



# NORTHERN MORAINÉ WASTEWATER RECLAMATION DISTRICT

113 Timber Trail, Island Lake, Illinois 60042

## REGULAR MEETING MINUTES

May 7, 2019

Present: Trustees: Ken Michaels, John Ragland, Timothy Brunn, Lydia Ryberg, Dena Battaglia  
District Manager: Mohammed Haque; District Clerk: Deborah Martin

President Michaels called the meeting to order at 7:33 p.m.

### 1. CALL TO ORDER:

Roll Call: Timothy Brunn - Present  
John Ragland - Present  
Dena Battaglia - absent for roll call, but arrived at 7:39 pm  
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, April 16, 2019

Motion by Trustee Ryberg to approve the Regular Meeting minutes of April 16, 2019 as presented.  
2nd by Trustee Ragland.

4 ayes 0 nays 1 absent

**MOTION CARRIED**

### 4. TRUSTEE'S OATH OF OFFICE:

Having been reappointed by the Appointing Authorities, Timothy Brunn and John Ragland took oaths of office as Trustees for the Northern Moraine Wastewater Reclamation District for the period of May 1, 2019 through April 30, 2022.

### 5. ELECTION OF OFFICERS:

*Pursuant to the Sanitary District Act of 1917, (70 ILCS 2405/4) Section 4, "The Board of Trustees immediately after their appointment and at their first meeting in May of each year thereafter, shall elect one of their number as president, one of their number as vice-president and from or outside of their membership a clerk and an assistant clerk. In case of the death, resignation, absence from the State or other disability of the president, until such disability is removed or until a successor to the president is appointed and chosen in the manner provided by this Act."*

Motion by Trustee Brunn to appoint Ken Michaels as the President of the Northern Moraine Wastewater Reclamation District.

2nd by Mr. Ragland

4 ayes 0 nays 1 abstain - Ken Michaels **MOTION CARRIED**

Motion by President Michaels to appoint Lydia Ryberg as Treasurer of the Northern Moraine Wastewater Reclamation District.

2nd by Mr. Ragland

4 ayes 0 nays 1 abstain - Mrs. Ryberg **MOTION CARRIED**

Motion by Mr. Ragland to appoint Dena Battaglia as Vice President of the Northern Moraine Wastewater Reclamation District.

2nd by Mr. Brunn

4 ayes 0 nays 1 abstain - Mrs. Battaglia **MOTION CARRIED**



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Motion by Mrs. Ryberg to appoint Deborah Martin as District Clerk of the Northern Moraine Wastewater Reclamation District.

2nd by Mr. Ragland

5 ayes 0 nays 0 abstain

**MOTION CARRIED**

Motion by Mrs. Ryberg to appoint Madalina Roscan-Guzman as Assistant Clerk of the Northern Moraine Wastewater Reclamation District.

2nd by Mr. Ragland

5 ayes 0 nays 0 abstain

**MOTION CARRIED**

**6. SELECTION OF DISTRICT OFFICIALS:**

Motion by President Michaels to appoint Victor Filippini, Jr. as Legal Counsel for the Northern Moraine Wastewater Reclamation District.

2nd by Mr. Ragland

5 ayes 0 nays 0 abstain

**MOTION CARRIED**

A short discussion ensued by the Trustees questioning if the District's Junior Engineer, Joe Lapastora, qualified to be appointed District Engineer. The Trustees decided that although having Joe on staff has proven to be an asset, he is not yet fully qualified to take on the many needs that the District has that require an engineering professional. It was agreed that the District did need to appoint an engineering firm for those needs that would arise in the future.

Motion by Mr. Ragland to appoint Trotter and Associates as District Engineers for the Northern Moraine Wastewater Reclamation District.

2nd by Mrs. Ryberg

5 ayes 0 nays 0 abstain

**MOTION CARRIED**

Motion by President Michaels to appoint Deborah Martin and Mohammed Haque as Freedom of Information Act and Open Meetings Act Officers for the Northern Moraine Wastewater Reclamation District.

2nd by Mrs. Ryberg

5 ayes 0 nays 0 abstain

**MOTION CARRIED**

**7. TREASURER'S REPORT:**

The Treasurer's Report was presented by Mrs. Ryberg.

Motion by Mrs. Battaglia to approve the Treasurer's Report for the month ending March 31, 2019 as presented.

2nd by Mr. Brunn

5 ayes 0 nays 0 abstain

**MOTION CARRIED**

**8. PUBLIC COMMENTS:**

None

**9. MANAGER'S REPORT:**

Manager Haque update the Board on the various developments taking place within the District, including Deer Grove North II, Savannah's of Lakemoor and Woodman's. These developments should have the sewer completed later this spring. Manager Haque reported that Skipper Bud's in Volo has expressed a need to be connected to sanitary sewer. Per the District's 5-party agreement, the District will notify the others of this business's request to connect to Northern Moraine's sanitary sewer. He reported that work continues with the Lift Station Controls, SCADA, and Control Building Floodproofing projects. Both Manager Haque and President Michaels were encouraged by the Senate hearing turnout at the University of Lake County's Capital Bill Senate Hearing in Grayslake. Manager Haque commented that he felt the District was fortunate to have a speaking spot



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during this hearing, and that he felt the District's infrastructure improvement needs were taken seriously by our representatives. Manager Haque reported that District staff is working at finalizing plans for the District's 50<sup>th</sup> Anniversary Celebration to take place at the District's treatment plant on September 14<sup>th</sup>. He reminded the Board that the Operations Supervisor's report and the Junior Engineer's report were in their packets.

**10. Trustee Reports:**

Mrs. Ryberg reported that she toured Woodman's and was impressed with how large this food store will be.

**11. LEGAL BUSINESS**

None

**12. OLD BUSINESS**

None

**13. NEW BUSINESS**

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

After discussion concerning the ability of the District to become self-insured, the Board decided it would be in the District's best interests to continue to retain an outside broker for the District's insurance needs.

Motion by Mrs. Ryberg to award the contract for Property, Liability and Flood Insurances to Arthur J. Gallagher Risk Management Services and to adopt a resolution authorizing the District Manager to bind coverage and also to execute an agreement for said insurance coverage with AJG for the coverage period of May 23, 2019 to May 23, 2020 at the renewal rate of \$64,810.00.

2nd by Mrs. Battaglia

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

5 ayes 0 nays 0 abstain

**MOTION CARRIED**

b. Authorization to Dispose of Records per State Statute

Motion by Mr. Brunn to initiate the records disposal process for the items listed on the District's application # 05:289.

2nd by Mr. Ragland

5 ayes 0 nays 0 abstain

**MOTION CARRIED**

c. Approval of a Memorandum of Understanding with Cascade Energy

Manager Haque informed the Board that Cascade Energy had recently contacted the District to see if the District would be interested in participating in seven workshops related to identifying and acting upon energy savings opportunities at the District's plants. He explained that these workshops offer incentives for participation and meeting key milestones, of up to \$4,000 as well as a \$0.01/kWh incentive on energy saved. The period of engagement with Cascade Energy would be two years.

Motion by Mr. Ragland to approve a Memorandum of Understanding with Cascade Energy for Strategic Energy Management and to adopt a Resolution to authorize the District Manager to execute the Memorandum.

2nd by Mrs. Ryberg

Roll Call Vote: Dena Battaglia - Aye  
Timothy Brunn - Aye  
John Ragland - Aye



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Lydia Ryberg - Aye  
Ken Michaels - Aye

5 ayes 0 nays 0 abstain

**MOTION CARRIED**

d. Approval of an Engineering Services Agreement with Trotter and Associates for Control Building Improvements

Manager Haque reminded the Board that the District has budgeted several projects at the Treatment plant for the coming fiscal year and that he had recently met with Scott Trotter of Trotter and Associates to discuss these various projects and to determine the priorities and phasing of these projects. Mr. Haque stated that the District has had good experience with the District's Control Building Floodproofing and Generator Modifications using internal engineering review, bidding and project management, and that the District saved money. He suggested that the District should continue this method. Manager Haque suggested that some engineering work would need to be done for the various budgeted projects, and that he recommended that TAI provide a time and materials Engineering Services contract for up to \$35,000 in services for the upcoming projects.

Motion by Mr. Brunn to approve an Engineering Services Agreement with Trotter and Associates for the Control Building Improvements not to exceed \$35,000 and to adopt a Resolution to authorize the District Manager to execute said Agreement.

2nd by Mrs. Ryberg

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

5 ayes 0 nays 0 abstain

**MOTION CARRIED**

e. Approval of Surveying and Site Plan Service Agreement with CE Ltd.

Mr. Haque reported to the Board that among work for the fiscal year is the planning of a new maintenance garage adjacent to the existing Administration office. Because of the new pavement that will be installed west of this new maintenance garage, a stormwater and site plan improvement permit will be required from McHenry County. In addition, as part of the District's work around the sludge dewatering building, Staff would like to widen the road at the plant and put in curb and gutter to deal with the standing water that the District has in the area north of the Oxidation ditch. This standing water is a concern in the winter as it turns to ice and never drains. Mr. Haque explained that our previous surveyors, Vanderstoppen Surveying is co-located with CE Ltd. CE Ltd are well versed with the requirements and reviewers at McHenry County Stormwater division and felt that they are a good fit for this work.

Motion by Mrs. Battaglia to approve a Surveying and Site Plan Service Agreement with CE Ltd in the amount of \$19,000 for Parking Lot Improvements and to adopt a Resolution authorizing the District Manager to execute that agreement.

2nd Mr. Ragland

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

5 ayes 0 nays 0 abstain

**MOTION CARRIED**





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f. Adoption of Salary Ordinance 19-03

Manager Haque explained that this year's Salary Ordinance allows for adjustments to include adding additional grades above the standard Wastewater Collection Operator level to allow for high performing operators to advance to WW Collection Operator 2 or Chief Operator positions. He also pointed out that this year the District has added an Intern position to allow for the hiring of temporary summer help and a position of Engineer to allow for growth for the District's existing Junior Engineer.

Motion by Mr. Brunn to adopt Salary Ordinance 19-03, a Salary Ordinance for Employees of the Northern Moraine Wastewater Reclamation District.

2nd Mr. Ragland

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

5 ayes 0 nays 0 abstain

**MOTION CARRIED**

g. Approval of an Appraisal Service Agreement with CBIZ Valuation Group, LLC

Manager Haque informed the board that during last year's audit, it was noticed that it had been a considerable time since the District had an assessment done on the valuation of the District's assets. Manager Haque had requested a proposal from CBIZ Valuation Group, LLC to perform a thorough update of the District's capital assets and to incorporate the same into the new audit that Lauterbach and Amen will perform. CBIZ has done insurance appraisal work for the District in the past.

Motion by Mr. Brunn to Approve an Appraisal Services Agreement with CBIZ Valuation Group, LLC in the amount of \$6,250 for Capital Asset Inventory and Valuation Services and to Authorize the District Manager to execute the Agreement.

2nd Mrs. Battaglia

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

5 ayes 0 nays 0 abstain

**MOTION CARRIED**

h. Adoption of Ordinance 19-04, Amending a Sewer User Charge

Manager Haque reminded the Board that in March the District received a letter from Mayor Chuck Amrich, stating that the Village of Island Lake would be increasing their fee to hang red tags for the District. This would increase the Village of Island Lake's charge for Water Shut Off Notices from \$35 to \$50.

Motion by Mr. Ragland to Adopt Ordinance 19-04, an Ordinance Amending Ordinance 14-02, being an Ordinance Establishing Sewer User Service Charges and to authorize the District Manager to enact the new rate immediately and to publish said Ordinance as required.

2nd Mr. Brunn

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

5 ayes 0 nays 0 abstain

**MOTION CARRIED**



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i. Discuss Septage Receiving as Additional Non-Traditional Revenue

Manager Haque informed the Board that the District has been getting requests from Septage Hauler, Community Sewer and Septic, asking if the District would be willing to take Septage at the District's treatment plant. In the past the District chose to not accept septage waste from private haulers, because of the additional loading it would put on the plant and technical challenges. Manager Haque pointed out that he felt the District has good technical skills now and is working on getting more instrumentation. Accordingly he felt that we should entertain the idea of accepting Septage waste as an additional revenue for the District. He felt that this could increase non-traditional revenue per year. The Board discussed various scenarios and considerations in the acceptance of Septage waste from private haulers. The Board asked that District Manager continue taking Septage loads from Community Sewer and Septic and to report back to the Board the results and report on revenue generated. They also asked that District Staff bring to the Board a formal ordinance establishing hauled waste loading and an ordinance laying out the requirements for Septage receiving.

**11. MISCELLANEOUS CORRESPONDENCE**

- a. MCCG Annual Meeting– May 22, 2019 at Boulder Ridge Country Club. Interested parties should let District Clerk Debi Martin know so that she may RSVP.

**12. APPROVAL OF BILLS**

Motion by Mr. Brunn to approve payment of bills on the May 7, 2019 bill list as presented, in the amount of \$196,413.69.

2nd Mrs. Battaglia

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

5 ayes 0 nays 0 abstain

**MOTION CARRIED**

**13. OTHER BUSINESS - none**

**ADJOURNMENT**

Motion by Mrs. Ryberg to adjourn at 8:47 p.m.

2nd Mr. Ragland

5 ayes 0 nays 0 abstain

**MOTION CARRIED**



May 7, 2019

To: NMWRD Board of Trustees  
From: Mohammed Haque, District Manager  
Subject: Manager's Report

**Deer Grove North Unit 2 [Gravity Sewer Extension for 11 lots]**

Nothing new to report. We hope to close out this project this spring.

**Savannahs of Lakemoor [Gravity Sewer Extension for Subdivision]**

Nothing new to report aside from the Engineer's update. We hope to close out this project this spring.

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

The control panel for Woodman's was reviewed internally and approved. The new panel is standardized per our similar design at the Hale #1 station. They are still looking at a June completion for all lift station work.

**SCADA(Supervisory Control and Data Acquisition) and Automation**

We have put out the control panels for quotes for the SCADA and those quotes are coming in now. We have moved on to phase 2 of the work, which includes providing schematic design drawings for the Control Building, Chemical Building and Oxidation Ditch. Three new control panels are planned for this and that work is underway. In addition, this month we installed the concrete pads and additional conduits for the backbone and actuators for some valves.

**Circle K**

Basic site plans have been received and are under review.

**Skipper Bud's**

Skipper Bud's has sent the attached letter indicating their desire to connect to us. Per the requirements of our 5-party agreement with Lakemoor, Lake County, Volo and Lakes Region SD, we are to notify the other party about their request. I will be doing that after the Board Meeting.

**Lift Station Controls**

The Hale control panel has been delivered and we will be working with Kresmery Construction on the installation. In conjunction with this, we are now working on designing and procuring the power panel. Panels at additional locations will be ordered in the next few months.

**Floodproofing of Control Building and Generator Modifications**

Most of the mansard has been removed. Flood barriers are being shipped and additional items such as doors, roofing and masonry revisions are pending. Since we have had considerable savings on this project, we are considering replacing the weathered and rusting doors on this building with extruded aluminum doors. WE are also replacing a greater part of the mansard so that we have a uniform look for our 50<sup>th</sup> Anniversary open house.

**Phosphorus Removal**

We are in the process of installing permanent fiberglass tanks for bulk storing Hyper+ion. Luke and his staff are working on selecting the pumps and bulk storage tanks for this project.



### **Influent Flowmeter and Raw Pump #1**

Per our 2014 Facility Plan, Trotter & Associates recommended that we replace our existing influent 18" flowmeter with a 12" flowmeter at a cost of approximately \$100,000 and Raw Pumps for \$250,000 (\$62,500 per pump). TAI estimated that the total cost, with engineering and contingencies, of replacing one pump and the 12" flowmeter would be \$265,160. We are under way to replace it for approximately \$104,000 per below. We have ordered a flowmeter for \$4,800 as well as an immersible pump for \$14,000 as part of this project, both of which have now been delivered or are ready to pick up. We are currently coordinating bypass flow for the project since we will need to send flows to the oxidation ditch for a few days so the work can be done. Work is currently being schedule for the end of this month.

<b>Influent Flowmeter and Raw Pump # 1</b>	<b>TAI</b>	<b>Project w/ 1 pump</b>	<b>Project w/ 1 pump</b>	<b>Balance of</b>	
	<b>Facility Plan</b>	<b>and Flowmeter</b>	<b>and Flowmeter</b>	<b>Work in Future</b>	
	<b>Cost</b>	<b>Standard Method</b>	<b>NMWRD as GC</b>		<b>Comments</b>
General Conditions	\$ 93,750.00	\$ 21,959.46	\$ -	\$ -	
Raw Sewage Pump Replacement (4 pumps)	\$ 250,000.00	\$ 62,500.00	\$ 20,000.00	\$ 60,000.00	1 pump now; 3 later
Influent Force Main and Meter Replacement	\$ 100,000.00	\$ 100,000.00	\$ 70,000.00	\$ -	
Fine Screen Replacement	\$ 250,000.00	\$ -	\$ -	\$ 200,000.00	Replace Fine Screen in separate project
<b>Subtotal Construction</b>	<b>\$693,750.00</b>	<b>\$ 184,459.46</b>	<b>\$ 90,000.00</b>	<b>\$ 260,000.00</b>	
Contingency @ 25%	\$ 173,437.50	\$ 46,114.87	\$ 9,000.00	\$ 26,000.00	Contingency @ 10% for NMWRD as GC
<b>Construction Total</b>	<b>\$867,187.50</b>	<b>\$ 230,574.33</b>	<b>\$ 99,000.00</b>	<b>\$ 286,000.00</b>	
Engineering @ 15%	\$ 130,078.13	\$ 34,586.15	\$ 5,000.00	\$ 5,000.00	As-Built Only
<b>Portable Capital Cost - Treatment Facility Rehabilitation</b>	<b>\$997,265.63</b>	<b>\$ 265,160.47</b>	<b>\$ 104,000.00</b>	<b>\$ 291,000.00</b>	
			<b>TOTAL COST</b>	<b>\$ 395,000.00</b>	

### **Headworks / Screening Issues**

The screenings conveyor has been delivered and we are in the process of bidding out a new bar screen. The replacement Influent Grinder has been received and installation is scheduled for later this month. Additional electrical and controls work will also be necessary.

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

Installation of a self-cleaning filter is scheduled for later this month.

### **Operations Building Remodeling**

We just need to order a couple of file cabinets and prepare a punchlist.

### **Office Remodeling**

Work is complete with the exception of a couple of punchlist items.

### **Prairie Woods Generator**

A replacement generator by Cummins was ordered and shop drawing submittals have been reviewed and approved. We are waiting for shipment.

### **Maintenance Garage**

I continue to work with ADG Design Services on the design of the new maintenance garage. I have included a request to have surveying and site plans prepared by CE Ltd for Stormwater Permitting by McHenry County on the current board meeting agenda.



### **Capital Bill Senate Hearing – May 3 @ Grayslake**

I attended and spoke at a Senate hearing on Capital at the University of Lake County in Grayslake that was coordinated by Senator Melinda Bush and included Senators Don DeWitte, Dan McConchie, Craig Wilcox, Jim Oberweiss, Ram Villivalam, Pat McGuire and Representative Mary Edly-Allen. A copy of my testimony and handout are attached. President Michaels joined me for the hearing and I am very grateful for the time he took away from work for this. We were fortunate to have a speaking spot, considering we were the smallest agency present. I will be going back down to Springfield on Thursday and should be able to report further on progress on a Capital Bill. I have been keeping Lakemoor apprised of my efforts.

### **50<sup>th</sup> Anniversary Preparations**

Debi is getting started on preparations for this event and is going to reach out to tent rental companies and catering. We are also working on several items including a water reuse pilot, observation platform by the ditch and fish that eat algae as ways to spark interest from the public and elementary school tours on our biological treatment process. In addition, Luke has been working with the local boy scout troop that is interested in setting up bat houses and observation areas. All of this goes towards making wastewater treatment an interesting process for the public and to drive home the point that wastewater treatment is a biological process and the resources we recover are valuable resources in the form of nutrients and food for other organisms.

We will be working on invitation lists and sending out invites soon. Please pass along folks you feel we should be inviting and we will include them. Just a reminder that the event is scheduled for September 14 in the afternoon.



A Division of Skipper Marine Holdings, Inc. & Affiliated Companies  
April 11, 2019

Mohammed Haque  
Northern Moraine Wastewater  
Reclamation District  
P.O Box 240  
113 Timber Trail  
Island Lake, IL 60042

via Email: [haque@nmwrd.org](mailto:haque@nmwrd.org)

**RE: Sanitary Sewer Service – SkipperBud's, Lakemoor**

Mr. Haque:

This letter is a written request for Northern Moraine Wastewater Reclamation District to provide sanitary service to the parcel(s) commonly known as 31535 N. U.S Highway 12 – Lakemoor, IL. We understand that this request would require amendments to the existing Intergovernmental Agreements with Lakes Region Sanitary District and its successor Lake County, and to the end, this letter is a formal request for same.

This request is contrary to the boundaries in the intergovernmental agreement dated 7/31/2010, amending the "Memorandum of Understanding" dated February 21, 2005 (copy attached). It is important to note that the boundaries in both the Memorandum and Intergovernmental Agreement were established without input or knowledge from SkipperBud's as landowners.

This request would allow SkipperBud's and the Village of Lakemoor to extend sanitary sewer and water mains to SkipperBud's property from the Woodman's parcel, located directly across Route 12 to the east. This is the only direct and economically viable connection to sanitary sewer currently available. Timing of an economically viable solution to provide sewer and water services from Lakes Region Sanitary district/Lake County is unknown and frankly time is of the essence.

SkipperBud's is a proud corporate citizen of both Lakemoor and Lake County with three locations in Lake County - Winthrop Harbor, Lakemoor and Antioch. We respectfully ask that our request is expedited and granted in a timely fashion.

Very truly yours,

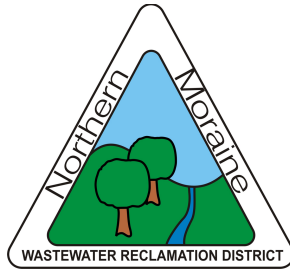
Mark D. Ellerbrock, Vice President  
SkipperBud's

cc.

Judy Martini – Lake County Board Member  
Lakes Sanitary District/ Lake County PW – Rod Worden, Director  
Matt Dabrowski – Village of Lakemoor

[JMartini@lakecountyil.gov](mailto:JMartini@lakecountyil.gov)  
[publicworks@lakecountyil.gov](mailto:publicworks@lakecountyil.gov)  
[mdabrowski@lakemoor.net](mailto:mdabrowski@lakemoor.net)





Mohammed M. Haque  
May 3, 2019

### **Capital Bill Hearing Testimony**

Honorable Senators and Subcommittee members from the Senate,

Today you have heard from some very big agencies with some very big asks. There is no shortage of wants as you can see, and the need for a massive capital bill is not unfounded. Illinois has an exodus problem and the counties closest to Wisconsin have it the worst. I'm Mohammed Haque, the District Manager for Northern Moraine Wastewater Reclamation District. I'm the guy that "Allows you to flush it and forget about it" and our district is a local government agency that provides wastewater service to 20,000 people in the Villages of Island Lake, Lakemoor, and Port Barrington.

The property taxes and costs of services are squeezing our residents, especially our 23% minority population in western Lake County. At the same time, we need to compete with Wisconsin and Indiana to keep and grow our businesses and jobs. Our District's Darrell Road Sewer Project is a \$16.6 million-dollar capital request that includes installing 8 miles of sanitary sewers and pumping stations. This would take pressure off an existing sewer system that is currently at capacity and to provide a commercial growth area of 5,500 acres. The new sewer would be able to handle sanitary sewer flow from the equivalent of 19,000 people and provide the commercial development and jobs that are needed in our state.

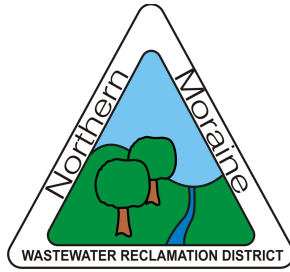
This sewer also will be able to divert flows from a failed system serving over 300 homes, that has in the past discharged overland sewage to Volo Bog. It is our responsibility to protect the environment and we must protect Volo Bog, one of our National Natural Landmarks.

Our project is just an example of the many needs for wastewater capital funding. As the current president of the Illinois Association of Wastewater Agencies, I speak for more than 80% of the wastewater industry in our state when I say that "We must continue to invest and protect the recreational waters that our citizens enjoy".

After all, you can have all the roads you want, but without good clean water, you won't have places for those roads to go.

Our sewer systems and treatment plants are now reaching the 40-50 year mark since most were installed in the 70s and 80s as a result of the Clean Water Act. The Illinois Association of Wastewater Agencies has calculated that we have in excess of \$4 billion in immediate need in the wastewater sector in Illinois. Let's take a step in the right direction so that our future generations can continue to enjoy our great state and its great water bodies.





## ILLINOIS NEEDS TO KEEP WATER CLEAN NO Sewers = NO Development

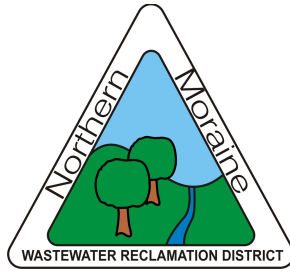
Water infrastructure upgrades are badly needed to protect our rivers and lakes from pollutants and to ensure clean water for all. We can not expect 40-50 year old systems to work forever. Many unsewered communities need wastewater services to allow for growth and expansion. Northern Moraine WRD has unique needs for new sewers to allow for commercial growth along the Route 12 and Route 120 corridors as well as several treatment plant upgrade needs. A capital bill will allow us to provide these services and compete with our less taxed neighbors.



### DARRELL ROAD SEWER \$16,632,000

*Villages Helped – Island Lake, Lakemoor*  
*Utility Regionalization – Rockwell Utilities*

The construction of the Darrell Road Sewer would provide needed sewer capacity to the Villages of Lakemoor and Island Lake. The sewer would provide capacity for the economic development of 5,500 acres in Lake and McHenry Counties and provide the needed transportation of 1.95 million gallons of sewage a day to a regional wastewater facility (Northern Moraine Wastewater Reclamation District) in Island Lake. This would also provide the needed capacity to the failing 321,000 gallons per day wastewater facility at Rockwell Place in Lakemoor, alleviating pollution of the Volo Bog.



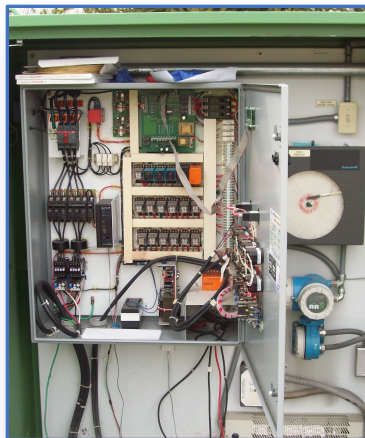
## **WASTEWATER PLANT UPGRADES**

**\$997,290**

*Villages Helped – Island Lake, Lakemoor, Port Barrington*

*Counties Served – McHenry & Lake*

The Northern Moraine Wastewater Reclamation District provides regional wastewater transportation and treatment for the communities of Island Lake, Lakemoor and Port Barrington in Lake and McHenry County. The 2.0 million gallon per day facility was originally built in 1978 and requires upgrades to replace and modernize several pieces of equipment that are beyond their useful service life. This project would allow for the replacement of the raw sewage pumps, influent force main & meter, screening equipment and outdated motor control centers at the head of the plant.



## **LIFT STATION CONTROLS PROJECT**

**\$400,000**

*Villages Helped – Island Lake, Lakemoor*

*Counties Served – McHenry & Lake*

The Northern Moraine Wastewater Reclamation District provides regional wastewater transportation and treatment for the communities of Island Lake, Lakemoor and Port Barrington in Lake and McHenry County. The District owns and maintains twenty-two (22) lift stations. Many of the lift station controls are outdated and have outlived their useful service life. This project would allow for eight (8) lift station control panels to be replaced at a cost of \$50,000 each with modern equipment capable of remote monitoring and advanced alarming, allowing for better and more reliable control and service to the residents of Island Lake and Lakemoor.



Northern Moraine WRD is a local government agency that provides wastewater collection and treatment to a population of 20,000 people in the Villages of Lakemoor, Island Lake and Port Barrington as well as unincorporated Lake and McHenry Counties. Our annual operating budget is \$3 million and we discharge our clean water into the Fox River.

Our Senators (Wilcox and McConchie) and Representatives (Wilson and McSweeney) are both informed of the need and benefits of these projects. They understand that without sewers, there is no development.

### Contact

- Kenneth A. Michaels, Jr. - Board President ([kmichaels@lakelaw.com](mailto:kmichaels@lakelaw.com)) 312-588-5000
- Mohammed M. Haque, P.E., MBA - District Manager ([haque@nmwrd.org](mailto:haque@nmwrd.org)) 847-526-3300

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## **NMWRD March 2019 Operations Report**

As of May 3rd, 2019

Prepared by: Luke Markko, Superintendent

- **Costa Rican Delegation Visit** – As was discussed at the last District Board meeting, a Delegation of Costa Rican officials visited our facility on 4/11. They were provided a presentation by Junior Engineer, Joe Lapastora and myself about our collection system, and treatment plant. We provided a tour of our dewatering process involving the centrifuge, a review of our remote monitoring of systems via Grundfos Remote Management (GRM), and provided a tour of the Deer Grove Lift Station. This was all accomplished through an interpreter which was a new experience for some of us. All in all, the whole event went very well, and I am honored to have been able to represent our District, in this meeting of international professionals!
- **Crane Truck** – On 4/12 the Ford F-450 crane truck and the new Ford F-550 chassis we taken to Monroe Trucking. The work being performed involves the New F-550 chassis being equipped with a new utility body, outriggers for stability when lifting, and to have the crane removed from the old F-450 and installed on the new truck. On 4/30, it was reported that a hydraulic leak in the crane would need to be repaired before the truck would be ready. Both Wauconda Public Works and Crystal Lake Public Works have agreed to assist in the event a situation arises requiring the use of a crane in the interim.
- **Illinois EPA Annual Compliance Inspection** – On 4/16 IEPA inspector Karen Katamay performed the annual compliance inspection for NMWRD. We reviewed our recent facility upgrades in both the collection system and treatment plant. District staff reviewed the flow of information as it is obtained in the laboratory via testing and recording of values, and then how that information is processed via a marriage of the lab data that is logged into an excel spreadsheet with the operational data that is gathered daily via iAuditor on an iPad during facility inspections. The result is a final excel spreadsheet that provides all the values that are entered into the Discharge Monitoring Report (DMR) that is submitted to the IEPA on a monthly basis. District staff reviewed where the District is at with meeting the new effluent Phosphorous concentration of 1.0 mg/L that went into effect for the month of May. Staff provided her with a tour of the treatment plant, and all indications are that the inspection went well. We are still awaiting a report following her inspection.



- **Ford F-250** – The F-250 that was purchased last fall was recently equipped with safety lighting. This includes strobe lights for the front and rear, along with a beacon on top of the cab. A spotlight was installed as well to help with night work.



Making staff visible helps keep them safe on the roadways.

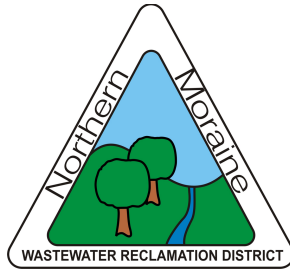
- **Phosphorous Removal Update** – Final Effluent Total Phosphorous concentrations remain below the 1.0 mg/L limit that will go into effect for the month of May. Recent results have been averaging around 0.93 mg/L. Feed rates of the Hyper Ion have been increased to 44 gallons per day in an effort to drive that number down a bit further and start with a safe margin.
- **Exterior Improvements to Control Building** – District staff have begun removing the mansard from the control building. A section of the mansard over the Raw Wet Well was damaged during the removal of the Lakeside Rotating Drum Screen, and a portion had to be removed for the installation of the new dumpster enclosure. The mansard has been showing its age for some time, and has been a haven for wasps building their nests in the warmer months. It was decided to remove it, and find an alternative that is less prone to infestation, and is more aesthetically pleasing.



Easter side of Control Building with mansard removed.

- **Supervisory Control and Data Acquisition (SCADA) Update** - District staff continue to work towards developing a SCADA system for the treatment plant. More conduits and junction boxes have been installed outside at various locations throughout the facility. A new concrete pad was poured near the





Oxidation Ditch to facilitate the installation of a SCADA control panel along with a base to mount an automated valve actuator. The focus of a significant amount of work is in the Dewatering Building. The old Belt Filter Press (BFP) control panel was used as a junction box for a number of items controlled by the centrifuge that were also controlled by the BFP. This has resulted in a significant effort to disengage all of the old BFP controls and prevent them from interfering with the operation of the centrifuge.



One of several junction boxes that were installed.

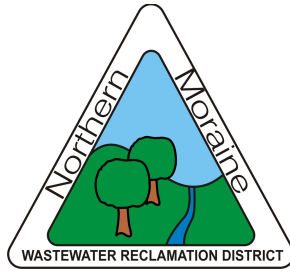


Conduit & junction box installed at future control panel site.



Concrete poured at control panel & valve actuator site.

- Drying Bed Modifications** – Last month the dividing wall was removed between the two drying beds closest to the Dewatering Building. This month a large concrete divider that was part of the apron was cut and removed. This was done in preparation for Turfstone installation in the runners, and to have the two beds covered with a Clearspan cover in a similar fashion to several other beds that are covered. The goal here is to have the dried sludge being produced by the centrifuge conveyed directly to the stockpile storage. Currently sludge is deposited onto the floor of a garage bay adjoining the dewatering room. Staff then use a front-end loader to scoop up the sludge and then drive it over to the covered beds used to store our sludge stockpile. This is a time consuming and messy affair that results in sludge being tracked down a large portion of the driveway.



Concrete dividing wall in apron



Dividing wall removed.

- Bulk Chemical Storage Preparations** – There is a drain pit below where the old Belt Filter Press (BFP) once was. Now that the BFP has been removed, this space will be repurposed to provide spill containment for bulk tanks of the Hyper + Ion product that is currently being used for Phosphorous removal. Plans are to install several storage tanks and pumps that will convey the chemical up to the Oxidation Ditch at the same feed point where it is currently introduced to the process. This will reduce the manhours involved in refilling a 275 gal. tote every week. A concrete dividing wall was poured in the drainage pit to allow a separation of the chemical storage area from the centrifuge drain. A plastic conduit was directionally bored from the Dewatering Building to the Oxidation Ditch to act as a supply line.



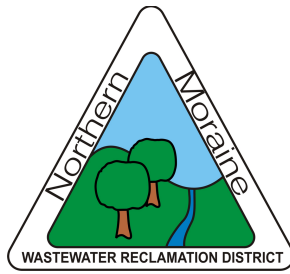
Concrete for dividing wall being poured.



Final product!

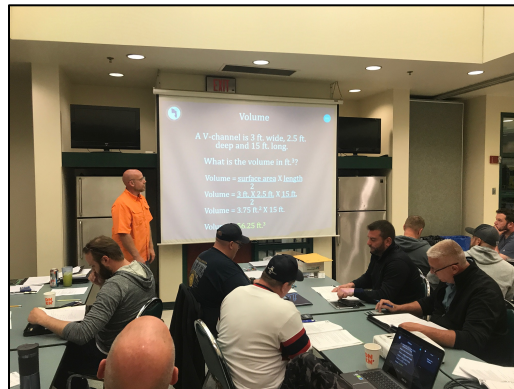
- Channel Grinder** – A new channel grinder has been delivered. If you recall, the one that arrived previously was not sized correctly. District staff are coordinating with contractors to perform the installation along with a number of other improvements that are being planned.





New grinder configuration.

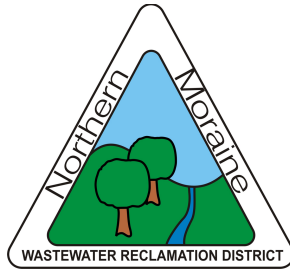
- Math Class** – On 4/23 all Operations staff attended a class put on by the Central States Water Environment Association (CSWEA). This class, Math I, is a class that provides training on introductory mathematics that are used in the wastewater industry. It is a part of the larger CSWEA: Certified Operator Training Program that leads to certification upon successful completion of several classes and attendance of an educational seminar. Not only did I get to attend the class, I was one of the co-instructors. This provided a new and exciting experience. Unfortunately, a situation arose that required two of our staff members to leave the class early, but I am happy that the remaining half of the Operations staff was able to attend the class in full.



Staff at math class.

- Septage Receiving Trial** - I am excited to report that we have begun receiving septage in small doses to evaluate its impact on plant processes. Our first load of approximately 1,500 gal. was taken on Wednesday 5/1 and we received a second load of 2,000 gal. on Friday 5/3. This is a very limited amount of data to make any decision on, but no negative impacts to plant processes have been detected at this time. If all goes well, an automated septage receiving station could allow local septic haulers a place to discharge their waste and generate an additional revenue stream for the District.
- Lift Station Standardization** - The first “controls” panel for the Lift Station Standardization project has rolled off the production line! This panel is earmarked for replacing the Hale #1 control panel. Starters

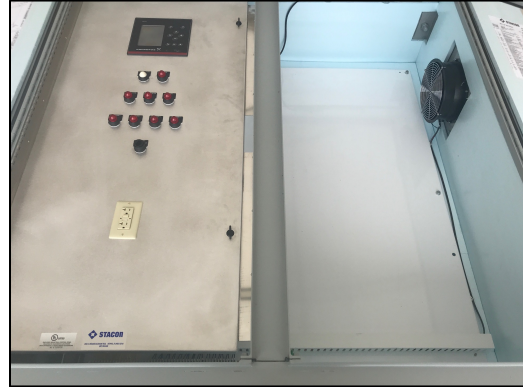




along with VFDs or Soft Starts will be installed in the space on the right side of the interior panel. There remains some work to be done for the “power” panel, but this is a significant milestone in this project that will result in a standardized control and component layout at all the District’s many Lift Stations.



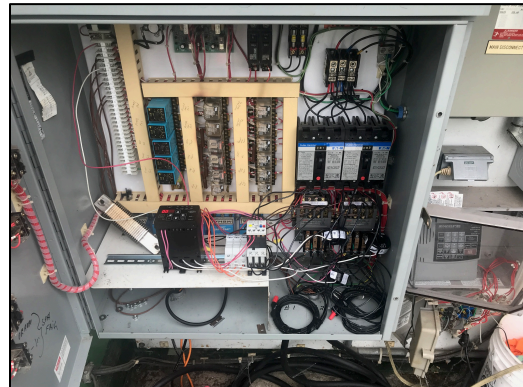
Exterior of new “controls” panel.



Interior “dead front” door & starter space on right side



A simplified controls layout occupies the left side.



An example of some current panel layouts to be replaced.

**NMWRD Engineering Report**  
Date: May 3<sup>rd</sup>, 2019  
Prepared by: Joe Lapastora, Junior Engineer

**Deer Grove Sanitary Sewer Extension:**

*[Project Update]* – The construction portion of this project has been successfully completed. No other sanitary work is expected to be performed and all applicable testing has been conducted. The only major work item related to the sanitary sewer that needs to be completed is the cleaning and televising of the sewer extension along Noble Parkway.

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

*[Project Update]* – PirTano has completed all sanitary related construction at the Savannah's site. All post-construction tests have been completed with the exception of the mandrel deflection test of the sewer main that runs across Route 120. MH-A and MH-L were vacuum tested with the appropriate plugs in place on April 22<sup>nd</sup>. Finally, cleaning and televising of the sanitary sewer will need to be completed before NMWRD accepts ownership and allows any connections.

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

*[Project Update]* – Mancini Construction has finished the entire sanitary sewer main along Ring Road. A total of 16 structures are set which include 15 manholes and the wet well. Similarly, Lake County Grading has finished all service lines associated with the car wash and gas station. Testing of the service lines associated with the car wash and gas station were performed on April 29<sup>th</sup>. Due to the rainy weather, only the air pressure test was completed, while the manhole vacuum testing will occur at a later date. Note that all service lines passed the air pressure tests. Before any service connections to the mainline will be allowed, Lake County Grading Company will need to submit their maintenance bond to the District. Furthermore, the District will not allow the connection until Mancini has cleaned and televised the sanitary sewer main. Finally, as underground construction wraps up, we will be shifting our focus to the control panel and generator side of the Woodman's project. The District has received the submittal revisions regarding the control panel and generator from Gasvoda and we have given the green light to move forward. The anticipated opening date for the Woodman's grocery store is tentatively set for late June.



*Lake County Grading setting the base for a manhole.*



*LCGC capped the service line 5 feet short of the main line.*





*Air pressure tests performed on April 29<sup>th</sup>.*



*Air test mechanism in place.*

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

*[Project Update]* – Road crews have staked out the proposed right turn lane during the week of April 15<sup>th</sup>. When construction crews begin stripping pavement, we will find the foreman to discuss our intent to uncover two buried manholes.

### **NMWRD Floodproofing & Other Plant Projects:**

*[Project Update]* – Completed aspects of this project include; new concrete curb, step ladder, railing, kick plates, temporary steps, conveyor removal, grating, control panel relocation and dumpster enclosure. Finally, the permanent stairs are on hold until concrete is poured for the new sidewalk.

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

*[Project Update]* – The District has completed many aspects of this project prior to the month of May. Completed aspects of the SCADA & Telemetry project include; underground conduit with tracer wire installed at the plant, some hardware has been ordered for SCADA system, Rotork Actuators ordered from LAI, fiber cable ordered, and new concrete pads poured. Items currently on hold or in progress include; Panel/enclosures, restoration landscaping after all excavating is complete, and tying the entire system together.



*Concrete pad location to the South of the oxidation ditch.*



*Second concrete pad directly South of the oxidation ditch.*





*Picture after concrete was poured.*



*Second pad after concrete was poured.*

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

- Old electronics have been identified and organized. A final list has been provided to Mohammed to review. Backup items have been identified and stored away while any additional items will be sent to auction as surplus items. Furthermore, we came across multiple items that are no longer in working condition. For these items, we have contacted Wauconda Recycling Center and they have agreed to take in all electronic waste and will pay the District an amount equal to the scrap value of the item.
- The District ultimately moved forward with the retrofit of the old belt filter press pit for storage of the Hyperlon chemical. On April 17<sup>th</sup>, Manusos poured a concrete divider in the pit directly below the old belt filter press so that the Centrifuge can still drain properly while also creating spill containment for the Hyperlon.



*Picture of rebar in place for new concrete divider.*



*Picture of the newly poured concrete wall in the old BFP pit.*

- District operator, Bryan Gainer, attended a ComEd workshop in mid-April regarding a Strategic Energy Management initiative. After some further discussion, Joe Lapastora was appointed as the “Energy Champion” for NMWRD and will take the lead on this new program. Over the course of the next several months, Joe will be visiting several wastewater plants in the area in hopes of gathering ideas that he can bring back to the District with the ultimate goal of reducing NMWRD’s energy consumption. A tentative “Treasure Hunt” or general audit of the plant is scheduled for June 6<sup>th</sup>.
- It appears that Circle K will be moving forward with their proposed building at the corner of River Road and Route 176 in Island Lake. I have sent their engineer the District’s most current “as-builts” of the dual forcemains and associated depths to aid in the design of the proposed sanitary sewer extension.
- Attended the 2019 Lake County DOT Utility Coordination Meeting on April 30<sup>th</sup>. We informed LCDOT of the proposed Darrell Road interceptor in an attempt to coordinate any other projects that may be scheduled along Darrell Road. This project is on hold until funding is available in the form of grants.



## DELINQUENT ACCOUNTS RECAP FOR APRIL, 2019

Revised: 5/01/19 by Debi Martin, District Clerk

### \$200-\$300

#### 20 Active Accounts

Island Lake – 12 customers  
7 Water Shut Off Notices, 5 Final Water Shut off Notices  
Lakemoor – 7 customers  
6 Sewer Disconnection Notices, 1 promised payment  
Port Barrington – 1 customer  
1 Sewer Disconnection Notice

### \$301-500

#### 9 Active Accounts

Island Lake – 2 customers  
2 Sewer Disconnection Notices  
Lakemoor – 4 customers  
4 Sewer Disconnection Notices  
Port Barrington – 3 customers  
3 Sewer Disconnection Notices

### \$501-\$1000

#### 11 Active Accounts

Island Lake – 7 customers  
6 liens – 6 with water off, 1 Sewer Disconnection Notice  
Lakemoor – 2 customers  
2 liens – 2 to be disconnected  
Port Barrington – 2 customers  
2 liens – 2 to be disconnected; in foreclosure

### \$1001 and up

#### 12 Active Accounts

Island Lake – 7 customers  
7 liens – 7 with water off  
Lakemoor – 5 customers  
5 liens – 3 sold for delinquent taxes, 1 to be demolished, 2 to be disconnected

Delinquent Accounts total (active and inactive customers): **\$44,138.16** (\$14,570.79 inactive accts)

April 2018's report: **\$47,649.42**

April 2017's report: **\$51,673.72**

#### MONTHLY ACTIVITY:

4788	Monthly Bills mailed on 5/1/19 (for April service)	108	Notices of Delinquency to be mailed on 5/09/19
389	Bills <u>not</u> mailed – customers prepaid on their accounts	17	Sewer Disconnection Notices to be mailed on 5/09/19
7	Water Shut Off Notices to be mailed on 5/09/19	5	Final Water Shut Off Notices to be mailed on 5/09/19
9	Final Notices of Delinquency to be mailed on 5/09/19	21	Real Estate closings for April 2019



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# Northern Moraine Wastewater Reclamation District

113 Timber Trail  
Island Lake IL 60042

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## AGENDA REGULAR MEETING 7:30 P.M. - May 7, 2019

1. **CALL TO ORDER & ROLL CALL**
2. **PLEDGE OF ALLEGIANCE**
3. **PRESENTATION & APPROVAL OF MINUTES**
  - a. Regular Meeting Minutes – April 16, 2019
4. **OATH OF OFFICE:**
  - Having been duly reappointed, Trustee Ragland will take the Oath of Office
  - Having been duly reappointed, Trustee Brunn will take the Oath of Office
5. **ELECTION OF OFFICERS:**
  - Pursuant to 70 ILCS 2405/4 of the 1917 Sanitary District Act, "The Board of Trustees at their first meeting in May of each year shall elect one of their number as President, one of their number as Vice-President and from outside of their membership a Clerk and an Assistant Clerk."
6. **SELECTION OF TREASURER, ATTORNEY and ENGINEER:**
  - Pursuant to 70 ILCS 2405/4 the Board may select a Treasurer, Attorney and Engineer for the District and appoint FOIA and OMA Officers
7. **TREASURER'S REPORT**
8. **PUBLIC COMMENTS**
9. **MANAGER'S REPORT**
  - a. Operations Report
  - b. Engineering Report
  - c. Seriously Delinquent Accounts Report
10. **TRUSTEE REPORTS**
11. **LEGAL BUSINESS**
12. **OLD BUSINESS**
13. **NEW BUSINESS**
  - a. Renewal of the District's Property, Liability and Flood Insurance
  - b. Authorization to Dispose of Records per State Statute
  - c. Approval of a Memorandum of Understanding with Cascade Energy for Strategic Energy Management
  - d. Approval of an Engineering Services Agreement with Trotter & Associates for Control Building Improvements
  - e. Approval of a Surveying and Site Plan Services Agreement with CE Ltd
  - f. Adoption of Ordinance 19-03, 2019-20 Salary Ordinance
  - g. Approval of Appraisal Services with CBIZ
  - h. Approval of Ordinance 19-04, Increasing the fee for Water Shutoffs in Island Lake
  - i. Discuss Septage Receiving as Additional Non-Traditional Revenue





**14. MISCELLANEOUS CORRESPONDENCE**

- a. MCGG Membership Meeting – Wednesday, May 22, Boulder Ridge Country Club, Lake in the Hills, IL

**15. APPROVAL OF BILLS**

**16. OTHER BUSINESS**

- a. Executive Session – if needed

Posted to [www.nmwrdd.org](http://www.nmwrdd.org) May 3, 2019