



OUR 2020 ANNUAL REPORT
WATER

METRO WATER SERVICES



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SUSTAINABILITY IS NOT JUST CREATING STRONG WATER INFRASTRUCTURE AND WORK PROCESSES, BUT ABOUT BUILDING PERSONAL SUSTAINABILITY.

Sustainability must create trust and carry relationships through difficult times. We hope to continue building trust with the Nashville community so that, even in times of strife, the Nashville community can trust that their water services will be among the best in the country.





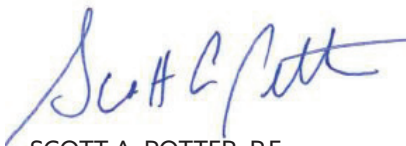
LETTER FROM THE DIRECTOR

Dear Metro Water Friends and Colleagues,

In my 20 years as the Director of Metro Water Services (MWS), 2020 has proven itself to be one of the most challenging. In March, a tornado that devastated much of North Nashville completely interrupted power to the Central Wastewater Treatment Plant (WWTP) and the Biosolids Facility. In April, the global COVID-19 pandemic required us to work in a completely unpredictable environment and create a remote work environment within weeks. And then in December, a bomb destroyed downtown Nashville affecting underground sewer infrastructure. 2020 also brought a new rate structure and the first rate increase since 2011 to you, our customers.

As MWS faced the effects of this difficult and uncertain time, we remained committed to our core value: To Protect Public Health and Safety. Fortunately through years of preparation, MWS was able to continue to provide safe, clean and reliable water services to all our customers.

In order to do this, it was necessary to be properly funded and maintain continuity of operations. Throughout this utterly abnormal year, there was never a question or doubt of our drinking water quality. There was no question of the quality of the water reclaimed from sewage and returned to the river or the management of residuals. Our stormwater crews were often out in harsh weather, helping to prevent risk to life and property. Each day, everyone associated with watershed management made our environment a better, safer place to live. We initiated a long-awaited \$400 million project at the Central WWTP and are implementing an aggressive capital plan to replace aging infrastructure throughout the city. We are proud of the services we provide, which is a result of the ongoing investments in advanced treatment processes at our water plants paired with the knowledge and dedication of our water utility employees.



SCOTT A. POTTER, P.E.

Director of Metro Water Services



OUR MISSION:

**SUPPLY, TREAT, MANAGE
AND PROTECT OUR
WATER RESOURCES IN A
SUSTAINABLE MANNER FOR
THE BENEFIT OF ALL WHO
LIVE, WORK AND PLAY IN
OUR COMMUNITY.**

ABOUT US

Since 1833, Nashville has had a public water system that is supplied by the Cumberland River. The water treatment and distribution facilities have grown gradually and have expanded and upgraded to meet the community's needs and comply with increasingly stringent water quality and public safety laws and regulations. When the Metropolitan Government of Nashville and Davidson County was chartered in 1963, MWS was chartered to provide consolidated county-wide water services and to deal with the then 50,000 homes, which did not have service. MWS is a Metro enterprise operation, meaning that it is funded through the revenues it generates from services provided to customers. The agency does not receive general tax funds to support its capital or operating and maintenance budget.

MWS provides public water (treatment and distribution) and wastewater (collection and treatment) services to customers located in Nashville/Davidson County and portions of five surrounding counties: Robertson, Rutherford, Sumner, Williamson and Wilson. We provide stormwater services for customers located in Nashville/Davidson County (540 square miles). The public drinking water system is also a vital part of the fire protection in our community.

More than 3,000 miles of pressurized water mains, 37 reservoirs, 54 water pumping stations and over 21,000 fire hydrants provide water supply and protection to more than 212,000

customers (accounts). Finished potable water is provided by two water treatment plants, R.L. Lawrence (Omohundro) and K.R. Harrington, each with rated capacities of 90 million gallons per day (MGD).

Wastewater is collected utilizing over 3,100 miles of sewer lines and 118 sewer pumping stations. Wastewater treatment is provided for over 216,000 customers (accounts) by three wastewater treatment plants, Central, Dry Creek and Whites Creek.

**NASHVILLE'S WATER SYSTEM
INFRASTRUCTURE FIRST BEGAN IN 1826
IN DOWNTOWN. NEW AND IMPROVED
FACILITIES HAVE BEEN ADDED AND
EXPANDED UPON EVER SINCE.**

A YEAR OF OVERCOMING CHALLENGES

The EF-3 tornado that touched down in Nashville in the early hours of March 3, 2020, tested our emergency response preparations. While MWS was fortunate not to sustain structural damage, widespread power outages left the Central Campus consisting of the Customer Services Building, the Administration Building, the Central WWTP and the Biosolids Facility without power.

Both the K.R. Harrington and Omohundro Water Treatment Plants were placed on generator power prior to the storm's arrival. The Omohundro Campus Substation and Generation Facility, completed in 2019, provided power to the Omohundro WTP, our laboratory, fleet, warehouse and system services division, and the adjacent Clean Water Nashville equalization facilities utilizing 10 megawatts (MW) of backup power generation.

Power was restored to the Central WWTP, a 125 million gallon per day facility, and the Biosolids Facility within days utilizing eight 2-megawatt generators, system knowledge and creative applications. The generators were rented and delivered on flatbed trailers.

In the aftermath of the tornado, MWS stormwater crews responded swiftly to assist in clearing trees and debris in area neighborhoods so Nashville's emergency response crews could more efficiently reach and search through severely impacted areas.

Then, on March 8, 2020, while still responding to the tornado, Nashville had its first presumptive case of COVID-19.

MWS executed its pandemic plan on March 15, 2020, and began drafting a phased operational plan based on the Mayor's Roadmap for Nashville. Throughout the COVID crisis, MWS operated in a completely unpredictable environment. Where

possible, employees were asked to work from home; others were given staggered schedules and assigned one person per vehicle to allow for distancing. Temperature checks and masks were required in all MWS buildings.

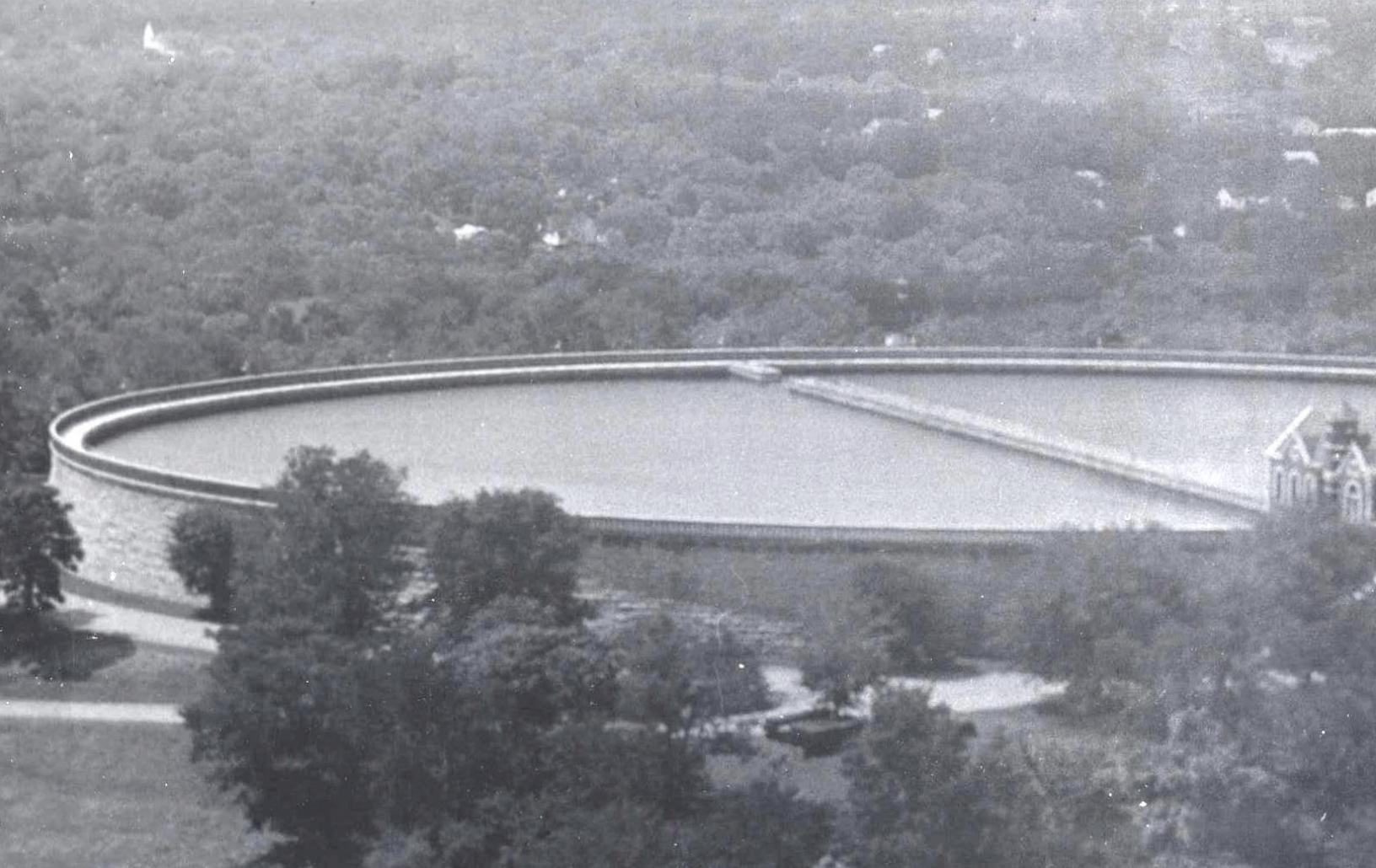
Thanks to efforts to build sustainable infrastructure and the resilience of MWS employees, neither the tornado nor the pandemic interrupted our staff's ability to accomplish our mission of providing safe, clean and reliable water service to our customers and community.



(Above) Trucks clearing debris after the tornado

**GENERATORS ENSURE THAT
SAFE, CLEAN AND RELIABLE
WATER SERVICES CONTINUE
THROUGH ANY CHALLENGE
NASHVILLE MAY FACE.**





HISTORIC 8TH AVE RESERVOIR

The 8th Avenue Reservoir is both the largest and oldest reservoir in the MWS water distribution system. The 51-million gallon structure, built in 1889, experienced a devastating 200-foot failure in the east wall in 1912, which resulted in a partial reconstruction in 1914. There have been various geotechnical concerns investigated since 1914 that have resulted in numerous structural improvements as well as geotechnical monitoring.

The reservoir was placed on the National Register of Historic Places by the United States Department of the Interior and designated as a National Landmark by American Water Works Association (AWWA) in 1971.

MWS currently operates the east side of the reservoir with a membrane liner system that has reached its useful life.

A planned 8th Avenue Reservoir Improvements Project will address geotechnical concerns by installing new cast-in-place concrete tanks within the existing historic reservoir structure. The new tanks will be anchored to solid bedrock. The project will be constructed in three separate phases, outlined on the next page.

8TH AVE RESERVOIR PROJECT CONSTRUCTION PHASES:

PHASE 1

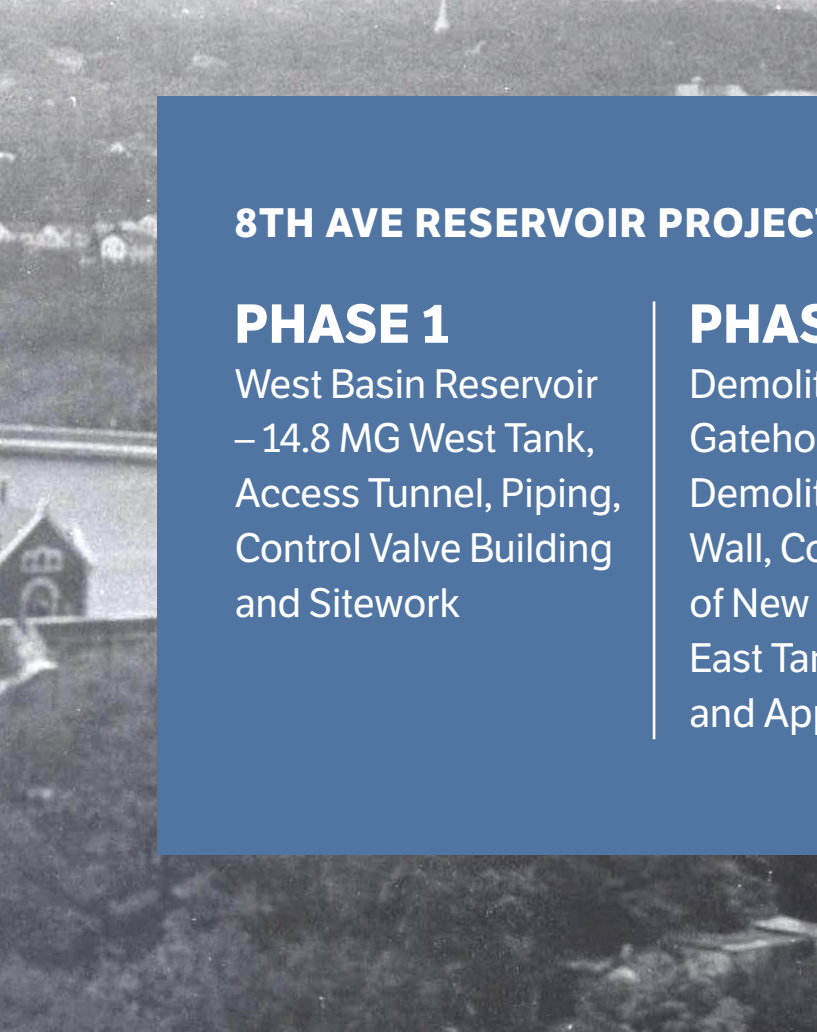
West Basin Reservoir
– 14.8 MG West Tank,
Access Tunnel, Piping,
Control Valve Building
and Sitework

PHASE 2

Demolition of
Gatehouse Equipment,
Demolition of Middle
Wall, Construction
of New 19.5 MG
East Tank, Piping
and Appurtenances

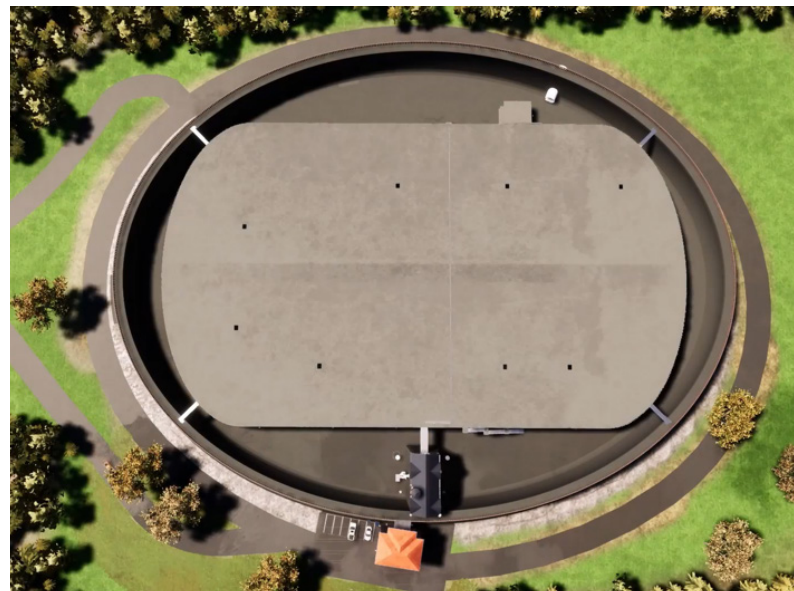
PHASE 3

Historic Gatehouse
Restoration, New Entry
Tower Construction,
Sitework and Historic
Wall Restoration



(Left) Historic 8th Avenue Reservoir

(Below) A glance of the future reservoir



Phase 1 of the project has been approved to be part of the State Revolving Fund (SRF) program.

This program offers Drinking Water State Revolving (DWSRF) low interest loans, which are awarded annually through a project ranking process. The project was officially awarded a DWSRF loan with a 0.95% interest rate and 20-year term in May of 2020.

Once completed, the project will reduce the risk of slippage, eliminate leakage from the aging membrane liner and valves, increase water quality through baffling, improve operational reliability and flexibility and eliminate the ongoing geotechnical monitoring at the site.



DANGER
HIGH PRESSURE
HOT SURFACES
NO ENTRY

WARNING OVERFLOW

WARNING OVERFLOW

A NEW ERA FOR THE DISTRICT ENERGY SYSTEM (DES)

In July 2020, Metro Water Services assumed contract management of the DES* which provides heating and cooling to buildings downtown.

After considerable analysis regarding the proposed sale of the DES, Metro decided, as one of the largest customers of DES, it was in Metro's best interest to maintain control of the system and thus control of the costs to taxpayers.

MWS, having a background in management of distribution and collection systems as well as industrial plants, was chosen to take over the

contract management of the system. Operation of the system remained as a contract service by Constellation NewEnergy, Inc.

The amended operation contract resulted in material savings for the City both in cost of service and in subsidy, benefitting Metro, DES customers and the taxpayers.



**The Metro Nashville DES facility uses natural gas and electricity to produce steam and chilled water. The steam and chilled water are then distributed through a series of underground pipes to about 42 buildings and structures in the downtown area. By using DES services, these facilities don't require boilers, furnaces, chillers or use fuel or electricity in water heaters; the DES does that work for them – often at a reduced cost and reduced greenhouse gas emissions.*

ENERGY SUSTAINABILITY

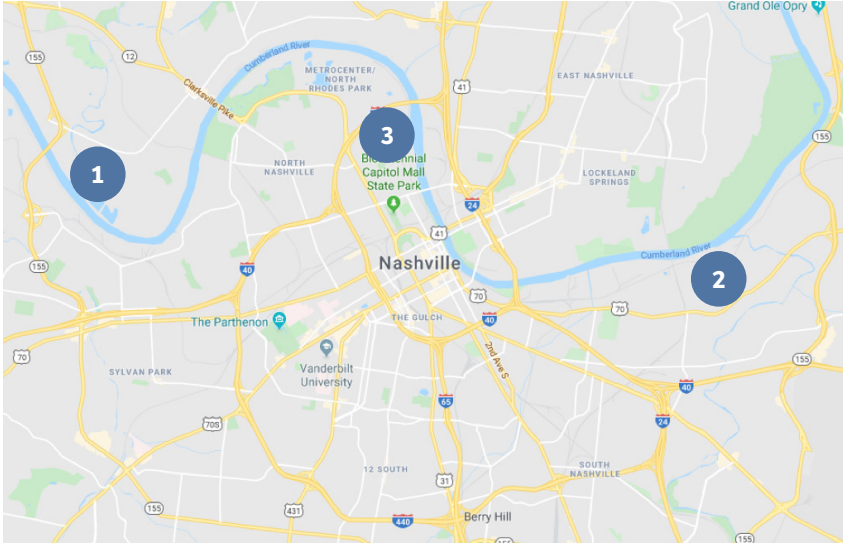
MWS Energy Management Program, which began in 2012, focuses on improving energy use and optimizing energy production. The program’s overall goal is to bring about an energy-focused culture while maintaining the department’s core functions: to supply customers with quality water, reclaim wastewater and manage stormwater.

MWS spends nearly \$18 million per year on electrical expenses alone. The cost of energy isn’t controllable, but MWS can reduce the amount of electricity used. Various projects, programs and upgrades at multiple facilities have allowed MWS to save over \$1.5 million annually in electricity cost alone. Some notable improvements include upgraded HVAC and lighting, construction of LEED buildings and process improvements.

The department has also significantly reduced its dependence on natural gas. The biogas produced at the Central Biosolids Facility and the Dry Creek Facility is used to power equipment that once depended on natural gas. These improvements have saved the department almost \$1 million annually.

Overall, the total savings from existing and planned improvements will be nearly \$3 million per year.

Metro Water is also installing renewable energy generation. The first solar project is scheduled to be built in 2021 and will produce over 3-megawatts of power, equivalent to 4 million pounds of coal. This innovative project, being implemented at three properties, will require no upfront capital and will save money. MWS plans to pursue more innovative projects and partner with other departments in the future to help meet the City’s goal of 100% renewable energy by 2041.



SOLAR SITE LOCATIONS:

1. White’s Creek WWTP Solar Site.
2. Omohundro South Facility Solar Site
3. Central WWTP Solar Ground Mount Site Description

IMPROVING OUR INFRASTRUCTURE BY ENCOURAGING WATER CONSERVATION

In January 2020, MWS implemented a historic rate structure change and increase to support the utility needed well into the future. Not only was the structure simplified and made equitable, eliminating inexplicable customer classes, the system also increased the water and sewer rates for the first time since 2011.

MWS pays for operating and maintaining our system with money from the rates customers pay. Our operating costs increased 30% since the previous increase in 2011 (Prior to the 2011 increase, MWS had not raised rates for 13 years). Stronger regulations and an old system susceptible to failure (more than 65% of our water pipes and 58% of our sewer pipes are over 40 years old) have required MWS to make large, expensive infrastructure investments. Additionally, we are required by the U.S. Environmental Protection Agency (EPA) to complete an estimated \$1.62 billion worth of work to upgrade our sewer system to address sewer overflows. It had become necessary to increase MWS rates as previous rates did not create enough funding to meet the needs of our operations, maintenance and improvement needs.

The new rate structure and increase went into effect on January 1, 2020. Additionally, rates increased by 4% on January 1, 2021, and will increase by 3% on January 1, 2022-2024, respectively. Starting in January of 2025, a Consumer Price Index increase of no less than 2% will occur annually. Rate increases for the fiscal years 2021-2024 were stretched over a period of years to reduce the impact on our customers.

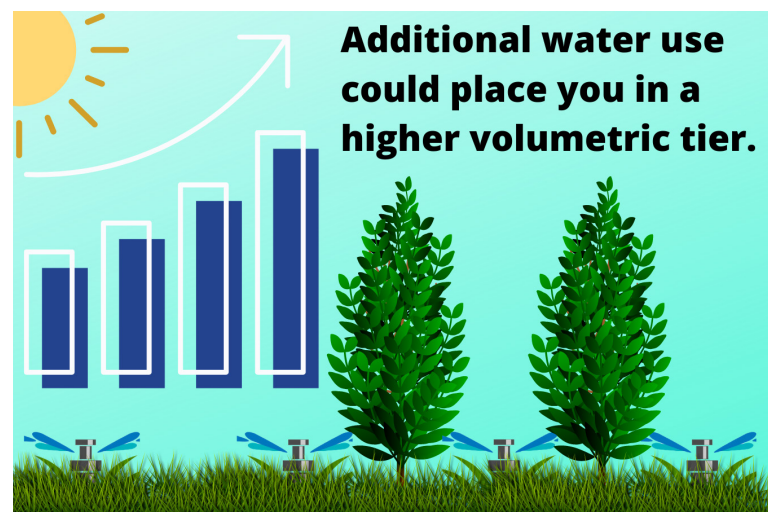
MWS is an enterprise fund and does not receive tax dollars from the general government.

The new water and sewer rate structure includes a tiered rate structure that encourages wise water use,

helps curb unnecessary water use and incentivizes conservation. The tier system means customers who use more water pay more. The rate structure has four tiers based on typical usage categories as determined by the Cost of Service Study. The volumetric rate per ccf (100 cubic feet = 748 gallons) of water is higher for the higher-use tiers.

MWS will review the rates every five years moving forward to make sure they are aligned with our capital and operating needs.

This will allow for regular, small rate adjustments based on the cost of living for operating and capital costs rather than large adjustments every 10 years.





CENTRAL OPTIMIZATION



Modernizing and expanding the Central WWTP is the largest project in the Clean Water Nashville Program, representing an investment of approximately \$400 million.

The project to upgrade the Central WWTP began construction in the summer of 2020 and is scheduled for completion in late 2023.

The Central Upgrade project adds additional capacity to improve water quality and become more energy efficient, but equally important, it allows MWS to be a better partner to the thriving nearby Germantown and Salemtown neighborhoods with additional odor control, landscaping improvements and lighted walkways along our boundary.

When completed, it will position the plant to meet projected demands as Nashville continues to grow while improving water quality and ensuring compliance with state and federal regulations. The plant is located between Second and Third Avenues North, south of Interstate 65. A new

headworks facility, with a capacity of 440 million gallons per day, will be constructed on Third Avenue North. The headworks facility will have heavy-duty screens that remove large debris and fine screens to remove small materials such as so-called flushable wipes to reduce clogging in the treatment facility.

Additional major elements of the project include upgrades to the Central Pump Station, improvements to conveyance piping, upgrades to the aeration system and additional capture and treatment of odor sources. The disinfection process will be changed from chlorine gas to ultraviolet light, a more environmentally friendly and efficient process.

TRANSFORMING BIOSOLIDS INTO MUSIC CITY GOLD

In 2020, MWS produced over 19,000 tons of pelleted fertilizer at the Central Biosolids facility. Commercially marketed as Music City Gold (MCG), this marked the second consecutive year that 100% of the fertilizer product was beneficially reused. In partnership with TYCOWA LLC, the fertilizer was distributed to residents and farmers to improve soil structure, increase crop yields and stabilize erodible ground. Production of MCG also benefited our community and environment in other, less visible ways: it produced energy, conserved valuable community landfill space, reduced truck traffic, reduced greenhouse gas emissions and isolated carbon.

Scientists have recognized for many years that treatment plant residuals were a largely untapped source of beneficial energy. Unfortunately, the construction and operating costs of these processing facilities were a significant hurdle. Constructed in 2006, the Central Biosolids facility used organic residuals from the treatment process as a food source for microbes. The microbes are housed in large concrete tanks (digesters) where they consume the organic residuals from the treatment facility. This reduces the total volume of material and produces methane-rich digester gas. In 2020, MWS used over 250 million ft³ of digester gas as an energy source for boilers and drying equipment.

The microbial consumption of organic material significantly

reduced the operational expenses for hauling and landfill fees. While 19,000 tons of fertilizer may seem like a large number, that is about 20% of the 103,000 tons of sludge that MWS hauled before the Biosolids facility was constructed. In 2020 that conserved about 200,000 yd³ of landfill space and eliminated over 120,000 metric tons of greenhouse gas (GHG) emissions from landfill decomposition. The savings in landfill fees and truck traffic equaled over \$4 million in 2020, and reduced roadway greenhouse gas emissions by approximately 2,800 metric tons.

As a soil amendment, the pelleted product also benefited our community by sequestering carbon and reducing use of chemical fertilizers. Because plants consume CO₂, increasing total

plant growth sequesters carbon in root, stem and leaf. This increased biomass sequesters carbon from our atmosphere – a benefit to the entire community! Production of chemical fertilizers accounts for over 1% of global energy consumption, and biopellets provide an environmentally friendly alternative. The 2020 biopellet production reduced atmospheric CO₂ by over 20,000 metric tons, 4,800 tons by offsetting chemical fertilizer production and over 17,000 tons sequestered by plants.

The soil amendment produced at our Central Biosolids facility benefited our community in several ways. In 2020 we eliminated over 140,000 metric tons of GHG emissions, saved over \$4 million in landfill costs and sold over \$300,000 in fertilizer.



**TO LEARN MORE ABOUT
THE BIOSOLIDS PROCESS
OR MUSIC CITY GOLD,
VISIT OR WEBSITE AT**

**[WWW.NASHVILLE.GOV/WATER-SERVICES/
COMMUNITY-EDUCATION/BIOSOLIDS](http://WWW.NASHVILLE.GOV/WATER-SERVICES/COMMUNITY-EDUCATION/BIOSOLIDS)**

GRANULAR ACTIVATED CARBON (GAC) GETS THE GREENLIGHT

MWS completed a two-year water treatment pilot plant endeavor, which began in 2018. The pilot plant research project explored emerging technologies that best provided safe and reliable drinking water to our customers and was discussed in the 2019 Annual Report.

Two water treatment technologies were selected for piloting: ozone and GAC. These treatment options were chosen for piloting due to proven effectiveness within other water treatment facilities

in achieving the MWS selected water quality goals. Ozone is used in water treatment as a powerful oxidant and disinfectant. Ozone has proven effectiveness for taste and odor control, facilitates



downstream biological active filtration and can oxidize and eliminate certain contaminants. GAC has adsorbing capacities that can remove organics, chemicals and contaminants from the water. GAC filtration is a combination of chemical and physical removal processes with the ability to absorb some offensive compounds. It can attract and bind a variety of compounds in its porous surfaces.

These treatment alternatives were piloted together, independently and at different locations throughout the water treatment process. Ozone and GAC were strategically located along the pilot plant treatment trains where they could realistically be implemented into the full-scale treatment process. These arrangements resulted in the piloting of a total of six different treatment options.

Throughout the course of the pilot operations, over 44,000 samples were collected and analyzed. The data concluded that all the piloted options provided water quality benefits beyond existing treatment. The post-process applied after filtration yielded additional benefits beyond the pretreatment processes. Additionally, while ozone did provide water quality benefits, GAC delivered the best overall results in the four water quality categories.

Through a MWS Strategic Plan initiative, a Water Master Planning group was formed to review and analyze the pilot plant data and submit a final recommendation. This 15-member team consisted of experts

throughout the department. The Water Master Planning group rated each water quality and process implementation category in order of criticality. This weighted ranking system was applied to all the piloted options' performances, providing a final score for each. Through this collaborative process, one piloted option emerged as the clear leader and the best suited for the future water treatment at MWS.

The GAC post-filter adsorbers provided excellent results in all water quality categories. In addition, process implementation considerations for the GAC post-filter adsorbers demonstrated that the ability to execute the proposed improvements would be successful. The GAC post-filter adsorbers received a final score of 95.81, with other piloted options, including both GAC and ozone clustered together in the mid-70 point range and ozone options without GAC at the bottom in the 60 point range.

The final recommendation for full scale implementation at both water treatment plants is GAC post filter adsorbers.

OVERALL RANKINGS

RANK	OPTION	SCORE
1	3b: GAC Post Filter Adsorber	95.81
2	2a: Post Ozone GAC	77.47
3	1a: Pre Ozone GAC	75.13
4	3a: GAC in Filters	73.67
5	1b: Pre Ozone Anthracite	60.79
6	2b: Post Ozone Anthracite	50.93

FINANCIALS

This summary is intended to serve as an introduction to MWS basic financial statements. The basic financial statements consist of the Statements of Net Position, the Statements of Revenue, Expenses, and Changes in Net Position and the Statements of Cash Flows.

MWS collects its primary revenues from charges for water and sewerage services provided to customers. Activities are funded entirely from revenues generated from its operations, with no tax revenues from the Government. All revenues are required to be used for the benefit of the ratepayers.

On June 30, 2020, the Utility served approximately 212,000 water accounts and 217,000 accounts. On January 1, 2020, Water and Sewer rates were increased for the first time since 2011. The increase included a water rate restructure that consolidated base charges across customer classes and introduced an increasing block tiered rate structure for residential water use. The rate restructure and increase, which included multiyear percentage adjustments, was a result of a Commissioner's Order and was adopted on December 10, 2019. The Department remains under oversight of the Tennessee Water and Wastewater Financing Board which issued an order requiring rates be adjusted according to the cost of services study completed in August 2019.

At June 30, 2020, assets and deferred outflows of the Department were \$2.5 billion and exceeded liabilities by \$1.3 billion (total net position). In 2020, the rate restructure and increase, increases in consumption and development positively affected operating revenues of \$265 million resulted in an increase of \$38.8 million as compared to 2019. For 2020, operating expenses were \$219.5, an increase of \$17.8 million from 2019 mainly caused by the new \$10 million Payment in Lieu of Taxes (PILOT), escalation in contract pricing and reduced attrition rates. Investment income decreased from \$5.8 million in 2019 to \$1.3 million in 2020, following the volatility of the investment market due to COVID-19. Capital grants and contributions increased by \$5.9 million to \$26.7 million in 2020, suggesting that development through infrastructure deeding process has remained steady and grown between periods. The Department ended Fiscal Year 2020 \$1.5 million over its operating budget of \$130.4 million largely due to an increased PILOT introduced mid-year.

In 2009, the Metropolitan Government established a Stormwater Division of the Department as a stand-alone enterprise fund with its own set of service fees, which are now an itemized part of the water bill. Stormwater operations is funded solely through stormwater fees and any associated bonds supported by those fees. This financial statement does not include stormwater.

Please note that this information is a summary and does not contain all of this information available in the full Comprehensive Financial Annual Report (CAFR) at <https://www.nashville.gov/Finance/Financial-Operations/Comprehensive-Financial-Reports.aspx>.

**ON JANUARY 1,
2020, WATER AND
SEWER RATES
WERE INCREASED
FOR THE FIRST
TIME SINCE 2011.**

CONDENSED FINANCIAL INFORMATION

(as of June 30, 2020)

Statements of Net Position

	2020	2019
ASSETS		
Total Current Assets	\$207,422,860	\$158,507,166
Total Capital and other non current assets	\$5,967,205,108	\$5,906,689,493
Total Assets	\$6,174,627,968	\$6,065,196,659
Deferred charge on refunding	\$2,509,379	\$2,667,744
Pensions	\$7,037,553	\$8,452,367
Total deferred outflows of resources	\$ 9,546,932	\$11,120,111
LIABILITIES		
Total current liabilities	\$147,421,162	\$287,091,882
Total noncurrent liabilities	\$1,057,093,444	\$888,922,626
Total liabilities	\$1,204,514,606	\$1,176,014,508
Pensions	\$6,467,308	\$12,813,821
Total deferred intflows of resources	\$6,467,308	\$12,813,821
TOTAL NET POSITION	\$1,334,272,969	\$1,307,096,202

CONDENSED FINANCIAL INFORMATION

(as of June 30, 2020)

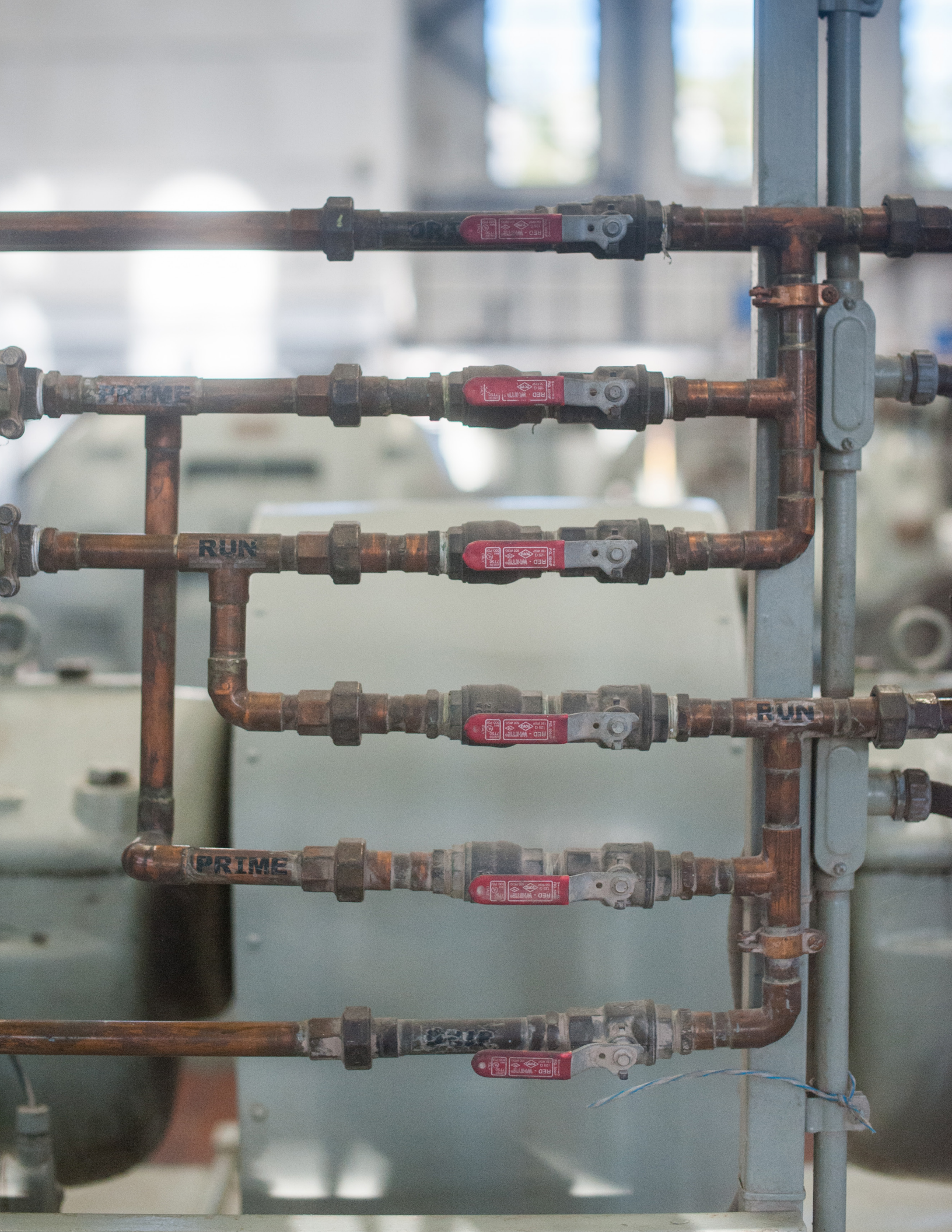
Statement of Revenue, Expenses, and Changes in Net Position

	2020	2019
OPERATING REVENUES	\$265,887,373	\$227,648,685
Depreciation (expense)	(86,868,784)	(\$90,316,161)
Other operating (expenses)	(132,611,031)	(\$111,335,275)
Operating income	\$46,407,558	\$25,997,249
NON-OPERATING REVENUES (EXPENSES):		
Investment income	\$1,279,050	\$5,866,244
Interest expense	(\$32,364,872)	(\$34,816,690)
Other	(\$696,608)	\$435,667
CAPITAL GRANTS AND CONTRIBUTIONS	\$26,567,580	\$20,652,395
TRANSFERS TO OTHER FUNDS OF THE METROPOLITAN GOVERNMENT, NET	(\$14,015,941)	(\$13,907,893)
Change in net Position	\$27,176,767	\$4,226,972
NET POSITION, BEGINNING OF YEAR	\$1,307,096,202	\$1,302,869,230
NET POSITION, END OF YEAR	\$1,334,272,969	\$1,307,096,202

BY THE NUMBERS

The data presented here reflects the initiatives and hard work delivered by Metro Water Services to maintain a high quality water program.

STORMWATER		LABORATORY	
SW requests	2,017	Avg. Daily samples	65
Inspections	2,104	Total Samples taken	23,696
Work orders completed	1,540	ENGINEERING	
Homes removed from flood risk areas	14	Miles of new water main	7.8
Miles of streets swept	19,705	Miles of new sewer main	21.6
Tons of debris collected	4,862	Miles of water main inspected for leak detection	3,738
Miles of stream evaluation	15	CONSTRUCTION INSPECTIONS	
STORMWATER QUALITY		Inspections	3,000+
Illicit discharge investigations	126	CUSTOMER SERVICES	
Stream adoptions	13	Customer bills generated	2,860,879
SW control measure inspections	3,045	Water customers	212,481
Notices of Violation issued	87	Sewer customers	216,988
Trees planted	10,464	Calls taken	749,285
Grading permits issued	283	ADMINISTRATION	
Grading permit inspections	8,227	# of pieces of legislation filed	137
Construction complaint investigations	363	# of pieces of legislation filed	9
DEVELOPMENT SERVICES		CLEAN WATER NASHVILLE PROGRAM	
Feet of Approved Water	116,957	Miles of sewer main rehabbed/ lined (CIPP)	0.04
Sewer plans approved	202	Linear feet of sewer line televised internal inspections	517,861
Feet of approved sewer	79,754	Linear feet of sewer cleaned	211,602
Water plans approved	110	SYSTEM SERVICES	
FLEET		Public fire hydrants	21,263
Vehicles/equipment in fleet	500	Breaks per 100 miles of pipe	14
Miles logged	3,184,186	COMMUNICATION	
OPERATIONS		# of children reached through programs	2,740
Average daily water delivery	89 MG	# of adults reached through tours	457
Peak water delivery	113.70 MG (7/20/20)	# of events sponsored/ attended by MWS	7
Average daily wastewater treatment	177.61 MG		
Peak wastewater treatment	460.95 MG (2/13/20)		



RED - WHITE
1/2" 150#
100% LEAK
PROTECTANT

RED - WHITE
1/2" 150#
100% LEAK
PROTECTANT

RED - WHITE
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RED - WHITE
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100% LEAK
PROTECTANT

RED - WHITE
1/2" 150#
100% LEAK
PROTECTANT

PRIME

RUN

RUN

PRIME



1600 2ND AVE NORTH | NASHVILLE, TN 37208
CUSTOMER SERVICE: 615-862-4600

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