

Metropolitan Sewerage District

of

Buncombe County, North Carolina

2022-2023 BUDGET DOCUMENT



2022-2023 Budget Document

PRINCIPAL OFFICIALS

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|--|--|------------------------|------------------------|
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| Jackie W. Bryson, Secretary/Treasurer | Woodfin Sanitary Water & Sewer District | Chris Pelly | City of Asheville |
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| McGill & Associates | Engineer of Record | W. Scott Powell, CLGFO | Director of Finance |



Certificate of Achievement

The Government Finance Officers Association of the United States and Canada (GFOA) presented a Distinguished Budget Presentation Award to the Metropolitan Sewerage District of Buncombe County, North Carolina (MSD) for its annual budget for the fiscal year beginning July 1, 2021. This is the twenty-fourth (24) consecutive year that the MSD has received this award.

In order to receive this award, a governmental unit must publish a budget document that meets program criteria as a policy document, as an operations guide, as a financial plan, and as a communication device.

This award is valid for a period on one year only. We believe our FY2023 budget continues to conform to the program requirements, and we are submitting it to the GFOA to determine its eligibility for another award.



GOVERNMENT FINANCE OFFICERS ASSOCIATION

Distinguished Budget Presentation Award

PRESENTED TO

**Metropolitan Sewerage District of Buncombe County
North Carolina**

For the Fiscal Year Beginning

July 01, 2021

Christopher P. Morill

Executive Director

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Introduction

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Metropolitan Sewerage District

OF BUNCOMBE COUNTY, NORTH CAROLINA

June 15, 2022

Members of the Board

Metropolitan Sewerage District of Buncombe County, North Carolina

W. H. Mull Building

2028 Riverside Drive

Asheville, North Carolina 28804

Subject: FY2023 Budget and Proposed Sewer Rates

Dear Members of the Board,

We respectfully present the FY2023 Budget for the Metropolitan Sewerage District of Buncombe County, North Carolina. The budget incorporates staff recommendations presented to and accepted by the Capital Improvement Program Committee, which met on April 28, 2022, the Personnel Committee, which met on April 26, 2022.

We have developed the FY2023 Budget to advance the organization's mission *"to provide wastewater collection and treatment to its users which promotes the health and safety of affected citizens in the most effective and efficient manner possible today and in the future"*. The following Operational and Capital budget is designed to provide services meeting or exceeding all state regulations and Bond Order covenants with which the District must comply, with any rate changes to be at the lowest responsible level.

Current Year Highlights

In FY2022, the District's domestic and industrial revenue are expected to meet budgeted projections. The economic impacts pertaining to the COVID-19 pandemic has had significant effects on revenue and cash flows for FY2022.

The District has proposed 3.00% rate increase for the upcoming year. Additionally, the District's long-range business plan incorporates this change and projects that future rate increases will be between approximately 3.0% and 3.5% for the remaining nine (9) years.


This budget continues several recent initiatives to maintain the District's overall strategy of keeping collection lines and the plant functioning effectively while rehabilitating significant portions of aging infrastructure. The most important goal remains meeting all regulatory permit requirements.

The SS Construction Department continues to expand its participation in sewer line rehabilitation and replacement efforts to maximize service and minimize SSOs (Sanitary Sewer Overflows). Goals for FY2023 include utilizing Infrastructure Rehabilitation System (IRS) lining, pipe bursting, and dig-and-replacement construction to rehabilitate and replace at least 20,000 linear feet, while providing preventative maintenance for approximately 600,000 linear feet of the system by employing in-house jet wash cleaning and both chemical and mechanical root control. In addition, the SS (System Services) Maintenance Department will manage the District's Right-of-Way maintenance program whereby easements will be periodically cleared or mowed.

The Wastewater Treatment Plant is continuing systematic improvements as part of the District's detailed Facilities Plan. In FY2020, the District completed the construction phase of the \$9.6 million Headworks project. This project included installing new bar screens and grit removal systems along with fine screens and a surge system for peak flows. This project is now operational.


Operating Budget

The proposed \$19.8 million Operating Budget represents routine expenditures and capital equipment acquisitions needed for the day-to-day operations of the District. Highlights of significant components and changes include:

-  **Compensation and Benefits**—The staff and employees considered salary and health insurance increases together as part of a comprehensive compensation package.
 - A 7% salary adjustment—CPI for the Southern Urban Wage Earners increased 8.1% for the last twelve-month period; Division Directors in conjunction with Employee Advisory Committee have requested a cost-of-living increase to keep pace with industry salary increases as well as to

encourage retention of valued employees. On April 26, 2022, the Personnel Committee has recommended a wage increase, which has an approximate \$530,000 impact.

- A 3.4% Pay & Classification study adjustment – Every five to seven years the District performs a pay and classification study. This year’s study recommends market adjustments for certain positions, it also adjusts all entry level positions to the local hourly living wage amount as well as address any salary compression issues. On April 26, 2022, the Personnel Committee has recommended the pay and classification adjustment, which has an approximate impact of \$426,000.
- A 6.96% increase in funding for North Carolina retirement cost—In 2016, the Local Governmental Employees’ Retirement Systems (LGERS) adopted a rate stabilization policy to allow for predictability and stability in the contribution rates, while continuing keeping the local retirement system one of the best-funded systems in the country. Subsequently, LGERS raised the District’s contribution rate from 7.75% to 8.95% of total salary and wages. Over the next five years, contribution rates are projected to increase to an amount slightly over 12.14%. This has an approximate \$119,000 impact on current year expenditures.
- A 6.5% increase in funding for Self-Insured Medical Plan—During FY2016, staff worked with its consultant and initiated a top to bottom review of our medical insurance plan. The effort was to ensure the District had a medical plan in line with our sister agencies as well as to limit certain benefits and increase cost sharing by employees in the amount of \$175,000. The Employee Advisory Committee endorsed these changes. The two groups continue to work on a long-term strategic plan to address controllable medical issues. The 6.5% increase in the employer contribution is in line with medical and prescription trend and has an approximate \$172,000 impact on current year expenditures.
- Funding for Post-Employment Health Benefit—Starting in FY2009, GASB 45/75 required recognition of cost for Post-Employment Health Benefits. An actuarial study was done in the current year, staff is recommending FY2023 funding should remain at approximately \$283,000. Current funding has been implemented into the proposed FY2022 budget, in addition to the current business plan, and represents 1.4% of total operations.

 **Materials, Supplies, and Service expenditures increased 11.6% over prior year**—The District has made a concerted effort to hold materials, supplies, and services cost close to the prior year’s level, taking into account inflationary cost increases and continued expansion of the District. The District

has increased specific line items to address regulatory and operational needs. Discretionary expenditures have been limited where practicable. This has an approximate \$879,000 impact on year expenditures.

Capital Improvement Program

The District prepares a ten-year Capital Improvement Program as required by its State Collection System Permit and the Consolidation Agreements. The estimated construction expenditure for FY2023 is \$30.3 million, which is comprised of an estimated \$28.7 million in construction, \$590,000 of reimbursement, and \$1 million in contingency. The total 10-year CIP budget is \$389.3 million.

A detailed list of individual projects and planned expenditures by year was presented at the April 28, 2022 CIP meeting. This signifies a large increase in the 10-year CIP due largely to major improvements at the Plant along with upgrades to the interceptor network. MSD will be positioned to meet future regulations and to provide capacity to serve the estimated growth for the next 50 years.

The Board has consistently financed its Capital Improvement Program through revenue bonds and pay-as-you-go moneys. As of June 30, 2022, the District will have \$88.4 million in outstanding revenue bond debt, with total debt service of \$8.9 million due before the end of the fiscal year. Unlike counties and cities, the District does not have a legally mandated debt limit. However, the District does have a rate covenant. The covenant requires the District to set rates and charges so that income available for debt service will not be less than 120% of fiscal year debt service requirement.

Collection System Capital Improvements:

MSD initiated and maintains an aggressive program to rehabilitate its Wastewater Collection System. This program will conform to the North Carolina Department of Environmental and Natural Resources (NCDENR) Collection System Permit requirements, will improve the operational performance, and extend the life of the collection system. The estimated cost over a 10-year period is approximately \$233.1million.

MSD's focus to rehabilitate over 400,000 feet of sewer lines for the next 10 years and other projects identified in the Master Plan. This rehabilitation has been made more cost-effective by the development of the Pipe Rating Program. Pipe Rating is a proactive planning tool, which utilizes Closed Circuit Television (CCTV) information, a GIS database, actual maintenance history to view, rate, and computer-score pipe segments based on a number of factors.

These factors, for any given manhole-to-manhole segment, include maintenance work order history, number, severity of defects, record of overflows on that segment, and are combined to yield a rating useful for prioritizing rehabilitation efforts.

Pipe Rating minimizes costs by helping the District focus rehabilitation dollars where they are needed most, rather than the previous replacement of collector lines throughout an entire basin. In recognition of this innovative program, the Association of Metropolitan Sewerage Agencies (AMSA) awarded the District one of only two 2003 National Environmental Achievement Awards.

Major projects for FY2023 include the Christian Creek Interceptor with 10,226 linear feet \$5,194,000, French Broad Interceptor at Amboy Road with 1,100 linear feet \$3,125,000, Aurora Drive with 2,700 linear feet \$1,025,000, Caledonia Road with 2,126 linear feet \$1,337,000, Bent Tree Road with 1,654 linear feet \$809,000. In FY2023, Weaverville Pump Station Replacement is scheduled to cost \$778,000 and Equipment Storage Facility is scheduled to cost \$2.4 million. These are in addition to numerous smaller projects completed throughout the collection system. Further details are available in the CIP section of the budget document.

The District's Collection System Master Plan addresses the orderly extension of the District's collection system into future service areas. The plan has been prepared in close cooperation with the District's member agencies and regional stakeholders. The land use policies and zoning regulations of each agency were used for land usage, growth projections/densities, and line locations. For areas outside of corporate or jurisdictional limits, Buncombe County's Zoning Ordinance has played an integral role in defining future service areas.

The Plan will serve as a basis to ensure that the sewer system will be extended in an orderly fashion and is done so in accordance with the planning policies of the various local governments within the District's service area.

Wastewater Treatment Plant Capital Improvements:

During FY2015, the Treatment Facilities Plan was updated for the Water Reclamation Facility. This Plan provides short, medium, and long-term recommendations for each specific process and facility.

This update primarily expanded on several of the original plan's longer-term recommendations. It focused specifically on improvements to the WRF Headwork's (i.e. bar screens, influent pumping station, and the problematic grit & grease removal system), including surge control for short-term peak flows. It also investigated in detail the installation of a primary clarification process and has evaluated alternatives for the biological treatment process.

Another key aspect of the Facility Plan Update was to gain a solid understanding of regulatory issues that may influence (impact) future treatment requirements and identify long-term biological treatment alternatives to comply with anticipated future regulation changes.

Near-term and mid-term project recommendations from the Plan include:

- Plant Headworks Project—This \$11 million project spans 2 years and consists of a new grit removal system to replace the existing problematic system, a fine screening facility which will supplement the WRF's existing bar screens, and storage at the plant using existing decommissioned tanks to provide more effective treatment during peak flow events. In addition, by removing more grit than the current process, it will help to better protect downstream processes within the plant. Construction of the Plant Headworks Project began in early April 2017 and is currently operational.
- High Rate Primary Treatment Project—This \$17 million project will provide primary clarification by removing solids before the biological treatment stage. This will provide a more effective treatment and will help the Rotating Biological Contactors (RBC's) to better perform. During high flow (storm) events, this treatment can be ramped-up in order to match the higher flows. Construction began in FY2019 and has been completed in FY2022.
- Biological System Upgrades—This \$70 million project is being driven by the future water quality regulations as set forth in MSD's NPDES permit (effluent discharge permit). Compliance with effluent ammonia levels must be achieved by October 2030 and will require significant upgrades to the existing biological treatment system. Design will begin in FY2025 with construction starting in FY2027.

Impact of CIP on Operations

For most municipal and county governments, capital improvements often result in higher operating costs. New buildings typically result in higher utility cost as well as cost for additional personnel.

The CIP for the District is largely made up of upgrades to existing facilities such as pump stations, sewer mains, and treatment plant facilities. Although some new chemicals may be added to treatment methods on occasion, the overall net effect of the CIP is actually one of reduced cost. The marginal increase in the size of replacement facilities (seen as up-front capital cost) is offset by increases in efficiencies of the new mechanical and electrical equipment replacements. In addition, as the level of service of the sewer mains increase with the new replacements, the operational cost will decrease for general maintenance and for emergency spill response.

Sewer Rate Increase

Staff recommends a 3.0% increase in domestic and industrial sewer rates and meter fees for FY2023.

We believe this rate increase is prudent under the current economic situation and is necessary to provide for the following District responsibilities and objectives:

- ✓ Meet current and future regulations at the Water Reclamation Facility and for the Collection System
- ✓ Replace and rehabilitate approximately 41,000 linear feet of sewer mains a year
- ✓ Debt coverage ratio attractive to investors and rating agencies
- ✓ Support of the pay-as-you-go element of the CIP in addition to bonds
- ✓ Continue with goal of periodic smaller rate increases in lieu of large increases in future years
- ✓ Adequate current funding and maintenance of prudent reserves for Self-Insured Medical/Dental Plan
- ✓ Continue with necessary Treatment Plant upgrades

In the past, the MSD Board has endeavored to keep rate increases to a minimum. The District's Bond Order requires sewer rates be set to ensure that the excess of revenues over current expenditures is at least 120% of debt service.

Additionally, the Board balances the bond order requirements while maintaining all regulatory and fiduciary responsibilities.

Domestic sewer rates for the past five years as well as a projection for FY2023 are shown below:

| | FY18 | FY19 | FY20 | FY21 | FY22 | FY23 |
|-----------------------------------|---------|---------|---------|---------|---------|---------|
| Rate Increase % | 2.5% | 2.5% | 2.5% | 0% | 2.75% | 3.00% |
| Meter, Maintenance & Billing Fees | \$9.30 | \$9.51 | \$9.74 | \$9.74 | \$9.99 | \$10.38 |
| Flow Rate (per ccf) | \$4.50 | \$4.61 | \$4.73 | \$4.73 | \$4.86 | \$ 5.01 |
| Avg. Monthly Bill (5ccf) | \$30.62 | \$31.36 | \$32.17 | \$32.17 | \$33.04 | \$34.10 |

Distinguished Budget Award

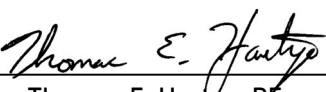
The Government Finance Officers Association of the United States and Canada (GFOA) presented a Distinguished Budget Presentation Award to the Metropolitan Sewerage District of Buncombe County, North Carolina for its annual budget for the fiscal year beginning July 1, 2021. This is the twenty-fourth (24) consecutive year that the MSD has received this award. In order to receive this award, a governmental unit must publish a budget document that meets program criteria as a policy document, as an operations guide, as a financial plan, and as a communication device.

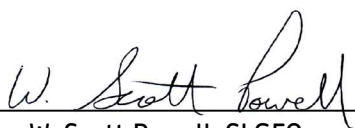
This award is valid for a period of one year only. We believe our FY2023 budget continues to conform to program requirements and we are submitting it to GFOA to determine its eligibility for another award.

In Closing

The Budget represents the combined efforts and guidance of the Board, its Committees, and staff. A special thanks to Jody Germaine/Budget Analyst for assembling the budget documents, Pam Thomas/HR Director, Hunter Carson/CIP Director, and Cheryl Rice/Accounting Manager for assembling the CIP Section of the Budget. We look forward to working with you, staff, and our ratepayers as we implement this financial plan and policy document.

Respectfully submitted,


 Thomas E. Hartye, PE
 General Manager


 W. Scott Powell, CLGFO
 Director of Finance

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About MSD, City of Asheville & Buncombe County

About MSD

The MSD is a public body and body politic and corporate of the State of North Carolina, exercising public and essential governmental functions and organized under the provisions of the North Carolina Metropolitan Sewerage Districts Act, being Article 5, Chapter 162A of the General Statutes of North Carolina, as amended. The District was established in 1962 by the North Carolina State Stream Sanitation Committee to construct and operate facilities for sewage treatment for municipalities and sanitary districts within Buncombe County.

In 1967, the District completed the construction of a 25 million gallon per day (MGD) wastewater treatment plant adjacent to the French Broad River. Nineteen miles of interceptor sewer were initially built, connecting the collector sewer systems located within the municipalities and other political subdivisions, which comprised the District. Then, in the late 1980's, the District expanded the capacity of the Water Reclamation Facility to its current capacity of 40 MGD, rehabilitated the hydroelectric dam and powerhouse to mitigate energy costs, and built a thermal converter for sludge disposal.

In July 1990, the political subdivisions comprising the District transferred their respective sewerage systems to the District. These systems had been previously owned, operated, and maintained separately by each political subdivision. The purpose of this sewer consolidation was to create a consolidated sewerage system in the urbanized portion of Buncombe County with ownership of all components of the system and responsibility for their operation, maintenance, and capital improvement centralized with the District. Before the sewer consolidation, the District had little control over the condition, operation, and maintenance of individual collector systems, which significantly affect the operational efficiency of the wastewater plant.

About MSD, City of Asheville & Buncombe County (continued)

About MSD (continued)

Buncombe County is located in the Blue Ridge Mountains of Western North Carolina. The District is comprised of the following political subdivisions located within Buncombe County:

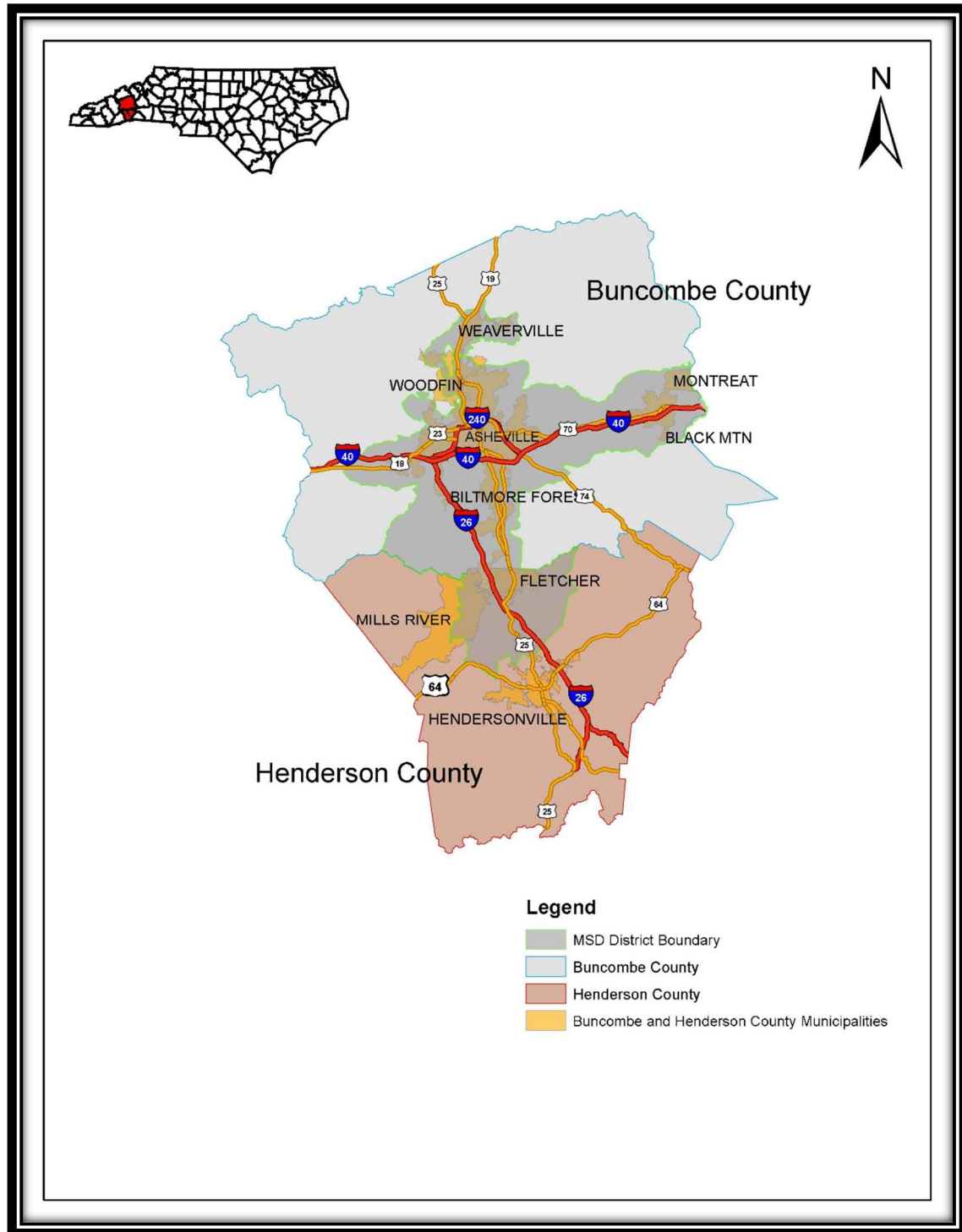
| | |
|---|---------------------------------------|
| City of Asheville | Busbee Sanitary Sewer District |
| County of Buncombe | Caney Valley Sanitary Sewer District |
| Town of Biltmore Forest | Crescent Hill Sanitary Sewer District |
| Town of Black Mountain | Enka-Candler Water & Sewer District |
| Town of Montreat | Fairview Sanitary Sewer District |
| Town of Weaverville | Skyland Sanitary Sewer District |
| Town of Woodfin | Swannanoa Water & Sewer District |
| Woodfin Sanitary Water & Sewer District | Venable Sanitary District |
| Beaverdam Water & Sewer District | |

The District Board consists of fourteen (14) appointed members. Three (3) from the County of Buncombe, three (3) from the City of Asheville, and one (1) each from the Woodfin Sanitary Water & Sewer District, and the Towns of Biltmore Forest, Black Mountain, Montreat, Woodfin, and Weaverville. With the acquisition of the Cane Creek Water & Sewer District in northern Henderson County effective July 1, 2020, the District increased by two (2) the number of appointed members that are representing Henderson County.

Under the North Carolina Metropolitan Sewerage Districts Act, the District is authorized, among other things, to: (a) acquire, lease, construct, reconstruct, improve, extend, enlarge, equip, repair, maintain, and operate any sewerage system or part thereof (including facilities for the generation and transmission of electric power and energy) within or without the District; (b) to issue revenue bonds to pay the costs of any of the foregoing; and (c) to fix and revise from time to time and collect rents, rates, fees and other charges for the use of or the services and facilities furnished by any sewerage system.

About MSD, City of Asheville & Buncombe County (continued)

District Boundary Map



About MSD, City of Asheville & Buncombe County (continued)

Population and Growth Statistics

Population growth in Buncombe County has occurred largely in a linear fashion along major transportation routes, which is reflected in the configuration of the District's service area. The District is approximately a 264-square mile service area, comprised of approximately 32% of the total land area of Buncombe County and 13% of the land area of Henderson County. The District's service area corresponds generally with the urbanized core of Buncombe County and stretches down into northern Henderson County.

The population of the area has steadily increased, as illustrated in the following chart:

| Year | Buncombe County | Henderson County |
|------|-----------------|------------------|
| 1980 | 160,897 | 58,580 |
| 1990 | 174,727 | 69,378 |
| 2000 | 206,316 | 89,173 |
| 2010 | 238,318 | 106,740 |
| 2015 | 252,149 | 111,975 |
| 2016 | 255,334 | 113,758 |
| 2017 | 257,607 | 115,708 |
| 2018 | 259,259 | 116,500 |
| 2019 | 261,191 | 117,417 |
| 2020 | 269,452 | 116,281 |

Located in the geographic center of Buncombe County, the City of Asheville is the major population center in the District. About 35% of the County's residents live in Asheville. Five (5) incorporated towns in Buncombe County—Black Mountain, Biltmore Forest, Weaverville, Woodfin, and Montreat—are included in the District's service area. Weaverville and Woodfin are north of Asheville, Black Mountain and Montreat are in eastern Buncombe County, and Biltmore Forest is contiguous to the City of Asheville on its southern boundary. Approximately eight percent (8%) of the county's population lives in these five towns.



About MSD, City of Asheville & Buncombe County (continued)

Population and Growth Statistics (continued)

Buncombe County's topography ranges from fertile valleys to rugged mountains. Mt. Mitchell, the highest point in eastern North America (6,684 feet), is found 35 miles northeast of the City of Asheville in adjacent Yancey County. The topography of Buncombe County's urbanized core is, however, a long flat plain, which has allowed Buncombe County to develop differently from the more mountainous counties of Western North Carolina.

The plain, with an elevation of 2,000 feet, averages about 45 miles in width. It is bisected from south to north by the French Broad River and from east to west by the Swannanoa River and Hominy Creek, two major tributaries of the French Broad. Because of extremes in elevation, the climate varies significantly from one section of Buncombe County to another. The mean elevation of the City of Asheville is about 2,300 feet, the summers are cool, and the winters are moderate with small amounts of snow. The higher elevations in Buncombe County receive considerable amounts of snow and the summers are cooler. The average January temperature is 39° for the City of Asheville and the average temperature in July is 74°. The City of Asheville receives an average of 47 inches of precipitation per year.

However, because the City of Asheville is found within a "rain shadow" caused by the shielding effect of the nearby mountain barriers, other areas of Buncombe County, especially to the south and southwest, receive significantly higher amounts of precipitation.

Employment and Major Industries

Buncombe County serves as a regional economic center for Western North Carolina. Its diverse commercial and industrial base includes manufacturing, distribution, travel and tourism, retail trade, health care and governmental services. According to the N. C. Department of Commerce-Labor & Economic Analysis Division, 136,819 people were employed in Buncombe County as of June 2022. The number of persons in the labor force has increased by 7,164 from the previous year.

About MSD, City of Asheville & Buncombe County (continued)

Employment and Major Industries (continued)

Buncombe County's economy has been expanding and becoming more diverse. Recognizing that textile industries no longer dominate the manufacturing base, the public and private sectors in Buncombe County have been working together to encourage the relocation and development of new industries and other economic endeavors. In addition, the Buncombe County Tourism Development Authority works to foster the continued growth of tourism and convention business. Downtown redevelopment efforts by the City of Asheville have also provided additional office, retail shop, and parking space.

Employment in the service sector is increasing, but manufacturing remains a significant part of the local economy. The diverse products manufactured include food, textiles, apparel, wood products, printing and publishing, rubber and plastic products, fabricated metal products, industrial machinery and equipment, electrical equipment, and transportation equipment. Health care, retail sales, education, and government services are the principal employers in the growing service sector of Buncombe County's labor force. Buncombe County serves as a regional medical center for most of western North Carolina.

There are two major hospital complexes located in Buncombe County: Mission Health System, an acute care medical center licensed for 815 beds on (2) two adjoining campuses, Memorial and St. Joseph, and the federally funded Veteran's Administration Medical Center, Charles George VA Medical Center consisting of a 119-bed acute care hospital and 120-bed nursing facility serving veterans from four (4) locations in a 23-county area in Western North Carolina, parts of Eastern Tennessee, and upstate South Carolina and Georgia.

Also located in Buncombe County is CarePartners Health Services, a private nonprofit acute care 80-bed rehabilitation facility for the treatment of stroke and ambulation dysfunction victims, traumatic brain/head injuries, and amputation. In addition, CarePartners provides home health, adult care, and hospice care (27-beds).

About MSD, City of Asheville & Buncombe County (continued)

Employment and Major Industries (continued)

Tourism and the hospitality industry also constitute major segments of employment in the service sector and are projected to increase significantly. The impact of tourism is multi-dimensional and includes conventioners, commercial visitors, and tourists taking advantage of the mountain scenery, moderate climate, and craft skills of persons living in the area. Closely related to the tourism industry is the growth of discount malls and outlet stores. The seasonal influx of persons from outside the region is strengthening Buncombe County's position as the primary regional retail center for area and tourist commerce.

To provide a source of funds for promoting the recreational, cultural, and other attractions of the area, Buncombe County has imposed an occupancy tax on hotel and motel rooms in Buncombe County. The revenues from this tax are used by Buncombe County's Tourism Development Authority to promote the growth of tourism and convention business.

Western North Carolina is known as a recreational area, which makes tourism and the hospitality industry a major contributing force to the economic vitality of Buncombe County. The Great Smoky Mountains National Park is found 70 miles west of the City of Asheville.

Approximately 160 miles of the Blue Ridge Parkway are in western North Carolina, and the Parkway bisects Buncombe County from east to west. Two national forests, Pisgah and Nantahala, are located within an easy drive of the City of Asheville. These outdoor recreational resources attract thousands of visitors each year to the area for such activities as camping, hiking, canoeing, white-water rafting, fishing, and hunting. Also, south of the City of Asheville is the 255-room "chateau" known as the Biltmore House. Constructed from 1889 to 1895 by George Vanderbilt, the Biltmore House is one of North Carolina's most visited tourist attractions, which includes self-guided tours of the House & Gardens, Antler Hill Village, featuring the Winery, The Biltmore Legacy, Village Green, and Farm. Another attraction is The Omni Grove Park Inn with 510 guest rooms, 42 meeting rooms, an 18-hole, 6,720-yard, par 70 Donald Ross designed golf course, a 43,000 square-foot spa with 31 treatment rooms and over 60 treatment selections which has augmented its appeal to the tourism and hospitality industry.

About MSD, City of Asheville & Buncombe County^(continued)

Employment and Major Industries^(continued)

This favorable economic environment has resulted in lower unemployment rates for Buncombe County than across the state and nation. According to the U. S. Department of Commerce, for the year 2020, median household income in the City of Asheville was \$53,621 and in Buncombe County was \$55,032. This compares with \$56,642 for the State of North Carolina and \$64,994 for the nation as a whole.

Education

Buncombe County has two public school systems: the Asheville City Administrative Unit, which serves about 4,121 students, consisting of (1) primary school, (5) elementary magnet schools, (2) middle schools, (1) high school, and several alternative classrooms/programs including a preschool program; and the Buncombe County Administrative Unit, which serves about 22,196 students, consisting of (23) elementary schools, (4) intermediate schools, (7) middle schools, (6) high schools , and (4) unit-wide special high schools.

Asheville-Buncombe Technical Community College is a public, two-year college, serving more than 25,000 students in a variety of business, technical, and health care curricula. In addition, community enrichment classes, such as art, languages, and practical skills are offered year-round at five campus locations throughout the College's service area.

Warren Wilson College is a private, four-year liberal arts college with an enrollment of about 825 students offering academics in 44 programs of study with work for the school (15 hours per week) and service to the community (100 hours over four years).

Montreat College is a private four-year liberal arts college with an enrollment of 979 students at the (4) campuses which strives to be Christ-centered, student-focused, and service-driven. In addition, Montreat College offers accelerated programs for adult students, including graduate, professional, and online degree programs.

About MSD, City of Asheville & Buncombe County (continued)

Education (continued)

The University of North Carolina at Asheville (“UNCA”) is an undergraduate, state-supported liberal arts college with an enrollment of about 3,300 students from 43 states and 17 countries. UNCA is one of the nation's top public liberal arts universities and one of the 17 institutions in the University of North Carolina system offering more than 30 majors.

Transportation

An integrated network of highway, rail, and air services serves Buncombe County. Interstate Highway 40, Interstate Highway 26, Interstate 240 (Billy Graham Freeway), U.S. Highway 19-23 and U.S. Highway 74 link Buncombe County to the Piedmont area of North Carolina (including the cities of Charlotte, Greensboro, Raleigh, and Winston-Salem), the Piedmont area of South Carolina (including the cities of Greenville and Spartanburg), and the Tennessee-Ohio Valley area.

Rail service to Buncombe County is served by the Norfolk Southern Railroad Corporation providing rail lines through Knoxville, Tennessee to the west and Greenville, South Carolina to the south. To the east, rail lines adjoin North Carolina’s 3,600-mile rail network an hour away in Greer, South Carolina.

Major air passenger and cargo services are available through the Asheville Regional Airport and served by Allegiant, American Airlines, Delta, jetBlue, Sun Country Airlines, and United. These carriers offer many daily non-stop flights to 25 popular destinations and enplaned 397,768 (793,268) passengers as of calendar year to date ending June 2022.

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Policies

&

Budget

Process

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Financial Plan

Guide to the Budget Document

This Budget presentation has four major objectives:

Policy Document—To show how resources have been allocated in response to the mission statement and supporting goals/objectives set forth by the Board of Directors.

Financial Plan—To present the District's Financial Plan for the fiscal year, showing where the money will come from and how it will be spent.

Operations Guide—To describe services provided along with goals and objectives for each unit within the District, and a method for measuring progress towards the District's mission of providing cost-effective and efficient wastewater collection and treatment. In addition, a Budget is a required management tool for compliance with state wastewater management licensure and local government fiscal control regulations.

Communications Device—To explain the District budgetary procedures and interactions with other District planning processes and within the larger context of local and regional economic and environmental conditions.

This document has been divided into sections as follows to assist the reader's understanding and ability to easily locate information:

Introduction—The transmittal letter provides current year trends and highlights.

Policies & Budget Process—Presents the policies forming the basis for all management decisions, a narrative of the overall budget process, the underlying fund structure, and a discussion of revenue.

Operation & Maintenance Fund—Provides detail of departmental expenditure budgets including underlying goals and objectives, as well as accomplishments and performance measures.

Financial Plan (continued)

Guide to the Budget Document (continued)

Insurance Funds—Describes internal service-type funds used to allocate premiums and associated expenses among various departments.

Replacement Funds—Provides funding status of various replacement and reserve funds.

CIP Program—Details the Capital Improvement Program, including budgetary process, current year highlights, and summarizes planned projects for the upcoming 10 years.

Debt Financing—Provides further detail on debt philosophy and management, including current and future debt service.

Statistical Information—Includes historical summaries of District financial information, plant operational data, and local demographic and economic statistics.

Appendix—Provides a description of the line item accounts that are currently used and staffing information for the previous (4) years plus the upcoming budget year.

Glossary—Definitions of technical terms and acronyms.

Background of Entity

The Metropolitan Sewerage District of Buncombe County, North Carolina (the District), established under an act of the state legislature, is a local governmental agency providing wastewater collection and treatment services to approximately 58,000 residences and businesses located in several municipalities and certain unincorporated areas in Buncombe County. The governing board is comprised of fourteen members appointed by nine local governments who serve three-year overlapping terms.

The District owns a 40 million gallon per day (MGD) wastewater treatment plant and the associated collection network of approximately 1,140 miles of collector sewers, 33,890 manholes, and 40 pump stations. The District is responsible for current operation and maintenance of this infrastructure, as well as for planning for future operations and capacity.

Financial Plan (continued)

Background of Entity (continued)

The budgetary process starts with the mission statement promulgated by the District Board. To achieve the purpose articulated in the mission statement, staff is charged with developing long-term goals and the short-term objectives designed to achieve these goals. Using this framework, annual operating and construction budgets are proposed to fulfill these short-term objectives and thus meet or reach toward long-term goals.

Therefore, an understanding of the mission statement and the underlying goals and objectives provide a context for the decisions made in developing the annual budget. Each departmental goal and objective are tied to one or more of the non-financial or financial policies to coordinate and prioritize the District's focus, initiatives, and efforts.

Mission Statement—To provide wastewater collection and treatment to its users which promotes the health and safety of affected citizens in the most effective and efficient manner possible today and in the future.

Long-Term Goals—Staff has developed four goals to be pursued in support of the Mission Statement adopted by the Board:

1. Protection of health, safety, and the environment
2. Excellence in customer service
3. Cost-effectiveness
4. Continuous improvement

Managers and employees use these goals to determine appropriateness of and to enhance coordination and consistency of decisions, activities, and initiatives throughout the District.

Financial Plan (continued)

Background of Entity (continued)

Short-Term Objectives—Objectives are specific achievements or strategies, which support or lead to long-term goals and are used to determine how resources are allocated in this budget.

1. Maintain Collection System Permit. (Goal #1)
2. Maintain Discharge Permit to French Broad River for Water Reclamation Facility. (Goal #1)
3. Maintain a qualified and motivated workforce. (Goals #1-4)
4. Coordinate, to the extent practicable, with other governmental and private entities for cooperative provision of sewer service to gain optimum economies of scale, reduced capital cost, and improved efficiency. (Goals # 1-4)
5. Participate in two-way communications with customers, elected officials, and other stakeholders in matters of mutual concern such as regulations, policies, and fees. (Goals # 1-4)
6. Provision of information and education concerning stewardship of water resources.
(Goals # 1- 4)

Authority for the District's first goal of protection of health, safety, and the environment is received from the Collection System and Discharge Permits issued by the North Carolina Department of Environment and Natural Resources, Division of Water Quality. Therefore, the major emphasis of the District's activities is to fulfill or comply with the terms of these permits. In addition to specifying certain measures of water quality and minimum standards for maintenance of lines, the permits expect steady progress towards rehabilitation of aged lines and planned replacement of plant assets.

The remaining four objectives are strategies designed to complement the efforts to fulfill the requirements of the permits in achieving the District's goals. Obviously, a competent, well-trained, and committed workforce will not only be technically accomplished, but will also provide excellent customer service, and will explore ways to do the job better and at less cost. Similarly, leveraging resources with others can improve service delivery and reduce costs.

Financial Plan (continued)

Background of Entity (continued)

Finally, communication with and education of stakeholders is designed result in wide-ranging improvements to service delivery, customer relations, and cost containment.

Using key objectives identified as critical to the District's mission, Departments develop their individual initiatives and objectives, and the performance measures by which to assess progress. As the budgets for each division or department are presented in the next section, each departmental goal will reference the number of the overall District's goal, objective, or the fiscal policy supported. In this way, each department establishes its accountability and demonstrates the linkage between activities and the achievement of the District's objectives.

The Systems Services Division bears responsibility for maintaining the Collection System Permit (Objective #1) and the Water Reclamation Facility for maintaining the Discharge Permit (Objective #2). Details of the requirements of these permits and related performance measurements may be found in these respective departmental budgets in the "Operation & Maintenance Fund" section of this Budget Document. The other objectives have no legal or regulatory basis but are underlying principles of how the Board intends the District to carry out the primary mission and are referenced as appropriate in the departmental goals and objectives.

Rate Projections & Budgetary Forecast

The District is required by its Bond Order to set rates at such a level that the excess of revenues over current expenditures equals at least 120% of debt service. The Board established a revenue policy that the goal for debt coverage ratio be 150% or 1.5, and sufficient to meet all operating and capital needs with modest level increases.

The Board has also established a budget policy that calls for a ten-year projected operating budget and capital improvement program for long-term planning purposes. Revenue and expenditure projections are integrated with anticipated capital expenditures to anticipate rate increases and timing of debt issuance based on cash flow levels and debt coverage ratios.

Consumer revenue projections are based on consumption rates, growth in number of taps during the previous year, and projected rate increase. Industrial revenue is developed from anticipated fees of actual individual companies, since there are relatively few industrial customers and the charges are determined by effluent strength, as well as volume, which may vary greatly depending on the particular entity. As there are a limited number of large customers, any major change to a particular facility such as announced layoffs or closings, may be immediately factored into the industrial revenue computation.

Operating expenditures are anticipated to increase at the regional cost of living rate, and capital expenditures at the general inflation rate. Future debt service is projected to be issued at slightly above prevailing rates. As this forecast is updated at least semiannually, management is able to adjust timing of capital projects and discuss in advance with Board members proposed timing and levels of rate increases.

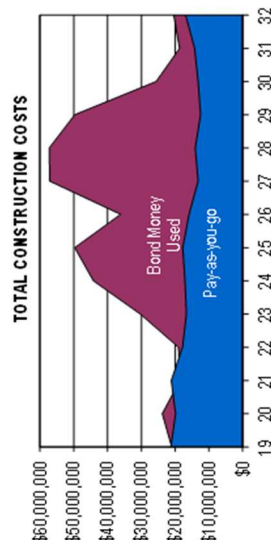
Using consumption data projected from the recent historical population growth statistics within the Asheville-Buncombe County area, the District anticipates annual rate increases 3.0% and 3.5% for the next nine years.

Rate Projections & Budgetary Forecast (continued)

Construction costs are fairly level reflecting the District's Master Plan to consistently rehabilitate approximately 40,000 linear feet of pipe per year. The CIP expenditure forecast for FY2023 reflects a continuation of a major rehabilitation project at the Wastewater Treatment Plant.

This long-range budgetary projection also shows how the District plans to finance these projects with a combination of bond proceeds and pay-as-you-go funding from sewer revenues. Overall, the ten-year projection indicates the District's continuing ability to provide wastewater collection and treatment for customers, infrastructure maintenance in accordance with state regulations, and debt service in compliance with Bond Order, all with minimal, uniform rate increases.

- Pay-as-you-go
- Revenue w/o Bonds
- Bond Issues
- Cash Balance



Fiscal Policies

Overview

The Metropolitan Sewerage District of Buncombe County, North Carolina (the District) fiscal policies compiled below comprises the basic framework for the overall financial management of the District. These policies assist Board and Management decision-making and provide guidelines for evaluating both current and long-range activities and programs. They are reviewed annually in conjunction with the budgetary process to verify continued applicability and benefit to the District.

The primary objectives of these policies are to ensure that moderate rate increases will be adequate to provide current and future funds to support the District's mission and goals; and to provide accountability for cost-effective stewardship of ratepayer's funds to stakeholders through fairly presented financial information supported by full disclosures.

Revenue Policy

1. **Revenue Recognition**—Revenues shall be recorded on the full accrual basis in accordance with Generally Accepted Accounting Principles (GAAP) for proprietary governmental entities.
2. **Setting User Charges**—Charges for domestic and industrial sewer users shall be set at such a level to provide sufficient revenues to cover all annual operating and debt service expenditures, to accumulate funds for timely acquisition and replacement of capital equipment and facilities, and to finance the pay-as-you-go portion of the long-term Capital Improvement Plan as approved by the Board.
3. **Revenue Projections**—To assist in setting annual user rate charges, District staff will prepare projections of revenues and expenditures for a minimum of five years.
4. **Daily Deposits**—In accordance with NC General Statutes Section 159-32, the Board shall require daily deposits of receipts only when the moneys on hand amount to at least two hundred fifty dollars (\$250.00). Any funds not immediately deposited shall be appropriately safeguarded.

Fiscal Policies (continued)

Revenue Policy (continued)

5. **Monitoring Revenue**—District staff shall monitor revenues as billed and collected by participating entities for reasonableness and completeness and shall report to the Board no less than quarterly.
6. **Direct Billing**—For those users who are billed directly by District staff, such bills shall be computed accurately, recorded properly, and distributed in a timely manner.
7. **Billing Adjustments**—The Billing Coordinator shall be authorized to create and post credit memoranda for adequately documented adjustments incurred by customers billed directly by the District. The Billing Coordinator may also make adjustments of up to \$10 to correct errors or remove disputed charges.
8. **Bad Debt**—The District shall consider as bad debt any domestic revenue for customers when written off by the member agencies who provide collection services. All delinquent customer accounts billed directly by the District shall be subject to reasonable collection efforts.

After such efforts have been exhausted, writing off uncollectible accounts shall be authorized as follows: The Billing Coordinator may write off amounts up to \$10, the Director of Finance amounts up to \$1,000, and the General Manager amounts over \$1,000. The Director of Finance shall prepare an annual reporting of bad debts to be submitted to the Finance Committee.

9. **Authority for Revenue Procedures**—The Director of Finance shall be responsible for designing, implementing, monitoring, and amending as necessary, accounting procedures, including internal controls, for the billing, recording, and reporting of all revenues of the District in compliance with GAAP and State law. Any changes to revenue procedures will be reported to the Finance Committee at their next meeting.

Fiscal Policies (continued)

Operating Budget Policy

1. **Funding**—Debt or bond financing will not be used to finance current expenditures.
2. **Service Efforts and Accomplishments**—The District will integrate performance measures and productivity indicators into its budgetary process.
3. **Planning**—The District will prepare a ten-year operating budget projection, which will include projections of annual growth plus allowances for operating costs of new capital facilities.
4. **Risk Management**—The District will utilize a risk management program to protect against loss and reduce exposure to liability. A comprehensive safety program shall be an integral component and will investigate property damage and workers' compensation incidents to minimize liability and take proactive measures to reduce the number and severity of future claims.
5. **Authority for Budget Procedures**—The District will prepare the budget in accordance with GAAP and the Local Government Budget and Fiscal Control Act (LGBFCA) established by the state legislature.
6. **Periodic Reporting**—The Finance Department shall submit quarterly budget to actual financial reports to the Board of Directors and monthly to Division Heads.
7. **Balanced Budget**—The District shall submit a balanced budget wherein budgeted expenditures shall equal budgeted revenues. Budgeted revenues may include transfers from another fund, reserves, or fund equity (available funds) defined as the excess of revenues over expenditures accumulated from prior years that are present in the form of cash at the beginning of the fiscal year.

Fiscal Policies (continued)

Asset Management Policy

1. **Planning for Operational and Maintenance Assets**—The District shall utilize an Equipment Replacement Review Committee to plan major operational and maintenance asset acquisitions on a systematic, comprehensive, and entity-wide basis.
2. **Asset Condition**—The District will maintain all assets at a level adequate to comply with all regulatory requirements and to minimize future replacement and maintenance costs. This process will be coordinated with the planning in the Capital Improvement Program.

Capital Improvement Policy

1. **Planning**—The District will annually update and re-adopt a ten-year Capital Improvement Program, identifying and describing each capital project along with the estimated cost and funding source, in accordance with requirements of the State of North Carolina Collection System Permit.
2. **Capitalization**—The District will charge engineering division salaries and related costs used to plan for and oversee construction of major infrastructure to the Capital Improvement Program.
3. **Reporting**—The District will provide annual reports of expenditures by project to the Capital Improvement Program Committee.
4. **Funding**—The District will fund the construction program from revenue bonds and current revenues including grants as available.

Accounting Policy

1. **Authority for Accounting Procedures**—The District will establish and maintain the accounting system according to the North Carolina Local Government Budget and Fiscal Control Act (LGBFCA), generally accepted accounting principles (GAAP) for governments, and in compliance with applicable provisions in the Bond Order.

Fiscal Policies (continued)

Accounting Policy (continued)

2. **Annual Audit**—An annual audit will be performed by an independent public accounting firm, which will issue an official opinion on the annual financial statements, and a management letter indicating any suggestions for improvement or areas of concern.
3. **Transparency**—Full disclosure will be provided in the financial statements and bond representations.
4. **Due Diligence**—The District will monitor the audited financial statements of member agencies and compare with reports of revenues remitted to the District and accounts receivable billed by member governments.
5. **Financial Reporting**—The District shall prepare an annual comprehensive financial report (ACFR) upon completion of the financial audit, which will be submitted to the Government Finance Officers' Association (GFOA) for the Certificate of Achievement for Excellence in Financial Reporting award.
6. **Written Accounting Procedures**—The District will maintain currently updated written accounting procedures

Debt Policy

1. **Duration**—Capital projects financed through the issuance of bonds shall be financed for a period not to exceed the lesser of the expected useful life of the project or thirty years.
2. **Capitalization**—Interest, operating, and/or maintenance expenses will be capitalized only for facilities of enterprise activities and will be strictly limited to those expenses incurred prior to actual operation of the facilities.
3. **Ratings**—The District will endeavor to maintain its financial condition at no lower than Moody's "A1" and Standard & Poor's "AA-" bond rating.

Fiscal Policies (continued)

Debt Policy (continued)

4. **Unfunded Liabilities**—The District's debt policy extends beyond capital financing and includes not knowingly entering into any contracts creating significant unfunded liabilities.
5. **Coverage Ratio**—The District shall prepare an annual budget to maintain a debt ratio (coverage) of at least 1.5 net revenues to bonded debt. This exceeds the minimum 1.2 ratio as set forth in the Bond Order.
6. **Compliance**—The District shall follow terms and conditions of its Bond Order and any requirements of the Local Government Commission.

Cash Management and Investment Policy

1. **Written Policy**—The District Board's investment policy, written to be in compliance with NC General Statutes and its Bond Order, shall be reviewed on an annual basis by the Board's Finance Committee.
2. **Objectives**—The primary objectives of investment activities, in priority order, shall be preservation of principal, liquidity, and yield.
3. **Periodic Reporting**—The District shall provide monthly investment reports to its Board and submit semi-annual reports to the North Carolina Local Government Commission.
4. **Treasury Services**—The District shall consider the advisability of preparing a Request for Proposal (RFP) for banking services every three (3) years.

Reserve Policy

1. **Capital Reserves**—The District shall maintain a Capital Reserve Fund in the amount of 6% of current expenses in the adopted annual Operation & Maintenance Fund Budget as set forth in the Bond Order. This fund may be used only for debt service payments in the event of inadequate revenues or for unusual and extraordinary repair and maintenance expenses.

Fiscal Policies (continued)

Reserve Policy (continued)

2. **Fleet & Heavy Equipment**—The District shall maintain a Fleet & Heavy Equipment Fund for vehicles and rolling stock with a value greater than \$10,000. Periodic budgeted transfers from the operating fund along with proceeds from sale of equipment shall be deposited in said fund along with interest earnings to provide funding to replace vehicles on a systematic basis as required.
3. **Plant Equipment**—The District shall maintain a Wastewater Treatment Equipment Replacement Fund for capital expenditures of \$10,000 or more with a useful life of at least (3) years. Periodic budgeted transfers from operations are intended to stabilize rate increases by planning funding for major repairs and rehabilitations.

Purchasing Policy

1. **Authority for Purchasing Procedures**—The District will follow procedures and guidelines as prescribed by North Carolina General Statutes and Board approved resolutions.
2. **Centralized Procurement**—The District shall operate centralized purchase and warehouse functions to obtain materials, supplies, and services in the most cost-efficient manner for the District.

Budget Process

Budgetary Adoption

The District's budget process must comply with North Carolina General Statutes and the MSD Revenue Bond Order as amended to date. The Bond Order requires that the District adopt its final budget on or before June 15 of each year. North Carolina General Statutes mandate an annual balanced budget ordinance based upon expected revenues, along with a budget message, to be presented to the governing board no later than June 1 and mandates a public hearing be held. The Bond Order calls for a preliminary budget hearing 30 days prior to adoption if requested by a certain percentage of bondholders. The budget calendar is designed to provide for input by all stakeholders into a systematic and deliberate process.

For the Operations and Maintenance Budget, the process begins with the mission statement as approved by the Board. Each Division or section of the District develops a specific mission statement setting forth its role in supporting the overall mission of the District. Next, key responsibilities are defined for each unit, with associated goals and objectives. To evaluate progress, performance measures are identified and tracked for the previous three years. Once the District staff develops the operational activities required to implement the mission-directed strategies, necessary resources can be quantified and presented in a budgetary format.

Because payroll and benefits represent such a large proportion of expenditures, and because an experienced and appropriately compensated, well-trained staff is necessary to accomplish the District's mission, extra effort is made to ensure salaries and benefits are competitive without being excessive. To this end, a human resources consultant prepares a salary survey every three to five years that compares District pay scales with other utilities and governmental entities in the area. During those years a consultant is not retained, the Human Resources Director and other staff take surveys among regional governments and wastewater utilities of intended increases and types/levels of benefits considered.

Budget Process (continued)

Budgetary Adoption (continued)

After reviewing comparative data, the Finance and Personnel Committees take an active role in ratifying increases of cost of living and merit pay, as well as contributions to health insurance and other employee benefit programs. Before approval of any new positions, the Board must be convinced of the cost-benefit, efficiency, and programmatic benefit.

The Capital Budget incorporates short-term improvements mandated by the State-issued Collection System Permit with long-term needs identified and prioritized by the 20-year Wastewater System Master Plan to handle wet-weather flow conditions, to improve the performance at the wastewater treatment plant, and to prepare the system to handle expected future wastewater flows. Engineering staff prepare annual estimates of expenditures over the life of projects in a proposed timetable for construction in a 10-year Capital Improvement Plan (CIP).

Meanwhile, Administrative staff prepares an update of the District's ten-year financial forecast based on estimated revenues, expenditures, and debt issuance, which is integrated with the 10-year CIP, along with projections for fleet and wastewater plant replacement funds.

The effect of current expenditures on cash flows and debt coverage ratios are verified for adequacy, and any indicated adjustments to expenditures are made to sustain services within the desired user rate levels, which are set annually in connection with budget adoption.

Budget Administration

The Budget Resolution is adopted at the fund level and allows for the carry forward of encumbered contracts and purchase orders from the previous fiscal year. This budget book illustrates the initial allocations among departments and between line items for authorized expenditures not including carryover amounts. Authority for modifying these allocations varies.

Budget Process (continued)

Budget Administration (continued)

The General Manager has the authority to transfer amounts between departments within a fund without limitation. Division Directors may transfer amounts between line items and sections within their departments without limitation.

The entire allocation is available at the beginning of the year, and the unexpended balance will remain available during the year, unless otherwise limited by the General Manager and Director of Finance due to cash flow considerations.

Several strategies are used to monitor expenditures throughout the year. The General Manager and Division Directors receive monthly expenditure reports, which compare actual to budgeted amounts for the period and for the year to date.

In addition, the procurement software is designed to require approval from the General Manager or Director of Finance if the line item has insufficient funds to cover the requisition or if the expenditure is over a certain amount. Purchasing staff make periodic reviews of outstanding inventory levels, requisitions, and purchase orders to update available line-item balances.

Budget Amendment

Budget Amendments require approval by the Board of Directors and as such are submitted through the agenda process for consideration at a regularly scheduled Board meeting.

Budget Calendar

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| D A T E | T I M E | S U B J E C T |
|----------|-----------|---|
| April 26 | 9:00 a.m. | Personnel Committee Meeting |
| | | <ul style="list-style-type: none"> Cost of Living & Merit Pay Benefit Allocations |
| April 28 | 9:00 a.m. | CIP Committee Meeting |
| | | <ul style="list-style-type: none"> Update of Ten-Year Capital Improvement Program Update Construction Program Financing 2022-2023 Construction Fund Budget |
| May 3 | 9:00 a.m. | Finance Committee Meeting |
| | | <ul style="list-style-type: none"> Nine Month Revenue/Expenditure Report Self-Funded Medical & Dental Program Proposed FY2023 Construction Fund Budget Proposed FY2023 Operating Budget & Sewer Rates |
| May 18 | 2:00 p.m. | Board Meeting |
| | | <ul style="list-style-type: none"> Preliminary FY2023 Budgets & Sewer Rates |
| June 15 | 2:00 p.m. | Board Meeting |
| | | <ul style="list-style-type: none"> Public Hearing Adoption of FY2023 Budgets & Sewer Rates |
| July 1 | | Start of Fiscal Year 2022-2023 |

Budgetary Basis of Accounting

The District accounts for its activities as an Enterprise Fund, which is similar to that of a private business where the costs of providing wastewater collection and treatment on a continuing basis are recovered primarily from user charges. Therefore, the accrual basis of accounting is used for financial reporting purposes, where revenues are recognized as soon as they are earned and expenses at the time the liability is incurred.

However, state law requires local governments to budget on the modified accrual basis, wherein revenues are only recognized to the degree that they are available to finance expenditures of the current period. Similarly, debt service payments and other liabilities are recognized when payment is due because it is only at that time that they normally are liquidated with expendable available financial resources.

There are no significant differences between the full and modified accrual basis of budgeting for District revenues, because the majority of revenues are collected shortly after billing, and as such, are available to pay period liabilities. The major difference resulting from the modified accrual method is noted in budgeting debt service and capital expenditures.

The Bond Order requires the District to have remitted all debt service to the Trustee at least one business day prior to the payment date, so that in the event of default, the Trustee will have time to secure payment for the bondholders from the Debt Service Reserve Fund for payment on the due date. Therefore, the District budgets for the amount of principal due on July 1 of the subsequent fiscal year, but reports the principal reduction paid on July 1 of the current year as reducing loans payable in the audited financial statements.

Capital outlays, which are defined as equipment or construction with an acquisition value over \$1,000 and a useful life of three years or longer, are budgeted as an expense in the year incurred, but depreciation is not budgeted, as it does not involve expenditure of cash. In the audited financial statements, buildings, and equipment over \$15,000 are capitalized and depreciated over future years.

Budgetary Basis of Accounting (continued)

The District does not budget for barter transactions such as the exchange of building space for laboratory services, but the fair market value of such transactions is reflected as income and expense in the audited financial statements in accordance with generally accepted accounting principles.

The ten-year Capital Improvement Plan presented in this budget manual documents the District's long-term asset management strategy to achieve and maintain compliance with state environmental permit conditions but does not authorize expenditures for any years beyond the current budget year.

The Capital Improvement Plan identifies specific projects with anticipated expenditures broken down by each year but based on the best estimates of the District. The General Manager is authorized to accelerate or postpone the start date of any particular project and to authorize the encumbrance of funds for projects continuing into a future fiscal year, provided that the total amount of funds expended and encumbered for any one year does not exceed the total appropriation in the Construction Fund for that fiscal year.

However, any projects included in a Capital Projects Ordinance may have expenditures authorized for the entire project crossing fiscal years, regardless of when contracts are signed, or costs are incurred or paid.

In accordance with the District's Bond Order, separate accounts for debt service and extraordinary maintenance reserves have been established. The District utilizes other reserve accounts to minimize or moderate the effect of unanticipated large expenditures and substantial equipment replacement on rate increases.

Fund Structure

For financial statement purposes, all the District's transactions are reported in one enterprise fund. However, to be in compliance with the District's Bond Order, which prescribes certain procedures for financial planning and budgetary process, the enterprise fund is divided into several funds.

Appropriated major funds whose expenditures exceed 10% of the budget include: the Revenue Fund from which operational and maintenance expenditures are made, the General Fund that transfers pay-as-you-go funding authorized for construction, the Construction Fund that incorporates CIP expenditures, the Insurance Funds that provides funding for Self-funded Employee Medical, General Liability, Worker's Compensation, and Post-Employment, the Replacement Funds that provides funding for Fleet/Heavy Equipment, WRF equipment, and Pump Maintenance, the Debt Service Funds.

Financial plans are prepared for other non-appropriated funds whose expenditures are determined by external parties and contractual agreements, namely the insurance funds, debt reserve, and the capital reserve fund.

Revenue Fund—The Bond Order requires all revenues from user charges to be deposited to a revenue fund. The first order of payments is current expenses, defined as the costs of controlling, operating, managing, and maintaining the sewerage system and wastewater treatment plant, which are paid directly from the revenue fund. Remaining revenues may be transferred as budgeted to other funds for use in debt service, construction, or any other lawful purpose.

General Fund—The District may use funds from the General Fund for any lawful purpose. Due to the provisions of the 1985 and 1999 Bond Orders, the former which provided that operating expenses were to be paid from the O&M fund, and the latter which calls for current expenditures to be paid from the Revenue Fund, the General Fund has been used primarily to accumulate pay-as-you-go financing for construction.

Construction Fund—This fund was established in accordance with the bond order to account for construction projects funded by sewer revenue bonds. The fund is currently used to record expenditures of capital construction, regardless of funding source.

Fund Structure (continued)

Insurance Funds—Financial plans for the four insurance funds—Self-Funded Employee Medical, General Liability, Worker’s Compensation, and Post Employment are included in the FY18 budget document. Each Department and Section budget is charged a proportionate share of employer insurance costs based upon the number of covered employees. Separate funds are maintained to track the excess or deficit of actual expenses over estimated cost. To ameliorate the effect of large unanticipated losses on the annual rate setting process, any excess of cost assessed over claims paid is retained by the fund as designated for any deficit in future years. There are no trust documents or other legal restrictions on these funds, and they are combined with other funds and accounts into one enterprise fund for financial reporting purposes.

A brief discussion of each follow.

Self-Funded Employee Medical—Revenues consist of both employee and employer contributions. Expenditures include charges for stop-loss and aggregate premiums, third party administration of claims, as well as medical, dental, and prescription claims. Employer contributions are currently based on actuarially determined expected funding, which is approximately 80% of potential maximum cost if stop-loss and aggregate limits are reached. Prudent management of reserves should provide adequate funding for claims in excess of those anticipated, as well as for claims incurred during the year but paid after the year-end outside of the aggregate coverage.

General Liability—The District purchases commercial coverage for Automobile, General Liability, Public Officials Liability, and Employee Blanket Bond. Each year, the Engineer of Record reviews the adequacies of the Districts’ insurance coverage to comply with the District’s Bond Order.

Reimbursement for each loss is reduced by the amount of the particular coverage deductible, so the budgeted expenditure includes both contractual premiums and an estimate of the potential liability to be incurred from paying the deductible amount on each claim. Any excess of amounts transferred from the Operations and Maintenance Fund over premiums and deductibles expense is retained in the fund to be appropriated in a future year with unanticipated losses.

Fund Structure (continued)

Insurance Funds (continued)

Worker's Compensation—The District purchases commercial insurance coverage for Worker's Compensation. This policy also includes provisions for deductible amounts for each claim; so similarly budgeted insurance expense includes both contractual premium and an estimate of deductible amounts. Any excess is retained in the fund to be appropriated in a future year in the event of unanticipated losses.

Post-Employment—The District has established a post-employment insurance fund to accumulate funds now, which will reduce future operational expenditures when retirees begin taking advantage of this benefit. The District will annually fund the equivalent of the annual required contribution less expenses as determined by an actuarial study as required by GASB45.

Equipment Replacement Funds—Three (3) equipment replacement funds are included with the budget. Responsible departments are assessed proportional amounts to provide planned funding for the systematic replacement of assets and to moderate the impact in any one year on sewer rates from major capital acquisitions.

Any excess of revenues over expenditures are retained in fund equity to provide for large future capital expenditures, and for replacement or repair of any mission-critical equipment resulting from an accident, natural disaster, or other unforeseeable event.

Fleet & Heavy Equipment—The District owns a variety of vehicles including pickup trucks, specialized vans, dump trucks, tankers, and excavating equipment, some costing up to \$250,000. The Fleet Supervisor and WRF Director are responsible for maintaining an inventory of all equipment including anticipated replacement dates and cost for all items. Departments are assessed determined amounts in the annual budget, which are estimated to provide funding for new vehicles when those in their use may no longer be efficiently maintained.

Fund Structure (continued)

Equipment Replacement Funds (continued)

Wastewater Treatment Plant—Various specialized machinery require replacement from time to time, usually at costs well in excess of what may be budgeted as routine maintenance. The WRF Director prepares a schedule by year of anticipated major projects needed to refurbish or replace obsolete equipment. The plant maintenance department is assessed amounts in the annual operations budget estimated to provide adequate funding for these projects when needed in the future.

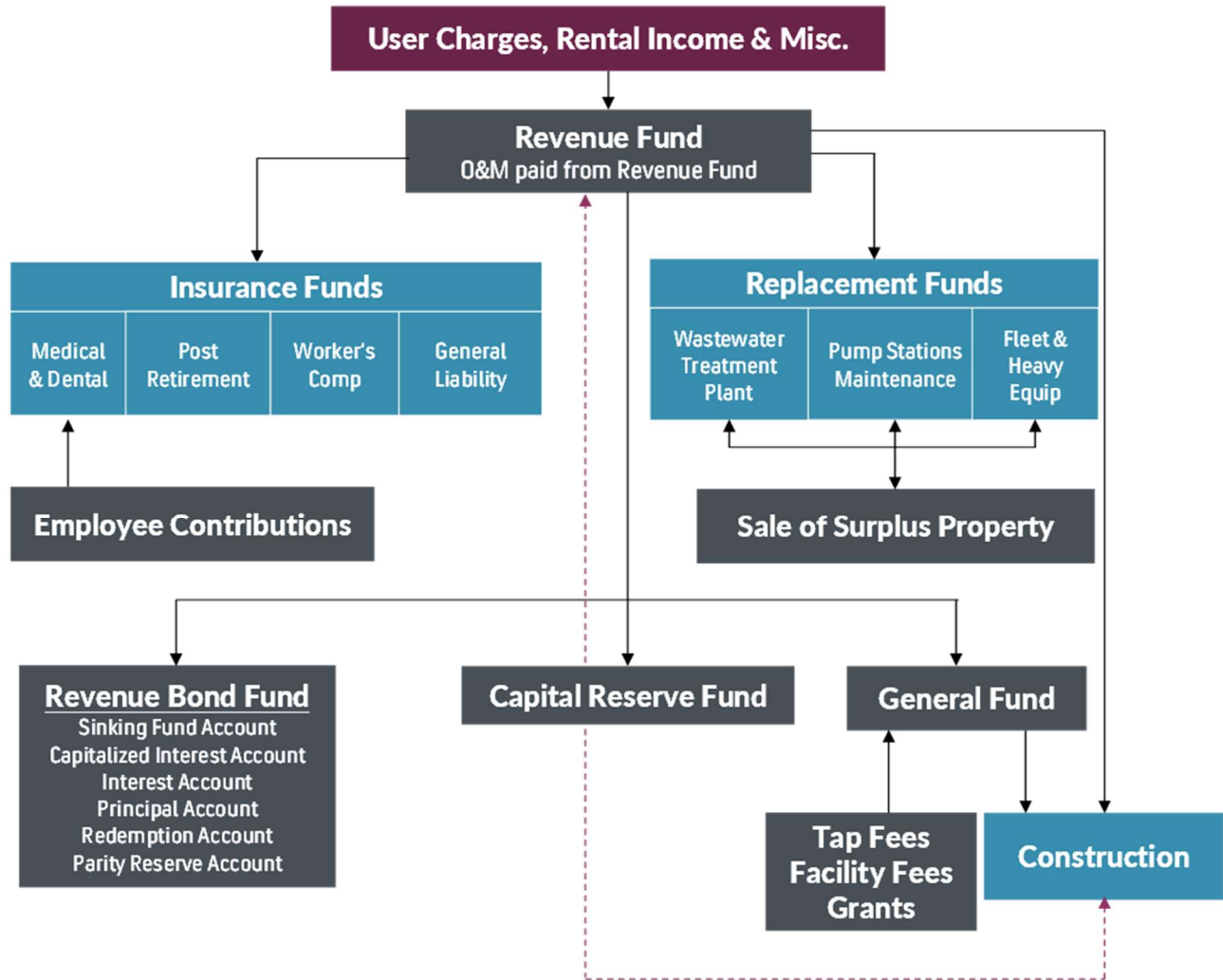
Pump Maintenance—Various large pumps require replacement from time to time, usually at costs well in excess of what may be budgeted as routine maintenance. The SS Maintenance Director prepares a schedule by year of anticipated major projects needed to refurbish or replace obsolete equipment.

Debt Service Funds—These funds are required under the District's Bond Order to accumulate and transmit all District debt service payments.

Revenue Bond Fund—This fund is used to accumulate periodic deposits from the revenue fund to pay principal and interest as scheduled.

Capital Reserve Fund—While technically not a debt service fund, this fund is mandated by the Bond Order to contain six percent (6%) or such greater percentage, as may be determined from time to time by the Board, of the amount shown by the annual budget to be necessary for current expenses for the current fiscal year. As this fund is to be kept for unusual and unforeseen expenditures, none is included in the financial plan as coming from this account.

Flow of Funds – Bond Order



Priority of expenditures per Bond Order

1. Current Expenditures
2. Debt Service
3. Capital Reserve
4. Any Lawful Purpose



— Flow of Funding

- - - Flow of Funding if required for emergency repairs or maintenance

Budget Summary

The District utilizes a fund structure developed to accommodate mandates of the District's Bond Order with generally accepted accounting principles for proprietary governments. Appropriated funds, which are those funds that must have a board-approved budget, include ❶ the Revenue Fund from which operational and maintenance expenditures are made, ❷ the General Fund that transfers pay-as-you-go funding authorized for construction, ❸ the Construction Fund that incorporates CIP expenditures, ❹ the Replacement Funds providing funding for Fleet, WRF, and Pump Stations equipment, and ❺ Debt Service Funds.

Financial plans are approved for those other funds whose expenditures are determined by external parties or contractual agreements such as the insurance, debt reserve, and capital reserve funds.

The budget summary chart below shows total activity for all funds and consolidates the effect of transfers between funds.

| | FY 2021 Actual Total | FY 2022 Amended Budget | FY 2023 Proposed Budget | Increase (Decrease) | % Change |
|---|-------------------------|------------------------------|-------------------------------|------------------------|--------------|
| REVENUES & FINANCING SOURCES | | | | | |
| Domestic User Fees | \$ 34,703,937 | \$ 34,939,096 | \$ 36,801,493 | \$ 1,862,397 | 5.33% |
| Industrial User Fees | 3,497,070 | 3,509,420 | 3,370,488 | (138,932) | -3.96% |
| Billing and Collection | 983,058 | 952,783 | 1,019,478 | 66,695 | 7.00% |
| Facility and Tap Fees | 5,092,060 | 2,175,000 | 3,175,000 | 1,000,000 | 45.98% |
| Interest and Misc. Income | 4,411,299 | 468,475 | 1,145,536 | 677,061 | 144.52% |
| Rental Income | 79,445 | 71,641 | 96,000 | 24,359 | 34.00% |
| City of Asheville (Enka Bonds) | 30,586 | 35,000 | 35,000 | - | 0.00% |
| Employee Contributions to Health Fund | 378,470 | 393,600 | 379,669 | (13,931) | -3.54% |
| Use of (Contributions to) Available Funds | (1,808,089) | 17,156,411 | 13,829,434 | (3,326,977) | -19.39% |
| Total Revenues & Financing Sources | \$ 47,367,836 | \$ 59,701,426 | \$ 59,852,098 | \$ 150,672 | 0.25% |
| EXPENDITURES | | | | | |
| Operations and Maintenance | \$ 15,676,174 | \$ 18,147,522 | \$ 19,762,020 | \$ 1,614,498 | 8.90% |
| Construction | 18,407,385 | 30,622,532 | 30,314,882 | (307,650) | -1.00% |
| Capital Equipment | 757,604 | 1,107,429 | 875,835 | (231,594) | -20.91% |
| Bond Principal and Interest | 9,800,097 | 9,823,943 | 8,899,361 | (924,582) | -9.41% |
| Other Long-Term Obligation | 2,726,576 | - | - | - | N/A |
| Total Expenditures | \$ 47,367,836 | \$ 59,701,426 | \$ 59,852,098 | \$ 150,672 | 0.25% |

NOTE: Both Operation and Maintenance and Capital Equipment expenditures represent actual amounts to be spent in the respective reserve funds. These amounts do not include current year reserve funds funding request.

Component Fund Chart

The following chart shows revenues, expenditures, and transfers by individual fund and provides the detail supporting the summary amounts.

| | Operating and Construction | | | Equipment Replacement | | | Debt Service | Appropriated Funds |
|--|----------------------------|-------------|--------------|-----------------------|--------------|----------------------|--------------|--------------------|
| | Revenue/O&M | General | Construction | Fleet & Heavy Reserve | WWTP Reserve | Pump Station Reserve | Bond Service | |
| Projected Net Position at 6/30/22 | 64,225,548 | 25,000 | 500,000 | 826,053 | 140,101 | 107,742 | 6,280,000 | 72,104,444 |
| Revenues and Other Financing Sources | | | | | | | | |
| Domestic User Charges | 36,801,493 | - | - | - | - | - | - | 36,801,493 |
| Industrial User Charges | 3,370,488 | - | - | - | - | - | - | 3,370,488 |
| Billing and Collection Fees | 1,019,478 | - | - | - | - | - | - | 1,019,478 |
| Facility and tap fees | - | 3,175,000 | - | - | - | - | - | 3,175,000 |
| Proceeds from Revenue Bonds | - | - | - | - | - | - | - | - |
| Stimulus Loan/Grant | - | - | - | - | - | - | - | - |
| Sale of Surplus Property | - | - | - | 49,100 | - | - | - | 49,100 |
| Non-governmental Grants | - | - | - | - | - | - | - | - |
| Capital Contributions | - | - | - | - | - | - | - | - |
| Investment interest & misc. | 1,000,000 | 125 | 2,500 | 12,391 | 2,102 | 1,616 | 500 | 1,019,234 |
| City of Asheville for Enka Bond | 35,000 | - | - | - | - | - | - | 35,000 |
| Rental Income | 96,000 | - | - | - | - | - | - | 96,000 |
| Employee/retirees Medical Contributions | - | - | - | - | - | - | - | - |
| Total Revenues and Fin. Sources | 42,322,459 | 3,175,125 | 2,500 | 61,491 | 2,102 | 1,616 | 500 | 45,565,793 |
| Expenditures and Other Financing Uses | | | | | | | | |
| Operating Expenses | (15,792,805) | - | - | - | - | - | - | (15,792,805) |
| Debt--Principal | - | - | - | - | - | - | (5,675,825) | (5,675,825) |
| Debt--Interest | - | - | - | - | - | - | (3,223,536) | (3,223,536) |
| Construction | - | - | (30,314,882) | - | - | - | - | (30,314,882) |
| Capitalized Equipment Expenditures | (97,635) | - | - | (491,000) | (231,000) | (56,200) | - | (875,835) |
| Total Expenditures and Other Financing Uses | (15,890,440) | - | (30,314,882) | (491,000) | (231,000) | (56,200) | (8,899,361) | (55,882,883) |
| Interfund/account transfers | (40,894,128) | (3,200,000) | 30,314,882 | 501,983 | 200,000 | 55,000 | 8,899,361 | (4,122,902) |
| Excess (Deficit) of Revenues over Expenditures | (14,462,109) | (24,875) | 2,500 | 72,474 | (28,898) | 416 | 500 | (14,439,992) |
| Projected Net Position at 06/30/23 | 49,763,439 | 125 | 502,500 | 898,527 | 111,203 | 108,158 | 6,280,500 | 57,664,452 |

Funding comes primarily from the Revenue Fund, from which Operations and Maintenance expenditures are paid. Revenues are transferred to other funds, including construction, insurance internal funds, debt service and replacement reserve funds. Infrastructure over \$15,000 is capitalized and budgeted through the Construction Fund. Capitalized equipment such as trucks and rolling stock are budgeted through the Fleet Replacement Fund and capitalized equipment such as pumps and plant machinery are budgeted through the Water Reclamation Facility Replacement Fund. While the O&M budget contains line items entitled "Capital Equipment," while such expenditures are below the capitalization threshold, they are in excess of \$1,000 and budgeted and tracked internally for managerial purposes.

Component Fund Chart (continued)

The following chart shows revenues, expenditures, and transfers by individual fund and provides the detail supporting the summary amounts.

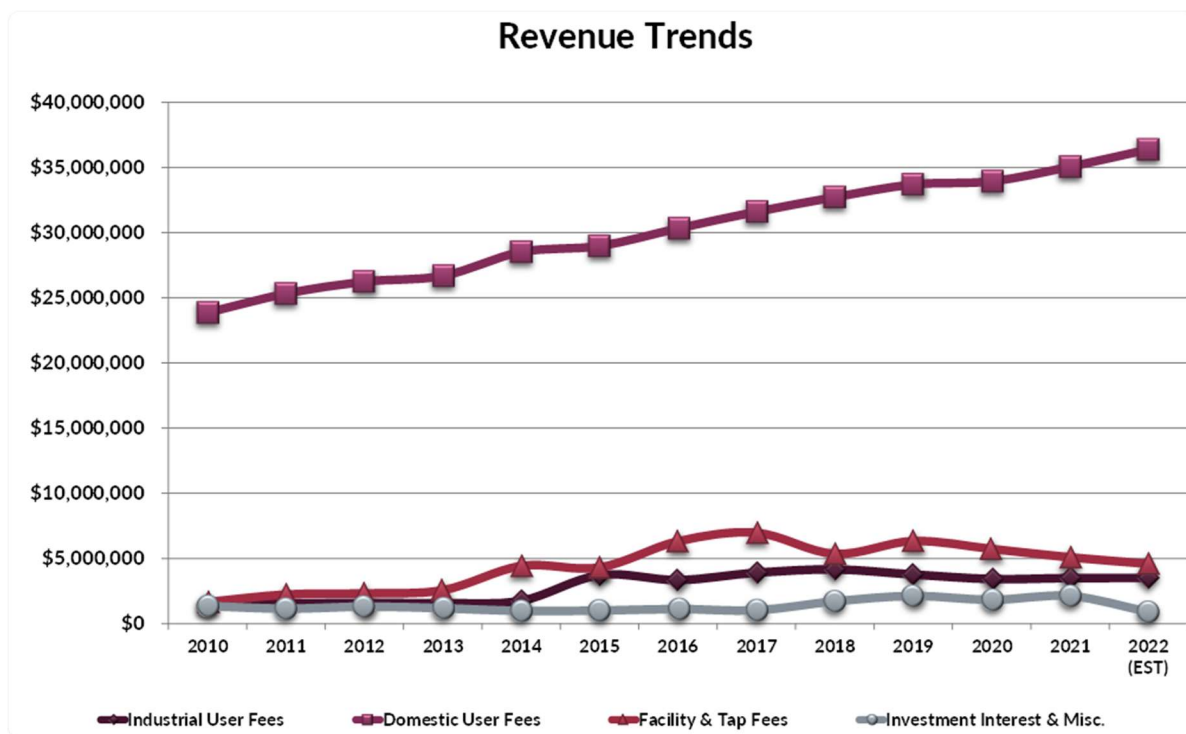
| | Designated for Insurance | | | | Bond Covenant Requirement | Non- Appropriated | Budget Summary |
|--|--------------------------|------------------------------|--------------------------|------------------------|---------------------------------|----------------------|--------------------|
| | Insurance Medical | Insurance Post Employment | Insurance Prop & Liab | Insurance Work Comp | Capital Reserve | | District Totals |
| Projected Net Position at 6/30/22 | 2,467,756 | (1,836,947) | 603,871 | 520,144 | 1,080,142 | 2,834,966 | 74,939,410 |
| Revenues and Other Financing Sources: | | | | | | | |
| Domestic User Charges | - | - | - | - | - | - | 36,801,493 |
| Industrial User Charges | - | - | - | - | - | - | 3,370,488 |
| Billing and Collection Fees | - | - | - | - | - | - | 1,019,478 |
| Facility and tap fees | - | - | - | - | - | - | 3,175,000 |
| Proceeds from Revenue Bonds | - | - | - | - | - | - | - |
| Stimulus Loan/Grant | - | - | - | - | - | - | - |
| Sale of Surplus Property | - | - | - | - | - | - | 49,100 |
| Non-governmental Grants | - | - | - | - | - | - | - |
| Capital Contributions | - | - | - | - | - | - | - |
| Investment interest & misc. | 15,000 | 35,000 | 6,000 | 5,000 | 16,202 | 77,202 | 1,096,436 |
| City of Asheville for Enka Bond | - | - | - | - | - | - | 35,000 |
| Rental Income | - | - | - | - | - | - | 96,000 |
| Employee/Retirees Medical Contributions | 356,669 | 23,000 | - | - | - | 379,669 | 379,669 |
| Total Revenues and Fin. Sources | 371,669 | 58,000 | 6,000 | 5,000 | 16,202 | 456,871 | 46,022,664 |
| Expenditures and Other Financing Uses | | | | | | | |
| Operating Expenses | (3,102,915) | - | (706,300) | (160,000) | - | (3,969,215) | (19,762,020) |
| Debt--Principal | - | - | - | - | - | - | (5,675,825) |
| Debt--Interest | - | - | - | - | - | - | (3,223,536) |
| Construction | - | - | - | - | - | - | (30,314,882) |
| Capitalized Equipment Expenditures | - | - | - | - | - | - | (875,835) |
| Total Expenditures and Other Financing Uses | (3,102,915) | - | (706,300) | (160,000) | - | (3,969,215) | (59,852,098) |
| Interfund/account transfers | 2,961,110 | 133,000 | 782,775 | 153,000 | 93,017 | 4,122,902 | - |
| Excess (Deficit) of Revenues over Expenditures | 229,864 | 191,000 | 82,475 | (2,000) | 109,219 | 610,558 | (13,829,434) |
| Projected Net Position at 06/30/23 | 2,697,620 | (1,645,947) | 686,346 | 518,144 | 1,189,361 | 3,445,524 | 61,109,976 |

Now that the Districts' financial overview has been presented, we will examine revenues and various expenditures in detail.

Revenue

Overview

The District has the authority to establish rates and charges for service to be approved by a budget resolution of the District Board of Directors. The District has established separate rates for domestic and industrial customers, adopted a schedule of facility and sewer connection fees applying to new customers, and receives minor amounts of income from rental of real property and investment of surplus cash. The various types of revenues and other financing sources are described in detail on the following pages.

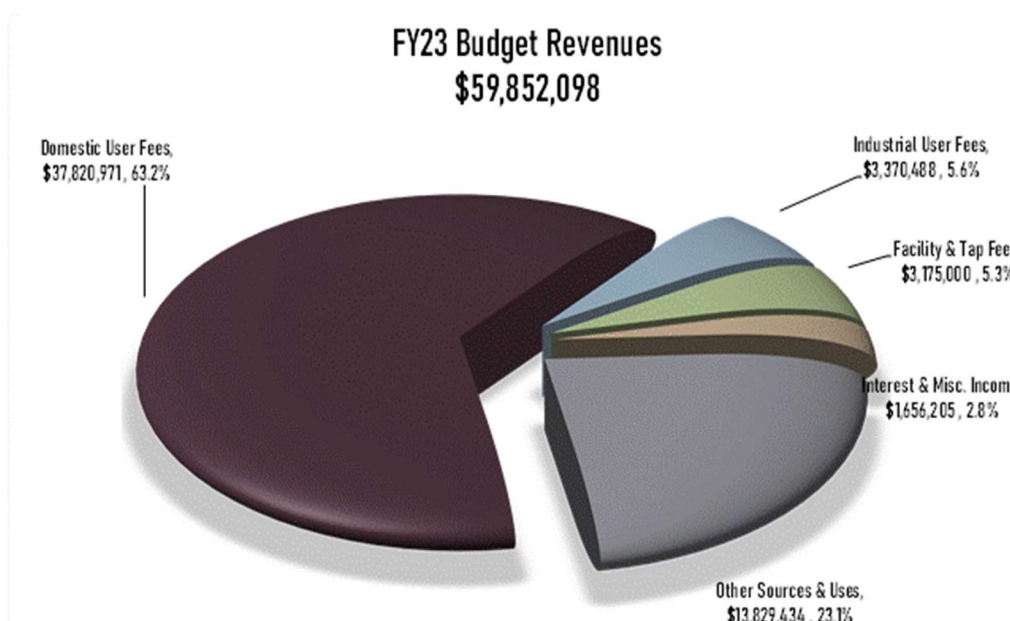


A graph of historical revenues by type reveals the overwhelming percentage of the District's income derives from domestic (residential & commercial) customers and has increased for the past ten consecutive years. Industrial user fees clearly show the effect of the shrinking textile industry in Buncombe County and are diminishing as larger industries wind down and are replaced with smaller new enterprises. Facility and tap fees testify to the growth fueled by population in-migration and expansion of non-industrial type businesses. Overall, income for FY2022 is estimated to be slightly higher than in FY2021.

Revenue (continued)

Revenue Summary

When projecting FY2023 revenues, a 3.00% domestic customer rate increase was considered in conjunction with a projected .75% increase in domestic consumption. In addition, the budget reflects no growth in industrial users. Conservative assumptions based on recent income trends underlie other budgeted income amounts as explained below.



Domestic User Charges

The primary source of District revenues are domestic charges. The District has approximately 58,000 accounts. The District direct bills approximately 500 of these domestic users all of which are on private well systems but are connected to MSD's sewer collector system. Billing and collection of the remainder of District domestic customers is performed by the member agencies providing water, who charge a fee for this service, which is added to the monthly bill and paid by MSD customers.

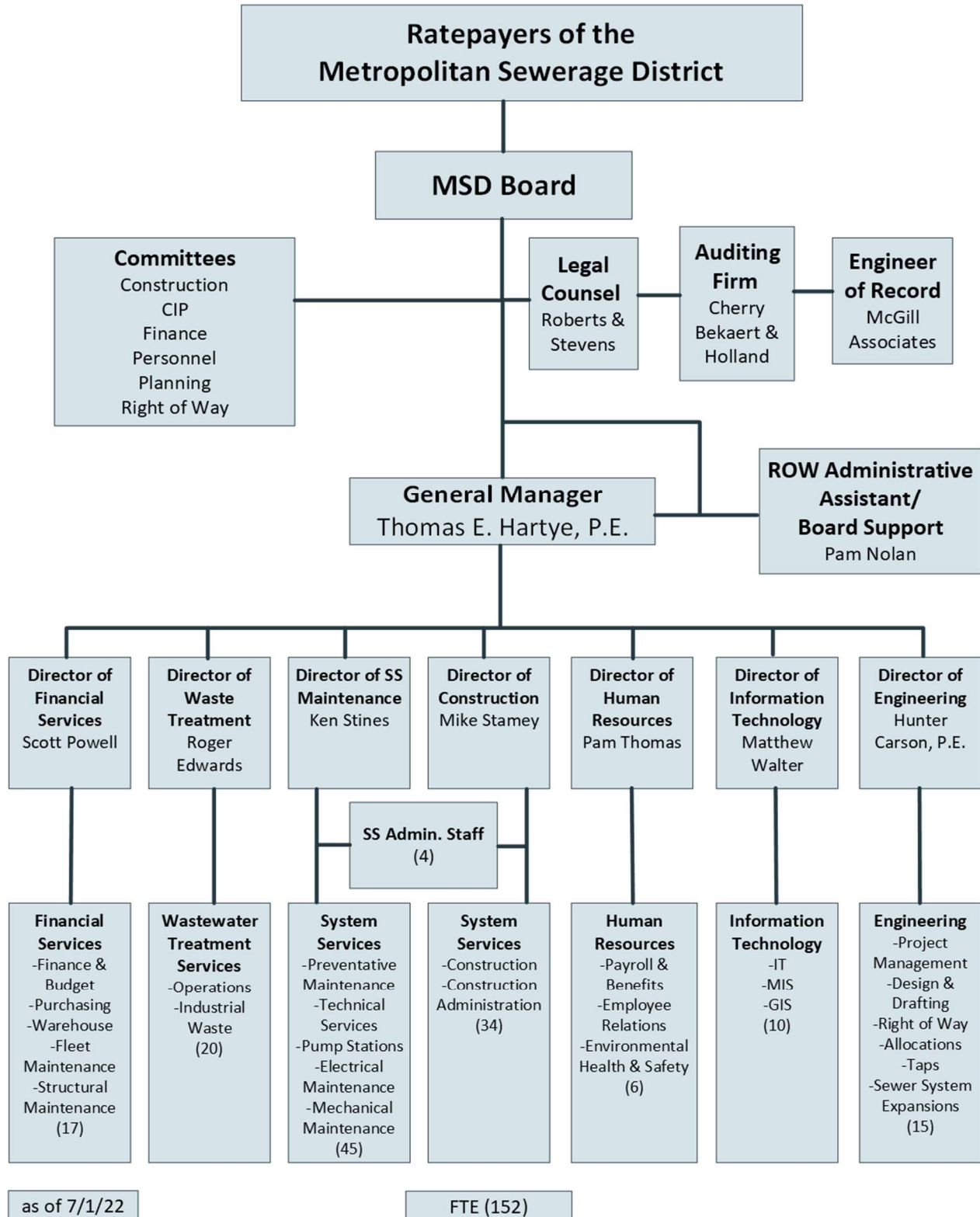
Domestic sewer rate increases for the past ten years are shown below:

| Fiscal Year | | | | | | | | | |
|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 |
| 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 0.0% | 2.75% | 3.0% |

Operation & Maintenance ന.ര

Operation & Maintenance Fund

Organizational Chart



Operation & Maintenance Fund (continued)

Overview

The Operation & Maintenance Fund budget finances the program and administrative activities for the wastewater treatment plant, pump stations, and collection system. The FY2023 Operation & Maintenance Fund budget totals \$20,770,325. This represents a 9.47% increase over the previous year. The District budgets to the Departmental level and are as follows:

| | | |
|---|----|-------------|
| Office of the General Manager | \$ | 1,899,506 |
| Human Resources | | 967,520 |
| Information Technology | | 1,658,574 |
| Financial Services | | 2,981,730 |
| Wastewater Treatment Plant | | 5,600,732 |
| SS Maintenance | | 6,581,560 |
| SS Construction | | 4,199,086 |
| Engineering | | 1,983,365 |
| Total Expenditures | \$ | 25,872,073 |
| Less: Capitalized in Construction Funds | | (5,101,748) |
| Net Operation & Maintenance Fund | \$ | 20,770,325 |

O & M Overview

| | ACTUAL 2019-2020 | APPROVED 2021-2022 BUDGET | ESTIMATED 2021-2022 ACTUAL | PROPOSED 2022-2023 BUDGET | INC(DEC) OVER PRIOR YR BUDGET |
|-----------------------------------|---------------------|---------------------------------|----------------------------------|---------------------------------|--|
| SALARIES & WAGES | \$ 9,067,084 | \$ 9,537,624 | \$ 9,537,624 | \$ 10,349,484 | 8.51% |
| BENEFITS | \$ 5,055,138 | \$ 5,506,257 | \$ 5,506,257 | \$ 5,942,543 | 7.92% |
| MATERIALS, SUPPLIES & SERVICES | \$ 5,723,877 | \$ 7,604,809 | \$ 7,508,756 | \$ 8,484,038 | 11.56% |
| REPLACEMENT FUNDS & TRANSFERS | \$ 882,255 | \$ 1,005,400 | \$ 1,005,400 | \$ 998,373 | -0.70% |
| CAPITAL EQUIPMENT | \$ 127,800 | \$ 120,175 | \$ 117,675 | \$ 97,635 | -18.76% |
| SUB-TOTAL O&M FUND | \$ 20,856,154 | \$ 23,774,265 | \$ 23,675,712 | \$ 25,872,073 | 8.82% |
| LESS: | | | | | |
| Capitalized Construction Expenses | \$ (4,438,337) | \$ (4,801,575) | \$ (4,772,987) | \$ (5,101,748) | 6.25% |
| NET OPERATION & MAINTENANCE FUND | \$ 16,417,816 | \$ 18,972,690 | \$ 18,902,725 | \$ 20,770,325 | 9.47% |

Operation & Maintenance Fund (continued)

The major factors that impact our operating and maintenance budget include:

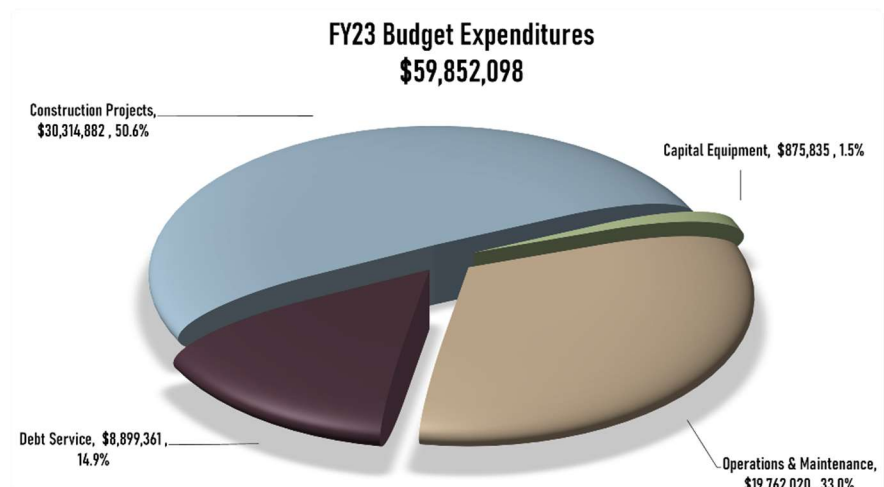
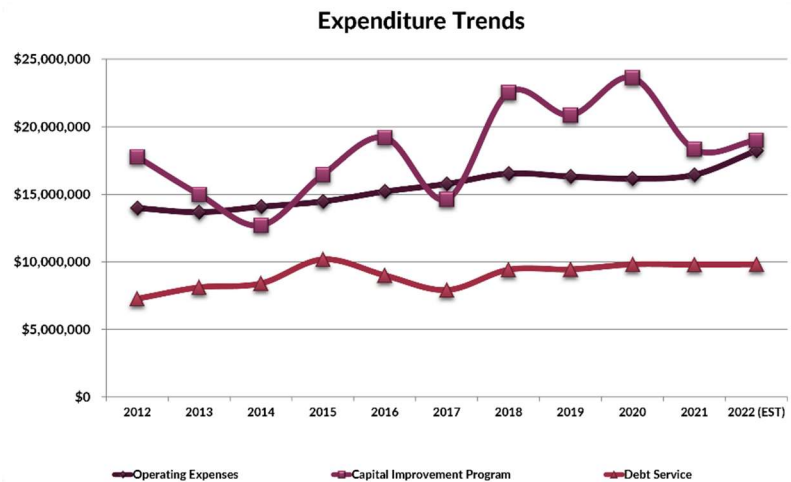
1. Repairs and Maintenance—A majority of the Districts' approximately 1,140 miles of collection lines are between thirty and one hundred years old. While many capital projects are planned and in process, these aging

facilities often require frequent repairs and maintenance costs prior to commencement of a major rehabilitation funded in the CIP. The Asset Management Plan calls for periodic maintenance and repairs. The District has budgeted

significant amounts for maintenance of equipment, buildings, and grounds as well as for in-house sewer line repair and maintenance.

2. Salaries and Benefits—A 7.0% salary adjustment as well as a 6.5% increase for the Self-Funded Health Insurance Plan. Personnel costs represent over 63% of the Operating and Maintenance budget.

3. Post-Employment Health Benefit—Starting in FY2009, GASB45 required the recognition of cost for Post-Employment Health Benefits. Current funding represents 1.4% of total operations.



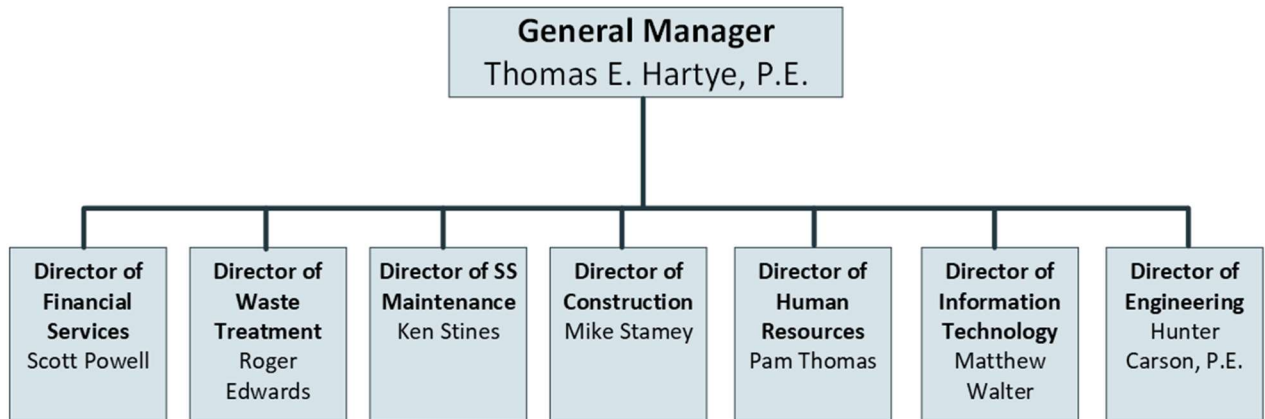
METROPOLITAN SEWERAGE DISTRICT OF BUNCOMBE COUNTY, NORTH CAROLINA

FY2023 Budget – All Departments Summary

| No. | Name | ACTUAL 2018-2019 | ACTUAL 2019-2020 | ACTUAL 2020-2021 | ADOPTED 2021-2022 Budget | ESTIMATED Actual 6/30/2022 | Percent Expended To Total Budget | PROPOSED 2022-2023 Budget | Inc (Dec) Over Prior Year |
|---|-------------------------------------|----------------------|----------------------|----------------------|--------------------------------|----------------------------------|---|---------------------------------|---------------------------------|
| Salaries & Wages | | | | | | | | | |
| 51100 | Salaries & Wages | \$ 8,716,041 | \$ 8,980,201 | \$ 8,838,699 | \$ 9,206,124 | \$ 9,206,124 | 100.00% | \$ 10,009,984.00 | 8.73% |
| 51150 | Overtime | 315,580 | 276,671 | 228,385 | 331,500 | 331,500 | 100.00% | 339,500.00 | 2.41% |
| Total Salaries & Wages | | 9,031,621 | 9,256,872 | 9,067,084 | 9,537,624 | 9,537,624 | 100.00% | 10,349,484.00 | 8.51% |
| Benefits | | | | | | | | | |
| 51200 | North Carolina Retirement | 709,834 | 855,631 | 945,243 | 1,087,290 | 1,087,290 | 100.00% | 1,256,429.00 | 15.56% |
| 51250 | Payroll Taxes | 662,290 | 679,958 | 666,404 | 729,629 | 729,629 | 100.00% | 791,735.00 | 8.51% |
| 51300 | Medical, Dental & Life | 2,185,141 | 2,327,175 | 2,478,441 | 2,639,540 | 2,639,540 | 100.00% | 2,811,112.00 | 6.50% |
| 51325 | Post Retirement Insurance | 307,560 | 283,000 | 283,000 | 283,000 | 283,000 | 100.00% | 283,000.00 | 0.00% |
| 51350 | Worker's Compensation | 273,000 | 273,000 | 273,000 | 273,000 | 273,000 | 100.00% | 273,000.00 | 0.00% |
| 51360 | State Unemployment Benefits | 3,287 | 1,211 | 2,150 | 32,560 | 32,560 | 100.00% | 32,560.00 | 0.00% |
| 51450 | Automobile Allowance | - | - | 3,600 | 3,600 | 3,600 | 100.00% | 3,600.00 | 0.00% |
| 51500 | 401-K/457 Plan | 395,750 | 405,998 | 403,299 | 457,638 | 457,638 | 100.00% | 491,107.00 | 7.31% |
| Total Benefits | | 4,536,862 | 4,825,973 | 5,055,138 | 5,506,257 | 5,506,257 | 100.00% | 5,942,543.00 | 7.92% |
| Total Salaries, Wages & Benefits | | 13,568,483 | 14,082,845 | 14,122,222 | 15,043,881 | 15,043,881 | 100.00% | 16,292,027.00 | 8.30% |
| Materials, Supplies & Services | | | | | | | | | |
| 52010 | Advertising | 25,232 | 20,447 | 12,157 | 29,500 | 26,500 | 89.83% | 35,500.00 | 20.34% |
| 52050 | Dues & Subscriptions | 52,722 | 56,164 | 54,883 | 60,155 | 59,155 | 98.34% | 66,020.00 | 9.75% |
| 52100 | Postage | 11,056 | 12,379 | 13,978 | 14,000 | 14,000 | 100.00% | 14,000.00 | 0.00% |
| 52150 | Travel, Mtgs & Training | 123,549 | 109,854 | 60,590 | 190,148 | 172,425 | 90.68% | 187,362.00 | -1.47% |
| 52160 | Tuition Assistance | 4,106 | 3,752 | 683 | 8,000 | 8,000 | 100.00% | 8,000.00 | 0.00% |
| 52170 | Directors Fees & Expenses | 22,167 | 23,626 | 19,858 | 24,000 | 24,000 | 100.00% | 24,000.00 | 0.00% |
| 52180 | Liability Insurance | 547,746 | 547,746 | 547,746 | 602,521 | 602,521 | 100.00% | 662,775.00 | 10.00% |
| 52200 | Telephone/Telefax | 32,047 | 32,243 | 43,945 | 52,000 | 20,000 | 38.46% | 30,200.00 | -41.92% |
| 52210 | Communications | 121,724 | 116,755 | 112,951 | 151,900 | 150,860 | 99.32% | 154,280.00 | 1.57% |
| 52240 | Uniforms | 75,172 | 70,761 | 67,991 | 88,135 | 87,695 | 99.50% | 90,545.00 | 2.73% |
| 52250 | Office Supplies | 16,134 | 15,578 | 16,517 | 26,650 | 22,300 | 83.68% | 21,150.00 | -20.64% |
| 52260 | Special Dept Supplies | 413,582 | 371,347 | 369,374 | 482,950 | 477,800 | 98.93% | 491,450.00 | 1.76% |
| 52270 | Safety Equip/Supplies | 81,303 | 75,345 | 52,067 | 85,150 | 84,450 | 99.18% | 91,050.00 | 6.93% |
| 52280 | Maint Supp/Small Tools | 102,451 | 116,886 | 121,363 | 152,650 | 152,500 | 99.90% | 155,650.00 | 1.97% |
| 52290 | Chemical Supplies | 371,798 | 377,527 | 408,502 | 1,035,250 | 1,035,250 | 100.00% | 1,547,350.00 | 49.47% |
| 52300 | Line Cleaning Supplies | 47,485 | 53,965 | 49,675 | 53,750 | 53,750 | 100.00% | 53,750.00 | 0.00% |
| 52330 | Legal Fees | 19,782 | 46,054 | 24,593 | 40,000 | 38,700 | 96.75% | 40,000.00 | 0.00% |
| 52350 | Prof/Contractual Svcs | 509,104 | 431,549 | 478,081 | 598,440 | 591,690 | 98.87% | 681,644.00 | 13.90% |
| 52410 | Maint-Buildings & Grounds | 135,355 | 192,651 | 191,120 | 261,500 | 261,500 | 100.00% | 261,500.00 | 0.00% |
| 52420 | Maintenance-Equipment | 436,326 | 461,976 | 463,812 | 524,299 | 513,499 | 97.94% | 515,800.00 | -1.62% |
| 52430 | Landscape Restoration | 12,340 | 8,797 | 8,502 | 14,701 | 13,701 | 93.20% | 13,701.00 | -6.80% |
| 52440 | Pump Maintenance | 48,711 | 59,170 | 82,519 | 102,500 | 102,500 | 100.00% | 102,500.00 | 0.00% |
| 52450 | Equipment Rental | 9,745 | 16,105 | 16,633 | 36,900 | 36,900 | 100.00% | 38,500.00 | 4.34% |
| 52460 | Motor Fuel & Lubricants | 146,309 | 138,984 | 127,190 | 214,272 | 214,272 | 100.00% | 270,000.00 | 26.01% |
| 52470 | Outside Vehicle Maint | 28,645 | 2,773 | 16,351 | 24,030 | 24,030 | 100.00% | 28,000.00 | 16.52% |
| 52500 | Rents/Leases | 44,051 | 42,594 | 44,429 | 50,900 | 48,800 | 95.87% | 50,000.00 | -1.77% |
| 52510 | Permits/Fees/Software Licenses | 268,884 | 249,314 | 283,688 | 309,960 | 308,910 | 99.66% | 341,628.00 | 10.22% |
| 52650 | Utilities | 1,025,513 | 1,065,903 | 958,184 | 1,290,000 | 1,284,000 | 99.53% | 1,349,500.00 | 4.61% |
| 52690 | Freight | 4,004 | 5,435 | 5,391 | 6,000 | 6,000 | 100.00% | 6,000.00 | 0.00% |
| 52715 | Safety Incentive Program | 692 | 1,287 | 1,393 | 2,500 | 2,500 | 100.00% | 2,500.00 | 0.00% |
| 52725 | Wellness Program | 4,382 | 6,995 | 442 | 8,000 | 8,000 | 100.00% | 8,000.00 | 0.00% |
| 52730 | Employee Asst Program | 4,355 | 4,355 | 4,355 | 4,500 | 4,500 | 100.00% | 4,500.00 | 0.00% |
| 52900 | Other Operating Expenses | 249 | 1,307 | 4,810 | 2,000 | 500 | 25.00% | 2,000.00 | 0.00% |
| 52910 | Non-Capital Equipment | 58,882 | 82,207 | 77,041 | 100,765 | 100,765 | 100.00% | 110,705.00 | 9.86% |
| 52915 | Copiers Printers & Faxes | - | - | - | 4,000 | 4,000 | 100.00% | 5,000.00 | 25.00% |
| 52920 | Billing & Collections | 821,024 | 852,981 | 983,058 | 952,783 | 952,783 | 100.00% | 1,019,478.00 | 7.00% |
| Total Materials, Supplies & Services | | 5,626,624 | 5,674,813 | 5,723,877 | 7,604,809 | 7,508,756 | 98.74% | 8,484,038.00 | 11.56% |
| Interfund Transfers | | | | | | | | | |
| 52340 | Debt Administration Expenses | 175,765 | 163,685 | 132,255 | 155,400 | 155,400 | 100.00% | 148,373.00 | -4.52% |
| 53040 | Fleet Replacement Charges | 500,000 | 500,000 | 500,000 | 595,000 | 595,000 | 100.00% | 595,000.00 | 0.00% |
| 53050 | WWTP Replacement Charges | 180,000 | 200,000 | 200,000 | 200,000 | 200,000 | 100.00% | 200,000.00 | 0.00% |
| 53070 | Pump Replacement Charges | 50,000 | 50,000 | 50,000 | 55,000 | 55,000 | 100.00% | 55,000.00 | 0.00% |
| Total Interfund Transfers | | 905,765 | 913,685 | 882,255 | 1,005,400 | 1,005,400 | 100.00% | 998,373.00 | -0.70% |
| Capital Outlay | | | | | | | | | |
| 54010 | Capital Equipment - New | 37,444 | 62,702 | 63,658 | 34,100 | 31,600 | 92.67% | 34,040.00 | -0.18% |
| 54020 | Capital Equip-Software | - | - | - | - | - | - | - | - |
| 54030 | Capital Equip - Replacement | 75,600 | 89,601 | 64,143 | 86,075 | 86,075 | 100.00% | 63,595.00 | -26.12% |
| Total Capital Outlay | | 113,044 | 152,303 | 127,801 | 120,175 | 117,675 | 97.92% | 97,635.00 | -18.76% |
| Sub-Total O&M Fund | | \$ 20,213,915 | \$ 20,823,646 | \$ 20,856,154 | \$ 23,774,265 | \$ 23,675,712 | 99.59% | \$ 25,872,073.00 | 8.82% |
| 59200 LESS: | | | | | | | | | |
| | Chargebacks to General Fund for CIP | (2,565,693) | (2,670,068) | (2,655,960) | (2,907,817) | (2,879,471) | 99.03% | (3,104,950.00) | 6.78% |
| | Chargebacks to General Fund for SSD | (1,729,039) | (1,766,213) | (1,782,378) | (1,893,758) | (1,893,516) | 99.99% | (1,996,798.00) | 5.44% |
| Net Operation & Maintenance Fund | | \$ 15,919,183 | \$ 16,387,365 | \$ 16,417,816 | \$ 18,972,690 | \$ 18,902,725 | 99.63% | \$ 20,770,325.00 | 9.47% |

Office of the General Manager

Organizational Chart



Office of the General Manager (continued)

Mission Statement

The mission of Office of the General Manager is to provide overall direction, leadership and coordination of the District and Department activities to ensure that the most efficient and effective services possible are provided within the policies established by the District's Board of Directors and the resources authorized.

Key Responsibilities

Carry out policies and directives of the Board. Monitor and control resources to ensure that the District is operated in a responsible and cost-efficient manner. Operate and maintain a reliable wastewater, collection, and treatment system. Maintain effective communications and relationships with member agencies and the public. Maintain positive media relations through news releases and prompt, accurate responses to media inquiries. Represent MSD in various meetings, forums, and special events. Oversee intermediate and long-range planning. Review and submit the board and committee agenda items; prepare minutes for board meetings; coordinate travel arrangements for board members and staff; provide public relations assistance.

Staffing History

| Division & Position | Approved Positions FY20-21 | Approved Positions FY21-22 | Budgeted Positions FY22-23 |
|--|-------------------------------|-------------------------------|-------------------------------|
| Department of Office of the General Manager | | | |
| Management: | | | |
| General Manager | 1 | 1 | 1 |
| Total General Manager | 1 | 1 | 1 |
| | | | |
| Total – Office of the General Manager Department | 1 | 1 | 1 |

Office of the General Manager (continued)

Accomplishments for FY 2021-2022

- Construction for High-Rate Primary Treatment (HRPT) Project is complete. Start-up testing is underway.
- Incorporated \$100 million of Treatment Plant improvements within 10-year CIP for MSD to meet future regulations and growth for next 50 years
- Design of Carrier Bridge Pump Station (\$45 million) over 90% complete, permitting underway.
- Replaced or rehabbed between 40,000 feet of sewer line
- Incorporated \$100 million Interceptor & Storage improvements for 50-year planning period
- Kept response time to all customer calls to less than 35 minutes
- ISO Recertification for entire organization

Budget Highlights/Changes for FY 2022-2023

- ▲ 3.0% rate increase for customers.
- ▲ 7.0% wage increase for employees for Cost of Living Adjustment (COLA).
- ▲ \$426,016 for market salary adjustments pursuant to Pay and Class Study Recommendations.
- ▲ Keep rate increases low and consistent based on long-term financial model
- ▲ Includes completing Capital Improvements of approximately \$30 Million
- ▲ Reflects 6.5% increase in medical plan contributions
- ▲ Includes 6.96% increase in state required contributions for the NC Retirement

Goals & Objectives

- ⦿ Goal: Oversee compliance with all State & Federal requirements for collection, treatment, and disposal of wastewater. (MSD Objectives #1 & 2)
- ⦿ Goal: Manage District in a financially sound manner. (MSD Goal #3)
- ⦿ Goal: Implement District programs in accordance with Board approved schedules, as modified from time to time as appropriate to provide project flexibility and accommodate ongoing changes in the community. (MSD Goal #4)
- ⦿ Goal: Manage community relations and education efforts. (MSD Objective #5)

Office of the General Manager (continued)

Goals & Objectives (continued)

- ⦿ Goal: Establish departmental goals & objectives. (MSD Goal #4)

Performance Measures

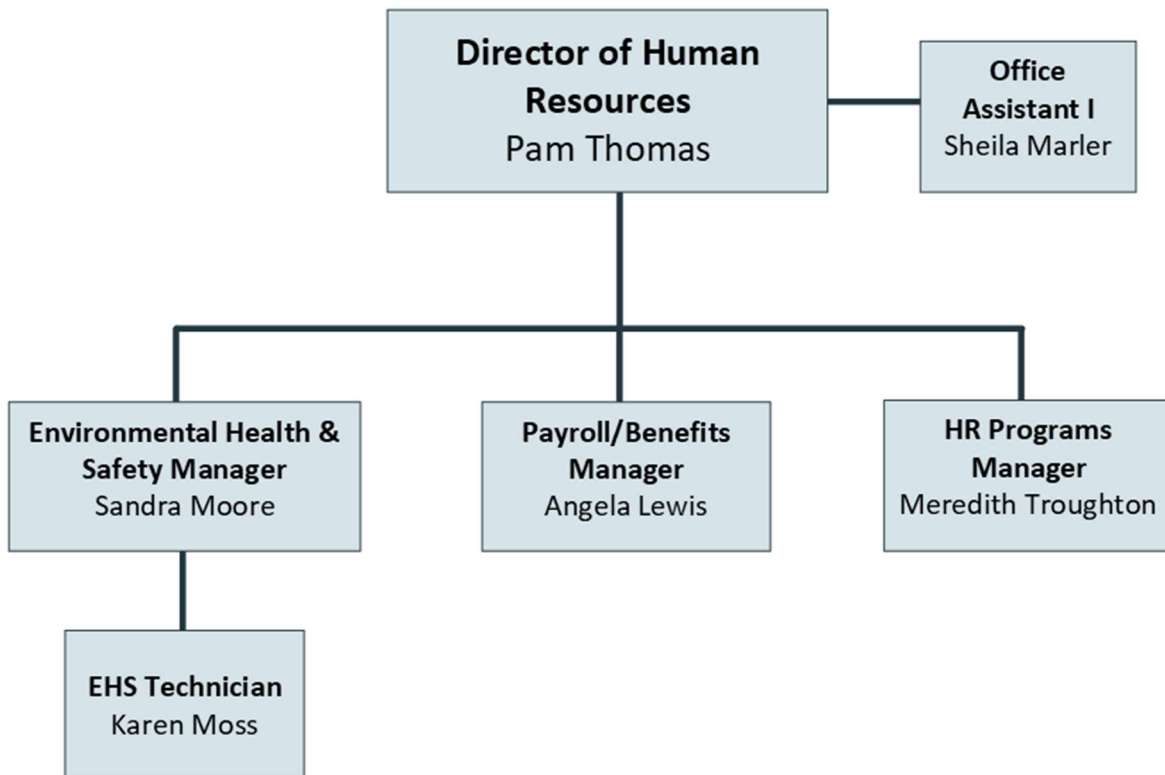
1. Oversight of compliance matters—see performance measures for Systems Services and Water Reclamation facility departments
2. Fiscal management—see performance measures for Finance Department

FY2023 Budget – Office of the General Manager

| No. | Name | ACTUAL 2018-2019 | ACTUAL 2019-2020 | ACTUAL 2020-2021 | ADOPTED 2021-2022 Budget | ESTIMATED Actual 6/30/2022 | Percent Expended To Total Budget | PROPOSED 2022-2023 Budget | Inc (Dec) Over Prior Year |
|---|--------------------------------|---------------------|---------------------|---------------------|--------------------------------|----------------------------------|---|---------------------------------|---------------------------------|
| Salaries & Wages | | | | | | | | | |
| 51100 | Salaries & Wages | \$ 202,162 | \$ 223,699 | \$ 213,238 | \$ 208,665 | \$ 208,665 | 100.00% | \$ 223,271 | 7.00% |
| Total Salaries & Wages | | 202,162 | 223,699 | 213,238 | 208,665 | 208,665 | 100.00% | 223,271 | 7.00% |
| Benefits | | | | | | | | | |
| 51200 | North Carolina Retirement | 15,862 | 20,526 | 22,202 | 23,788 | 23,788 | 100.00% | 27,105 | 13.94% |
| 51250 | Payroll Taxes | 11,247 | 12,729 | 11,040 | 15,963 | 15,963 | 100.00% | 17,080 | 7.00% |
| 51300 | Medical, Dental & Life | 14,665 | 15,412 | 16,306 | 17,366 | 17,366 | 100.00% | 18,494 | 6.50% |
| 51325 | Post Retirement Insurance | 2,064 | 1,874 | 1,862 | 1,862 | 1,862 | 100.00% | 1,862 | 0.00% |
| 51350 | Worker's Compensation | 1,833 | 1,808 | 1,796 | 1,796 | 1,796 | 100.00% | 1,796 | 0.00% |
| 51360 | State Unemployment Benefits | 22 | - | 14 | 215 | 215 | 100.00% | 215 | 0.00% |
| 51500 | 401-K/457 Plan | 9,856 | 10,167 | 10,119 | 10,434 | 10,434 | 100.00% | 11,164 | 7.00% |
| Total Benefits | | 55,549 | 62,516 | 63,340 | 71,424 | 71,424 | 100.00% | 77,716 | 8.81% |
| Total Salaries, Wages & Benefits | | 257,711 | 286,215 | 276,578 | 280,089 | 280,089 | 100.00% | 300,987 | 7.46% |
| Materials, Supplies & Services | | | | | | | | | |
| 52010 | Advertising | 12,577 | 5,635 | 4,861 | 10,000 | 7,000 | 70.00% | 10,000 | 0.00% |
| 52050 | Dues & Subscriptions | 12,144 | 13,654 | 12,400 | 10,000 | 10,000 | 100.00% | 11,000 | 10.00% |
| 52100 | Postage | 11,056 | 12,379 | 13,978 | 14,000 | 14,000 | 100.00% | 14,000 | 0.00% |
| 52150 | Travel, Mtgs & Training | 3,445 | 4,312 | 42 | 4,000 | 2,000 | 50.00% | 4,000 | 0.00% |
| 52170 | Directors Fees & Expenses | 22,167 | 23,626 | 19,858 | 24,000 | 24,000 | 100.00% | 24,000 | 0.00% |
| 52180 | Liability Insurance | 105,099 | 105,099 | 105,099 | 115,609 | 115,609 | 100.00% | 127,170 | 10.00% |
| 52210 | Communications | 2,252 | 2,381 | 2,550 | 4,000 | 4,000 | 100.00% | 4,000 | 0.00% |
| 52250 | Office Supplies | 453 | 301 | 5 | 400 | 400 | 100.00% | 400 | 0.00% |
| 52260 | Special Dept Supplies | 339 | 471 | 595 | 600 | 500 | 83.33% | 600 | 0.00% |
| 52270 | Safety Equip/Supplies | - | - | 824 | 1,000 | 1,000 | 100.00% | - | -100.00% |
| 52330 | Legal Fees | 18,106 | 43,540 | 14,144 | 30,000 | 30,000 | 100.00% | 30,000 | 0.00% |
| 52350 | Prof/Contractual Svcs | 31,528 | 60,812 | 21,756 | 30,000 | 30,000 | 100.00% | 30,000 | 0.00% |
| 52410 | Maint-Buildings & Grounds | 130,682 | 136,817 | 144,391 | 200,000 | 200,000 | 100.00% | 200,000 | 0.00% |
| 52420 | Maintenance-Equipment | - | - | - | 300 | - | 0.00% | 300 | 0.00% |
| 52500 | Rents/Leases | 3,667 | 3,192 | 4,148 | 5,000 | 4,000 | 80.00% | 5,000 | 0.00% |
| 52510 | Permits/Fees/Software Licenses | 145 | 223 | 184 | 200 | 150 | 75.00% | 200 | 0.00% |
| 52650 | Utilities | 101,588 | 66,858 | 74,216 | 100,000 | 100,000 | 100.00% | 100,000 | 0.00% |
| 52690 | Freight | 4,004 | 5,435 | 5,391 | 6,000 | 6,000 | 100.00% | 6,000 | 0.00% |
| 52900 | Other Operating Expenses | 249 | 1,307 | 4,810 | 2,000 | 500 | 25.00% | 2,000 | 0.00% |
| 52910 | Non-Capital Equipment | 571 | - | - | - | - | - | - | - |
| 52920 | Billing & Collections | 821,024 | 852,981 | 983,058 | 952,783 | 952,783 | 100.00% | 1,019,478 | 7.00% |
| Total Materials, Supplies & Services | | 1,281,096 | 1,339,022 | 1,412,309 | 1,509,892 | 1,501,942 | 99.47% | 1,588,148 | 5.18% |
| Interfund Transfers | | | | | | | | | |
| 53040 | Fleet Replacement Charges | 8,715 | 8,715 | 8,715 | 10,371 | 10,371 | 100.00% | 10,371 | 0.00% |
| Total Interfund Transfers | | 8,715 | 8,715 | 8,715 | 10,371 | 10,371 | 100.00% | 10,371 | 0.00% |
| Capital Outlay | | | | | | | | | |
| 54010 | Capital Equipment - New | - | - | - | - | - | - | - | - |
| Total Capital Outlay | | - | - | - | - | - | - | - | - |
| Sub-Total O&M Fund | | 1,547,521 | 1,633,952 | 1,697,601 | 1,800,352 | 1,792,402 | 99.56% | 1,899,506 | 5.51% |
| Net Operation & Maintenance Fund | | \$ 1,547,521 | \$ 1,633,952 | \$ 1,697,601 | \$ 1,800,352 | \$ 1,792,402 | 99.56% | \$ 1,899,506 | 5.51% |

Human Resources

Organizational Chart



Human Resources (continued)

Mission Statement

The mission of the **Human Resource Management Division** is to develop and implement a comprehensive, consistent program of human resource activities and maintain a qualified, diverse, career-oriented work force.

The mission of the **Payroll and Employee Benefits Division** is to process bi-weekly payroll for the District employees and to provide an attractive employee benefits package at a reasonable cost to the District and employees.

The mission of the **Environmental Safety Division** is to eliminate avoidable personal injuries and accidents through compliance with applicable federal, state, local and MSD rules and regulations governing environmental health and safety.

Key Responsibilities

Human Resources—Includes compliance with all Federal/State regulations and MSD Personnel Policies; coordinate recruitment process and new employee orientation; coordinate employee six-month and annual evaluations; maintain employee personnel files; coordinate updates to personnel pay plan & job descriptions; maintain positive employer-employee relations and develop training program for supervisors.

Payroll & Benefits—Includes bi-weekly processing of payroll and related reports; administering the following benefits: group medical, dental and life insurance; social security, North Carolina Retirement Defined Benefit Plan, 401(k) and 457 Defined Contribution Plans, Section 125 Cafeteria Plan, and voluntary employee deductions such as cancer, disability, and life insurance.

Environmental Safety—To ensure District compliance with laws of regulatory agencies such as OSHA, the North Carolina Department of Transportation, and EPA; to reduce losses to the District such as high worker's compensation premiums, lost production time, damage to property, etc.; and to promote awareness of and participation in environmental, health and safety among all employees.

Human Resources (continued)

Staffing History

| Division & Position | Approved Positions FY20-21 | Approved Positions FY21-22 | Budgeted Positions FY22-23 |
|--|-------------------------------|-------------------------------|-------------------------------|
| Department of Human Resources | | | |
| Management: | | | |
| Director of Human Resources | 1 | 1 | 1 |
| Total Management | 1 | 1 | 1 |
| Human Resources: | | | |
| Floater | 1 | 1 | 0 |
| Office Assistant I | 1 | 1 | 1 |
| HR Programs Manager | 1 | 1 | 1 |
| Payroll/Benefits Manager | 1 | 1 | 1 |
| Total Human Resources | 4 | 4 | 3 |
| Environmental, Health & Safety: | | | |
| EHS Safety Technician | 1 | 1 | 1 |
| Environmental, Health & Safety Manager | 1 | 1 | 1 |
| Total Environmental, Health & Safety | 2 | 2 | 2 |
| Total - Human Resources Department | 7 | 7 | 6 |

Accomplishments for FY 2021-2022

- Continued discount contract with Advent Health Hospital, resulting in zero costs for employees
- Discount contract with Range Urgent Care for employees and the District
- Set up program with Script sourcing for high drug cost resulting in discount for employees and the District
- Maintained employee medical insurance premium amounts at last year's levels
- Continued Wellness activities and monthly newsletter
- Conducted Pay and Classification Study
- Developed new advertisement avenues for job openings
- Coordinated retirement and replacements activities
- Upgraded Sage (HRIS System) to add more employees

Human Resources (continued)

Accomplishments for FY 2021-2022 (continued)

- Identified, provided training, and promoted people as part of the Succession Plan
- New Employees trained on essential job functions before the 6-month OSHA deadline
- Fall protection and harness inspections performed as required
- Received Safety Award from the NC Dept of Labor
- Improved safety (CO) by eliminating fuel saws in trenches and replacing with battery powered saws
- Improved safety for Facilities Maintenance Department while working on the incinerator
- Safety worked with each division to ensure training was completed by OSHA, NFPA, & NCDOT guidelines

Budget Highlights for FY 2022-2023

- ▲ Monitoring & inspections for fire alarms and sensors
- ▲ Increased Advertising budget
- ▲ Train new Safety Technician
- ▲ Provide more training on retirement and Social Security

Goals & Objectives

- ⦿ Goal: Provide supervisory leadership development training (MSD Objective #3)
 - ↪ Objective: Provide appropriate training sessions for employees
- ⦿ Goal: Train supervisors in improving employee relations and managing employee personnel issues (MSD Objective #3)
- ⦿ Goal: Keep personnel policies up to date (MSD Objective #3)
 - ↪ Objective: Review 20% of policies per year
- ⦿ Goal: Keep job descriptions up to date (MSD Objective #3)
 - ↪ Objective: Review 20% of job descriptions per year

Human Resources (continued)

Goals & Objectives (continued)

- ⊙ Goal: Improve the pool of applicants to reflect the diversified community (MSD Objective #3)
 - ↪ Objective: Utilize minority communications tools
- ⊙ Goal: Ongoing review of new position classifications or positions with added responsibilities (MSD Objective #3)
 - ↪ Objective: Review Labor Grade of new & existing positions as necessary
- ⊙ Goal: Promote Wellness Program (MSD Objective #3)
 - ↪ Objective: Educate and distribute healthy information to lower insurance costs
- ⊙ Goal: Minimize time positions are vacant (MSD Goals #1 & 2)
 - ↪ Objective: Have positions filled within 20 days
- ⊙ Goal: Minimize cost to fill vacancies (MSD Goal #3)
 - ↪ Objective: Limit average cost to \$400
- ⊙ Goal: Maintain consistency throughout District on disciplinary actions (MSD Objective #3)
 - ↪ Objective: Train supervisors to keep personnel informed/involved in all dealings leading up to a disciplinary step
- ⊙ Goal: To guard the occupational health and safety of MSD's workforce (MSD Goal #1)
 - ↪ Objective: Maintain an "Incident Rate" below industry standards of 5.30 per 100 employees.
 - ↪ Objective: To ensure compliance with the following: Federal/State OSHA, NFPA, NCDOT, EPA and FMCA. Promote safety focused training and compliance inspections. Have Zero (0) OSHA violations
 - ↪ Objective: Continuously evaluate current safety practices and improve/change as needed.
 - ↪ Objective: Focus on plant involvement in all areas
 - ↪ Objective: Stay abreast of changes and regulations and how they apply with MSD
 - ↪ Objective: Manage safety related contractual efforts including drug testing, hoist testing, fire protection, and gas line inspections.
- ⊙ Goal: Process payroll in a timely and accurate manner (MSD Objective #3)
 - ↪ Objective: No errors in paychecks

Human Resources (continued)

Goals & Objectives (continued)

- ⊙ Goal: Promote efficient utilization of employee benefits (MSD Objective #3)
 - ↪ Objective: Provide quarterly education or updates to employees concerning different types of benefits or other personal financial issues
- ⊙ Goal: Promote efficient utilization of employee benefits (MSD Objective #3)
 - ↪ Objective: Resolve employee payroll and benefit concerns within two business days
- ⊙ Goal: Maintain full compliance with all applicable legal requirements and governmental standards.
 - ↪ Objective: Have zero (0) OSHA violations
 - ↪ Objective: Stay abreast of changes and regulations and how they apply to the District

Performance Measures

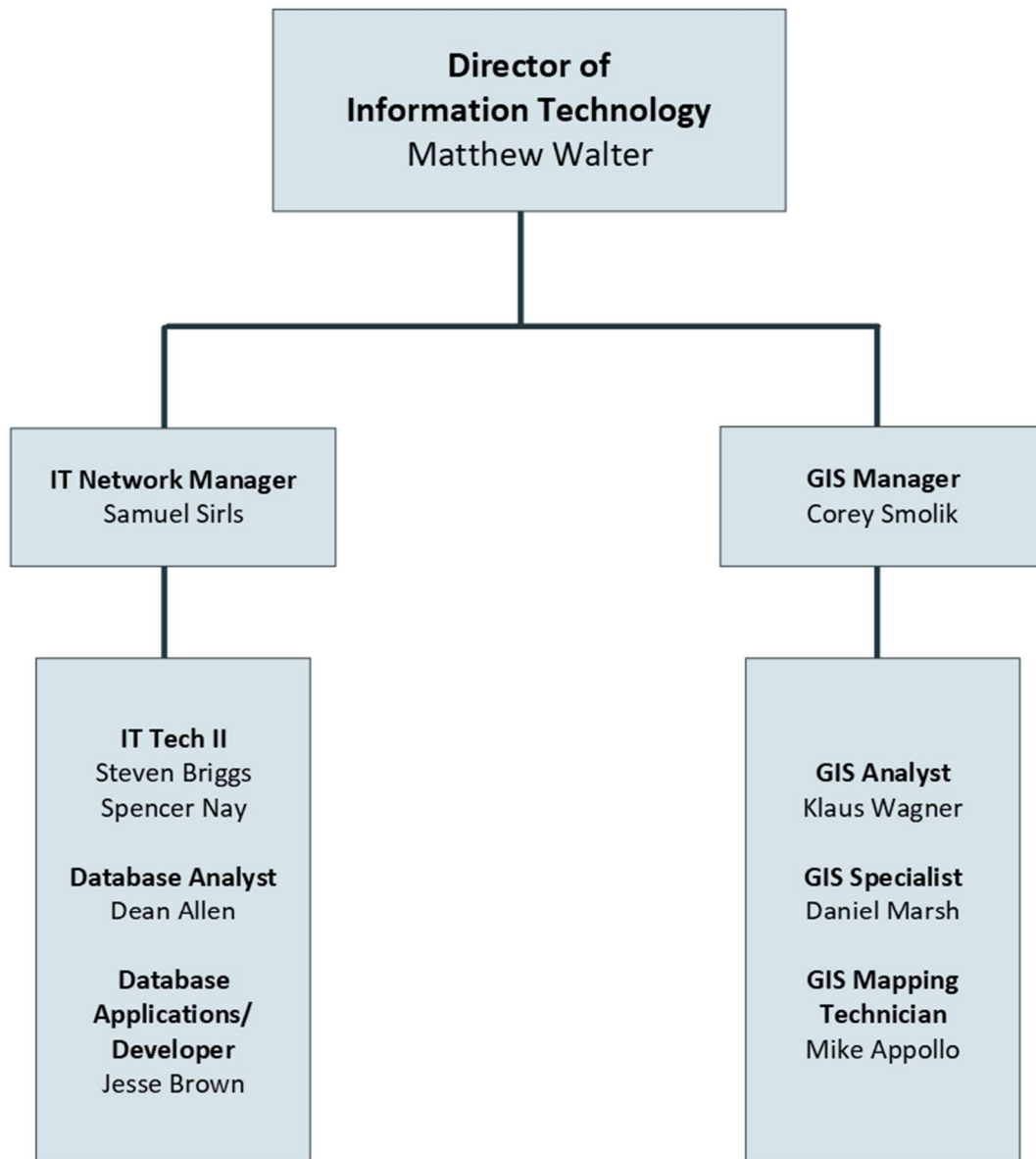
| Task | FY19-20 | FY20-21 | FY21-22 |
|---|---------|---------|---------|
| 1. Monitor and evaluate Skill Based Pay System | Yes | Yes | Yes |
| 2. Assist in the administration of the Employee Wellness Program | Yes | Yes | Yes |
| 3. # of external vacancies | 15 | 14 | 15 |
| 4. Avg. # of days to fill vacancies | 40 | 40 | 45 |
| 5. Avg. advertising cost per vacancy | \$400 | \$400 | \$400 |
| 6. Percentage of paychecks reissued or modified | <.1% | <.1% | <.1% |
| 7. Percentage of payroll tax and benefit withholdings timely remitted | 100% | 100% | 100% |
| 8. Number of employee benefit education sessions | 6 | 5 | 5 |
| 9. Percentage of employee payroll and benefit concerns resolved within two business days | 100% | 100% | 100% |
| 10. Number of Injuries <small>(calendar year)</small> | 0 | 4 | 6 |
| 11. Number of Lost Time Injuries <small>(calendar year)</small> | 0 | 2 | 2 |
| 12. Incident Rate NAICS <small>(calendar year) *(total case)</small> | 0 | 1.91 | 4 |
| 13. Inspections/Audits <small>(calendar year)</small> | 25/75+ | 25/75+ | 25/75+ |
| 14. Random Alcohol and Drug Tests for Safety Sensitive drivers <small>(calendar year)</small> | 35 | 36 | 40 |
| 15. EHS Training classes conducted <small>(calendar year)</small> | 58 | 77 | 112 |

FY2023 Budget – Human Resources

| No. | Name | ACTUAL 2018-2019 | ACTUAL 2019-2020 | ACTUAL 2020-2021 | ADOPTED 2021-2022 Budget | ESTIMATED Actual 6/30/2022 | Percent Expended To Total Budget | PROPOSED 2022-2023 Budget | Inc (Dec) Over Prior Year |
|---|--------------------------------|---------------------|---------------------|---------------------|--------------------------------|----------------------------------|---|---------------------------------|---------------------------------|
| Salaries & Wages | | | | | | | | | |
| 51100 | Salaries & Wages | \$ 412,478 | \$ 384,230 | \$ 385,458 | \$ 480,735 | \$ 480,735 | 100.00% | \$ 457,381 | -4.86% |
| 51150 | Overtime | - | 81 | - | - | - | - | - | - |
| Total Salaries & Wages | | 412,478 | 384,311 | 385,458 | 480,735 | 480,735 | 100.00% | 457,381 | -4.86% |
| Benefits | | | | | | | | | |
| 51200 | North Carolina Retirement | 32,335 | 35,516 | 40,144 | 54,804 | 54,804 | 100.00% | 55,526 | 1.32% |
| 51250 | Payroll Taxes | 32,650 | 30,973 | 28,872 | 36,776 | 36,776 | 100.00% | 34,990 | -4.86% |
| 51300 | Medical, Dental & Life | 87,993 | 107,883 | 114,139 | 121,558 | 121,558 | 100.00% | 129,460 | 6.50% |
| 51325 | Post Retirement Insurance | 12,385 | 13,119 | 13,033 | 13,033 | 13,033 | 100.00% | 13,033 | 0.00% |
| 51350 | Worker's Compensation | 10,993 | 12,656 | 12,573 | 12,573 | 12,573 | 100.00% | 12,573 | 0.00% |
| 51360 | State Unemployment Benefits | 133 | - | 99 | 1,499 | 1,499 | 100.00% | 1,499 | 0.00% |
| 51500 | 401-K/457 Plan | 18,963 | 18,010 | 18,964 | 21,359 | 21,359 | 100.00% | 22,870 | 7.07% |
| Total Benefits | | 195,452 | 218,158 | 227,824 | 261,602 | 261,602 | 100.00% | 269,951 | 3.19% |
| Total Salaries, Wages & Benefits | | 607,930 | 602,469 | 613,282 | 742,337 | 742,337 | 100.00% | 727,332 | -2.02% |
| Materials, Supplies & Services | | | | | | | | | |
| 52010 | Advertising | 7,535 | 8,075 | 3,907 | 9,000 | 9,000 | 100.00% | 15,000 | 66.67% |
| 52050 | Dues & Subscriptions | 5,678 | 4,564 | 4,249 | 6,505 | 6,505 | 100.00% | 6,505 | 0.00% |
| 52150 | Travel, Mtgs & Training | 32,045 | 7,828 | 7,598 | 21,915 | 21,915 | 100.00% | 23,100 | 5.41% |
| 52160 | Tuition Assistance | 4,106 | 3,752 | 683 | 8,000 | 8,000 | 100.00% | 8,000 | 0.00% |
| 52180 | Liability Insurance | 1,695 | 1,695 | 1,695 | 1,864 | 1,864 | 100.00% | 2,050 | 9.98% |
| 52210 | Communications | 5,321 | 5,502 | 21,174 | 24,060 | 24,060 | 100.00% | 23,000 | -4.41% |
| 52240 | Uniforms | 682 | 364 | 772 | 1,385 | 1,385 | 99.99% | 800 | -42.25% |
| 52250 | Office Supplies | 2,076 | 1,988 | 2,681 | 3,450 | 3,450 | 100.00% | 1,350 | -60.87% |
| 52260 | Special Dept Supplies | 755 | 2,081 | 2,004 | 4,300 | 4,300 | 100.00% | 2,000 | -53.49% |
| 52270 | Safety Equip/Supplies | 16,873 | 15,629 | 9,281 | 18,000 | 18,000 | 100.00% | 23,000 | 27.78% |
| 52280 | Maint Supp/Small Tools | - | - | - | - | - | - | - | - |
| 52330 | Legal Fees | 954 | 1,574 | 10,019 | 8,000 | 8,000 | 100.00% | 8,000 | 0.00% |
| 52350 | Prof/Contractual Svcs | 51,546 | 42,320 | 46,283 | 75,000 | 75,000 | 100.00% | 92,600 | 23.47% |
| 52410 | Maint-Buildings & Grounds | - | - | - | 500 | 500 | 100.00% | 500 | 0.00% |
| 52420 | Maintenance-Equipment | - | 258 | 11 | 4,000 | 4,000 | 100.00% | 6,000 | 50.00% |
| 52510 | Permits/Fees/Software Licenses | 67 | 68 | 67 | 100 | 100 | 100.00% | 100 | 0.00% |
| 52715 | Safety Incentive Program | 692 | 1,287 | 1,393 | 2,500 | 2,500 | 100.00% | 2,500 | 0.00% |
| 52725 | Wellness Program | 4,382 | 6,995 | 442 | 8,000 | 8,000 | 100.00% | 8,000 | 0.00% |
| 52730 | Employee Asst Program | 4,355 | 4,355 | 4,355 | 4,500 | 4,500 | 100.00% | 4,500 | 0.00% |
| 52910 | Non-Capital Equipment | 6,790 | 11,425 | 18,323 | 10,500 | 10,500 | 100.00% | 10,500 | 0.00% |
| Total Materials, Supplies & Services | | 145,552 | 119,758 | 134,939 | 211,579 | 211,579 | 100.00% | 237,505 | 12.25% |
| Interfund Transfers | | | | | | | | | |
| 53040 | Fleet Replacement Charges | 2,254 | 2,254 | 2,254 | 2,683 | 2,683 | 100.00% | 2,683 | 0.00% |
| Total Interfund Transfers | | 2,254 | 2,254 | 2,254 | 2,683 | 2,683 | 100.00% | 2,683 | 0.00% |
| Capital Outlay | | | | | | | | | |
| 54010 | Capital Equipment - New | - | - | - | 2,500 | - | 0.00% | - | -100.00% |
| Total Capital Outlay | | - | - | - | 2,500 | - | 0.00% | - | -100.00% |
| Sub-Total O&M Fund | | 755,737 | 724,481 | 750,474 | 959,099 | 956,599 | 99.74% | 967,520 | 0.88% |
| Net Operation & Maintenance Fund | | \$ 755,737 | \$ 724,481 | \$ 750,474 | \$ 959,099 | \$ 956,599 | 99.74% | \$ 967,520 | 0.88% |

Information Technology

Organizational Chart



Information Technology (continued)

Mission Statement

To provide information technology support, training, management, and development that will benefit the District divisions by facilitating completion of work objectives, improving communication, and creating better and easier access to information.

Key Responsibilities

Information Technology (IT)—Support new systems development based on the plans of the District divisions. Provide ongoing support and enhancements to major on-line operational and administrative systems. Maintain the existing computer equipment and data communications network. Plan and manage the acquisition and installation of new computer equipment, software, and peripherals. Provide computer equipment support, including installations, moving, and troubleshooting. Develop new software applications to meet specific MSD needs. Provide daily operations and product support. Develop long-range goals for computer systems development. Support responsibilities also include the telephone system, radio system, and process control equipment at the Plant. Offer computer software training programs for District staff. All IT work done 100% in-house. No vendor or contractors used for IT support.

Geographical Information Systems (GIS)—Develop, manage, and maintain data sets and digital maps related to the operations of the District. Provide data access and data analysis services for all divisions. Coordinate the acquisition of updated information from the field, external sources (such as other governmental agencies), and the Engineering Division and incorporate it into the GIS data sets. Develop, maintain, and train others in the use of tools for accessing spatial information to support all District activities.

Information Technology (continued)

Staffing History

| Division & Position | Approved Positions FY20-21 | Approved Positions FY21-22 | Budgeted Positions FY22-23 |
|---|-------------------------------|-------------------------------|-------------------------------|
| Department of Information Technology | | | |
| Management: | | | |
| Director of IT | 1 | 1 | 1 |
| Total Management | 1 | 1 | 1 |
| Information Technology: | | | |
| IT Technician II | 2 | 2 | 2 |
| IT Manager | 1 | 1 | 1 |
| Database Analyst | 1 | 1 | 1 |
| Network Database Administrator | 1 | 1 | 1 |
| Total IT | 5 | 5 | 5 |
| Geographic Information Systems (GIS): | | | |
| GIS Mapping Technician | 1 | 1 | 1 |
| GIS Analyst | 1 | 1 | 1 |
| GIS Specialist | 1 | 1 | 1 |
| GIS Manager | 1 | 1 | 1 |
| Total GIS | 4 | 4 | 4 |
| Total – Information Technology Department | 10 | 10 | 10 |

Accomplishments for FY 2021-2022

- Increased CityWorks report library for multiple divisions, SQL automation processes, and numerous software customizations for MSD.
- CityWorks expended to include WRF Maintenance – new Asset system to better track/manage equipment and work order history.
- Freeance Mobile expanded with more devices for mobile app use with CityWorks.
- New MSD website (msdsbc.org) designed and implemented.
- Upgraded Active Directory user account portal and rolled out 2 Factor Authentication (2FA) system – 2FA methods include Mobile App, SMS, and hardware security token.

Information Technology (continued)

Accomplishments for FY 2021-2022 (continued)

- Upgraded SonicWall primary/secondary units with next generation hardware and operating system – with additional services including Deep Packet Inspection for SSL connections.
- MSD server upgrades – Domain Controller, Finance (including Navision software), Plant, Web, and GIS.
- New virtual server environment for SCADA with new industrial switches throughout the Plant.
- Set up new environmental monitoring systems for Mull server room and disaster recovery room.
- Implemented new Audio/Visual setup for Board Room teleconferencing.
- Upgraded NVR for Mull Building camera system.
- Setup and configuration of 12 new Savin copiers under 5-year replacement plan.
- 20+ laptops and PCs configured and deployed for MSD employees.
- Obtained 2020 Census Bureau GIS data, including tracts, population counts, and municipal boundaries.
- Produced population data for MSD service areas using 2020 and estimated 2021 Census Bureau information.
- Added City of Hendersonville sewer utilities to MSD's GIS system.
- Linked CCWSD scanned as-builts to MSD GIS features.
- Organized CCWSD CCTV sewer inspections for linking into MSD's Granite CCTV system.
- Started detailed mapping for MSD pump stations to allow for expanded use of CityWorks.
- Started development of GIS mobile feature to capture pump station inventory and inspection imagery from mobile device directly onto GIS server.
- Preparation and evaluation of next generation AcrGIS tools for future conversion.
- Started identification and addition of Cane Creek street maintenance information.
- Ongoing use of high accuracy GPS to capture inventory field-located by System Services Division.
- Cataloged CCWSD as-builts according to MSD project numbering, as available data allowed.
- Ongoing updates and improvements to performance and content on MSD mobile, desktop, and web applications.
- Produce bulk mailing address lists for System Services Division.
- Ongoing updates and improvements of GIS data services in support of Cityworks

Information Technology (continued)

Accomplishments for FY 2021-2022 (continued)

- Ongoing application and data use support for all devices in use by MSD staff.
- Ongoing collection of high-accuracy GPS data to improve accuracy and gather missing data of known, existing inventory mapping.
- Ongoing inspection reports of manhole condition (broken lids, inverts, infiltration, etc) during GPS map improvements.
- Perform training for current and new staff on all GIS applications, data products, and services.

Goals & Objectives

- ⦿ Goal: To provide on-going training, support, and application customization to all divisions
 - ↪ Objective: Continue implementation and support of CityWorks software into all divisions
 - ↪ Objective: Continue user support for MSD Web, Mobile, and Desktop GIS users
 - ↪ Objective: Expand web and mobile solutions to help streamline field navigation and workflows where needed
 - ↪ Objective: Staff training to enable GIS work order submittal through CityWorks (things like field edits and tap map requests; this has been an underutilized possibility since CityWorks was in use)
 - ↪ Objective: Participate in presentations for mapping use in wastewater classes and in-house general instruction classes.
- ⦿ Goal: Maintain the servers, network, email, websites, public map access, phones, copiers, fax machines, printers, and security systems
 - ↪ Objective: Replace aging servers and desktop hardware as needed
 - ↪ Objective: Continue testing and researching in preparation for upgrades, including Windows, Server, Cloud Computing, and Storage
- ⦿ Goal: Improve reporting structure for existing CityWorks implementation
 - ↪ Objective: Continue implementing mobile solution for CityWorks to aid in paper reduction as well expanding use of Flex/ESRI Mapping systems.
- ⦿ Goal: Replace existing door/gate locks
 - ↪ Objective: New security card secured doors and gate locks installed across MSD facilities.

Information Technology (continued)

Goals & Objectives (continued)

- ⊙ Goal: Increase 2 factor authentication (2FA) users
 - ↪ Objective: Expand use of 2FA to MSD employees for increased network security
- ⊙ Goal: Fiber network to new storage facility
 - ↪ Objective: Run fiber to the new storage facility that has never been on the MSD network
- ⊙ Goal: New Board Room iPads
 - ↪ Objective: New iPads to replace outdated iPads for use in Board Meetings and other meetings held in the Board Room
- ⊙ Goal: Improve quazite security near Septage Receiving Station
 - ↪ Objective: Working with MSD Construction to improve visibility and durability of MSD fiber network along Riverside Drive
 - ↪ Objective: Replacing existing quazite box that will support more weight and building a curb to deter Septic trucks from running over it
- ⊙ Goal: Provide all MSD staff with outstanding customer service
- ⊙ Goal: To provide on-going training, support, and application customization to all divisions.
 - ↪ Objective: Continue implementation and support of CityWorks software into all divisions.
 - ↪ Objective: Continue user support for MSD Web, Mobile, and Desktop GIS users.
 - ↪ Objective: Expand web and mobile solutions to help streamline field navigation and workflows where needed.
 - ↪ Objective: Staff training to enable GIS work order submittal through CityWorks.
 - ↪ Objective: Participate in presentations for mapping use in wastewater classes and in-house general instruction classes.
- ⊙ Goal: Maintain the servers, network, email, websites, public map access, phones, copiers, fax machines, printers, and security systems.
 - ↪ Objective: Replace aging servers and desktop hardware as needed.
 - ↪ Objective: New Finance server and upgraded Finance software implementation.
 - ↪ Objective: New Web server and MSD website implemented.
 - ↪ Objective: New Plant and Business servers implemented.
 - ↪ Objective: Continue testing and researching in preparation for upgrades, including Windows, Server, Cloud Computing, and Storage.

Information Technology (continued)

Goals & Objectives (continued)

- ⦿ Goal: Improve reporting structure for existing CityWorks implementation.
 - ✎ Objective: Continue implementing mobile solution for CityWorks to aid in paper reduction as well expanding use of Flex/ESRI Mapping systems.
- ⦿ Goal: Data entry of as-built sewer maps.
 - ✎ Objective: Ongoing data entry of existing record drawings into the GIS system.
- ⦿ Goal: To input geospatial data changes as requested by users.
 - ✎ Objective: Continue application and geospatial data support for CityWorks, Granite XP, Flex, ArcGIS Desktop, and AR for Trucks software and processes.
 - ✎ Objective: All submitted field locates will be measured and entered using high-accuracy GPS.
- ⦿ Goal: Continue system-wide accuracy verification and improvement project.
 - ✎ Objective: Locate unmapped infrastructure.
 - ✎ Objective: Verification that mapped data physically exists.
 - ✎ Objective: Improve horizontal accuracy of mapped infrastructure using high-accuracy GPS measurements.
 - ✎ Objective: Improve vertical accuracy of mapped infrastructure using physical measurement.
 - ✎ Objective: Photograph infrastructure to record existence and condition.
 - ✎ Objective: Report infrastructure condition to System Services Division.
- ⦿ Goal: Processing of map requests and customer data inquiries.
 - ✎ Objective: Map Wastewater Reclamation Facility structures as they are changed and exposed by construction projects.
 - ✎ Objective: Assessment of MSD hardcopy maps, survey, and standalone digital data that have not been entered into the GIS system.
- ⦿ Goal: Update MSD's information on population served using 2020 US Census Bureau data, as modified by US Census Bureau projection for the current fiscal year.
 - ✎ Objective: Perform a review of MSD's District Boundary against most recent municipal boundaries.
 - ✎ Objective: Produce lists of population served by MSD as required by the General Manager and MSD Directors.

Information Technology (continued)

Goals & Objectives (continued)

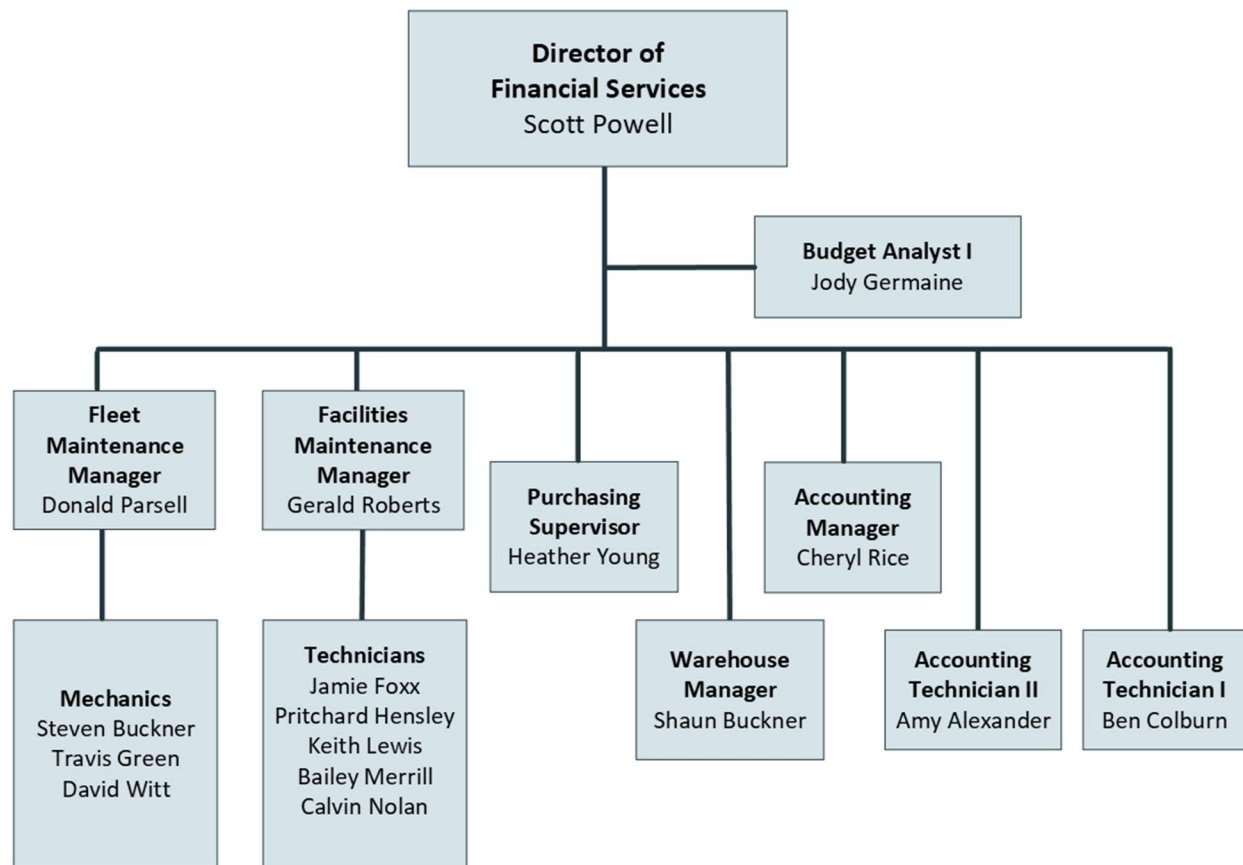
- ⦿ Goal: Complete detailed mapping of MSD Pump Station Locations.
 - ✎ Objective: Map all MSD-managed pump station inventory to include all structures requiring attached work orders and operator-provided imagery. This may require MSD-produced drone aerial imagery.
 - ✎ Objective: Provide facility identification numbers and/or building identifiers for all mapped pump station structures.
 - ✎ Objective: Link mapped pump station structures to Cityworks for purposes of work order and inventory management functionality.
- ⦿ Goal: Configure and test next generation ArcGIS desktop, web, and mobile applications.
 - ✎ Objective: Import user desktop maps from ArcMap into ArcGIS Pro.
 - ✎ Objective: Begin replacement of ArcReader with ArcGIS Pro.
 - ✎ Objective: Prepare for and begin user training.
- ⦿ Goal: Ongoing preparation of street maintenance layer for MSD service area within Henderson County.
 - ✎ Objective: Obtain data available through NCDOT maintenance data.
 - ✎ Objective: Fill gaps in local maintenance data through communication with municipal staff.
- ⦿ Goal: Ongoing integration of CCWSD information into MSD GIS.
 - ✎ Objective: Add CCWSD CCTV inspections into MSD's CCTV inspection management system.
- ⦿ Goal: Identify adjacent providers of municipal and sewer service operating within MSD's service area to assist MSD's billing and permitting activities.
 - ✎ Objective: Obtain GIS, plan sets, or addresses from adjacent providers.
 - ✎ Objective: Add provider infrastructure to MSD's GIS database.

FY2023 Budget – Information Technology

| No. | Name | ACTUAL 2018-2019 | ACTUAL 2019-2020 | ACTUAL 2020-2021 | ADOPTED 2021-2022 Budget | ESTIMATED Actual 6/30/2022 | Percent Expended To Total Budget | PROPOSED 2022-2023 Budget | Inc (Dec) Over Prior Year |
|---|-------------------------------------|---------------------|---------------------|---------------------|--------------------------------|----------------------------------|---|---------------------------------|---------------------------------|
| Salaries & Wages | | | | | | | | | |
| 51100 | Salaries & Wages | \$ 709,575 | \$ 746,836 | \$ 736,836 | \$ 754,881 | \$ 754,881 | 100.00% | \$ 805,329 | 6.68% |
| 51150 | Overtime | 574 | - | - | - | - | - | - | - |
| Total Salaries & Wages | | 710,149 | 746,836 | 736,836 | 754,881 | 754,881 | 100.00% | 805,329 | 6.68% |
| Benefits | | | | | | | | | |
| 51200 | North Carolina Retirement | 56,062 | 69,346 | 76,855 | 86,056 | 86,056 | 100.00% | 97,766 | 13.61% |
| 51250 | Payroll Taxes | 52,392 | 55,741 | 54,024 | 57,749 | 57,749 | 100.00% | 61,607 | 6.68% |
| 51300 | Medical, Dental & Life | 146,654 | 154,116 | 163,055 | 173,653 | 173,653 | 100.00% | 184,940 | 6.50% |
| 51325 | Post Retirement Insurance | 20,642 | 18,742 | 18,618 | 18,618 | 18,618 | 100.00% | 18,618 | 0.00% |
| 51350 | Worker's Compensation | 18,322 | 18,078 | 17,960 | 17,960 | 17,960 | 100.00% | 17,960 | 0.00% |
| 51360 | State Unemployment Benefits | 222 | - | 141 | 2,142 | 2,142 | 100.00% | 2,142 | 0.00% |
| 51500 | 401-K/457 Plan | 35,609 | 36,748 | 36,671 | 37,745 | 37,745 | 100.00% | 40,267 | 6.68% |
| Total Benefits | | 329,903 | 352,770 | 367,325 | 393,923 | 393,923 | 100.00% | 423,300 | 7.46% |
| Total Salaries, Wages & Benefits | | 1,040,052 | 1,099,606 | 1,104,161 | 1,148,804 | 1,148,804 | 100.00% | 1,228,629 | 6.95% |
| Materials, Supplies & Services | | | | | | | | | |
| 52050 | Dues & Subscriptions | 433 | 433 | 762 | 850 | 700 | 82.35% | 500 | -41.18% |
| 52150 | Travel, Mtgs & Training | 2,101 | 1,066 | 2,005 | 5,423 | 2,800 | 51.63% | 5,452 | 0.53% |
| 52180 | Liability Insurance | 10,557 | 10,557 | 10,557 | 11,613 | 11,613 | 100.00% | 12,775 | 10.01% |
| 52200 | Telephone/Telefax | 32,047 | 32,243 | 43,945 | 52,000 | 20,000 | 38.46% | 30,200 | -41.92% |
| 52210 | Communications | 5,087 | 7,507 | 6,294 | 6,700 | 6,700 | 100.00% | 9,680 | 44.48% |
| 52240 | Uniforms | 610 | 359 | 933 | 850 | 850 | 100.00% | 700 | -17.65% |
| 52250 | Office Supplies | 165 | 727 | 61 | 500 | 500 | 100.00% | 200 | -60.00% |
| 52260 | Special Dept Supplies | 624 | 1,499 | 464 | 2,000 | 1,500 | 75.00% | 500 | -75.00% |
| 52270 | Safety Equip/Supplies | 94 | 261 | 38 | 1,000 | 500 | 50.00% | 1,000 | 0.00% |
| 52280 | Maint Supp/Small Tools | 91 | 48 | - | 1,650 | 1,500 | 90.91% | 1,650 | 0.00% |
| 52350 | Prof/Contractual Svcs | 17,506 | 4,204 | 9,283 | 12,500 | 12,500 | 100.00% | 12,500 | 0.00% |
| 52500 | Rents/Leases | 39,584 | 38,602 | 39,481 | 44,000 | 44,000 | 100.00% | 44,000 | 0.00% |
| 52510 | Permits/Fees/Software Licenses | 200,968 | 199,791 | 200,596 | 228,110 | 227,110 | 99.56% | 229,528 | 0.62% |
| 52910 | Non-Capital Equipment | 32,811 | 52,221 | 38,811 | 55,000 | 55,000 | 100.00% | 55,160 | 0.29% |
| 52915 | Copiers Printers & Faxes | - | - | - | 4,000 | 4,000 | 100.00% | 5,000 | 25.00% |
| Total Materials, Supplies & Services | | 342,676 | 349,518 | 353,230 | 426,196 | 389,273 | 91.34% | 408,845 | -4.07% |
| Capital Outlay | | | | | | | | | |
| 54010 | Capital Equipment - New | 19,476 | 12,400 | 10,347 | 4,800 | 4,800 | 100.00% | 6,100 | 27.08% |
| 54020 | Capital Equip-Software | - | - | - | - | - | - | - | - |
| 54030 | Capital Equip - Replacement | 28,710 | 29,053 | 14,970 | 31,500 | 31,500 | 100.00% | 15,000 | -52.38% |
| Total Capital Outlay | | 48,186 | 41,452 | 25,317 | 36,300 | 36,300 | 100.00% | 21,100 | -41.87% |
| Sub-Total O&M Fund | | \$ 1,430,914 | \$ 1,490,576 | \$ 1,482,708 | \$ 1,611,300 | \$ 1,574,377 | 97.71% | \$ 1,658,574 | 2.93% |
| 59200 LESS: | | | | | | | | | |
| | Chargebacks to General Fund for CIP | (306,375) | (319,791) | (322,577) | (345,720) | (342,214) | 98.99% | (359,740) | 4.06% |
| Net Operation & Maintenance Fund | | \$ 1,124,539 | \$ 1,170,785 | \$ 1,160,131 | \$ 1,265,580 | \$ 1,232,163 | 97.36% | \$ 1,298,834 | 2.63% |

Financial Services

Organizational Chart



Financial Services (continued)

Mission Statement

The mission of the Finance, Accounting, and Budget Division is to provide timely, useful, and accurate financial data to all internal and external customers including but not limited to staff, division directors, Board, investors, and the public and to assure prudent control of District cash and investments.

The mission of the Purchasing and Warehouse Division is to provide procurement services to District Departments in the timeliest and cost-effective manner in compliance with all requirements of the District's Purchasing Policy and NC General Statutes while maintaining a complete and sufficient supply of parts and materials required for District operations and asset maintenance.

The mission of Facilities Management Division is to provide professional, crafted, and highly productive trade persons to properly maintain each of the District's (90) structures and facilities. They continuously seek out new and improved products and methods of operation for inclusion into the process of project completion in the longest-term, cost-effective manner.

The mission of the Fleet Maintenance Division is to oversee the maintenance of all District rolling stock in a timely and cost-efficient manner.

Key Responsibilities

Finance, Accounting, and Budget—Coordinates and manages the District's Operating and Capital budget preparation; monitors the annual budget through pre-audit of purchase orders and invoice payment; prepares monthly operation and capital projects financial reports for management and the Board; assists in financial analysis as directed by the General Manager or Board; monitors all debt financing obligations for timely payment and reporting; coordinates issuance of debt with professional advisors; oversees the Insurance Programs; prepares billing for industries and customers using well water.

Financial Services (continued)

Key Responsibilities (continued)

Purchasing and Warehouse—To provide a proper system of internal control for all District acquisitions; to ensure compliance with the North Carolina General Statutes and the Board-approved District Purchasing Policy; to assist and train division requisitioners as required; to effect timely acquisitions and disposals of property.

Facilities Management—Provides masonry (stone, brick, block) concrete (plaster, refractory, resurface, slab), carpentry (form, frame, finish), industrial painting, tile (quarry, vinyl, ceramic), cabinetry (in-house built), glass installation and glazing, signage (engraving, layout), mechanical installation, in-house fabrication, locksmith (unified master system), and drywall. Prepares Annual District facility/structural evaluations and oversees contract work (i.e., plumbing, roofing, etc.). Periodically compares in-house estimates with estimates from the private sector to ensure cost effective and quality services.

Fleet Maintenance—To provide fleet maintenance and management; coordinate Fleet Replacement; write specifications for new and replacement vehicles and equipment; manage fueling facilities; inspections at District owned facilities; maintain fleet inventory; service vehicles on a regular basis.

Staffing History

| Division & Position | Approved Positions FY20-21 | Approved Positions FY21-22 | Budgeted Positions FY22-23 |
|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| Department of Financial Services | | | |
| Management | | | |
| Director of Financial Services | 1 | 1 | 1 |
| Total Management | 1 | 1 | 1 |
| Finance & Budget: | | | |
| Budget Analyst | 1 | 1 | 1 |
| Total Finance & Budget | 1 | 1 | 1 |

Financial Services (continued)

Staffing History (continued)

| Division & Position | Approved Positions FY20-21 | Approved Positions FY21-22 | Budgeted Positions FY22-23 |
|--|-------------------------------|-------------------------------|-------------------------------|
| Accounting, Investments & Cash Flow Management: | | | |
| Accounting Technician I | 1 | 1 | 1 |
| Accounting Technician II | 1 | 1 | 1 |
| Accounting Manager | 1 | 1 | 1 |
| Total Acct., Investments & Cash Flow Management | 3 | 3 | 3 |
| Purchasing & Warehouse: | | | |
| Purchasing Agent I | 1 | 1 | 1 |
| Purchasing Supervisor | 1 | 1 | 1 |
| Total Purchasing & Warehouse | 2 | 2 | 2 |
| Facilities Maintenance: (moved to Finance Division in FY20) | | | |
| Facility Maintenance Technician | 5 | 5 | 5 |
| Facilities Maintenance Supervisor | 1 | 1 | 1 |
| Total Structural Maintenance | 6 | 6 | 6 |
| Fleet Maintenance: (moved to Finance Division in FY20) | | | |
| Fleet Mechanic III | 3 | 3 | 3 |
| Fleet Maintenance Supervisor | 1 | 1 | 1 |
| Total Fleet Maintenance | 4 | 4 | 4 |
| Total – Financial Services Department | 17 | 17 | 17 |

Accomplishments for FY 2021-2022

- Received the GFOA “Excellence in Financial Reporting” award for the Annual Comprehensive Financial Report (ACFR) for FY ending June 30, 2021.
- Received the GFOA “Distinguished Budget” award for the Budget Document prepared for FY ending June 30, 2021.
- Continue to offer high level of Customer Service to all customers internal and external to the District.
- Purchasing and Finance Team continue to implement and enhance its E-Payables program with Bank of America.

Financial Services (continued)

Accomplishments for FY 2021-2022 (continued)

- Successfully auctioned MSD surplus materials.
- Enhanced paper reduction initiative by scanning and attaching receipts, quotations, emails, and other pertinent information and documentation to purchase orders and the vendor database. Also increased use of email and pdf for Request for Quotations (RFQ) and other communications with vendors.

Goals & Objectives

- ⊙ Goal: Prepare and administer budget, which effectively meets the short and long-term needs of the District (Operating Budget Policy #6)
 - ↪ *Objective:* Obtain outside verification of the effectiveness of the budget document as a policy, operations, and communications guide by earning GFOA Distinguished Award for Budget Document
 - ↪ *Objective:* Maximize accuracy of budgeted revenues and expenditures by striving for variances between budget and actual amounts of less than 5%
 - ↪ *Objective:* Maintain affordability of rate increases by limiting rate increase to southern urban cost of living percentage
- ⊙ Goal: Prepare ACFR and other financial information, which effectively meet manager, investor, regulator, and other user needs
 - ↪ *Objective:* Obtain outside verification of the effectiveness of the ACFR by earning Government Finance Officers' Association Award of Excellence
 - ↪ *Objective:* Maximize availability of financial information to all users by offering CAFR and budget documents on District Website
- ⊙ Goal: Manage the District's debt rating to obtain the lowest cost of borrowing (Debt Policy #3)
 - ↪ *Objective:* Achieve compliance with all provisions of Bond Order (Debt Policy #6)
 - ↪ *Objective:* Maintain or improve District's debt rating
 - ↪ *Objective:* Make efficient use of district funds used for debt service

Financial Services (continued)

Goals & Objectives (continued)

- ⊙ Goal: Provide services and supplies in a timely manner (LT6 and Purchasing Policy #2)
 - ↪ Objective: Place purchase orders within three business days of requisition
 - ↪ Objective: Bid capital equipment within two weeks of requisition
- ⊙ Goal: Operate Finance Department in an efficient manner
 - ↪ Objective: Minimize finance department expenditures in relation to total expenditures
- ⊙ Goal: Manage District's investments to maximize rate of return while maintaining safety and meeting cash flow needs
 - ↪ *Objective:* Achieve a total rate of return at least that of a 6-Month T-bill
- ⊙ Goal: Prepare sewage treatment bills, which are accurate and collected in a timely manner
 - ↪ *Objective:* Limit rebilling due to errors to less than 1% of total bills
 - ↪ *Objective:* Collect a minimum of 98% of all residential fees and 90% of industrial fees billed
- ⊙ Goal: Pay for all services rendered and goods delivered to the District in a timely and accurate manner
 - ↪ *Objective:* Not be assessed any late charges on any District accounts
 - ↪ *Objective:* Limit voided accounts payable checks to 10% of total checks written
- ⊙ Goal: Maintain cost-effective and sufficient inventory levels
 - ↪ Objective: To maintain an inventory loss level below 3% (Purchasing Policy #2)
 - ↪ Objective: To minimize emergency purchases
- ⊙ Goal: Timely and cost-efficient maintenance and rehabilitation of plant buildings and equipment (Goals # 1 & 3)
 - ↪ Objective: Maintain annual rehab and replacement of key Building systems according to long-range plan (roofs, Mechanical systems, exteriors, etc.)
- ⊙ Goal: For the MSD fleet to have minimal environmental impact to the service area (Goal #1)
 - ↪ Objective: Monitor all vehicles use of biodiesel (B20) and ethanol (E10) for any fuel related problems or repairs

Financial Services (continued)

Goals & Objectives (continued)

- ⊙ Goal: Provide high level of quality of service and proficiency
 - ↪ Objective: Continuous improvement and training on software upgrades, diesel engine maintenance, and repairs
- ⊙ Goal: Maintain and replace only vehicles and equipment required for efficient and effective operation
 - ↪ Objective: Continue to evaluate heavy-duty vehicles essential for sewer line preventative maintenance

Performance Measures

| Task | FY19-20 | FY20-21 | FY21-22 (est.) |
|---|---------|---------|-------------------|
| 1. Receive the Distinguished Budget Presentation Award | yes | yes | yes |
| 2. Receipt of GFOA Excellence in Financial Reporting Award for ACFR | yes | yes | yes |
| 3. ACFR and budget document available on website | yes | yes | yes |
| 4. District debt rating Moody's/Standard & Poor's/Fitch | Aaa/AA+ | Aaa/AA+ | Aaa/AA+ |
| 5. Fitch Ratings | AA+ | AA+ | AAA |
| 6. Compliance with all provisions of bond order | yes | yes | yes |
| 7. Southern Urban COL % increase | 2.16% | 1.35% | 8.1% |
| 8. MSD rate increase | 2.50% | 0.00% | 2.75% |
| Comments: Assesses affordability of sewer rate increases when compared to overall regional price increases. | | | |
| 9. Ratio of actual to budgeted sewer revenues | 98.00% | 108.69% | 101.5% |
| 10. Ratio of operating and maintenance total expenditures actual to budgeted | 98.92% | 89.50% | 99.63% |
| Comments: These illustrate the accuracy of financial projections and adequacy of revenues to meet expenditures. | | | |
| 11. Interest and debt management costs as a percentage of outstanding debt | 3.87% | 3.83% | 3.82% |
| 12. MSD Investment Yield | 2.00% | 0.03% | 0.37% |
| 13. NC Cash Management Trust (Money Market) | 1.80% | 0.01% | 0.08% |
| 14. 6-Month T-Bill Secondary Market (Calendar) | 1.72% | 0.05% | 0.83% |
| Comments: Rates of return reflect overall declining interest rates in the fixed income market. | | | |

Financial Services (continued)

Performance Measures (continued)

| Task | FY19-20 | FY20-21 | FY21-22 (est.) |
|---|---------|---------|-------------------|
| 15. Collection of internally billed residential accounts | 95.50% | 95.15% | 95.25% |
| 16. Collection of internally billed industrial accounts | 100.00% | 100.00% | 100.00% |
| 17. Percentage of voided accounts payable checks | 0.01% | 0.03% | 0.03% |
| Comments: This ratio illustrates the effectiveness of the cash disbursement process. | | | |
| 18. Percentage of total O&M costs expended on Finance function | 5.10% | 4.50% | 4.50% |
| 19. Purchase orders placed within 3 business days | 99.00% | 98.00% | 97.75% |
| 20. Requisitions for capital equipment to be bid within two (2) weeks from receipt of detailed specifications from division | 99.00% | 98.75% | 98.75% |
| 21. Maintain loss of inventory at Warehouse below 3% in value (Goal 2) | 1.50% | 0.88% | 1.85% |
| 22. Obtain the 12% goal for purchases with minority owned/operated businesses | 11.00% | 10.85% | 10.75% |

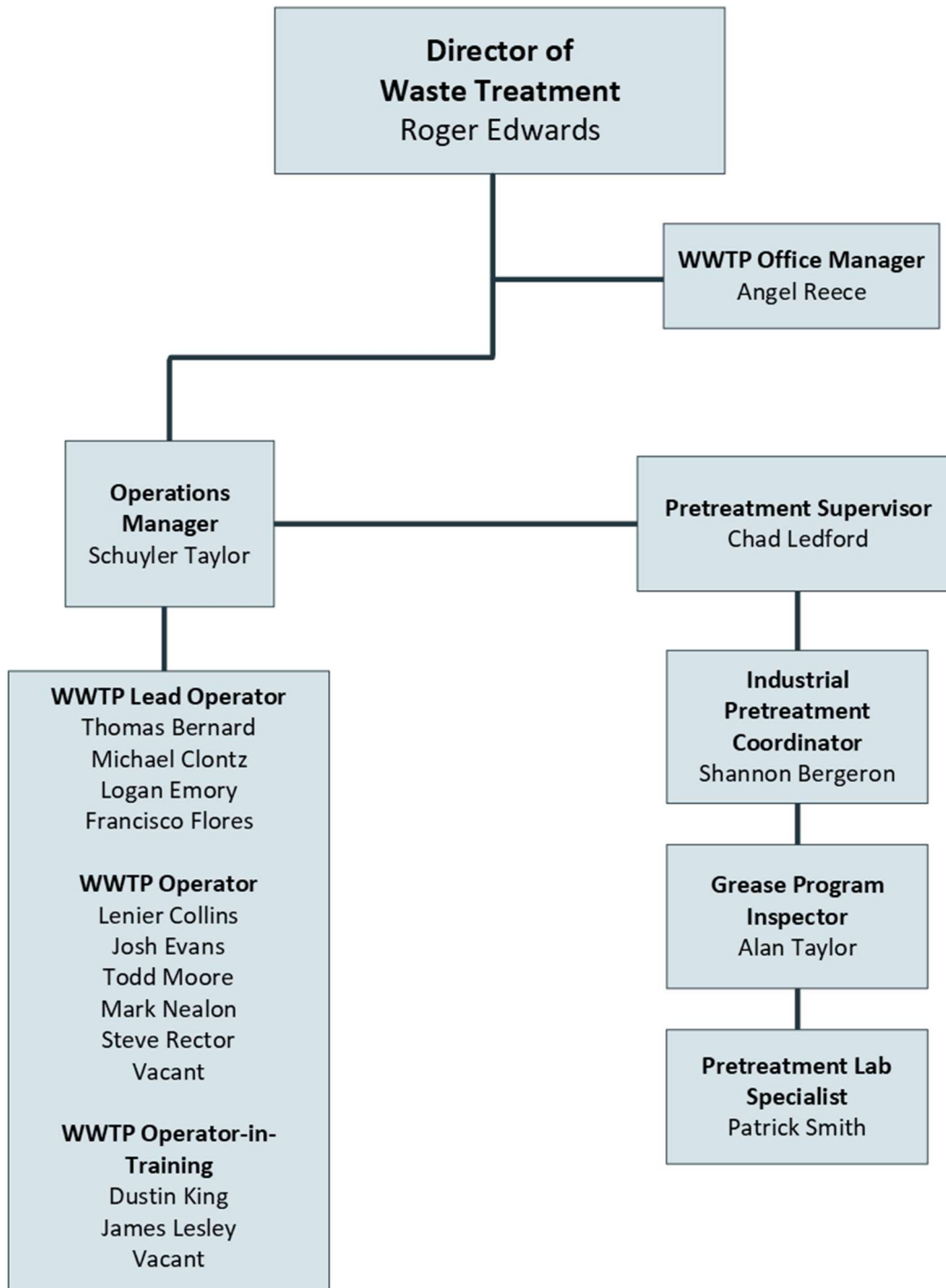
METROPOLITAN SEWERAGE DISTRICT OF BUNCOMBE COUNTY, NORTH CAROLINA

FY2023 Budget – Financial Services

| No. | Name | ACTUAL 2018-2019 | ACTUAL 2019-2020 | ACTUAL 2020-2021 | ADOPTED 2021-2022 Budget | ESTIMATED Actual 6/30/2022 | Percent Expended To Total Budget | PROPOSED 2022-2023 Budget | Inc (Dec) Over Prior Year |
|---|--------------------------------|---------------------|---------------------|---------------------|--------------------------------|----------------------------------|---|---------------------------------|---------------------------------|
| Salaries & Wages | | | | | | | | | |
| 51100 | Salaries & Wages | \$ 1,096,495 | \$ 1,159,634 | \$ 1,127,965 | \$ 1,104,917 | \$ 1,104,917 | 100.00% | \$ 1,182,474 | 7.02% |
| 51150 | Overtime | 14,737 | 18,727 | 13,118 | 28,500 | 28,500 | 100.00% | 28,500 | 0.00% |
| Total Salaries & Wages | | 1,111,232 | 1,178,360 | 1,141,083 | 1,133,417 | 1,133,417 | 100.00% | 1,210,974 | 6.84% |
| Benefits | | | | | | | | | |
| 51200 | North Carolina Retirement | 87,497 | 109,600 | 119,286 | 129,209 | 129,209 | 100.00% | 147,013 | 13.78% |
| 51250 | Payroll Taxes | 81,891 | 86,768 | 84,654 | 86,707 | 86,707 | 100.00% | 92,639 | 6.84% |
| 51300 | Medical, Dental & Life | 249,312 | 261,999 | 277,194 | 295,212 | 295,212 | 100.00% | 314,402 | 6.50% |
| 51325 | Post Retirement Insurance | 35,090 | 31,861 | 31,650 | 31,650 | 31,650 | 100.00% | 31,650 | 0.00% |
| 51350 | Worker's Compensation | 31,148 | 30,735 | 30,532 | 30,532 | 30,532 | 100.00% | 30,532 | 0.00% |
| 51360 | State Unemployment Benefits | 378 | - | 240 | 3,641 | 3,641 | 100.00% | 3,641 | 0.00% |
| 51500 | 401-K/457 Plan | 49,595 | 51,363 | 54,169 | 55,248 | 55,248 | 100.00% | 59,125 | 7.02% |
| Total Benefits | | 534,911 | 572,326 | 597,726 | 632,199 | 632,199 | 100.00% | 679,002 | 7.40% |
| Total Salaries, Wages & Benefits | | 1,646,143 | 1,750,687 | 1,738,809 | 1,765,616 | 1,765,616 | 100.00% | 1,889,976 | 7.04% |
| Materials, Supplies & Services | | | | | | | | | |
| 52050 | Dues & Subscriptions | 1,825 | 1,210 | 1,776 | 2,000 | 2,000 | 100.00% | 2,000 | 0.00% |
| 52150 | Travel, Mtgs & Training | 4,220 | 6,867 | 1,202 | 14,500 | 14,500 | 100.00% | 20,000 | 37.93% |
| 52180 | Liability Insurance | 132,144 | 132,144 | 132,144 | 145,359 | 145,359 | 100.00% | 159,895 | 10.00% |
| 52210 | Communications | 7,348 | 7,001 | 7,121 | 8,340 | 7,700 | 92.33% | 7,700 | -7.67% |
| 52240 | Uniforms | 6,122 | 6,374 | 5,988 | 7,700 | 7,700 | 100.00% | 7,700 | 0.00% |
| 52250 | Office Supplies | 3,396 | 3,139 | 3,504 | 3,750 | 3,750 | 100.00% | 3,750 | 0.00% |
| 52260 | Special Dept Supplies | 370,373 | 330,768 | 325,124 | 416,600 | 416,600 | 100.00% | 441,100 | 5.88% |
| 52270 | Safety Equip/Supplies | 974 | 1,539 | 1,084 | 1,250 | 1,250 | 100.00% | 1,350 | 8.00% |
| 52280 | Maint Supp/Small Tools | 4,855 | 5,323 | 3,479 | 18,500 | 18,500 | 100.00% | 18,500 | 0.00% |
| 52290 | Chemical Supplies | 2,474 | 1,122 | 1,170 | 4,000 | 4,000 | 100.00% | 4,000 | 0.00% |
| 52350 | Prof/Contractual Svcs | 137,845 | 77,894 | 73,999 | 104,300 | 104,300 | 100.00% | 104,500 | 0.19% |
| 52410 | Maint-Buildings & Grounds | 4,004 | 394 | - | - | - | - | - | - |
| 52450 | Equipment Rental | - | 8,901 | - | 10,400 | 10,400 | 100.00% | 10,000 | -3.85% |
| 52460 | Motor Fuel & Lubricants | 146,309 | 138,984 | 127,190 | 214,272 | 214,272 | 100.00% | 270,000 | 26.01% |
| 52470 | Outside Vehicle Maint | 28,645 | 2,773 | 16,351 | 24,030 | 24,030 | 100.00% | 28,000 | 16.52% |
| 52500 | Rents/Leases | - | - | - | - | - | - | - | - |
| 52510 | Permits/Fees/Software Licenses | 3,085 | 3,391 | 4,772 | 4,000 | 4,000 | 100.00% | 4,400 | 10.00% |
| 52910 | Non-Capital Equipment | 1,293 | - | 4,093 | 1,650 | 1,650 | 100.00% | 1,650 | 0.00% |
| Total Materials, Supplies & Services | | 854,911 | 727,823 | 708,998 | 980,651 | 980,011 | 99.93% | 1,084,545 | 10.59% |
| Interfund Transfers | | | | | | | | | |
| 53040 | Fleet Replacement Charges | 6,058 | 6,058 | 6,058 | 7,209 | 7,209 | 100.00% | 7,209 | 0.00% |
| Total Interfund Transfers | | 6,058 | 6,058 | 6,058 | 7,209 | 7,209 | 100.00% | 7,209 | 0.00% |
| Capital Outlay | | | | | | | | | |
| 54010 | Capital Equipment - New | - | - | - | - | - | - | - | - |
| 54030 | Capital Equip - Replacement | - | - | 2,894 | - | - | - | - | - |
| Total Capital Outlay | | - | - | 2,894 | - | - | - | - | - |
| Sub-Total O&M Fund | | \$ 2,507,112 | \$ 2,484,568 | \$ 2,456,759 | \$ 2,753,476 | \$ 2,752,836 | 99.98% | \$ 2,981,730 | 8.29% |
| Net Operation & Maintenance Fund | | \$ 2,507,112 | \$ 2,484,568 | \$ 2,456,759 | \$ 2,753,476 | \$ 2,752,836 | 99.98% | \$ 2,981,730 | 8.29% |

Wastewater Treatment Plant

Organizational Chart



Wastewater Treatment Plant (continued)

Mission Statement

The mission of the Wastewater Treatment Facility Division is to maintain the highest level of wastewater quality by meeting Federal and State environment regulations; operating and maintaining facilities in a productive and cost-effective manner; and above all to protect the environment.

Key Responsibilities

Include the operation of the District's regional water reclamation facility and maintain 24-hour shift operation; assure that all treated wastewater meets all discharge requirements; assure that all Title V air quality permits meet Federal, State and Local requirements; assure that State stormwater permit requirements are met; assure that all Federal and State Pretreatment program requirements are met.

Staffing History

| Division & Position | Approved Positions FY20-21 | Approved Positions FY21-22 | Budgeted Positions FY 22-23 |
|--|----------------------------------|----------------------------------|-----------------------------------|
| Department of Water Reclamation Facility | | | |
| <i>Management:</i> | | | |
| Director of Waste Treatment & Maintenance Facility | 1 | 1 | 1 |
| Total Management | 1 | 1 | 1 |
| | | | |
| <i>Plant Operations:</i> | | | |
| Operator in Training | 2 | 0 | 3 |
| Lead Operator | 4 | 4 | 4 |
| WRF Operator | 6 | 8 | 6 |
| WRF Operations Manager | 1 | 1 | 1 |
| Total Plant Operations | 13 | 13 | 14 |
| | | | |
| <i>Office Support:</i> | | | |
| WRF Office Manager | 1 | 1 | 1 |
| Total Office Support | 1 | 1 | 1 |

Wastewater Treatment Plant (continued)

Staffing History (continued)

| Division & Position | Approved Positions FY20-21 | Approved Positions FY21-22 | Budgeted Positions FY 22-23 |
|---|-------------------------------|-------------------------------|--------------------------------|
| <i>Field Operations:</i> | | | |
| Grease Program Inspector | 1 | 1 | 1 |
| Industrial Pretreatment Supervisor | 1 | 1 | 1 |
| Pretreatment/Lab Specialist | 1 | 1 | 1 |
| Pretreatment Coordinator | 1 | 1 | 1 |
| Total Industrial Waste | 4 | 4 | 4 |
| | | | |
| Total – Wastewater Treatment Plant Department | 19 | 19 | 20 |

Accomplishments for FY 2021-2022

- Maintained compliance with all National Pollution Discharge Elimination Systems, Stormwater Permit and WNC & EPA Air Quality Title V permit and standards during FY2022.
- Recognized for a Peak Performance Award by the National Association of Clean Water Agencies (NACWA) at the Silver Level Award for calendar 2021.
- Estimated total gallons treated: 8,865 million gallons.
- Estimated total solids incinerated: 7,560 tons.
- Estimated total solids hauled: 1,426 tons.
- Estimated total cubic yards removed by fine screens: 343 cubic yards.
- Estimated total cubic yards removed by bar screens: 230 cubic yards.
- Estimated total cubic yards removed by grit vortex: 282 cubic yards.
- Compliant Stationary Source Testing (Stack Test) for Fluidized Bed Incinerator (FBI) Title V permit
- High-Rate Primary Treatment project; completed July 2022.
- Treatment plant staff conducted guided tours of the facility with approximately 77 student and adult individuals attending. Number of tours down due to COVID-19.
- Replaced polymer system in Fluidized Bed Incinerator building.
- Replaced all piping and valves in final clarifier pump gallery. This is key to operation of final clarifier and solids processing.
- Removed vegetation from ash lagoon.
- Replaced influent gates on RBC basin #3.

Wastewater Treatment Plant (continued)

Budget Highlights/Changes for FY 2022-2023

- ▲ Maintain compliance with all National Pollution Discharge Elimination Systems, Stormwater Permit and WNC & EPA Air Quality Title V permit and standards.
- ▲ Install Belt Filter Press (BFP) in-line solids metering equipment.
- ▲ Install a new Belt Filter Press (BFP) for management of increased solids from High-Rate Primary Clarifier.
- ▲ FBI heat exchanger replacement.
- ▲ Rehab of final clarifier effluent troughs.

Goals & Objectives

- ⦿ Goal: Operate the Water Reclamation Facility in the most efficient and effective manner and in compliance with all requirements of the Discharge Permit (NPDES) (Objective #2)
 - ↪ *Objective:* Achieve a carbonaceous biochemical oxygen demand (CBOD) removal efficiency of at least 85%
 - ↪ *Objective:* Achieve a total suspended solids (TSS) removal efficiency of 85%
 - ↪ *Objective:* Have NPDES permit non-compliance occurrence of zero (0)
 - ↪ *Objective:* Limit odor complaints by maintaining dissolved hydrogen sulfide (H₂S) levels below 0.5 mg/L
 - ↪ Objective: Maintain treatment costs (cost/MG) at/below NACWA average
- ⦿ Goal: Continual improvement of operations
 - ↪ Objective: Effectively manage divisional objective(s) identified in the ISO 14001 Environmental Management System
 - ↪ Objective: Assist in development of WRF SCADA–integration of controls, reviews of standard operating procedures affecting Operations and Pretreatment.
 - ↪ Continue to advance operator biological certifications.

Wastewater Treatment Plant (continued)

Performance Measures

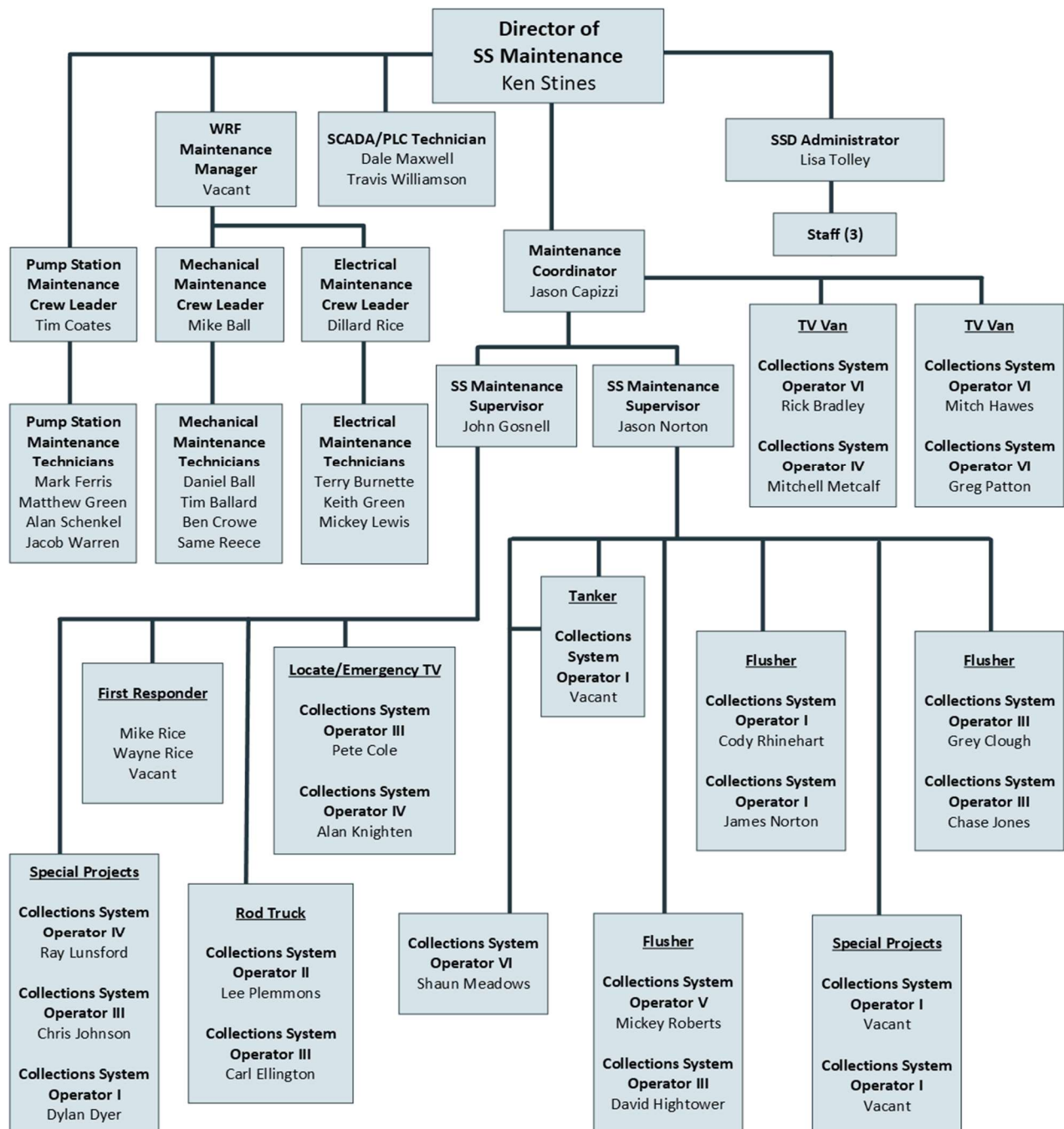
| Task | FY19-20 | FY20-21 | FY21-22 (est.) |
|--|---------|---------|-------------------|
| 1. Average monthly flow treated in million gallons/day (MGD) | 24.2 | 24.3 | 22.1 |
| 2. Maximum daily flow treated in MGD | 67.2 | 67.3 | 74.06 |
| 3. Bio-solids processed in dry tons | 7145 | 6411 | 8985 |
| 4. Cost per million gallons (MG) treated | \$593 | \$577 | \$577 |
| 5. Energy costs per MG treated | \$115 | \$113 | \$148 |
| 6. CBOD removal efficiency percentage | 93% | 93% | 93% |
| 7. TSS removal efficiency percentage | 94% | 93% | 94% |
| 8. Number of NPDES permit violations (non-compliance) | 0 | 1 | 1 |

FY2023 Budget – Wastewater Treatment Plant

| No. | Name | ACTUAL 2018-2019 | ACTUAL 2019-2020 | ACTUAL 2020-2021 | ADOPTED 2021-2022 Budget | ESTIMATED Actual 6/30/2022 | Percent Expended To Total Budget | PROPOSED 2022-2023 Budget | Inc (Dec) Over Prior Year |
|---|--------------------------------|---------------------|---------------------|---------------------|--------------------------------|----------------------------------|---|---------------------------------|---------------------------------|
| Salaries & Wages | | | | | | | | | |
| 51100 | Salaries & Wages | \$ 1,023,987 | \$ 1,059,921 | \$ 1,059,702 | \$ 1,116,041 | \$ 1,116,041 | 100.00% | \$ 1,295,212 | 16.05% |
| 51150 | Overtime | 66,507 | 71,973 | 73,008 | 69,000 | 69,000 | 100.00% | 77,000 | 11.59% |
| Total Salaries & Wages | | 1,090,494 | 1,131,894 | 1,132,711 | 1,185,041 | 1,185,041 | 100.00% | 1,372,212 | 15.79% |
| Benefits | | | | | | | | | |
| 51200 | North Carolina Retirement | 85,676 | 104,195 | 118,095 | 135,095 | 135,095 | 100.00% | 166,586 | 23.31% |
| 51250 | Payroll Taxes | 79,880 | 83,230 | 83,976 | 90,656 | 90,656 | 100.00% | 104,975 | 15.79% |
| 51300 | Medical, Dental & Life | 249,311 | 277,412 | 309,805 | 329,942 | 329,942 | 100.00% | 351,388 | 6.50% |
| 51325 | Post Retirement Insurance | 35,091 | 33,735 | 35,375 | 35,375 | 35,375 | 100.00% | 35,375 | 0.00% |
| 51350 | Worker's Compensation | 30,828 | 32,543 | 34,125 | 34,125 | 34,125 | 100.00% | 34,125 | 0.00% |
| 51360 | State Unemployment Benefits | 422 | - | 269 | 4,070 | 4,070 | 100.00% | 4,070 | 0.00% |
| 51450 | Automobile Allowance | - | - | 3,600 | 3,600 | 3,600 | 100.00% | 3,600 | 0.00% |
| 51500 | 401-K/457 Plan | 45,742 | 49,018 | 47,391 | 55,803 | 55,803 | 100.00% | 60,788 | 8.93% |
| Total Benefits | | 526,950 | 580,133 | 632,635 | 688,666 | 688,666 | 100.00% | 760,907 | 10.49% |
| Total Salaries, Wages & Benefits | | 1,617,444 | 1,712,027 | 1,765,346 | 1,873,707 | 1,873,707 | 100.00% | 2,133,119 | 13.84% |
| Materials, Supplies & Services | | | | | | | | | |
| 52010 | Advertising | 2,622 | 3,401 | 3,389 | 5,500 | 5,500 | 100.00% | 5,500 | 0.00% |
| 52050 | Dues & Subscriptions | 17,991 | 22,543 | 21,914 | 23,000 | 23,000 | 100.00% | 27,300 | 18.70% |
| 52150 | Travel, Mtgs & Training | 15,900 | 16,653 | 9,283 | 28,460 | 28,460 | 100.00% | 29,450 | 3.48% |
| 52180 | Liability Insurance | 101,454 | 101,454 | 101,454 | 111,599 | 111,599 | 100.00% | 122,759 | 10.00% |
| 52210 | Communications | 25,284 | 17,822 | 9,893 | 13,500 | 13,500 | 100.00% | 13,500 | 0.00% |
| 52240 | Uniforms | 8,159 | 8,533 | 8,987 | 9,450 | 9,450 | 100.00% | 11,300 | 19.58% |
| 52250 | Office Supplies | 2,405 | 1,797 | 3,571 | 3,150 | 3,150 | 100.00% | 3,050 | -3.17% |
| 52260 | Special Dept Supplies | 34,722 | 34,649 | 35,998 | 52,000 | 52,000 | 100.00% | 42,300 | -18.65% |
| 52270 | Safety Equip/Supplies | 9,006 | 10,330 | 8,083 | 11,200 | 11,200 | 100.00% | 13,000 | 16.07% |
| 52280 | Maint Supp/Small Tools | 2,041 | 1,927 | 1,449 | 2,900 | 2,900 | 100.00% | 3,400 | 17.24% |
| 52290 | Chemical Supplies | 369,324 | 376,405 | 407,332 | 1,031,250 | 1,031,250 | 100.00% | 1,543,350 | 49.66% |
| 52350 | Prof/Contractual Svcs | 193,006 | 151,850 | 225,457 | 221,000 | 221,000 | 100.00% | 286,144 | 29.48% |
| 52510 | Permits/Fees/Software Licenses | 21,170 | 14,417 | 14,875 | 25,650 | 25,650 | 100.00% | 55,500 | 116.37% |
| 52650 | Utilities | 923,926 | 999,045 | 883,968 | 1,190,000 | 1,184,000 | 99.50% | 1,249,500 | 5.00% |
| 52910 | Non-Capital Equipment | 4,874 | 2,577 | 3,767 | 6,800 | 6,800 | 100.00% | 6,800 | 0.00% |
| Total Materials, Supplies & Services | | 1,731,886 | 1,763,402 | 1,739,420 | 2,735,459 | 2,729,459 | 99.78% | 3,412,853 | 24.76% |
| Interfund Transfers | | | | | | | | | |
| 53040 | Fleet Replacement Charges | 28,202 | 28,202 | 28,202 | 33,560 | 33,560 | 100.00% | 33,560 | 0.00% |
| Total Interfund Transfers | | 28,202 | 28,202 | 28,202 | 33,560 | 33,560 | 100.00% | 33,560 | 0.00% |
| Capital Outlay | | | | | | | | | |
| 54010 | Capital Equipment - New | 4,247 | 5,032 | 14,050 | 11,200 | 11,200 | 100.00% | 13,200 | 17.86% |
| 54030 | Capital Equip - Replacement | 17,836 | 13,537 | 1,969 | 2,000 | 2,000 | 100.00% | 8,000 | 300.00% |
| Total Capital Outlay | | 22,083 | 18,568 | 16,019 | 13,200 | 13,200 | 100.00% | 21,200 | 60.61% |
| Sub-Total O&M Fund | | \$ 3,399,614 | \$ 3,522,199 | \$ 3,548,987 | \$ 4,655,926 | \$ 4,649,926 | 99.87% | \$ 5,600,732 | 20.29% |
| Net Operation & Maintenance Fund | | \$ 3,399,614 | \$ 3,522,199 | \$ 3,548,987 | \$ 4,655,926 | \$ 4,649,926 | 99.87% | \$ 5,600,732 | 20.29% |

System Services - Maintenance

Organizational Chart



System Services - Maintenance (continued)

Mission Statement

The mission of the System Services Maintenance Division is to maintain MSD's Collection System, Pump Stations, and Water Reclamation Facility in such a way as to protect the health, safety, and environment. In short, our mission is to "Keep it Flowing" through more than one thousand miles of piping, 40 pump stations, and the treatment process until discharged into the French Broad River.

Key Responsibilities

Include maintenance and inspection of 1,140 miles of sanitary sewer line, operation, and maintenance of 40 remote pump stations, maintenance of 40 MGD Water Reclamation Facility, and operation and maintenance of 2.5-megawatt Hydro Electric Generation Facility. Provide customer service and emergency response 24 hours/day, 365 days/year. Provide preventive, proactive, and corrective maintenance of all mechanical, electrical, pneumatic, HVAC, instrumentation/controls, and Scada communication throughout the District. Maintain compliance with MSD's Collection System Permit and provide support to plant operations in maintaining HPDS discharge permit.

Staffing History

| Division & Position | Approved Positions FY20-21 | Approved Positions FY21-22 | Budgeted Positions FY 22-23 |
|---|-------------------------------|-------------------------------|--------------------------------|
| Department of System Services - Maintenance | | | |
| <i>Management:</i> | | | |
| Director of SS Maintenance | 1 | 1 | 1 |
| Total Management | 1 | 1 | 1 |
| <i>Office Support:</i> | | | |
| Dispatcher II | 1 | 1 | 1 |
| Office Assistant I | 1 | 1 | 1 |
| Office Assistant II | 1 | 1 | 1 |
| SSD Administrator | 1 | 1 | 1 |
| Total Office Support | 4 | 4 | 4 |

System Services - Maintenance (continued)

Staffing History (continued)

| Division & Position | Approved Positions FY20-21 | Approved Positions FY21-22 | Budgeted Positions FY 22-23 |
|--|-------------------------------|-------------------------------|--------------------------------|
| <i>Pump Station Maintenance:</i> | | | |
| Technicians | 4 | 4 | 4 |
| Crew Leader | 1 | 1 | 1 |
| Total Pump Station Maintenance | 5 | 5 | 5 |
| <i>Maintenance:</i> | | | |
| Collections System Operator I | 0 | 0 | 6 |
| Collections System Operator II | 6 | 6 | 1 |
| Collections System Operator III | 7 | 7 | 5 |
| Collections System Operator IV | 1 | 1 | 3 |
| Collections System Operator V | 2 | 2 | 1 |
| Collections System Operator VI | 5 | 5 | 5 |
| First Responder | 2 | 2 | 2 |
| Night Supervisor | 1 | 1 | 1 |
| Collection System Maintenance Supervisor | 2 | 2 | 2 |
| Maintenance Coordinator | 1 | 1 | 1 |
| Total Maintenance | 27 | 27 | 27 |
| <i>Maintenance/Electrical Maintenance:</i> | | | |
| Electrical Maintenance Crew Leader | 1 | 1 | 1 |
| Electrical IV/Specialist | 1 | 1 | 1 |
| Senior Electrician | 2 | 2 | 2 |
| Mechanical Maintenance Crew Leader | 1 | 1 | 1 |
| Maintenance Mechanic II | 3 | 3 | 3 |
| Scada PLC Technician | 2 | 2 | 2 |
| Senior Maintenance Mechanic | 1 | 1 | 1 |
| Maintenance Manager | 1 | 1 | 1 |
| Total Maintenance/Electrical Maintenance | 12 | 12 | 12 |
| Total - SS Maintenance Department | 49 | 49 | 49 |

System Services - Maintenance (continued)

Accomplishments for FY 2021-2022

- Cleaned over 870,000 LF of pipeline with in-house crews.
- CCTV'd over 259,750 LF of sanitary sewer lines.
- Mechanically rodded over 28,500 LF of pipeline for root removal.
- Achieved an average 38-minute response time to Collections System customer service calls during working hours, nights, and weekends.
- Performed over 86,000 LF of acoustic inspection on the Collection System.
- Smoke tested over 11,300 LF of Collection System. Continuing to decrease I & I along with assisting Engineering in flow monitoring studies.
- Inspected over 700,000 LF of High Priority/Creek Crossings.
- Continue public awareness education/FOG by handing out information packets when applicable. Increase awareness of problem with disposable wipes through public education.
- Recovery of over \$316,960 in electric power savings from the Hydro Electric Generation Facility.
- Upgraded Leicester Village control panel wiring to meet NEC requirements and upgraded to 7.5 HP pumps.
- Installed outdoor lighting for the wet well area at Ridgefield #1.
- Rebuilt pump cord connection panel at Weaverville #1. Also installed new Siemens soft start on Pump #1.
- Replaced wear rings on impeller and volute on pump #1 and #3 at Carrier Bridge pump station. Bypassed all three isolation transformers.
- Motor rewound on pump #3 at Carrier Bridge pump station.
- Purchased new Sulzer pump for Mud Creek pump station.
- Installed underground wiring for backflow preventer heat tape at Cliffs #1 and Ridgefield #1.
- Installed Surge Protective Device (SPD) at New Bern pump station.
- Installed 4X SS RTU panel and ran conduit for power and controls at Fanning Bridge and Mountain Home pump stations. Also hung transducer at Fanning Bridge.
- Ran conduit for generator communication with SCADA at ITT, Little Flat Creek, and Lake Julian pump stations.

System Services - Maintenance (continued)

Accomplishments for FY 2021-2022 (continued)

- SCADA Network Health Monitoring PLC completed along with SCADA interface displaying alarms and status of the fiber network.
- Completed the fiber ring at the WWRF with redundant paths.
- Completed construction of remaining three Cane Creek RTU panels.
- High Rate Treatment process start up and SCADA installation.
- Plant generators have been connected to the plant network and developed the SCADA interface to monitor the status of the generators.
- Completion of the WWRF SCADA system upgrade. This included the installation of the hardware (Stratus Server consisting of seven virtual computers running the iFix primary and secondary servers, terminal servers, historian servers, and the Win911 servers). Setup and installation of 8 remote terminal clients at various locations at the WWRF.
- Plant and pump SCADA were combined to create an operational SCADA system.
- Upgrade of the Win911 to the latest software version has been completed.
- Rebuilt Southeast clarifier, replaced cross collector chain, anchored drive axle, installed new drive, and rebuilt southwest clarifier drive.
- Installed sump pump at the Filter building.
- Plated the bottom of the heat exchanger and pumped in a refractory barrier.
- Switched to thicker wear rings for the raw pumps.
- S&L Pista Grit upgrades, larger solenoids with higher PSI for greater reliability and performance, replaced South pump and motor, rebuilt old pump and motor and coated the volute and impeller for greater longevity, and replaced air and vacuum hoses with stainless steel piping.
- Rebuilt RBC basin 1 blower and sleeved five RBC stub shafts.
- Rebuilt ash clarifier, rake and supply line.
- Repaired two rollers at the belt filter press, turned stub shafts and sleeved, and installed overhead hoist to assist with roller removal.
- Surfaced ten wear plates for Gorman Rupp pumps with shop mill.
- Installed new air compressor for maintenance shop.
- Installed lathe in maintenance shop to enable reworking of machinery parts.

System Services - Maintenance (continued)

Accomplishments for FY 2021-2022 (continued)

- Replaced water line for polymer system with stainless-steel two-inch line.
- Performed all preventative maintenance in a timely manner in order to keep plant operations running efficiently.
- Assisted various surrounding towns and cities with nine mutual aid projects.
- Bypassed Bear Creek, Warren Wilson, and Leicester Village pump stations for emergency repairs.
- Purchased a replacement vacuum truck
- Purchased a replacement tanker truck
- Participated in a career day event for eleventh and twelfth grade students for Buncombe County Schools.
- Participated in Asheville Parks and Recreation's Truck City Asheville show giving kids and adults a chance to get an up-close look at trucks and equipment.
- Inspect and dye test all creek crossings from Black Mountain to Asheville.
- Replace 27.5 tons of HVAC equipment campus wide.
- Performing monthly thermography scans on electrical panels and components.

Budget Highlights/Changes for FY 2022-2023

- ▲ Upgrade check valves at Ridgefield #2.
- ▲ Replace and upgrade gate valves and check valves at Avery's Creek.
- ▲ Working with GIS department to complete a new way to access pictures and vital pump station information using the collector app or equivalent. Exploring possibility of it working in unison with Cityworks.
- ▲ Establish all Cane Creek stations on Milltronics controls and have SCADA running at all stations.
- ▲ Purchase and install a new Grundfos pump at Biltmore Lake #2, as well as one for back up to eliminate all hydromatic pumps at this station.
- ▲ Purchase Liberty pump to replace the one existing hydromatic and also a Liberty backup to have this station completely switched to Liberty pumps.
- ▲ Purchase two rotating assemblies for Erwin Hills pump station.

System Services - Maintenance (continued)

Budget Highlights/Changes for FY 2022-2023 (continued)

- ▲ Rebuild Muffin Monster Grinder at Erwin Hills pump station.
- ▲ Replace water supply lines for mechanical seals in clarifier pump room.
- ▲ Install polymer system at the TC building.
- ▲ Replace gate actuator for hydro.
- ▲ Install a fourth pump in the Thickner building due to an increase in volume of sludge.
- ▲ S&L tank retrofit.
- ▲ Replace both suction tubes on S&L pumps
- ▲ Inspect Northwest clarifier, install new drive, and rebuild the old drive.
- ▲ Install backup quench pumps for incinerator
- ▲ Relocate ash transfer pump along with decommissioning the ash clarifier.
- ▲ Develop Human Machine Interface (HMI) for the FBI PLC, Influent Pump Station (IPS) PLC's. Expect to complete June/July 2023.
- ▲ Install and commission remaining Cane Creek RTU's
- ▲ Continuing education and onsite training of new SCADA technician.
- ▲ New Polymer installation and SCADA development.
- ▲ Continual improvement to SCADA system.

Goals & Objectives

- ☉ Goal: Promote safety first (Goals #1 - 4)

↖ *Objective:* Training

- Personal Protective Equipment
- Traffic Control
- Confined Space
- Vehicle/Equipment Operation
- Arc Flash
- Rigging, Chains, and Hoists

System Services - Maintenance (continued)

Goals & Objectives (continued)

⊙ Goal: Reduce number of Sanitary Sewer Overflows (Goals #1 - 4)

↪ *Objective:* Continue to identify areas with heavy Inflow and Infiltration (I & I)

- Flow Monitoring Investigation
- Smoke testing Investigation
- Identify major/minor sources of I & I

↪ *Objective:* Maintain an aggressive Preventive Maintenance Program

- Clean a minimum of 600,000 LF of sanitary sewer lines
- Utilize acoustic inspection to help strengthen impact of lines cleaned

↪ *Objective:* Evaluate/update priorities for increased preventive maintenance areas and recommendations of areas for rehabilitation

- CCTV Inspection/score 400,000 LF sewer pipeline
- Continue to expand pipe rating program
- Utilize SL-RAT to prioritize preventive maintenance program to gain optimal performance and save resources
- Completion of CCTV'ing and re-scoring of all current CIP lines in Collection System into new PACP format

⊙ Goal: Provide excellent customer service internal/external (Goals #1 – 4)

↪ *Objective:* Maintain on call status 24 hours/day, 7 days/week

↪ *Objective:* Respond to all customer service requests within one hour

↪ *Objective:* Maintain great relationship with outside entities and internal divisions

⊙ Goal: Maintain a qualified and motivated work force (Goals #1 – 4)

↪ *Objective:* Cross train to promote positive employee relationships and teamwork

↪ *Objective:* Provide opportunities for additional trainings that promote increased knowledge and abilities for all SS Maintenance staff

↪ *Objective:* Exploration of new technologies for continuous improvement

System Services - Maintenance (continued)

Goals & Objectives (continued)

- ⊙ Goal: Decrease in Equipment Failure (Goals #1 – 4)
 - ↪ *Objective:* Increase predictive/preventive maintenance program.
 - ↪ *Objective:* Continue to develop equipment maintenance SOP's on all equipment.
 - ↪ *Objective:* Continue to develop electrical preventive maintenance program.

Performance Measures

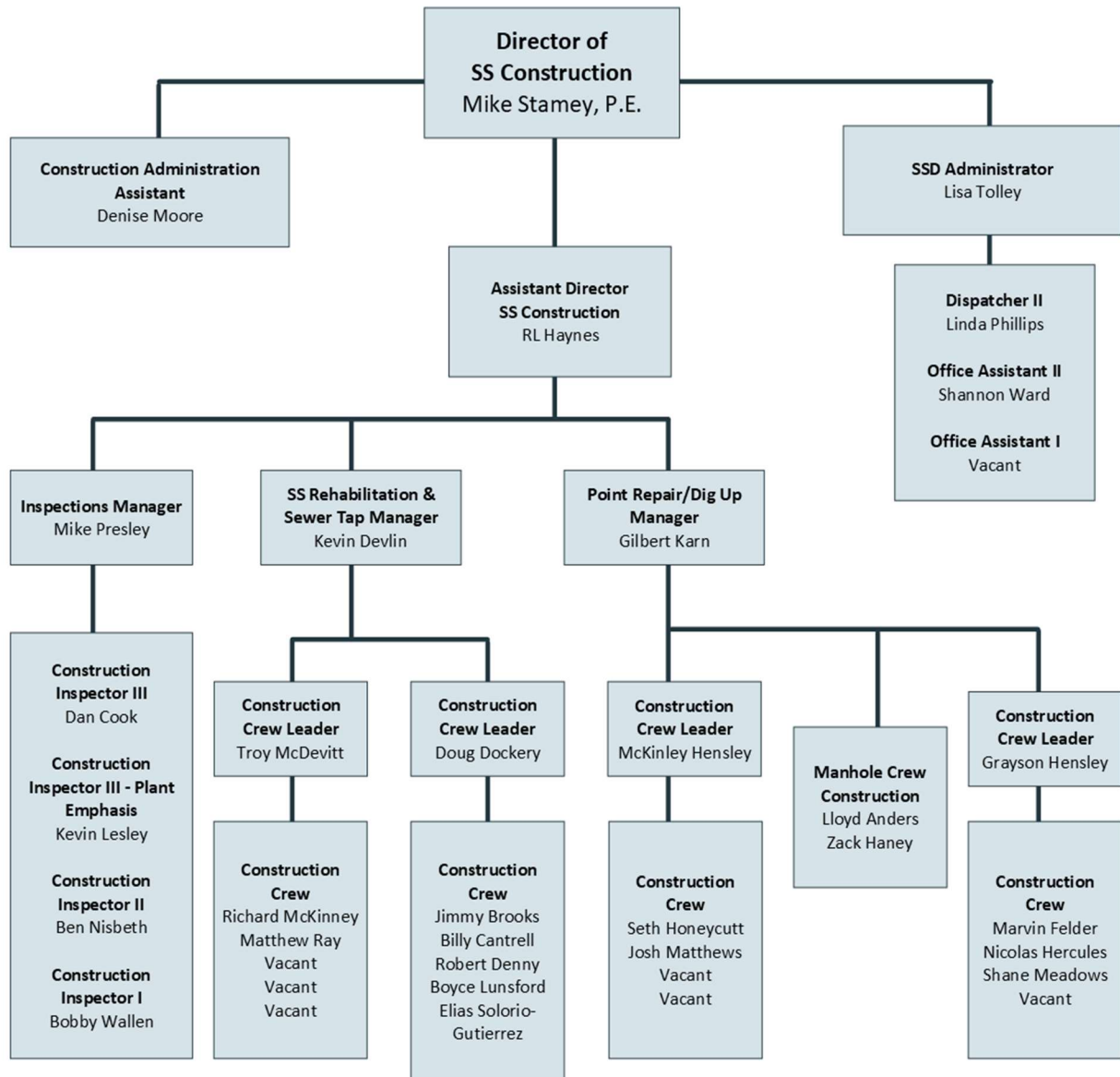
| Task | FY19-20 | FY20-21 | FY21-22 (est.) |
|--|-----------|-----------|-------------------|
| 1. Customer Service Response calls during normal working hours | 1,193 | 1,428 | 1,285 |
| 2. Average Response Time | .45 | .48 | .48 |
| 3. Customer Service Request calls (after hours & holidays) | 785 | 835 | 790 |
| 4. Average Response Time (after hours & holidays) | .62 | .62 | .62 |
| 5. Lines Washed (lineal feet) | 905,778 | 891,700 | 780,000 |
| 6. Root Control chemical & rod (lineal feet) | 53,252 | 26,278 | 28,500 |
| 7. TV Report (lineal feet) | 195,746 | 271,237 | 259,750 |
| 8. Sanitary Sewer Overflow Totals | 19 | 11 | 28 |
| 9. Smoke Testing | 23,696 | 107,864 | 11,300 |
| 10. SL Rat Testing | 267,245 | 501,573 | 86,200 |
| 11. Hydro Electric Generated KWH | 6,778,339 | 9,547,000 | 7,125,000 |

FY2023 Budget – System Services - Maintenance

| No. | Name | ACTUAL 2018-2019 | ACTUAL 2019-2020 | ACTUAL 2020-2021 | ADOPTED 2021-2022 Budget | ESTIMATED Actual 6/30/2022 | Percent Expended To Total Budget | PROPOSED 2022-2023 Budget | Inc (Dec) Over Prior Year |
|---|--------------------------------|---------------------|---------------------|---------------------|--------------------------------|----------------------------------|---|---------------------------------|---------------------------------|
| Salaries & Wages | | | | | | | | | |
| 51100 | Salaries & Wages | \$ 2,423,224 | \$ 2,451,767 | \$ 2,400,595 | \$ 2,516,146 | \$ 2,516,146 | 100.00% | \$ 2,792,804 | 11.00% |
| 51150 | Overtime | 173,144 | 137,487 | 111,276 | 159,000 | 159,000 | 100.00% | 159,000 | 0.00% |
| Total Salaries & Wages | | 2,596,368 | 2,589,254 | 2,511,870 | 2,675,146 | 2,675,146 | 100.00% | 2,951,804 | 10.34% |
| Benefits | | | | | | | | | |
| 51200 | North Carolina Retirement | 202,496 | 239,219 | 261,643 | 304,967 | 304,967 | 100.00% | 358,350 | 17.50% |
| 51250 | Payroll Taxes | 190,525 | 189,746 | 185,237 | 204,648 | 204,648 | 100.00% | 225,813 | 10.34% |
| 51300 | Medical, Dental & Life | 689,273 | 724,353 | 766,360 | 816,173 | 816,173 | 100.00% | 869,225 | 6.50% |
| 51325 | Post Retirement Insurance | 97,016 | 88,086 | 87,507 | 87,507 | 87,507 | 100.00% | 87,507 | 0.00% |
| 51350 | Worker's Compensation | 86,433 | 84,974 | 84,416 | 84,416 | 84,416 | 100.00% | 84,416 | 0.00% |
| 51360 | State Unemployment Benefits | 977 | 1,211 | 665 | 10,068 | 10,068 | 100.00% | 10,068 | 0.00% |
| 51500 | 401-K/457 Plan | 106,935 | 107,386 | 104,118 | 125,809 | 125,809 | 100.00% | 134,214 | 6.68% |
| Total Benefits | | 1,373,655 | 1,434,975 | 1,489,946 | 1,633,588 | 1,633,588 | 100.00% | 1,769,593 | 8.33% |
| Total Salaries, Wages & Benefits | | 3,970,023 | 4,024,229 | 4,001,816 | 4,308,734 | 4,308,734 | 100.00% | 4,721,397 | 9.58% |
| Materials, Supplies & Services | | | | | | | | | |
| 52010 | Advertising | 2,498 | 3,332 | - | 4,500 | 4,500 | 100.00% | 4,500 | 0.00% |
| 52050 | Dues & Subscriptions | 6,878 | 5,302 | 5,107 | 7,100 | 7,100 | 100.00% | 7,100 | 0.00% |
| 52150 | Travel, Mtgs & Training | 38,178 | 41,189 | 20,894 | 56,150 | 53,150 | 94.66% | 55,300 | -1.51% |
| 52180 | Liability Insurance | 74,050 | 74,050 | 74,050 | 81,455 | 81,455 | 100.00% | 89,601 | 10.00% |
| 52210 | Communications | 50,350 | 52,937 | 42,433 | 67,000 | 67,000 | 100.00% | 67,000 | 0.00% |
| 52240 | Uniforms | 34,920 | 33,384 | 28,758 | 41,100 | 41,100 | 100.00% | 41,100 | 0.00% |
| 52250 | Office Supplies | 4,510 | 4,716 | 3,640 | 8,500 | 5,500 | 64.71% | 5,500 | -35.29% |
| 52260 | Special Dept Supplies | 3,619 | 863 | 1,215 | 2,250 | 1,750 | 77.78% | 1,750 | -22.22% |
| 52270 | Safety Equip/Supplies | 31,068 | 27,248 | 19,860 | 29,000 | 29,000 | 100.00% | 29,000 | 0.00% |
| 52280 | Maint Supp/Small Tools | 44,905 | 64,565 | 66,645 | 73,500 | 73,500 | 100.00% | 76,000 | 3.40% |
| 52290 | Chemical Supplies | - | - | - | - | - | - | - | - |
| 52300 | Line Cleaning Supplies | 47,141 | 53,835 | 49,449 | 53,000 | 53,000 | 100.00% | 53,000 | 0.00% |
| 52350 | Prof/Contractual Svcs | 67,945 | 77,236 | 86,163 | 130,140 | 130,140 | 100.00% | 130,400 | 0.20% |
| 52410 | Maint-Buildings & Grounds | 668 | 55,440 | 46,729 | 61,000 | 61,000 | 100.00% | 61,000 | 0.00% |
| 52420 | Maintenance-Equipment | 436,248 | 461,417 | 463,250 | 518,000 | 508,000 | 98.07% | 508,000 | -1.93% |
| 52430 | Landscape Restoration | 1,277 | 863 | 842 | 3,000 | 2,000 | 66.67% | 2,000 | -33.33% |
| 52440 | Pump Maintenance | 48,711 | 59,170 | 82,519 | 102,500 | 102,500 | 100.00% | 102,500 | 0.00% |
| 52450 | Equipment Rental | 2,805 | 4,242 | 1,683 | 7,500 | 7,500 | 100.00% | 9,500 | 26.67% |
| 52510 | Permits/Fees/Software Licenses | 24,253 | 16,950 | 34,958 | 26,300 | 26,300 | 100.00% | 26,300 | 0.00% |
| 52910 | Non-Capital Equipment | 3,750 | 6,311 | 3,760 | 13,820 | 13,820 | 100.00% | 13,820 | 0.00% |
| Total Materials, Supplies & Services | | 923,773 | 1,043,052 | 1,031,957 | 1,285,815 | 1,268,315 | 98.64% | 1,283,371 | -0.19% |
| Interfund Transfers | | | | | | | | | |
| 53040 | Fleet Replacement Charges | 247,935 | 247,935 | 247,935 | 295,042 | 295,042 | 100.00% | 295,042 | 0.00% |
| 53050 | WWTP Replacement Charges | 180,000 | 200,000 | 200,000 | 200,000 | 200,000 | 100.00% | 200,000 | 0.00% |
| 53070 | Pump Replacement Charges | 50,000 | 50,000 | 50,000 | 55,000 | 55,000 | 100.00% | 55,000 | 0.00% |
| Total Interfund Transfers | | 477,935 | 497,935 | 497,935 | 550,042 | 550,042 | 100.00% | 550,042 | 0.00% |
| Capital Outlay | | | | | | | | | |
| 54010 | Capital Equipment - New | 3,021 | 33,853 | 28,506 | 12,250 | 12,250 | 100.00% | 8,200 | -33.06% |
| 54030 | Capital Equip - Replacement | 15,322 | 23,019 | 19,802 | 28,650 | 28,650 | 100.00% | 18,550 | -35.25% |
| Total Capital Outlay | | 18,344 | 56,872 | 48,307 | 40,900 | 40,900 | 100.00% | 26,750 | -34.60% |
| Sub-Total O&M Fund | | \$ 5,390,075 | \$ 5,622,088 | \$ 5,580,015 | \$ 6,185,491 | \$ 6,167,991 | 99.72% | 6,581,560 | 6.40% |
| Net Operation & Maintenance Fund | | \$ 5,390,075 | \$ 5,622,088 | \$ 5,580,015 | \$ 6,185,491 | \$ 6,167,991 | 99.72% | \$ 6,581,560 | 6.40% |

System Services - Construction

Organizational Chart



System Services - Construction (continued)

Mission Statement

The mission statement of the System Services Construction Division is to undertake construction and repair activities in the MSD Sewer System as “Good Stewards of the Environment,” to provide construction related support to other departments of the District and to demonstrate the highest level of customer service and professionalism in all internal and external interactions.

Key Responsibilities

Include timely, quality, and cost effective connections, repairs, and rehabilitation to the MSD Sewer System while protecting the waters of the state and the environment of Buncombe County and the District; working closely with the MSD System Services Maintenance Division in maintaining a properly operating collection system; providing guidance to local contractors, developers, and other construction personnel installing sewer lines, and being exceptional public servants in all activities and interactions with others.

Staffing History

| Division & Position | Approved Positions FY20-21 | Approved Positions FY21-22 | Budgeted Positions FY22-23 |
|--|-------------------------------|-------------------------------|-------------------------------|
| Department of System Services - Construction | | | |
| <i>Management:</i> | | | |
| Director of Construction | 1 | 1 | 1 |
| Total Management | 1 | 1 | 1 |
| <i>Construction Administration:</i> | | | |
| Administrative Assistant – Construction | 1 | 1 | 1 |
| Construction Inspector I | 1 | 1 | 1 |
| Construction Inspector II | 0 | 0 | 1 |
| Construction Inspector III | 2 | 2 | 2 |
| System Services Rehabilitation Manager | 1 | 1 | 1 |
| Inspections Manager | 1 | 1 | 1 |
| Total Construction Administration | 6 | 6 | 7 |

System Services - Construction (continued)

Staffing History (continued)

| Division & Position | Approved Positions FY20-21 | Approved Positions FY21-22 | Budgeted Positions FY22-23 |
|--|-------------------------------|-------------------------------|-------------------------------|
| <i>Construction:</i> | | | |
| Construction Operator I | 1 | 1 | 7 |
| Construction Operator II | 6 | 6 | 4 |
| Construction Operator III | 4 | 4 | 0 |
| Construction Operator IV | 1 | 1 | 2 |
| Construction Operator V | 1 | 1 | 1 |
| Construction Operator VI | 1 | 1 | 0 |
| Construction Crew Leader | 4 | 4 | 4 |
| Point Repair/Dig Up Manager | 1 | 1 | 1 |
| Sewer Tap Manager | 1 | 1 | 0 |
| Heavy Equipment Excavator I | 2 | 1 | 2 |
| Heavy Equipment Excavator II | 3 | 3 | 1 |
| Heavy Equipment Excavator III | 1 | 2 | 3 |
| Assistant Director of System Services Construction | 1 | 1 | 1 |
| Total Construction | 27 | 27 | 26 |
| | | | |
| Total – SS Construction Department | 34 | 34 | 34 |

Accomplishments for FY 2021-2022

- Completed over 880 work order requests during the year. Through these work orders, approximately 12,000 LF of sewer rehabilitation, 410 point repairs, and 310 sewer taps were undertaken.
- Coordinated (5) joint venture projects with the other agencies to facilitate overall cost savings and/or other benefits for both agencies
- Performed (2) emergency river crossing pipe replacements, in a timely manner, to repair storm related damage to the collection system.
- Coordinated needed sewer rehabilitation project on the campus of Oakley Elementary School during 2022 Spring Break to minimize impact on normal school functions and traffic at their entrance drive.
- Utilizing Trenchless Technologies for approximately 1,150 LF to maintain existing asphalt/concrete surfaces.

System Services - Construction (continued)

Accomplishments for FY 2021-2022 (continued)

- Continued annual paving contract with the City of Asheville Street Department to expedite economical, efficient repairs and restoration to City streets affected by MSD construction and repair work
- Continued participation in the City of Asheville joint task force for Infrastructure Committee. This committee plans and coordinates projects to facilitate cost savings for multiple utility departments. These efforts contributed to several joint venture activities throughout the year between MSD and various City departments.
- The Construction Administration group provided inspection services for five (5) Collection System CIP projects, six (6) Water Reclamation Facility related projects, sixty-three (63) Planning and Development related sewer extensions, and nineteen (19) contractor installed sewer taps.
- 12 System Service Construction employees participated in the NCDOT Work Zone Supervisor Certification Training, and 7 employees participated in the NCDOT Work Zone Installer Certification Training.
- Utilized recycled asphalt and concrete materials for select backfill on current sewer rehabilitation projects

Budget Highlights/Changes for FY 2022-2023

- ▲ Purchase twelve 4' x 8' mats to help minimize surface damage from large excavating equipment.
- ▲ Purchase of a 16-foot over deck trailer to assist with efficient transport of needed safety equipment and other items to job sites.
- ▲ Hiring of concrete crushing company to recycle approximately 5,600 tons (3,600 CY) of excavated concrete and asphalt materials. (These materials will be reused in future MSD in-house construction projects.)

System Services - Construction (continued)

Goals & Objectives

- ⊙ Goal: Operate collection system in compliance with all provisions of State Permit (Goal #1)
 - ↪ *Objective:* Clear a minimum of 20,000 LF of sewer line easement each year.
 - ↪ *Objective:* Rehabilitate 16,000 LF of sewer line with in-house staff utilizing dig-and-replace, IRS, and other trenchless technology rehabilitation methods.
 - ↪ *Objective:* Provide inspection services to ensure new sewer extensions and sewer rehabilitation projects meet standards and permit requirements.
- ⊙ Goal: Promote a "Safety First" work environment (Goal #1).
 - ↪ *Objective:* Continue working closely with the MSD Safety Division to ensure safety policies and procedures are followed.
 - ↪ *Objective:* Provide safety training classes to advance employee safety knowledge on the various equipment used and activities undertaken within our construction division.
 - ↪ *Objective:* Provide equipment and resources needed to promote a safe work environment.
- ⊙ Goal: Maintain a qualified and motivated work force (Goal #1-4).
 - ↪ *Objective:* Continue cross training schedule for employees.
 - ↪ *Objective:* Continue step training and promotion programs for operator and excavator employees.
 - ↪ *Objective:* Provide opportunities for additional trainings that promote increased knowledge and abilities for all construction staff including Collection System Operator Certifications.
- ⊙ Goal: Work with City of Asheville Street, Storm Water, and Water Departments as well as other agencies where possible on strategic planning and joint projects (Goal #3-4).
 - ↪ *Objective:* Participate in bi-quarterly City of Asheville Infrastructure Task Force meetings.
 - ↪ *Objective:* Participate in monthly NC811 Buncombe County Utility Coordinating Committee meetings.
 - ↪ *Objective:* Work with field representatives for municipalities and other utility agencies to promote joint efforts and improve project efficiency at time of construction.
 - ↪ *Objective:* Remove service lines from water meter boxes.
 - ↪ *Objective:* Establish specific joint ventures for pavement overlays and other beneficial activities.

System Services - Construction (continued)

Goals & Objectives (continued)

- ⦿ Goal: Explore various cost savings options for the division (Goal #3).
 - ↪ *Objective:* Continue exploring and developing pipe-bursting, boring, and other trenchless technology options.
 - ↪ *Objective:* Facilitate cost savings through the recycling and reuse of excavated concrete and asphalt materials.
 - ↪ *Objective:* Perform constructability reviews during project design to promote cost savings during construction.
 - ↪ *Objective:* Competitively bid asphalt/concrete restoration work on in-house sewer rehabilitation CIP projects.

Performance Measures

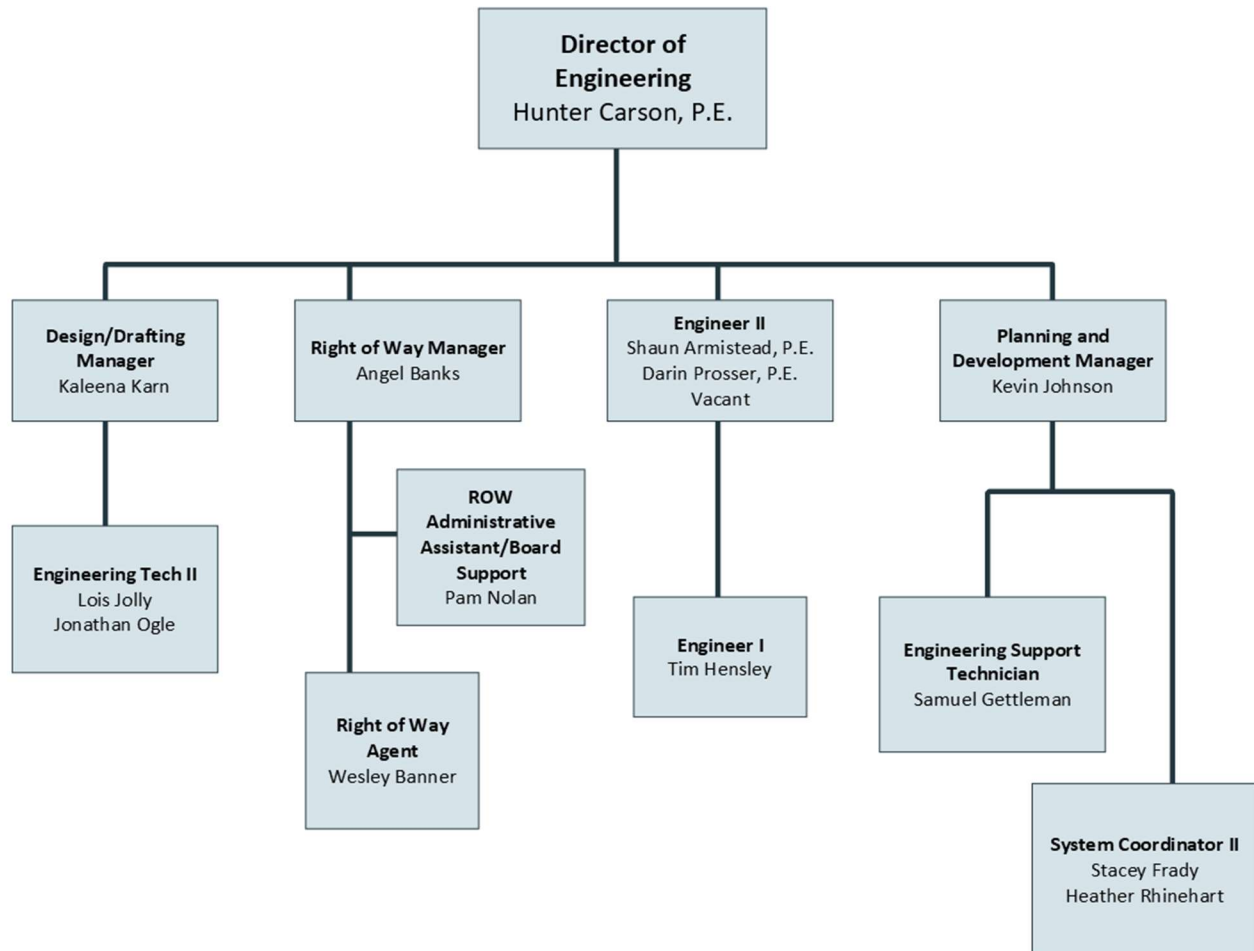
| Task | FY19-20 | FY20-21 | FY21-22 (est.) |
|--|---------|---------|-------------------|
| 1. Construction Repairs | 403 | 467 | 410 |
| 2. Taps Installed | 294 | 285 | 310 |
| 3. Manhole Repairs | 217 | 183 | 165 |
| 4. Right-of-Way Clearing (lineal feet) | 49,991 | 80,110 | 98,320 |
| 5. Other Trenchless Line Rehabilitation (lineal feet) | 649 | 244 | 680 |
| 6. Dig & Replace Rehabilitation (lineal feet) | 7,013 | 12,859 | 7,850 |
| 7. IRS (lineal feet) | 0 | 0 | 200 |
| 8. Construction Rehabilitation (lineal feet) | 2,847 | 3,644 | 3,540 |
| 9. Pipe Bursting Main Line (lineal feet) | 100 | 75 | 0 |
| 10. Boring Main Line (lineal feet) | 1,623 | 260 | 270 |
| 11. Total Construction Rehabilitation Footage (lineal feet) (Items 6, 7, 8, 9, 10) | 11,583 | 16,838 | 11,860 |
| 12. Sewer Rehabilitation Inspected on CIP Projects (lineal feet) | 13,698 | 16,859 | 10,835 |
| 13. Sewer Extensions Inspected from Development Projects (linear feet) | 23,699 | 62,494 | 17,300 |

FY2023 Budget – System Services - Construction

| No. | Name | ACTUAL 2018-2019 | ACTUAL 2019-2020 | ACTUAL 2020-2021 | ADOPTED 2021-2022 Budget | ESTIMATED Actual 6/30/2022 | Percent Expended To Total Budget | PROPOSED 2022-2023 Budget | Inc (Dec) Over Prior Year |
|---|-------------------------------------|---------------------|---------------------|---------------------|--------------------------------|----------------------------------|---|---------------------------------|---------------------------------|
| Salaries & Wages | | | | | | | | | |
| 51100 | Salaries & Wages | \$ 1,740,125 | \$ 1,808,940 | \$ 1,791,990 | \$ 1,868,139 | \$ 1,868,139 | 100.00% | \$ 2,023,636 | 8.32% |
| 51150 | Overtime | 59,615 | 48,404 | 30,983 | 73,000 | 73,000 | 100.00% | 73,000 | 0.00% |
| Total Salaries & Wages | | 1,799,740 | 1,857,344 | 1,822,973 | 1,941,139 | 1,941,139 | 100.00% | 2,096,636 | 8.01% |
| Benefits | | | | | | | | | |
| 51200 | North Carolina Retirement | 142,772 | 171,457 | 189,900 | 221,290 | 221,290 | 100.00% | 254,532 | 15.02% |
| 51250 | Payroll Taxes | 132,068 | 136,312 | 135,185 | 148,497 | 148,497 | 100.00% | 160,392 | 8.01% |
| 51300 | Medical, Dental & Life | 527,952 | 554,825 | 586,999 | 625,155 | 625,155 | 100.00% | 665,791 | 6.50% |
| 51325 | Post Retirement Insurance | 74,310 | 67,470 | 67,027 | 67,027 | 67,027 | 100.00% | 67,027 | 0.00% |
| 51350 | Worker's Compensation | 65,959 | 65,087 | 64,657 | 64,657 | 64,657 | 100.00% | 64,657 | 0.00% |
| 51360 | State Unemployment Benefits | 800 | - | 509 | 7,711 | 7,711 | 100.00% | 7,711 | 0.00% |
| 51500 | 401-K/457 Plan | 79,663 | 80,932 | 78,893 | 93,409 | 93,409 | 100.00% | 101,183 | 8.32% |
| Total Benefits | | 1,023,523 | 1,076,083 | 1,123,170 | 1,227,746 | 1,227,746 | 100.00% | 1,321,293 | 7.62% |
| Total Salaries, Wages & Benefits | | 2,823,264 | 2,933,427 | 2,946,143 | 3,168,885 | 3,168,885 | 100.00% | 3,417,929 | 7.86% |
| Materials, Supplies & Services | | | | | | | | | |
| 52010 | Advertising | - | 4 | - | 500 | 500 | 100.00% | 500 | 0.00% |
| 52050 | Dues & Subscriptions | 3,199 | 3,386 | 3,753 | 5,000 | 5,000 | 100.00% | 5,000 | 0.00% |
| 52150 | Travel, Mtgs & Training | 19,839 | 17,958 | 12,047 | 28,500 | 28,100 | 98.60% | 29,000 | 1.75% |
| 52180 | Liability Insurance | 88,006 | 88,006 | 88,006 | 96,807 | 96,807 | 100.00% | 106,488 | 10.00% |
| 52210 | Communications | 22,360 | 18,867 | 18,987 | 23,600 | 23,600 | 100.00% | 24,000 | 1.69% |
| 52240 | Uniforms | 23,362 | 20,676 | 20,673 | 25,200 | 25,200 | 100.00% | 25,200 | 0.00% |
| 52250 | Office Supplies | 974 | 1,237 | 566 | 2,900 | 2,900 | 100.00% | 2,900 | 0.00% |
| 52260 | Special Dept Supplies | 895 | 562 | 295 | 1,000 | 1,000 | 100.00% | 1,000 | 0.00% |
| 52270 | Safety Equip/Supplies | 23,181 | 20,280 | 12,859 | 23,450 | 23,450 | 100.00% | 23,450 | 0.00% |
| 52280 | Maint Supp/Small Tools | 50,560 | 45,023 | 49,787 | 56,100 | 56,100 | 100.00% | 56,100 | 0.00% |
| 52300 | Line Cleaning Supplies | 344 | 130 | 226 | 750 | 750 | 100.00% | 750 | 0.00% |
| 52350 | Prof/Contractual Svcs | 2,816 | 8,770 | 1,120 | 13,000 | 13,000 | 100.00% | 13,000 | 0.00% |
| 52420 | Maintenance-Equipment | 78 | 302 | 551 | 1,499 | 1,499 | 100.00% | 1,500 | 0.07% |
| 52430 | Landscape Restoration | 11,062 | 7,934 | 7,660 | 11,701 | 11,701 | 100.00% | 11,701 | 0.00% |
| 52450 | Equipment Rental | 6,940 | 2,962 | 14,950 | 19,000 | 19,000 | 100.00% | 19,000 | 0.00% |
| 52510 | Permits/Fees/Software Licenses | 19,196 | 14,474 | 28,236 | 25,600 | 25,600 | 100.00% | 25,600 | 0.00% |
| 52910 | Non-Capital Equipment | 8,792 | 7,532 | 8,287 | 12,995 | 12,995 | 100.00% | 12,875 | -0.92% |
| Total Materials, Supplies & Services | | 281,604 | 258,104 | 268,003 | 347,602 | 347,202 | 99.88% | 358,064 | 3.01% |
| Interfund Transfers | | | | | | | | | |
| 52340 | Debt Administration Expenses | 175,765 | 163,685 | 132,255 | 155,400 | 155,400 | 100.00% | 148,373 | -4.52% |
| 53040 | Fleet Replacement Charges | 206,836 | 206,836 | 206,836 | 246,135 | 246,135 | 100.00% | 246,135 | 0.00% |
| Total Interfund Transfers | | 382,601 | 370,521 | 339,091 | 401,535 | 401,535 | 100.00% | 394,508 | -1.75% |
| Capital Outlay | | | | | | | | | |
| 54010 | Capital Equipment - New | 10,700 | 11,418 | 10,755 | 3,350 | 3,350 | 100.00% | 6,540 | 95.22% |
| 54030 | Capital Equip - Replacement | 13,731 | 23,993 | 24,508 | 23,925 | 23,925 | 100.00% | 22,045 | -7.86% |
| Total Capital Outlay | | 24,430 | 35,411 | 35,264 | 27,275 | 27,275 | 100.00% | 28,585 | 4.80% |
| Sub-Total O&M Fund | | \$ 3,511,899 | \$ 3,597,462 | \$ 3,588,501 | \$ 3,945,297 | \$ 3,944,897 | 99.99% | \$ 4,199,086 | 6.43% |
| 59200 LESS: | | | | | | | | | |
| | Chargebacks to General Fund for CIP | (747,014) | (770,296) | (744,979) | (846,885) | (846,885) | 100.00% | (940,516) | 11.06% |
| | Chargebacks to General Fund for SSD | (1,729,039) | (1,766,213) | (1,782,378) | (1,893,758) | (1,893,516) | 99.99% | (1,996,798) | 5.44% |
| Net Operation & Maintenance Fund | | \$ 1,035,846 | \$ 1,060,953 | \$ 1,061,145 | \$ 1,204,654 | \$ 1,204,496 | 99.99% | \$ 1,261,772 | 4.74% |

Engineering

Organizational Chart



Engineering (continued)

Mission Statement

The mission of the Engineering Division is to produce, manage, and complete engineering projects for the planning, repair, and rehabilitation of the District's Collection System and Water Reclamation Facility (WRF), and to ensure that new extensions to the Collection System are designed and constructed to District Standards. This shall be undertaken in the most efficient and effective manner necessary to ensure the reliable delivery and treatment of wastewater at an equitable price and in an environmentally sensitive manner.

Key Responsibilities

Prepare a complete budget and schedule for all Capital Improvement Projects each fiscal year and adhere to it. For all capital projects: Produce quality, timely, and cost-effective engineering designs, plans, and specifications; acquire necessary rights-of-way; and administer construction through each project's completion. Prepare CIP cash flows quarterly to be submitted to the Finance Director for accurate cash flow management. Procure, manage, and direct design work performed by various consulting engineers, as needed. Provide various special studies and analyses, including master planning of the collection system and treatment facilities, evaluation of projected flow allocations, plan review, and quality control of developer-constructed extensions; perform specialized related duties; and serve as a technical resource for the District.

Staffing History

| Division & Position | Approved Positions FY20-21 | Approved Positions FY21-22 | Budgeted Positions FY22-23 |
|-----------------------------------|-------------------------------|-------------------------------|-------------------------------|
| Department of Engineering | | | |
| Management: | | | |
| Director of Engineering | 1 | 1 | 1 |
| Total Management | 1 | 1 | 1 |
| Engineers: | | | |
| Engineer I | 2 | 1 | 1 |
| Engineer II | 1 | 2 | 3 |
| Assistant Director of Engineering | 1 | 1 | 0 |
| Total Engineers | 4 | 4 | 4 |

Engineering (continued)**Staffing History** (continued)

| Division & Position | Approved Positions FY20-21 | Approved Positions FY21-22 | Budgeted Positions FY22-23 |
|---|----------------------------------|----------------------------------|----------------------------------|
| Department of Engineering | | | |
| Design and Drafting: | | | |
| Engineering Technician II | 2 | 2 | 1 |
| Engineering Technician III | 0 | 0 | 1 |
| Design & Drafting Manager | 1 | 1 | 1 |
| Total Design and Drafting | 3 | 3 | 3 |
| | | | |
| Right of Way: | | | |
| Administrative Assistant – Right of Way | 1 | 1 | 1 |
| Right of Way Agent | 1 | 1 | 1 |
| Right of Way Manager | 1 | 1 | 1 |
| Total Right of Way | 3 | 3 | 3 |
| | | | |
| Planning & Development: | | | |
| Systems Coordinator II | 2 | 2 | 2 |
| Engineering Support Technician | 0 | 0 | 1 |
| Assistant Manager of Planning & Development | 1 | 1 | 0 |
| Planning & Development Manager | 1 | 1 | 1 |
| Total Planning and Development | 4 | 4 | 4 |
| | | | |
| Total – Department of Engineering | 15 | 15 | 15 |

Engineering (continued)

Accomplishments for FY 2021-2022 (continued)

- 34,932 Linear Feet (LF) of collection system were rehabilitated during FY2022. This included 18,094 LF rehabilitated through contract construction and development projects, plus 16,838 LF rehabilitated in-house by System Services.
- Managed over 83 projects and line items within the CIP. Projects are within the various stages of lifecycles - from preliminary design, to active construction, to complete/closeout.
- Designed 20 in-house projects for System Services. These are designed and then constructed by in-house forces. (Estimated as of May 2022.)
- Processed over 1,123 applications and reviewed 63 plans for new connections and extensions to the collection system. (Estimated as of May 2022.)
- Acquired Rights-of-Way across 59 properties. (Estimated as of May 2022.)
- Purchase of assemblage parcel for Weaverville PS #2.
- Continued to manage the construction phase of the Plant High-Rate Primary Treatment Project. This \$17.1 million project is the mid-term recommendation of the Plant Facility Plan and will provide much needed primary treatment for the plant. Construction of this project is expected to be complete July 2022.
- Continued the design phase for the replacement of the Carrier Bridge Pump Station (construction scheduled to begin FY2023-2024).
- Completed design and began construction of the Equipment Storage Facility at the WRF. This facility will replace the old Nutri-Lime Building that burned in November 2020.
- Completed restoration of the incinerator ash lagoon by clearing vegetation and regaining storage volume.
- Began the design phase for the replacement of the Weaverville Pump Station system.
- Purchased a replacement polymer system for the WRF sludge incinerator. This system will be installed by in-house staff early in FY2023.
- Began construction of the RBC slide gate replacement project at the WRF.
- Continued to emphasize the use of MSD's online sewer application/plan review process. During the COVID-19 pandemic and shutdown, this system has played an important role to help maintain the sewer application process for new development.

Engineering (continued)

Budget Highlights/Changes for FY 2022-2023

- ▲ Begin construction of the Christian Creek Interceptor, which is over 12,000LF and will span two fiscal years.
- ▲ Begin and complete construction of the French Broad Interceptor @ Amboy Road project. This relatively short 1,100LF project will replace a section of large diameter critical interceptor along the French Broad River
- ▲ Complete the design for the replacement of the Carrier Bridge Pump Station, to be ready for construction in FY2023-2024.
- ▲ Continue the design phase for the Weaverville Pump Station replacement project and begin ROW acquisition.
- ▲ Complete construction of the Equipment Storage Facility.

Goals & Objectives

- ⦿ Goal: Rehabilitate approximately 40,000 feet of the collection system each year, in close collaboration with System Services Construction Division. (MSD Objective #1)
- ⦿ Goal: Verify adequate capacity of lines prior to authorizing construction of new lines or connection of any new facility, and ensure that all developer-constructed projects conform to MSD requirements (MSD Goal #1)
- ⦿ Goal: Begin construction of the Christian Creek Interceptor project.
- ⦿ Goal: Complete the construction phase of the Equipment Storage Facility project.
- ⦿ Goal: Begin and complete construction of the French Broad Interceptor at Amboy Rd. project. Maintain excellent lines of communication and emphasize coordination between MSD, the City of Asheville, and the Contractor in this highly-utilized area.
- ⦿ Goal: Meet the time and budget predictions established in the CIP for FY2023. (MSD Goal #3)
- ⦿ Goal: Utilize consulting engineers for unexpected rehabilitation projects, or those requiring specialized expertise, as necessary to produce a timely response for other Divisions' engineering requests. (MSD Goal #2)
- ⦿ Goal: Coordinate projects with member agencies whenever possible. This is accomplished by sharing information on upcoming projects.
- ⦿ Goal: Prepare special studies and designs as necessary for other Divisions. (MSD Goal #2)

Engineering (continued)

Goals & Objectives (continued)

- ⊙ Goal: Safeguard the structural integrity and accessibility of MSD sewer lines against damage from grading activities by other jurisdictions and private parties (MSD Objective #4)
- ⊙ Goal: Obtain feedback from developers and engineers concerning the District's regulations and process for sewer lines to be accepted for public use. (MSD Objective #5)
- ⊙ Goal: Reduce use of paper when possible and minimize file space needs.

Performance Measures

| Task | FY19-20 | FY20-21 | FY21-22 (est. May '22) |
|--|-------------|-------------|------------------------|
| 1. Linear footage rehabilitated | 30,041 | 34,932 | 22,627 |
| 2. CIP expenditures | \$23.8M | \$18.5M | \$19.0M |
| 3. CIP projections vs. actual expenditures (*) | 80% | 66% | 62% |
| 4. Allocations | 168 | 203 | 199 |
| 5. Sewer Tap Applications | 1,004 | 1,167 | 1,123 |
| 6. Plans Reviewed | 69 | 62 | 63 |
| 7. Value of accepted systems | \$4,609,894 | \$7,929,986 | \$2,700,000 |

(*) Percentages include Contingency and Developer Reimbursements.

FY2023 Budget – Engineering

| No. | Name | ACTUAL 2018-2019 | ACTUAL 2019-2020 | ACTUAL 2020-2021 | ADOPTED 2021-2022 Budget | ESTIMATED Actual 6/30/2022 | Percent Expended To Total Budget | PROPOSED 2022-2023 Budget | Inc (Dec) Over Prior Year |
|---|-------------------------------------|---------------------|---------------------|---------------------|--------------------------------|----------------------------------|---|---------------------------------|---------------------------------|
| Salaries & Wages | | | | | | | | | |
| 51100 | Salaries & Wages | \$ 1,107,994 | \$ 1,145,174 | \$ 1,122,914 | \$ 1,156,600 | \$ 1,156,600 | 100.00% | \$ 1,229,877 | 6.34% |
| 51150 | Overtime | 1,004 | - | - | 2,000 | 2,000 | 100.00% | 2,000 | 0.00% |
| Total Salaries & Wages | | 1,108,998 | 1,145,174 | 1,122,914 | 1,158,600 | 1,158,600 | 100.00% | 1,231,877 | 6.32% |
| Benefits | | | | | | | | | |
| 51200 | North Carolina Retirement | 87,135 | 105,771 | 117,118 | 132,081 | 132,081 | 100.00% | 149,551 | 13.23% |
| 51250 | Payroll Taxes | 81,637 | 84,460 | 83,417 | 88,633 | 88,633 | 100.00% | 94,239 | 6.32% |
| 51300 | Medical, Dental & Life | 219,981 | 231,175 | 244,583 | 260,481 | 260,481 | 100.00% | 277,412 | 6.50% |
| 51325 | Post Retirement Insurance | 30,962 | 28,113 | 27,928 | 27,928 | 27,928 | 100.00% | 27,928 | 0.00% |
| 51350 | Worker's Compensation | 27,484 | 27,119 | 26,941 | 26,941 | 26,941 | 100.00% | 26,941 | 0.00% |
| 51360 | State Unemployment Benefits | 333 | - | 212 | 3,214 | 3,214 | 100.00% | 3,214 | 0.00% |
| 51500 | 401-K/457 Plan | 49,387 | 52,374 | 52,974 | 57,831 | 57,831 | 100.00% | 61,496 | 6.34% |
| Total Benefits | | 496,919 | 529,012 | 553,173 | 597,109 | 597,109 | 100.00% | 640,781 | 7.31% |
| Total Salaries, Wages & Benefits | | 1,605,917 | 1,674,185 | 1,676,087 | 1,755,709 | 1,755,709 | 100.00% | 1,872,658 | 6.66% |
| Materials, Supplies & Services | | | | | | | | | |
| 52050 | Dues & Subscriptions | 4,573 | 5,072 | 4,923 | 5,700 | 4,850 | 85.09% | 6,615 | 16.05% |
| 52150 | Travel, Mtgs & Training | 7,820 | 13,981 | 7,520 | 31,200 | 21,500 | 68.91% | 21,060 | -32.50% |
| 52180 | Liability Insurance | 34,741 | 34,741 | 34,741 | 38,215 | 38,215 | 100.00% | 42,037 | 10.00% |
| 52210 | Communications | 3,722 | 4,739 | 4,499 | 4,700 | 4,300 | 91.49% | 5,400 | 14.89% |
| 52240 | Uniforms | 1,318 | 1,071 | 1,879 | 2,450 | 2,010 | 82.04% | 3,745 | 52.86% |
| 52250 | Office Supplies | 2,154 | 1,674 | 2,489 | 4,000 | 2,650 | 66.25% | 4,000 | 0.00% |
| 52260 | Special Dept Supplies | 2,256 | 453 | 3,678 | 4,200 | 150 | 3.57% | 2,200 | -47.62% |
| 52270 | Safety Equip/Supplies | 107 | 59 | 40 | 250 | 50 | 20.00% | 250 | 0.00% |
| 52330 | Legal Fees | 722 | 940 | 430 | 2,000 | 700 | 35.00% | 2,000 | 0.00% |
| 52350 | Prof/Contractual Svcs | 6,912 | 8,462 | 14,021 | 12,500 | 5,750 | 46.00% | 12,500 | 0.00% |
| 52420 | Maintenance-Equipment | - | - | - | 500 | - | 0.00% | - | -100.00% |
| 52500 | Rents/Leases | 800 | 800 | 800 | 1,900 | 800 | 42.11% | 1,000 | -47.37% |
| 52910 | Non-Capital Equipment | - | 2,142 | - | - | - | - | 9,900 | - |
| Total Materials, Supplies & Services | | 65,125 | 74,134 | 75,021 | 107,615 | 80,975 | 75.25% | 110,707 | 2.87% |
| Capital Outlay | | | | | | | | | |
| 54010 | Capital Equipment - New | - | - | - | - | - | - | - | - |
| Total Capital Outlay | | - | - | - | - | - | - | - | - |
| Sub-Total O&M Fund | | 1,671,042 | 1,748,319 | 1,751,109 | 1,863,324 | 1,836,684 | 98.57% | 1,983,365 | 6.44% |
| 59200 | LESS: | | | | | | | | |
| | Chargebacks to General Fund for CIP | (1,512,304) | (1,579,981) | (1,588,404) | (1,715,212) | (1,690,372) | 98.55% | (1,804,694) | 5.22% |
| Net Operation & Maintenance Fund | | \$ 158,738 | \$ 168,339 | \$ 162,705 | \$ 148,112 | \$ 146,312 | 98.78% | \$ 178,671 | 20.63% |

Insurance Funds

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Insurance Funds

Overview

The Insurance Funds are funded through annual appropriations from the Operations and Maintenance Fund Budget. The District has established four (4) Insurance Funds as part of its sewer rate stabilization strategy. Background information and current year budget highlights of the insurance funds are discussed on the following pages.

Insurance Funds (continued)

Self-funded Employee Medical Program

The District offers medical, dental, and life insurance to all employees. Employees may purchase optional dependent coverage through payroll deduction. These benefits are funded by a combination of District contributions as well as commercial insurance premiums.

The District has established a self-insured group health and dental insurance program, with premiums paid to commercial carriers for stop-loss and aggregate coverage to limit the amount of risk the District will assume. A third-party administrator processes all claims, and a commercial healthcare provider network is retained to negotiate fees and authorize payments. Prescription benefits are administered through a private contractor.

Employees pay a nominal amount for individual medical and dental coverage and pay approximately 30% to 36% of the cost for dependent coverage. After employee payment of specified deductibles and co-payments for medical and dental services, the Plan covers the remaining authorized charges in total. The budget for FY2023 includes an employer contribution increase of 6.5% to cover anticipated expenditures needs.

Insurance Funds (continued)**Self-funded Employee Medical Program** (continued)*FY2023 Self-funded Employee Medical Program Budget*

| | Actual 2020-2021 | Estimated Actual 2021-2022 | Budget 2022-2023 |
|-------------------------------------|---------------------|----------------------------------|---------------------|
| Beginning Balance | \$ 1,889,312 | \$ 2,307,417 | \$ 2,467,756 |
| | | | |
| Income: | | | |
| District Contributions | 2,478,441 | 2,639,540 | 2,811,110 |
| Employee Contributions | 355,075 | 346,281 | 356,669 |
| Transfer from Other Insurance Funds | 150,000 | 150,000 | 150,000 |
| | | | |
| Interest | 315 | 150 | 15,000 |
| Total Income | 2,983,831 | 3,135,971 | 3,332,779 |
| | | | |
| Total Funds Available | 4,873,143 | 5,443,389 | 5,800,535 |
| | | | |
| Expenses: | | | |
| Expected Claim Liability | 2,187,739 | 2,545,633 | 2,672,915 |
| Fixed Costs | 377,987 | 430,000 | 430,000 |
| Total Expenses | 2,265,726 | 2,975,633 | 3,102,915 |
| | | | |
| Ending Balance | \$ 2,307,417 | \$ 2,467,756 | \$ 2,697,620 |

Insurance Funds (continued)

Post-Employment Insurance

The District has established a post-employment insurance fund to accumulate funds now, which will reduce future operational expenditures when retirees begin taking advantage of this benefit. The District will annually fund the equivalent of the annual required contribution less expenses as determined by an actuarial study as required by GASB 75. The accumulated funds will only be used for post-employment insurance. However, the District's Board does reserve the right to use the reserve funds for unforeseen emergencies. FY2023 funding of \$283,000 represents a 1.4% of total operations. As of July 2021, the District has eighteen (18) eligible participants in the post-employment insurance plan.

FY2023 Post-Employment Insurance Budget

| | Actual 2020-2021 | Estimated Actual 2021-2022 | Budget 2022-2023 |
|-----------------------------------|---------------------|----------------------------------|---------------------|
| Beginning Balance | \$ (1,446,013) | \$ (1,633,447) | \$ (1,836,947) |
| Income | | | |
| District Contributions | 283,000 | 283,000 | 283,000 |
| Interfund Transfer In | - | - | - |
| Employee Contributions | 23,395 | 23,500 | 23,000 |
| Interest Income | 407 | 500 | 35,000 |
| Total Income | 306,802 | 306,500 | 341,000 |
| Total Funds Available | (1,139,211) | (1,326,947) | (1,495,947) |
| Expenses | | | |
| Interfund Transfer Out | - | - | - |
| OPEB Expense | 344,236 | 360,000 | - |
| Transfer to Other Insurance Funds | 150,000 | 150,000 | 150,000 |
| Total Expenses | 494,236 | 510,000 | 150,000 |
| Ending Balance | \$ (1,633,447) | \$ (1,836,947) | \$ (1,645,947) |

Insurance Funds (continued)

Worker's Compensation

The District established a separate insurance fund for worker's compensation, which will facilitate allocation of costs to respective department, division, and section budgets. The Safety Officer acts as liaison with the insurance carrier to administer claims and to minimize future claims by providing training and equipment designed to prevent injuries. The budget for FY2023 includes a 0.0% increase to cover anticipated expenditure needs.

FY2023 Worker's Compensation Financial Plan

| | Actual 2020-2021 | Estimated Actual 2021-2022 | Budget 2022-2023 |
|-----------------------------------|---------------------|----------------------------------|---------------------|
| Beginning Balance | \$ 423,847 | \$ 452,727 | \$ 520,144 |
| | | | |
| Income | | | |
| District Contributions | 273,000 | 273,000 | 273,000 |
| Interfund Transfer In | - | - | - |
| Interest Income | <u>400</u> | <u>100</u> | <u>5,000</u> |
| Total Income | 273,400 | 273,100 | 278,000 |
| | | | |
| Total Funds Available | 697,247 | 725,827 | 798,144 |
| | | | |
| Expenses | | | |
| Interfund Transfer Out | 100,000 | 100,000 | 120,000 |
| Deductibles for Individual Claims | 11,818 | 10,000 | 10,000 |
| Premiums to commercial carrier | <u>132,702</u> | <u>95,683</u> | <u>150,000</u> |
| Total Expenses | 244,520 | 205,683 | 280,000 |
| | | | |
| Ending Balance | <u>\$ 452,727</u> | <u>\$ 520,144</u> | <u>\$ 518,144</u> |

Insurance Funds (continued)

General Liability

The District's general liability insurance fund was established to ❶ allocate insurance costs to all departments, divisions, and sectional budgets, ❷ provide funds for payment of no-fault sewer back-ups and ❸ establish reserves to offset future unanticipated increases in sewer back-up liabilities in excess of budgeted amounts. The budget for FY2023 includes a 10.0% increase based on anticipated expenditure needs.

FY2023 General Liability Financial Plan

| | Actual 2020-2021 | Estimated Actual 2021-2022 | Budget 2022-2023 |
|--------------------------------|---------------------|----------------------------------|---------------------|
| Beginning Balance | \$ 478,641 | \$ 549,439 | \$ 603,871 |
| | | | |
| Income | | | |
| District Contributions | 547,746 | 602,521 | 662,775 |
| Interfund Transfer In | 100,000 | 100,000 | 120,000 |
| Interest Income | 255 | 100 | 6,000 |
| Total Income | 648,001 | 702,621 | 788,775 |
| | | | |
| Total Funds Available | 1,126,642 | 1,252,060 | 1,392,646 |
| | | | |
| Expenses | | | |
| Interfund Transfer Out | - | - | - |
| Premiums to commercial carrier | 476,554 | 531,910 | 575,000 |
| No Fault Sewer Back-Up Claims | 2,394 | 5,000 | 20,000 |
| Claim Deductibles | 87,071 | 100,000 | 100,000 |
| Flood Insurance | 11,184 | 11,279 | 11,300 |
| Total Expenses | 577,203 | 648,189 | 706,300 |
| | | | |
| Ending Balance | \$ 549,439 | \$ 603,871 | \$ 686,346 |

Replacement Funds

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Replacement & Equipment Funds

Overview

The replacement funds are funded through annual appropriations from the Operations and Maintenance Fund Budget. The District has established three (3) replacement and equipment funds as part of its sewer rate stabilization strategy, with fourth reserve fund required under the Bond Order. Background information and current year budget highlights of the replacement and equipment funds are discussed on the following pages.

Replacement & Equipment Funds (continued)

Fleet & Heavy Equipment Fund

The District has projected replacement dates and estimated prices for all vehicles and construction-type equipment over \$10,000. This information has been used to develop a funding plan whereby relatively constant amounts are to be transferred in from the annual Operations and Maintenance budget, with annual expenditures to be made in varying amounts to secure new vehicles and equipment as indicated in the plan's timetable. The FY2023 contribution is \$595,000, with anticipated expenditures of \$491,000, including (2) Ford Escapes, (1) 3/4-Ton Utility Pickup, (1) Utility Cab and Chassis, and (1) CCTV Van .

FY2023 Fleet & Heavy Equipment Fund Budget

| | Actual 2020-2021 | Projected 2021-2022 | Budget 2022-2023 |
|--------------------------------|---------------------|------------------------|---------------------|
| Beginning Balance: | \$ 727,475 | \$ 695,853 | \$ 826,053 |
| | | | |
| Revenue: | | | |
| District Contributions | 500,000 | 595,000 | 595,000 |
| Sale of Surplus Property | 171,157 | 400,000 | 49,100 |
| Interest Income | 1,054 | 200 | 12,391 |
| Total Revenue | 672,211 | 995,200 | 656,491 |
| | | | |
| Expenditures: | | | |
| Capital Expenditures | 703,833 | 865,000 | 491,000 |
| Transfer Out | 0 | 0 | 93,017 |
| Total Expenditure Replacements | 703,833 | 865,000 | 584,017 |
| | | | |
| Ending Balance: | \$ 695,853 | \$ 826,053 | \$ 898,527 |

Replacement & Equipment Funds (continued)

Wastewater Treatment Plant Replacement

The replacement fund for the wastewater treatment plant was set up to develop a reserve to address general equipment replacement cost at these facilities. A similar strategy of periodic, uniform contributions from the Operations and Maintenance Fund and withdrawals for planned equipment rehabilitation or replacement are employed. The FY2023 contribution is \$200,000 with anticipated expenditures of \$231,000 including General Rehab; General Rehab @ Incinerator Building, Raw Pumps and Intermediate Clarifiers; Dechlor Pumps; RBC Bearings; Belt Filter Press for Solids; AquaDisk 1-cell repl. Filters; Barscreen Rake rehab @ Hydro Building.

FY2023 Wastewater Treatment Plant Fund Budget

| | Actual 2020-2021 | Projected 2021-2022 | Budget 2022-2023 |
|--------------------------------|---------------------|------------------------|---------------------|
| Beginning Balance: | \$ 231,572 | \$ 132,654 | \$ 140,101 |
| Revenue: | | | |
| District Contributions | 200,000 | 200,000 | 200,000 |
| Sale of Salvage Materials | - | - | - |
| Interest Income | <u>195</u> | <u>56</u> | <u>2,102</u> |
| Total Revenue | 200,195 | 200,056 | 202,102 |
| Expenditures: | | | |
| Capital Expenditures | <u>299,113</u> | <u>192,609</u> | <u>231,000</u> |
| Total Expenditure Replacements | 299,113 | 192,609 | 231,000 |
| Ending Balance: | | | |
| | <u>\$ 132,654</u> | <u>\$ 140,101</u> | <u>\$ 111,203</u> |

Replacement & Equipment Funds (continued)

Pump Maintenance Replacement Fund

The replacement fund for the pump stations was set up to develop a reserve to address general equipment replacement cost at these facilities. A similar strategy of periodic, uniform contributions from the Operations and Maintenance Fund and withdrawals for planned equipment rehabilitation or replacement are employed. The FY2023 contribution is \$55,000 with anticipated expenditures of \$56,200, which includes rehab at the following pump stations: Biltmore Lake #2, Erwin Hills, Mud Creek, New Bern, and Waightstill Mountain.

FY2023 Pump Maintenance Replacement Fund Budget

| | Actual 2020-2021 | Projected 2021-2022 | Budget 2022-2023 |
|--------------------------------|---------------------|------------------------|---------------------|
| Beginning Balance: | \$ 185,382 | \$ 154,809 | \$ 107,742 |
| | | | |
| Revenue: | | | |
| District Contributions | 50,000 | 55,000 | 55,000 |
| Transfer In | - | - | - |
| Sale of Surplus Property | - | - | - |
| Interest Income | 927 | 774 | 1,616 |
| Total Revenue | 50,927 | 55,774 | 56,616 |
| | | | |
| Expenditures: | | | |
| Capital Expenditures | 65,000 | 50,000 | 56,200 |
| Transfer Out | 16,500 | 52,841 | - |
| Total Expenditure Replacements | 81,500 | 102,841 | 56,200 |
| | | | |
| Ending Balance: | \$ 154,809 | \$ 107,742 | \$ 108,158 |

Replacement & Equipment Funds (continued)

Capital Reserve Fund

This fund is mandated by the Bond Order to contain six percent (6%) or such greater percentage, as may be determined from time to time by the Board, of the amount shown by the Annual Budget to be necessary for current expenses for the current Fiscal Year. As this fund is to be tapped only for unusual and unforeseen expenditures, none is budgeted. There will be a \$93,017 transfer to the fund to meet the FY2023 requirements.

FY2023 Capital Reserve Fund

| | Actual 2020-2021 | Projected 2021-2022 | Budget 2022-2023 |
|--------------------|---------------------|------------------------|---------------------|
| Beginning Balance: | \$ 1,010,040 | \$ 1,026,733 | \$ 1,080,142 |
| | | | |
| Revenue: | | | |
| Interfund Transfer | 16,500 | 53,341 | 93,017 |
| Interest Income | 193 | 68 | 16,202 |
| Total Revenue | 16,693 | 53,409 | 109,219 |
| | | | |
| Ending Balance: | \$ 1,026,733 | \$ 1,080,142 | \$ 1,189,361 |

NOTE: Ending balance must be at least 6% of the annual O&M current expenses. FY2022-2023 O&M Budget (\$20,770,325 - \$850,000 transfer to reserves - \$97,635 capital equipment) x 6% = \$1,189,361)

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Capital Improvement Program

2020-2021

Capital Improvement Program

Overview

The District's Capital Improvement Program commands the largest portion of budgeted expenditures, and as such, is planned strategically and in great detail for all infrastructure projects in excess of the \$15,000 infrastructure capitalization threshold. The District updates its ten-year Capital Improvement Program (CIP) annually to comply with state regulatory and bond order requirements. Objectives of constructing these capital projects include replacing and rehabbing structurally defective sewer lines, handling wet-weather flow conditions, improving the performance at the wastewater treatment plant, and preparing the system to handle expected future wastewater flows over the upcoming decade.

The process begins with engineering staff developing projects, which often originate from problem areas identified by field crews during emergency and preventative maintenance procedures and includes consideration of those projects outlined in the 20-year Wastewater System Master Plan. Engineers evaluate and prioritize each proposed project based upon the District's short-term requirements and long-term mission. Engineering staff then prepare cost estimates for identified projects and a proposed timetable for construction.

Once the CIP is drafted, the CIP Committee, consisting of representatives from the member agencies, meet to review the costs, locations, and necessity of proposed projects and make a recommendation to the District's Board. A copy of the CIP summary sheets follows in the succeeding pages of this budget document. A separate document compiling individual pages for each project with detailed costs and location map as presented to the CIP Committee and may be obtained upon request to W. Scott Powell, Director of Finance at (828) 225-8211 or spowell@msdbc.org.

The District maintains a Ten-Year CIP and rehabilitates approximately 40,000 Linear Feet (LF) of the collection system every year. The ten-year CIP prioritizes projects identified by the Board as fulfilling the District's mission but does not obligate District resources for their construction past the end of the current budget year.

Capital Improvement Program (continued)

Background

The Capital Improvement Program is essential to the efficient functioning of the District, as evidenced by the requirement from both the Bond Order and State Collection System Permit. A well-planned CIP provides customers with the assurance of having reliable and affordable wastewater collection and treatment both now and in the future.

The Board has consistently financed its Capital Improvement Program through revenue bonds and pay-as-you-go moneys. As of June 30, 2022, the District will have \$88.4 million in outstanding revenue bond debt, with total debt service of \$8.9 million due before the end of the fiscal year. Unlike counties and cities, the District does not have a legally mandated debt limit. However, the District does have a rate covenant. The covenant requires the District to set rates and charges so that income available for debt service will not be less than 120% of fiscal year debt service requirement.

Throughout the history of the District, staff has continued to seek increasingly effective ways of identifying and prioritizing individual projects, to ensure a more comprehensive and balanced CIP. In 1990, as part of the political process of forming the District, certain construction and rehabilitation projects were identified by the various member municipalities and sanitary districts.

Once these designated projects were completed, the District then focused on rehabilitating aging, undersized collection lines to minimize unregulated discharges of raw sewage (sanitary sewer overflows or SSOs) and inflow/infiltration (I/I). Inflow and infiltration are the intrusion of groundwater and storm water runoff into the collection system, which can deplete capacity in sewer mains and at wastewater treatment plants.

As part of this comprehensive evaluative process, the District developed and implemented a program to monitor wastewater flows from the various parts of the sewerage system. The flow monitoring data was used to develop a computer hydraulic model of the flows of the sewerage system to help identify and remediate the worst areas of inflow and infiltration.

Capital Improvement Program (continued)

Background (continued)

In 1999, MSD began an aggressive line cleaning and television inspection program wherein the District contracted with outside companies to clean the pipes with water under high pressure and then to send a video camera (also known as closed circuit television or CCTV camera) through the line. The videotapes have enabled the District to more accurately determine the condition of the lines and to prioritize necessary repairs. Each year 10% of the pipes will be cleaned and then inspected by CCTV cameras to maintain the efficient operation of the collection system.

The District developed a proactive cost-effective rehabilitation strategy with the development of the Pipe Rating Program. Pipe rating is a proactive planning tool, which utilizes Closed Circuit Television (CCTV) information, GIS database, and actual maintenance history to view, rate, and computer-score pipe segments based on a number of factors. These factors, manhole-to-manhole, include work order history, number and severity of defects, and record overflows on that segment, which are combined to yield a numerical rating used to prioritize efforts. Staff recently updated the District's Pipe Rating Program to include additional parameters over previous versions. Each line project now has an objective numerical rating based upon overflow history, structural issues, customer service requests, and impacts to surface waters. This rating is then used to objectively prioritize collection system projects within the CIP each fiscal year.

Pipe Rating minimizes costs by helping the District focus rehabilitation dollars where they are needed most, rather than the usual full-scale replacement of entire collector lines. In recognition of this innovative program, the Association of Metropolitan Sewerage Agencies (AMSA) awarded the District one of only two 2003 National Environmental Achievement Awards.

Wastewater System Master Planning

- **Comprehensive Master Plan**—This plan was prepared in 2001 by Camp, Dresser & McKee (CDM). It is a comprehensive sewer system management program, which was prepared to identify system improvements needed to handle wet-weather flow conditions, to improve performance at the Wastewater Treatment Plant, and to prepare the system to handle future system wastewater flows.

Capital Improvement Program (continued)

Background (continued)

Wastewater System Master Planning (continued)

► Comprehensive Master Plan (continued)—

The report contained recommendations for improvements to the collection system as well as the treatment plant. A CIP was developed which included specific projects and their associated costs.

Reduction of Sanitary Sewer Overflows (SSO's) was, and remains, a key objective of this plan. Over the past twelve years, this has been accomplished using a “three-prong” approach, which combines: ① An effective Management, Operations and Maintenance (MOM) program to reduce line blockages and optimize response time when blockages do occur; ② An ongoing rehabilitation program to improve the structural condition of the system; and ③ Providing capacity to handle flows during wet-weather and future projected dry-weather flows.

This plan helped to establish the basis for the District's on going, aggressive Preventative Maintenance and Capital Improvement Programs. These two programs have resulted in substantially reducing SSO's over the past twenty-one years, in addition to greatly improved system integrity.

- Facilities Plan— The District completed an update to this Facilities Plan in 2015. This significant, comprehensive study examined the various unit processes within the plant, with a focus on headworks, biological treatment alternatives, and the future regulatory requirement. After extensive research of various options, the Plan recommends Plant Headworks Improvements adding new grit removal, a fine screening system, storage for peak flows (using existing decommissioned digesters), and chemically enhanced primary clarification.

Completion of the High-Rate Primary Treatment project is expected in Spring 2022. The Plant Headworks (completed in early 2019) and High-Rate Primary projects are the short and mid-term recommendations of the Plant Facility Plan. These two projects total approximately \$27.8 million, will significantly improve the plant's treatment process.

Capital Improvement Program (continued)

Background (continued)

Wastewater System Master Planning (continued)

► Facilities Plan (continued)—

The final recommendation of the Facility Plan, and the most significant, is the replacement of the plant's biological treatment process - the Rotating Biological Contactors (RBCs). These were installed in the 1980s and have functioned well over the years. They are approaching the end of their functional lifespan and are limited in the kind of treatment that they can provide. Replacement of the RBCs will be a major project and is currently projected at over \$69 million. It is important to note that this project is fully incorporated into the District's ten-year planning window.

- Collection System Master Plan—In 2008, McGill Associates completed a Collection System Master Plan (the "2008 Collection System Plan"). The 2008 Collection System Plan focuses on the District's comprehensive growth issues by incorporating all of the recent planning and zoning changes from the District's member agencies. This Plan also describes where and how areas will be served and provides for orderly growth of the sewer system to meet the needs of the region as a whole for the future. This plan was updated in 2021 to include the Cane Creek Water and Sewer District.

The District's Collection System Master Plan (Master Plan) addresses the orderly extension of the District's collection system into future service areas. The Master Plan has been prepared in close cooperation with the District's member agencies and regional stakeholders. The land use policies and zoning regulations of each agency were used for land usage, growth projections/densities, and line locations. For areas outside of corporate or jurisdictional limits, Buncombe County's Zoning Ordinance has played an integral role in defining future service areas.

Capital Improvement Program (continued)

Types of Projects

The projects in the CIP are classified into several types, based on the objective of the project. The projects are determined and scheduled based on the Master Plan, the pipe-rating score, and other factors impacting the overall well-being of the District.

The District's Capital Improvement Program is divided into the following six areas, generally based upon type of project or expense category:

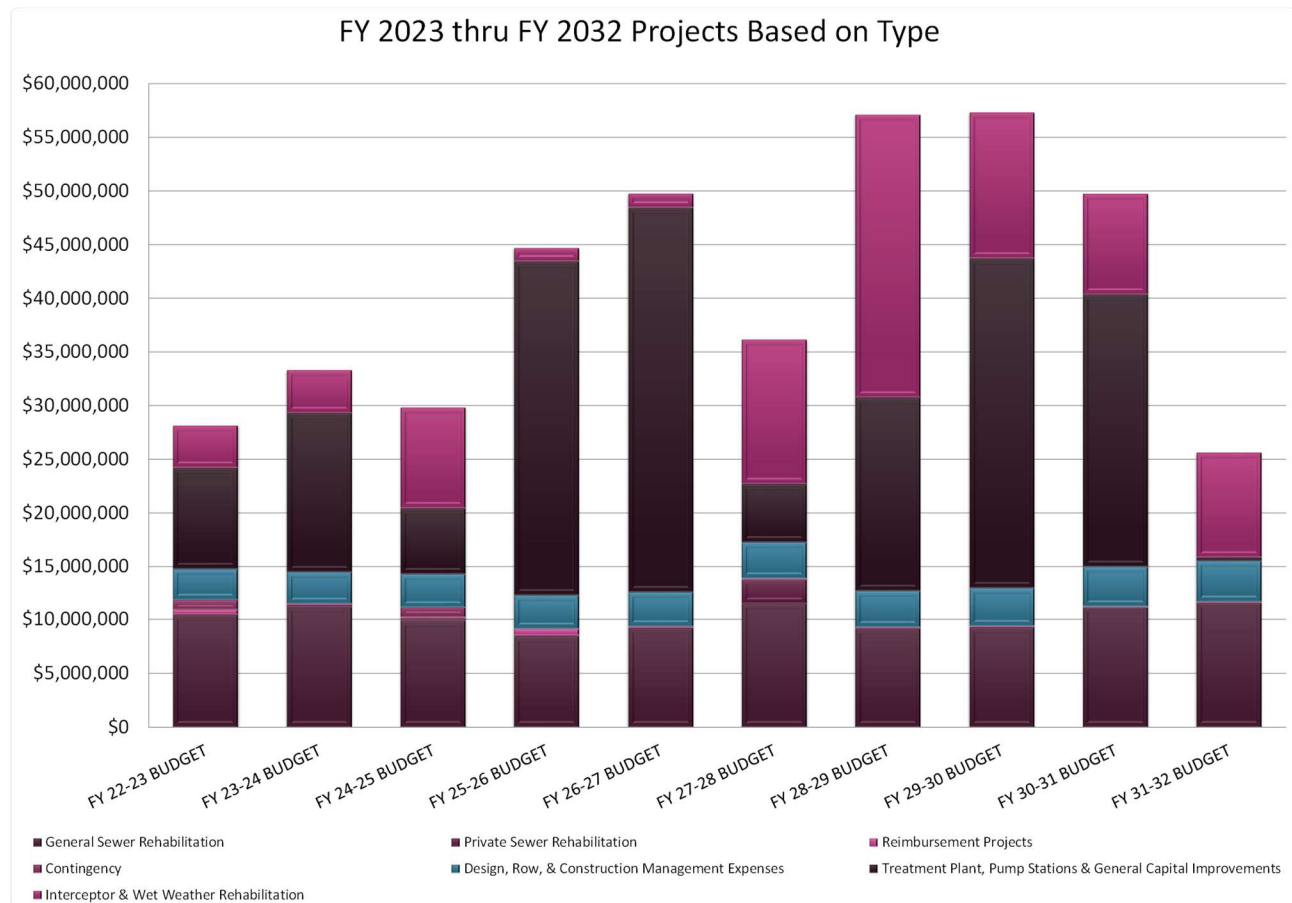
- Interceptor & Wet Weather Rehabilitation
- General Sewer Rehabilitation
- Private Sewer Rehabilitation
- Treatment Plant, Pump Stations, and General Capital Improvements
- Design, ROW, and Construction Management Expenses
- Reimbursement Projects

In accordance with the State Collection System Permit, the District maintains a CIP, which details necessary system improvements. The state permit requires a minimum of three years in the CIP; however, the District utilizes a ten-year window for better planning and financial projections. The District rehabilitates approximately 40,000 LF of the collection system each year.

The Interceptor and Wet Weather Rehabilitation projects address the third prong of the Master Plan by providing increased system conveyance. The General Sewer Rehabilitation projects combine the first and second prongs by surveying all lines to plan maintenance activities and to improve the structural condition of the system. The Private Sewer Rehabilitation projects have the same objectives as the General but are separately presented to address environmental concerns resulting from sewers that were not publicly maintained at the time the District was formed. A limited amount of funding is budgeted annually to address the problem locations on a "worst first" basis as identified.

Capital Improvement Program (continued)

Types of Projects (continued)



Proposed FY2022-2023 Budget

The proposed Capital Budget for FY2023 is \$30,314,882 which includes a contingency of \$1,000,000. The \$1,000,000 contingency line item is used for the entire program rather than having a separate contingency for each project. This is more efficient and continues to provide sufficient reserves for the District's capital program. Additionally, a proposed budget for Reimbursement Projects totaling \$590,000. For these types of projects, the District will reimburse a developer for constructing a system, which will serve larger areas upstream of their development.

Capital Improvement Program (continued)

Proposed FY2022-2023 Budget (continued)

Total project costs over the ten-year window are estimated at \$389.3 million. Costs are updated each year during budget preparation to accurately reflect current bid pricing and market conditions. Included in future years' is an inflation factor of 2.96%, which is a ten-year average of the annual increases in the ENR Construction Cost Index. This factor is also updated each year.

Approximately 66 infrastructure projects are included in the CIP for FY2023, ranging in length from 130 linear feet to over 36,000 linear feet. Seven (7) new Collection System Projects have been added to the CIP for FY2023 and beyond. In-house forces, as well as, outside contractors will be used to rehabilitate or replace approximately 40,000 linear feet per year.

Current Year Highlights

✧ Collection System Capital Improvements:

MSD initiated and maintains a major program to rehabilitate its Wastewater Collection System. This program will conform to the North Carolina Department of Environmental and Natural Resources (NCDENR) Collection System Permit requirements and will improve the operational performance and extend the life of the collection system.

The District's focus has been to rehabilitate of approximately 400,000 linear feet of sewer line every ten (10) years and other projects identified in the Master Plan. The estimated cost over a 10-year period is approximately \$230.6 million out of a total CIP budget of \$389.3 million.

Significant collection system projects currently underway or completed over the past year are the Springside Road @ Overlook Road, Bryson Street, West Crabapple Lane and Mountainbrook Road @ Chunns Cove Road projects. Combined with in-house rehabilitation projects, the total rehabilitated footage as of April 2022 is over 17,600 LF.

Capital Improvement Program (continued)

Current Year Highlights (continued)

Major projects for FY2023 include:

| Project Name | Footage (LF) | Budget (\$) |
|---------------------------------------|--------------|-------------|
| Aurora Drive | 2,700 | \$1,025,469 |
| Caledonia Road | 2,126 | \$1,336,750 |
| Christian Creek Interceptor | 10,226 | \$5,193,715 |
| French Broad Interceptor @ Amboy Road | 1,100 | \$3,125,000 |

✧ Collection System Capital Improvements:

Design of the new Carrier Bridge Pump Station (the District's largest) is underway. Carrier Bridge is a regional pump station which serves large areas of Buncombe County and Northern Henderson County. This significant \$42 million project will replace an aging pump station first constructed in the 1960's and upgraded multiple times over the years.

✧ Wastewater Treatment Plant Capital Improvements:

The Incinerator System Emissions Upgrades project completed in FY2019, received a 2017 NACWA Environmental Achievement Award in February 2017. This \$7.4 million project reduced emissions from the incinerator and utilized a new mercury removal technology, which saved \$5 million over traditional technology.

The Plant Facility Plan is serving as guidance for planning significant capital projects at the Plant.

Another key aspect of the Facility Plan Update was to gain a solid understanding of regulatory issues that may impact future treatment requirements and identify long-term biological treatment alternatives to comply with anticipated future regulation changes.

Capital Improvement Program (continued)

Current Year Highlights (continued)

Near-term and mid-term project recommendations from the Facility Plan include:

- **Plant Headworks Project:** This \$11 million project consists of a new grit removal system to replace the existing problematic system, a fine screening facility which supplements the WRF's existing bar screens, and storage at the Plant using existing decommissioned tanks to provide more effective treatment during peak flow events. In addition, by removing more grit than the previous process, it will help to better protect downstream processes within the plant and will significantly improve the plant's treatment process. Construction began in April 2017 and is currently operational.
- **High-Rate Primary Treatment Project:** This \$17 million project will provide primary clarification by removing solids before the biological treatment stage. This will provide a more effective treatment and will help the Rotating Biological Contactors (RBC's) to better perform. During high flow (storm) events, this treatment can be ramped-up in order to match the higher flows. Construction began in FY2019 and has been completed in FY2022.
- **Biological System Upgrades:** This \$70 million major project is being driven by the water quality regulations as set forth in MSD's NPDES permit (effluent discharge permit). Compliance with effluent ammonia levels must be achieved by October 2030 and will require significant upgrades to the existing biological treatment system. Design will begin in FY2025 with construction starting in FY2027.

Capital Improvement Program (continued)

Program Summary

| PROJECT NAME | FY 22-23 BUDGET | FY 23-24 BUDGET | FY 24-25 BUDGET | FY25-26 BUDGET | FY26-27 BUDGET | FY27-28 thru FY31-32 BUDGET |
|---|--------------------|--------------------|--------------------|-------------------|-------------------|--------------------------------------|
| Interceptor & Wet Weather Rehabilitation | | | | | | |
| Beaverdam Creek WW (CDM #10) | - | - | - | - | - | 1,822,350 |
| This was identified as a potential rehabilitation project to improve wet weather flow conveyance, as specified in the Master Plan developed by CDM. It is located in the North Asheville area and is comprised of 5,500 LF of 8-inch through 12-inch diameter pipe. | | | | | | |
| Christian Creek Interceptor | \$ 5,193,715 | \$ 37,000 | \$ - | \$ - | \$ - | - |
| This project is located along Christian Creek, between US 70 Hwy and I-40, east of Asheville. The project includes the replacement of approximately 12,226 LF of existing 8-inch VCP sewer pipe with new 8", 12" and 16" DIP. The existing lines serve a large collection area and are undersized. Additionally, they are in poor structural condition and have experienced multiple SSO's. | | | | | | |
| French Broad Interceptor @ Amboy Road | 3,125,000 | - | - | - | - | - |
| This project is located along Lyman Street between Amboy Rd and Foundy St. The project includes replacement of approximately 1,100 LF of existing 48 and 54-inch RCP with new 60-inch C900 PVC. The existing lines in this area are in poor condition due to deterioration from hydrogen sulfide. A sink hole occurred in January of 2021 due to the deterioration of the pipe walls. The design budget for this project is under the associated project 2019045 Carrier Bridge Pump Station Replacement Project. | | | | | | |
| Lower Swannanoa Interceptor | 42,000 | - | 93,000 | 100,000 | 3,844,000 | 3,865,000 |
| This project is to eliminate problems associated with the splitter box and the downstream twin 36-inch lines. | | | | | | |
| South French Broad Relief Interceptor | - | 50,000 | 8,500 | 514,800 | 7,885,000 | 23,705,000 |
| This project is to implement the recommendations of the French Broad/Carrier Bridge Preliminary Engineering Report. This project includes paralleling the existing 36-inch interceptor from Dingle Creek north to Hominy Creek with a new 36-inch interceptor. It also includes installing a new 60-inch interceptor between Hominy Creek and Carrier Bridge PS. The new interceptor will provide relief to the existing system during wet weather. | | | | | | |

Capital Improvement Program (continued)

Program Summary (continued)

| PROJECT NAME | FY 22-23 BUDGET | FY 23-24 BUDGET | FY 24-25 BUDGET | FY25-26 BUDGET | FY26-27 BUDGET | FY27-28 thru FY31-32 BUDGET |
|--|--------------------|--------------------|--------------------|-------------------|-------------------|--------------------------------------|
| Interceptor & Wet Weather Rehabilitation | | | | | | |
| Swannanoa Equalization Tank | 1,020,000 | 1,125,000 | 1,126,500 | 11,720,000 | 11,720,000 | - |
| This project is to implement the recommendations of the French Broad/Carrier Bridge Preliminary Engineering Report. This project will help mitigate wet weather impacts to the Swannanoa Interceptor by shaving peak wet weather flows. Equalizing flow will help reduce SSOs and prevent inundation and surcharging of downstream infrastructure, including the treatment plant. The estimated costs shown are planning level only, and incorporate a new 8.1MG EQ tank, 16MGD pump station and associate piping. | | | | | | |
| SUBTOTAL | 9,380,715 | 1,212,000 | 1,228,000 | 12,334,800 | 23,449,000 | 29,392,350 |
| Inflation per ENR Const. Cost Index | 1.0296 | 1.0601 | 1.0915 | 1.1238 | 1.1570 | 1.19375 |
| SUBTOTAL with inflation | 9,658,384 | 1,284,812 | 1,340,306 | 13,861,373 | 27,131,075 | 35,087,135 |
| General Sewer Rehabilitation | | | | | | |
| Albemarle Commons Pump Station Elimination | 38,500 | - | 3,000 | - | - | - |
| This project is located in East Asheville just off Winkworth Place at MSD's Albemarle Commons Pump Station. This project will eliminate the existing pump station by installing approximately 832 LF of 8-inch DIP gravity line. | | | | | | |
| Antique Lane @ Canie Street | - | - | - | - | - | 2,248,000 |
| This project is in the Starnes Cove area of west Asheville . The project runs along Canie Creek and north to Pisgah View Road and south to Starnes Cove Drive through residential property. The existing 6-inch and 8-inch clay pipes have numerous joint and structural defects that has led to root problems, infiltration, and overflows. | | | | | | |
| Atkins Street | - | - | - | 2,550 | 52,000 | 638,600 |
| This project is located in Arden just north of Lake Julian. Approximately 1,833 LF of existing 6-inch vitrified clay pipe will be replaced with new 8-inch ductile iron pipe. The existing sewer line is in poor condition due to roots, fractures, and sags in the line. The line is undersized and has flooded houses in the area. | | | | | | |

Capital Improvement Program (continued)

Program Summary (continued)

| PROJECT NAME | FY 22-23 BUDGET | FY 23-24 BUDGET | FY 24-25 BUDGET | FY25-26 BUDGET | FY26-27 BUDGET | FY27-28 thru FY31-32 BUDGET |
|--|--------------------|--------------------|--------------------|-------------------|-------------------|--------------------------------------|
| General Sewer Rehabilitation | | | | | | |
| Aurora Drive | 1,025,469 | - | - | - | - | - |
| This project runs along Aurora Drive in the Kenilworth area of Asheville, runs through several properties, and ends on Springdale Road. The existing 6-inch clay pipes have structural defects, heavy root intrusion, and deteriorating manholes. All of these problems contribute to I/I issues. | | | | | | |
| Avon Avenue @ Haywood Road | 1,500 | 5,950 | 43,000 | 72,000 | - | - |
| This project is located in West Asheville near Avon Ave, approximately 0.25 mile west of the Haywood Rd. bridge. Approximately 233 LF of existing 6-inch and 8-inch vitrified clay pipe will be replaced with new 8-inch ductile iron pipe. The existing sewer line is in poor condition due to roots and cannot be washed or rodded due to lack of access. | | | | | | |
| Beale Road at Copney Lane | - | 230,250 | - | 1,413,000 | - | - |
| This project ties into the Lake Julian Phase 4 project just west of Glenn Bridge Road, extending northward to Ducker Road, and Lower Glenn Bridge Road. It serves several major manufacturing sites. The lines are in poor condition with broken segments and leaking joints, have resulted in SSO's, and are difficult to access for maintenance and repairs. | | | | | | |
| Bellevue Road | - | 8,000 | 58,000 | 430,500 | - | - |
| This project is located in South Asheville along properties on Bellevue Road and will replace 1,100 LF of 6-inch VCP and PVC. The existing line is in poor condition and has too many point repairs. | | | | | | |
| Bent Tree Road | 808,500 | - | - | - | - | - |
| This project runs adjacent to Bent Tree Road in Asheville. It begins on Old Toll Road, crosses Bent Tree Road, and ends at Crestwood Road. There are numerous structural problems and bends within the lines which contribute to I/I issues. | | | | | | |

Capital Improvement Program (continued)

Program Summary (continued)

| PROJECT NAME | FY 22-23 BUDGET | FY 23-24 BUDGET | FY 24-25 BUDGET | FY25-26 BUDGET | FY26-27 BUDGET | FY27-28 thru FY31-32 BUDGET |
|---|--------------------|--------------------|--------------------|-------------------|-------------------|--------------------------------------|
| General Sewer Rehabilitation | | | | | | |
| Braddock Way - PRP 20002 | - | - | - | 38,500 | 162,087 | 1,466,000 |
| This project will replace, line, and pipe burst several existing sewer mains in Park Avenue and Braddock Way subdivisions. Problems with these lines include leaking joints, broken pipes, high inflow and infiltration. In some areas, the existing lines will be relocated from private property to public rights of way for better access and maintenance. | | | | | | |
| Buchanan Avenue | 101,000 | 1,354,500 | - | - | - | - |
| This project is located in downtown Asheville near Biltmore Avenue and is comprised of 2,228 LF of 8-inch ductile iron pipe. The existing line is 6-inch clay with heavy root intrusion, fractures, and one section exposed along a steep grade. | | | | | | |
| Caledonia Road | 1,336,750 | - | - | - | - | - |
| This project is located at the Caledonia Road entrance to the Kenilworth neighborhood, approximately 0.3 mile south of the Mission Hospital campus. The project includes replacement of approximately 2,291 LF of 8-inch VCP pipe with new 8-inch DIP. The existing pipe has structural defects which have resulted in multiple SSO's. | | | | | | |
| Calvin Trail @Greybeard Trail | - | - | - | 5,000 | 36,000 | 294,450 |
| This project is located in Montreat and consists of replacing the existing 780 LF of 6" VCP line on Calvin Trail to the intersection of Greybeard Trail with 8" DIP. The existing line is in severely poor structural condition with multiple fractured sections. | | | | | | |
| Central Avenue @ I-240 | - | - | - | 6,000 | 16,500 | 371,500 |
| This project is located in downtown Asheville near Woodfin Street and is comprised of 990 LF of 12-inch ductile iron pipe. The existing line is 6, 10, and 12-inch vitrified clay pipe. | | | | | | |
| Chatham Road | - | - | 44,500 | 1,000 | - | 590,400 |
| This project is located in North Asheville near W.T. Weaver Boulevard and is comprised of 1,450 LF of 8-inch ductile iron pipe. The existing line is 6-inch vitrified clay pipe in poor condition with heavy root intrusion. | | | | | | |

Capital Improvement Program (continued)

Program Summary (continued)

| PROJECT NAME | FY 22-23 BUDGET | FY 23-24 BUDGET | FY 24-25 BUDGET | FY25-26 BUDGET | FY26-27 BUDGET | FY27-28 thru FY31-32 BUDGET |
|--|--------------------|--------------------|--------------------|-------------------|-------------------|--------------------------------------|
| General Sewer Rehabilitation | | | | | | |
| Cherokee Road | 254,000 | 707,500 | - | - | - | - |
| This project will replace (or pipe burst) the existing sewer main from the end of the Macon Avenue @ Sunset Parkway project to an existing manhole east of Cambridge Road in North Asheville. The line is old vitrified clay pipe and is in very poor condition. Several segments are under houses, walls, or other physical features which make repairs very difficult. | | | | | | |
| Cub Road | - | - | - | - | - | 449,000 |
| This project is located south of Elk Mountain Road between I-26 and the French Broad River. It is comprised of approximately 4,101 LF of 8-inch ductile iron pipe. The existing vitrified clay sewer line is in poor condition and has experienced SSO's. | | | | | | |
| East Chestnut Avenue @ Five Points | - | - | 88,800 | 104,350 | - | 1,575,000 |
| This project is located in North Asheville and is comprised of 5,225 LF of 8-inch ductile iron pipe. The existing line is aging 6, 8, and 10-inch VCP in poor shape with multiple structural defects per segment. | | | | | | |
| Edwards Avenue @US 70 Hwy | - | - | - | 14,400 | - | 859,000 |
| This project is located in Swannanoa, approximately 0.5 mile east of the Patton Cove Rd exit (I-40 exit 59). The project includes pipe replacement on Edwards Ave, Richmond Ave, and Young St. Approximately 2,400 LF of existing 6-inch and 8-inch vitrified clay pipe will be replaced with 8-inch ductile iron pipe. This line was constructed in the 1920s and has numerous structural defects which contributed to one flooded structure. | | | | | | |
| Elk Mountain Place | 181,571 | 1,000 | 1,179,500 | - | - | - |
| This project is located in North Asheville and is comprised of 5,225 LF of 8-inch ductile iron pipe. The existing line is aging 6", 8", and 10" VCP in poor shape with multiple structural defects per segment. | | | | | | |
| Erwin Hills Road @ High School | 4,000 | 37,500 | - | - | - | - |
| This project is in Western Buncombe County, in the Erwin Hills neighborhood. The purpose is to replace an aging creek crossing with difficult access and a history of SSO's. Approximately 130 LF of DIP that allows improved access will be replaced with a re-engineered crossing. | | | | | | |

Capital Improvement Program (continued)

Program Summary (continued)

| PROJECT NAME | FY 22-23 BUDGET | FY 23-24 BUDGET | FY 24-25 BUDGET | FY25-26 BUDGET | FY26-27 BUDGET | FY27-28 thru FY31-32 BUDGET |
|---|--------------------|--------------------|--------------------|-------------------|-------------------|--------------------------------------|
| General Sewer Rehabilitation | | | | | | |
| Fairmont Road | - | - | - | - | 25,000 | 1,686,500 |
| This project is located in North Asheville approximately 0.25 miles east of Charlotte Street. The project will run along roads and properties from Glendale Road to Sunset Drive. The 6-inch clay lines are in poor condition which have caused manhole overflows and SSOs. | | | | | | |
| Forestdale Drive | - | - | - | - | 17,000 | 1,009,000 |
| This project begins at Carnell Street and ends at Caribou Road. The system runs along side roads and properties parallel to Hendersonville Road. System Services crews have reported numerous problems including multiple SSO's. The existing pipes will be replaced with 8-inch ductile iron pipe. | | | | | | |
| Harmony Lane | - | - | - | - | | 190,500 |
| This project runs along Harmony Lane in Asheville's Oakley area. The existing system has two parallel lines that collect on both side of the street. Problems with the system consist of root intrusion, poor access for maintenance, and close proximity to houses. | | | | | | |
| Hazel Mill Road @ Richland Street | 148,000 | 1,000 | 1,114,300 | - | - | - |
| This project is located in West Asheville, near the Bowen Bridge and consists of 3,300 LF of 8-inch ductile iron pipe. The current pipe is 6-inch, 8-inch clay, and PVC. Lines are undersized and in poor condition with multiple pipe sags, cracks, and fractures. | | | | | | |
| Hill Street @ Cross Place | 2,350 | - | 15,300 | 216,475 | - | - |
| This project runs along Hill Street to the intersection of Cross Place abutting the I-240 & I-26 Interchange. It consists of replacing approximately 635 LF of existing 6-inch VCP with 8-inch DIP. The line has numerous structural issues, experienced frequent stoppages, and flooded structures over the years. | | | | | | |
| Howland Road @ Sunset Trail | - | 5,000 | 66,000 | 394,000 | - | - |
| This project will replace an existing 8-inch main from 5 Howland Road up to the rear of 371 Sunset Drive. System Services recently completed another portion of this system due to SSO's and line condition. | | | | | | |

Capital Improvement Program (continued)

Program Summary (continued)

| PROJECT NAME | FY 22-23 BUDGET | FY 23-24 BUDGET | FY 24-25 BUDGET | FY25-26 BUDGET | FY26-27 BUDGET | FY27-28 thru FY31-32 BUDGET |
|---|--------------------|--------------------|--------------------|-------------------|-------------------|--------------------------------------|
| General Sewer Rehabilitation | | | | | | |
| Johnston Boulevard @ Providence Road | - | - | - | - | 11,000 | 642,000 |
| This project is located in West Asheville, approximately 0.6 miles west of New Leicester Highway. The project consists of replacing 2,000 LF of existing 6-inch vitrified clay and PVC pipe with new 8-inch ductile iron pipe. The existing line contains many offset joints and bends and is in poor structural condition. | | | | | | |
| Jonestown Road @ Riverside Drive | 75,500 | 12,000 | 40,000 | 500,000 | 6,500 | - |
| This project is located upstream from MSD's WWTP along Riverside Drive on Jonestown Road. It consists of approximately 1,890 LF of existing 6-inch VCP to be replaced with 8-inch DIP. This system is full of structural defects, has heavy I & I issues, and deteriorating manholes. | | | | | | |
| Joyner Avenue @Amboy Road | - | 3,500 | 17,000 | 76,500 | - | - |
| This project is located in West Asheville and is comprised of 241 LF of 8-inch ductile iron pipe. The existing line is aging 8" VCP and PVC in poor condition, exposed in a hillside with erosion issues. | | | | | | |
| Kimberly Avenue @ Sedley Avenue | 22,000 | 179,000 | - | 1,062,000 | - | - |
| This project is located in North Asheville along Kimberly Avenue. The existing 6-inch VCP will be replaced with 3,005 LF of 8-inch HDPE through pipe bursting operations. This 6-inch VCP line is in poor structural condition, roots present throughout, mis-aligned joints, and problematic spur lines. | | | | | | |
| Lakeview @ Glen Falls Road | - | - | - | - | - | 1,409,500 |
| This project is just south of Beaver Lake on Lakeview Rd., Glen Falls Rd., and through properties on Glen Falls Rd. The existing 6-inch clay pipe will be replaced with 8-inch ductile iron pipe. System Services has experienced numerous problems with this line. Approximately 1,450 LF along Lakewview Rd was removed from this project and will be constructed by In-House crew. | | | | | | |
| Lakewood Drive @ Chiles Avenue | 13,000 | 9,500 | 336,000 | 653,500 | - | - |
| This project is located in Kenilworth along the south edge of Kenilworth Lake, adjacent to Lakewood Drive. It consists of replacing approximately 2,149LF of existing 8-inch and 12-inch VCP with new 8-inch and 12-inch DIP. The pipe is difficult to access, has significant root problems, and is generally in poor condition. | | | | | | |

Capital Improvement Program (continued)

Program Summary (continued)

| PROJECT NAME | FY 22-23 BUDGET | FY 23-24 BUDGET | FY 24-25 BUDGET | FY25-26 BUDGET | FY26-27 BUDGET | FY27-28 thru FY31-32 BUDGET |
|--|--------------------|--------------------|--------------------|-------------------|-------------------|--------------------------------------|
| General Sewer Rehabilitation | | | | | | |
| Le An Hurst Road | 333,011 | - | - | - | - | - |
| This project is located in South Asheville running along the rear of properties fronting Le An Hurst Road. It parallels a tributary to Sweeten Creek. The existing 8-inch VCP is in very poor condition due to heavy root intrusion and has to be routinely rodded. It will be replaced by 8-inch DIP. | | | | | | |
| Lincoln Avenue | - | - | - | - | - | 539,300 |
| This project is located in the Oakley neighborhood in southeast Asheville, just north of I-40. It consists of replacing approximately 1,415 LF of existing 6-inch vitrified clay pipe with 8-inch ductile iron pipe. The existing line is in very poor structural condition. | | | | | | |
| Logan Avenue | - | - | - | 10,200 | 122,500 | 942,300 |
| This project is located in West Asheville near Craven Street and consists of 1,884 LF of 8" DIP. The existing clay pipe is undersized and has a large number of pipe defects. | | | | | | |
| Manetta Road @ Johnson Drive | 26,000 | - | - | - | - | 1,777,187 |
| This project is located in North Asheville near Merrimon Avenue and consists of 6,500 LF of 8-inch ductile iron pipe. The existing clay pipe is undersized, has voids, fractures, and root intrusions which have contributed to multiple SSO's. | | | | | | |
| McDowell Street @ Lily Carmichael | - | - | - | 11,000 | 1,000 | 604,000 |
| This project is located in downtown Asheville, along McDowell St near Mission Hospital's main campus. The existing line is 6 and 8-inch vitrified clay pipe, with many structural defects, requiring extensive maintenance. This line will be replaced with approximately 1,660 LF of 8-inch DIP. | | | | | | |
| Meadow Road @ Train Yard | - | - | - | - | 2,000 | 1,050,000 |
| This project is located in Asheville on Meadow Road between the Biltmore Estate and Asheville-Buncombe Technical Community College. It consists of replacing 2,001 LF of existing 6-inch VCP with new 8-inch DIP. The existing line is in poor condition, is undersized, and runs underneath various structures. | | | | | | |
| Montford Avenue @ Montford Park | - | 9,400 | 100,000 | 401,800 | - | - |
| This project is located just south of Montford Park and includes the replacement of approximately 1,258 LF of existing 8-inch VCP with new 8-inch DIP. The existing pipe has sags, multiple structural defects, and areas where the pipe is almost non-existent. | | | | | | |

Capital Improvement Program (continued)

Program Summary (continued)

| PROJECT NAME | FY 22-23 BUDGET | FY 23-24 BUDGET | FY 24-25 BUDGET | FY25-26 BUDGET | FY26-27 BUDGET | FY27-28 thru FY31-32 BUDGET |
|--|--------------------|--------------------|--------------------|-------------------|-------------------|--------------------------------------|
| General Sewer Rehabilitation | | | | | | |
| New Haw Creek Road @ Dogwood Grove | - | - | 3,600 | 48,750 | 2,000 | 603,400 |
| This project is in East Asheville near Haw Creek Road and consists of 1,900 LF of 8-inch ductile iron pipe. Existing 4-inch and 6-inch clay pipe is undersized, with fractures, root intrusion, and misaligned joints. Existing 8-inch ductile iron pipe has corrosion issues and existing manholes are in poor condition. | | | | | | |
| New Stock Road | - | - | 10,000 | 163,000 | 2,535,000 | - |
| This project runs along New Stock Road in Woodfin, beginning at Nichols Hill Drive & New Stock Road, running under I-26, and ending at Weaverville Road. The existing 8-inch lines have structural issues which have led to root intrusion and multiple SSOs. | | | | | | |
| Oakland Drive @ Church Street | - | - | - | - | - | 209,000 |
| This project is located in Black Mountain running through properties from Pine Street to Oakland Drive. The project will replace 575 LF of 4-inch orangeburg and 6-inch VCP. The existing lines are in poor condition and have too many point repairs. | | | | | | |
| Parkwood Avenue | - | - | - | - | - | 429,500 |
| This project is located in Woodfin. The existing line is approximately 1,165 LF of 6" VCP with known SSO's and I/I due to structural defects. | | | | | | |
| Riverview Drive | - | - | - | - | - | 874,000 |
| This project is located in Asheville near the Haywood Rd. bridge. The project consists of replacing approx. 2,302 LF of existing 6-inch vitrified clay pipe with 8-inch ductile iron pipe. The existing line is in poor condition and has experienced multiple overflows. | | | | | | |
| Rosewood Avenue @ Riverside Cemetery | \$ - | \$ - | \$ - | - | - | 78,800 |
| This project is located off of Rosewood Avenue in Montford, adjacent to Riverside Cemetery. This project includes the replacement of approximately 180 LF of 6-inch VCP pipe with new 8-inch DIP. The existing line is in poor structural condition and is located next to a broken storm drain, causing heavy I & I. | | | | | | |
| Royal Pines Drive - PRP 47009 | \$ - | \$ 30,000 | \$ 5,000 | 6,000 | 34,000 | 2,653,750 |
| This project is located in South Asheville and is comprised of 2,888 LF of 8-inch ductile iron pipe. The existing line is 8-inch vitrified clay pipe which has had a history of root problems. | | | | | | |

Capital Improvement Program (continued)

Program Summary (continued)

| PROJECT NAME | FY 22-23 BUDGET | FY 23-24 BUDGET | FY 24-25 BUDGET | FY25-26 BUDGET | FY26-27 BUDGET | FY27-28 thru FY31-32 BUDGET |
|--|--------------------|--------------------|--------------------|-------------------|-------------------|--------------------------------------|
| General Sewer Rehabilitation | | | | | | |
| Sand Hill Road @ Baker Place | \$ 8,650 | \$ 93,500 | \$ 569,500 | - | - | - |
| This project is located in West Asheville and is comprised of 1,100 LF of 8-inch ductile iron pipe. The existing line is a 6-inch VCP with multiple structural defects and access issues due to being located under several houses. | | | | | | |
| Somerset Road @ Greene Road | \$ 55,000 | \$ - | \$ 244,100 | - | - | - |
| This project is located in South Asheville off of Somerset Rd. The line cuts behind houses and follows a stream where it lays flat with misaligned joints and erosion has exposed the pipe causing heavy I&I. The 840 linear feet VCP section needs to be replaced with 8-inch DIP. | | | | | | |
| Springside Road @ Overlook Road | \$ 300,000 | \$ 5,400 | \$ - | - | - | - |
| This project is located in South Asheville near Overlook Road and is comprised of 3,922 LF of 8-inch ductile iron pipe. The existing line is 6-inch and 8-inch vitrified clay pipe in poor shape, with a history of SSO's at various points. | | | | | | |
| Sulphur Springs Road @ Covington Street | \$ - | \$ - | \$ 18,000 | 186,000 | - | 396,500 |
| This project begins in the area of the Sulphur Springs Road/Delaware Avenue intersection and runs through the back properties along Belmont Avenue. The existing 6-inch clay pipe will be replaced with 8-inch ductile iron pipe. The 6-inch clay line has had numerous problems and runs under a house. | | | | | | |
| Sweeten Creek Road @ Buck Shoals Road | \$ 18,000 | \$ 753,400 | \$ - | - | - | - |
| This project is located in Royal Pines on Buck Shoals Road between Hendersonville Road (US 25) and Sweeten Creek Road (US 25A). Approximately 1,558 LF of existing 6-inch vitrified clay pipe will be replaced with 8-inch ductile iron pipe. The existing line is in poor condition and is undersized. | | | | | | |
| Toxaway Street | \$ 411,200 | \$ - | \$ - | \$ - | \$ - | \$ - |
| This project is located in West Asheville and is comprised of 811 LF of 8-inch DIP. The existing sewer line is 6-inch clay with extensive structural problems and roots. | | | | | | |

Capital Improvement Program (continued)

Program Summary (continued)

| PROJECT NAME | FY 22-23 BUDGET | FY 23-24 BUDGET | FY 24-25 BUDGET | FY25-26 BUDGET | FY26-27 BUDGET | FY27-28 thru FY31-32 BUDGET |
|---|--------------------|--------------------|--------------------|-------------------|-------------------|--------------------------------------|
| General Sewer Rehabilitation | | | | | | |
| Walnut Street @ N. Lexington Avenue | \$ - | \$ - | \$ - | 8,000 | - | 606,000 |
| This project runs along Walnut Street in downtown Asheville. The project begins at N. Lexington Avenue, runs along Walnut Street and down the side roads of Langren Alley, Market Street, Lawyers Walk, and ends near the corner of E. Walnut Street. The existing 6-inch and 8-inch clay pipes have structural issues and yearly maintenance is needed. | | | | | | |
| Waynesville Avenue @ Brownwood Avenue | \$ - | \$ 19,500 | \$ - | 28,000 | 408,750 | 914,500 |
| This project is located in West Asheville between Haywood Road and Craven Street and is comprised of 3,022 LF of 8-inch ductile iron pipe. The existing line is 8-inch vitrified clay pipe that is in poor condition with heavy root intrusion, structural defects, and I & I problems, resulting in a long history of SSO's. | | | | | | |
| SSD Rehabilitation & Replacement | \$ 4,675,000 | \$ 4,675,000 | \$ 4,675,000 | \$ 4,675,000 | \$ 4,675,000 | \$ 23,375,000 |
| This line item is for the replacement of capital assets using in-house construction crews and materials. This includes new taps, small repairs, lining, as well as larger rehabilitation projects. Also included is paving when required for these repairs and rehabilitation projects. The total estimated project cost shown is the total within the ten year window. | | | | | | |
| Surveys for Design | \$ 50,000 | \$ 50,000 | \$ 50,000 | 50,000 | 50,000 | 250,000 |
| New rehabilitation projects are generated continuously throughout the year. This line item provides the surveying needs for these new projects, in order that preliminary work may begin prior to being formally incorporated into the next year's CIP. This helps to ensure projects are completed efficiently. | | | | | | |
| SUBTOTAL | \$ 9,889,001 | \$ 8,190,900 | \$ 8,680,600 | \$ 10,577,525 | \$ 8,156,337 | \$ 48,732,687 |
| Inflation per ENR Const. Cost Index | 1.0296 | 1.0601 | 1.0915 | 1.1238 | 1.1570 | 1.2327 |
| SUBTOTAL with inflation | \$ 10,181,715 | \$ 8,682,978 | \$ 9,474,479 | 11,886,615 | 9,437,084 | 60,071,223 |

Capital Improvement Program (continued)

Program Summary (continued)

| PROJECT NAME | FY 22-23 BUDGET | FY 23-24 BUDGET | FY 24-25 BUDGET | FY25-26 BUDGET | FY26-27 BUDGET | FY27-28 thru FY31-32 BUDGET |
|--|--------------------|--------------------|--------------------|-------------------|-------------------|--------------------------------------|
| PRIVATE SEWER REHABILITATION | | | | | | |
| Homeland Park | \$ 195,250 | \$ - | \$ - | \$ 348,500 | \$ - | \$ - |
| This project is located in East Asheville just south of the intersection of Swannanoa River Road and Tunnel Road in Homeland Park. This project consists of 921 LF of existing 4-inch VCP replacing with new 8-inch DIP. The existing 4-inch private sewer is the main line for this subdivision and is full of roots, which has triggered numerous service calls. | | | | | | |
| Old County Home Road PSR | \$ 15,000 | \$ 90,650 | \$ 27,000 | 1,704,500 | - | - |
| This project is located in West Asheville and is comprised of 4,600 LF of 8-inch ductile iron pipe and 182 LF of 12-inch ductile iron pipe. The existing line is a problematic 4 and 8-inch sewer line composed of PVC and VCP with many defects. | | | | | | |
| SUBTOTAL | \$ 210,250 | \$ 90,650 | \$ 27,000 | \$ 2,053,000 | \$ - | \$ - |
| Inflation per ENR Const. Cost Index | 1.0296 | 1.0601 | 1.0915 | 1.1238 | 1.1570 | |
| SUBTOTAL with inflation | \$ 216,473 | \$ 96,096 | \$ 29,469 | \$ - | \$ - | \$ - |

Treatment Plant, Pump Stations & General Capital Improvements

| | | | | | | |
|--|---------|---------|-----------|-----------|------------|------------|
| Bar Screen Roof Penetrations | 250,000 | - | - | - | - | - |
| This project includes new precast concrete hollowcore roofing panels with access penetrations overtop of the influent bar screens. The existing roof panels do not have penetrations which makes removal of the bar screens difficult. Removal of the screens is ideal for maintenance. Roof panel replacement will also require replacement of the membrane roofing system. | | | | | | |
| Biological Treatment | 125,000 | 375,000 | 3,015,000 | 3,090,000 | 15,770,000 | 47,310,000 |
| This project is the final and most significant recommendation from the Plant Facilities Plan. It will replace the Rotating Biological Contactors (RBC's) with an alternative biological treatment technology. This project will be driven by regulatory requirements. | | | | | | |
| Building and Facility Rehabilitation | 60,000 | 60,000 | 60,000 | 60,000 | 60,000 | 300,000 |
| This item is for the replacement of larger capital items such as roofing systems, HVAC, and subcontracts on buildings and structures within the MSD campus and treatment plant facility. Total estimated project cost shown is the total within the ten year window. | | | | | | |

Capital Improvement Program (continued)

Program Summary (continued)

| PROJECT NAME | FY 22-23 BUDGET | FY 23-24 BUDGET | FY 24-25 BUDGET | FY25-26 BUDGET | FY26-27 BUDGET | FY27-28 thru FY31-32 BUDGET |
|---|--------------------|--------------------|--------------------|-------------------|-------------------|--------------------------------------|
| Treatment Plant, Pump Stations & General Capital Improvements | | | | | | |
| Carrier Bridge Pump Station Replacement | 543,442 | 20,243,260 | 20,235,000 | - | - | - |
| This project is to implement the recommendations of the French Broad/Carrier Bridge Preliminary Engineering Report. This project will increase the capacity of the Carrier Bridge Pump Station to 34 MGD to accommodate future growth in south and west Asheville, as well as CCWSD. The estimated costs shown are planning level only and incorporate a new pump station with screening, odor control, electrical building, and emergency generator. The project also includes a new 36" force main. | | | | | | |
| Collection System Master Plan Update | - | - | 200,000 | - | - | - |
| The District's Collection System Master Plan was completed in 2008 and needs to be updated. The Master Plan Update will include the merger with Cane Creek Water & Sewer District and any updates from MSD member agencies. | | | | | | |
| Equipment Storage Facility | 2,392,220 | - | - | - | - | - |
| On November 10, 2020 a fire destroyed MSD's Alkaline Stabilization Building, also known as the "Nutri-Lime Building", which is located on the main plant property. This facility was utilized for equipment storage. This project is to design and construct a new storage facility at the same location. | | | | | | |
| Flow Monitoring | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 250,000 |
| This project is for expenses related to the continued operation, maintenance, and improvements of the District's flow monitoring program. | | | | | | |
| HVAC Rehabilitation | 40,000 | 10,000 | 10,000 | 10,000 | 10,000 | 50,000 |
| This item is for replacement of HVAC systems within the MSD campus, treatment plant facility, and pump stations. Total estimated project cost shown is the total within the ten year window. | | | | | | |
| Hydroelectric Power Plant Rehabilitation | 200,000 | 100,000 | 1,040,000 | - | - | - |
| This project includes an evaluation of the existing hydroelectric plant and its aging infrastructure. The study will consider the cost benefit of replacing various components with more efficient technology. The project also includes rehabilitation of the influent bar screen structure. | | | | | | |

Capital Improvement Program (continued)

Program Summary (continued)

| PROJECT NAME | FY 22-23 BUDGET | FY 23-24 BUDGET | FY 24-25 BUDGET | FY25-26 BUDGET | FY26-27 BUDGET | FY27-28 thru FY31-32 BUDGET |
|---|--------------------|--------------------|--------------------|-------------------|-------------------|--------------------------------------|
| Treatment Plant, Pump Stations & General Capital Improvements | | | | | | |
| Incinerator Ash Lagoon Restoration | 63,950 | - | - | - | - | - |
| This project is for the restoration of the existing incinerator ash lagoon. The lagoon has approximately 9 acres of surface area and is overgrown with vegetation. The vegetation will be removed to increase lagoon capacity. Once completed, the overflow structure will be rehabilitated. | | | | | | |
| Incinerator Heat Exchanger Replacement | 250,000 | 1,625,000 | - | - | - | - |
| This project includes the rehabilitation of the existing heat exchanger and fabrication of a new heat exchanger inside of the incinerator building. Having two heat exchangers will allow MSD to switch out the heat exchangers when one requires rebuilding. This will result in minimal downtime and operating efficiency of the incinerator. The existing heat exchanger is approximately six years old and is showing major corrosion issues due to gases that are present in the incinerating process. | | | | | | |
| Incinerator Polymer System Replacement | 38,000 | - | - | - | - | - |
| This project is for the replacement of the polymer system at the Incinerator Building. Polymer is added to thickened sludge to improve its dewatering characteristics prior to the belt filter presses. The polymer system consists of a feed hopper, aging tanks, mixers and dosing pumps. The existing system was installed when the incinerator was placed online and is now approximately 28 years old. | | | | | | |
| Incinerator Refractory Replacement | 24,000 | 1,016,000 | - | - | - | - |
| This project is for the replacement of the high temperature refractory lining inside the fluidizing bed incinerator. The refractory was last replaced in 2004 and is showing wear. The refractory protects the steel shell of the incinerator from high temps and corrosive gases. This project also includes replacement of the incinerator preheat burner and gas piping which is original to the unit. | | | | | | |
| Intermediate Clarifier Effluent Trough Rehab | 257,000 | 259,000 | - | - | - | - |
| The intermediate clarifier was placed into service in 1990. Clarified water flows upward through one of four clarifier basins and overflows into a series of aluminum effluent troughs. These troughs are in poor condition and are leaking. This project includes surface preparation and coating application to make the existing troughs watertight and resistant to further corrosion. | | | | | | |

Capital Improvement Program (continued)

Program Summary (continued)

| PROJECT NAME | FY 22-23 BUDGET | FY 23-24 BUDGET | FY 24-25 BUDGET | FY25-26 BUDGET | FY26-27 BUDGET | FY27-28 thru FY31-32 BUDGET |
|--|--------------------|--------------------|--------------------|-------------------|-------------------|--------------------------------------|
| Treatment Plant, Pump Stations & General Capital Improvements | | | | | | |
| ITT Pump Station Upgrade | - | 85,000 | 3,500 | 999,000 | - | - |
| The ITT pump station is located in the Broadpointe Industrial Park in south Asheville. The station is generally in fair to poor condition. Additional wet well capacity and pumping capacity will be necessary in the future. The existing access to the pump station is located in a flood plain area and is unaccessible with a flusher truck. The project should involve the negotiation of a new access route through the Broadpointe Ind. Park in addition to the PS upgrade. | | | | | | |
| Mud Creek Pump Station Replacement | 40,000 | - | - | 620,000 | - | - |
| This project is to increase firm capacity of the Mud Creek Pumping System and to consolidate the two existing pump stations into a single station. The replacement project will also include upgrades to pump controls and emergency backup power supply. | | | | | | |
| Mull Building HVAC - Phase III | - | - | 40,000 | - | - | - |
| MSD's Mull Building HVAC system is approaching 20 years of service life and experiences hot/cold zones and frequent service calls. As suggested per McGill Associates HVAC study completed in 2019, MSD will be performing a complete overhaul on these aging core components. This will include the replacement of the air handlers, cooling tower (with two air cooled chillers), pumps, and electrical components. Phases I and II are complete, which include the replacement of the air handlers, cooling tower (with two air cooled chillers), pumps, and electrical components. Phase III is replacement of the boilers, which will be done at the end of their service life. | | | | | | |
| Plant High Rate Primary Treatment | 381,000 | - | - | - | - | - |
| This project is a recommendation from the Facilities Plan Update, a WRF master planning document completed by HDR in April 2015. High rate primary treatment will improve water quality ahead of the RBC's thereby extending their useful life and improving treatment efficiency. | | | | | | |
| RBC Slide Gate Replacement | 400,000 | - | - | - | - | - |
| This project will replace failing slide gates in the RBC Basins 2 and 3 at the Water Reclamation Facility. | | | | | | |

Capital Improvement Program (continued)

Program Summary (continued)

| PROJECT NAME | FY 22-23 BUDGET | FY 23-24 BUDGET | FY 24-25 BUDGET | FY25-26 BUDGET | FY26-27 BUDGET | FY27-28 thru FY31-32 BUDGET |
|--|--------------------|--------------------|--------------------|-------------------|-------------------|--------------------------------------|
| Treatment Plant, Pump Stations & General Capital Improvements | | | | | | |
| Solids Handling Capacity Improvements | 146,000 | 117,000 | 2,747,000 | - | - | - |
| This project will increase the capacity of the solids handling and dewatering processes at the treatment plant. Additional capacity will be needed to accommodate future flow rates as well as increased sludge generation from the High Rate Primary Treatment process. Further testing will confirm exact timing of this capital investment. The project will include a third belt filter press, third cake pump, and new piping between the Thickener Bldg. and Incinerator Bldg. | | | | | | |
| Weaverville Pump Station Replacement | 777,750 | 6,135,000 | 6,248,000 | - | - | - |
| This project is for the replacement of Weaverville Pump Stations No. 1 & No. 2. Heavy growth has led to an increased demand for sewer allocations in Weaverville and as a result both stations are low on available capacity. This project includes replacing pump station No. 1, replacing the existing 12" force main with 18", and converting pump station No. 2 into a smaller residential station. Pump Station No. 1 will be designed to pump directly to the WRF. | | | | | | |
| General Capital Equipment | 150,000 | 150,000 | 150,000 | 150,000 | 150,000 | 750,000 |
| This is for the purchase of capital equipment in excess of \$15,000. Examples include pumps, plant equipment, computer servers, large concrete saws, etc. | | | | | | |
| SUBTOTAL | \$ 5,938,362 | \$ 30,225,260 | \$ 33,798,500 | \$ 4,979,000 | \$ 16,040,000 | \$ 48,660,000 |
| Inflation per ENR Const. Cost Index | 1.0296 | 1.0601 | 1.0915 | 1.1238 | 1.1570 | 1.1738 |
| SUBTOTAL with inflation | \$ 6,114,138 | \$ 32,041,078 | \$ 36,889,522 | \$ 5,595,208 | \$ 18,558,678 | \$ 57,116,103 |
| Design, Row, & Construction Management Expenses | | | | | | |
| Design, ROW, & Const. Mgmt. Exp. | \$ 3,096,554 | \$ 3,205,306 | \$ 3,289,908 | 3,376,957 | 3,466,577 | 19,005,914 |
| This line item is for expenses related to the District's Capital Improvement Program (CIP). Included are salaries for the CIP Division, capital equipment, and bond debt expenses related to the financing of the CIP program. | | | | | | |
| SUBTOTAL | \$ 3,096,554 | \$ 3,205,306 | \$ 3,289,908 | 3,376,957 | 3,466,577 | 19,005,914 |

Capital Improvement Program (continued)

Program Summary (continued)

| PROJECT NAME | FY 22-23 BUDGET | FY 23-24 BUDGET | FY 24-25 BUDGET | FY25-26 BUDGET | FY26-27 BUDGET | FY27-28 thru FY31-32 BUDGET |
|---|--------------------|--------------------|--------------------|-------------------|-------------------|--------------------------------------|
| Budget Summary | | | | | | |
| SUBTOTAL with Inflation | \$ 28,724,882 | \$ 44,099,793 | \$ 49,651,385 | \$ 36,059,823 | \$ 57,008,570 | \$ 171,280,373 |
| CONTINGENCY | \$ 1,000,000 | | | | | |
| REIMBURSEMENT PROJECTS | | | | | | |
| (Developer Reimbursements) | 590,000 | 100,000 | 100,000 | 100,000 | 100,000 | 500,000 |
| This is for reimbursements for extensions that qualify under the District's Extension Policy. Refer to the "Policy and Procedures for the Extension of Sewer Service" for further information. For FY20-21 there are two reimbursement agreements: 1) Olivette Master Plan Interceptor \$350,000; 2) 17 North Market Street \$87,000. | | | | | | |
| TOTAL | \$ 30,314,882 | \$ 44,199,793 | \$ 49,751,385 | \$ 36,159,823 | \$ 57,108,570 | \$ 171,780,373 |

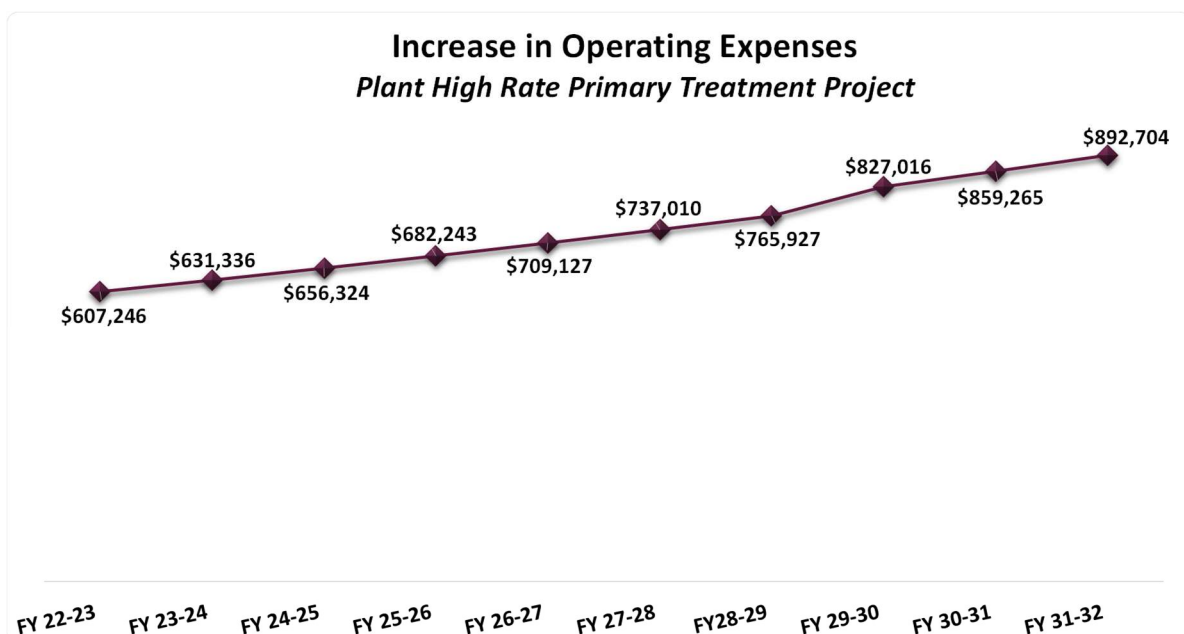
Capital Improvement Program (continued)

Impact of CIP on Operations

One of the purposes of a budget document is to describe the impact of significant non-routine capital expenditures on a government's current and future operating budgets. For most municipal and county governments, non-routine capital improvements consist of expansion of facilities, which often result in higher operating costs. For example, larger buildings increase utility expenses, and new structures such as libraries or swimming pools involve hiring additional staff. In addition, for most municipal and county governments, non-routine capital improvements are, for the most part, based upon the decisions of the local governing authority.

The District's CIP is different in two respects. First, almost all non-routine capital expenditures involve rehabilitation of already existing sewer pipe infrastructure, and secondly, the District's capital improvements to infrastructure are mandated by the state environmental regulatory department, imposing limits on discretionary action and cost. Through major capital improvements to the sewer collection system, the District expects to realize long-term cost reduction in wastewater treatment operations.

The following detail illustrates the impact of the Capital Improvement Program on the District's current and future operational budgets.



Capital Improvement Program (continued)

Operational Impact Summary

| PROJECT NAME | FY 22-23 BUDGET | FY 23-24 BUDGET | FY 24-25 BUDGET | FY 25-26 BUDGET | FY 26-27 BUDGET | FY 27-28 thru FY 31-32 BUDGET |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|--|
| Interceptor & Wet Weather Rehabilitation | | | | | | |
| Beaverdam Creek WW (CDM #10) | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Christian Creek Interceptor | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| French Broad Interceptor @ Amboy Road | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| South French Broad Relief Interceptor | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Swannanoa Equalization Tank | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Interceptor & Wet Weather Rehabilitation | - | - | - | - | - | - |
| General Sewer Rehabilitation | | | | | | |
| Albemarle Commons Pump Station Elimination | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Antique Lane @ Canie Creek | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Atkins Street | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |

Capital Improvement Program (continued)

Operational Impact Summary (continued)

| PROJECT NAME | FY 22-23 BUDGET | FY 23-24 BUDGET | FY 24-25 BUDGET | FY 25-26 BUDGET | FY 26-27 BUDGET | FY 27-28 thru FY 31-32 BUDGET |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|--|
| General Sewer Rehabilitation | | | | | | |
| Aurora Drive | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Avon Avenue @ Haywood Road | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Beale Road @ Copney Lane | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Bellevue Road | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Bent Tree Road | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Braddock Way - PRP 20002 | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Buchanan Avenue | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Caledonia Road | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Calvin Trail @ Greybeard Trail | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |

Capital Improvement Program (continued)

Operational Impact Summary (continued)

| PROJECT NAME | | | | | | FY 27-28 thru FY 31-32 |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|------------------------------|
| | FY 22-23 BUDGET | FY 23-24 BUDGET | FY 24-25 BUDGET | FY 25-26 BUDGET | FY 26-27 BUDGET | BUDGET |
| General Sewer Rehabilitation | | | | | | |
| Central Avenue @ I-240 | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Chatham Road | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Cherokee Road | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Cub Road | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| East Chestnut Ave @ Five Points | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Edwards Avenue @ US 70 Hwy | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Elk Mountain Place | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Erwin Hills Road @ High School | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Fairmont Road | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |

Capital Improvement Program (continued)

Operational Impact Summary (continued)

| PROJECT NAME | FY 22-23 BUDGET | FY 23-24 BUDGET | FY 24-25 BUDGET | FY 25-26 BUDGET | FY 26-27 BUDGET | FY 27-28 thru FY 31-32 BUDGET |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|--|
| General Sewer Rehabilitation | | | | | | |
| Forestdale Drive | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Harmony Lane | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Hazel Mill Road @ Richland Street | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Hill Street @ Cross Place | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Howland Road @ Sunset Trail | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Johnston Boulevard @ Providence Road | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Jonestown Road @ Riverside Drive | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Joyner Avenue @ Amboy Road | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Kimberly Avenue @ Sedley Avenue | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |

Capital Improvement Program (continued)

Operational Impact Summary (continued)

| PROJECT NAME | FY 22-23 BUDGET | FY 23-24 BUDGET | FY 24-25 BUDGET | FY 25-26 BUDGET | FY 26-27 BUDGET | FY 27-28 thru FY 31-32 BUDGET |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|--|
| General Sewer Rehabilitation | | | | | | |
| Lakeview @ Glen Falls Road | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Lakewood Drive @ Chiles Avenue | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Le An Hurst Road | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Lincoln Avenue | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Logan Avenue | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Manetta Road @ Johnson Drive | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| McDowell Street @ Lily Carmichael Drive | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Meadow Road @ Train Yard | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Montford Avenue @ Montford Park | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |

Capital Improvement Program (continued)

Operational Impact Summary (continued)

| PROJECT NAME | FY 22-23 BUDGET | FY 23-24 BUDGET | FY 24-25 BUDGET | FY 25-26 BUDGET | FY 26-27 BUDGET | FY 27-28 thru FY 31-32 BUDGET |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|--|
| General Sewer Rehabilitation | | | | | | |
| New Haw Creek Road @ Dogwood Grove | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| New Stock Road | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Oakland Drive @ Church Street | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Parkwood Avenue | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Riverview Drive | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Rosewood Avenue @ Riverside Cemetery | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Royal Pines Drive - PRP 47009 | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Sand Hill Road @ Baker Place | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Somerset Road @ Greene Road | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |

Capital Improvement Program (continued)

Operational Impact Summary (continued)

| PROJECT NAME | FY 22-23 BUDGET | FY 23-24 BUDGET | FY 24-25 BUDGET | FY 25-26 BUDGET | FY 26-27 BUDGET | FY 27-28 thru FY 31-32 BUDGET |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|--|
| General Sewer Rehabilitation | | | | | | |
| Springside Road @ Overlook Road | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Sulphur Springs Road @ Covington Street | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Sweeten Creek Road @ Buck Shoals Road | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Toxaway Street | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Walnut Street @ N. Lexington Avenue | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Waynesville Avenue @ Brownwood Avenue | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| SSD Rehabilitation & Replacement | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Surveys for Design | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| General Sewer Rehabilitation | - | - | - | - | - | - |

Capital Improvement Program (continued)

Operational Impact Summary (continued)

| PROJECT NAME | FY 22-23 BUDGET | FY 23-24 BUDGET | FY 24-25 BUDGET | FY 25-26 BUDGET | FY 26-27 BUDGET | FY 27-28 thru FY 31-32 BUDGET |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|--|
| Private Sewer Rehabilitation | | | | | | |
| Homeland Park | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Old County Home Road PSR | - | - | - | - | - | - |
| No Impact to Operating Budget - efficiencies gained will be used in the District's collector system preventative maintenance program. | | | | | | |
| Private Sewer Rehabilitation | | | | | | |
| Treatment Plant, Pump Stations & General Capital Improvements | | | | | | |
| Bar Screen Roof Penetrations | - | - | - | - | - | - |
| Impact to Operating Budget will be negligible. | | | | | | |
| Biological Treatment | - | - | - | - | - | - |
| Impact to Operating Budget will be negligible. | | | | | | |
| Building and Facility Rehabilitation | - | - | - | - | - | - |
| Impact to Operating Budget will be negligible. | | | | | | |
| Carrier Bridge Pump Station Replacement | - | - | - | - | - | - |
| Impact to Operating Budget will be negligible. | | | | | | |
| Collection System Master Plan Update | - | - | - | - | - | - |
| Impact to Operating Budget will be negligible. | | | | | | |
| Equipment Storage Facility | - | - | - | - | - | - |
| Impact to Operating Budget will be negligible. | | | | | | |
| Flow Monitoring | - | - | - | - | - | - |
| Impact to Operating Budget will be negligible. | | | | | | |
| HVAC Rehabilitation | - | - | - | - | - | - |
| Impact to Operating Budget will be negligible. | | | | | | |
| Hydroelectric Power Plant Rehabilitation | - | - | - | - | - | - |
| Impact to Operating Budget will be negligible. | | | | | | |
| Incinerator Ash Lagoon Restoration | - | - | - | - | - | - |
| Impact to Operating Budget will be negligible. | | | | | | |

Capital Improvement Program (continued)

Operational Impact Summary (continued)

| PROJECT NAME | FY 22-23 BUDGET | FY 23-24 BUDGET | FY 24-25 BUDGET | FY 25-26 BUDGET | FY 26-27 BUDGET | FY 27-28 thru FY 31-32 BUDGET |
|--|--------------------|--------------------|--------------------|--------------------|--------------------|--|
| Treatment Plant, Pump Stations & General Capital Improvements | | | | | | |
| Incinerator Heat Exchanger Replacement | - | - | - | - | - | - |
| Impact to Operating Budget will be negligible. | | | | | | |
| Incinerator Polymer System Replacement | - | - | - | - | - | - |
| Impact to Operating Budget will be negligible. | | | | | | |
| Incinerator Refractory Replacement | - | - | - | - | - | - |
| Impact to Operating Budget will be negligible. | | | | | | |
| Intermediate Clarifier Effluent Trough Rehabilitatoin | - | - | - | - | - | - |
| Impact to Operating Budget will be negligible. | | | | | | |
| ITT Pump Station Upgrade | - | - | - | - | - | - |
| Impact to Operating Budget will be negligible. | | | | | | |
| Mud Creek Pump Station Replacement | - | - | - | - | - | - |
| Impact to Operating Budget will be negligible. | | | | | | |
| Mull Building HVAC - Phase III | - | - | - | - | - | - |
| Impact to Operating Budget will be negligible. | | | | | | |
| Plant High Rate Primary Treatment | 607,246 | 631,336 | 656,324 | 682,243 | 709,127 | 4,081,921 |
| The process will not be online until 2020. Impact to operating budget includes additional materials, energy, and disposal costs. | | | | | | |
| RBC Slide Gate Replacement | - | - | - | - | - | - |
| Impact to Operating Budget will be negligible. | | | | | | |
| Solids Handling Capacity Improvements | - | - | - | - | - | - |
| Impact to Operating Budget will be negligible. | | | | | | |
| Weaverville Pump Station Replacement | - | - | - | - | - | - |
| Impact to Operating Budget will be negligible. | | | | | | |
| General Capital Equipment | - | - | - | - | - | - |
| Impact to Operating Budget will be negligible. | | | | | | |
| Treatment Plant, Pump Stations & General Capital Improvements | \$ 607,246 | \$ 631,336 | \$ 656,324 | \$ 682,243 | \$ 709,127 | \$ 4,081,921 |

Capital Improvement Program (continued)

Operational Impact Summary (continued)

| PROJECT NAME | FY 22-23 BUDGET | FY 23-24 BUDGET | FY 24-25 BUDGET | FY 25-26 BUDGET | FY 26-27 BUDGET | FY 27-28 thru FY 31-32 BUDGET |
|--|--------------------|--------------------|--------------------|--------------------|--------------------|--|
| Design, Row, & Construction Management Expenses | | | | | | |
| Design, ROW, & Const. Mgmt. Exp. | - | - | - | - | - | - |
| No Impact to Operating Budget | | | | | | |
| Design, Row, & Construction Management Expenses | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Operational Impact Summary | | | | | | |
| Interceptor & Wet Weather Rehabilitation | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| General Sewer Rehabilitation | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Private Sewer Rehabilitation | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Treatment Plant, Pump Station and General Capital Improvements | \$ 607,246 | \$ 631,336 | \$ 656,324 | \$ 682,243 | \$ 709,127 | \$ 4,081,921 |
| Design, ROW, & Construction Management Expenses | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Total - Operational Impact Summary | \$ 607,246 | \$ 631,336 | \$ 656,324 | \$ 682,243 | \$ 709,127 | \$ 4,081,921 |

Debt Financing

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Debt Financing

Debt Management

Prior to the 1990s, the District's policy was to fund capital improvements from user fees. Having inherited aging collector lines, some in excess of 100 years old, this policy forced the District to increase rates dramatically yet never provided enough funding to keep up with the magnitude of desperately needed repairs. Coming to realize the benefit of integrating capital-planning and debt-financing activities, the District Board developed a long-range plan to utilize bonds and pay-as-you-go in a coordinated capital improvement plan.

This combined strategy allows for more equity between long-term and new ratepayers while providing the necessary funding for an adequately functioning system. Issuing debt provides the capital to rehabilitate crumbling infrastructure while allowing present and future ratepayers who will enjoy the benefit to share the cost through annual principal and interest payments. This contrasts with a strategy that uses only pay-as-you-go whereby a resident will pay higher rates for many years to accumulate the funds needed for rehabilitation before enjoying any benefit, yet new users joining after completion of a project will have immediate use of the new facilities without sharing in any of the cost. Another advantage of combining borrowed funds with current funding is the ability to structure debt repayment schedules to avoid dramatic rate increases otherwise needed to provide adequate amounts for multi-million-dollar projects.

The District's bonds are rated by national rating agencies as follows:

| Moody's Investors Service | Standard & Poor's | Fitch Ratings |
|---------------------------|-------------------|---------------|
| Aaa | AA+ | AAA |

In October 2021, the District received a ratings upgrade from AA+ to AAA from Fitch Ratings. Fitch Ratings recognized the District's sound financial performance characterized by ample liquidity, healthy debt service coverage, and comprehensive fiscal planning.

Debt Financing (continued)

Debt Management (continued)

The rating also incorporates MSD's regional customer base, adequate system capacity, manageable debt levels, and satisfactory protections for bondholders. These high ratings enable the District to pay a lower rate of interest than many other utilities, which has a positive effect on the current and future budgets.

Unlike North Carolina's cities and counties, MSD does not have a debt limit. However, provisions in the District's Bond Order require minimum debt coverage of 120% of net revenues to bonded debt service.

The Board established a revenue policy, which sets a goal for debt coverage ratio to be approximately 150% for forecasting and planning purposes, realizing the impact of the increased debt coverage ratio on bond ratings.

The District maintains a ten-year forecast to budget capital improvements financed by a combination of debt and current fees. Based on projections using modest, consistent rate increases and capital improvement projects as outlined in the District's 10-year Capital Improvement Plan, an additional \$40 million in debt is anticipated to be issued in FY2024 without affecting the planned rate of user charge increases.

Capital Projects Funding

Funding for capital projects comes from a combination of revenue bonds and pay-as-you-go financing. Details may be found in the Policies & Budget Process tab of this budget document where Debt Policy is presented and, in the schedule, "Budget/Rate Forecast" which illustrates the timing of debt issues and accumulation of revenues over expenditures anticipated to be available for capital financing.

Generally speaking, half of the funds for capital improvements come from debt financing, with the other half funded by the excess of revenues over expenditures (pay-as-you-go).

Debt Financing (continued)

Capital Projects Funding (continued)

During FY2018, the District issued \$37.5 million fixed rate revenue bonds. \$11.4 million was used to refund portions of the 2009A Series bonds. The remaining \$26.1 million has been expended. The District will accumulate funding from operations to finance a portion of the capital budget until the next debt issuance, anticipated to be in FY2024.

As of June 30, 2022, the District will have \$88.4 million par value of outstanding revenue bond debt. During FY2023, over \$6.4 million in principal will be repaid. The District anticipates issuing an additional \$50 million in revenue bonds in FY2025. Debt service from this future bond issue has been included in the District's long-term business plan and sewer rate increases. A summary of outstanding debt at June 30, 2022 and anticipated principal repayment during FY2023 begin below and continue on the following two (2) pages.

Debt Financing (continued)**Outstanding Debt as of June 30, 2022**

| | Balance 6/30/2022 | Additions | Retirements | Balance 6/30/2023 |
|--|----------------------|-------------|------------------|----------------------|
| Enka-Candler Water and Sewer District Bonds liability assumed by Metropolitan Sewerage District of Buncombe County, North Carolina on July 2, 1990 as stated in the sewer consolidated agreement: | | | | |
| 5.00% serial bonds assumed July 2, 1990 with maturities on each June 1 through 2024 varying from \$19,000 to \$64,000, interest payable annually. | \$ 84,000 | \$ - | \$ 64,000 | \$ 20,000 |
| Total Bonds - Enka Candler Series | \$ 84,000 | \$ - | \$ 64,000 | \$ 20,000 |

Revenue Bonds, Series 2008A issued to refund Series 2005 Revenue Bonds

| | | | | |
|--|----------------------|-------------|---------------------|----------------------|
| Interest at variable rates in the weekly mode, payable monthly, due serially until 2031. | \$ 22,910,000 | \$ - | \$ 2,235,000 | \$ 20,675,000 |
| Total Bonds - Series 2008A | \$ 22,910,000 | \$ - | \$ 2,235,000 | \$ 20,675,000 |

2009 North Carolina Water Pollution Control Revolving Fund used to construct certain sewerage projects:

| | | | | |
|---|-------------------|-------------|------------------|-------------------|
| \$672,980 revolving loan issued August 18, 2009 unpaid principal sum is reduced by one-half as "Principal Forgiveness", interest accrues at 0%, 20 annual installments May 1, 2011 to 2030. | \$ 134,590 | \$ - | \$ 16,825 | \$ 117,765 |
| Total State Revolving Fund | \$ 134,590 | \$ - | \$ 16,825 | \$ 117,765 |

Revenue Bonds Series 2013 issued to refund Series 2003 and Series 2008B Revenue Refunding Bonds:

| | | | | |
|--|----------------------|-------------|---------------------|---------------------|
| 2.0% to 5.00% serial bonds issued May 1, 2013, with maturities on each July 1, 2014 through 2029 varying from \$1,065,000 to \$4,255,000; interest payable semi-annually | \$ 10,135,000 | \$ - | \$ 1,915,000 | \$ 8,220,000 |
| Total Bond - Series 2013 | \$ 10,135,000 | \$ - | \$ 1,915,000 | \$ 8,220,000 |

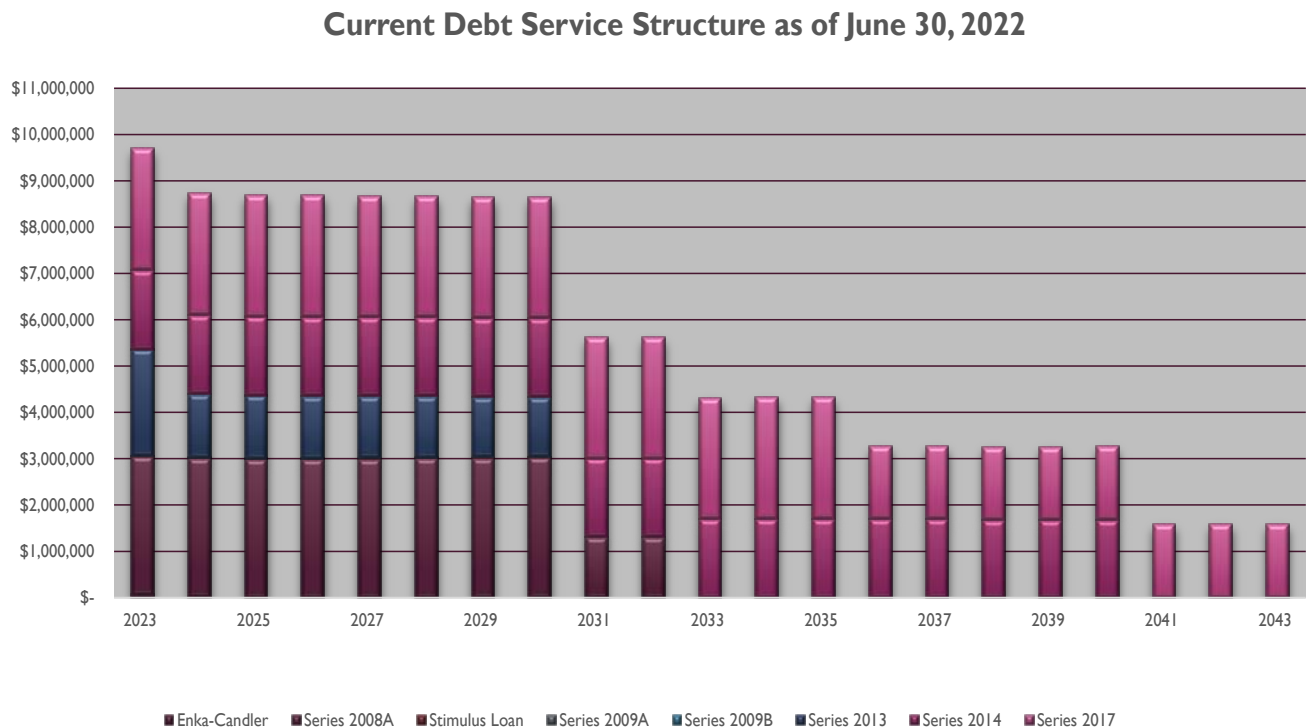
Debt Financing (continued)**Outstanding Debt as of June 30, 2022**

| | Balance 6/30/2022 | Additions | Retirements | Balance 6/30/2023 |
|--|----------------------|-------------|---------------------|----------------------|
| Revenue Bonds Series 2014 issued to construct certain sewerage projects: | | | | |
| 2.0% to 5.00% serial bonds issued May 21, 2014, with maturities on each July 1, 2015 through 2039 varying from \$535,000 to \$1,430,000; interest payable semi-annually | \$ 16,590,000 | \$ - | \$ 835,000 | \$ 15,755,000 |
| 5.00% term bonds issued May 21, 2014, at 112.950%, due July 1, 2039; interest payable semi-annually. | \$ 4,685,000 | \$ - | \$ - | \$ 4,685,000 |
| Total Bond - Series 2014 | \$ 21,275,000 | \$ - | \$ 835,000 | \$ 20,440,000 |
| Revenue Bonds Series 2017 issued to refund Series 2009A and to construct certain sewerage projects: | | | | |
| 3.0% to 5.00% serial bonds issued July 11, 2017, with maturities on each July 1, 2018 through 2039 varying from \$620,000 to \$2,260,000; interest payable semi-annually | \$ 29,315,000 | \$ - | \$ 1,295,000 | \$ 28,020,000 |
| 5.00% term bonds issued July 11, 2017, at 97.704%, due July 1, 2042; interest payable semi-annually. | \$ 4,520,000 | \$ - | \$ - | \$ 4,520,000 |
| Total Bond - Series 2017 | \$ 33,835,000 | \$ - | \$ 1,295,000 | \$ 32,540,000 |
| Total Bonds - All Series | \$ 88,373,590 | \$ - | \$ 6,360,825 | \$ 82,012,765 |

Aggregate Debt Service

| Year Ending June 30 | Enka Candler Bonds | Series 2008A Refunding | North Carolina Water Pollution Control Revolving Fund | Series 2013 Refunding | Series 2014 | Series 2017 | Aggregate Debt Service |
|------------------------------|--------------------------|------------------------------|---|--------------------------|----------------------|----------------------|---------------------------|
| 2023 | 68,200 | 2,979,445 | 16,825 | 2,298,219 | 1,705,775 | 2,633,775 | 9,702,238 |
| 2024 | 21,000 | 2,986,599 | 16,825 | 1,377,719 | 1,706,675 | 2,625,850 | 8,734,668 |
| 2025 | - | 2,986,194 | 16,825 | 1,363,469 | 1,708,025 | 2,622,225 | 8,696,737 |
| 2026 | - | 2,987,324 | 16,825 | 1,352,944 | 1,703,275 | 2,625,100 | 8,685,467 |
| 2027 | - | 3,000,803 | 16,825 | 1,341,444 | 1,695,775 | 2,619,350 | 8,674,196 |
| 2028 | - | 3,010,738 | 16,825 | 1,323,644 | 1,706,625 | 2,614,975 | 8,672,806 |
| 2029 | - | 3,017,451 | 16,825 | 1,304,644 | 1,695,475 | 2,621,475 | 8,655,870 |
| 2030 | - | 3,025,226 | 16,825 | 1,294,922 | 1,697,675 | 2,618,600 | 8,653,247 |
| 2031 | - | 1,304,929 | - | - | 1,698,175 | 2,616,350 | 5,619,454 |
| 2032 | - | 1,306,777 | - | - | 1,696,875 | 2,614,475 | 5,618,127 |
| 2033 | - | - | - | - | 1,698,675 | 2,612,725 | 4,311,400 |
| 2034 | - | - | - | - | 1,693,575 | 2,637,675 | 4,331,250 |
| 2035 | - | - | - | - | 1,698,138 | 2,635,850 | 4,333,988 |
| 2036 | - | - | - | - | 1,697,325 | 1,583,050 | 3,280,375 |
| 2037 | - | - | - | - | 1,692,850 | 1,584,650 | 3,277,500 |
| 2038 | - | - | - | - | 1,682,125 | 1,580,125 | 3,262,250 |
| 2039 | - | - | - | - | 1,681,000 | 1,579,475 | 3,260,475 |
| 2040 | - | - | - | - | 1,681,000 | 1,582,550 | 3,263,550 |
| 2041 | - | - | - | - | - | 1,578,438 | 1,578,438 |
| 2042 | - | - | - | - | - | 1,577,109 | 1,577,109 |
| 2043 | - | - | - | - | - | 1,579,297 | 1,579,297 |
| | <u>\$ 89,200</u> | <u>\$ 26,605,486</u> | <u>\$ 134,596</u> | <u>\$11,657,003</u> | <u>\$ 30,539,038</u> | <u>\$ 46,743,119</u> | <u>\$115,768,442</u> |

Current Debt Service Structure as of June 30, 2022



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Statistical Section ന.ര

Introduction

This part of MSD's comprehensive annual financial report presents detailed information as a context for understanding what the information in the financial statements, note disclosures, and required supplementary information says about the District's overall financial health.

Financial Trends

These schedules contain trend information to help the reader understand how the District's financial performance and well-being have changed over time.

- ▲ Net Position by Component
- ▲ General Revenue by Source
- ▲ Expenses by Function

Revenue Capacity

These schedules contain information to help the reader assess the District's most significant revenue sources.

- ▲ Principal Commercial Users

Demographic and Economic Information

These schedules offer demographic and economic indicators to help the reader understand the environment within which the District's financial activities take place.

- ▲ Demographic & Economic Statistics
- ▲ Principal Employers

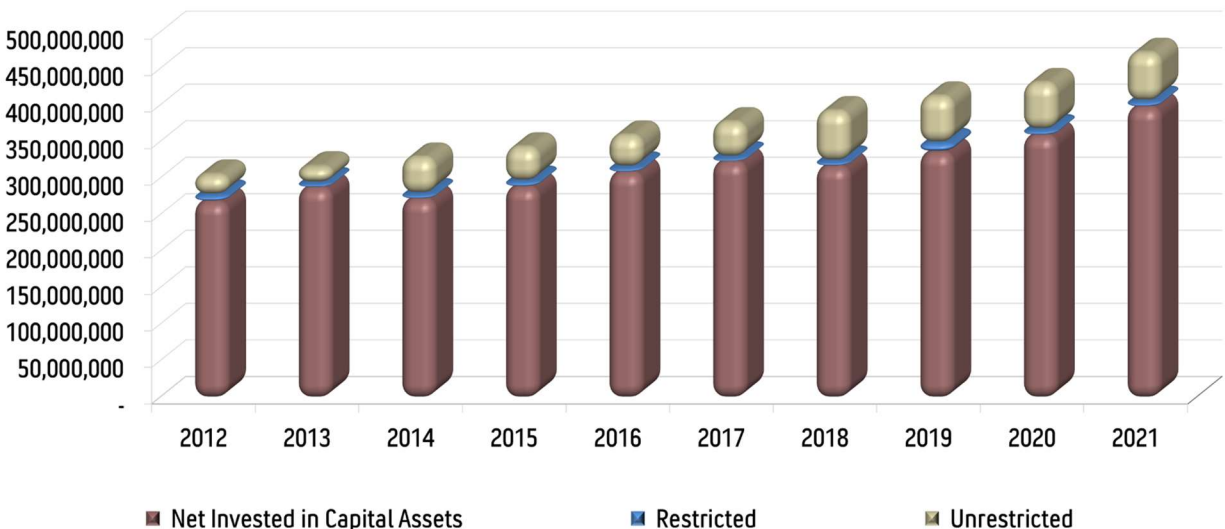
Source: Unless otherwise noted, the information in these schedules is derived from the annual comprehensive financial reports for the relevant year.

Net Position by Component

FY 2012 to FY 2021

| Fiscal Year Ended June 30 | Net Invested in Capital Assets | Restricted | Unrestricted | Total Net Position |
|---------------------------|--------------------------------|------------|--------------|--------------------|
| 2012 | 270,297,021 | 8,117,494 | 28,687,702 | 307,102,217 |
| 2013 | 289,369,009 | 5,472,550 | 23,332,868 | 318,174,427 |
| 2014 | 273,702,824 | 6,238,648 | 50,388,726 | 330,330,198 |
| 2015 | 290,329,700 | 6,930,286 | 47,164,270 | 344,424,256 |
| 2016 | 310,277,965 | 6,087,649 | 44,227,370 | 360,592,984 |
| 2017 | 324,826,191 | 5,169,667 | 48,827,214 | 378,823,072 |
| 2018 | 318,591,132 | 6,045,516 | 69,374,003 | 394,010,651 |
| 2019 | 337,729,290 | 11,860,481 | 64,530,210 | 414,119,981 |
| 2020 | 360,881,071 | 6,747,582 | 64,850,064 | 432,478,717 |
| 2021 | 399,621,901 | 7,016,964 | 67,107,474 | 473,746,339 |

Net Position by Component FY 2012 thru FY 2021

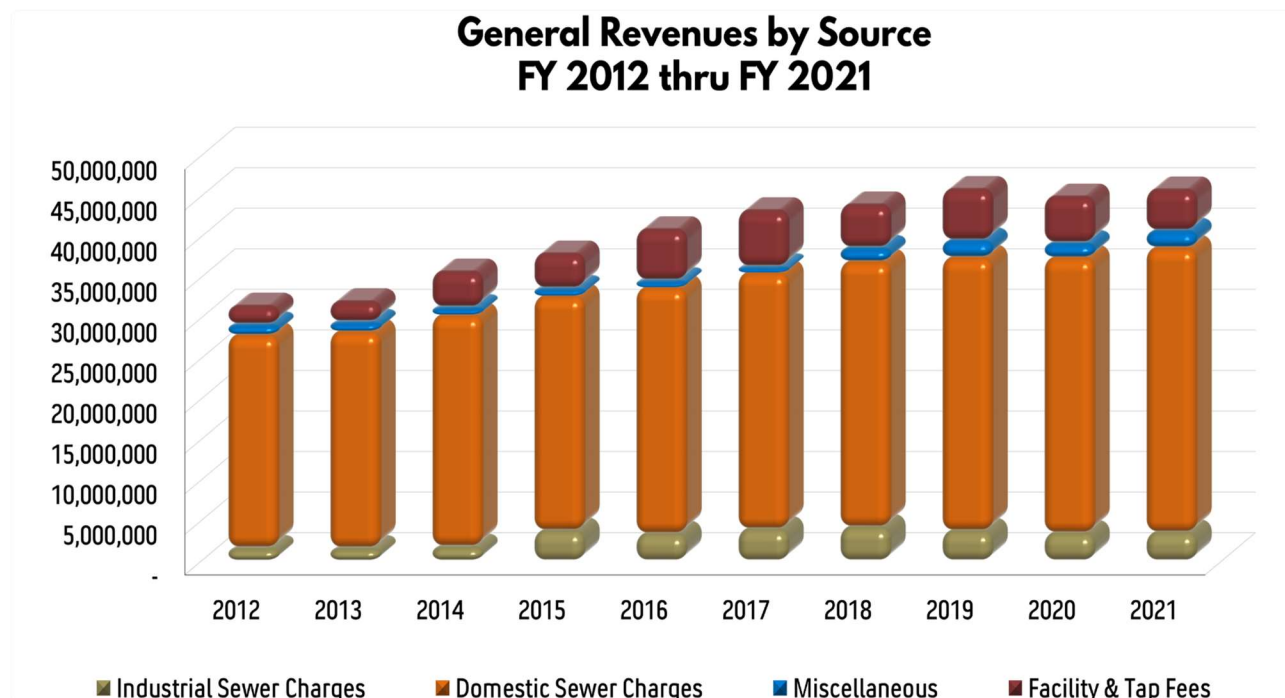


General Revenues by Source

FY 2012 to FY 2021

| Fiscal Year Ended June 30 | Industrial Sewer Charges | Domestic Sewer Charges | Facility & Tap Fees | Miscellaneous | Total |
|---------------------------|--------------------------|------------------------|---------------------|---------------|------------|
| 2012 | 1,599,819 | 26,249,357 | 2,321,474 | 1,305,959 | 31,476,609 |
| 2013 | 1,577,916 | 26,690,934 | 2,566,635 | 1,185,057 | 32,020,542 |
| 2014 | 1,758,818 | 28,528,622 | 4,430,475 | 972,397 | 35,690,312 |
| 2015 | 3,725,584 | 28,892,302 | 4,311,259 | 984,097 | 37,913,242 |
| 2016 | 3,344,074 | 30,335,486 | 6,324,596 | 895,535 | 40,899,691 |
| 2017 | 3,909,925 | 31,611,295 | 6,977,097 | 744,894 | 43,243,211 |
| 2018 | 4,159,767 | 32,731,233 | 5,357,008 | 1,715,431 | 43,963,439 |
| 2019 | 3,687,703 | 33,705,906 | 6,343,842 | 2,125,732 | 45,863,183 |
| 2020 | 3,426,103 | 33,945,459 | 5,737,611 | 1,826,347 | 44,935,520 |
| 2021 | 3,497,070 | 35,094,831 | 5,092,060 | 2,123,374 | 45,807,335 |

Note: Does not include Capital Contributions.

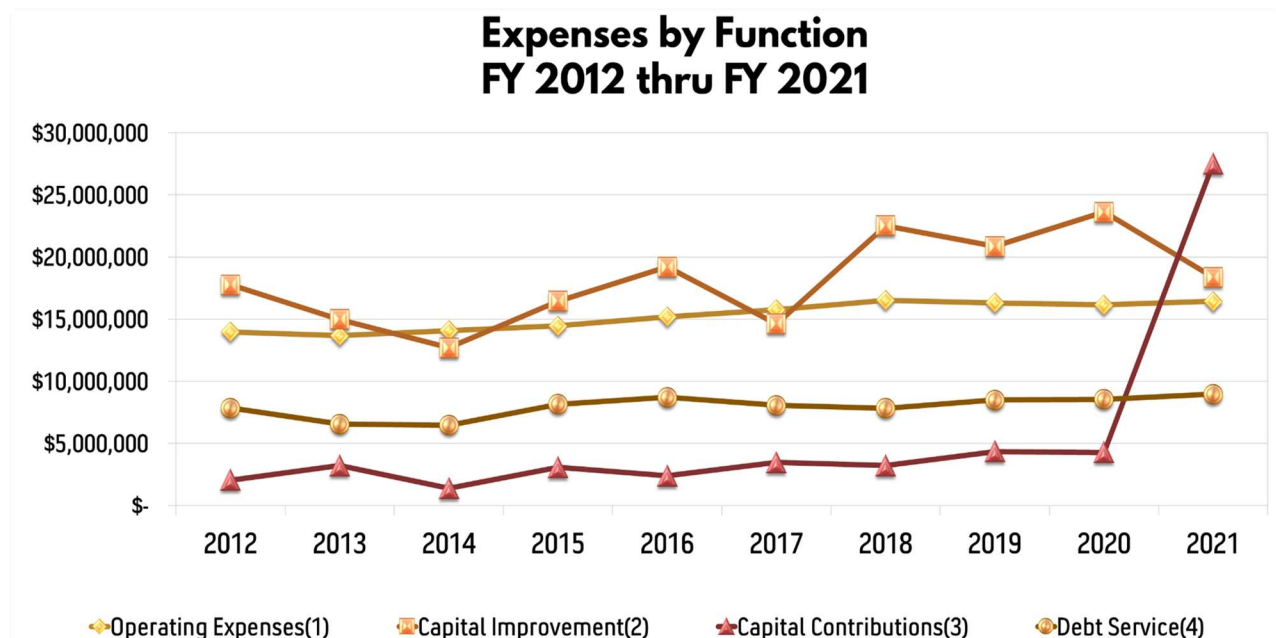


Expenses by Function (Non-GAAP)

FY 2012 to FY 2021

| Fiscal Year Ended June 30 | Operating Expenses ⁽¹⁾ | Capital Improvement ⁽²⁾ | Capital Contributions ⁽³⁾ | Debt Service ⁽⁴⁾ | Total |
|---------------------------|-----------------------------------|------------------------------------|--------------------------------------|-----------------------------|------------|
| 2012 | 13,982,269 | 17,775,391 | 2,047,550 | 7,859,771 | 41,664,981 |
| 2013 | 13,674,518 | 14,988,922 | 3,217,846 | 6,553,956 | 38,435,242 |
| 2014 | 14,081,697 | 12,701,810 | 1,396,385 | 6,464,583 | 34,644,475 |
| 2015 | 14,468,184 | 16,455,653 | 3,078,520 | 8,154,350 | 42,156,707 |
| 2016 | 15,204,117 | 19,201,501 | 2,392,781 | 8,722,495 | 45,520,894 |
| 2017 | 15,767,824 | 14,631,155 | 3,478,337 | 8,069,902 | 41,947,218 |
| 2018 | 16,536,830 | 22,528,740 | 3,222,031 | 7,841,626 | 50,129,227 |
| 2019 | 16,315,760 | 20,860,363 | 4,354,071 | 8,505,560 | 50,035,754 |
| 2020 | 16,158,239 | 23,629,714 | 4,281,722 | 8,558,107 | 52,627,782 |
| 2021 | 16,441,116 | 18,377,093 | 27,495,566 | 8,966,312 | 71,280,087 |

Includes general operations.

²Excludes depreciation expense.³This includes collection system infrastructure contributed by developers.⁴Includes Bond Principal Expense and Bond Interest Less Capitalized Interest Portion and excludes early retirement of long-term debt.

Principal Commercial Users

FY 2012 & FY 2021

| Commercial User | Type of Business | 2012 | | | 2021 | | |
|--|--|---------------|------|-----------------------------|---------------|------|-----------------------------|
| | | Total Charges | Rank | Percentage of Total Charges | Total Charges | Rank | Percentage of Total Charges |
| Milkco, Inc. | Dairy Products & Juices | \$ 529,303 | 1 | 1.90% | \$ 724,302 | 1 | 1.88% |
| Jacob Holm Industries America | Textile Manufacturer | 120,883 | 5 | 0.43% | 573,937 | 2 | 1.49% |
| Sierra Nevada | Micro-Brewery Manufacturer | ----- | | | 305,179 | 3 | 0.79% |
| Ridgecrest Baptist Conference Center | Christian Conference Center | 176,541 | 3 | 0.63% | 201,015 | 4 | 0.52% |
| VA Medical Center | Veterans Hospital | 98,181 | 7 | 0.35% | 175,478 | 5 | 0.45% |
| - Asheville Department of Veterans Affairs | | | | | | | |
| Arcadia Beverage | Beverage Supplier for local/global retailers | ----- | | | 160,212 | 6 | 0.42% |
| New Belgium Brewing | Micro-Brewery Manufacturer | ----- | | | 145,113 | 7 | 0.38% |
| The Biltmore Company | Tourist Attraction/Winery/Resort Services | ----- | | | 138,035 | 8 | 0.36% |
| Givens Estates, Inc. | Continuing Care Retirement Community | 142,559 | 4 | 0.51% | 136,826 | 9 | 0.35% |
| Mission Health System | Health & Emergency Services | 264,630 | 2 | 0.95% | 126,279 | 10 | 0.33% |
| BONAR | Chemical Manufacturer | 98,603 | 6 | 0.35% | ----- | | |
| - (formerly Colbond) | | | | | | | |
| Cooperative Laundry Services | Laundry Services Provider | 85,556 | 8 | 0.31% | ----- | | |
| Flint Group | Textile Machine Parts | 74,878 | 9 | 0.27% | ----- | | |
| - (formerly Day International) | | | | | | | |
| Continental Automotive Systems | Automotive Parts Manufacturer | 74,346 | 10 | 0.27% | ----- | | |
| TOTAL | | \$ 1,665,480 | | 5.98% | \$ 2,686,376 | | 6.96% |

Source: District Billing Records

Demographic & Economic Statistics

FY 2012 to FY 2021

| Fiscal Year Ended June 30 | Population Estimates ¹ | Per Capita Income ² | Median Age ¹ | Civilian Labor Force ³ | | |
|------------------------------------|--------------------------------------|-----------------------------------|----------------------------|-----------------------------------|------------|----------------------|
| | | | | Employed | Unemployed | Unemployment Rate |
| 2012 | 243,655 | 38,205 | 41.3 | 118,636 | 9,794 | 7.6% |
| 2013 | 246,807 | 37,973 | 41.4 | 121,521 | 7,929 | 6.1% |
| 2014 | 249,084 | 40,604 | 41.7 | 122,480 | 5,898 | 4.6% |
| 2015 | 251,954 | 43,006 | 41.9 | 125,355 | 6,131 | 4.7% |
| 2016 | 254,955 | 44,478 | 41.9 | 129,324 | 5,412 | 4.0% |
| 2017 | 257,071 | 46,297 | 42.2 | 132,122 | 4,856 | 3.5% |
| 2018 | 259,259 | 48,936 | 42.3 | 135,728 | 4,545 | 3.2% |
| 2019 | 261,191 | 50,690 | 42.5 | 138,212 | 4,564 | 3.2% |
| 2020 | Unavailable | Unavailable | Unavailable | 118,165 | 15,077 | 11.3% |
| 2021 | Unavailable | Unavailable | Unavailable | 129,830 | 6,064 | 4.5% |

Note: The information above is for Buncombe County, North Carolina. The District believes that the above information is representative of the service area, which extends over approximately 80% of the county.

Sources:

¹U.S. Census Bureau, Population Division; Estimates for 2010-2018 reflect county population estimates available as of March 2019.

²Regional Economic Information System, Bureau of Economic Analysis, U.S. Department of Commerce; Last updated: November 14, 2019-- new statistics for 2018; revised statistics for 2010-2017.

³U.S. Department of Labor - Bureau of Labor Statistics; Local Area Unemployment Statistics

Principal Employers

FY 2012 to FY 2021

| Employer | FY 2012 | | | FY 2021 | | |
|--|-----------|------|------------------------------|-----------------|------|------------------------------|
| | Employees | Rank | % of Total County Employment | Employees* | Rank | % of Total County Employment |
| Mission Health System & Hospitals | 6,994 | 1 | 5.90% | 3,000+ | 1 | 2.17%+ |
| Buncombe County Public Schools | 4,000 | 2 | 3.37% | 3,000+ | 2 | 2.17%+ |
| The Biltmore Company | 1,770 | 3 | 1.49% | 1,000-2,999 | 3 | 0.72% - 2.17% |
| VA Medical Center - Asheville | 1,593 | 4 | 1.34% | 1,000-2,999 | 4 | 0.72% - 2.17% |
| Buncombe County Government | 1,380 | 5 | 1.16% | 1,000-2,999 | 5 | 0.72% - 2.17% |
| Ingles Markets, Inc. | 1,137 | 6 | 0.96% | 1,000-2,999 | 6 | 0.72% - 2.17% |
| The Grove Park Inn Resort & Spa | 1,100 | 7 | 0.93% | 1,000-2,999 | 7 | 0.72% - 2.17% |
| Asheville-Buncombe Technical Community College | 1,019 | 8 | 0.86% | 1,000-2,999 | 8 | 0.72% - 2.17% |
| City of Asheville | 1,000 | 9 | 0.84% | 1,000-2,999 | 9 | 0.72% - 2.17% |
| CarePartners | 950 | 10 | 0.80% | 500-999 | 10 | 0.36% - 0.72% |
| Total for Principal Employers | 20,943 | | 17.65% | 13,500 - 21,992 | | 9.77% - 15.91% |

* Employee range is the only public information available

Note: The information above is for Buncombe County, North Carolina. The District believes that the above information is representative of the entire service area, which extends over approximately 80% of the County.

Source: Asheville Area Chamber of Commerce, Economic Development Department & NC Employment Security Commission

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Appendix

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Classification of Accounts

51100-Salaries & Wages—This includes salaries & wages for 152 department personnel. Also includes a Cost of Living increase of 7%.

51150-Overtime—This includes compensation as necessary for non-exempt personnel.

51200-NC Retirement—The District contributes 12.14% of gross salaries and wages to the North Carolina Local Government Employees' Retirement System. The employees contribute an additional 6.00% through payroll deduction, but the employee portion is not budgeted, as it is not an expense of the District. The above contribution includes 0.05% death benefit.

51250-Payroll Taxes—The District contributes 6.20% of gross salaries and wages to Social Security and 1.45% for Medicare as the employer share. The employees contribute equal amounts through payroll deduction, but this is not included in the budgeted amount.

51300-Medical, Dental & Life—This includes the employer allocation of the self-funded employee medical and dental program.

51325-Post-Employment Insurance—The District implemented GASB Statement No. 45: Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions. Included are postretirement benefits other than pension, for example, medical, dental, and vision.

51350-Worker's Compensation—This includes the allocation of worker's compensation premiums and deductible costs.

Classification of Accounts (continued)

51360-State Unemployment Benefits—Beginning FY14, the District was required to maintain a reserve equaling 1% of unemployment insurance taxable wages. In August of 2014, and every August subsequent, the Division of Employment Security (DES) calculates the amount that each employer should have in its reserve. Unemployment claims will be deducted from the reserve in the fall of that year. Employers will then receive a bill from the DES indicating the amount they must pay to replenish their reserve to the 1% level. This payment will cover both the costs of unemployment claims and increases in the employer's total number of employees or total taxable wages.

51500-401(k)—The District contributes up to 5.0% of matching contributions based upon the level of employee participation in the 401(k)-retirement plan. A professional investment institution administers this as contracted with the North Carolina Retirement System.

52010-Advertising—This includes newspaper ads for vacant positions, quarterly informational reports, and mandatory public SSO notices. In addition, the advertising account covers Annual Report and System Performance Annual Report distribution, door hangers and any other miscellaneous communications from the District to the public.

52050-Dues & Subscriptions—This includes memberships to professional organizations and subscriptions to water utility periodicals, local newspapers, etc.

52100-Postage—This includes the charges for mailing of all official correspondence.

52150-Travel, Meetings & Training—This includes attendance at regional, state, and national professional associations and various continuing education requirements including supervisory training, skill-based pay training, operator's seminar, etc.

Classification of Accounts (continued)

52160-Tuition Assistance—This includes pre-authorized monetary assistance to employees who take educational courses that directly relate to their positions at the District.

52170-Director's Fees & Expenses—This includes all costs pertaining to the Board of Directors such as stipends, meeting expenses, and travel to national water and wastewater conferences.

52180-Insurance—This represents allocation of general liability insurance premium and deductible costs.

52210-Communications (other than landline telephone)—This includes charges for cellular telephones, mobile radios, and pagers.

52240-Uniforms—This includes charges for the purchase of work shirts, pants, outerwear, safety boots and other related items, as well as the rental and cleaning of certain uniforms.

52250-Office Supplies—This includes paper, printing charges, and other miscellaneous office-related supplies.

52260-Special Departmental Supplies—This includes specialty paper, bindery supplies, and printing services for employee manual, index tabs, ID badges, film, film developing, business cards, and vellum.

52270-Safety Equipment/Supplies—This includes goggles, vests, trench-shoring equipment, gas monitors, and related items to prevent work-related injuries.

52280-Supplies/Small Tools—This includes chainsaw blades, drill bits, gloves, miscellaneous hand tools, axes, shovels, batteries, sewer tape, paint, and paint brushes, etc.

Classification of Accounts (continued)

52290-Chemicals—This includes all chemicals used in the treatment of wastewater.

52300-Line Cleaning & Supplies—This includes chemicals, rat bait, nozzles, hose, root cutters & replacement rods, root killer, degreaser, etc.

52330-Legal Fees—This includes professional services of the District's attorney for various matters not related to capital projects.

52340-Debt Administration Fees—This includes trustee fees, liquidity facility fees for variable debt, arbitrage calculation fees, and incidental expenditures incurred by the Bond Trustee.

52350-Professional & Contractual Services—This includes external audit fees, building security, emissions testing, effluent analysis, testing of samples, service contract on pumps, lab instrumentation, emergency line repairs, plumbing repairs, tree service, fence service, software annual support fees, and other outsourced services.

52400-Repairs (Office Equipment)—This includes charges for repairs of various office equipment not under a maintenance agreement.

52410-Maintenance (Bldgs. & Grounds)—This includes janitorial fees, outsourced repairs, mowing services, landscaping supplies, and elevator inspections.

52420-Maintenance (Equipment)—This includes maintenance expense on the forklift and pallet jack for the Purchasing/Warehouse Division, maintenance, and repair of various equipment items, such as gas detectors, chlorinators, parts and repairs for the camera equipment, cable, pumps, and various other maintenance of non-vehicular equipment.

Classification of Accounts (continued)

52430-Landscape Restoration—This includes manholes, rims & lids, blacktop patch and concrete materials, asphalt & concrete work, pipe, couplings, adapters, straw, grass seed, mulch, pine needles and plants required to recover excavated areas, etc.

52440-Pump Maintenance—This includes all parts and supplies necessary to maintain all MSD pumps.

52450-Equipment Rental—This includes the rental of equipment used occasionally like chippers and bulldozers.

52460-Motor Fuel and Lubricants—This includes gasoline, diesel fuel, motor oil, brake fluid, and similar supplies to operate and maintain the District fleet of trucks, vans, and heavy equipment.

52470-Outside Vehicle Maintenance—This includes expenditures paid to factory-authorized dealer service departments or similar enterprises to perform needed repairs to vehicles beyond the capabilities of the District's in-house fleet maintenance employees.

52500-Rents & Leases—This includes the rental of any equipment for the treatment plant, and operating leases for copiers and other office equipment.

52510-Permits, Fees, & Software Licenses—This includes charges for annual radiation license, stormwater permit, lab certification renewal, state operating permits, air permit, City of Asheville pavement cutting permits, and MSD manholes raised by the City during their paving programs and water usage by preventative maintenance trucks.

52650-Utilities—This includes charges for electricity, gas, water, and trash collection.

Classification of Accounts (continued)

52690-Freight—This includes freight charges ONLY for items that are not clearly and easily defined as pertaining to a certain division and/or line item(s).

52715-Safety Incentive Program—Rewards to employees for compliance with safety rules and procedures are distributed by the Safety Officer based upon observations during routine and surprise inspections.

52725-Wellness Program—One of the ways the District attempts to manage costs for self-funded health insurance plan is to encourage employees to achieve and maintain healthy lifestyles. Wellness program costs include education, fitness equipment, and auxiliary supplies.

52730-Employee Assistance Program—The District contracts with an agency to provide resources for dealing with employee performance issues to assist management.

52910-Non-Capital Equipment—This includes any item under \$1,000 consisting of various tools and assorted information technology components such as computers or monitors.

52915-Copiers, Printers and Faxes—This includes routine supplies and purchase of any machines under \$1,000.

52920-Billing & Collections—This represents the billing and collection of sewer charges by the member agencies.

53040-Fleet Equipment Replacement Fund—This includes the proposed annual funding for the future acquisition of vehicles, trucks, and trailers. Current acquisition of replacement vehicles is budgeted in the replacement fund itself.

Classification of Accounts (continued)

54010-Capital Equipment (New)—This includes requests for new equipment over \$1,000 or more and having a useful life of three years or longer.

54020-Capital Equipment (Software)—This includes license and other nonrecurring software charges of at least \$1,000 and having a useful life of three years or longer.

54030-Capital Equipment (Replacement)—This includes requests for replacement equipment over \$1,000 or more and having a useful life of three years or longer.

59200-Chargebacks to Construction Fund—Direct labor and materials costs incurred to acquire right-of-ways, design, plan, and monitor construction projects budgeted in the Systems Services and Engineering Services departments are transferred to the capital projects fund to be included in the capitalized cost of self-constructed assets.

Job Classification by Grade Order (effective July 1, 2022)

| Grade | Annual Salary Range - July 1, 2022 | | | Title |
|-------|------------------------------------|-----------|----------|---------------------------------------|
| | Minimum | Mid-Point | Maximum | |
| 11 | \$36,192 | \$44,353 | \$52,515 | Collections System Operator I |
| | | | | Construction Operator I |
| | | | | Office Assistant I |
| 12 | \$39,735 | \$48,695 | \$57,655 | Dispatcher I |
| | | | | Heavy Equipment Excavator I |
| | | | | Office Assistant II |
| 13 | \$40,728 | \$49,913 | \$59,097 | Collections System Operator II |
| | | | | Construction Operator II |
| | | | | Dispatcher II |
| 14 | \$41,747 | \$51,160 | \$60,574 | Electrician I |
| | | | | Facility Maintenance Technician |
| 15 | \$42,790 | \$52,439 | \$62,089 | Collections System Operator III |
| | | | | Construction Operator III |
| | | | | Heavy Equipment Excavator II |
| | | | | Systems Coordinator I |
| | | | | WWTP Operator in Training |
| 16 | \$43,860 | \$53,750 | \$63,641 | Accounting Technician I |
| | | | | Collections System Operator IV |
| | | | | Construction Administrative Assistant |
| | | | | Construction Operator IV |
| | | | | Maintenance Mechanic I |
| | | | | Warehouse Manager |
| 17 | \$44,957 | \$55,094 | \$65,232 | Accounting Technician II |
| | | | | Electrician II |
| | | | | Fleet Mechanic I |
| | | | | Pump Station Technician I |
| | | | | System Coordinator II |

Job Classification by Grade Order (effective July 1, 2022) (continued)

| Grade | Annual Salary Range - July 1, 2022 | | | Title |
|-------|------------------------------------|-----------|----------|--|
| | Minimum | Mid-Point | Maximum | |
| 18 | \$46,080 | \$56,472 | \$66,863 | Collections System Operator V |
| | | | | Construction Operator V |
| | | | | |
| 19 | \$47,232 | \$57,883 | \$68,534 | Construction Inspector I |
| | | | | GIS Data Mapping Technician |
| | | | | Heavy Equipment Excavator III |
| | | | | ROW Admin Assistant/Board Support |
| | | | | Senior Electrician |
| | | | | System Coordinator III |
| | | | | |
| 20 | \$48,413 | \$59,330 | \$70,248 | Collections System Operator VI |
| | | | | Construction Operator VI |
| | | | | Environmental Health & Safety Technician |
| | | | | Fleet Mechanic II |
| | | | | Maintenance Mechanic II |
| | | | | Pump Station Technician II |
| | | | | WWTP Office Manager |
| | | | | WWTP Operator I |
| 21 | \$49,624 | \$60,814 | \$72,004 | WWTP Operator II |
| | | | | |
| 22 | \$50,864 | \$62,334 | \$73,804 | Collections System Operator VII |
| | | | | Construction Operator VII |
| | | | | First Responder |
| | | | | GIS Technician I |
| 23 | \$52,136 | \$63,892 | \$75,649 | Budget Analyst |
| | | | | Construction Crew Leader |
| | | | | Construction Inspector II |
| | | | | Engineering Technician I |
| | | | | Grease Program Inspector |
| | | | | Pretreatment/Laboratory Specialist |
| | | | | Planning and Development Technician |

Job Classification by Grade Order (effective July 1, 2022) (continued)

| Grade | Annual Salary Range - July 1, 2022 | | | Title |
|-------|------------------------------------|-----------|----------|--------------------------------------|
| | Minimum | Mid-Point | Maximum | |
| 23 | \$52,136 | \$63,892 | \$75,649 | Senior Maintenance Mechanic |
| | | | | WWTP Operator III |
| | | | | |
| 24 | \$53,439 | \$65,490 | \$77,540 | Engineering Support Technician |
| | | | | Engineering Technician II |
| | | | | Fleet Mechanic III |
| | | | | IT Technician I |
| 25 | \$54,775 | \$67,127 | \$79,479 | GIS Technician II |
| | | | | WWTP Lead Operator |
| | | | | |
| 26 | \$56,145 | \$68,805 | \$81,446 | Construction Inspector III |
| | | | | Electrical Maintenance Crew Leader |
| | | | | Engineering Technician III |
| | | | | GIS Specialist |
| | | | | IT Technician II |
| | | | | Mechanical Maintenance Crew Leader |
| | | | | Payroll/Benefits Manager |
| | | | | Point Repair/Dig Up Manager |
| | | | | Pump Station Maintenance Crew Leader |
| | | | | Purchasing Supervisor |
| | | | | SSD Administrator |
| | | | | SS Maintenance Supervisor |
| 29 | \$60,462 | \$74,096 | \$87,730 | SS Rehab/Sewer Tap Manager |
| | | | | |
| | | | | Database Analyst |
| | | | | GIS Analyst |
| | | | | HR Programs Manager |
| | | | | Industrial Pretreatment Coordinator |
| | | | | Inspections Manager |
| | | | | Right of Way Agent |
| | | | | SCADA/PLC Technician |

Job Classification by Grade Order (effective July 1, 2022) (continued)

| Annual Salary Range - July 1, 2022 | | | | |
|------------------------------------|-----------|-----------|-----------|---------------------------------------|
| Grade | Minimum | Mid-Point | Maximum | Title |
| 30 | \$61,973 | \$75,948 | \$89,923 | Design Drafting Manager |
| | | | | Environmental Health & Safety Manager |
| | | | | Maintenance Coordinator |
| | | | | |
| 33 | \$66,738 | \$81,788 | \$96,837 | Senior SCADA/PLC Technician |
| | | | | |
| 34 | \$68,407 | \$83,832 | \$99,258 | Database Applications/Developer |
| | | | | Engineer I |
| | | | | |
| 36 | \$71,870 | \$88,076 | \$104,283 | Accounting Manager |
| | | | | Facilities Maintenance Manager |
| | | | | Fleet Maintenance Manager |
| | | | | Maintenance Manager |
| | | | | |
| 37 | \$73,666 | \$90,278 | \$106,890 | Pretreatment Supervisor |
| | | | | |
| 38 | \$75,508 | \$92,535 | \$109,562 | Engineer II |
| | | | | GIS Manager |
| | | | | IT Manager |
| | | | | Right of Way Manager |
| | | | | |
| 39 | \$77,396 | \$94,849 | \$112,301 | Assistant Director SS Construction |
| | | | | Planning and Development Manager |
| | | | | |
| 42 | \$83,347 | \$102,142 | \$120,936 | Engineer III |
| | | | | |
| 44 | \$87,566 | \$107,312 | \$127,059 | Operations Manager |
| | | | | |
| 52 | \$106,691 | \$130,750 | \$154,809 | Director of Human Resources |

Job Classification by Grade Order (effective July 1, 2022) (continued)

| Annual Salary Range - July 1, 2022 | | | | |
|------------------------------------|------------------|------------------|------------------|------------------------------------|
| Grade | Minimum | Mid-Point | Maximum | Title |
| 53 | \$109,358 | \$134,019 | \$158,679 | Director of Construction |
| | | | | Director of Information Technology |
| | | | | Director of SS Maintenance |
| | | | | Director of WWTP |
| | | | | |
| 55 | \$114,895 | \$140,803 | \$166,712 | Director of Engineering |
| | | | | Director of Finance |
| | | | | |
| | | contract | | General Manager |
| | | | | |
| | | Skill-Based | | |
| | \$38,056 | \$51,047 | \$64,038 | Facilities Maintenance Technician |

Staffing History (FTE's)

| Division & Position | Positions per Fiscal Year | | | | | | | | | |
|--|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 |
| Management | | | | | | | | | | |
| Division Heads: | | | | | | | | | | |
| Director of Engineering | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Director of Financial Services | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Director of Human Resources | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Director of Information Technology | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Director of System Services – Construction | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Director of System Services – Maintenance | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Director of Water Reclamation Facility | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total Division Heads | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| Department of Office of the General Manager | | | | | | | | | | |
| General Manager | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total General Manager | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Office Support: | | | | | | | | | | |
| Executive Secretary | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Office Support | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Department of Human Resources | | | | | | | | | | |
| Floater | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 |
| Office Assistant I | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| HR Programs Manager | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Payroll/Benefits Manager | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total Human Resources | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 3 |
| Environmental, Health & Safety: | | | | | | | | | | |
| EHS Administrative Assistant | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Environmental, Health & Safety Manager | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total Environmental, Health & Safety | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |

Staffing History (FTE's) (continued)

| Division & Position | Approved Positions | | | | | | | | | |
|---|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 13- 14 | 14- 15 | 15- 16 | 16- 17 | 17- 18 | 18- 19 | 19- 20 | 20- 21 | 21- 22 | 22- 23 |
| Department of Information Technology | | | | | | | | | | |
| Information Systems (IT): | | | | | | | | | | |
| IT Technician I | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| IT Technician II | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| IT Network Manager | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total IT | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Management Information Systems (MIS): | | | | | | | | | | |
| Database Analyst | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Database Administrator/Developer | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total MIS | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Geographic Information Systems (GIS): | | | | | | | | | | |
| Technical Services Data Manager | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| GIS Analyst | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| GIS Mapping Technician | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 |
| GIS Specialist | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 |
| GIS Technician I | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| GIS Manager | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total GIS | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Department of Financial Services | | | | | | | | | | |
| Finance & Budget: | | | | | | | | | | |
| Budget Analyst | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total Finance & Budget | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Accounting/Investments/Cash Flow | | | | | | | | | | |
| Accounting Technician I | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Accounting Technician II | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Accounting Manager | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total Acct., Investments & Cash Flow | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Purchasing & Warehouse: | | | | | | | | | | |
| Purchasing Agent I | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Purchasing Agent II | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| Purchasing Supervisor | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total Purchasing & Warehouse | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 |

Staffing History (FTE's) (continued)

| Division & Position | Positions per Fiscal Year | | | | | | | | | |
|---|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 |
| Department of Financial Services | | | | | | | | | | |
| Fleet Maintenance: | | | | | | | | | | |
| Fleet Mechanic III | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Fleet Maintenance Manager | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total Fleet Maintenance | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Facilities Maintenance: | | | | | | | | | | |
| Facility Maintenance Technician | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Facilities Maintenance Manager | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total Facilities Maintenance | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| Department of Engineering | | | | | | | | | | |
| Office Support: | | | | | | | | | | |
| Office Manager | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Office Support | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Engineers: | | | | | | | | | | |
| Engineer I | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 1 | 1 | 1 |
| Engineer II | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 2 | 2 | 2 |
| Senior Engineer/Construction Manager | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| Assistant Director of Engineering | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 |
| Total Engineers | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Design and Drafting: | | | | | | | | | | |
| Engineering Technician I | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Engineering Technician II | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Design and Drafting Manager | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total Design and Drafting | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Right of Way: | | | | | | | | | | |
| Administrative Assistant – Right of Way | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Right of Way Agent | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Right of Way Manager | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total Right of Way | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |

Staffing History (FTE's) (continued)

| Division & Position | Positions per Fiscal Year | | | | | | | | | |
|---|---------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 13- 14 | 14- 15 | 15- 16 | 16- 17 | 17- 18 | 18- 19 | 19- 20 | 20- 21 | 21- 22 | 22- 23 |
| Department of Engineering | | | | | | | | | | |
| Planning & Development | | | | | | | | | | |
| Engineering Support Technician | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Systems Coordinator II | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 |
| Systems Coordinator III | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 0 | 0 | 0 |
| Planning & Development Technician | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 |
| Planning & Development Asst. Manager | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 |
| Planning & Development Manager | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Private Development Inspector | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Private Development Project Manager | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Private Development Coordinator/Plan Review | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Planning and Development | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Department of Water Reclamation Facility | | | | | | | | | | |
| Plant Operations: | | | | | | | | | | |
| Operator in Training | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 3 |
| Lead Operator | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 4 |
| Operations Manager | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| WWTP Office/Administrative Manager | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| WWTP Operator | 8 | 8 | 8 | 8 | 6 | 8 | 8 | 6 | 8 | 6 |
| Total Plant Operations | 11 | 11 | 12 | 12 | 13 | 13 | 14 | 14 | 14 | 15 |
| Industrial Waste: | | | | | | | | | | |
| Field Operations Manager | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| Industrial Waste Chemist | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| Grease Program Inspector | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 |
| Pretreatment/Lab Specialist | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 |
| Industrial Pretreatment Coordinator | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Industrial Pretreatment Supervisor | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 |
| Total Industrial Waste | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 |

Staffing History (FTE's) (continued)

| Division & Position | Positions per Fiscal Year | | | | | | | | | |
|---|---------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 |
| Department of System Services – Construction | | | | | | | | | | |
| Construction: | | | | | | | | | | |
| Construction Worker I | 1 | 1 | 1 | 1 | 5 | 1 | 1 | 0 | 0 | 0 |
| Construction Worker II | 6 | 6 | 6 | 6 | 2 | 6 | 6 | 0 | 0 | 0 |
| Construction Worker III | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 0 | 0 | 0 |
| Construction Operator I | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 7 |
| Construction Operator II | 2 | 2 | 2 | 2 | 0 | 1 | 1 | 6 | 6 | 4 |
| Construction Operator III | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 4 | 4 | 0 |
| Construction Operator IV | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 |
| Construction Operator V | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 |
| Construction Operator VI | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 |
| Construction Crew Leader | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 4 |
| Senior Construction Crew Leader | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 |
| Construction & Repair Supervisor | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 0 | 0 | 0 |
| Point Repair/Dig Up Manager | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 |
| Sewer Tap Manager | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 |
| Heavy Equipment Excavator I | 5 | 5 | 5 | 5 | 3 | 2 | 2 | 2 | 1 | 2 |
| Heavy Equipment Excavator II | 1 | 1 | 1 | 1 | 3 | 5 | 5 | 3 | 3 | 1 |
| Heavy Equipment Excavator II | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 3 |
| Assistant Director of SS Construction | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total System Services Construction | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 26 |
| Construction Administration: | | | | | | | | | | |
| Admin. Assistant – Construction | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Construction Inspector I | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 |
| Construction Inspector II | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Construction Inspector III | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 2 |
| Construction Inspector IV | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lead Construction Inspector | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 |
| Inspections Manager | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Senior Field Representative | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 |
| System Services Rehabilitation Manager | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 |
| Total Construction Administration | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 7 |

Staffing History (FTE's) (continued)

| Division & Position | Positions per Fiscal Year | | | | | | | | | |
|--|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 |
| Department of System Services – Maintenance | | | | | | | | | | |
| Office Support: | | | | | | | | | | |
| Dispatcher II | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Office Assistant I | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 |
| Office Assistant II | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 |
| SSD Administrator | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total Office Support | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| SCADA/PLC: | | | | | | | | | | |
| SCADA/PLC Technician | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total SCADA/PLC | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Pump Station Maintenance: | | | | | | | | | | |
| Pump Station Maintenance Technician | 1 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 4 |
| Pump Station Maintenance Crew Leader | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total Pump Station Maintenance | 2 | 3 | 3 | 3 | 3 | 5 | 5 | 5 | 5 | 5 |
| Maintenance: | | | | | | | | | | |
| Collections System Operator I | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| Collections System Operator II | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 6 | 1 |
| Collections System Operator III | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 7 | 5 |
| Collections System Operator IV | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 3 |
| Collections System Operator V | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 1 |
| Collections System Operator VI | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 5 |
| First Responder | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 2 |
| Technical Services Worker I | 2 | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 |
| Technical Services Worker II | 4 | 4 | 4 | 4 | 5 | 6 | 6 | 0 | 0 | 0 |
| Technical Services Worker III | 2 | 2 | 2 | 4 | 6 | 7 | 7 | 0 | 0 | 0 |
| Technical Services Operator I | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 |
| Technical Services Operator II | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 0 | 0 | 0 |
| Technical Services Operator III | 7 | 7 | 7 | 7 | 5 | 5 | 5 | 0 | 0 | 0 |
| Night Supervisor | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Assistant Supervisor – SS Maintenance | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Collection System Maint. Supervisor | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Maintenance Coordinator | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total System Services Maintenance | 25 | 25 | 25 | 27 | 27 | 27 | 27 | 27 | 27 | 27 |

Staffing History (FTE's) (continued)

| Division & Position | Positions Per Fiscal Year | | | | | | | | | |
|--|---------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| | 13- 14 | 14- 15 | 15- 16 | 16- 17 | 17- 18 | 18- 19 | 19- 20 | 20- 21 | 21- 22 | 22- 23 |
| Department of System Services – Maintenance (continued) | | | | | | | | | | |
| Mechanical/Electrical Maintenance: | | | | | | | | | | |
| Electrician II | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Electrical Maintenance Crew Leader | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Electrical Specialist | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 |
| Instrumentation Specialist | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Maintenance Mechanic II | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 |
| Mechanical Maint. Crew Leader | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Mechanical Specialist | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| Senior Electrician | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Senior Maintenance Mechanic | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 |
| Maintenance Manager | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total Mechanical/Electrical | 13 | 13 | 12 | 12 | 11 | 10 | 10 | 10 | 10 | 10 |
| Total District: | 148 | 150 | 147 | 149 | 148 | 150 | 151 | 152 | 152 | 152 |

Budget Resolution

RESOLUTION ADOPTING PRELIMINARY BUDGET AND SEWER USE CHARGES
FOR THE
METROPOLITAN SEWERAGE DISTRICT
OF BUNCOMBE COUNTY, NORTH CAROLINA
FOR THE FISCAL YEAR July 1, 2022 THRU June 30, 2023

WHEREAS, the Board of Directors has reviewed the Operations and Maintenance, Bond, Reserves, Construction Expenditures of the District, and the sources of revenue and allocations (uses) of expenditures for the 2022-2023 fiscal year; and

NOW, THEREFORE, BE IT RESOLVED:

- 1 The following amounts are hereby appropriated in the Revenue Fund for the Operations and Maintenance of the District and for transfers to the Debt Service, General Fund, and Insurance Funds for the fiscal year beginning July 1, 2022 and ending June 30, 2023:

| | | |
|--|----|-------------------|
| Operating and Maintenance Expenses | \$ | 15,890,440 |
| Transfer to Insurance Accounts | \$ | 4,029,885 |
| Transfer to Fleet & Heavy Equipment Fund | \$ | 595,000 |
| Transfer to Wastewater Treatment Plant Reserve | \$ | 200,000 |
| Transfer to Pump Station Maintenance | \$ | 55,000 |
| Subtotal O&M | \$ | 20,770,325 |
| Transfer to the General Fund | \$ | 27,114,882 |
| Transfer to Debt Service Fund | \$ | 8,899,361 |
| | \$ | <u>56,784,568</u> |

It is estimated that the following revenues will be available in the Revenue Fund for the fiscal year beginning July 1, 2022 and ending June 30, 2023:

| | | |
|---|----|-------------------|
| Domestic User Fees | \$ | 36,801,493 |
| Industrial User Fees | \$ | 3,370,488 |
| Billing and Collection Fees | \$ | 1,019,478 |
| Investment Interest | \$ | 1,000,000 |
| Reimbursement for Debt Service from COA | \$ | 35,000 |
| Rental Income | \$ | 96,000 |
| Appropriated from Net Position | \$ | 14,462,109 |
| | \$ | <u>56,784,568</u> |

- 2 The following amounts are hereby appropriated in the General Fund for the transfers to the Construction Fund for the fiscal year beginning July 1, 2022 and ending June 30, 2023:

| | | |
|----------------------------|----|-------------------|
| Transfer into Construction | \$ | <u>30,314,882</u> |
|----------------------------|----|-------------------|

Budget Resolution (continued)

It is estimated that the following revenues will be available in the General Fund for the fiscal year beginning July 1, 2022 and ending June 30, 2023:

| | |
|--------------------------------|----------------------|
| Facility and Tap Fees | \$ 3,175,000 |
| Investment Income | \$ 125 |
| Transfer In from Revenue Fund | \$ 27,114,882 |
| Appropriated from Net Position | \$ 24,875 |
| | <u>\$ 30,314,882</u> |

- 3 The following amounts are hereby appropriated in the Construction Fund for Capital Improvement Plan expenditures for the fiscal year beginning July 1, 2022 and ending June 30, 2023.

| | |
|-------------------------------|----------------------|
| Capital Improvements Projects | <u>\$ 30,314,882</u> |
|-------------------------------|----------------------|

It is estimated that the following revenues will be available to the Construction Fund for the fiscal year beginning July 1, 2022 and ending June 30, 2023.

| | |
|-------------------------------|----------------------|
| Investment Income | \$ 2,500 |
| Transfer In from General Fund | \$ 30,314,882 |
| Contribution to Net Position | \$ (2,500) |
| | <u>\$ 30,314,882</u> |

- 4 The following amounts are presented as the financial plan of the Insurance Funds that are used to provide insurance services. Estimated operating expenditures for the fiscal year beginning July 1, 2022 and ending June 30, 2023 are:

| | |
|------------------------|---------------------|
| Operating Expenditures | <u>\$ 3,969,215</u> |
|------------------------|---------------------|

It is estimated that the following revenues will be available in the Insurance Funds for the fiscal year beginning July 1, 2022 and ending June 30, 2023:

| | |
|---|---------------------|
| Transfer In from the Revenue Fund | \$ 4,029,885 |
| Investment Income | \$ 61,000 |
| Employee/Retirees Medical Contributions | \$ 379,669 |
| Contribution To Net Position | \$ (501,339) |
| | <u>\$ 3,969,215</u> |

- 5 The following amounts are presented as the financial plan of the Fleet & Heavy Equipment Fund designated for capital equipment expenditures for the fiscal year beginning July 1, 2022 and ending June 30, 2023 estimated as follows:

| | |
|-----------------------------|-------------------|
| Transfer to Capital Reserve | \$ 93,017 |
| Capital Equipment | \$ 491,000 |
| | <u>\$ 584,017</u> |

Budget Resolution (continued)

It is estimated that the following revenues will be available in the Fleet & Heavy Equipment Fund for the fiscal year beginning July 1, 2022 and ending June 30, 2023:

| | | |
|-----------------------------------|----|----------------|
| Transfer In from the Revenue Fund | \$ | 595,000 |
| Sale of Surplus Property | \$ | 49,100 |
| Investment Income | \$ | 12,391 |
| Appropriated from Net Position | \$ | (72,474) |
| | \$ | <u>584,017</u> |

- 6 The following amounts are presented as the financial plan of the Wastewater Treatment Plant Replacement Fund designated for wastewater treatment plant capital expenditures for the fiscal year beginning July 1, 2022 and ending June 30, 2023 estimated as follows:

| | | |
|-------------------|----|----------------|
| Capital Equipment | \$ | <u>231,000</u> |
|-------------------|----|----------------|

It is estimated that the following revenues will be available in the Wastewater Treatment Plant Replacement Fund for the fiscal year beginning July 1, 2022 and ending June 30, 2023:

| | | |
|---|----|----------------|
| Transfer In from the Revenue Fund | \$ | 200,000 |
| Investment Income | \$ | 2,102 |
| Transfer Out to Pump Station Replacement Fund | \$ | - |
| Contribution to Net Position | \$ | <u>28,898</u> |
| | \$ | <u>231,000</u> |

- 7 The following amounts are presented as the financial plan in the Pump Station Replacement Fund designated for pump capital expenditures for the fiscal year beginning July 1, 2022 and ending June 30, 2023 estimated as follows:

| | | |
|-------------------|----|---------------|
| Capital Equipment | \$ | <u>56,200</u> |
| | \$ | <u>56,200</u> |

It is estimated that the following revenues will be available in the Pump Station Replacement Fund for the fiscal year beginning July 1, 2022 and ending June 30, 2023:

| | | |
|-----------------------------------|----|---------------|
| Transfer In from the Revenue Fund | \$ | 55,000 |
| Investment Income | \$ | 1,616 |
| Appropriated from Net Position | \$ | <u>(416)</u> |
| | \$ | <u>56,200</u> |

- 8 The following amounts are hereby appropriated in the Debt Service Fund for principal and interest payments for the fiscal year beginning July 1, 2022 and ending June 30, 2023:

| | | |
|--------------|----|------------------|
| Debt Service | \$ | <u>8,899,361</u> |
|--------------|----|------------------|

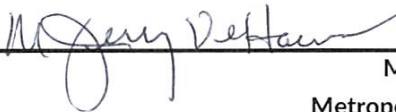
Budget Resolution (continued)

It is estimated that the following revenues will be available in the Debt Service Fund for the fiscal year beginning July 1, 2022 and ending June 30, 2023:

| | | |
|-----------------------------------|----|------------------|
| Transfer In from the Revenue Fund | \$ | 8,899,361 |
| Investment Income | \$ | 500 |
| Transfer Out | | |
| Contribution To Net Position | \$ | (500) |
| | \$ | <u>8,899,361</u> |

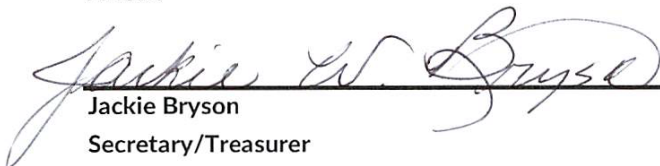
- 9 That the Board of the Metropolitan Sewerage District does hereby approve an increase in the Budgets to the amount necessary to reflect any contributions to the Debt Service Reserve Fund or Capital Reserve Fund as determined by the Bond Trustee to be necessary to comply with covenants in the Bond Order.
- 10 The General Manager is hereby authorized to transfer appropriations as contained herein under the following conditions:
 - a. He may transfer amounts without limitation between departments in a fund.
 - b. He may transfer any amounts within Debt Service and Reserve Funds designated as excess by the Trustee into another fund.
 - c. He may transfer up to 10% of Insurance Fund reserves to meet current year expenditures in excess of budget.
- 11 That the attached Schedule of Fees and Charges be adopted as effective July 1, 2022.
- 12 That this resolution shall be entered in the minutes of the District and within five (5) days after its adoption, copies thereof are ordered to be filed with the Finance and Budget Officer and Secretary of the Board as required by G.S. 159-13 (d).

Adopted this 15th day of June 2022



M. Jerry VeHaun, Chairman
Metropolitan Sewerage District of
Buncombe County, North Carolina

Attest:



Jackie Bryson
Secretary/Treasurer

Schedule of Rates, Fees, and Charges – FY2023

Effective July 1, 2022

| | ADOPTED FY2022 RATE | PROPOSED FY2023 RATE |
|---|---------------------------|----------------------------|
| Collection Treatment Charge | | |
| Residential & Commercial Volume Charges (per CCF) Inside | \$ 4.86 | \$ 5.01 |
| Industrial Volume Charges (per CCF) Inside | 4.86 | 5.01 |
| Industrial Surcharge for BOD (per lb., BOD >250 mg/l) Inside | 0.300 | 0.300 |
| Industrial Surcharge for TSS (per lb., TSS >250 mg/l) Inside | 0.250 | 0.250 |
| Residential & Commercial Volume Charges (per CCF) Outside | \$ 4.87 | \$ 5.02 |
| Industrial Volume Charges (per CCF) Outside | 4.87 | 5.02 |
| Industrial Surcharge for BOD (per lb., BOD >250 mg/l) Outside | 0.300 | 0.300 |
| Industrial Surcharge for TSS (per lb., TSS >250 mg/l) Outside | 0.250 | 0.250 |
| Base Meter/Maintenance Charge & Billing Fee | | |
| 5/8" | \$ 7.49 | \$ 7.72 |
| 3/4" | 10.90 | 11.23 |
| 1" | 19.35 | 19.94 |
| 1 1/2" | 44.27 | 45.60 |
| 2" | 78.30 | 80.65 |
| 3" | 173.64 | 178.85 |
| 4" | 309.86 | 319.16 |
| 6" | 698.02 | 718.97 |
| 8" | 1,239.41 | 1,276.60 |
| 10" | 1,940.86 | 1,999.09 |
| Billing Fee (per bill) | 2.50 | 2.66 |
| Sewer System Development Fees | | |
| This impact fee is for allotted capacity in the treatment and transmission system. A differential fee will be charged for increases to an existing meter size. | | |
| <i>Residential</i> | | |
| Per Unit | \$ 2,836.00 | \$ 2,836.00 |
| Mobile Home | 2,836.00 | 2,836.00 |
| Multifamily Unit | 1,900.00 | 1,900.00 |
| Affordable Housing | 670.00 | 670.00 |

Schedule of Rates, Fees, and Charges – FY2023 (continued)

Effective July 1, 2022

| | ADOPTED FY2022 RATE | PROPOSED FY2023 RATE |
|--|---------------------------|----------------------------|
| Sewer System Development Fees <i>(continued)</i> | | |
| <i>Nonresidential</i> | | |
| 5/8" | \$ 2,836.00 | \$ 2,836.00 |
| 3/4" | 4,254.00 | 4,254.00 |
| 1" | 7,090.00 | 7,090.00 |
| 1 1/2" | 14,180.00 | 14,180.00 |
| 2" | 22,688.00 | 22,688.00 |
| 3" | 45,376.00 | 45,376.00 |
| 4" | 70,900.00 | 70,900.00 |
| 6" | 141,800.00 | 141,800.00 |
| 8" | 226,800.00 | 226,800.00 |
| 10" | 595,560.00 | 595,560.00 |
| 12" | 751,540.00 | 751,540.00 |
| Sewer Connection Fees | | |
| The Sewer Connection Fee will apply to all new construction, as well as existing structures which have been demolished/rebuilt and sewer service is reinstated under new property ownership. | | |
| MSD will install sewer connections where the public main is on the same side of the street as the residence or business | | |
| MSD requires that a licensed utility contractor install any sewer connection/service line within public rights-of-way extending over 75 feet or that requires pavement disturbance or boring to reach across a paved thoroughfare. The installation shall be constructed to MSD Standards. All work will be subject to MSD inspection. | | |
| Sewer Connection by MSD | \$ 1,300.00 | \$ 1,300.00 |
| Contractor installed Sewer Connection | | Varies |
| Inspection Fee for Utility Contractor Installed Sewer Connection | \$ 140.00 | \$ 140.00 |
| Manhole Installation/Replacement | | |
| Cost per foot | \$ 250.00 | \$ 250.00 |
| Pavement replacement (if required) | 1,800.00 | 1,800.00 |

Schedule of Rates, Fees, and Charges – FY2023 (continued)

Effective July 1, 2022

| | ADOPTED FY2022 RATE | PROPOSED FY2023 RATE |
|--|---------------------------|----------------------------|
| Other Fees | | |
| Allocation Fee | 170.00 | 170.00 |
| Non-Discharge Permit | 200.00 | 200.00 |
| Plan Review Fee | 450.00 | 450.00 |
| Plan re-review Fee | 350.00 | 350.00 |
| Pump Station Acceptance Fee | Note 1 | Note 1 |
| Note 1--See policy for details of computation of O&M and equipment replacement costs for upcoming 20 years; 50% discount for affordable housing. | | |
| Bulk Charges | | |
| Volume Charge for Septic Haulers (per 1,000 Gal.) | \$ 45.00 | \$ 45.00 |
| Biochemical Oxygen Demand >250 mg/l (per lb.) | 0.300 | 0.300 |
| Total Suspended Solids >250 mg/l (per lb.) | 0.250 | 0.250 |
| Returned Check Charge | | |
| Returned Check (per event) | \$ 25.00 | \$ 25.00 |
| Dishonored Draft (per event) | 25.00 | 25.00 |
| Copy/Printing Fees/Miscellaneous (each) | | |
| 8x11 first print of standard GIS inquiry | \$ 1.00 | \$ 1.00 |
| 8x14 first print of standard GIS inquiry | 1.00 | 1.00 |
| 11x17 first print of standard GIS inquiry | 2.00 | 2.00 |
| 24x36 first print of standard GIS inquiry | 7.00 | 7.00 |
| 34x44 first print of standard GIS inquiry | 12.00 | 12.00 |
| 36x48 first print of standard GIS inquiry | 14.00 | 14.00 |
| 8x11 or 8x14 copies after first print | 0.11 | 0.11 |
| 11x17 copies after first print | 0.20 | 0.20 |
| 24x36 copies after first print | 0.94 | 0.94 |
| 34x44 copies after first print | 1.76 | 1.76 |
| 36x48 copies after first print | 2.03 | 2.03 |
| Foam Core mounting per sq. foot | 3.00 | 3.00 |
| Data CD | 30.00 | 30.00 |
| Shipping for CD | 5.00 | 5.00 |
| Permit Decals for Septic Haulers | 50.00 | 50.00 |

Glossary

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Glossary of Terms

Accrual Basis of Accounting—Method of accounting where revenues are recognized as soon as they are earned and expenses as soon as the liability is incurred. Used most often with business-type governmental funds.

Actuary—A professional trained in mathematics, statistics and economic techniques that allow them to put a financial value on future events. The District retains a consulting actuarial firm to perform the regular annual actuarial valuations of the post retirement plan.

Actuarial Report—A report performed annually by the actuary to examine whether the contributions made to a post-retirement plan is adequate.

Adopted Budget—The budget approved by District Board of Directors and enacted via a budget resolution, on or before June 15 of each year.

AMSA (American Metropolitan Sewerage Association)—Nationwide organization established to help improve operations.

Annual Budget—The District's adopted budget for a fiscal year.

Basis of Accounting—The criteria governing the timing of the recognition of financial transactions and events. There are three major methods of accounting—cash, accrual, and modified accrual.

Billing Fee—Charge assessed by member agencies that collect sewer user fees from ratepayers to recover the administrative cost of collection.

BOD (Biochemical Oxygen Demand)—A measure of the amount of oxygen used up in the anaerobic decomposition of organic matter. The BOD test uses the oxygen from air dissolved in water and reflects treatability or stage of decomposition. It gives a direct measurement of the strength of wastewater, usually expressed in mg/l (milligrams per liter).

Glossary of Terms (continued)

Bond—A written promise to pay a specific sum of money (the principal) at a date or dates in the future (the maturity) together with periodic interest at a specified rate.

Bond Rating—Rating for bonds to be issued that primarily reflects the ability of the issuer to repay the bonds. Better bond ratings result in lower interest rates for the bonds issued. Current bond rates for the District are Aaa by Moody's, AA+ by Standard & Poor's, and Fitch Ratings.

Budget—A plan of financial operation comprised of an estimate of proposed expenditures for a fiscal year and the proposed means of financing those expenditures (revenue estimates).

Budget Calendar—The schedule of key dates or milestones, which the District follows in the preparation and adoption of the budget.

Budget Document—The official written statement prepared by the District's Director of Finance, which presents the proposed budget to the District Board of Directors.

Budget Resolution—The official statement by the District Board of Directors establishing the legal authority for the District Budget administrative staff to obligate and expend funds.

Budget Transmittal—A general discussion of the proposed budget presented to the Board by the General Manager and the Director of Finance as a part of the budget document. The budget message explains principal budget issues against the background of financial experience in recent years and presents recommendations made by the General Manager.

Glossary of Terms (continued)

Capital Budget—The capital budget is responsible for all infrastructure projects in excess of the \$15,000 infrastructure capitalization threshold. Projects include replacing and rehabbing structurally defective sewer lines, handling wet-weather flow conditions, improving the performance at the wastewater treatment plant, and preparing the system to handle expected future wastewater flows over the upcoming decade. A capital budget appropriation is limited to the cost of a project and may be spent over a long period until the project is completed.

Capital Expenditure—An amount paid out that creates a benefit in more than one year, usually costs that are incurred in the acquisition or improvement of real or personal property. Capital expenditure includes both the cost of the asset itself as well as expenditures necessary to put it in place. Capital expenditure for equipment, for example, means the net invoice price of the equipment including the cost of any modifications, attachments and accessories or auxiliary apparatus necessary to make it usable for the purposes for which it is acquired. Ancillary charges such as taxes, duty, and protective in transit insurance, freight, and installation are also included in the total purchase price.

Capital Improvement Program (CIP)—Projects established to account for the cost of capital improvements. Typically, the District's capital projects include a purchase of land and/or the construction or rehabilitation of infrastructure such as major interceptors and pump stations as well as major renovations and additions to the hydroelectric and wastewater treatment plant facilities.

Capital Reserve Fund—The Metropolitan Sewerage District of Buncombe County Capital Reserve Fund, a special fund created by the provisions the District's Bond Order established to provide funding for unusual and extraordinary expenditures and debt service in the event of insufficient revenues.

Cash Basis of Accounting—Under cash basis, all transactions is recognized when cash is received or spent. This method is not acceptable for use by governmental entities.

Glossary of Terms (continued)

Collector Sewers—That portion of the collection and transportation system, which gathers wastewater from individual buildings and transports it through a network of sanitary sewers to interceptor sewers.

Coverage Ratio—The excess of current revenues over current expenses divided by required debt service expressed as a ratio. This ratio is used to gauge the adequacy of utility rates to provide cash required for current operations and debt payments.

Current Expenses—The Districts' reasonable and necessary annual expenses of maintenance, repair, and operation of the Sewerage System.

Debt Service—Payment of interest and repayment of principal on bonded indebtedness.

Department—A management unit.

District—The Metropolitan Sewerage District of Buncombe County, North Carolina, a public body, and body politic and corporate in the County of Buncombe, State of North Carolina exercising public and essential governmental functions to provide for the preservation and promotion of the public health and welfare.

District Board—The sewerage district board established under the provisions of the Enabling Act as the governing body of the District.

Division—A term used to describe a cost center with distinct objectives and activities within a Department.

Domestic User—Users whose sewer charges are based upon flow and meter size, predominately residences and small businesses.

Glossary of Terms (continued)

Enabling Act—The North Carolina Metropolitan Sewerage Districts Act (Article 5, Chapter 162A, General Statutes of North Carolina, 1982 Replacement Volume, as amended) and, pursuant to the provisions thereof, The State and Local Government Revenue Bond Act (Article 5, Chapter 159, General Statutes of North Carolina, 1982 Replacement).

Encumbrance—Commitment of money to meet an obligation that is expected to be incurred to pay for goods or services received by the District.

Enterprise Fund—A type of proprietary fund set up to account for the financing of services to the general public where all or most of the operating expenses involved are recovered in the form of user charges.

Environmental Protection Agency (EPA)—The federal agency responsible for regulating water quality and the Federal Clean Water Act.

Expansion—Expenditures to enlarge capacity of facilities or extend system to new areas.

Expenditures—The cost of goods received or services rendered whether payment for such goods and services has been made or not.

Federal Energy Regulatory Commission (FERC)—An independent government agency, officially organized as part of the Department of Energy, and is responsible for regulating the interstate transmission of natural gas, oil, and electricity.

Fiscal Year—The calendar on which the District operates for financial and budget purposes. The District's fiscal year begins on July 1 and ends on June 30. The current fiscal year, 2023, begins on July 1, 2022, and will continue until June 30, 2023.

Flow—Volume of domestic or industrial wastewater.

Glossary of Terms (continued)

Full-Time Equivalent (FTE)—A method of calculating employment and enrollment to adjust for part-time or part-year participation. One FTE is equivalent to one full-time employee who works 40 per week for 52 weeks, for a total of 2,080 work hours.

Fund—A fiscal entity with a self-balancing set of accounts used to account for an activity(s) with common objectives.

Fund Equity—The excess of revenues over expenditures accumulated from prior years within a fund that are present in the form of cash at the beginning of the fiscal year.

GAAP (Generally Accepted Accounting Principles)—These are standards for measuring and reporting financial data promulgated by an authoritative body.

GIS (Geographical Information System)—An organized collection of computer hardware, software, geographic data, and personnel designed to efficiently capture, store, update, manipulate, analyze, and display all forms of geographically referenced information.

Goal—The underlying reason(s) for the provision of essential District services.

Improvements—Betterments or upgrades to increase value, quality, or usefulness.

Industrial User—Any user of the Sewerage System who discharges industrial waste (the liquid and waterborne pollutants resulting from processes or operations employed in industrial establishments). Charges based on flow, BOD and TSS.

I/I (Inflow/Infiltration)—Water entering the collection system from rain, water table, streams, and other non-user sources, unnecessarily driving up cost of treatment and likelihood of SSOs.

Influent—The wastewater entering the reclamation facility.

Glossary of Terms (continued)

Infrastructure Rehabilitation System (IRS)—A method of lining existing deteriorating sewer pipes in the ground to save the cost of having to dig them up and replace them. This procedure is performed by in-house staff, at a lower cost than hiring contractors.

Interceptor—A sewer that carries sanitary waste that is built by the District. These are large sewers that collect wastewater from local trunk sewers and convey it to the water reclamation facility.

Laterals—Privately owned building sewer lines and smaller collection system lines (4-6 inch in diameter) which connect to larger public main sewer lines.

Lift Station—A facility in a sewer system consisting of a receiving chamber, pumping equipment, and associated drive and control devices which collect and lift wastewater to a higher elevation when the continuance of the sewer at reasonable slopes would involve excessive trench depths; or that collects and raises wastewater through the use of force mains from areas too low to drain into available sewers.

Line-item Budget—A budget detailing categories of expenditure for goods and services that the District intends to purchase during the fiscal year.

Local Government Budget & Fiscal Control Act—The legal guidelines of the State of North Carolina, which govern budgetary and fiscal affairs of local governments, found in Chapter 159 of the North Carolina General Statutes.

Local Government Commission (LGC)—The nine-member body established as a division of the Department of the State Treasurer to serve the citizens of North Carolina by issuing debt for units of local government and public authorities, monitoring the repayment of their debt, and overseeing the fiscal activities and financial soundness of all local governments and public authorities.

Glossary of Terms (continued)

Modified Accrual Basis of Accounting—Under modified accrual, revenue is recognized when earned provided it is collected in time to pay liabilities of the current period. Similarly, liabilities are recognized as expenditures when payment is due because it is only at that time that they normally are liquidated with expendable available financial resources.

Net Assets—The difference of total assets and total liabilities for any period.

Net Position—The difference between assets and deferred outflows of resources, and liabilities and deferred inflows of resources.

Net Revenues—The excess of revenues over current expenses for any period.

NPDES (National Pollutant Discharge Elimination System)—Permit to operate wastewater treatment issued by the EPA.

Objective—A measurable statement of the actual service(s), which the District expects to achieve.

Operations and Maintenance (O&M) Budget—The annual budget for activities related to controlling, operating, managing, and maintaining the sewerage system. Operating costs include such expenses as personal services (salaries and benefits for classified employees and hourly workers), contractual services, and supplies.

Order—The Amended and Restated 1999 Bond Order. To request a copy, contact the Director of Finance at the address on the cover of this document.

OSHA (Occupational Safety and Health Administration)—Federal agency responsible for issuing and monitoring standards to minimize workplace deaths, injuries, and illnesses.

Glossary of Terms (continued)

PLC (Programmable Logic Controller)—Instrumentation hardware used for automated control of equipment.

Preliminary Budget—Budget that Board approves prior to adoption of Final Budget.

Pretreatment—Any process used by local industries to reduce pollution load before wastewater is introduced into a main sewer system or delivered to a reclamation facility.

Proprietary Fund—A type of fund that accounts for governmental operations that are financed and operated in a manner similar to private business enterprises. It is financed primarily from charges to users of services provided.

Pumping Station—A relatively large sewage pumping installation designed not only to lift sewage to a higher elevation but also to convey it through force mains to gravity flow points located relatively long distances from the pumping station.

Recommended Budget—The budget proposed by the General Manager and Director of Finance to District Board for adoption.

Rehabilitation—Expenditures for repair due to damage, wear, or decay to restore facilities to normal or optimum condition.

Replacements—Expenditures for components replacing existing units.

Glossary of Terms (continued)

Revenue (for purposes of Bond Order coverage)—All payments, proceeds, fees, charges, and all other income derived by or for the account of the District from its ownership and operation of the Sewerage System, excluding all acreage, connection, front-footage, tap-on, assessment and similar fees and charges and grants derived by the District in connection with the provision of or payment for capital improvements constituting a part of the Sewerage System and excluding the proceeds of any taxes levied by the District.

Rotating Biological Contactor (RBC)—Large rotating plates housing bacteria, which consume dissolved solids in wastewater.

Satellite System—Any sewer system maintained by another entity without a state-issued discharge permit, but which is connected to an MSD line for wastewater treatment and discharge by MSD. The State requires reporting for all satellite systems with a flow over 200,000 gallons per day. MSD has one reportable satellite system.

Sewage—Sewage refers to the wastewater flow from residential, commercial, and industrial establishments, which flows through the pipes to a reclamation facility.

Sewerage—Sewerage refers to the system of sewers and physical facilities employed to transport, treat, and discharge sewage.

SCADA (Supervisory control and data acquisition)—A computer system for gathering and analyzing real time data. SCADA systems are used to monitor and control a plant or equipment in industries such as telecommunications, water and waste control, energy, oil and gas refining and transportation.

Sludge—The accumulated settled solids deposited from sewage or industrial wastes, raw or treated, in tanks and basins, and containing more or less water forming a semi-liquid mass.

Glossary of Terms (continued)

SS (Suspended Solids)—Solid matter that either floats on the surface of or is suspended in wastewater and which is removable by laboratory filtration.

SSO (Sanitary System Overflow)—Untreated wastewater escapes from the collection system.

User Charge—Fees levied upon residential, commercial, and industrial users of a wastewater treatment system based upon the volume and characteristics of the waste.

Water Reclamation Facility (WRF)—Wastewater Treatment Plant of the District.

WNCRAQA Western North Carolina Regional Air Quality Agency—A self-supporting, local air quality regulatory agency formed by an interlocal agreement between Buncombe County and the City of Asheville.

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