

**Department of Water Management  
2020 Budget Hearing  
Remarks of Randy Conner, Commissioner  
October 2019**

Good morning Chairman Dowell, members of the Committee on Budget and Government Operations and members of the City Council. I am pleased to appear before you today to present and discuss the 2020 budget proposal for the Department of Water Management (DWM).

The mission of the 2,000 men and women of the Department of Water Management is to deliver high-quality drinking water in the most environmentally and fiscally responsible manner possible while also efficiently managing waste and storm water. Through our operations at the Jardine and Sawyer Water Purification Plants –two of the largest conventional treatment plants in the world – DWM purifies on average about 750 million gallons of water a day. We operate 12 pumping stations that distribute water through more than 4,300 miles of water mains. On the sewer side, the department is responsible for the transmission of wastewater through more than 4,400 miles of sewer mains to the Metropolitan Water Reclamation District.

We provide purified water to more than 2.7 million customers in Chicago and another 2.7 million customers in 125 surrounding suburbs. On a daily basis, approximately 5.4 million customers, or 42% of the Illinois population, depend on us for their drinking water.

We take this responsibility extremely seriously with public health being our primary concern. We perform over 600,000 analyses of water throughout the treatment system 24/7 and adjust treatment protocols as necessary. We also monitor water quality in Lake Michigan to identify potential issues and to protect the lake from polluters.

Under the 10-year Capital Improvement Program, DWM has been aggressively working to replace Chicago's aging water infrastructure to create a more reliable and efficient system. Since 2012, DWM has replaced 722 miles of water main and 167 miles of sewer mains. We have lined 410 miles of sewer main and converted one pumping station from steam to electric power and another is in process.

For 2019, we are on track to replace 90 miles of water mains, 22 miles of sewer mains and line 42 miles of sewers and 5,000 sewer structures. We have also begun the conversion of the Central Park Pumping Station from steam to electric power. Estimated for completion in 2022, this conversion will save approximately \$4.5 million dollars annually through a greener, more efficient power source.

Before water reaches taps, DWM takes a proactive approach to mitigating contaminants – including lead – in the water system by using corrosion control in our water mains. The corrosion control forms a coating on the inside of the pipes that minimizes the risk of any contaminants leaching into the system.

The end result of using this prudent approach is safe drinking water for all Chicagoans. And for many consecutive years, Chicago's water has tested under the U.S. EPA's benchmark for lead in drinking water of 15 parts per billion. However, concerns about lead in drinking water are being proactively addressed to ensure the City can further exceed these standards.

In 2018, DWM commissioned a report from nationally recognized experts in the field to determine the feasibility and framework of what would be a multi-billion-dollar program to

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potentially replace lead service lines citywide. As Chicago has more lead service lines than any city in the country, with a large portion of these lines on private property, the scope is massive and complex.

When completed, the report will outline industry best practices, highlight community engagement considerations, investigate available technology, and assess funding options including potential federal and state funding sources. The report will also generate recommendations for a pilot and a step-by-step phased replacement program throughout the City.

In June, the Mayor paused the City's water meter program based on preliminary results of a DWM study which indicated a statistically significant elevation in lead levels in some homes after meters were installed. DWM continues to investigate possible sources in order to determine a solution and resume the free meter installation program. The same study also examined the impact of water main installation on residential lead levels and found no significant elevation in lead.

On an ongoing basis, DWM offers several other steps residents can take to preserve their water quality.

For the over 221,000 accounts that have received water meters in the past, DWM is offering free water filter sets. Residents can register for the sets- which consist of NSF-certified water pitcher and six cartridges to remove lead if used correctly- at [www.chicagowaterquality.org](http://www.chicagowaterquality.org) by entering an address and zip code. Results of water tests are then posted on the same site.

Additionally, DWM has undertaken an aggressive promotional campaign to promote filter registration using letters, postcards, emails and community events to reach those who qualify. So far, approximately 25% of those who qualify have registered to receive a free set.

The department offers free water testing by an independent certified laboratory to any resident concerned about their water quality. Over 62,000 kits have been mailed out since 2016 and results are posted at [www.chicagowaterquality.org](http://www.chicagowaterquality.org)

Should an address test over the U.S. EPA's benchmark level for lead of 15 parts per billion, DWM calls the resident and schedules a follow-up appointment with a plumber, electrician and sanitary engineer to identify possible contributing sources for the problem and provide customized recommendations for mitigation.

DWM encourages residents to run their water for five minutes whenever it has been stagnant for six hours or more. Moving water pulls the corrosion control through the home plumbing and flushes out any sediment that might have collected while the water was stagnant. For post-water construction, the department provides intensive flushing instructions to residents to ensure that their systems remove sediment raised by construction.

As a longtime leader in water quality research, we are once again taking initiative in leveraging innovation and implementing new technologies to improve our water system with the least impact on our environment.

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DWM recently announced two pilots designed to leverage alternative pipe replacement technologies, to extend the useful life of underground infrastructure and lessen the impact of water pipeline repair construction on the community.

The first pilot will investigate the use of cured-in-place pipe (CIPP) for the rehabilitation of water mains. DWM has used CIPP in recent years to extend the useful life of sewer mains. In the CIPP process, a resin-soaked textile liner tube is pulled through an existing pipe and allowed to harden. As the resin cures, it forms a tight-fitting, jointless and corrosion-resistant replacement pipe. The liner can be inserted using water or air pressure and only requires digging access points for entry and end points.

The second pilot study will assess the rehabilitation of private drains using various pipe lining materials. Private drains are the pipes that move wastewater from a residence to the sewer main in the street. While it is anticipated that this pilot will reduce the impact to surrounding trees, any underground construction can result in state regulation-mandated tree removal. This is more likely with private drain work, as the drains usually run from a residence under the parkway and out to the sewer main.

Independent consultants will conduct the pilots, analyze the results and make recommendations about using the tested technologies moving forward. Both pilots will be conducted in compliance with Chicago Plumbing Code and state regulations for water infrastructure construction, while avoiding any negative impact on water quality. DWM will work with stakeholders to determine locations for both pilots, and results are expected to be available by the end of 2020.

With the CIP over half completed, we are now tackling projects that require more coordination, have more complex compliance-related issues and have the potential to have a bigger impact on the surrounding environment.

In order to ensure that we are working safely on these more complicated projects, we have developed an aggressive training program focused on safety. We meet monthly with other City departments as well as the labor unions and utility providers to create efficiencies through coordinated trainings. So far in 2019, we have conducted 100 tool box trainings on construction sites as a refresher on issues like Workers Compensation, Slips, Trips and Falls, Personal Protective Equipment, and Work Zone Safety.

To protect the safety of employees and pedestrians, we have conducted more than 350 unscheduled job site inspections to ensure that work is being conducted in compliance with federal, state and local regulations.

We offer training and mandatory refreshers to our employees on hazard recognition for the operation of heavy equipment, OSHA competent person protocols in trenching, shoring, excavation and personal protection equipment.

We know that this training is working. Gas utility hits during construction- the most frequent underground interference we experience- are down 34% .

And we are working more efficiently than ever before. In 2019 our response time decreased dramatically for calls on flooding, water in basement and sewer cave-in inspection calls. Sewer cave-in inspections decreased by 12 days, from 18 in 2018 to 6 days in 2019. Water in

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basement complaints decreased by 2 days, from 3.6 days to 1.5 days and the department was able to complete an additional 2,800 customer service requests regarding flooding from 2018.

Once again, we are requiring that all 2,000 DWM employees undergo EEO training in order to improve the culture at the department. The more tools our employees have- technical and soft skills- the more efficient and productive they can be.

Water has become big news across the globe. We are seeing our climate change with more 50- and 100-year storms that tax our systems and create new challenges in storm water management. To address this problem here in Chicago, we have prioritized green infrastructure including permeable construction materials and ground water detention techniques in our projects. Through the Space to Grow program, we are partnering with the Chicago Public Schools to create bioswales, rain gardens and outdoor classrooms at elementary schools across the city.

These projects keep hundreds of thousands of gallons of rainwater out of the storm water system and cultivate an interest in conservation in the next generation of citizens.

Through another stakeholder partnership with the Center for Neighborhood Technology and the Metropolitan Water Reclamation District, we are scheduled to launch a pilot program in the chronically water-logged Chatham neighborhood to evaluate potential runoff reduction and flood prevention strategies. The pilot will involve 40 single-family homes located in this neighborhood.

We are committed to providing the highest level of professional service to our customers and building a strong water infrastructure to meet Chicago's needs now and for future generations to come. I pledge to continue to work with all of you as we look at each ward's service needs and to make the improvements necessary to maintain our quality of life.

Thank you.