happy to see that we increased our rates to cover inflation.*

### **Personnel**

*We will be advertising for a fourth Operator and the PT Office Clerk positions.*

### **Floodproofing of Control Building and Generator Modifications**

*Floodproofing angles and supports have been delivered. Coping and other architectural metals have been received and are currently being installed by District staff. District staff are finalizing the door orders.*

### **Phosphorus Removal**

*I expect we can wrap up this project by the end of the Fiscal Year.*

### **SCADA(Supervisory Control and Data Acquisition) and Telemetry**

*Fiber optics backbone has been installed and most hardware components have been purchased. A purchase order has been issued for installation and termination of fiber optics. Part of the fiber optics is currently being installed. One existing conduit that we planned to use is being difficult and will likely require us to bore a new conduit. We are currently getting that scheduled.*

### **Plant Process Automation – Phase 1**

*Three control panels have been installed and are awaiting their fiber network installation. We are currently working on re-designing the panel for the RAS Station and to develop a list of instrumentation we will need as well as the final Human Man Interface software programming we want for the SCADA / Process Control.*

### **Headworks / Screening Issues**

*The influent grinder was installed and continues to work well after it was fixed under warranty. There is a need to change the motor stem height. In addition, some alignment issues will require us to move it slightly in conjunction with the installation of the new replacement screen and conveyor. I am waiting on Trotter & Associates to prepare some drawings for the installation of the new Headworks MS1 bar screen, conveyor, new gates and the repositioning of the grinder. Once revised submittals are reviewed, the screen will be put into production and scheduled for delivery. Plans from Trotter & Associates have been received and are in the process of being reviewed.*

### **Non-Potable Water Improvements**

*Self-cleaning filter/strainer has been started up and is working quite well. In the process we have discovered that of the three existing NPW pumps, one does not work properly and another is showing extreme age and corrosion. Due to a failure of a second pump, an emergency repair was completed. A new pump skid has been ordered from MP Pumps and we are waiting for delivery.*





### **Maintenance Garage**

I am working with ADG Design on the architectural drawings and will submit to the board in the future. *A revised set of drawings has been received and permits have also been received for the paving work related to the maintenance garage and plant.*

### **Ordinance Review**

Currently the District has Sewer rates, usage, construction details and specifications in seven (7) different documents. There is some duplication (and related confusion) as a result. I am currently working with our attorney Vic Filippini to streamline this into 2-3 ordinances, which is the standard for agencies such as ours. This will make things easier for staff and for the public. *Awaiting receipt of draft from Vic Filippini.*

### **Circle K**

Waiting on retained personnel fee. No contact has been made with the District for several months. We have reached out to inspector at Island Lake. *No update.*

### **Skipper Bud's**

Skipper Bud's request to connect to NMWRD did not garner the full support of all five parties. LRSD has requested that the matter be delayed until their dissolution/transfer to Lake County. *No update.*

### **Lift Station Controls**

The Hale control panel has been delivered and because of the 50<sup>th</sup> Anniversary, we have decided to use it at the Treatment Plant Lift Station. A new one will be ordered for Hale, as well as panels at additional locations in the next few months utilizing contributions from state legislature capital bill funding. Due to ongoing trouble with the Grundfos Remote Management system, we are looking into alternate alarming system for the new conversions. *Quotes have been requested for control panel installation.*

# Northern Moraine WRD - Septage Receiving Tracking FY 2019-2020



Month	Loads	Gallons	Revenue	YTD
May-19	9	21000	\$1,260.00	\$1,260.00
Jun-19	10	22000	\$1,320.00	\$2,580.00
Jul-19	5	11850	\$711.00	\$3,291.00
Aug-19	9	22250	\$1,335.00	\$4,626.00
Sep-19	5	12950	\$777.00	\$5,403.00
Oct-19	16	38400	\$2,304.00	\$7,707.00
Nov-19	14	40100	\$2,550.00	\$10,257.00
Dec-19	10	32350	\$1,968.60	\$12,225.60
Jan-20	9	25400	\$1,642.20	\$13,867.80
Feb-20	9	27650	\$1,632.00	\$15,499.80
Mar-20				
Apr-20				

	Date	Company Name	Gallons	Cost/Gal	Revenue	Time	Type
May	5/1/2019	Comm. Sewer & Septic	1500	\$0.06	\$90.00	11:15AM	Septic
	5/3/2019	Comm. Sewer & Septic	2000	\$0.06	\$120.00	10:00AM	Septic
	5/6/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	9:15AM	Septic
	5/9/2019	Comm. Sewer & Septic	2000	\$0.06	\$120.00	12:35PM	Septic
	5/10/2019	Comm. Sewer & Septic	1500	\$0.06	\$90.00	9:35AM	Septic
	5/10/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	3:10PM	Septic
	5/22/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	9:40AM	Septic
	5/24/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	11:15AM	Septic
	5/30/2019	Comm. Sewer & Septic	2000	\$0.06	\$120.00	10:00AM	Septic
June	6/3/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	9:45AM	Septic
	6/5/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	9:20AM	Septic
	6/5/2019	Comm. Sewer & Septic	2000	\$0.06	\$120.00	11:15AM	Septic
	6/10/2019	Comm. Sewer & Septic	1500	\$0.06	\$90.00	9:55AM	Septic
	6/12/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	8:15AM	Septic
	6/14/2019	Comm. Sewer & Septic	2500	\$0.06	\$150.00	7:55AM	Septic
	6/17/2019	Comm. Sewer & Septic	1000	\$0.06	\$60.00	1:40PM	Septic
	6/24/2019	Comm. Sewer & Septic	2750	\$0.06	\$165.00	10:55AM	Septic
	6/25/2019	Comm. Sewer & Septic	1000	\$0.06	\$60.00	-	Septic
July	6/27/2019	Comm. Sewer & Septic	2250	\$0.06	\$135.00	-	Septic
	7/8/2019	Comm. Sewer & Septic	2850	\$0.06	\$171.00	-	Septic
	7/9/2019	Comm. Sewer & Septic	2250	\$0.06	\$135.00	-	Septic
	7/11/2019	Comm. Sewer & Septic	1200	\$0.06	\$72.00	-	Septic
	7/17/2019	Comm. Sewer & Septic	2550	\$0.06	\$153.00	-	Septic
	7/18/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	-	Septic
	8/12/2019	Comm. Sewer & Septic	2000	\$0.06	\$120.00	-	Septic
	8/14/2019	Comm. Sewer & Septic	3500	\$0.06	\$210.00	10:05AM	Septic
	8/14/2019	Comm. Sewer & Septic	2100	\$0.06	\$126.00	2:05PM	Septic
August	8/16/2019	Comm. Sewer & Septic	2750	\$0.06	\$165.00	1:00PM	Septic
	8/19/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	9:40AM	Septic
	8/21/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	2:10PM	Septic
	8/23/2019	Comm. Sewer & Septic	2000	\$0.06	\$120.00	-	Septic
	8/26/2019	Comm. Sewer & Septic	1950	\$0.06	\$117.00	8:30AM	Septic
	8/29/2019	Comm. Sewer & Septic	1950	\$0.06	\$117.00	8:10AM	Septic
	9/3/2019	Comm. Sewer & Septic	2200	\$0.06	\$132.00	10:00AM	Septic
	9/4/2019	Comm. Sewer & Septic	3500	\$0.06	\$210.00	2:45PM	Septic
	9/5/2019	Comm. Sewer & Septic	1500	\$0.06	\$90.00	11:05AM	Septic
September	9/6/2019	Comm. Sewer & Septic	2500	\$0.06	\$150.00	1:55PM	Septic
	9/22/2019	Comm. Sewer & Septic	3250	\$0.06	\$195.00	9:00AM	Septic

October	10/7/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	10:05AM	Septic
	10/7/2019	Comm. Sewer & Septic	2000	\$0.06	\$120.00	2:55PM	Septic
	10/9/2019	Comm. Sewer & Septic	3100	\$0.06	\$186.00	2:45PM	Septic
	10/11/2019	Comm. Sewer & Septic	3100	\$0.06	\$186.00	2:30PM	Septic
	10/17/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	9:05AM	Septic
	10/17/2019	Comm. Sewer & Septic	2000	\$0.06	\$120.00	3:10PM	Septic
	10/25/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	2:00PM	Septic
	10/25/2019	Weidner' Septic Service	3100	\$0.06	\$186.00	4:30PM	Septic
	10/28/2019	Weidner' Septic Service	3500	\$0.06	\$210.00	AM	Septic
	10/29/2019	Comm. Sewer & Septic	3000	\$0.06	\$180.00	1:35PM	Septic
	10/29/2019	Weidner' Septic Service	3300	\$0.06	\$198.00	9:30AM	Septic
November	10/31/2019	Weidner' Septic Service	3400	\$0.06	\$204.00	9:45AM	Septic
	10/31/2019	Weidner' Septic Service	2900	\$0.06	\$174.00	12:05PM	Septic
	11/6/2019	Weidner' Septic Service	2850	Flat Rate	\$183.60	12:45PM	Septic
	11/7/2019	Weidner' Septic Service	3000	Flat Rate	\$183.60	9:10AM	Septic
	11/7/2019	Comm. Sewer & Septic	3000	Flat Rate	\$173.40	12:20PM	Septic
	11/7/2019	Weidner' Septic Service	2500	Flat Rate	\$183.60	2:25PM	Septic
	11/8/2019	Weidner' Septic Service	3200	Flat Rate	\$183.60	-	Septic
	11/8/2019	Weidner' Septic Service	3000	Flat Rate	\$183.60	12:50PM	Septic
	11/15/2019	Weidner' Septic Service	2500	Flat Rate	\$183.60	9:00AM	Septic
	11/19/2019	Comm. Sewer & Septic	3000	Flat Rate	\$173.40	11:40AM	Septic
	11/21/2019	Weidner' Septic Service	2500	Flat Rate	\$183.60	3:05PM	Septic
	11/22/2019	Weidner' Septic Service	3000	Flat Rate	\$183.60	12:05PM	Septic
	11/22/2019	Weidner' Septic Service	2750	Flat Rate	\$183.60	1:25PM	Septic
December	11/25/2019	Weidner' Septic Service	2800	Flat Rate	\$183.60	10:00AM	Septic
	11/25/2019	Weidner' Septic Service	3000	Flat Rate	\$183.60	2:05PM	Septic
	11/27/2019	Weidner' Septic Service	3000	Flat Rate	\$183.60	11:15AM	Septic
	12/2/2019	Comm. Sewer & Septic	2500	Flat Rate	\$173.40	12:40PM	Septic
	12/3/2019	Comm. Sewer & Septic	2750	Flat Rate	\$173.40	12:15PM	Septic
	12/3/2019	Weidner' Septic Service	3300	Flat Rate	\$183.60	3:10PM	Septic
	12/5/2019	Weidner' Septic Service	2750	Flat Rate	\$183.60	9:00AM	Septic
	12/12/2019	Comm. Sewer & Septic	3550	Flat Rate	\$173.40	9:15AM	Septic
	12/12/2019	Comm. Sewer & Septic	2750	Flat Rate	\$173.40	1:40PM	Septic
	12/13/2019	Weidner' Septic Service	3200	Flat Rate	\$183.60	1:10PM	Septic
January	12/13/2019	Weidner' Septic Service	3200	Flat Rate	\$183.60	1:25PM	Septic
	12/17/2019	Weidner' Septic Service	2250	Flat Rate	\$183.60	10:30AM	Septic
	12/18/2019	Comm. Sewer & Septic	2700	Flat Rate	\$173.40	12:15PM	Septic
	12/18/2019	Weidner' Septic Service	3400	Flat Rate	\$183.60	1:45PM	Septic
	1/3/2020	Comm. Sewer & Septic	2700	Flat Rate	\$173.40	11:00AM	Septic
	1/3/2020	Weidner' Septic Service	2500	Flat Rate	\$183.60	12:00PM	Septic
	1/8/2020	Weidner' Septic Service	2700	Flat Rate	\$183.60	10:00AM	Septic
	1/10/2020	Weidner' Septic Service	3500	Flat Rate	\$183.60	-	Septic
	1/14/2020	Weidner' Septic Service	3000	Flat Rate	\$183.60	12:05PM	Septic
February	1/14/2020	Weidner' Septic Service	3000	Flat Rate	\$183.60	2:45PM	Septic
	1/16/2020	Weidner' Septic Service	2000	Flat Rate	\$183.60	1:55PM	Septic
	1/17/2020	Weidner' Septic Service	3000	Flat Rate	\$183.60	1:40PM	Septic
	1/21/2020	Weidner' Septic Service	3000	Flat Rate	\$183.60	2:00PM	Septic
	2/3/2020	Comm. Sewer & Septic	3000	Flat Rate	\$173.40	-	Septic
	2/3/2020	Weidner' Septic Service	3000	Flat Rate	\$183.60	9:30AM	Septic
	2/4/2020	Weidner' Septic Service	3100	Flat Rate	\$183.60	10:00AM	Septic
	2/11/2020	Weidner' Septic Service	3000	Flat Rate	\$183.60	9:10AM	Septic
	2/12/2020	Weidner' Septic Service	3250	Flat Rate	\$183.60	-	Septic
	2/18/2020	Weidner' Septic Service	3250	Flat Rate	\$183.60	11:00AM	Septic
	2/21/2020	Comm. Sewer & Septic	2700	Flat Rate	\$173.40	10:00AM	Septic
	2/24/2020	Weidner' Septic Service	3250	Flat Rate	\$183.60	9:30AM	Septic
	2/28/2020	Weidner' Septic Service	3100	Flat Rate	\$183.60	10:00AM	Septic

# **NMWRD Sewer Connection Permit Tracking**

FY 2019-20



Permit Date	Address	City	Re-Connect, Repair, Demo or New Connection	Permit Owner	Permit No.	Amount Paid
5/22/2019	1245 Noble Drive	PB	New Connection	Deer Grove II Partners	5637	\$ 7,674.00
6/3/2019	204 Eastwood Avenue	PB	Re-Connect	Dariusz Urban	5637	\$ 100.00
6/11/2019	1990 Fox Ridge Drive	IL	New Connection	William Ryan Homes	5299-A	\$ 7,674.00
6/17/2019	316 Richard Court	IL	Repair	Manuel Sosa	5638	\$ -
6/19/2019	106 E. State Road	IL	New Connection	Kaya Properties	214-A	\$ 11,757.67
8/1/2019	205 Rand Road	LM	New Connection	FNC RE Entity - Dunkin Donuts	5639	\$ 32,565.00
11/5/2019	1241 Noble Drive	PB	New Connection	Jarvis	5640	\$ 7,674.00
11/5/2019	1237 Noble Drive	PB	New Connection	Jarvis	5641	\$ 7,674.00
11/7/2019	804 W Sheridan Road	LM	Repair	Pearson	214-A	\$ -
11/13/2019	316 Richard Court	IL	Repair	Manuel Sosa	214-B	\$ -
11/27/2019	2170 Walnut Glen Blvd	IL	New Connection	William Ryan Homes	5642	\$ 7,674.00
12/3/2019	437 Northlake Road	LM	Demolition	Walley / Eagle BioMass	4146-A	-
12/6/2019	203 E State Road	IL	Repair	Diemer Plumbing	1476-A	\$ 100.00
12/30/2019	3410 Woodland Cir. N	IL	Repair	Mr. Rooter	528-A	\$ 100.00
1/24/2020	3410 Woodland Cir. N	IL	Repair	Mr. Rooter	528-A	-
2/3/2020	1029 Wimbeldon Dr.	IL	Repair	Moore/ Good Mechanical	1532-A	\$ 100.00

**FY 2019 - 2020 Total:** \$ 83,092.67

**Proposed Budget FY 2019 - 2020** \$ 153,472.00

**Proposed +/- vs. Current** \$ (70,379.33)



---

## NMWRD February 2020 Operations Report

As of March 6th, 2020

Prepared by: Luke Markko, Superintendent

**Chris Molitor Class 3 Certification** - I'd like to take a moment to recognize and congratulate Operator Chris Molitor on passing the IEPA Class 3 Wastewater Operator Certification exam. Chris' efforts better both him and the District!

**North Secondary Clarifier** – February found us taking the first steps toward remediating the North Clarifier following a period of staff and other professional service providers taking a long hard look at how to approach repairs in a fiscally responsible manner while maximizing the longevity of our efforts. District Manager Haque has been keeping the District Board informed as we progress toward remediating the Clarifier. Here is a summary of recent activity.

- **New Mechanism** – A new clarifier mechanism has been ordered from Walker Process Systems. The new mechanism will have stainless steel components for items that will be below the water level in the tanks. This will significantly reduce rehab costs in the future. The existing coated steel needs sandblasting and recoating approximately every 10 years.
- **Dome & Mechanism Removal** – A PO was issued to DPS Equipment for the removal of the fiberglass dome, removal of the mechanism, installation of the new mechanism, and reinstallation of the dome. DPS is expected to get started on the dome removal and removal of the mechanism in the coming weeks.
- **Concrete Rehab** – District staff are close to settling on a contractor to perform the concrete rehab of the clarifier floor. We are evaluating costs and approaches to the method of repair.
- **Portable Clarifier** – Once the mechanism and floor of the North Clarifier are removed, the District will be relying solely on the South Clarifier to perform secondary clarification of the waste stream as it flows through the facility. Staff are looking into options to rent a portable clarifier or holding tanks to place on site to provide temporary redundancy in the event an issue were to arise with the South Clarifier for the period of time when it is the only available secondary treatment point in the facility.

**Lakemoor Lift Station Capital Bill Improvements** – An initial plan set was provided by Trotter and Associates Inc. (TAI) for the planned improvements to the Lakemoor lift stations that will be funded by the Capitol Bill. This is at an early stage and District staff have already responded to TAI with recommended revisions to the initial plans.

**Crane Truck** – While pulling pumps at a lift station, Operations staff noticed that the base of the crane was moving independently of the body of the truck it is mounted to. This presents a significant safety concern with the operation of the truck and crane. The crane was retrofitted to a new Ford F-550 chassis and utility body last year by Monroe Truck Equipment. Monroe has picked up the vehicle and is evaluating and making repairs to it. I am awaiting a report on what went wrong and what measures they have taken to ensure the safe operation of the vehicle in the future.





## NORTHERN MORaine W R D

**Lift Station Automatic Transfer Switches** – Automatic Transfer Switches (ATS's) have been replaced at both the Rawson Bridge Rd. Lift Station and Lift Station #3. These two ATS's each experienced mechanical failure that resulted in a need for replacement. The Rawson Bridge Rd. ATS was over twenty years old, and the one located at LS #3 was part of a residential backup generator system that is scheduled for replacement with the Lakemoor Lift Station Capital Bill Improvements. An ATS was selected that will be compatible with the future generator that will be installed at that location.



Former Rawson Bridge Rd. ATS



New Rawson Bridge Rd. ATS

**SCADA Panels** – Three remaining control panels that will serve as local control hubs at several locations at the treatment plant have been installed. They join a fourth that was installed in the Dewatering Building. These three are in the Control Building, Chemical Building, and at the Oxidation Ditch. Fiber optic cable is scheduled to be installed the week of March 9<sup>th</sup>. The fiber will be pulled through conduits that were directionally bored around the facility to provide a continuous loop around the treatment plant. This approach provides redundancy in that if a circumstance were to arise where the fiber optic cable was damaged at a single point, all of the SCADA panels could still communicate with one another. District staff are working with Automation System and Design to evaluate software packages to build the SCADA interface and control logic.



Chemical Building SCADA panel



Oxidation Ditch SCADA panel







## NORTHERN MORAINÉ W R D

**Disinfection System Improvements** – As noted in previous months, improvements have been underway with the disinfection system. The disinfection chemicals are very corrosive and have taken their toll on the equipment housed in the same room. Fluorescent light fixtures have been replaced with vapor tight LED lighting that provides better illumination as well as improved longevity in a corrosive environment. New chemical storage tanks have been installed and plumbed to provide external fill ports, and rooftop venting. This will create a safer and cleaner method of filling the tanks. The former arrangement often resulted in chemicals being dripped on the floor, and a buildup of hazardous vapors in the storage room, both of which will be mitigated by the exterior fill and venting.



New bulk holding tanks



Rooftop venting will reduce interior vapors

**Phosphorous Removal** - Our Hyper Ion bulk storage tanks have arrived. The Hyper Ion is an alum-type chemical that is utilized to precipitate phosphorous out of the waste stream. Presently the chemical is ordered in 275 gallon totes. District staff must manually move these totes with the front-end loader to maintain a constant feed of the chemical into the oxidation ditch. The bulk storage tanks will allow for bulk tanker deliveries and house approximately a 7-week supply of Hyper Ion. Similar to the disinfection system improvements, piping will be installed to facilitate filling, venting and feeding the chemical.



1,000 Gallon Hyper Ion tank



Exterior fill ports with spill containment reservoir

**Collection System Sampling** – There have been intermittent periods when laboratory analysis on Mondays indicates that there are higher levels of ammonia entering and leaving the treatment plant on Sundays. This has recently resumed, and over the past several weeks, staff have been





systematically sampling at various points in the collection system to determine where it is coming from. We began by sampling at key lift stations that would indicate what region of the system it could be originating from. Those results indicated that the systems feeding into Lift Station #7 in Lakemoor were resulting in ammonia readings as high as 39 mg/L at that lift station. To put that into context, the average ammonia levels entering the treatment plant for January 2020 were 16 mg/L. So, this indicates a significant source of ammonia. Recent snowfall has made accessing manholes in the vicinity of Lift Station #7 difficult. Now that most of the snow has cleared, we have resumed sampling in this area, and continue to investigate this situation.

**Lily Lake Rd. Improvements** – Improvement plans by Nunda township to Lily Lake Rd. have prompted District staff to locate & evaluate the two force mains coming from Lift Station #'s 1 & 7 that run along Lily Lake Rd. These two force mains are critical because they convey all of the wastewater from the Village of Lakemoor. Locating the force mains has proved challenging in that there is no tracer wire to connect a locating machine to either force main. Staff must refer to the original plan drawings for the installation of each force main or field verify the location of air relief and cleanout structures. The latter have been found to be buried under a significant amount of topsoil and the structures will need to be brought up to grade. In fact, a manhole lid that was found buried, broke into pieces as it was removed to inspect the air relief valve in the structure below. The lid was promptly replaced. Most of the air relief valves have been found to be underwater. The structures housing them will need to be pumped out. The few air relief valves that are not submerged show a need for replacement. A more suitable replacement air relief valve is being evaluated. One that is made up of composite and stainless-steel materials that will allow for more ease in installation due to the lightweight material and allow for many years of service due to the corrosion resistant materials.



Example of buried force main manhole on Lily Lake Rd.



Heavily corroded air relief valve





---

## **NMWRD Engineering Report**

Date: March 6<sup>th</sup>, 2020

Prepared by: Joe Lapastora, E.I.T. – Staff Engineer

### **Woodman's Lift Station and Sanitary Sewer Additions:**

*[Project Update]* – Mainline construction and testing was completed in July while the remaining items associated with the lift station were completed in late August. Since August, there have been various areas of concern that the District requested be addressed before we assume responsibility of the lift station. The District performed its final inspection on February 11<sup>th</sup> and the District felt comfortable approving the inspection after all of our concerns were addressed. The District will issue a conditional approval and acceptance letter pending some review of our IGA with the Village of Lakemoor. Note that there are no plans to pave the access road to the lift station until out lots begin to sell.

### **Right turn lane at the intersection of Route 176 and Roberts:**

*[Project Update]* – During mid-February, Hometown Electric was on site to switch the traffic lights from the temporary lights over to the new permanent pole mounted lights. Since paving and electric has wrapped up, it appears that the only remaining work would be general landscaping remediation.

### **NMWRD Plant Projects:**

*[Project Update]* – Plant project updates for the month of February are outlined in the following section. An adjustment was made to the angle of the final chute for sludge conveyance which allots more time between loader runs. Bay 1 of the chemical building has received various upgrades including new tanks, exterior fill ports, separate spill containment area and more. Various painting projects have been completed with more to come. New District clothing that includes the new District logo arrived mid-February and employees were pleased with the quality. The District received pre-engineering plans from Greenfield relating to the Sludge Drying Bed Cover which are currently under review in addition to receiving the McHenry County permit application, which will be submitted during the month of March. With the warmer weather approaching, the District will be ordering first quality foundation blocks from Fisher Bros. Finally, the District has continued working at acquiring reasonable greenhouse quotes as well as finalizing door hardware quotes once new considerations are taken into account. For an update on work relating to the North Secondary Clarifier, see the Operations Report.



113 Timber Trail, PO Box  
240, Island Lake, IL 60042



Phone: 847-526-3300  
Fax: 847-526-3349



Email: [info@nmwrd.org](mailto:info@nmwrd.org)  
Web: [www.nmwrd.org](http://www.nmwrd.org)



## NORTHERN MORAIN W R D

---

### **NMWRD SCADA & Telemetry:**

*[Project Update]* – Completed aspects of the SCADA & Telemetry project include; underground conduit with tracer wire installed at the plant, most of the hardware has been ordered for SCADA system (recommended by ASD), two (2) actuators installed on a RAS line, and on the Oxidation Ditch, fiber cable ordered, and new concrete pads poured. The three (3) panels; Control Building C.P., Oxidation Ditch C.P. and Chemical Building C.P. have been installed in their designated spots to prepare for the pulling and terminating of fiber which is scheduled for Monday, March 9<sup>th</sup>. Finally, a new server enclosure was ordered as the District moves forward with the relocation/rehabilitation of the existing District server.

### **Septage Receiving:**

*[Project Update]* – The District has been exploring the option of septage receiving at the treatment plant and intends to move forward with a permanent septage receiving station. Preliminary designs have been examined and District staff are close to finalizing plans. A new manhole was placed near the Southeast corner of the drying beds in anticipation for septage receiving. The new manhole is connected to the headworks wet well but is not currently in use. In preparation for the next phase of septage receiving, the District is searching for revised quotes for new gate hardware that will allow haulers to enter only if they receive a District issued RFID card that will both track proximity of haulers entering the treatment plant and allows for complete control on who does and does not have access to the plant. This program will provide the District with another revenue stream with a short-term payback period.

### **Deer Grove Sanitary Sewer Extension:**

*[Project Update]* – The District has officially entered the maintenance period of the project for the next three (3) years.

### **Savannah's of Lakemoor Residential Subdivision:**

*[Project Update]* – The District has officially entered the maintenance period of the project for the next three (3) years.







**In addition to the work relating to these projects, the following engineering related work is also being performed;**

- The District discovered that major road work was scheduled to be performed along a stretch of Lily Lake Road (project extent is from Stone Drive to Wegner Road) as early as mid-February. District operator, Chris Molitor, spoke to District Staff Engineer, Joe Lapastora, about a large number of JULIE locates that were coming in during the last week of January for various locations along Lily Lake Road. After reviewing the project description within the locates, we were under the impression that the project only involved gas main relocation as the work type descriptions read "INSTALL AND RETIRE GAS MAIN AND SERVICE." During the week of February 10<sup>th</sup>, District operators noticed that open cut excavations were being performed along Lily Lake Road, and after speaking with an on-site foreman, we discovered that Nunda Township had recently received IDOT funding for roadway and safety improvements that would include the lowering of several hills along Lily Lake Road. The District then began discussing the project with Nunda and determined that the original project plan sheets neglected to include the sanitary sewer (specifically, two force mains that convey ALL Lakemoor flow to the treatment plant) and there were several "pinch points" where the proposed cuts would breach the District's compliance with Illinois State code requiring a minimum of 42" of cover. District operators, Chris Molitor and Tim Hendrickson located all PRVs for the 8" and 12" mains while also gathering elevation data for some locations during the week of February 24<sup>th</sup>. The District will continue to work with Nunda on this project, but we have made it clear that the originally proposed cuts/relocations will be much more costly than Nunda's engineer's estimates. As of March 5<sup>th</sup>, revised plans were sent to the District and are currently under review.
- The District is finalizing the proposed budget for FY 2020-21 and should be available for Trustee review in early March.
- As required per Special Condition 23 in the District's most recent NPDES Permit, a Capacity, Management, Operations and Maintenance (CMOM) Report is being developed for NMWRD. The CMOM will need to be made available to the public by March 28<sup>th</sup> per our permit. Joe will be wrapping up the Draft version over the weekend so that the final report will be ready come March 28<sup>th</sup>.
- Engineering Intern, Miranda Durbin, has been working on acquiring revised door hardware quotes during February after some lingering questions were answered. Before the District moves forward with a final decision, we will have to review the Operations Floodproofing prints to verify if door swing direction is staying the same or changing for some doors. Once we complete this aspect, we will proceed with coordinating the order of the door hardware directly to Cross Aluminum to send the doors to the assembly floor.





## DELINQUENT ACCOUNTS RECAP FOR February 2020

Revised: 3/05/20 by Debi Martin, District Clerk

### \$200-\$300

#### 88 Active Accounts

Island Lake – 50 customers  
49 Water Shut Off Notices, 1 Sewer Disconnection Notice  
Lakemoor – 25 customers  
14 Water Shut Off Notices, 3 Sewer Disconnection Notices, 2 making payments, 6 Final Notices of Delinquency  
Port Barrington – 12 customers  
10 Final Notices of Delinquency, 1 Sewer Disconnection Notice, 1 making payments

### \$301-500

#### 10 Active Accounts

Island Lake – 4 customers  
2 Final Water Shut off Notices, 2 Sewer Disconnection Notices  
Lakemoor – 6 customers  
6 Sewer Disconnection Notices

### \$501-\$1000

#### 13 Active Accounts

Island Lake – 5 customers  
4 liens – 4 with water off, 1 to be disconnected from sewer  
Lakemoor – 5 customers  
4 liens – 4 to be disconnected, 1 Sewer Disconnection Notice  
Port Barrington – 3 customers  
3 liens – 2 to be disconnected, 1 in foreclosure

### \$1001 and up

#### 10 Active Accounts

Island Lake – 5 customers  
5 liens – 4 with water off, 1 to be disconnected from sewer  
Lakemoor – 6 customers  
6 liens – 3 sold for delinquent taxes; with 1 to be demolished, 3 to be disconnected

Delinquent Accounts total (active and inactive customers): **\$55,803.28** (\$9,701.89 inactive accts)

February 2019's report: **\$52,936.59**

February 2018's report: **\$50,872.42**

#### MONTHLY ACTIVITY:

4807	Monthly Bills mailed on 3/01/20 (for February service)	123	Notices of Delinquency mailed on 3/04/20
382	Bills <u>not</u> mailed – customers prepaid on their accounts	21	Real Estate closings for February 2020
63	Water Shut Off Notices mailed on 3/03/20	1	Lien filed in February
16	Final Notices of Delinquency mailed on 3/03/20	1	Lien released in February
14	Sewer Disconnection Notices mailed on 3/03/20	2	Final Water Shut off Notices mailed on 3/03/20



"I know this accounting in the cloud is supposed to make things easier, but how do we know which one is ours?"



113 Timber Trail, PO Box  
240, Island Lake, IL 60042



Phone: 847-526-3300  
Fax: 847-526-3349



Email: [info@nmwrd.org](mailto:info@nmwrd.org)  
Web: [www.nmwrd.org](http://www.nmwrd.org)





---

## **AGENDA REGULAR MEETING**

**7:30 P.M. – March 10, 2020**

- 1. CALL TO ORDER & ROLL CALL**
- 2. PLEDGE OF ALLEGIANCE**
- 3. PRESENTATION & APPROVAL OF MINUTES**
  - a. Regular Meeting Minutes – February 11, 2020
- 4. TREASURER'S REPORT**
- 5. PUBLIC COMMENTS**
- 6. MANAGER'S REPORT**
  - a. Operations Report
  - b. Engineering Report
  - c. Delinquent Accounts Report
- 7. TRUSTEE REPORTS**
- 8. LEGAL BUSINESS**
- 9. OLD BUSINESS**
  - a. Trustee Appointments for the term beginning May 1, 2020 and ending April 30, 2023
- 10. NEW BUSINESS**
  - a. Approve Resolution designating Surplus Equipment and Authorizing Disposal
  - b. Renewal of the District's Property, Liability and Flood Insurance
  - c. Annual Commodity and Services Bids and Contracts
  - d. Presentation on the FY 2020-21 Annual Budget Proposal with Final Action scheduled for May meeting
- 11. MISCELLANEOUS CORRESPONDENCE**
  - a. MCGG Membership Meeting – Wednesday, March 18, 2020 at Biaggi's in Algonquin, Illinois
- 12. APPROVAL OF BILLS**
- 13. OTHER BUSINESS**
  - a. Executive Session – Litigation, if needed

Posted to [www.nmwrld.org](http://www.nmwrld.org) - March 6, 2020



113 Timber Trail, PO Box  
240, Island Lake, IL 60042



Phone: 847-526-3300  
Fax: 847-526-3349



Email: [info@nmwrld.org](mailto:info@nmwrld.org)  
Web: [www.nmwrld.org](http://www.nmwrld.org)