

Metropolitan Water Reclamation District of Greater Chicago

President's Annual Message 2013



Kathleen Therese Meany President of the Board of Commissioners

At the close of my first year as President of the Board of Commissioners of the Metropolitan Water Reclamation District of Greater Chicago and my 23rd year as a commissioner, I am honored to present this annual message. It has been a pleasure working in harmony with my fellow commissioners, our staff, and our com-

munity to improve the region's water environment, manage stormwater, and move ahead in other important areas.

As we approach our 125th anniversary in 2014, I reflect on how the District made the Chicago region habitable beginning in 1889, and how the work we conduct today points us in a direction our early leaders could not have envisioned. The strides we are taking to evolve into a resource recovery organization are above and beyond the expectations of a wastewater treatment organization.

Our early leaders were passionate about finding the best way to protect our drinking water, and their revolutionary plan to reverse the flow of the Chicago River away from Lake Michigan with the Chicago Area Waterway System was a bold and successful solution to the problem. In the early 20th century, the District began working to develop wastewater treatment technology to help clean the notoriously polluted river. The construction of our seven wastewater treatment plants and 554 miles of intercepting sewers were giant steps in improving water quality. In the 1970s we began working on the Tunnel and Reservoir Plan (TARP), an unprecedented project designed to capture sewer overflows before they reach and pollute our waterways. TARP is still under construction but has already been extremely successful. Other cities around the world have taken note and are following our lead to undertake similar projects to prevent combined sewer overflow pollution.

I know our founders would be proud of the accomplishments that we have made to date and amazed by what we have done in 2013.

We began our 124th year on a bright note as the Calumet Water Reclamation Plant underwent an overhaul and received an award from the American Council of Engineering Companies of Illinois. The project included the construction of 12 new primary settling tanks and eight new aerated grit tanks to replace under-sized and antiquated facilities.

This award was followed by even better news as Governor Pat Quinn announced that the District would receive a \$250 million low-interest loan through the Illinois Clean Water Initiative. This funding allowed us to move forward with projects crucial for improving the water environment and protecting public health.

Responsible Fiscal Management

The District continued its quest to stay on sound financial footing in 2013. We passed an ordinance directing the Cook County Clerk to reduce our tax levy for 2012 by \$19.7 million. We believe residents deserve to have their hard earned dollars protected and managed properly. We also recovered additional costs of treating wastewater through a user charge imposed on certain non-residential users. The MWRD has maintained its AAA bond ratings from Fitch since 2001 and from Standard & Poor's since 2006. As in years past we received the Distinguished Budget Presentation award from the Government Finance Officers Association. In May, we released our Comprehensive Annual Financial Report (CAFR). This financial audit is performed annually to ensure we are conducting business in a responsible, ethical and financially-sound manner. Baker Tilly Virchow Krause, LLP, an independent accounting firm, presented the CAFR report during the Board's regular meeting on May 16 and stated that "the MWRD's financial statements present fairly, in all material respects, the position and results of the District."

Pursuit of Processes to Save Energy and Money

The quality of wastewater has greatly improved since the District's early years. The financial costs and energy required to run the processes that treat 1.4 billion gallons of wastewater per day are substantial. In keeping with our commitment to environmental stewardship and fiscal responsibility, we are continuing our work to become an energy-neutral organization and to minimize our energy costs. We are driving down energy costs by purchasing electricity at discounted rates through a competitive auction, with solar panels and by continuing the use of sewerthermal technology, which utilizes the ambient temperature of wastewater as an energy source.

Another significant effort underway that will help us achieve this energy neutral goal is the testing of a deammonification process, called ANITA™ Mox, which is a new energy-efficient nitrogen removal process with a low carbon footprint. Based on the use of anammox bacteria, it was developed for the treatment of water rich in ammonia and poor in carbon

source. We plan to cut the ribbon on this new process next June at the Egan WRP.

We are looking throughout our organization to find additional sources of energy production. We are partnering with the Illinois Sustainable Technology Center at the University of Illinois at Urbana-Champaign to capture the energy of falling water to produce electricity in a new application of a "pico turbine" at the Stickney WRP. As water proceeds from one process to another over the normal course of flow at a wastewater treatment plant, it often falls over weirs, which are used to control water surface elevation in treatment tanks, and when water falls, it releases energy. Until recently, there was no technology small enough to fit into the tanks to capture that energy.

Phosphorus Removal

In 2013, we took steps to remove phosphorus from the treatment process and convert it into a usable product. This technology will produce approximately 10,000-15,000 tons of fertilizer annually, and our contractor, Ostara, will purchase the product at \$400 per ton. This revenue should offset the operation costs of the facility. Robert F. Kennedy, a member of the Ostara Board of Directors, joined us during the Water Environment Federation's 86th Annual Technical Exhibition and Conference (WEFTEC) in October to announce this new pursuit.

These endeavors all illustrate that the District is changing how we see sewage: not as a waste product but as a resource to be recovered and reused.

Disinfection Groundbreaking

Phosphorus removal is just one of the ways we are working to improve water quality. In September, we broke ground on disinfection projects at the O'Brien and Calumet Water Reclamation Plants. We were joined by U.S. Environmental Protection Agency Region 5 Administrator, Susan Hedman; Illinois Environmental Protection Agency Director, Lisa Bonnett; and other area leaders in Skokie in September to help kick off the projects. The work on both plants should be completed by December 2015, ahead of the 2016 recreational season.

Controlling Combined Sewer Overflows and Preventing Floods

Illinois experienced tremendous flooding in April of this year. Hundreds of homes were deemed uninhabitable and many lives were disrupted. Governor Quinn declared 44 Illinois counties federal disaster areas. While we have no control over the intensity of storm events, we can help minimize local flooding, and we see some light at the end of the tunnel when it comes to flood protection. We celebrated the "last blast" at the Thornton Reservoir in September. The Thornton Reservoir, a part of TARP, is set to come online at the same time as the disinfection facilities at the Calumet WRP, which also serves the southern area of the county. This combined effort will maximize the area's water quality and minimizing flooding.

In October, the Board approved the Cook County Watershed Management Ordinance (WMO). The ordinance provides uniform stormwater management regulations for Cook County to prevent future commercial, municipal, and residential development and redevelopment projects from exacerbating flooding. We hosted four public meetings and a study session earlier this year to offer the public the opportunity to voice their opinion regarding the proposed ordinance. The WMO incorporates comments received during both the 2009 and 2013 public review periods; results received from an Economic Impact Study; and input from the WMO Advisory Committee.

Partnerships

This year we partnered with seven private and public organizations to support improvements in public access, green stormwater infrastructure, and wild-life habitat in the Chicago and Calumet region. In August, we joined our fund partners and Chicago Mayor Rahm Emanuel at the Wrigley Global Innovation Center to announce details on \$1.1 million in competitive funding. Healthy urban waterways are a key component of the vitality of our communities. These investments improve our local economy and our quality of life. In finding new ways to deal with flooding, the Chi–Cal Rivers Fund will help reduce costs and risks associated with stormwater runoff.

We also participated in two U.S. Drug Enforcement Administration unwanted medicine collections, removing more than 650 pounds of pharmaceuticals from the waste stream. In 2014, we will be moving forward with plans to partner with the City of Chicago Department of Water Management and Chicago Public Schools to install green infrastructure at four elementary schools. These projects will help minimize flooding by removing asphalt and replacing it with more natural means of water collection.

Legislative Program

This year, Commissioner Michael Alvarez, Chairman of the Federal Legislative Committee, Executive Director David St. Pierre and I traveled to Washington D.C. to secure federal funding needed to keep TARP on schedule. Despite a difficult budget year and economical challenges, our Illinois delegation, led by Senator Richard Durbin, understood the need for this project to move forward and made it a priority to push for the funding necessary to do so. With their help, the District received \$35 million dollars and ensured that TARP would be funded in 2013. The entire Board of Commissioners also traveled to Springfield to meet with members of the Illinois General Assembly to discuss legislative initiatives and new ideas in protecting our regional waterways. Our long time partnership with our state and federal legislators has helped MWRD to succeed in its mission, and our continued work together will guarantee efficient progress in our area's water protection.

First Sustainability Summit

With a goal of empowering community leaders with an awareness of local, state and federal resources and partnerships, we hosted our first Sustainability Summit in Midlothian in September. More than 80 officials from the 125 Cook County communities participated in the four hour summit held at the Raday Lodge. Speakers included representatives from the U.S. Environmental Protection Agency, the Illinois Environmental Protection Agency, the Office of the Governor, the Illinois State Treasurer's office, Cook County, the Metropolitan Planning Council, Openlands, and the MWRD.

Celebrating our Staff

All of these achievements are made possible by District staff. These are the people who work hard to ensure the region has a reliable source of drinking water, aesthetically-pleasing waterways, minimal flooding, and cost-effective services. To honor our employees, we celebrated our annual African American Heritage month in February and hosted the first Women's History month celebration in March. We honored our retirees during a banquet held at Niko's. We had a wonderful employee picnic at Mainstream Pumping Station in September and honored our veterans with a moving tribute by Loyola University's ROTC. We look forward to a large turnout for our holiday party at Hawthorne Racetrack on December 7.

Rescues on the Water

Two rescue operations occurred in 2013. Commissioners and staff participated in a Blackhawk fan's water rescue along the Chicago River near the Controlling Works in July, and retiree George Richardson rescued a stranded jet ski operator in September.

Vendor Outreach

Also vital to our success is the work of our vendors. Over 200 contractors, consultants, subcontractors, and potential vendors had the opportunity to pursue new business at our second vendor outreach event held at the University of Illinois at Chicago in August. In addition to District staff, other community organizations and businesses facilitated roundtable discussions to learn from or educate others about potential contract opportunities.

Technical Advancements

We have come a long way in 124 years. Since the District was first established, horse and buggies have been replaced with cars and buses, gas lamps were replaced with electric lights, and our drinking water is reliably clean and sanitized. Thanks to technology, those interested in the debate and proceedings of those early formative years, as well as all the years in between, can visit the MWRD website and read the minutes with the click of a button and the help of a new searchable database. The public can even watch Board meetings from the comfort of their own home

now that we stream the meetings online and archive the video. In addition, the state of the art facilities and processes that can be found at our facilities continue to attract visitors from all over the world.

Certainly the members of the 1889 Illinois General Assembly and our early leaders would be pleased with all that has been accomplished. The treatment technologies and processes we are pursuing today are on the cutting edge and will completely transform the wastewater industry for years to come. I believe the work we are doing today will be a significant triumph as the District's story is told 124 years from now.

Respectfully submitted,

Kathleen Therese Meany

President of the Board of Commissioners

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