



**Metropolitan Water Reclamation District of Greater Chicago**

# President's Annual Message 2024: A Year in Review



Guided by a bold, five-year strategic plan, the Metropolitan Water Reclamation District of Greater Chicago (MWRD) reached multiple milestones and advanced our goals across a variety of fronts in 2024.

We made progress in wastewater treatment, stormwater management, climate protection, and financial stewardship.

One of the year's stormwater management highlights includes advancing the Robbins Heritage Park and Midlothian Creek Restoration Project. In an impressive display of stormwater management, flood resilience and environmental justice, the MWRD and various local, state and federal elected officials marked the completion of the first phase of this project—making a significant step toward reducing over-bank flooding in an area that has long been underserved.

In May, the MWRD Board of Commissioners approved 12 new green infrastructure projects as part of our Green Infrastructure Partnership Program (GIPP). These projects include green alleys, green parking lots, bioswales and a green roof at the Blue Island Public Library.

In June, we joined Cook County commissioners and municipal and township leaders to unveil plans to fund \$20 million toward 26 stormwater management projects, with special emphasis on underserved communities.

In fact, since 2014, we have advanced or completed more than 260 projects benefiting nearly 19,000 homes, businesses and other buildings. This represents a total construction cost of \$850 million, including an investment of over \$537 million from the MWRD.

And our work has not gone unnoticed.

Our seven wastewater treatment plants were honored this year by the National Association of Clean Water Agencies (NACWA) for meeting National Pollutant Discharge Elimination System (NPDES) permits for the previous year. The MWRD has also maintained our AAA credit rating from Fitch Ratings and AA+ from Standard & Poor's Global Ratings this year and the International Water Association recognized our climate action plan among the top three finalists out of a field of more than 90 international water utilities. Additionally, for the 49th consecutive year, the Government Finance Officers Association of the United States and Canada awarded the MWRD with a Distinguished Budget Presentation Award.

Our agency's innovation, collaboration, and hard work in 2024 has helped pave the way for a stronger, more resilient 2025.

A handwritten signature in black ink that reads "Kari K. Steele". The signature is written in a cursive, flowing style.

Kari K. Steele  
*President of the Board of Commissioners*

## **Strategic Plan**

We are completing year four of our ambitious Strategic Plan, addressing key goals in resource management, stormwater management, workforce excellence, community engagement and enterprise resilience. To achieve these goals, our staff, guided by the Board of Commissioners, implemented multiple initiatives, including forming a new recruitment strategy committee, facilitating community partnership councils, launching an interactive data-mapping platform, and implementing an interactive dashboard on the mwr.org website that enhances transparency with real-time updates and engaging visuals.

## **Protecting our water quality**

Staff at our seven water reclamation plants (WRPs) continually transform an unpredictable flow of wastewater, stormwater, and urban runoff into clean water while meeting stringent permit requirements with increasing regulation on nutrient capture. Our seven plants were honored this year by the National Association of Clean Water Agencies (NACWA) for meeting National Pollutant Discharge Elimination System (NPDES) permits for the previous year. Only 50 percent of all NACWA public utility members had facilities that earned this peak performance recognition, and yet five of our WRPs have met 100 percent compliance for at least 10 consecutive years. We accomplish this by monitoring the flows to our WRPs through our Industrial Waste Division (IWD) and pre-treatment program. This year our IWD team conducted per- and polyfluoroalkyl substances (PFAS) source investigations at industrial facilities, conducting sampling studies that analyzed 40 PFAS compounds. We found that most PFAS sources come from household sources, emphasizing the importance of reducing forever chemicals at the source and educating consumers. We also launched a multi-year study to analyze biosolids processing at the Stickney WRP and continued research toward nutrient loss reduction strategies with our collaborators in the agricultural sector, working together to improve downstream water quality.

## **On the water**

In 2024, we coordinated new water quality testing at our Egan, Kirie and Hanover WRPs to ensure we meet our NPDES permits. On our waterways, where that treated water is released from our WRPs, we initiated a multi-year study to assess plant and algal growth as part of our Chicago Area Waterway System (CAWS) Phosphorus Assessment and Reduction Plan. We also marked 50 years of electrofishing surveys in 2024. When the MWRD first began studying fish in the CAWS in 1974,

we documented only 10 fish species. Today, the total number of fish species has risen to 77 in the CAWS. This includes more than 30 game fish species and 62 species that are native to Illinois. The catch rate of fish has also multiplied. Our actions are leading to cleaner Chicago area waterways, and the increasing fish supply indicate that our waterways are more ecologically productive and conducive to aquatic life and less degraded than they once were.

## **Innovative research**

We approved plans this year for a unique research project that studies how to best optimize the water reclamation process to preserve and promote water quality for the future. The project, titled “Balancing Carbon Management, Energy Management, Energy Production, Nutrient Removal, and Densification,” is supported through public and private contributions and a Water Research Foundation “Tailored Research Collaboration” grant.

Our research partners Current, Argonne National Laboratory, and the University of Chicago announced that the U.S. National Science Foundation Regional Innovation Engine Program pledged a generous award of up to \$160 million over 10 years to a six-state collaboration known as the Great Lakes ReNEW Initiative. The initiative sets out to join the MWRD and other utilities in efforts to promote sustainable water systems and water-focused technology. We also partnered with Current for another year on H2NOW, a real-time water quality monitoring platform for the Chicago and Calumet rivers. Assessments updated every 15 minutes help people make decisions about recreation on the river. Optimizing the water reclamation process is preserving and promoting water quality for the future.

## **Energy neutrality**

This year we also marked the completion of a multi-year study to formulate conceptual plans at achieving energy neutrality by 2035. The MWRD will meet these goals by implementing efficiencies to reduce energy consumption while also increasing the use of renewable energy, including biogas that the MWRD produces in-house through its digesters. The MWRD uses the biogas to heat buildings and the digesters at our WRPs. Over the last few years our inventive staff began taking inventory of energy usage and finding innovative ways to cut costs at our WRPs. We reviewed where we can increase efficiencies while minimizing disruptions in other processes. Along the way, we found and repaired leaks, installed new pumps and other equipment, and these efforts have led to savings in electricity costs.

## **Climate protection**

While energy reduction will lead to new savings, carbon reductions will save our planet further from the effects of global warming. This year the International Water Association recognized our climate action plan (CAP) among the top three finalists out of a field of more than 90 international water utilities in the IWA Climate Smart Utilities Recognition Programme. The CAP guides us in meeting greenhouse gas emission reductions and highlights the MWRD's work to adapt to the effects of climate change, increased rainfall and challenges in managing wastewater and stormwater. We made tremendous strides this year by decommissioning aging infrastructure at our Stickney WRP and replacing it with new primary tanks that eliminate approximately 36 percent of our carbon emissions compared to our 2005 baseline levels. This keeps us ahead of our 2025 goals.

## **Managing stormwater and climate change**

We have addressed stormwater management through multiple strategies, policy, planning, partnerships and projects of all scopes and sizes of infrastructure. We continued to advance major construction on our Tunnel and Reservoir Plan's McCook Reservoir, and we reached the halfway milestone of our Robbins Heritage Park and the Midlothian Creek Restoration Project in partnership with Robbins Mayor Darren E. Bryant, U.S. Sen. Dick Durbin, Gov. JB Pritzker, Cook County Board President Toni Preckwinkle and other leaders. We also made major progress on the Addison Creek Channel Improvement Project. We continued investing in local stormwater partnership projects, green infrastructure installations, conceptual projects and flood prone property acquisitions. Since receiving authority from the state to fund and support local stormwater management projects in 2014, we have advanced or completed more than 260 projects benefiting nearly 19,000 homes, businesses and other buildings. This represents a total construction cost of \$850 million, including an investment of over \$537 million from the MWRD.

We participated in numerous project kickoffs, ribbon cuttings and forums across Cook County to discuss stormwater management initiatives and partnerships. Our work is impacting more communities thanks to a new partnership between the MWRD and Cook County. In June, we joined Cook County Board President Toni Preckwinkle, Cook County commissioners and municipal and township leaders to unveil plans to fund \$20 million toward 26 stormwater management projects, with special emphasis on underserved communities. This effort, funded through the American Rescue Plan

Act, includes support for 16 critical MWRD projects. We also continue to mitigate flooding through our Small Stream Maintenance Program, watershed planning council meetings, the distribution of rain barrels, trees and native plants and our Watershed Management Ordinance (WMO).

Now a decade old, the WMO continues to protect Cook County homes and businesses from flood damage by managing and mitigating the effects of development and redevelopment on stormwater drainage. Over the last decade, through the WMO, more than 154 million gallons of rainwater have been retained in green infrastructure volume control practices. In addition, more than 3,294 permits have been issued for nearly 9,800 acres of development to create more than 74 million gallons of compensatory storage and detain more than 760 million gallons of stormwater runoff. It is because of prudent planning and policies like the WMO that we are building thriving stormwater-resistant communities throughout Cook County.

## **Green Infrastructure**

In May, the MWRD Board of Commissioners approved 12 new green infrastructure projects as part of our Green Infrastructure Partnership Program (GIPP). These projects include green alleys, green parking lots, bioswales and a green roof at the Blue Island Public Library. This year we prioritized disproportionately impacted areas (DIAs). In July, we unveiled one of our largest GIPP projects to date, by converting six asphalt lots into permeable pavement in North Riverside, covering 71,000 square feet, designed to capture up to 539,000 gallons of water each time it rains. In November, we celebrated our second set of new green alleys in Calumet City, designed to capture more than 447,000 gallons of water per rain event. We also approved a \$15.9 million plan to continue our nationally recognized Space to Grow program converting playlots at Chicago Public Schools into sustainable places to play and learn. We are close to completing two schoolyards on the South and West sides, while also developing a pilot program to introduce schoolyard transformations in Cicero, Franklin Park, Summit and Burnham.

## **Diversity, Equity, Environmental Justice and Inclusion**

Every aspect of the Strategic Plan focuses on diversity, equity and inclusion to guide engagement with all communities across Cook County. This year our Diversity staff participated in or hosted 42 outreach events with 1500 new engagements, including another successful Diverse Business Summit in September at Malcolm X College. As a result of this engagement, nearly 400 new vendors

were added to our vendor database, and 70 percent are diverse vendors.

Our Environmental Justice (EJ) Section continued amplifying its work by expanding partnerships and advancing our work in community engagement and workforce excellence. EJ staff participated in 100+ community engagements, including an Earth Day clean-up event with Aldridge Elementary School and community groups, developed the MWRD's first Environmental Resource Group program, partnered with Chicago City Colleges for the development of wastewater related courses, programming, and apprenticeship opportunities, and successfully completed a two-year term with the Calumet Community Partnership Council.

## **Celebrating culture**

Standing by these values of equity and diversity, we held numerous flag-raising events this year and hosted events to celebrate the unique contributions represented by the diversity of our workforce and the communities we serve. In February, we raised the Pan-African flag to kick off Black History Month and turned our attention to African Americans and the arts. We also recognized Women's History Month with a special event to honor four outstanding women who have made significant contributions to their respective fields and communities. We hosted our annual Asian American and Pacific Islander Heritage Month program with multi-dimensional Korean American artist Mia Park. In June, we proudly waved the Pride flag and celebrated Pride Month with events highlighting the importance of diversity, representation, and the invaluable contributions of LGBTQIA+ individuals. We commemorated Juneteenth with a flag raising ceremony and parade participation. In October, we marked Latinx Heritage Month with a reception at the HIRE360 training facility and held our fourth annual Latinx Stewardship Day at Possum Hollow Woods with our partners from the Forest Preserves of Cook County.

## **Community Engagement**

More than 600 neighbors flocked to the MWRD's O'Brien and Stickney WRP open houses as part of Chicago Water Week in May. Approximately 900 visitors came to our Lockport Powerhouse in June when we opened its doors to the public for the first time after a decade of construction to show how this critical infrastructure manages water and delivers clean energy. Supporters for clean water lined the north bank of the Chicago River in August to celebrate the reopening of our Nicholas J. Melas Centennial Fountain to again captivate onlookers

and neighbors to this iconic fountain and its cannon spraying an arc across the main stem of the Chicago River.

In October, we brought together environmental leaders and innovators for our 12th Annual Sustainability Summit at the Stickney WRP. The event placed a special emphasis on managing the effects of climate change with hydrologists, engineers, planners and sustainability leaders. The event also recognized communities and individuals for their contributions to environmental sustainability through innovative green infrastructure and dynamic public education efforts.

## **Community Partnership Councils**

The Sustainability Summit served as a backdrop for the launch of the Stickney Community Partnership Council (CPC). While we said farewell to our first ever CPC at our Calumet WRP, we launched what we hope will be another successful, engaging and informative two-year run for our Stickney CPC. An initiative born from the Strategic Plan, the CPCs function as a conduit for open, two-way communication between the community and the MWRD, fostering collaborative and thoughtful input from a partner perspective on MWRD's projects and programs.

## **Responsible Financial Stewardship**

Since 2023, we have maintained a AAA credit rating from Fitch Ratings and AA+ from Standard & Poor's Global Ratings. This consistent fiscal health has again earned the MWRD the highest recognition in governmental accounting and financial reporting. For the 49th consecutive year, the Government Finance Officers Association of the United States and Canada awarded the MWRD with a Distinguished Budget Presentation Award for the 2023 budget and Certificates of Achievement of Excellence in Financial Reporting to the MWRD, the MWRD Retirement Fund and the MWRD Retiree Health Care Trust for annual comprehensive financial reports. This reliable budgeting affords us the opportunity to deliver essential services that help protect our water environment.

## **Conclusion**

Throughout another year of essential work, the MWRD continues to accomplish our mission, meet and exceed many goals and expand our outreach. This all confirms our commitment to excellence that has transcended 135 years and will support future generations. It is a huge responsibility, and I am honored to serve as President, with more than 1,800 staff who are dedicated and committed to success.

