

2020 ANNUAL PERFORMANCE REPORT



MILWAUKEE METROPOLITAN SEWERAGE DISTRICT

OUR MISSION

The Milwaukee Metropolitan Sewerage District's mission is to protect public health and the environment through world-class, cost-effective water resource management, leadership, and partnership.

Essential to our success is our commitment to:

Stewardship
Integrity
Quality
Collaboration
Diversity
Innovation

WELCOME

The District welcomed its newest vessel in 2020, the Mallard. The Mallard is essential for the continued monitoring of the lower reaches of the rivers, harbor, and nearshore waters of Lake Michigan. It will be used when the Pelagos is undergoing maintenance and when conducting project work or fulfilling regulatory requirements in shallow water.



THIS REPORT

The *Milwaukee Metropolitan Sewerage District 2020 Annual Performance Report* describes activities undertaken between January and December 2020 to meet our customer needs, regulatory obligations, and contribute towards achieving our 2035 Vision of a healthier Milwaukee region and a cleaner Lake Michigan.

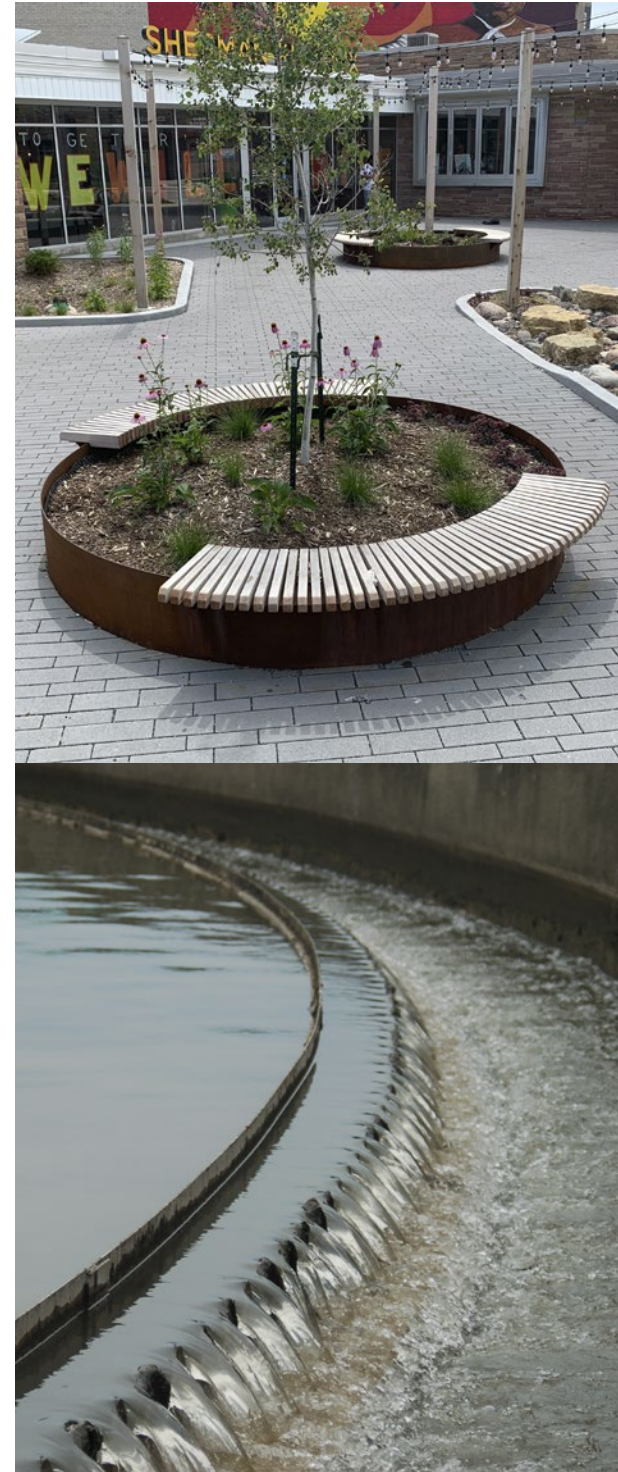
2020 DISTRICT AWARDS & HONORS

NACWA Peak Performance Award
Climate Bond Certification Award
GFOA Certificate of Achievement for Excellence in Financial Reporting
GFOA Distinguished Budget Presentation Award

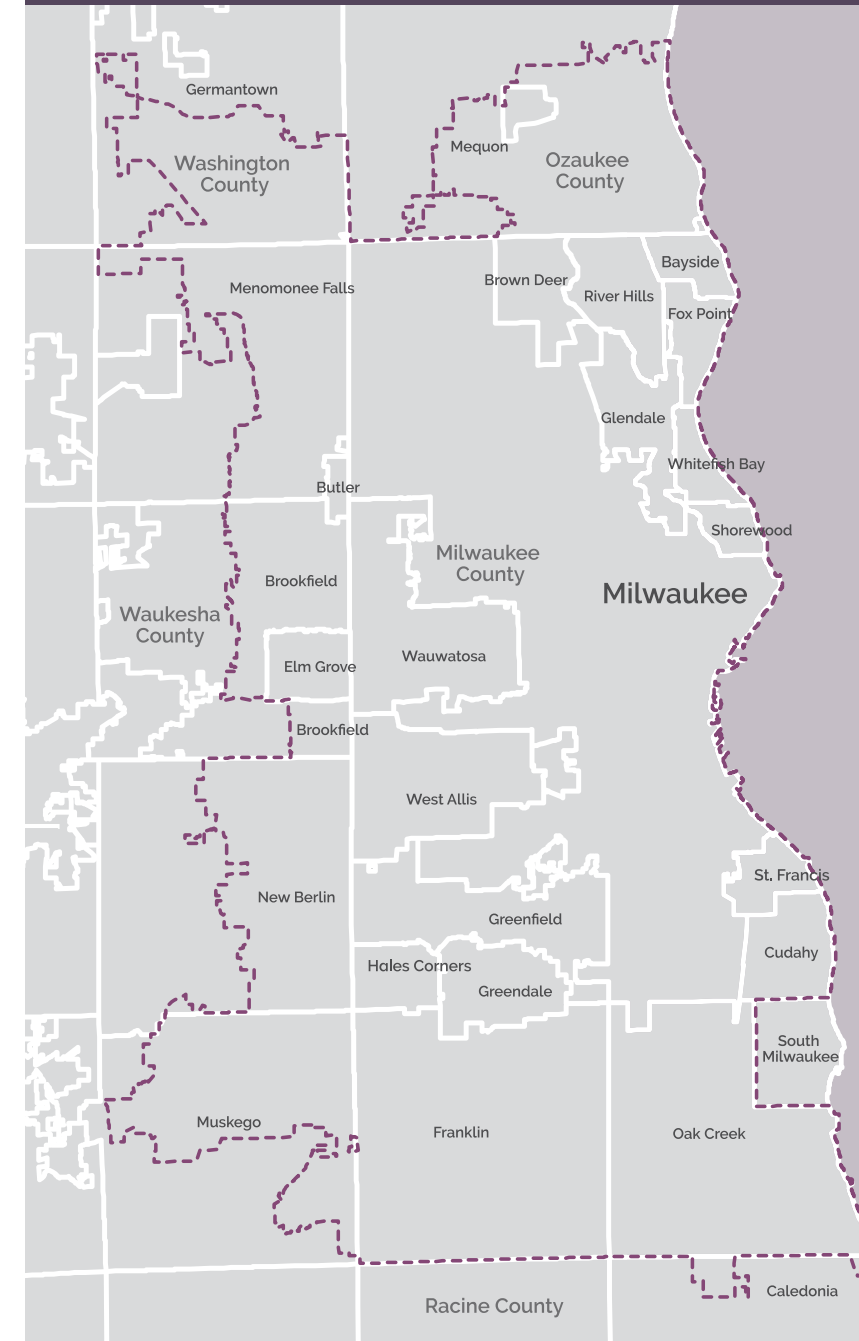
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CONTENTS

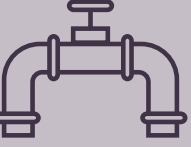
MESSAGE FROM THE EXECUTIVE DIRECTOR	06
MEETING CHALLENGES	07
SYSTEM PERFORMANCE	10
ENERGY EFFICIENCY	11
PRACTICING SUSTAINABILITY	12
COST-EFFECTIVELY PROTECTING THE AREA'S WATERWAYS	14
REDUCING INFLOW AND INFILTRATION	16
FLOOD MANAGEMENT	17
KEEPING WASTE OUT OF THE WATERWAYS	18
EDUCATING AND ENGAGING OUR CONSTITUENTS	19
PARTNERING FOR A BETTER FUTURE	20
OPERATIONAL EFFICIENCIES	21




MMSD SEWER SERVICE AREA





2020 POPULATION
1.1 MILLION

423 
SQUARE MILES
SERVED

 IN 2020,
97.3%
WASTEWATER CAPTURED

2 
WATER
RECLAMATION
FACILITIES

 **75.5** BILLION
GALLONS
OF WATER TREATED
IN 2020

630 MILLION GALLONS 
PER DAY PEAK TREATMENT CAPACITY



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“ IN ORDER TO BE AN EMPLOYER OF CHOICE, WE PUT OUR EMPLOYEES’ SAFETY FIRST DURING THE PANDEMIC AND AVOIDED ANY LAYOFFS OR REDUCTIONS. ”

MESSAGE FROM EXECUTIVE DIRECTOR KEVIN SHAFER

In 2019, when we set our annual goals for 2020, we did not know what the new year would bring. In 2020, we had to face some of the biggest challenges of our generation: a global health crisis, a reckoning with racial inequality across the nation, and a worsening climate crisis that continues to impact our operations and the community we serve. The District’s commitment to long-term planning and visioning proved useful in 2020. We maintained a strong financial position and avoided drastic changes to our operations. We have been able to protect our workforce and maintain assets. And most importantly, we continued to deliver on our mission to protect public health and the environment.

The COVID-10 pandemic profoundly disrupted economic activity and reduced employment around the world and in our region. In order to lessen the stressors on our constituents, we responded by reevaluating and prioritizing our spending to be able to provide affordable wastewater services in 2020 and 2021. Our prudence paid off and helped us reach our strategic plan goal of financial strength, with the 2020 budget ending with a surplus and the 2021 budget adopting minimal rate increases. Despite the challenges of 2020, we met our goal of infrastructure management and reached 100 percent compliance with applicable regulations and our O&M contracts. We helped improve the region’s ability to respond to climate change by increasing the region’s green infrastructure through the Fresh Coast Protection Partnership program which is one of the first fee-for-service agreements of its kind for the area. We improved watershed collaboration by revamping our Private Property Infrastructure and Inflow program and policy and securing a \$7.5 million grant from the USDA’s National Regional Conservation Partnership to work upstream and improve water quality. We strengthened our digital outreach efforts and learned to give virtual tours of Jones Island so people around the world can learn more about the important work we do. In order to be an employer of choice, we put our employees’ safety first during the pandemic and avoided any layoffs or reductions. Finally, the pandemic reiterated the importance of internal communication and collaboration as we all learned to work under the new circumstances and conditions.

I am extremely proud of the work outlined in this report. Not only for the substantive impact the District has had on improving the Milwaukee region’s resilience but also great pride in the resilience of the people who work at the District. Persevering through personal challenges, these individuals continued to work hard to exceed the generational challenges posed by the pandemic.

It was a trying year, but we rose to meet challenges and are proud of the work we accomplished. We encourage you to read on and learn more about the District’s achievements over the past year. As always, we welcome your feedback.

Kevin Shafer, Executive Director
Milwaukee Metropolitan Sewerage District



MEETING NEW CHALLENGES

The impacts of the novel coronavirus COVID-19 started to impact the District in March of 2020 and the lasting effects on the local economy and the way we do work will continue to be felt in the years to come. The emergence of COVID-19 spread quickly across the world creating an unprecedented global health challenge as medical professionals and first responders scrambled to contain what would ultimately be declared a worldwide pandemic. In response to the COVID-19 pandemic, the United States government, state governments, local governments and private industries have taken measures to limit social interactions in an effort to limit the spread of COVID-19. On March 25, 2020, Wisconsin’s "safer-at-home" order (the "Order") went into effect, requiring the closure of all non-essential business and operations (with certain exceptions as provided in the Order). COVID-19 has caused significant disruptions to the global, national and State economies, and the effects of the spread of COVID-19 and the government and private responses to the spread continue to evolve.

RESPONDING TO THE COVID-19 PANDEMIC

- 1 **Impact on employees.** MMSD management staff worked as a team to create policies and procedures to keep employees safe and productive. Management created new policies for leave and pay in compliance with the Families First Coronavirus Response Act. All staff were impacted by learning how to work from home, stagger work shifts, and modify procedures for testing, field operations, and operating fleet and vessels so employees could continue to work and maintain social distance. Facilities staff made improvements to the building infrastructure for safety



Jones Island Clarifier

Harbor Siphon project



DESPITE THE NEW SAFETY PRECAUTIONS AND SUPPLY CHAIN DISRUPTIONS, THE WASTEWATER TREATMENT PROCESS HAD TO CONTINUE.

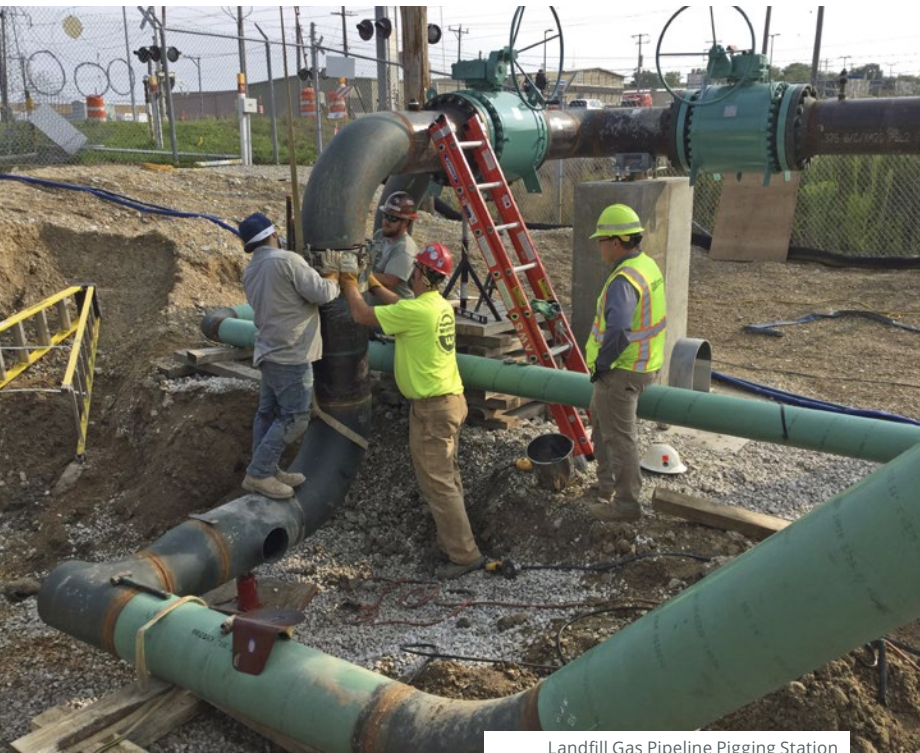
enhancements and modified its cleaning procedures. The IT team supported employees by making sure employees have the equipment and cybersecurity to work remotely. The Risk Management team established staff protocols for crisis and emergency communications. The outreach teams learned to use technology to host virtual tours and outreach events to connect with our constituents.

- ② **Impact on operations.** Despite the new safety precautions and supply chain disruptions, the wastewater treatment process had to continue. Veolia Water Milwaukee and the District had to quickly pivot standard operating procedures to keep the conveyance system and reclamation facilities operational so that the area would not experience a disruption in service. MMSD staff and Veolia staff created new safety protocols, managed staggering shifts, and kept construction projects on schedule and within budget during the pandemic.
- ③ **Impact on user charge billing revenue.** The pandemic and the emergency responses resulted in closures of restaurants, bars, malls, theaters, and other businesses, reductions in travel, and cancellations of numerous events as well as reduced business demand, worker layoffs, furloughs, and reductions in hours, and supply shortages. Consequently, District taxpayers and municipalities within the District's service area have been adversely affected. This could result in delayed collection of user charges and other payments from municipalities.

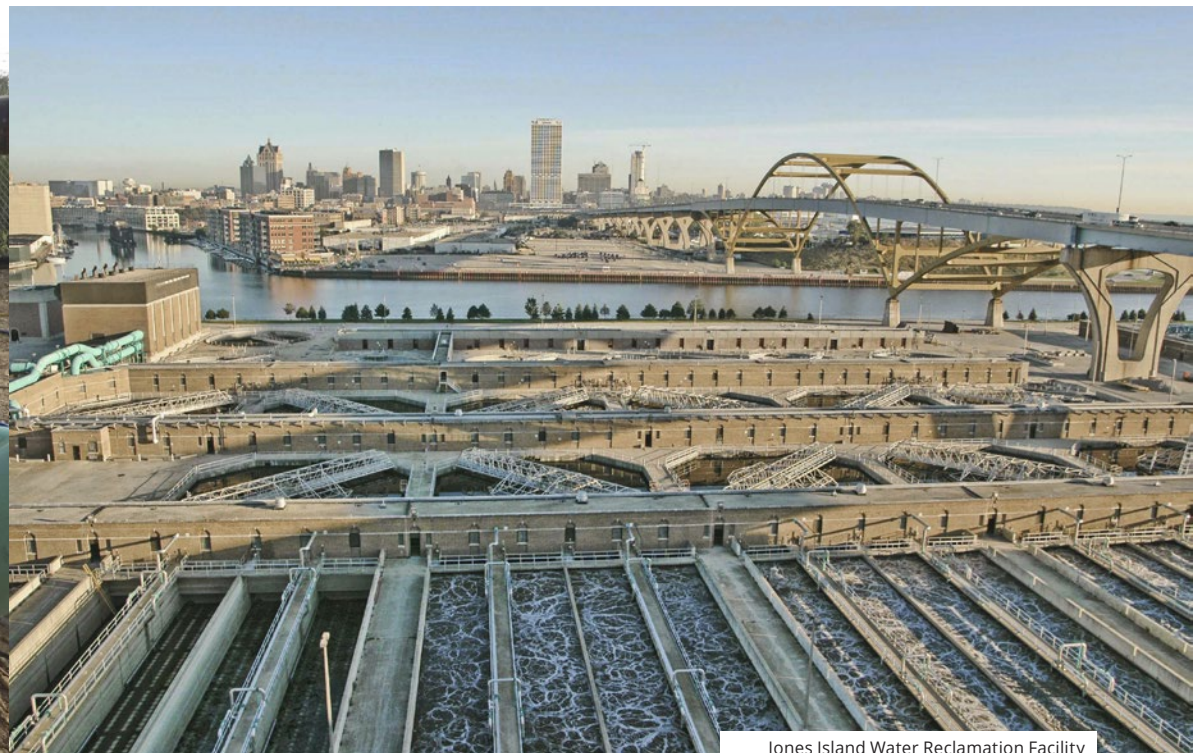
- ④ **Impact on supply chains.** The shutdowns that resulted from COVID-19 impacted suppliers, manufacturers, warehouses, distribution centers, and retail outlets, making it more difficult for MMSD to maintain the supply chain for the laboratory testing, such as chemicals, supplies, and equipment. MMSD and Veolia acquired and stored critical chemicals to ensure continued wastewater treatment operations.

COMPLEX PROJECTS

Another challenging project is the Harbor Siphons project. Harbor Siphons consists of **eight large diameter sewers** (48-inch to 96-inch) that convey raw wastewater beneath the Kinnickinnic and Milwaukee Rivers to two riser shafts at the Jones Island Water Reclamation Facility. From the two riser shafts, each sewer goes to one of two structures at JIWRP: the High-Level Flow Control Structure and the Low-Level Flow Control Structure. These two structures control and direct wastewater to the Preliminary Treatment Facility, where the raw wastewater then begins to be treated. In 2018, the District discovered sewer and structure leaks below the structure and began emergency work to repair the structure. In 2020, the Technical Services division completed the work to design and install additional structural support systems for both the high- and low-level flow control structures. In addition, adjacent utilities, including a water main, storm and sanitary sewer, were re-routed and installed on pile supports to provide continued service well into the future, while soils in the area continue to settle as frozen ground from original harbor siphon construction thaws over the next 25-50 years. This technically challenging project will be complete in early 2021 and has required coordination among technical, finance, risk management staff, and Veolia.



Landfill Gas Pipeline Pigging Station



Jones Island Water Reclamation Facility



MMSD Lab building solar panels



New landfill gas burning dryer



SYSTEM PERFORMANCE

The District aims to capture and clean as much wastewater as possible before returning it to the waterways. In 2020, the District is proud to report it captured and cleaned **97.3 percent** of wastewater! The high success rate is attributed to a number of projects and programs the District hosts.

The District's capital improvements program includes long-term projects to invest in the District's assets. In 2020, the District invested **\$52 million in the water reclamation facilities** and **\$4.8 million in the conveyance system**.

In order to improve the system's performance, the District reached substantial completion in construction contracts in the following capital improvements projects:

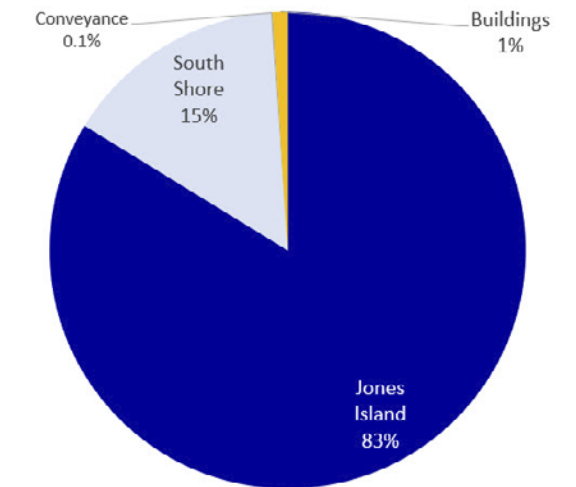
- + Interplant Pipeline Improvements Phase 2
- + Milorganite Facility Improvements Phase 4
- + Dryer Feed and Discharge Screw Conveyor Replacements
- + Permanent Pigging Station for the Landfill Gas Pipeline

IN 2020, THE DISTRICT CAPTURED & TREATED **97.3%** OF WASTEWATER

ENERGY EFFICIENCY

Operating the regional sewerage system requires significant energy. As stewards of the environment and public resources, the District is committed to increasing energy efficiency and increasing the District's use of renewable energy. The District's renewable energy efforts include capturing methane gas from digesters and using it to generate electricity at the South Shore Water Reclamation Facility, as well as using landfill gas, and solar panels. In 2020, the District met approximately **27 percent** of its needs with renewable sources. As seen in the chart to the right, Jones Island is the biggest energy user because it dries the biosolids to create Milorganite®.

One noteworthy project that will help the District reach its renewable energy goals is the Dryer Burner Upgrades at Jones Island project. The Dewatering and Drying Facility at Jones Island is equipped with **twelve** large rotary dryers that heat-dry dewatered biosolids to produce Milorganite®. Landfill gas is a renewable energy source and it is the lowest cost source of energy to the District. The District can reduce energy costs and help achieve its 2035 Vision for renewable energy by maximizing landfill gas use. Therefore, in order to increase landfill gas consumption, the District converted some of the dryers so that they are capable of combusting both landfill gas and natural gas. In 2020, the District upgraded two dryers to user landfill gas and another two dryers will be upgraded in the first quarter of 2021. The project also received a **\$488,000 grant** from Focus on Energy. This project is estimated to save MMSD **\$110,000 per year** by using landfill gas instead of natural gas in the dryers.



The water reclamation facilities are the **biggest energy users**



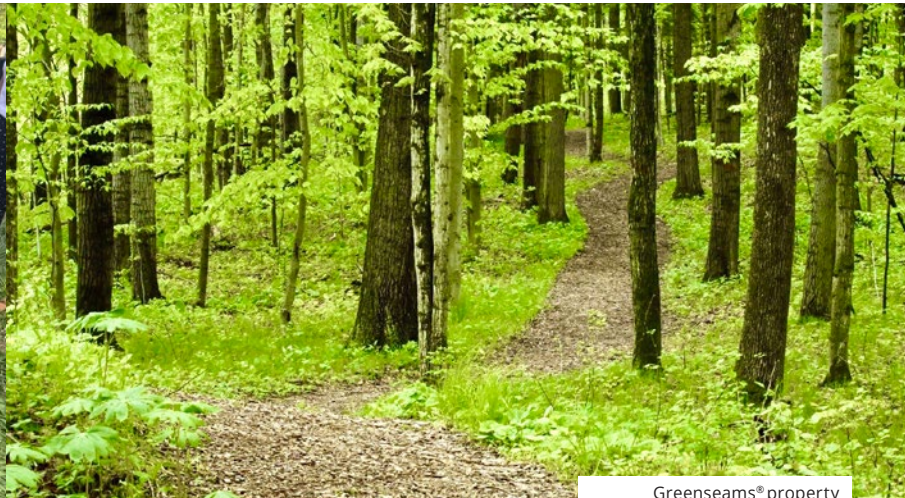
Rain barrel owner



Annual Rain Garden Plant Sale



Rain garden installation



Greenseams® property



Greenseams® property



Typical bioswale

PRACTICING SUSTAINABILITY

The District continues to focus its efforts in expanding green infrastructure (GI) adoption and implementation. In 2020, the District's funding helped partners install green infrastructure that can capture up to **three million gallons** of water each time it rains. Since the program started in 2004, the District has provided funding for green infrastructure to **capture over 37.7 million gallons** of water. The District continues to fund green infrastructure through its green infrastructure partnership program, its municipal program Green Solutions, and in 2020, the District launched its Fresh Coast Protection Partnership program, enlisting the private sector in efficient and cost-saving large-scale project delivery. Under the contract, each year, the consultant will submit to MMSD a proposed annual plan for bundled GI projects that will have a targeted benefit to the quantity of water entering the District's system and water quality. The projects will also support the District's 2035 Vision, Regional GI Plan, and Wisconsin Pollutant Discharge Elimination System (WPDES) permit goals. The implementation of these projects will produce measurable local economic and capacity development benefits to the community. As part of the unit price agreement, the consultant agrees to maintain a socioeconomic program with a minimum of **25 percent** small, women, and minority-owned business enterprise (SWMBE) utilization, a mentor-protégé program consisting of a minimum of three local firms per year, and a workforce certification program based on the established Water Environment Federation Stormwater Certification program in which the District is an active member, and to seek additional funding sources to offset the District's investment.

The District continued its green infrastructure neighborhood outreach program in 2020 focusing on the City of Milwaukee's 30th Street Corridor and the City of Glendale. MMSD interns engage residents and install rain barrels and rain gardens to demonstrate the important role residents can play in managing water where it falls. In 2020, the program adapted to new COVID-19 safety protocol and held virtual rain barrel installation workshops. The rain gardens and rain barrels that were installed through the program now help **capture over 20,600 gallons** of rainwater per wet weather event. In 2020, the rain barrel program distributed over **760 barrels** to area residents, and the rain garden plant sale that sells native high-absorbing plants to area residents at a reduced cost had a record-breaking year **selling over 21,400 plants!**

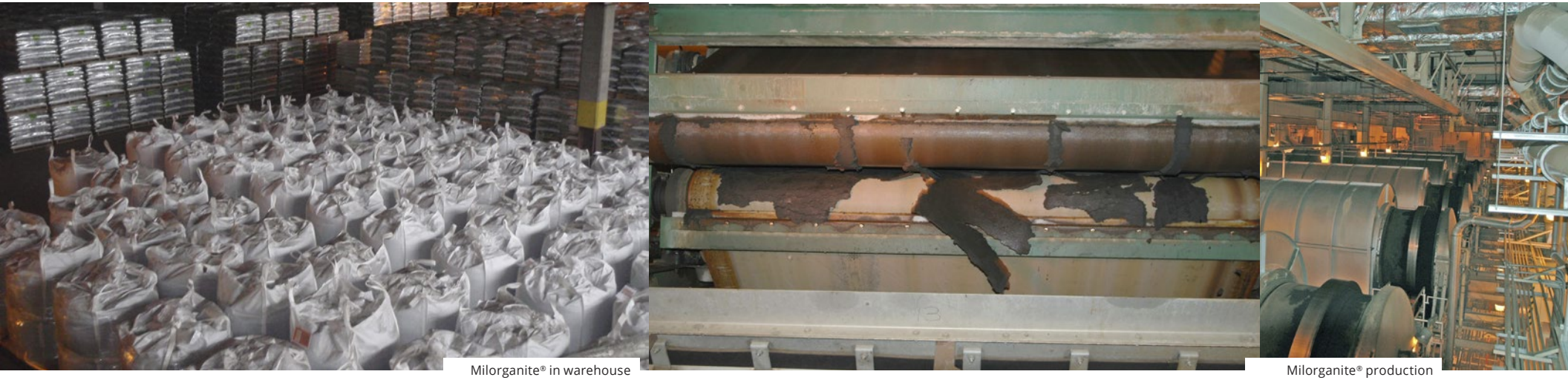
In 2020, the District also worked to protect public land through its Greenseams® Program which permanently preserves critical floodplain areas and hydric soils. Undeveloped, vegetated lands reduce future flooding risks by storing and draining water into the ground naturally. The Greenseams® Program makes voluntary purchases of undeveloped, privately owned properties in areas expected to experience major growth in the next 20 years. These sites contain water absorbing hydric soils typically found in floodplains and wetlands, and along streams and shorelines. In 2020, the Greenseams® program acquired an **additional 624 acres of land**. Additionally, in 2020, the District's Working Soils® Conservation Easement program, in partnership with the USDA Natural Resources Conservation Service, secured **permanent protection on 438 acres** of working farmland, which advances a larger watershed effort to protect floodplain and create opportunities for new and existing farmers to grow and sell fresh food in Greater Milwaukee. The Working Soils® program has **permanently protected 112 acres** of hydrologically significant floodplain through 2020.

MMSD helped fund research turning wastewater grit into a ceramic mortar that could be used as patch for pothole repair. Because grit contains pathogens and impurities that make it unsuitable for direct recycling, it is usually taken to a landfill and buried. Researchers are looking for a way to beneficially reuse grit rather than sending it to a landfill. MMSD supplied both the grit and funding for the research and is serving as a test site for the end product. In 2020, MMSD successfully deployed its first grit-assisted patches at South Shore Water Reclamation Facility. MMSD continues to monitor the patches' performance and will begin to explore the use of grit as a concrete-additive, which, if it is fit-for-use, will increase the amount of material MMSD can divert from landfills and beneficially reuse. This research received attention when it was presented at the American Chemical Society (ACS) Fall 2020 Virtual Meeting & Expo.

Green infrastructure mimics the natural environment by capturing water and allowing it to infiltrate into the ground before it enters the traditional conveyance system. This helps to reduce the amount of water flowing through the gray infrastructure of pipes that can be overwhelmed by intense rain events. These projects can also reduce wet weather flows to combined sewer systems, reduce combined sewer overflows to local waterways, and protect water quality in these vital waterways. Green infrastructure also reduces runoff volumes and improves water quality in separate sewer service areas. In addition, green infrastructure can make public spaces more attractive and provide social benefits that enhance the livability of communities.



SINCE 2004, THE DISTRICT HAS PROVIDED FUNDING FOR GREEN INFRASTRUCTURE TO CAPTURE OVER **37 MILLION GALLONS OF WATER**



Milorganite® in warehouse

Milorganite® production

COST-EFFECTIVELY PROTECTING THE AREA'S WATERWAYS

The District had strong financial performance in 2020. Thanks to tight control over expenses and a near-record year for Milorganite® revenue, the District's O&M budget ended in a surplus. The surplus from the 2020 budget will be used in preparing the 2022 O&M budget. Fitch Ratings also reaffirmed the District's long-term credit rating as AAA. The Government Finance Officers Association awarded MMSD with a Certificate of Achievement for Excellence in Financial Reporting and the Distinguished Budget Presentation Award.

In 2020, Milorganite® revenue **totaled \$11.8 million**. Producing Milorganite® is the most cost-effective solution for disposal of biosolids from the wastewater treatment process. The District sells Milorganite® to both professional customers including golf courses around the country and to retail customers such as box stores that sell to homeowners and gardeners. The revenue from Milorganite® helps reduce user charge billing increases to the District's service area. The District **sold 48,679 tons** in 2020, the highest number of tons sold in the last ten years. The value per ton of product also increased \$0.05 over 2019. The stay at home orders around the country meant more people were staying at home and spending time improving their lawn and gardens. In 2020, about 86 percent of Milorganite® sales were to retail markets and 14 percent were to professional markets.



In 2020, the District was the fourth in the country and the second wastewater treatment agency to issue a Certified Climate Bond. The Climate Bonds Initiative (CBI) Standards include rigorous evaluation against criteria to ensure that projects comply with strict standards. To achieve the Certified Climate Bond

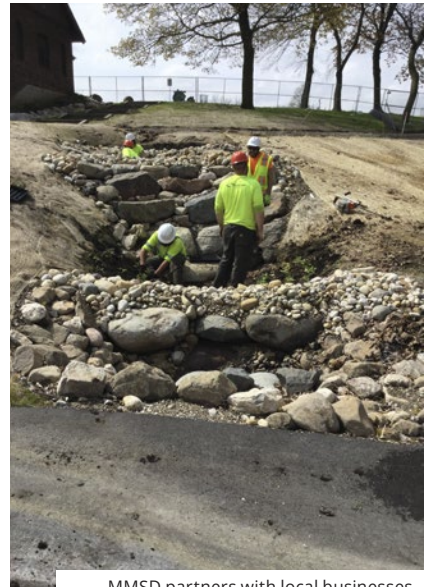


Milorganite is a Class A Exceptional Quality product that is for sale in all 50 states. Find out more at Milorganite.com.

SUSTAINABLE DEVELOPMENT GOALS



17 UN Sustainable Development Goals



MMSD partners with local businesses

BUSINESS CAPACITY DEVELOPMENT PROGRAM
CONSTRUCTION ESTIMATING
VIRTUAL SEMINAR | SEPT 24 | 9-11AM

See what past participants have said.

"Great course, extremely beneficial"

"Very impressed with the professionalism of the presenters."

95% indicated the classes met their learning goals

90% said the classes prepared them for working with MMSD

Online seminars start September 24, 2020

To register for the 2020 seminars, please visit:
<https://www.mmsd.com/procurement/business-development>

label, an Issuer must use an Approved 3rd Party Verifier to review the deal. Of the 40 CBI Approved Verifiers worldwide, MMSD selected Kestrel Verifiers, the only Woman-Owned Small Business, and a certified Women's Business Enterprise verifier. Additionally, Kestrel Verifiers determined that activities financed with MMSD's bonds meet three of the 17 United Nations Sustainable Development Goals (UNSDGs): Clean Water and Sanitation, Sustainable Cities and Communities, and Climate Action. The proceeds of this Series 2020A issuance will be used to finance capital projects ranging from water reclamation facilities and pipelines to green infrastructure to reduce flooding and stormwater runoff.

District policy sets spending goals for working with small business enterprises (SBE), minority-owned business enterprises (MBE), women-owned business enterprises (WBE) and veteran-owned business enterprises (VBE). The Procurement and Supplier Development Office provides information and tools to help District departments succeed in meeting the District's goals, develops training and networking opportunities for diverse businesses, assists prime contractors in identifying potential diverse partners, and regularly reports program performance. In 2020, the District awarded over **\$112 million** in new contract awards and **23.9 percent** of the new contracts were awarded to SWMBE firms. The District also aims to award **45 percent** of contracts to firms located within the sanitary sewer service area, and in 2020, it surpassed that goal by awarding **51 percent** of contracts to firms in the local area. In order to advance the local workforce and develop needed skills on capital projects, the District includes apprentice utilization goals in its construction bids. The goal is to include apprentices in **50 percent** of all construction bids, and in 2020, **28 percent** of construction bids included apprentice goals.



THE DISTRICT AWARDED **\$112** OVER **MILLION** IN CONTRACT AWARDS



Lateral rehabilitation



Pulaski Park bridge



Pulaski Park construction



REDUCING INFLOW AND INFILTRATION

IN 2020, **583** LATERALS WERE REHABILITATED

In 2020, the District continued its work on the Private Property Infiltration and Inflow (PPI/I) Reduction Program. Infiltration is the clear water entering a sewer system through aging and defective buried infrastructure. Sources of infiltration on private property are often leaking sewer plumbing under the basement floor, cracks and failing joints in the sewer lateral, and leaking connections at the municipal sewer mainline. Inflow is the clear water entering the sewer system through direct connections. The most common private property sources of inflow are foundation drains, downspouts, and catch basins directly connected to the sewer. During rain events, infiltration and inflow dramatically increase the flows overwhelming the sanitary sewer system thereby increasing the risk of basement backups and overflows. The increased flow in the sewer system must also be conveyed, stored, and treated by the District at a cost to the District's tax and rate payers. In 2020, the District's program fully rehabilitated **583 laterals**, and grouted or partially rehabilitated **338 laterals**. The District's program also completed **107 foundation drain disconnections**.

FLOOD MANAGEMENT

The District continued work on the Kinnickinnic River Flood Management Project. Since inception, this project has acquired and removed 83 residential structures to widen the channel and reduce the risk of flooding for approximately 300 structures. In 2020, the District substantially completed the Kinnickinnic River restoration and County Park improvements in Pulaski Park. The **\$38.6 million** project started in 2006 and will reduce flooding and improve public safety by slowing down the river in the park. The construction included removing **1,600 ft of concrete** channel lining before placing rock on the river bottom, which restored the river to a more naturalized state. The District also partnered with Milwaukee County to provide additional park improvements in conjunction with this project, including a new pedestrian bridge over the river, a new playground, a basketball court, a futsal court, and improved trails and river overlooks throughout the park.



1,600 FEET OF CONCRETE WAS REMOVED FROM PULASKI PARK



River Keepers spring cleaning



Lynrd Skimmer



KEEPING WASTE OUT OF THE WATERWAYS

MMSD is dedicated to keeping our local waterways clean and safe. The District operates a skimmer boat, the Lynrd Skimmer, that removes floating debris and trash that finds its way into the rivers. The skimmer boat has a full-time crew and picks up trash and debris. The Wisconsin Safer at Home Order due to COVID-19 delayed the launching of the skimmer boat, but it was still able to spend **92 days** on the water and **remove 1,120 cubic yards** of floating debris, making our rivers cleaner and safer for everyone, including their natural inhabitants—fish, waterfowl, amphibians, and aquatic plants. In 2020, the District added a second conveyor and offloading station for the skimmer. We hope this additional site will increase the amount of material that the skimmer can remove by improving efficiency.

The District also funds Milwaukee Riverkeeper's Adopt-a-River program. The program engages volunteers to pick up trash along area waterways. Organizations such as schools, nonprofit organizations, and community groups adopt a section of a waterway for two years and pledge to host two litter pickups. With the Safer at Home Order, it was not advised to have large groups of volunteers gather for litter pickups, which reduced the program's total pounds of trash collected from over **20,000 in 2019** to **5,000 in 2020**. In 2020, the District emphasized reducing plastic consumption by funding the Plastic-Free MKE coalition. Coalition members work with local community groups to reduce single-use plastics in the Milwaukee area. MMSD supports the movement in order to reduce the amount of plastic waste that ends up in and pollutes the local waterways.

The District's household hazardous waste collection program provides an opportunity for Milwaukee County residents to safely dispose of hazardous materials that may otherwise end up in the waterways. In 2020, the program hosted three permanent year-round collection sites and two mobile collection sites throughout the service area. The program was impacted by Covid-19 by closing the permanent collection sites for two months, cancelling two mobile collection sites, and implementing new safety procedures in compliance with social distancing best practices. Nonetheless, with more people spending time at home and cleaning out their garages and basements, over **16,900 participants** helped keep **1.2 million pounds** of hazardous waste out of the waterways!



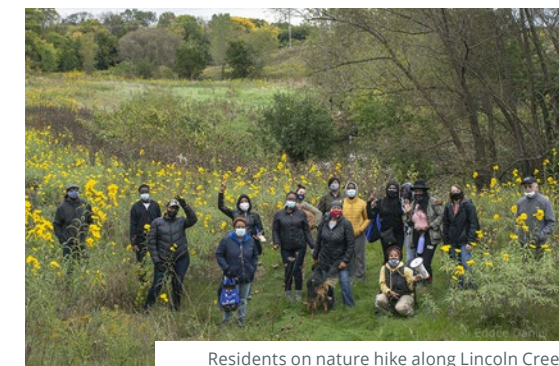
SINCE 2019,
ADOPT-A-RIVER
VOLUNTEERS
REMOVED OVER
25,000 LBS.
OF TRASH FROM
OUR WATERWAYS

EDUCATING AND ENGAGING OUR CONSTITUENTS

The District's mission "to protect public health and the environment through world-class, cost effective water resource management, leadership, and partnership" requires that the District regularly engage with the public it serves. The Safer at Home Order and limits on crowd sizes altered the District's approach to outreach. Typically, the District relies on in-person presentations at local schools, tours of Jones Island, and tabling at local festivals and tradeshows. In spring of 2020, MMSD and Veolia created a virtual tour of Jones Island allowing people from all over the world to tour our operations from the comfort of their home. In 2020, over **1,800 people** either toured Jones Island (in January and February) or viewed the virtual tour video.

With more people at home during the pandemic, people were spending more time online. The District took the opportunity to increase its social media presence and tell its story through the mmsd.com website and online platforms. The District is active on Facebook, Instagram, Twitter, YouTube, and LinkedIn. In 2020, total followers **increased 59 percent** over 2019 participation.

In 2020, the District launched its Community Advisory Team, an effort to gather community feedback from residents on their priorities and expectations for a sewerage district. The Team is comprised of **18 individuals** from a variety of backgrounds and meets virtually once a month to learn about MMSD and discuss future initiatives. The Executive Director also outlined a Community Platform for MMSD with six goals to help MMSD improve neighborhoods-in-need and focus its investments in underserved neighborhoods.



Residents on nature hike along Lincoln Creek

The District completed its two-year grant in the Connect Capital initiative. The initiative assists communities in attracting and deploying capital in low-income and disinvested areas to improve residents' health and increase their access to opportunity, and Milwaukee was one of six teams to receive the grant funding and support. The Milwaukee team included staff from MMSD, the Northwest Side Community Development Corporation, the Department of City Development, Community Development Alliance, Crisol Corridor Business Improvement District, and the Sixteenth Street Community Health Center. The team's goal was to leverage MMSD's flood management investments in the 30th St. Corridor and the restoration of the Kinnickinnic River. The team identified safety improvements such as crosswalk infrastructure, greenspace, and new recreational opportunities to include in the flood management projects in hopes of encouraging more outdoor activities and foster a greater sense of community among residents. Ultimately, the goal is to develop community amenities that promote residents' economic stability and mobility, reduce negative health impacts associated with living in an underserved community, and attract investment and jobs.

MMSD'S COMMUNITY PLATFORM GOALS

MMSD's Strategic Green Infrastructure Initiative will use the Center for Disease Control's social vulnerability index to prioritize green infrastructure by July 1, 2021.

MMSD will form the Community Advisory Team and convene its first meeting by November 1, 2020.

MMSD will expand workforce programs and provide maintenance of green infrastructure and flood management projects by June 1, 2021.

MMSD will develop and integrate community benefits selection criteria into procurement practices by January 1, 2022.

MMSD will restart and expand the toilet rebate program to include rebates for low-flow showerheads, faucets, dishwashers, and washing machines in 2022.

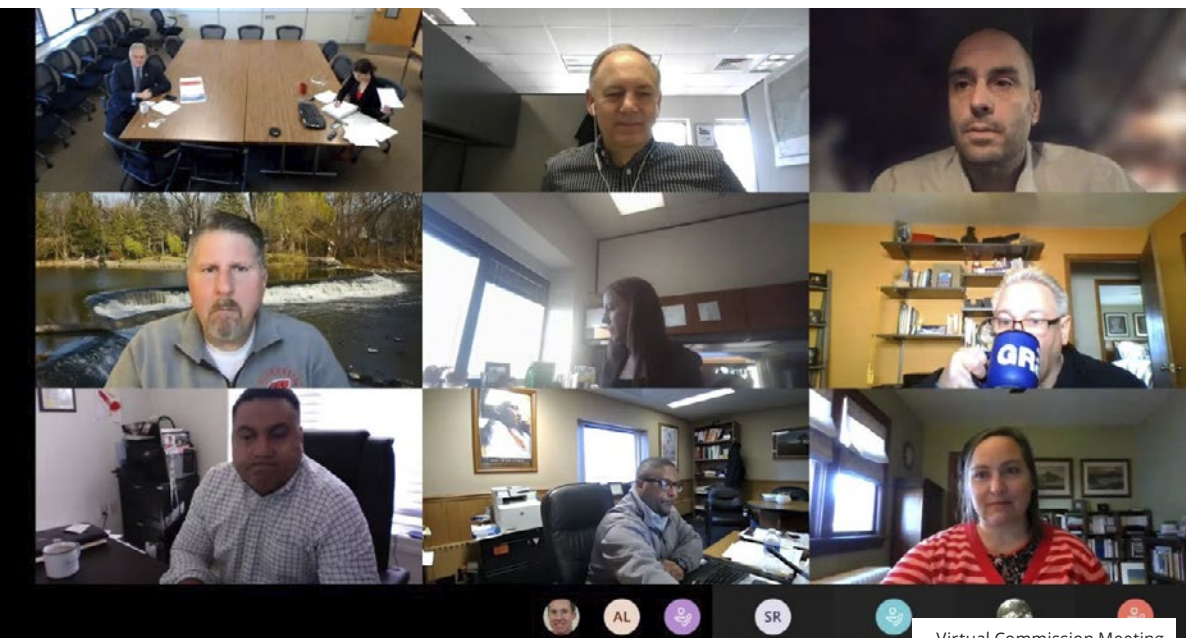
MMSD will work with Water Works to develop a joint pilot program where Water Works replaces lead pipes on a property at the same time MMSD performs private property inflow and infiltration work in 2022.



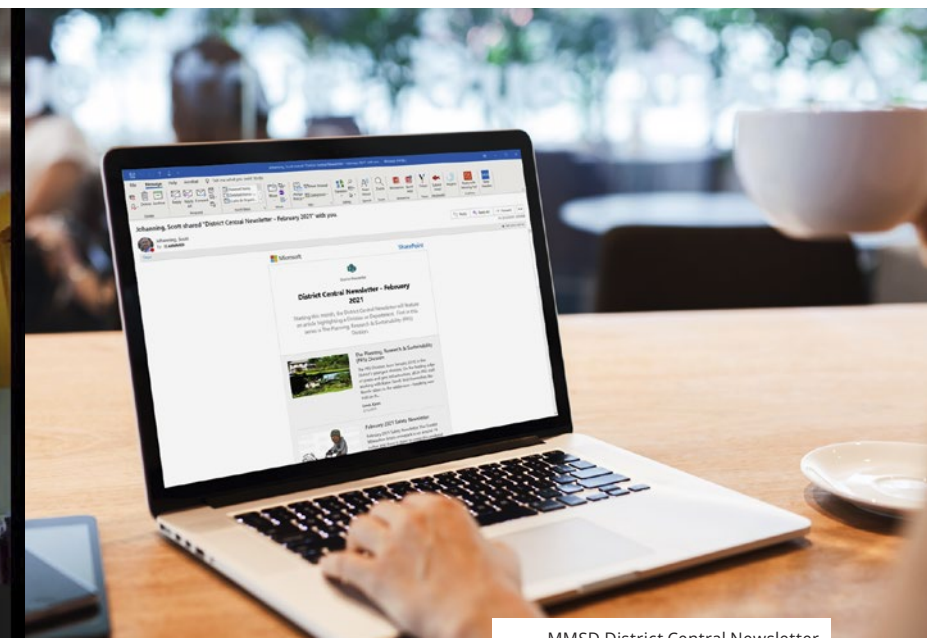
Milwaukee's Water Equity Task Force



School of Freshwater Sciences



Virtual Commission Meeting



MMSD District Central Newsletter

PARTNERING FOR A BETTER FUTURE



WASTEWATER CAN DETECT THE PRESENCE OF COVID-19

The COVID-19 pandemic brought about a unique approach to protect future public health. Since March 2020, the District has partnered with the University of Wisconsin Milwaukee, School of Freshwater Sciences to monitor wastewater for early detection of COVID-19 within a community. For people with COVID-19, the virus can be detected in their feces shortly after they are infected with the virus, even before they experience symptoms or if they are infected but asymptomatic. By testing wastewater, we can measure the amount of the virus and see whether the levels are increasing or decreasing. This can be an early warning sign of increasing COVID-19 cases within a community. Wastewater monitoring does not replace traditional COVID-19 testing but can provide a broader understanding of COVID-19 activity. Local public health officials can use this information to make decisions to help slow the spread of the disease in their communities.

The District also participated in the US Water Alliance's Water Equity Taskforce for the Milwaukee region. In order to increase understanding of the challenges, opportunities, and interventions to promote equitable water management, the US Water Alliance created a peer-exchange platform to foster collaboration, capacity building, and knowledge exchange. In 2020, the Milwaukee Water Equity Taskforce finalized the Water Equity Road Map. The Road Map identifies and shapes the goals set by the group to obtain a diverse and inclusive water workforce. The Taskforce also included Milwaukee Water Commons, Groundwork Milwaukee, Cream City Conservation, Century City Triangle Neighborhood Association, Greater Milwaukee Foundation, Employ Milwaukee, Milwaukee Jobs Work, and Milwaukee Area Technical College.

OPERATIONAL EFFICIENCIES



THE INTERNAL NEWSLETTER HELPS EMPLOYEES FEEL INCLUDED & ENGAGED IN THE DISTRICT'S WORK

The Information Technology group introduced a number of new processes and efficiencies in 2020. The Applications and Record teams paired up to migrate the records management system, OnBase, from an on-premise solution to a cloud hosted platform. The new platform increases system availability and enables external partners to access information, which improves collaboration and workflow efficiencies. The infrastructure team improved the data storage environment with new Storage Area Network (SAN) hardware and new Palo Alto Firewalls that will improve reliability and security of on-premise data storage and computer systems. These improvements contributed to increasing up-time for all of our business applications and infrastructure from **99.0 percent** in 2019 to **99.9 percent** in 2020.

In order to improve internal communications, the District launched a monthly internal newsletter in 2020. The newsletter keeps employees informed of upcoming projects, policy changes, helpful hints, and how current events are impacting the District. The newsletter helps employees stay engaged while working from home and reduces internal silos.

In early March of 2020, the District kicked off the implementation of a new Enterprise Resource Planning (ERP) and Human Capital Management system. A fully integrated ERP allows an organization to function more efficiently, improves data-driven policy making, and reduces long-term costs. The new system will offer improved resilience with modernized cloud services, continuous flow of transactions and automated data to reduce manual labor and potential for data input errors, and on-demand financial reporting, replacing a 20-year-old dated system. The District selected a cloud-based solution and worked with an external implementation consulting team. The project adapted to the COVID-19 challenges by hosting all of the meetings and trainings virtually with the consultant team and MMSD staff working offsite. Staff across multiple work groups have provided input to map existing processes and future needs. In December 2020, some modules became live and operational and work will continue through 2021.



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