



FY2023

**OPERATION & MAINTENANCE
AND CAPITAL BUDGETS**

**BW BIRMINGHAM
WATER WORKS**

BWWB.ORG



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THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM IS COMMITTED TO PROVIDING RELIABLE, EQUITABLE, COST-EFFECTIVE DELIVERY OF HIGH-QUALITY WATER AND SERVICES, WHILE PROTECTING PUBLIC HEALTH AND ENVIRONMENTAL RESOURCES FOR CURRENT AND FUTURE GENERATIONS.



GOVERNMENT FINANCE OFFICERS ASSOCIATION

*Distinguished
Budget Presentation
Award*

PRESENTED TO

**Birmingham Water Works Board
Alabama**

For the Fiscal Year Beginning

January 01, 2022

Christopher P. Morill

Executive Director

The Government Finance Officers Association of the United States and Canada (GFOA) presented a Distinguished Budget Presentation Award to Birmingham Water Works Board, Alabama, for its Annual Budget for the fiscal year beginning January 1, 2022.

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

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



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INTRODUCTION

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INTRODUCTION

The Birmingham Water Works (BWW) Annual Budget Document (The Budget) has been developed to communicate to customers, directors, and staff how BWW intends to fulfill its mission and vision, which are inserted below.

MISSION

BWW is committed to providing reliable, equitable, cost-effective delivery of high-quality water and services, while protecting public health and environmental resources for current and future generations.

VISION

To be nationally recognized for local excellence in water quality and service delivery.

The BWW has adopted “Effective Utility Management” (EUM) as the framework within which it manages the utility to ensure that it implements strategies that support EUM and ultimately result in the BWW accomplishing its mission and fulfilling its vision. In addition, the adoption of EUM has been essential in communicating a clear direction to all who are responsible for ensuring the success of the BWW. The Approved Fiscal Year (FY) 2023 Operation & Maintenance and Capital Budgets have been prepared using the EUM framework.



BIRMINGHAM
WATER WORKS

GOOD SOURCE WATER IS THE RESULT OF THE
BIRMINGHAM WATER WORKS' AGGRESSIVE
ENVIRONMENTAL PROTECTION POLICY.





KEY CONSIDERATIONS AFFECTING BUDGET DEVELOPMENT

As we operate in an ever-changing environment, we are continually faced with situations that increase the cost of service we deliver to our customers. Some of the challenges that we face include employee recruitment & retention, tracking field call responsiveness, cybersecurity threats and increased changes to regulatory enforcement.

The following are key areas that were considered in preparing the FY2023 Budgets:

- Continue to prepare budgets in accordance with GFOA Certificate Program
- Increase rates to fund O&M and Capital Budgets, and comply with financial policies
- Continue to focus on increasing Pay-As-You-Go (PAYGO) as a percentage of the Capital Budget
- Impact of COVID-19 on consumption trends & expenses
- Includes resources to implement BWB's Strategic Plan
- Includes employees receiving a Cost-Of-Living-Adjustment
- Includes eligible employees receiving a merit increase
- Includes eligible employees receiving longevity pay
- Implement strategies to consistently produce and deliver high-quality water that exceeds regulatory standards and customer expectations
- Add staffing to Water Treatment Department
- Conduct high-definition stream surveys
- Perform an assessment on Business Processes
- Initiate an Automatic Meter Reading/Advanced Metering Infrastructure (AMR/AMI) study (capital)
- Implement dashboard reporting
- Conduct an Organization Assessment
- Implement Salary Survey
- Build a Recruitment Pipeline
- Leverage capability of BCIA
- Transfer staffing to System Development and E&M Departments
- Utilize governmental affairs to augment pursuit of non-utility funding sources
- Attend conferences, workshops, and training seminars to maintain awareness of industry changes
- Develop a framework to establish an Outreach & Engagement Program with learning Institutions
- Includes a full year of funding to increase usage of HUB Program
- Includes three lobbyists
- Increase in property & casualty insurance rates
- Increase health insurance budget based on an increase in employee health insurance claims
- Increase chemical budget based on increase in vendors' prices and projected demand
- Increase power based on increase in rates and projected demand
- Increase in outsourced security budget based on increase in new security vendor's contract cost
- Add two positions In Public Relations
- Add one position In Customer Support
- Add one position In Call Center
- Added three Customer Resolution positions
- Transferred two positions to Electrical & Maintenance



COMPLIANCE WITH FINANCIAL POLICIES

The BWB is rated Aa2 by Moody’s Investors Service and rated AA by S&P Global due in large part to its sound fiscal management evidenced by its adoption and adherence to its financial policies. The chart below shows BWB’s current policies and related trends.

RESERVE FUND

Fund	Target
Capital Reserve	25% of Capital Plan
Revenue	15% of O&M + Debt
Demand Shortfall	5% of O&M + Debt
Rate Stabilization	5% of O&M + Debt
Economic Development	4.3% of O&M + Debt
Reserves of approximately 240 days of operating expenses on hand	430 days – projected days operating expenses on hand on December 31, 2022 150 – 250 days; Moody’s criteria for Aa utilities
Strong Bond Ratings	2002: S&P A / Moody’s A 2013: S&P AA / Moody’s Aa2 Current: S&P AA / Moody’s Aa2



FINANCIAL GOALS AND POLICIES

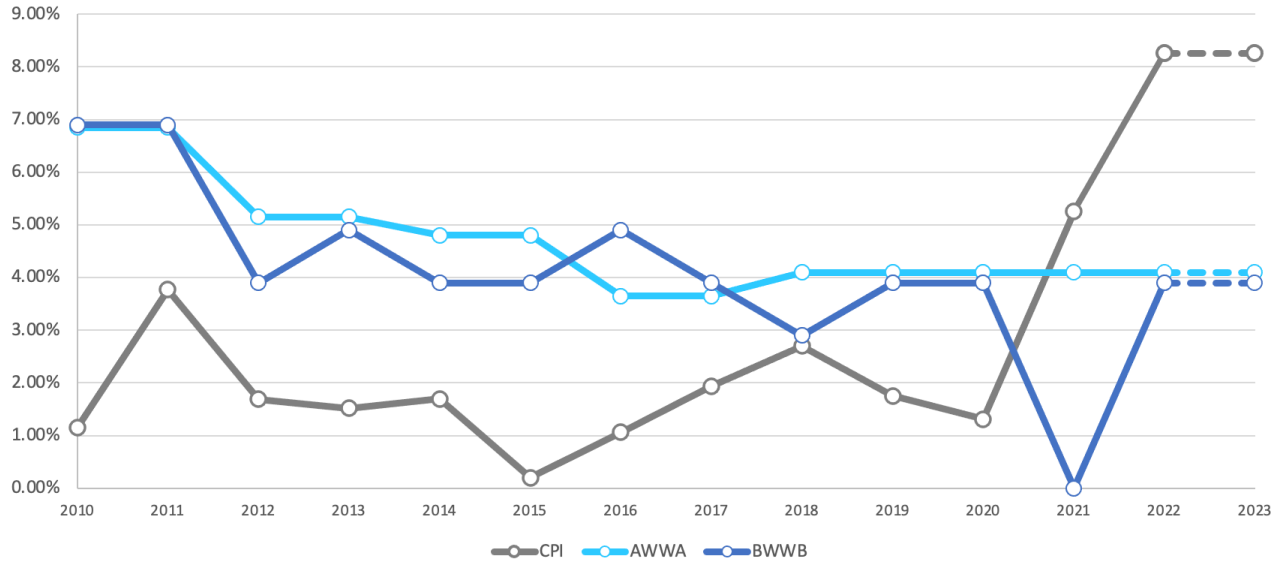
Policy	Trend
Rate increases below industry average (4.91%, 1998 - 2022)	3.9% - 2015, 2017, 2019, 2020
	2.9% - 2018, 4.9% - 2016
	0.0% - 2021
	3.9% - 2022, 3.9% - 2023
O&M increases	0.99% annual growth rate, 2015-2020
	3.31% for 2021
	6.97% increase in 2022
Goal of 45% of Capital Budget funded from PAYGO by 2028-2029	8.12% increase in 2023
	46.7% estimated in 2022
	38.0% estimated in 2023
	48.8% estimated by 2028
	Projected to reach 45% by 2027

RSE TARGETS

Senior Debt Service Coverage	Current
Target	1.50
Max	1.65
Min	1.35
Total Debt Service Coverage	Current
Target	1.20
Max	1.30
Min	1.10



RATE TRENDS: 2010 – 2023



- CPI: Consumer Price Index
- AWWA: American Water Works Association
- BWWB: Birmingham Water Works Board

STRATEGIC GOALS

The BWW adheres to a set of strategic goals that focus on the framework of the Effective Utility Management (EUM) program. These goals are grouped into 5 strategic target categories along with 10 attributes of an EUM as can be seen in the diagram below.

The EUM focuses on 10 attributes that includes stakeholder understanding and support, product quality, customer satisfaction, employee and leadership development, operational optimization, financial viability, infrastructure strategy and performance, enterprise resiliency, community sustainability, and water resource sustainability. Each of these has a subset of objectives and strategies that are laid out to guide the organization towards achieving its goals.





STRATEGIC PLANNING

Birmingham Water Works (BWW) initiated a strategic planning process in August 2020 to develop an updated framework for guiding the organization into the future. This strategic framework will help inform operational decisions and resource allocation to ensure that BWW continues to offer efficient, reliable services to the community and that its long-term goals and objectives are achieved.

To achieve these conditions for success, BWW's strategic planning process involved input from a broad group of leadership and staff and consistent communication of the organization's vision, mission, and overall strategic plan. The process included these major elements:

STAKEHOLDER INPUT

Input was obtained from BWWB's Board of Directors, executive leadership, management team, employees, and external stakeholders through a combination of interviews, focus groups, workshops, and an online employee survey.

EUM ASSESSMENT

Internal groups of subject matter experts met to assess BWWB's current performance against standards related to each of the 10 attributes of an effectively managed utility.

MANAGEMENT TEAM WORKSHOPS

BWWB's executive leadership and management team met to review stakeholder input and draft updates to the organization's mission and values for consideration at the Board retreat.

BOARD RETREAT

The Board of Directors and executive leadership team met to review the input from the stakeholder engagement activities and consider the organization's aspirations, strengths, critical issues, and opportunities that will shape BWWB moving forward.

The retreat resulted in an updated high-level strategic framework, inclusive of BWWB's vision, mission, values, and goals.

STRATEGY WORKSHOP

The executive leadership and management team reconvened to review the results of the Board retreat and develop success statements, strategies, and measures for each of BWWB's goal areas.

IMPLEMENTATION PLANNING

After development of all aspects of the strategic framework, teams of subject matter experts met to identify the initial activities, timelines, and accountabilities necessary to implement the updated strategic plan.

Note: See copy of our Strategic Plan: [BWWB-Strategic-Plan-v6-high-res_op.pdf](#)



O&M BUDGET HIGHLIGHTS GROUPED BY EUM ATTRIBUTE

O&M BUDGET HIGHLIGHTS

EUM ATTRIBUTE

CONTINUE TO PREPARE BUDGETS IN ACCORDANCE WITH GFOA CERTIFICATE PROGRAM

- Financial Viability
- Stakeholder Understanding & Support

INCREASE RATES TO FUND O&M AND CAPITAL BUDGETS, AND MEET BUDGET REQUIREMENTS

- Financial Viability

CONTINUE TO FOCUS ON INCREASING PAY AS YOU GO (PAYGO) AS A PERCENTAGE OF THE CAPITAL BUDGET

- Financial Viability
- Enterprise Resiliency
- Operational Optimization
- Infrastructure Strategy & Performance
- Community Sustainability

INCLUDES RESOURCES TO IMPLEMENT BWW'S STRATEGIC PLAN

- Customer Satisfaction
- Operational Optimization
- Financial Viability
- Enterprise Resiliency
- Stakeholder Understanding & Support

INCLUDES EMPLOYEES RECEIVING A 6.0% COST OF LIVING ADJUSTMENT

- Customer Satisfaction
- Employee & Leadership Development
- Financial Viability
- Enterprise Resiliency

INCLUDES EMPLOYEES RECEIVING A MERIT INCREASE

- Customer Satisfaction
- Employee & Leadership Development
- Financial Viability
- Enterprise Resiliency

INCLUDES LONGEVITY PAY

- Customer Satisfaction
- Employee & Leadership Development
- Financial Viability
- Enterprise Resiliency

IMPLEMENT STRATEGIES TO CONSISTENTLY PRODUCE AND DELIVER HIGH-QUALITY WATER THAT EXCEEDS REGULATORY STANDARDS AND CUSTOMER EXPECTATIONS

- Product Quality
- Customer Satisfaction
- Operational Optimization

NEED TO ENHANCE CUSTOMER CENTERED QUALITY SERVICE

- Customer Satisfaction
- Stakeholder Understanding & Support



O&M BUDGET HIGHLIGHTS

EUM ATTRIBUTE

INITIATE AN AUTOMATIC METER READING / ADVANCED METERING INFRASTRUCTURE (AMR/AMI) STUDY

- Customer Satisfaction
- Operational Optimization
- Financial Viability

CONTINUE TO DEVELOP PERFORMANCE MEASURES AND DASHBOARD REPORTING

- Customer Satisfaction
- Employee & Leadership Development
- Financial Viability
- Enterprise Resiliency
- Operational Optimization
- Infrastructure Strategy & Performance
- Stakeholder Understanding & Support

EXPAND CUSTOMER SERVICE HOURS TO 24/7

- Customer Satisfaction
- Operational Optimization
- Stakeholder Understanding & Support

REVIEW AND IMPROVE PROCESSES, WORKFLOWS, QUALITY OF WORK, AND CUSTOMER SERVICE LEVELS TO MEET THE OPERATIONAL AND STRATEGIC GOALS OF THE ORGANIZATION

- Customer Satisfaction
- Employee & Leadership Development
- Financial Viability
- Enterprise Resiliency
- Operational Optimization
- Infrastructure Strategy & Performance
- Stakeholder Understanding & Support

ENSURE PROPER ALIGNMENT OF FUNCTIONS AND ACTIVITIES WITHIN THE COMPANY TO ENSURE MAXIMUM EFFICIENCY AND EFFECTIVENESS

- Customer Satisfaction
- Operational Optimization
- Financial Viability
- Enterprise Resiliency
- Stakeholder Understanding & Support

MAINTAIN MARKET COMPETITIVENESS TO ENHANCE EMPLOYEE RETENTION AND RECRUITING

- Customer Satisfaction
- Employee & Leadership Development
- Financial Viability
- Enterprise Resiliency

ESTABLISH A FRAMEWORK TO BUILD A RECRUITMENT PIPELINE BY INTRODUCING THE WATER INDUSTRY TO STUDENTS THROUGH EDUCATIONAL AND INTERACTIVE PROGRAMS

- Operational Optimization
- Enterprise Resiliency
- Stakeholder Understanding & Support

NEED TO SOURCE AND RECRUIT TALENT IN A VERY COMPETITIVE LABOR MARKET

- Customer Satisfaction
- Employee & Leadership Development
- Financial Viability
- Enterprise Resiliency
- Operational Optimization
- Infrastructure Strategy & Performance
- Stakeholder Understanding & Support



O&M BUDGET HIGHLIGHTS

EUM ATTRIBUTE

INCREASE USAGE OF HISTORICALLY UNDERUTILIZED BUSINESS (HUB) PROGRAM

- Financial Viability
- Enterprise Resiliency
- Operational Optimization
- Infrastructure Strategy & Performance
- Stakeholder Understanding & Support

CONTINUE TO MAINTAIN AND REPLACE AGING INFRASTRUCTURE

- Product Quality
- Customer Satisfaction
- Financial Viability
- Enterprise Resiliency
- Operational Optimization
- Infrastructure Strategy & Performance
- Stakeholder Understanding & Support
- Community Sustainability
- Water Resource Sustainability

NEED TO STRENGTHEN ACCOUNTING PROCEDURES, PROCESSES, AND POLICIES

- Financial Viability
- Operational Optimization
- Customer Satisfaction

UTILIZE GOVERNMENTAL AFFAIRS TO AUGMENT PURSUIT OF NON- UTILITY FUNDING SOURCES

- Financial Viability
- Enterprise Resiliency

ATTEND CONFERENCES, WORKSHOPS, AND TRAINING SEMINARS TO MAINTAIN AWARENESS OF INDUSTRY CHANGES

- Stakeholder Understanding & Support

INCREASE HEALTH INSURANCE BUDGET BASED ON AN INCREASE IN EMPLOYEE HEALTH INSURANCE CLAIMS

- Customer Satisfaction
- Financial Viability
- Enterprise Resiliency

INCREASE CHEMICAL BUDGET BASED ON INCREASE IN VENDORS' PRICES

- Financial Viability
- Product Quality
- Operational Optimization

INCREASE IN OUTSOURCED SECURITY BUDGET BASED ON INCREASE IN NEW SECURITY VENDOR'S CONTRACT COST

- Enterprise Resiliency
- Operational Optimization

ADD PUBLIC INFORMATION OFFICER (2)

- Community Sustainability
- Customer Satisfaction
- Stakeholder Understanding and Support

ADD CUSTOMER SUPPORT SPECIALIST II

- Customer Satisfaction
- Operational Optimization
- Stakeholder Understanding & Support



O&M BUDGET HIGHLIGHTS

EUM ATTRIBUTE

ADD CUSTOMER SERVICE TEAM LEADER

- Customer Satisfaction
- Operational Optimization
- Stakeholder Understanding & Support
- Employee and Leadership Development

ADD OPERATOR II (3), PLANT MAINTENANCE WORKER

- Product Quality
- Operational Optimization
- Water Resource Sustainability
- Customer Satisfaction

ADD SECURITY SYSTEMS TECHNICIAN

- Operational Optimization
- Customer Satisfaction
- Infrastructure Strategy & Performance

ADD HVAC TECH II, TEAM LEAD

- Operational Optimization
- Infrastructure Strategy & Performance
- Customer Satisfaction

ADD (3) CUSTOMER RESOLUTION POSITIONS

- Customer Satisfaction
- Stakeholder Understanding & Support
- Operational Optimization



BUDGET DEVELOPMENT

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BUDGET DEVELOPMENT

This budget document attempts to match a staff-prepared needs assessment with projected revenues. It has been developed and prepared in accordance with applicable state and federal statutes and applicable Board policies and procedures.

The budget development process is guided by the following financial planning strategies:

- **BWW Strategic Plan** – Where the policies and goals established in the Capital Improvements Program (CIP) will serve as the framework for the future direction and objectives of the BWW.
- **Multi-year Budget Management Plan** – Where it is a principal objective of the BWW to achieve multi-year stability in the system's rates and charges.
- **Departmental Goals and Objectives** – Where budgeting decisions are based upon the establishment of realistic departmental goals and objectives and criteria for the measurement of performance.
- **Operational Budget Policies** – Where the BWW will attempt to maintain a high quality of performance, while recognizing the demands related to major ongoing utility system improvements and challenges, and the need to maintain personnel levels to ensure maximum efficiency and utilization.

For the FY2023 budget, and as with most years, total revenues are projected to exceed total expenses. As such, the BWW's definition of a balanced budget is when projected annual revenues and existing fund balances are sufficient to meet budgeted expenses.





BUDGET PROCESS

Annually, the BWW prepares and adopts a financial plan for the next fiscal year (January 1 through December 31). The plan includes determining the appropriate rates, fees, and charges necessary to provide sufficient revenues to meet anticipated expenses for operating and maintenance, asset repair or replacement, asset acquisition or construction to meet the service needs of the customer base, and debt service requirements for existing and projected debt. The financial plan is developed within the framework of the BWW's Rate Stabilization and Equalization Policy, which ensures that we charge reasonable rates sufficient to pay debt service, provide for payment towards operating and maintaining the system in good repair and replacement under work orders, and perform and comply with the covenants under the BWW's Bond Indenture.

The development of the Operation & Maintenance Budget begins in June following the completion of the first five months of the current fiscal year. Each department is requested to project their staffing (including overtime needs), supplies and materials such as travel, education, contractual services and other operating and maintenance needs, chemicals, and power for the next fiscal year. These projections are based on historical trends, new projects and/or requirements, changes in existing projects and/or requirements, cost adjustments and changes in regulatory requirements.

The Budget Office holds budget hearings with each department's management team and Executive Management to review and discuss the preliminary budget requests. During the budget hearings, department managers justify the need for budget changes, if applicable. The Budget Office or Executive Management may recommend adjusting budget line items based on current year spending, historical spending, or anticipated spending.

After the budget hearing, the department's management team enters the data that was approved in their respective budget hearings into the budget module.

The Budget Office confirms the data entered by each department, enters any additional data, and reviews the results with the Executive Management Team. Executive Management may recommend additional adjustments prior to presenting the preliminary budget to the Board of Directors.

SECTION 2: BUDGET DEVELOPMENT

Executive Management and the Budget Office hold a budget workshop with the Board of Directors to present the Preliminary Operation & Maintenance Budget and the Capital Budget. Management provides several schedules to support the Preliminary Budgets, including:

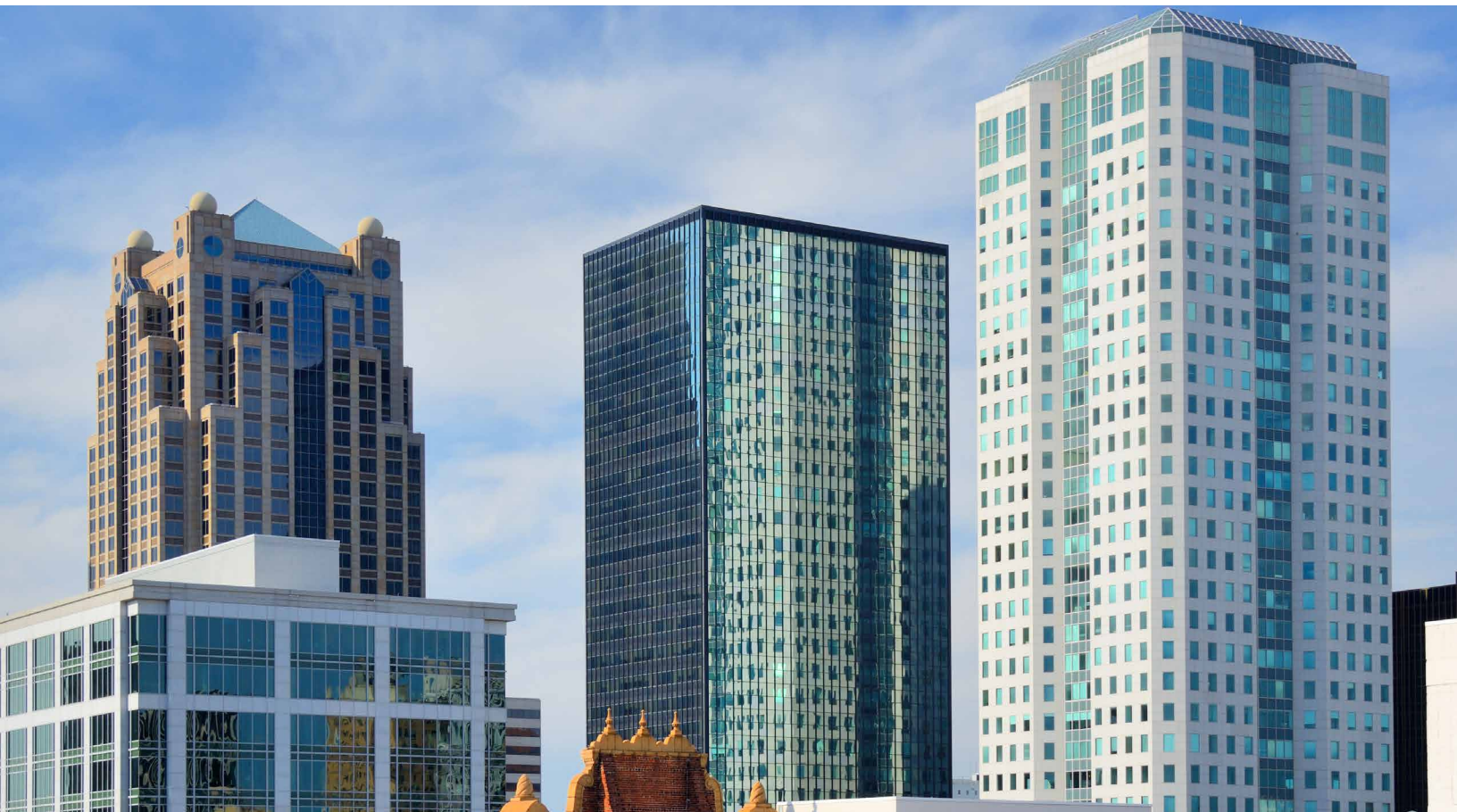
- **Top 10** – a list of 14 major expenses in the budget with comparisons to the prior year and the variance
- **By Department** – a list of each department's expenses with comparisons to the prior year and the variance
- **Department Details** – for each department, a schedule to outline notable department expense variances and the number of employee positions included in the department and the department's expense as a percentage of the total Preliminary Budget

The Preliminary Budgets are updated upon request from the Board of Directors. If needed, additional budget workshops are held with the Board of Directors and updates are made to the Preliminary Budgets as requested.

The Board holds a public hearing for public feedback on the budgets. The Board of Directors may request additional updates to the Preliminary Budgets prior to approval. Once the Board of Directors approve the budgets, the public is notified of the rate increase, if applicable, no later than 30 days prior to the beginning of the fiscal year, January 1.

After the Operation & Maintenance and Capital Budgets have been approved by the Board, any amendments to the budgets would have to be authorized through the following procedures:

- The Board approves items added to the Operation & Maintenance Budget that exceed the General Manager's \$50,000 expenditure authority for regular purchases and \$25,000 for consulting
- Amendments to the Capital Improvement Budget require discussion and approval by the Board





BUDGET CALENDAR

DATE	DESCRIPTION OF ACTION
JULY 7, 2022	Distribute Additional Staff Request Forms to Department Managers and Supervisors
JULY 7, 2022-JULY 15, 2022	Budget Office schedules meetings and prepare for Budget Hearings
JULY 14, 2022	Budget packet due to the Budget Office
JULY 18, 2022-AUGUST10, 2022	Departmental Budget Hearings
AUGUST 15, 2022-AUGUST19, 2022	Budget Input Meetings
AUGUST 22, 2022-SEPTEMBER 6, 2022	Budget Office review budget input and prepare schedules for AGM-Finance & Administration
SEPTEMBER 7, 2022	Present Preliminary FY2023 Budget to AGM- Finance & Administration
SEPTEMBER 12, 2022	Present Preliminary FY2023 Budget to Executive Management
SEPTEMBER 28, 2022	Finance Committee Meeting – Submittal of Draft Budget
OCTOBER 12, 2022	Budget Workshop
OCTOBER 19, 2022	Budget Workshop
OCTOBER 26, 2022	Budget Workshop
NOVEMBER 9, 2022	Public Hearing
NOVEMBER 30, 2022	Board Adoption of the 2023 Budgets



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BASIS OF BUDGETING

The Birmingham Water Works (BWW) operates as an enterprise fund with a fiscal year that begins January 1 and ends on December 31. The BWW operates with one major fund on the accrual basis of accounting. Generally accepted accounting principles (GAAP) require local governments, to use a proprietary-type fund, such as an enterprise fund, a fund used to account for operation that are financed and operated in a similar manner to a private business enterprise.

BWW operating expenditures are supported by operating revenues derived from the charges for services related to retail water, wholesale water, raw water, and fire protection. Other operating revenues include miscellaneous fees, system development charges (impact fees), and billing and collection services.

BWW's management is responsible for the establishment and maintenance of the internal control structure that ensures the assets of BWW are protected from loss, theft, or misuse. The internal control structure ensures that adequate accounting data is compiled to allow for the preparation of financial statements in conformity with Generally Accepted Accounting Principles (GAAP). BWW's internal control structure is designed to provide reasonable assurance that these objectives are met.

BWW's Board annually adopts a budget prior to the new fiscal year. The budget authorizes and provides the basis for reporting and control of financial operations, accountability for BWW's enterprise operations, and capital projects. The budget is presented on the accrual basis of accounting. The BWW defines a balanced budget as when projected annual revenues and existing fund balances are sufficient to meet budgeted expenses.





FUND STRUCTURE & BALANCES

The BWW uses funds to report on its financial position and the results of its operations determined in conformity with accounting principles generally accepted in the United States.

A fund is a separate accounting entity with a self-balancing set of accounts. The two funds used by the BWW are the enterprise fund, which reports information about the general operations of the utility, and fiduciary funds, which report information about the Pension Trust Fund and the Other Post- Employment Benefits (OPEB) Trust Fund. All department expenses are accounted for in the enterprise fund.

FUND	DIVISION	DEPARTMENT
ENTERPRISE	Executive	Executive
		Board
		Company Wide
		Business System & Operations
ENTERPRISE	Finance & Administration	Internal Auditor
		Public Communication
		Customer Support Services
		Call Center
ENTERPRISE	Finance & Administration	Human Resources
		Wellness and Health Management
		Water Watchers Brigade
		Information Technology
ENTERPRISE	Finance & Administration	Accounting
		Purchasing
		Operations & Technical Services
		EnviroLab & Water Quality
ENTERPRISE	Operations & Technical Services	Purification
		Security
		Water Resources
		SCADA
ENTERPRISE	Operations & Technical Services	Industrial & Commercial Accounts
		Engineering & Maintenance
		E&M Shop
		System Development
ENTERPRISE	Engineering & Maintenance	Distribution
		Engineering
		Mapping & Records
		Water Accountability
FIDUCIARY	Pension Trust Fund	N/A
	OPEB Trust Fund	N/A





ENTERPRISE FUND – PROPRIETARY FUND

The fund is used to account for operations that are financed and operated in a manner similar to private business enterprises. A fund of this type is entitled Enterprise Fund in accordance with terminology set forth in accounting principles generally accepted in the United States.

The BWW's Enterprise Fund maintains five reserve funds for unexpected capital and operating needs for the purpose of providing adequate cash flow and reserves.

RESERVES

Reserve Fund	2021	2022	2023
Capital Reserve	\$ 20,371,107	\$ 19,272,300	\$ 18,076,882
Revenue	\$ 26,157,860	\$ 26,254,714	\$ 28,377,296
Demand Shortfall	\$ 8,719,287	\$ 8,751,571	\$ 9,459,099
Rate Stabilization	\$ 8,719,287	\$ 8,751,571	\$ 9,459,099
Economic Development	\$ 7,498,587	\$ 7,526,351	\$ 8,134,825
Total Reserve Funds	\$ 71,466,127	\$ 70,556,507	\$ 73,507,201



OPERATION & MAINTENANCE BUDGET SUMMARY

The Approved FY2023 Operation & Maintenance (O&M) Budget is \$125,304,574.86. This is an increase of 8.12% over FY2022. A summary is provided below.

OPERATION & MAINTENANCE BUDGET SUMMARY

Operation & Maintenance Budget Summary				
CATEGORY	FY2023	FY2022	INCREASE (DECREASE)	PERCENT CHANGE
Labor	\$43,579,983.20	\$41,987,124.34	\$1,592,858.86	3.79%
Employee Related Expenses	17,480,852.58	16,365,868.82	1,114,983.76	6.81%
Power	11,185,000.00	9,887,219.52	1,297,780.48	13.13%
Transmission & Distribution Maintenance Materials	9,437,257.24	9,332,015.19	105,242.05	1.13%
License Fees	4,835,000.00	4,600,000.00	235,000.00	5.11%
Chemicals	9,115,231.80	6,802,538.37	2,312,693.43	34.00%
Legal	1,159,704.00	1,063,982.40	95,721.60	9.00%
Lab Support, Purification Maintenance	2,089,128.00	1,827,686.00	261,442.00	14.30%
Outsourced Security	1,769,374.80	1,629,336.94	140,037.86	8.59%
Insurance	3,091,598.69	2,788,021.47	303,577.22	10.89%
Electrical / Pump Maintenance	516,800.00	466,510.96	50,289.04	10.78%
Billing Expense	1,115,000.00	1,115,000.00	-	-
Other Operation & Maintenance Expenses	15,062,109.91	14,435,256.66	626,853.25	4.34%
Consultants	4,867,534.64	3,593,484.26	1,274,050.38	35.45%
Total Operation & Maintenance	\$125,304,574.86	\$115,894,044.93	\$9,410,529.93	8.12%



SOURCES OF REVENUE

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Revenue Goals 32

Rates & Charges 32

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SOURCES OF REVENUE

Revenue sources available to meet anticipated operation and capital expenses are:

- **Rates and Charges** – comprised of monthly charges for residential and non-residential raw water services based on usage, basic facility charges, connection and maintenance fees, miscellaneous charges for ancillary services, and penalty charges related to service interruption
- **Sewer Collection Fees** – BWW bills and collects sewer fees for several entities for which it is paid a fee
- **Impact Fees** – charges assessed against new developments to recover major capital costs associated with expanding water service facilities
- **Development Impact Fees** – charges established to recoup the cost of installing or extending water lines to service a certain defined group of properties, some of which may not currently be developed
- **Debt** – monies borrowed through the issuance of revenue bonds or loans through the State Revolving Fund

REVENUE GOALS

As part of the rates, charges, and impact fee analysis, the BWW's revenue requirements are as follows:

- Provide sufficient revenue to fund the operating budget and the programs provided by the Board
- Provide sufficient revenue to fund the recurring capital needs
- Provide sufficient revenue to meet the debt service payments and coverage requirements
- Provide sufficient revenue to fund the reserve funds as established by the RSE Policy
- Provide sufficient revenue to meet PAYGO requirements

Adherence to revenue goals is essential to long-term financial viability.

RATES & CHARGES

Each year rates are established based on ensuring that sufficient revenues will be received to fully recover all costs of operating and maintaining the water system. These costs include daily system operating expenses, planned repair, renewal and/or replacement of aging capital assets and payment of principal and interest on existing debt. In addition, the budget and any rate adjustments must ensure that the legal obligations contained in the bond indenture are also met.



REVENUE PROJECTIONS & DEVELOPMENT

Annual revenue estimates are developed using projected changes in consumer consumption patterns. For FY2023, it is projected that water demand will decrease by approximately 2.14% over the FY2022 estimated actuals. Revenues are reviewed monthly during the budget development process until the budget is adopted by the Board of Directors.

INITIAL CONSUMPTION PROJECTION

	2022 Budget	2022 Est. Actual	2023 Projected	2023 to 2022 Est. Actual Difference (Ccf)
Residential				
Block 1 (0-3 Ccf)	5,100,000	5,093,690	5,100,000	6,310
Percent Change*		-0.12%	0.12%	
Block 2 (3-15 Ccf)	6,100,000	6,137,378	6,100,000	(37,378)
Percent Change		0.61%	-0.61%	
Block 3 (15+ Ccf)	1,800,000	2,246,622	2,000,000	(246,622)
Percent Change		24.81%	-10.98%	
Subtotal: Residential	13,000,000	13,477,690	13,200,000	(277,690)
Percent Change		3.67%	-2.06%	
Non-Residential				
Commercial	11,500,000	11,661,317	11,500,000	(161,317)
Percent Change		1.40%	-1.38%	
Industrial	360,000	355,569	360,000	4,431
Percent Change		-1.23%	1.25%	
Municipal	950,000	1,093,595	970,000	(123,595)
Percent Change		15.12%	-11.30%	
Private Fire	50,000	77,907	60,000	(17,907)
Percent Change		55.81%	-22.99%	
Subtotal: Non-Residential	12,860,000	13,188,388	12,890,000	(298,388)
Percent Change		2.55%	-2.26%	
Wholesale	800,000	838,654	800,000	(38,654)
Percent Change		4.83%	-4.61%	
Raw Water	4,300,000	3,548,278	3,500,000	(48,278)
Percent Change		-17.48%	-1.36%	
Total Consumption	30,960,000	31,053,011	30,390,000	(663,011)
Percent Change		0.30%	-2.14%	

Note: Wholesale started as its own customer class on January 1, 2020. Previously, Wholesale was part of the Non-Residential customer class. Budgeting for Non-Residential subclasses began in 2021.

*Percent Change in 2022 Est. Actual column compares to 2022 Budget, Percent Change in 2023 column compares to 2022 Est. Actual.



2023 TOTAL REVENUE PROJECTIONS

Revenue is projected to increase by \$4,990,892 or 2.35% over the estimated actual amount for FY2022. The schedule below provides a summary of consumption projections for FY2023.

2023 TOTAL REVENUE PROJECTIONS

	2021 Actual	2022 Budget	2022 Est. Actual	2023 Projected
Volumetric Revenue				
Residential				
Block 1 (0-3 Ccf)	\$ 13,395,790	\$ 13,566,000	\$ 13,549,216	\$ 13,923,000
Block 2 (3-15 Ccf)	19,813,650	24,156,000	24,304,016	27,572,000
Block 3 (15+ Ccf)	8,940,996	12,474,000	15,569,093	15,820,000
<i>Subtotal: Residential</i>	\$ 42,150,437	\$ 50,196,000	\$ 53,422,325	\$ 57,315,000
Difference*			\$ 3,226,325	\$ 3,893,000
Non-Residential				
Commercial	\$ 44,283,289	\$ 47,840,000	\$ 48,511,079	\$ 49,680,000
Industrial	1,492,897	1,497,600	1,479,166	1,555,200
Municipal	3,764,104	3,952,000	4,549,356	4,190,400
Private Fire	285,445	208,000	324,095	259,200
<i>Subtotal: Non-Residential</i>	\$ 49,825,734	\$ 53,497,600	\$ 54,863,696	\$ 55,684,800
Difference			\$ 1,366,096	\$ 821,104
Wholesale	\$ 2,804,011	\$ 2,736,000	\$ 2,868,197	\$ 2,840,000
Difference			\$ 132,197	\$ (28,000)
Raw Water	\$ 5,222,746	\$ 5,078,300	\$ 4,190,517	\$ 4,711,000
Difference			\$ (887,783)	\$ 520,000
Total Volumetric Revenue	\$ 100,002,928	\$ 111,507,900	\$ 103,455,640	\$ 120,550,800
Total Fixed Charge Revenue	\$ 75,518,760	\$ 74,913,664	\$ 73,862,954	\$ 73,253,101
Other Revenue				
Other Operating Revenues	7,233,178	7,722,065	7,301,804	7,371,803
Jefferson County Sewer Billing Revenue	13,856,904	14,363,255	14,134,042	14,416,723
Total Operating Revenues	\$ 196,611,769	\$ 208,506,884	\$ 210,643,535	\$ 215,592,427
Non-Operating Revenues	\$ 2,049,670	\$ 3,629,000	\$ 2,091,000	\$ 2,133,000
Total Revenues	\$ 198,661,439	\$ 212,135,884	\$ 212,734,535	\$ 217,725,427



DEBT FUNDING

DEBT REDUCTION PLANNING

In 2021, the Birmingham Water Works (the BWW) issued the Series 2021 Senior Taxable Water Revenue Refunding Bonds in the amount of \$480,995,000. The Series 2021 Bonds were issued in order to advance refund various outstanding Senior and Subordinate Securities of the BWW achieving present value savings of \$23.3 million (5.71% of the par refunded), or \$35.5 million in gross cash flow savings. The 2021 refunding also eliminated all of the BWW's subordinate debt with the exception of approximately \$6.3 million in State Revolving Fund loans.

Dating back to 1998, the BWW had settled into a two-year cadence of issuing new revenue bonds to fund capital projects and take the opportunity to refund prior issues at the same time, whenever financial market conditions have been favorable for refunding prior bond issues. However, the BWW has not required any issuance of new revenue bonds since 2018. Re-fundings conducted in 2019 and 2021 have not only reduced annual debt obligations but have also resulted in the release of previously required reserves. The released reserves were used to fund the BWW's capital program, further delaying the need for any new revenue bond issuance. While new bond issues increase the BWW's overall outstanding debt, refunding saves money by taking advantage of favorable interest rates.

In 2021, the BWW was invited to apply for a federal loan ("WIFIA") to help pay for capital improvement projects. Aside from offering lower interest rate costs, WIFIA allows recipients to take draws to avoid any carrying cost. The BWW will also be able to extend the repayment period and structure the associated debt around its existing debt portfolio to avoid spikes in annual debt obligations. The completion of the WIFIA loan should further delay the BWW's need to issue new revenue bonds.

Even though the BWW regularly issues new revenue bond debt to fund its capital program, it also pays for a portion of its annual capital program with revenues generated from rates, referred to as "pay as you go capital," or PAYGO. Paying for capital expenses with cash decreases the amount of debt required to be issued by the BWW. Prior to 2018, the BWW developed an internal financial policy to fund 25% of its annual capital program with PAYGO. In 2018, when the BWW entered a new billing contract with Jefferson County for providing sewer billing services, the new contract provided the BWW with additional revenues of approximately \$9 million in 2018 and more than \$13 million in 2019 and beyond. With this additional revenue and a desire to continue to reduce outstanding debt, the BWW chose to apply this revenue to PAYGO, and revise its internal financial policy to increase the amount of its Capital Budget paid for with PAYGO to 70% by 2028.



The BWW has demonstrated a willingness to engage in practices that will reduce total outstanding debt over the long run. Standard and Poor's and Moody's Investor Service each maintain their respective bond ratings for the BWW of AA and Aa2, both with a stable outlook. While the ratings agencies commended the BWW's strong leadership and commitment to financial management, one of the main downsides to the BWW's financial outlook from the ratings agencies' perspectives is the amount of principal outstanding.

Inspired by this opportunity for improvement, the Board resolved to explore strategies for significantly reducing outstanding principal by 2030. To evaluate the various debt reduction strategies and their impacts to outstanding debt, overall financial management, and water rates, the BWW in 2019 worked with a team that includes its financial advisor and rate consultant to develop recommendations. The results of those efforts projected an estimated decrease in principal of \$209 million by 2030, compared to previous projections.

Total current outstanding debt is \$979,040,000

CURRENT OUTSTANDING DEBT SUMMARY SENIOR LIEN SUMMARY

SERIES	AMOUNT OUTSTANDING	FINAL MATURITY
2015-A	17,920,000	1/1/2029
2015-B	14,450,000	1/1/2040
2016-A	105,065,000	1/1/2041
2018	43,930,000	1/1/2031
2019	322,035,000	1/1/2045
2021	469,785,000	1/1/2043
Total Senior	\$973,185,000	

SUBORDINATE LIEN SUMMARY

SERIES	AMOUNT OUTSTANDING	FINAL MATURITY
DWSRF Loans	\$5,855,000	2031-2035
Total Subordinate	\$5,855,000	
Aggregate Total	\$979,040,000	



DEBT SERVICE SCHEDULE

Type of Debt/Purpose		Amount Outstanding 1/1/23	Requirement FY Ending 12/31/23
Capital Improvement Projects :			
Series			
2015 A-Bonds			
Principal		17,920,000	3,650,000
Interest		1,988,613	762,475
		19,908,613	4,412,475
2015 B-Bonds			
Principal		14,450,000	910,000
Interest		4,615,850	536,025
		19,065,850	1,446,025
2016 A-Bonds			
Principal		105,065,000	3,185,000
Interest		49,124,875	4,545,925
		154,189,875	7,730,925
2018 Bonds			
Principal		43,930,000	2,005,000
Interest		11,359,250	2,146,375
		55,289,250	4,151,375
2019 Bonds			
Principal		322,035,000	10,700,000
Interest		124,892,981	9,888,667
		446,927,981	20,588,667
2021 Bonds			
Principal		469,785,000	14,620,000
Interest		141,820,753	10,284,787
		611,605,753	24,904,787



CURRENT OUTSTANDING DEBT
ANNUAL DEBT SERVICE

AGGREGATE DEBT SERVICE			
PERIOD ENDING	SENIOR LIEN DS	SUBORDINATE LIEN DS	AGGREGATE DEBT SERVICE
12/31/2023	63,234,254	643,148	63,877,401
12/31/2024	63,234,228	644,213	63,878,441
12/31/2025	63,236,949	639,926	63,876,875
12/31/2026	63,234,297	640,281	63,874,578
12/31/2027	63,861,511	640,204	64,501,715
12/31/2028	63,846,134	644,624	64,490,758
12/31/2029	63,846,805	638,688	64,485,493
12/31/2030	64,496,577	642,274	65,138,850
12/31/2031	64,504,997	640,355	65,145,352
12/31/2032	64,632,549	505,105	65,137,655
12/31/2033	64,725,115	412,905	65,138,020
12/31/2034	65,094,689	41,960	65,136,649
12/31/2035	65,166,726	40,980	65,207,706
12/31/2036	65,368,171	–	65,368,171
12/31/2037	65,375,016	–	65,375,016
12/31/2038	65,373,331	–	65,373,331
12/31/2039	61,486,336	–	61,486,336
12/31/2040	53,905,421	–	53,905,421
12/31/2041	53,906,139	–	53,906,139
12/31/2042	46,988,912	–	46,988,912
12/31/2043	47,622,255	–	47,622,255
12/31/2044	6,920,337	–	6,920,337
12/31/2045	6,926,571	–	6,926,571
Total	\$1,306,987,322	\$6,774,661	\$1,313,761,983

**DEBT SERVICE**

Debt Service for FY2023 is \$63,877,401, which is an increase of \$4,170,021 from the FY2022.

DEBT SERVICE COVERAGE

	Est. Actual 2022	Recommended 3.9% 2023
Total Revenues	\$ 212,735,000	\$ 217,725,000
Less: Impact/System Development Fees	\$ (1,331,000)	\$ (1,331,000)
Less: Interest on Construction Funds	(14,983)	(14,983)
Plus: Loss on the Sale/Disposition of Assets	334,943	334,943
Total Revenues per Official Statement Definition	\$ 211,723,960	\$ 216,713,960
Revenue Requirements		
O&M Expenses	\$ (115,894,045)	\$ (125,304,575)
Total Revenues Available for Debt Service and PAYGO	\$ 95,829,915	\$ 91,409,385
Debt Service		
Senior Debt Service	\$ (59,065,731)	\$ (63,234,254)
Subordinate Debt Service	(641,649)	(643,148)
Total Debt Service	\$ (59,707,380)	\$ (63,877,401)
Base Charge Revenue as a Percent of Annual Debt Service	123.7%	114.7%
PAYGO Spending	\$ (36,000,000)	\$ (27,500,000)
PAYGO as Percent of Capital Budget	46.7%	38.0%
Total Revenue Requirements	\$ (211,601,425)	\$ (216,681,976)
Surplus/(Deficit)	\$ 122,535	\$ 31,983
Debt Service Coverage Ratios		
Senior Debt Service Coverage (Minimum = 1.35)	1.62	1.45
Total Debt Service Coverage (Minimum = 1.10)	1.60	1.43
Total Debt - Par Outstanding/Principal Remaining	\$ 1,129,480,000	\$ 1,098,095,000
Net Debt to Total Assets	88.71%	84.38%



CAPITAL IMPROVEMENT PLAN

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INTRODUCTION

On July 9, 1951, The Water Works Board of the City of Birmingham (BWW) acquired all properties and ownership from The Birmingham Water Works Company. The BWW supplies raw and potable water to approximately 770,000 customers in a five-county region (Jefferson, St. Clair, Blount, Shelby, Walker).

The BWW operates 4 intake stations with a total rated pumpage capacity of 285 million gallons per day (MGD). The intakes draw water from the Cahaba River, Mulberry Fork, Sipsy Fork, and Inland Lake. The BWW owns and operates 4 surface water-fed filtration plants with a total treatment capacity of 190 MGD. The distribution system includes approximately 4,117 miles of cast iron, ductile iron, polyvinyl chloride, and galvanized line pipe. The system also includes 6 impoundment dams, 73 potable and raw water storage facilities, 51 pumping stations, 41 pressure reducing valve stations, 52,000 valves, 15,000 hydrants and over 220,000-meter settings. The BWW maintains a system with over 220,000 major pieces of equipment.

In support of these assets, the BWW has a 2023 Capital Improvement Plan (CIP) of \$72,307,526 and a 10-Year Capital Improvement Plan of \$834,090,598. CIP funds are designated to address regulatory compliance, risk management, capacity/growth, performance/cost efficiency and maintenance/replacement needs throughout the system, as well as capitalized operations and maintenance. The CIP serves as a planning instrument to identify needed capital expenditures and to coordinate the financing and timing of improvements in a way that maximizes the return to the customers. In addition, the planning process is a valuable means of coordinating and taking advantage of joint planning and development of projects where possible. Planning for capital facilities over time can promote better use of BWW's financial resources and maintain an effective level of service for customers.

While the CIP serves as a long-range plan, it is reviewed annually and revised based on current prioritized circumstances and opportunities. Also, the project priorities may be changed due to funding opportunities and/or circumstances that cause a more rapid deterioration of an asset.

The adoption of the Capital Improvement Plan is neither a commitment to a particular project nor a limitation to a particular cost. When adopted, the CIP provides the framework for management and for the Directors with respect to rates, financing, investment planning and project planning.

GOALS OF THE CIP

The Capital Improvement Plan evaluates the operating condition of the organization's assets and identifies where upgrade improvements can be made and where opportunities for new projects may exist. For this reason, the BWW has the following goals from its CIP process:

- Ensure that BWW's 10-Year Capital Improvement Plan is affordable and finances only necessary capital expenditures
- Qualify capital investment decisions according to a fair, transparent, and objective process
- Emphasize the requirement for long-term planning
- Link the relation between the Capital and the Operation and Maintenance Budgets
- Avoid the need to impose emergency repairs
- Serve as an educational tool for the community and the BWW

DESCRIPTION OF PROJECT DRIVERS

The following categories, listed by priority, were developed to indicate the driver for each element of the BWW's CIP. Each project has been placed into one of these categories. It is possible that a project exists which could fall into multiple categories. Where this occurred, an effort was made to identify the most significant driver for the project.

REGULATORY COMPLIANCE

Projects associated with compliance with existing, pending, and future regulations. One regulation has a direct impact on the BWW's CIP. An example summary of this regulation and the associated projects is provided below.

Example of projects:

- Disinfectants/Disinfection Byproducts Rule Stage 2 – Requires utilities to meet disinfection by-product maximum contaminant levels at locations in the system known to produce high levels. The final rule was issued on January 4, 2006.
- Impact on BWW: Optimization of current treatment process and distribution system management practices. This includes the rehabilitation of existing facilities to position for potential use of alternative treatment strategies.

RISK MANAGEMENT

Projects associated with increasing service reliability, system redundancy, and safety of BWW facilities for workers, the surrounding community, and the environment. These activities include security program implementation, electrical system improvements, disinfection upgrades/conversion, distribution reinforcements, and dam safety improvements.

CAPACITY

Projects associated with supporting the continued growth of the BWW service area and demand within the existing service areas. These efforts include plant expansions, system expansion/redundancy, and new source development.

PERFORMANCE/COST EFFICIENCY

Projects associated with maintaining/improving current practices of utility operation. These efforts include information technology initiatives, treatment process rehabilitation, and system maintenance/replacement.

MAINTENANCE AND REPLACEMENT

Projects associated with extending the useful life of existing infrastructure through replacement of system elements or rehabilitation.

CAPITALIZED OPERATION AND MAINTENANCE

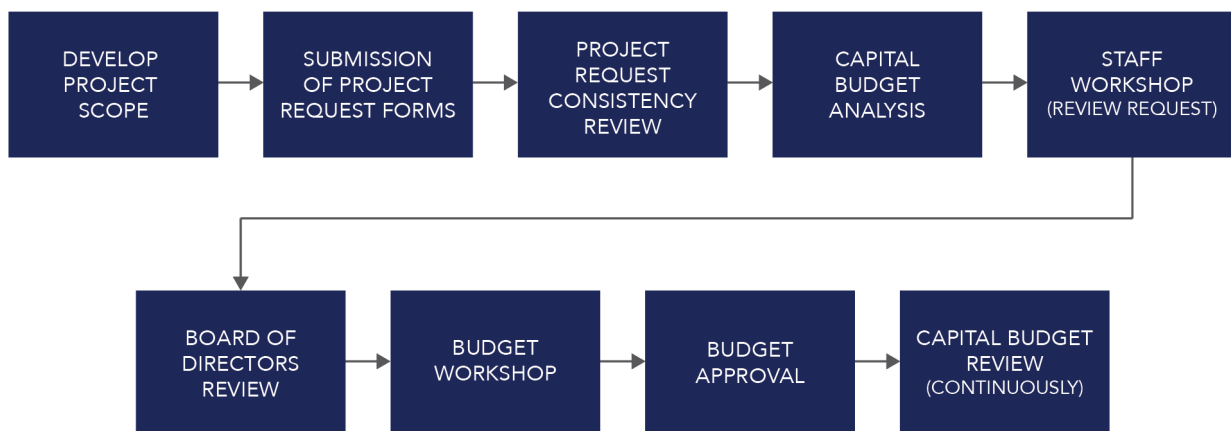
These are indirect project costs clearly related to the construction, development, or improvement of capital assets as a group, but not to the construction, development, or improvement of a specific capital asset.



CAPITAL PLANNING PROCESS

The Capital Planning Process is created to be a vehicle to meet specific BWW goals and/or drivers and to be consistent with BWW's Strategic and Master Plans. The purpose of the Capital Planning Process is to encourage the flow of ideas and allow for proactive planning. During this process, departments are reviewing facilities condition assessments, preventive maintenance records, current performance of the Capital Improvement Plan, and providing justification of any other necessary project request. From these activities, the departments should become familiar with the overall condition of their assets and needs.

If these needs require the expenditure of capital dollars, each department will be responsible for completing the appropriate Capital Request and Business Case Justification Form. These request forms provide information such as: project name and location, the estimated cost, project timing, a brief description and justification of the project and the resulting benefit. The procedures for the development of the Capital Improvement Plan budget will generally follow the schedule below:





5-YEAR BUDGET TIMELINE





CAPITAL PROJECT DESCRIPTIONS

BUDGET ITEMS

1A. NEW DISTRIBUTION MAINS & HYDRANTS

This item covers the installation of distribution mains and fire hydrants generally associated with new developments that result in extensions of water services. These costs are generally reimbursed to the BWW by the customer or developer

99 DISTRIBUTION MAINS, HYDRANTS & NEW CUSTOMER TAP FEES

This item includes the contributions and deposits received for main extensions in Budget Item 1A and new customers tap fees, in accordance with the Rules and Regulations Governing Service to Customers

1B. NEW CUSTOMER SERVICE CONNECTIONS –SYSTEM DEVELOPMENT ONLY

This item covers the BWW's cost for new service connections. It includes all labor and materials furnished by the BWW. Tap fees are charged to the customer to offset this cost

1C. METERS & METERING TECHNOLOGY

This item covers the purchase of additional and replacement meters. The additional meters are for new service connections. The replacement meters are for the continuation of the replacement program of worn-out inaccurate meters. This replacement program enhances revenue and reduces lost water

1D. REPLACE DISTRIBUTION MAINS – SYSTEM DEVELOPMENT ONLY

Many of the system's older distribution mains, particularly galvanized steel, have deteriorated beyond economical repair. These mains are a continuing source of excessive maintenance and lost revenue (water loss). This item is intended to continue replacement of water mains due to excessive repairs, water quality, low fire flow, etc.

1E. REPLACE DISTRIBUTION SERVICES – SYSTEM DEVELOPMENT ONLY

Many of the system's older services, particularly galvanized steel, have deteriorated beyond economical repair. These services are a continuing source of excessive maintenance and lost revenue (water loss). This item is intended to continue the program for replacement of these older services

1F. WATER PLANT FILTERS

In order to maintain the effectiveness and efficiency of the filter plants, it is necessary to rebuild the filters and replace the filter media on a regular basis. This item provides for a regular program of filter media replacement

1G. PURCHASE WATERSHED PROPERTY

In order to protect valuable water resources, it is advantageous to purchase watershed property when it becomes available. This item provides funding for purchasing watershed property as it becomes available

1H. TANK MAINTENANCE & REPAIR

In order to maintain the integrity of the BWW's storage tanks, it is necessary to have a comprehensive tank maintenance program. This item will provide for regular maintenance and rehabilitation as required. This includes updating to current standards and recoating the storage tanks on a scheduled basis

1I. REPAIR/REPLACE PUMPS, MOTORS, GENERATORS

In order to maintain acceptable operational efficiency of pumps, motors, and other appurtenances, it is necessary to have a repair/replacement program. This item will provide for repair or replacement of equipment, as necessary to maintain optimum operating efficiency

1J. REIMBURSABLE PIPELINE PROJECTS OUT

This item covers installation of new distribution mains at the cost of the BWW



1K. SERVICE LINE REPLACEMENT – DISTRIBUTION DEPARTMENT ONLY

This item covers installation of main and service line replacements at the cost of the BWW

1L. REPAIR/REPLACE DISTRIBUTION HYDRANTS AND VALVES

Repair/Replace Distribution Hydrants and Valves

1M. CUT AND CAP PROGRAM

This item includes the pilot program for the cut and cap of 2-inch service lines

1N. DEVELOPER INSTALLED

This item includes new development associated installation cost

2. OFFICE FURNITURE & EQUIPMENT

This item includes replacement of office furniture and equipment

3. TRANSPORTATION EQUIPMENT

This item includes the replacement of vehicles due to excessive mileage and/or repair cost and the purchase of additional vehicles

4. GENERAL EQUIPMENT

This budget item sets aside monies to purchase general equipment. Departments will be required to submit justification for review and approval to purchase under this capital item

5. MAINTENANCE & REPAIRS TO EXISTING FACILITIES

This item includes upgrades, replacements and repairs needed to improve safety, operations, and efficiency of existing facilities. These are typically small capital construction projects less than \$300,000 total installed cost

6. INFORMATION TECHNOLOGY/GIS

This item includes replacement of computer software and equipment to maintain existing network and other technology enhancements

7. ECONOMIC DEVELOPMENT

This item includes the development of programs and processes to increase economic development for BWW



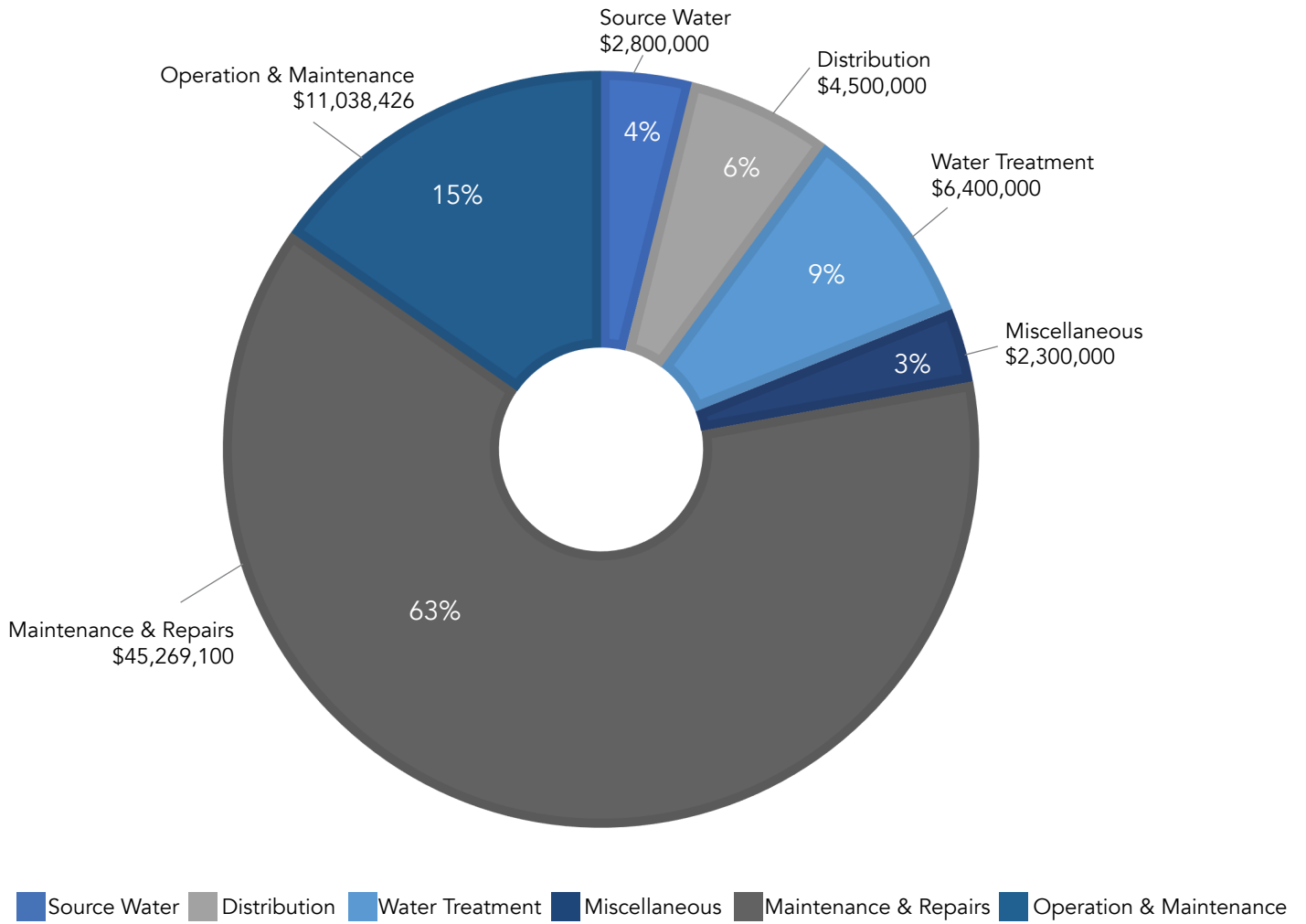
APPROVED 2023 CAPITAL BUDGET

Description	Drivers	2023
Filter Plants		
PFP Sodium Hypochlorite	Risk	\$ 1,500,000
PFP Liquid Lime	Perform	\$ 900,000
WFP Sodium Hypochlorite	Risk	\$ 3,000,000
WFP Liquid Lime	Perform	\$ 1,000,000
Raw Water & Distribution		
Lake Purdy Dam Stability Rehabilitation	Risk	\$ 2,000,000
Inland Lake PS and Transmission Line Improvements	Risk	\$ 800,000
Highway 79/Kiowa Road Distribution Update	Perform	\$ 2,000,000
Carson Loop Phase 6D	Risk	\$ 2,500,000
Main Campus IT/Security		
Envirolab Building	Reg	\$ 2,000,000
SAP Implementation (Phase 3 - HR)	Perform	\$ 300,000
Maintenance and Repairs		
1A - New Distribution Mains and Hydrants (Associated w/ New Developments)	M & R	\$ 2,000,000
1B - Replace Existing Services - Revenue Water Only	M & R	-
1C - Meters and Metering Technologies	M & R	\$ 3,000,000
1D - Replace Distribution Mains - System Development Only	M & R	\$ 19,875,000
1E - Replace Distribution Services - System Development Only	M & R	\$ 5,125,000
1F - Water Plant Filters	M & R	-
1H - Tank Maintenance and Repairs	M & R	\$ 2,750,000
1I - Repair/Replace Pumps, Motors, Generators	M & R	\$ 2,800,000
1K - Service Line Replacement - Distribution Department Only	M & R	\$ 2,000,000
1L-Repair/Replace Distribution Hydrants and Valves	M & R	\$ 2,000,000
1N - Developer Installed	M & R	-
2 - Office Furniture & Equipment	M & R	\$ 40,000
3 - Transportation Equipment	M & R	\$ 2,000,000
4 - General Equipment	M & R	\$ 800,000
5 - Maintenance & Repairs to Existing Facilities	M & R	\$ 4,500,000
6 - Information Technology/GIS	M & R	\$ 2,500,000
7 - Economic Development	Perform	\$ -
99 - Distribution Mains, Hydrants & New Customer Tap Fees	M & R	\$ (4,120,900)
Capitalized Operation & Maintenance		\$ 11,038,426
Total		\$ 72,307,526



The chart below is an allocation of the FY2023 Approved Capital Budget.

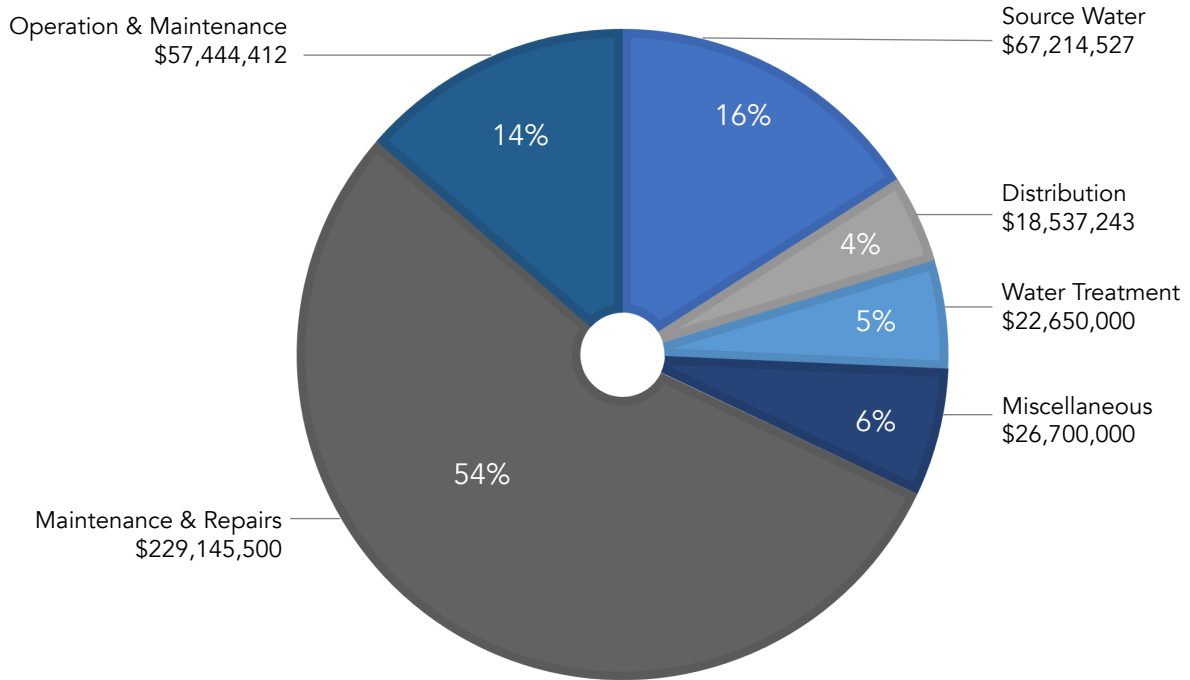
APPROVED 2023 CAPITAL BUDGET



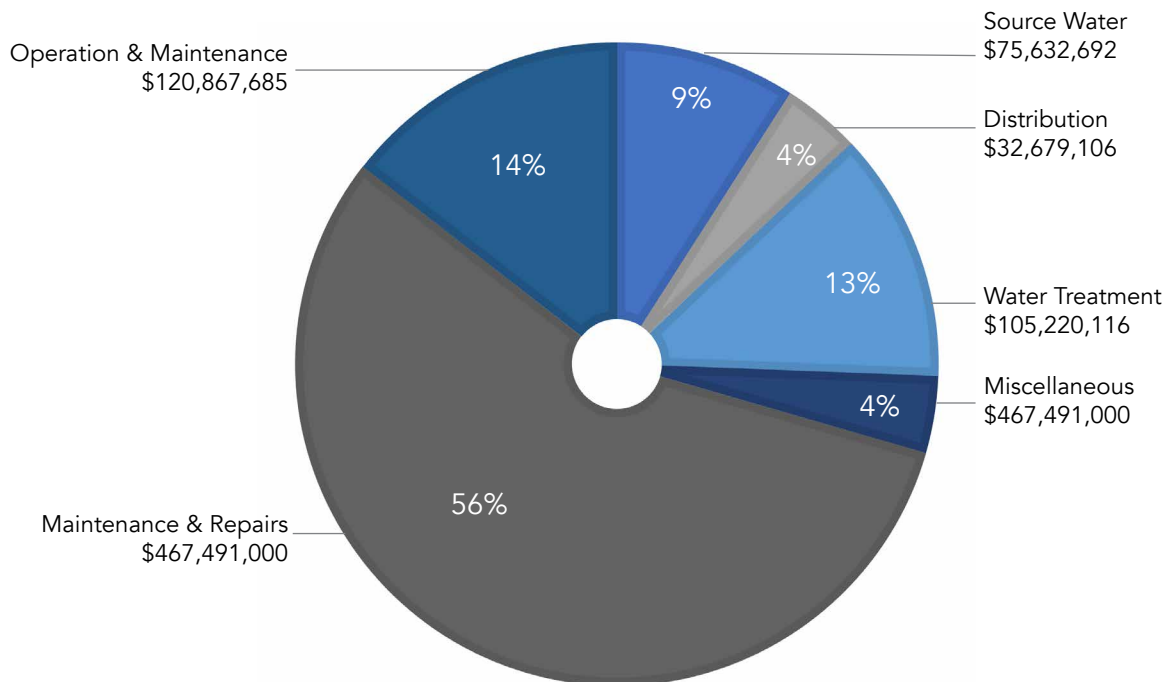


SECTION 5: CAPITAL IMPROVEMENT PLAN

5-YEAR PLAN 2023-2027



10-YEAR PLAN 2023-2032





CURRENT SYSTEM ASSETS

Our goal is to maintain existing assets in order to produce the nation's highest quality water.

8
TREATMENT &
RAW WATER PLANTS



73
WATER
TANKS



51
DISTRIBUTION
PUMP STATIONS



220,000
METERS/
CONNECTIONS



2
SLUDGE
FACILITIES



20
PRESSURE
GRADIENTS



154
BUILDINGS



4,117 MI
WATER
MAINS



1,000 MI.
SERVICE
LINES



6
IMPOUNDMENTS



15,000
HYDRANTS



52,000
VALVES



41
PRESSURE
REDUCING VALVES



RAW WATER DISTRIBUTION

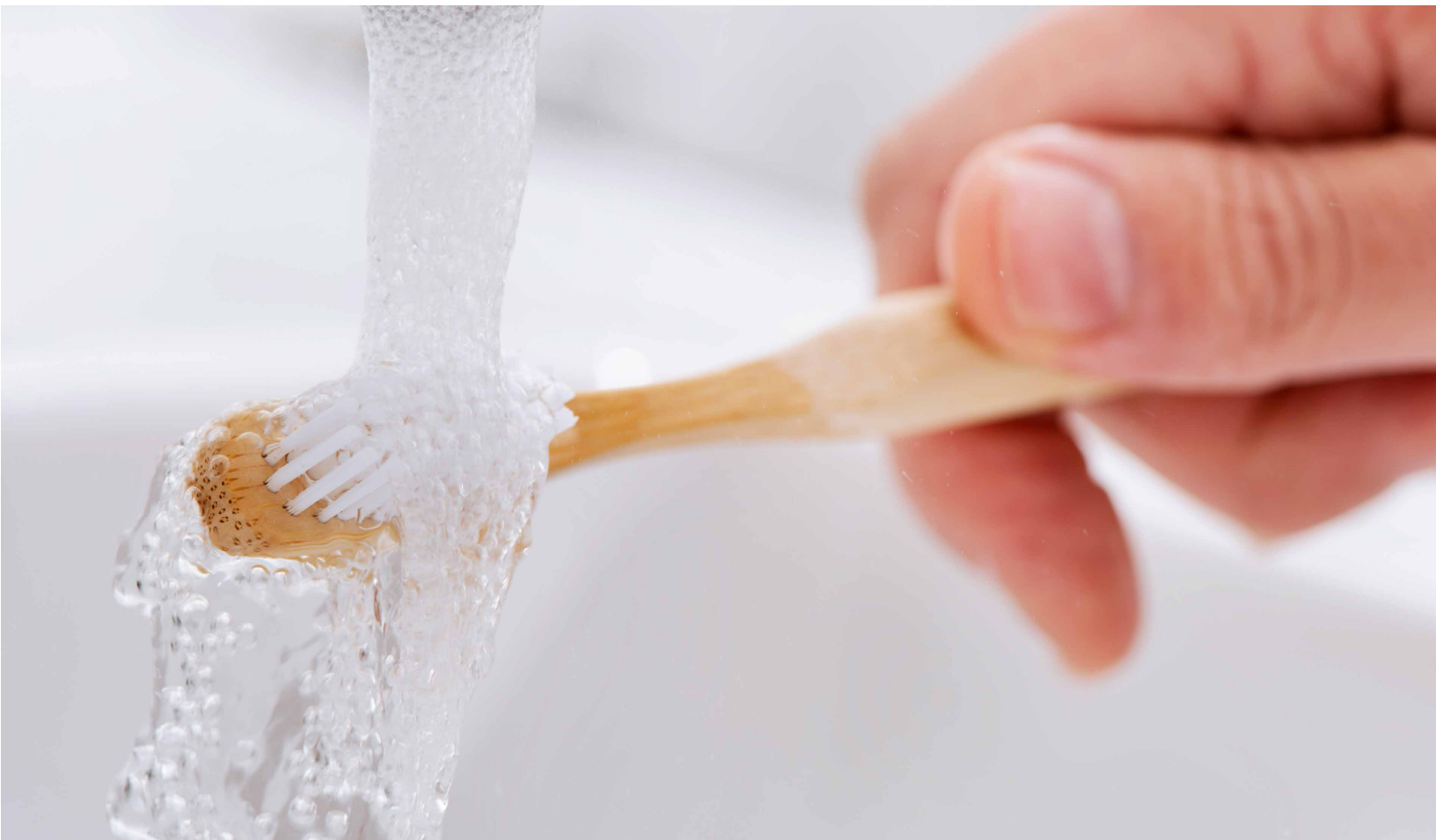
The Birmingham Water Works (BWW) ensures the availability of water to every home, school, business, and park within its service area. BWW system provides retail service to an area of approximately 700 square miles and approximately 196,000 customer accounts in Jefferson, Blount, St. Clair, Walker and Shelby Counties. The system consists of 4 raw water intake systems, 3 raw water boosters, 6 dams, and 53 raw water storage tanks. Water must be pumped long distances from the source of supply to storage/use.

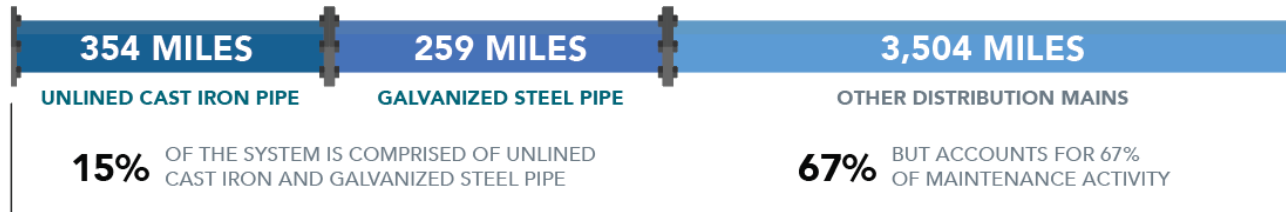
OBJECTIVE: WHAT WE ARE TRYING TO ACCOMPLISH

The objective of these asset classes is to ensure the system provides adequate storage of treatable water and equalizes demand to meet the current and future service demands of BWW. It also ensures that adequate water storage capacity meets water regulations and provides maximum operational efficiency for industrial purchase, wholesale customers, and meets fire protection needs.

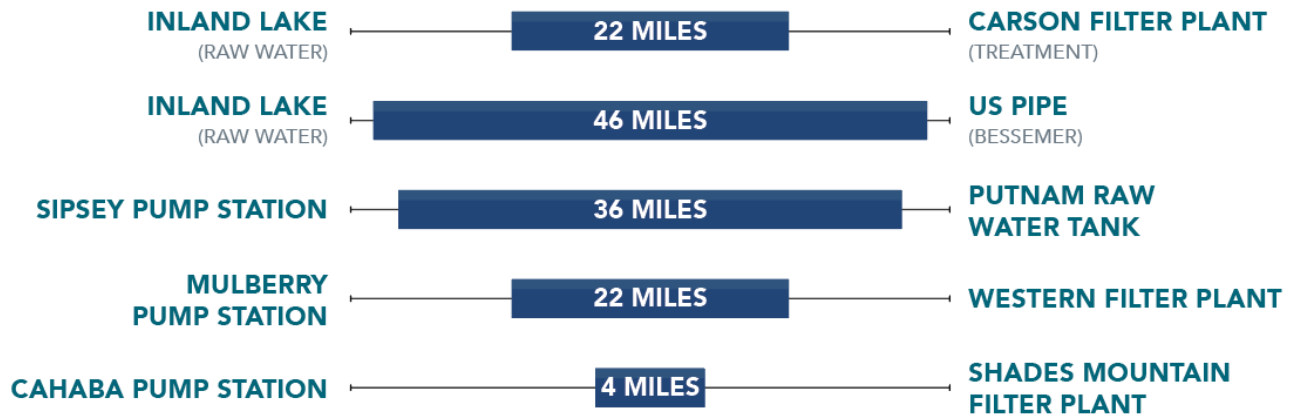
HOW WE WILL ACHIEVE OUR OBJECTIVE

The Capital Improvement Plan includes renewal and replacement projects needed to maintain adequate water supplies and storage to meet current water demands.



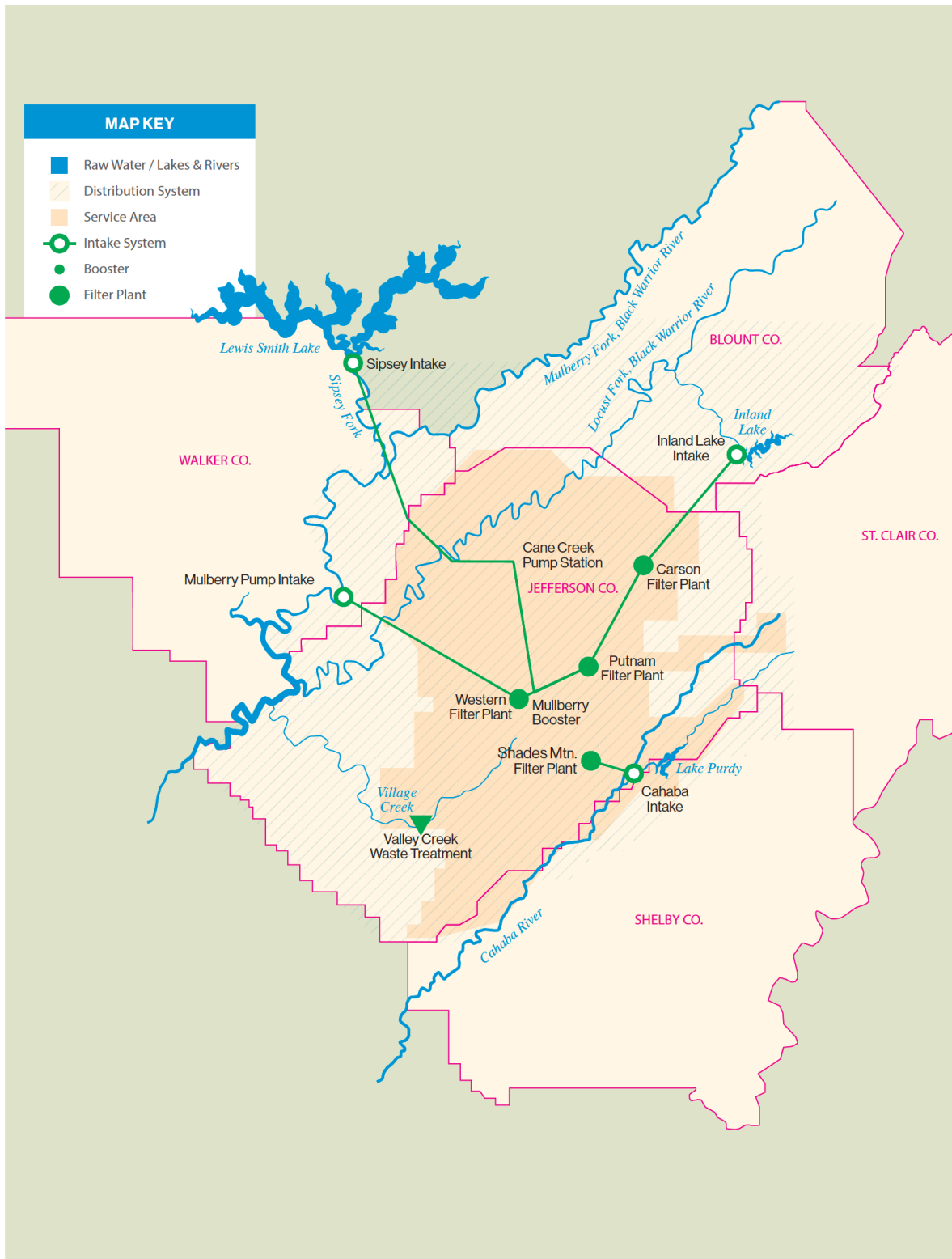


4,117 MILES
TOTAL PIPE IN SYSTEM





SECTION 5: CAPITAL IMPROVEMENT PLAN





WORK COMPLETED OR SCHEDULED IN FY2020 – 2023

LAKE PURDY DAM STABILIZATION PROJECT GOALS

- Improve the stability of the existing dam
- Mitigate seepage
- Increase the spillway capacity

SIPSEY PUMP STATION PUMP REPAIR GOALS

- Maintain the operational efficiency of the Sipsy Pump Station
- Repair and refurbish existing vertical turbine pumps
- Provide treatable water to our water treatment plants

MULBERRY RAW WATER SURGE TANKS GOALS

- Maintain and repair existing 750,000-unit raw water tank
- Increase structural integrity by preventing rust and deterioration
- Increase life span by 20 – 25 years



DISTRIBUTION

The Distribution System consists of 4,117 miles of piping, 1,000 miles of service lines, 48 distribution pump stations, 51 distribution storage tanks, 41 pressure-reducing valve stations, 52,000 valves, 15,000 hydrants, and 20 pressure gradients.

OBJECTIVE: WHAT WE ARE TRYING TO ACCOMPLISH

The objective of this asset class is to support the ongoing rehabilitation of existing water lines; improvements related to optimizing system performance and reliability, e.g., looping, paralleling, and replacing lines approaching capacity; and adding new transmission and distribution mains to support growth and service deficiencies in specific areas.

HOW WE WILL ACHIEVE OUR OBJECTIVE

The Capital Improvement Plan includes renewal and replacement projects needed to maintain adequate water supplies and storage to meet current water demands.

WORK COMPLETED OR SCHEDULED IN FY2020 – 2025

INLAND LAKE PUMP STATION AND TRANSMISSION LINE IMPROVEMENTS CONSTRUCTION PROJECT

This project includes removing and replacing failing main line valves, check valves and blow-off. This will involve the installation of new 60-inch main line valves, 60-inch check valves and a 60-inch magnetic flow meter.

CARSON LOOP PHASE 6D

The project consists of 3,700 feet of 36-inch buried ductile iron pipe and fittings along from Grand River West to Floyd Bradford Road and Amber Hills Road. This project also includes a 600-foot-long pipe bridge over the Cahaba River.

WATER LINE REPLACEMENT PROJECT

Replacement of the system's older distribution mains, particularly galvanized steel due to excessive repairs, water quality, low fire flow, etc.

METER REPLACEMENT PROJECT

The replacement meters are for the continuation of the replacement program of worn-out inaccurate meters. This replacement program enhances revenue and reduces lost water.

WATER TREATMENT

The Birmingham Water Works Board (BWW) consists of 4 water treatment plants and is the State of Alabama's largest water utility.

SHADES MOUNTAIN 80 MGD



WESTERN 60 MGD



PUTNAM 24 MGD



CARSON 25 MGD

**OBJECTIVE: WHAT WE ARE TRYING TO ACCOMPLISH**

The objective of this asset class is to ensure exceptional treatment facilities are being maintained to produce water quality that exceeds drinking water standards.

HOW WE WILL ACHIEVE OUR OBJECTIVE

The Capital Improvement Plan includes renewal and replacement of equipment, membranes, disinfection units and electrical/control components to ensure the water quality provided to our customers exceeds federal and state drinking water standards.

WORK COMPLETED OR SCHEDULED IN FY2020 – 2025**SHADES MOUNTAIN FILTER PLANT (SMFP) FILTER IMPROVEMENTS**

As part of BWW's overall filter rehabilitation program, BWW has chosen to upgrade the filters at each plant in such a way as to provide the flexibility for installation of GAC in the filters. Consistent with that approach, this project will establish the infrastructure to allow the existing filters to be converted into GAC Filter Absorbers. GAC treatment will allow the BWW to continue to use free chlorine for secondary disinfection while achieving compliance with Stage 2.

SMFP RESIDUALS

SMFP has purchased two 26-inch solids dewatering centrifuges. These units will replace the 37-year-old failing plate and frame system currently in place. The centrifuges still require installation as well as demolition of the existing plate and frame. Electrical and piping upgrades and modifications will be required. Additionally, a new dredge will be acquired to guarantee consistent removal of solids from the sedimentation basin to the dewatering equipment. Solids dewatering is critical to regulator operations at SMFP.

PFP & WFP SODIUM HYPOCHLORITE

The project includes the construction of a sodium hypochlorite facility at the Putnam & Western Filter Plant and when completed will replace the existing hazardous chlorine gas process.

PFP & WFP LIQUID LIME

Design and construct liquid lime facility to eliminate existing dry lime system. The goal of the project is to address the following objectives:

- Reduce clogging which limits operation downtime.
- Reduce operation and maintenance time to mix powder.



OPERATIONAL IMPACT OF FY2023 CAPITAL PROJECTS

OPERATIONAL IMPACT ASSOCIATED WITH THE PFP & WFP SODIUM HYPOCHLORITE PROJECTS

As part of the America's Water Infrastructure Act of 2018 (AWIA), plants that house gas chlorine systems were identified as key risk mitigation projects. The project design will convert the gas chlorine systems to bulk liquid sodium hypochlorite at the Putnam Filter Plant (PFP) and the Western Filter Plant (WFP). The motivation to switch to bulk liquid sodium hypochlorite is based on reducing the health risk to plant staff and the surrounding community associated with a potential chlorine gas leak. The estimated annual maintenance cost for each facility is expected to increase as follows:

ESTIMATED ANNUAL MAINTENANCE

O&M ITEM DESCRIPTION	COST (\$)
Annual Chemical Cost	285,640
Power Cost	16,973
Equipment/Maintenance Cost	32,300
Labor Cost	9,690
Total O&M	\$ 344,063

APPROVED OPERATION & MAINTENANCE BUDGET

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OVERVIEW

The Approved FY2023 Operation & Maintenance Budget is \$125,304,574.86 which is 8.12% or \$9,410,530 higher than the FY2022 Approved Budget. The following pages will provide details by Division and Department as well as budget information as it relates to the Approved FY2023 O&M budget.



THE DISTRIBUTION SYSTEM CONSISTS OF 4117 MILES OF PIPING, 1,000 MILES OF SERVICE LINES, 48 DISTRIBUTION PUMP STATIONS, 51 DISTRIBUTION STORAGE TANKS, 41 PRESSURE-REDUCING VALVE STATIONS, 60,000 VALVES, 14,000 HYDRANTS, AND 20 PRESSURE GRADIENTS.



O&M SUMMARY BY DIVISION AND DEPARTMENT

O&M SUMMARY BY DIVISION & DEPARTMENT

DIVISION	DEPARTMENT	2019 NET ACTUAL	2020 NET ACTUAL	2021 NET ACTUAL	2022 NET BUDGET	2023 NET BUDGET	
Executive	Executive	\$884,050.16	\$1,246,489.42	\$1,031,299.80	\$1,140,678.47	\$1,414,063.56	
	Board	203,442.41	139,624.74	191,804.27	\$241,092.95	\$191,359.95	
	Company Wide	26,617,904.57	27,557,603.12	28,021,822.98	\$31,030,203.87	\$33,504,839.71	
	Business System & Operations	636,047.48	663,934.77	809,537.86	\$816,341.67	\$1,611,736.76	
	Internal Auditor	244,186.21	261,793.98	254,649.24	\$270,931.23	\$292,165.74	
	Public Relations	514,374.75	586,191.80	754,286.63	\$847,471.81	\$919,343.65	
Finance & Administration	Customer Support Services	6,412,480.26	6,432,923.59	6,654,578.49	6,877,846.59	6,998,397.13	
	Call Center	1,617,059.18	1,671,014.55	1,810,577.04	\$1,856,772.07	\$1,991,935.14	
	Human Resources	2,527,396.94	1,665,018.23	2,752,203.12	\$3,002,699.60	\$3,085,837.23	
	Wellness and Health Mgt	219,777.88	399,703.04	294,530.40	\$337,407.83	\$385,084.22	
	Water Watchers Brigade	254,201.16	-	368,649.49	\$377,506.49	\$336,127.56	
	Information Technology	4,775,431.12	5,065,707.90	5,411,789.51	\$5,688,644.99	\$5,663,831.89	
	Accounting	1,729,101.29	1,677,843.50	1,855,977.45	\$2,066,233.25	\$2,004,722.30	
	Purchasing	2,260,112.98	2,578,198.33	2,402,007.87	2,884,298.79	2,805,374.52	
	Operations & Technical Services	EnviroLab & Water Quality	2,858,165.91	3,145,346.68	3,051,716.00	3,404,643.06	3,354,390.77
		Water Treatment	14,944,831.20	15,281,311.19	15,593,448.07	16,710,566.77	20,108,376.57
Security		2,176,569.24	2,095,377.63	2,388,311.31	2,666,745.54	2,804,568.87	
Water Resources		7,190,893.68	6,957,558.04	7,655,038.46	7,837,541.48	8,976,601.27	
SCADA		741,636.08	791,188.50	921,362.09	982,042.57	994,986.12	
Industrial & Commercial		261,355.36	284,842.73	379,226.22	425,673.26	462,443.82	
Engineering & Maintenance	E&M Shop	5,120,331.70	5,034,593.59	4,917,508.28	5,324,817.62	5,599,252.08	
	System Development	718,290.42	823,976.64	851,908.51	816,162.80	985,440.92	
	Distribution	16,000,168.37	16,130,384.80	15,836,927.81	16,139,572.53	16,713,405.79	
	Engineering	1,703,707.34	1,624,513.68	1,451,960.28	1,487,130.25	1,292,903.55	
	Mapping & Records	228,154.18	291,943.19	276,306.93	260,947.87	269,327.27	
	Water Accountability	3,361,307.17	3,273,992.89	2,397,950.14	2,400,071.57	2,538,058.47	
All Departments		\$ 104,200,977.04	\$ 105,681,076.53	\$ 108,335,378.25	\$ 115,894,044.93	\$ 125,304,574.86	



O&M SUMMARY BY DEPARTMENT

O&M SUMMARY BY DEPARTMENT

DEPARTMENT	2023 NET BUDGET	2022 NET BUDGET	INCREASE (DECREASE)	PERCENT CHANGE
Executive	\$ 1,414,063.56	\$ 1,140,678.47	\$ 273,385.09	23.97%
Board	191,359.95	241,092.95	(49,733.00)	(20.63%)
Company Wide	33,504,839.71	31,030,203.87	2,474,635.84	7.97%
Business System & Operations	1,611,736.76	816,341.67	795,395.09	97.43%
Internal Auditor	292,165.74	270,931.23	21,234.51	7.84%
Public Relations	919,343.65	847,471.81	71,871.84	8.48%
Customer Support Services	6,998,397.13	6,877,846.59	120,550.54	1.75%
Call Center	1,991,935.14	1,856,772.07	135,163.07	7.28%
Human Resources	3,085,837.23	3,002,699.60	83,137.63	2.77%
Wellness and Health Mgt	385,084.22	337,407.83	47,676.39	14.13%
Water Watchers Brigade	336,127.56	377,506.49	(41,378.93)	(10.96%)
Information Technology	5,663,831.89	5,688,644.99	(24,813.10)	(0.44%)
Accounting	2,004,722.30	2,066,233.25	(61,510.95)	(2.98%)
Purchasing	2,805,374.52	2,884,298.79	(78,924.27)	(2.74%)
EnviroLab & Water Quality	3,354,390.77	3,404,643.06	(50,252.29)	(1.48%)
Water Treatment	20,108,376.57	16,710,566.77	3,397,809.80	20.33%
Security	2,804,568.87	2,666,745.54	137,823.33	5.17%
Water Resources	8,976,601.27	7,837,541.48	1,139,059.79	14.53%
SCADA	994,986.12	982,042.57	12,943.55	1.32%
Industrial & Commercial	462,443.82	425,673.26	36,770.56	8.64%
E&M Shop	5,599,252.08	5,324,817.62	274,434.46	5.15%
System Development	985,440.92	816,162.80	169,278.12	21%
Distribution	16,713,405.79	16,139,572.53	573,833.26	3.56%
Engineering	1,292,903.55	1,487,130.25	(194,226.70)	(13.06%)
Mapping & Records	269,327.27	260,947.87	8,379.40	3.21%
Water Accountability	2,538,058.47	2,400,071.57	137,986.90	5.75%
All Departments	\$ 125,304,574.86	\$ 115,894,044.93	\$ 9,410,529.93	8.12%



O&M SUMMARY BY EXPENSE CATEGORY

O&M SUMMARY BY EXPENSE CATEGORY

CATEGORY	FY2023	FY2022	INCREASE (DECREASE)	PERCENT CHANGE
Labor	\$ 43,579,983.20	\$ 41,987,124.34	\$ 1,592,858.86	3.79%
Employee Related Expenses	17,480,852.58	16,365,868.82	1,114,983.76	6.81%
Power	11,185,000.00	9,887,219.52	1,297,780.48	13.13%
Trans & Distrib Maintenance Materials	9,437,257.24	9,332,015.19	105,242.05	1.13%
License Fees	4,835,000.00	4,600,000.00	235,000.00	5.11%
Chemicals	9,115,231.80	6,802,538.37	2,312,693.43	34.00%
Legal	1,159,704.00	1,063,982.40	95,721.60	9.00%
Lab Support, Purification Maintenance	2,089,128.00	1,827,686.00	261,442.00	14.30%
Outsourced Security	1,769,374.80	1,629,336.94	140,037.86	8.59%
Insurance	3,091,598.69	2,788,021.47	303,577.22	10.89%
Electrical / Pump Maintenance	516,800.00	466,510.96	50,289.04	10.78%
Billing Expense	1,115,000.00	1,115,000.00	-	0.00%
Other Operation & Maintenance Expenses	15,062,109.91	14,435,256.66	626,853.25	4.34%
Consultants	4,867,534.64	3,593,484.26	1,274,050.38	35.45%
Total Operation & Maintenance	\$ 125,304,574.86	\$ 115,894,044.93	\$ 9,410,529.93	8.12%



COMPENSATION & BENEFITS

THE COMPENSATION AND BENEFITS BUDGET FOR FY2023 IS \$53,859,278, WHICH IS AN INCREASE OF \$745,329 OR 1.40% MORE THAN THE FY2022 APPROVED BUDGET.

The FY2023 Approved Budget includes the addition of 15 new full-time positions (3 of which were transfers). The FY2023 budgeted merit adjustment is \$977,385, an increase of \$101,221 or 11.55% from FY2022. The FY2023 budgeted longevity is \$1,672,549, which is an increase of 20.96% from FY2022.

The cost-of-living adjustment (COLA) is budgeted at \$2,689,939, which is an increase of 11.43 % from the FY2022 Approved Budget. The FY2023 Approved Budget includes funding for 838.74 full-time equivalent positions.

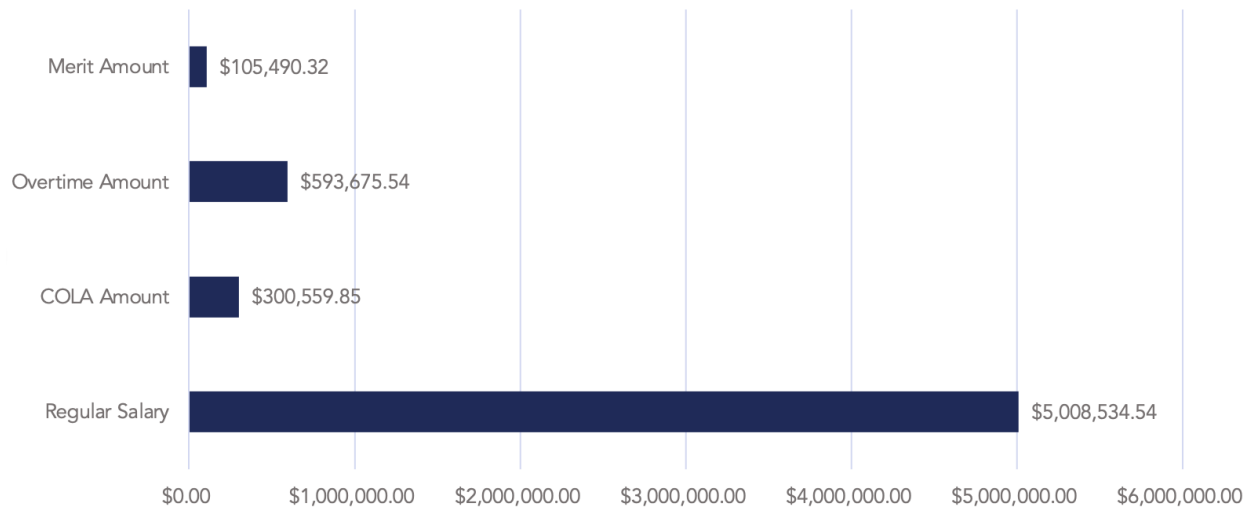
Overtime increased by \$208,339 (7.56 %) from prior year, the overtime hours increased by 882.16 hours. The trend has shown that these hours are needed to support leak repairs, plant operations and repairs, infrastructure inspection and installation related to an increase in new development and work related to Raw Water staffing deficiencies during vacation and holidays.

COMPENSATION & BENEFITS

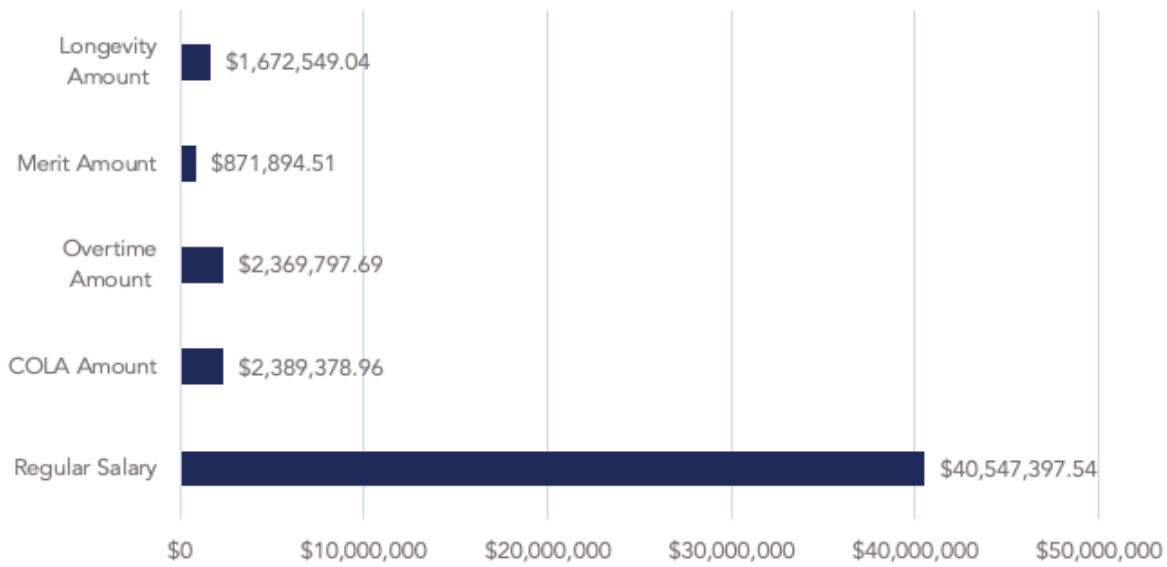
CATEGORY	FY 2023	FY 2022	INCREASE (DECREASE)	PERCENT CHANGE
Regular Salary	\$45,555,932.08	\$45,685,888.80	(\$129,956.72)	-0.28%
COLA Amount	\$2,689,938.81	\$2,414,081.47	\$275,857.34	11.43%
Overtime Amount	\$2,963,473.23	\$2,755,134.67	\$208,338.56	7.56%
Merit Amount	\$977,384.83	\$876,163.92	\$101,220.91	11.55%
Longevity Amount	\$1,672,549.04	\$1,382,680.12	\$289,868.92	20.96%
Total Budget	\$53,859,277.99	\$53,113,948.98	\$745,329.01	1.40%
Total FTE	838.74	829.97	8.77	1.06%
Overtime Hours	67,174.60	66,292.44	882.16	1.33%



CAPITAL LABOR



O&M LABOR





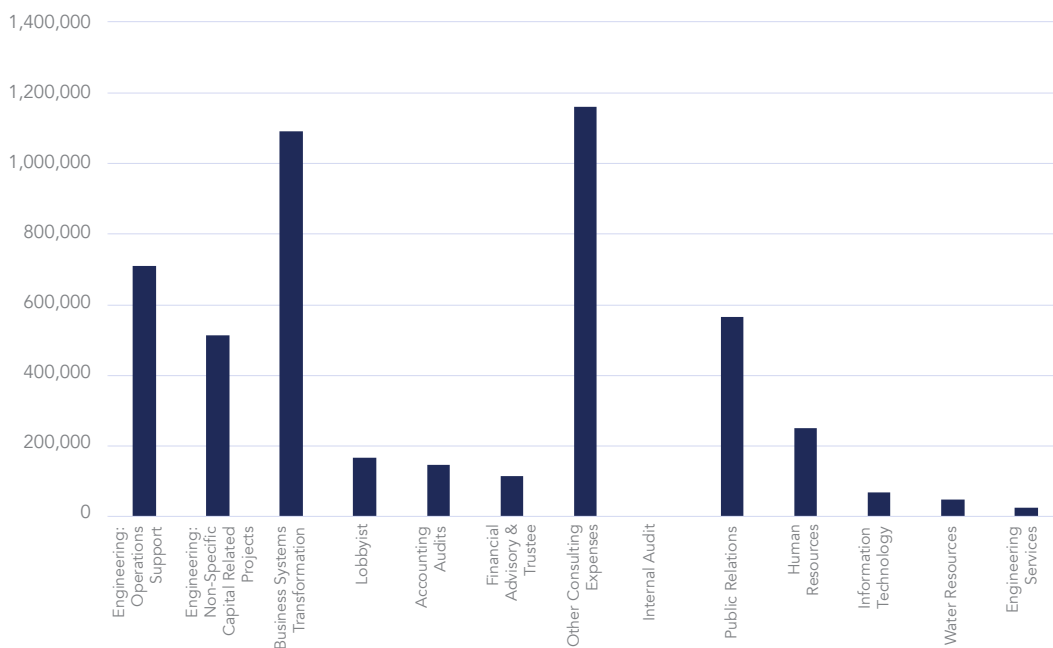
CONSULTANT SERVICES

The Approved Consultant Services Budget for FY2023 is \$4,867,535, which is an increase of \$1,274,050 or 35.45% from the FY2022 Approved Budget.

CONSULTANT SERVICES

EXPENSE CATEGORY	2023 NET CONSULTING DOLLARS
Engineering - Operations Support	\$710,600
Engineering - Non-Specific Capital Related Projects	513,225
Business Systems Transformation	1,090,766
Lobbyist	168,561
Accounting Audits	147,123
Financial Advisory & Trustee	115,176
Other Consulting Expenses	1,161,339
Internal Audit	1,005
Public Relations	566,210
Human Resources	252,264
Information Technology	68,097
Water Resources	48,000
Engineering Services	25,170
Total	\$4,867,535
2022 Consultant Services	3,593,485
Increase from 2022	1,274,050
2023 Percentae increase from 2022	35.45%

2023 NET CONSULTING DOLLARS





THE AVERAGE TOTAL HOME WATER USE PER PERSON IN THE UNITED STATES IS ABOUT 50 GALLONS/DAY.

Based on the BWW's RSE Model, customer water rates should increase by 3.9% each year, beginning in 2022 through 2027. The goal is to maintain rate increases below industry standards, which was 4.91% from 1998 through 2022. A 3.9% rate increase equates to \$1.55 per month for the average customer using 6CCF of water.

- Residential consumption is projected to decrease at a rate of 2.06%, and non-residential consumption is projected to decline at a rate of 2.26%. The 3.9% rate increase should result in increased revenue in 2023.
- Operation & Maintenance (O&M) expenses are projected to increase by an average of 3.7% annually, except for 2023. The BWW's goal is to keep the annual O&M increases below 5%.
- The total debt service will increase at an average rate of 4.2% over the next five years.
- The PAYGO is projected to reach 46% by the year 2027
- The BWW is projected to exceed the Total Debt Service Coverage Targets over the next five years.



DEBT SERVICE COVERAGE - 5 YEAR PROJECTION

	Est. Actual	Recommended				
	2022	3.9% 2023	4.9% 2024	4.9% 2025	4.9% 2026	4.9% 2027
Total Revenues	\$ 212,735,000	\$ 217,725,000	\$ 227,307,000	\$ 237,346,000	\$ 247,869,000	\$ 258,884,000
Less: Impact/System Development Fees	\$ (1,331,000)	\$ (1,331,000)	\$ (1,331,000)	\$ (1,331,000)	\$ (1,331,000)	\$ (1,331,000)
Less: Interest on Construction Funds	(14,983)	(14,983)	(14,983)	(14,983)	(14,983)	(14,983)
Plus: Loss on the Sale/Disposition of Assets	334,943	334,943	334,943	334,943	334,943	334,943
	1	2	3	4	5	6
Total Revenues per Official Statement Definition	\$ 211,723,960	\$ 216,713,960	\$ 226,295,960	\$ 236,334,960	\$ 246,857,960	\$ 257,872,960
Revenue Requirements						
O&M Expenses	\$ (115,894,045)	\$ (125,304,575)	\$ (131,569,804)	\$ (136,832,596)	\$ (140,937,574)	\$ (145,165,701)
Total Revenues Available for Debt Service and PAYGO	\$ 95,829,915	\$ 91,409,385	\$ 94,726,156	\$ 99,502,364	\$ 105,920,386	\$ 112,707,259
Debt Service						
Senior Debt Service	\$ (59,065,731)	\$ (63,234,254)	\$ (63,234,228)	\$ (66,489,521)	\$ (69,739,440)	\$ (72,703,955)
Subordinate Debt Service	(641,649)	(643,148)	(644,213)	(639,925)	(640,281)	(640,204)
	-	-	-	-	-	-
Total Debt Service	\$ (59,707,380)	\$ (63,877,401)	\$ (63,878,441)	\$ (67,129,446)	\$ (70,379,722)	\$ (73,344,159)
Base Charge Revenue as a Percent of Annual Debt Service	123.7%	114.7%	120.9%	121.2%	121.9%	123.3%
PAYGO Spending	\$ (36,000,000)	\$ (27,500,000)	\$ (30,800,000)	\$ (32,325,000)	\$ (35,510,000)	\$ (39,330,000)
PAYGO as Percent of Capital Budget	46.7%	38.0%	40.0%	40.3%	43.0%	46.2%
	-	1	-	-	-	-
Total Revenue Requirements	\$ (211,601,425)	\$ (216,681,976)	\$ (226,248,244)	\$ (236,287,042)	\$ (246,827,295)	\$ (257,839,859)
Surplus/(Deficit)	\$ 122,535	\$ 31,983	\$ 47,715	\$ 47,918	\$ 30,664	\$ 33,100
Debt Service Coverage Ratios						
Senior Debt Service Coverage (Minimum = 1.35)	1.62	1.45	1.50	1.50	1.52	1.55
Total Debt Service Coverage (Minimum = 1.10)	1.60	1.43	1.48	1.48	1.50	1.54
Total Debt - Par Outstanding/Principal Remaining	\$ 1,129,480,000	\$ 1,098,095,000	\$ 1,062,570,000	\$ 1,026,230,000	\$ 988,995,000	\$ 1,041,495,000
Net Debt to Total Assets	88.71%	84.38%	79.55%	74.70%	69.91%	70.67%

OVERVIEW OF DEPARTMENTS

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Electrical & Mechanical	154
System Development	159
Distribution	164
Engineering	169
Mapping & Records	173
Water Accountability	176

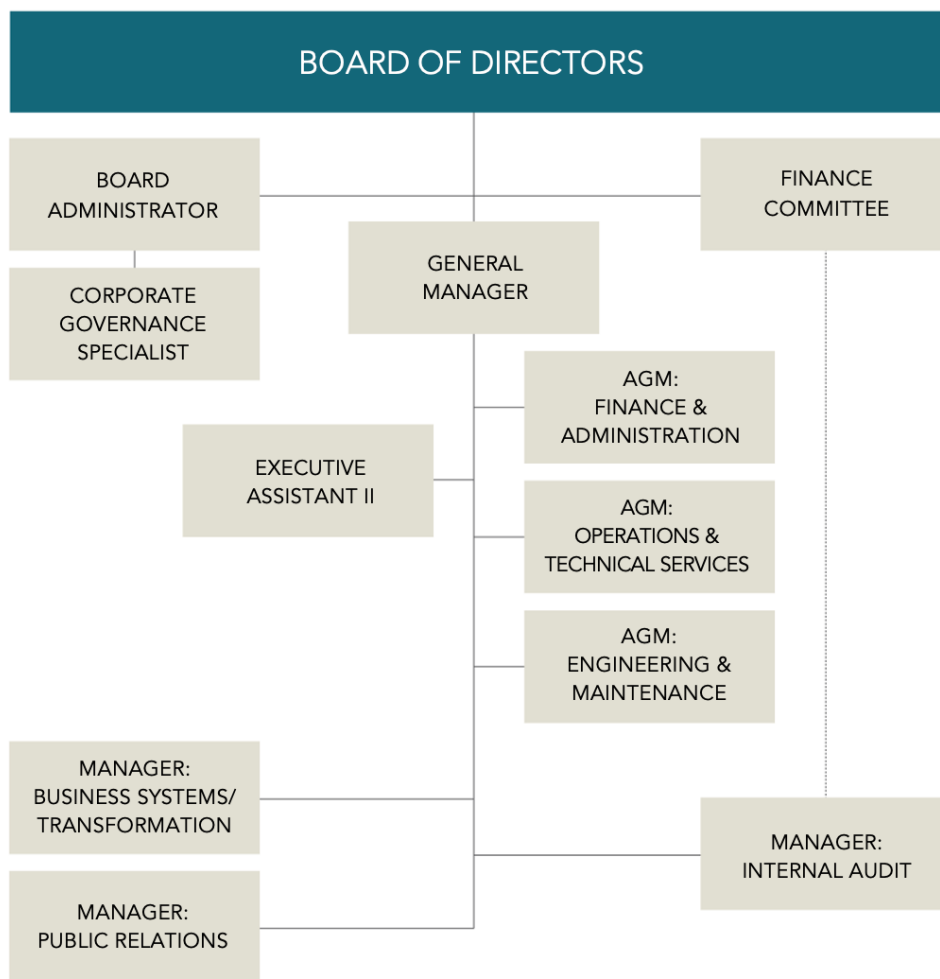




DEPARTMENT SUMMARY

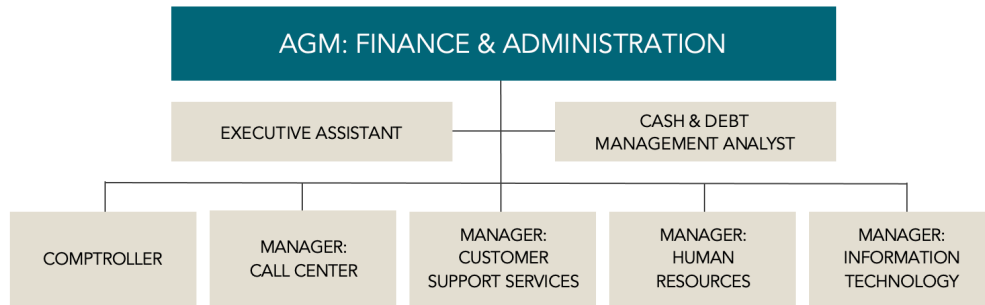
The BWW is organized into 22 functional departments, with each department having its own budget for fiscal control. The departments are organized within divisions as follows: Executive, Finance & Administration, Operations & Technical Services and Engineering & Maintenance. Except for the Accounting Manager and the Purchasing Manager who report to the Comptroller, each Department Manager reports to one of three Assistant General Managers (AGMs) who report to the General Manager (GM).

EXECUTIVE MANAGEMENT

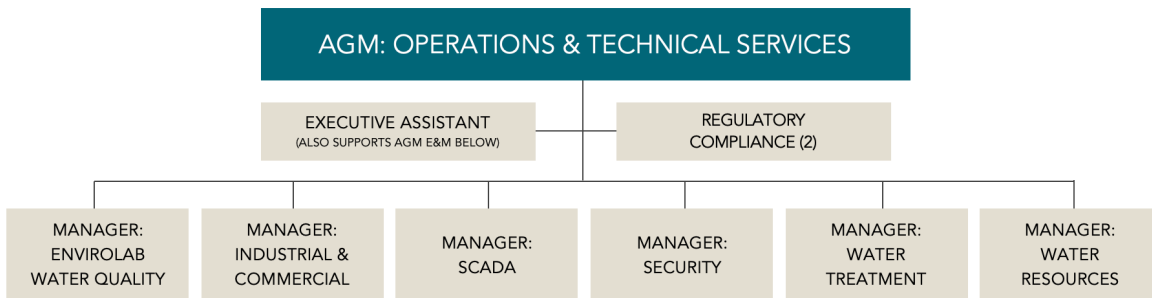




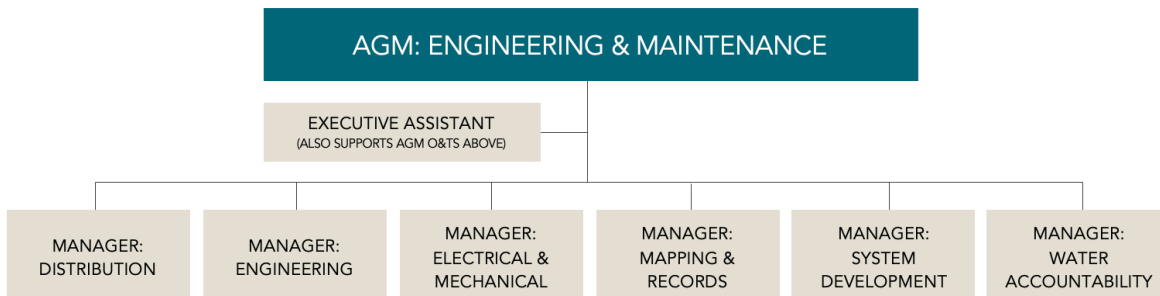
FINANCE & ADMINISTRATION DIVISION



OPERATIONS & TECHNICAL SERVICES DIVISION



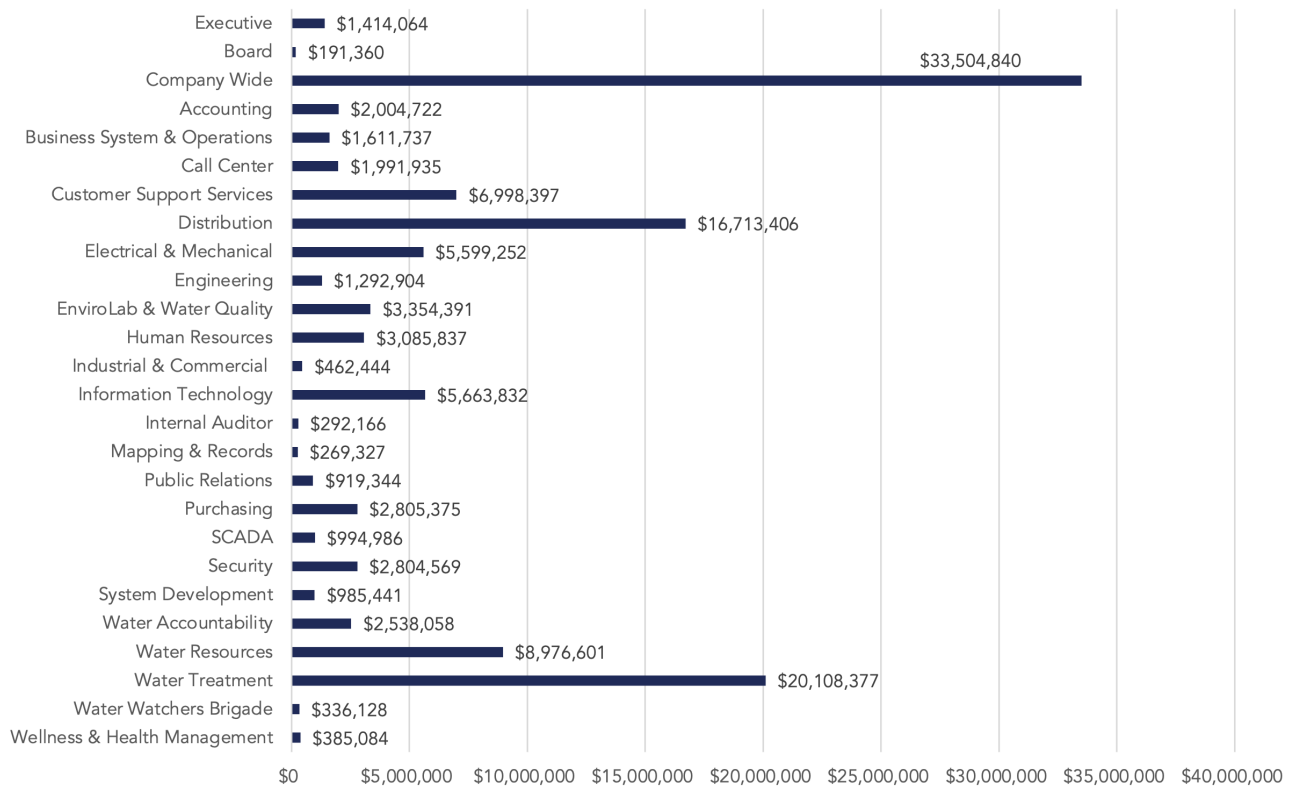
ENGINEERING & MAINTENANCE DIVISION





OPERATION & MAINTENANCE BUDGET – DEPARTMENT ALLOCATIONS

The total Operation & Maintenance Budget is \$125,304,575 and allocated as shown below.





PERSONNEL SUMMARY BY DEPARTMENT

The schedule below is a summary of total budgeted personnel for fiscal years 2019 through 2023. The 2023 O&M Budget includes funding for 728.98 FTE, an increase of 9.89 FTE.

Division	Department	2019	2020	2021	2022	2023
EXECUTIVE	Executive	10.00	10.00	10.00	10.00	13.00
	Business Systems & Transformation	6.00	6.00	6.00	5.00	5.00
	Internal Audit	3.00	3.00	3.00	3.00	3.00
	Public Relations	1.00	3.00	3.00	3.00	5.00
	Total	20.00	22.00	22.00	21.00	26.00
FINANCE & ADMINISTRATION	Call Center	36.23	36.23	36.23	36.53	38.53
	Customer Support Services	95.00	95.00	98.00	98.00	101.00
	Human Resources	14.00	14.00	14.00	15.00	15.00
	Information Technology	19.00	18.00	19.00	20.00	20.00
	Accounting	27.45	27.45	26.73	27.80	26.80
	Purchasing	18.75	18.75	18.75	22.00	21.00
	Total	210.43	209.43	212.71	219.33	222.33
OPERATIONS & TECHNICAL SERVICES	EnviroLab	25.00	25.00	25.00	28.00	26.00
	Water Treatment	72.90	72.90	72.90	76.92	80.92
	Water Resources	33.00	33.00	33.00	33.00	33.00
	SCADA	9.00	9.00	9.00	10.00	10.00
	Security	10.73	10.73	10.73	10.73	12.73
	Industrial & Commercial Accts	2.00	2.00	3.00	3.00	3.00
	Total	152.63	152.63	153.63	161.65	165.65
ENGINEERING & MAINTENANCE	Electrical & Mechanical	40.00	40.00	40.00	44.00	46.00
	System Development	16.00	23.00	23.00	26.73	27.00
	Distribution	151.80	145.80	145.80	154.38	150.00
	Engineering	31.00	31.00	31.00	30.00	30.00
	Water Accountability	50.00	50.00	50.00	50.00	50.00
	Mapping & Records	12.00	12.00	13.00	12.00	12.00
	Total	300.80	301.80	302.80	317.11	315.00
Grand Total	683.86	685.86	691.14	719.09	728.98	

Numbers above reflect regular Full-Time and Part-Time Employees. Does not include co-ops, summer employees, temp employees, etc.

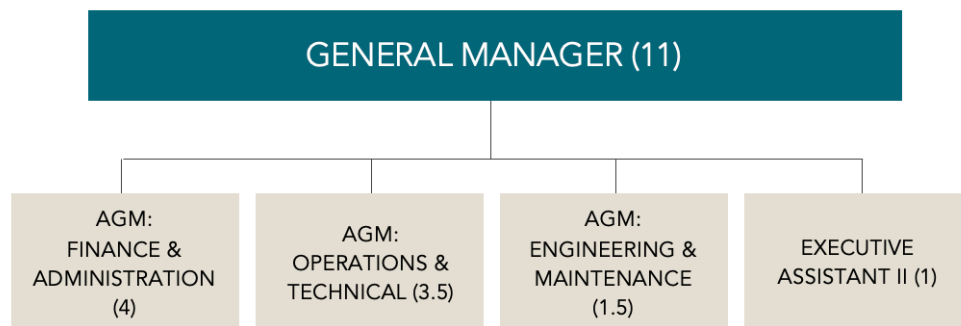
GOALS & OBJECTIVES METHODOLOGY

Below are established goals and objectives for each department developed based on the Effective Utility Management Framework.



EXECUTIVE DEPARTMENT

The Executive Department includes the General Manager, Assistant General Managers, the Board Administrator, Corporate Governance Specialist, and three Administrative Assistants. The Board of Directors is responsible for setting the Mission and Vision for the Birmingham Water Works Board (BWW) and providing direction and leadership to meet the goals. The Board Administrator and Corporate Governance Specialist report functionally to the Board and administratively to the General Manager. The General Manager (GM) is responsible for the administration and the implementation of the Board policies and federal and state laws. The GM organizes the staff, assigns responsibilities, and is responsible for carrying out the policies and directives of the BWW Directors.



EXECUTIVE DEPARTMENT MISSION

The mission of the Executive Department is to manage all aspects of the BWW's business plans efficiently and effectively, ensure organization goals are met, and provide the leadership that will enable BWW to accomplish its Mission and fulfill its Vision.



SUMMARY OF ACTIVITIES

- Provide the Board with timely information and support
- Ensure that all water facilities and programs are operating in compliance with all applicable standards
- Develop, implement, and maintain effective long-term financial, operational, and environmental protection plans
- Implement sound fiscal policies, budgets, and controls
- Maintain and improve effective coordination, cooperation, and communication with local, state, and federal governmental entities
- Continue innovation and creativity in providing services in a more effective, cost-efficient, and sustainable manner
- Support training and development of all employees to improve BW&B's services
- Motivate employees and encourage teamwork throughout the organization
- Promote BW&B to the community

EXECUTIVE DEPARTMENT O&M EXPENDITURES BUDGET SUMMARY

COMMITMENT ITEM	2023 NET BUDGET	2022 NET BUDGET	\$ VARIANCE	% VARIANCE
Labor	\$1,353,220.59	\$1,086,050.21	\$267,170.38	24.60%
Mileage Reimbursement	516.72	1,291.80	(775.08)	(60.00%)
Uniforms - Non-Stock	800.00	200.00	600.00	300.00%
Supplies & Expenses	17,654.70	20,176.80	(2,522.10)	(12.50%)
Exp Gen Office Employee	4,711.80	2,355.90	2,355.90	100.00%
Exp Office and Executive	-	78.53	(78.53)	(100.00%)
Misc Gen Exp Membership Dues	5,253.32	4,306.00	947.32	22.00%
Travel Misc Other	31,386.43	26,219.23	5,167.20	19.71%
Employee Recognition	520.00	-	520.00	100.00%
Total Operation & Maintenance	\$1,414,063.56	\$1,140,678.47	\$273,385.09	23.97%

HIGHLIGHTS OF BUDGET CHANGES

The 2023 Approved Budget increased by \$273,385 or 23.97% from the 2022 Approved Budget.

The major reasons for the variance are:

- 3 positions transferred to Executive Department
- Merit and cost of living adjustment increases



EXECUTIVE DEPARTMENT PERSONNEL SUMMARY

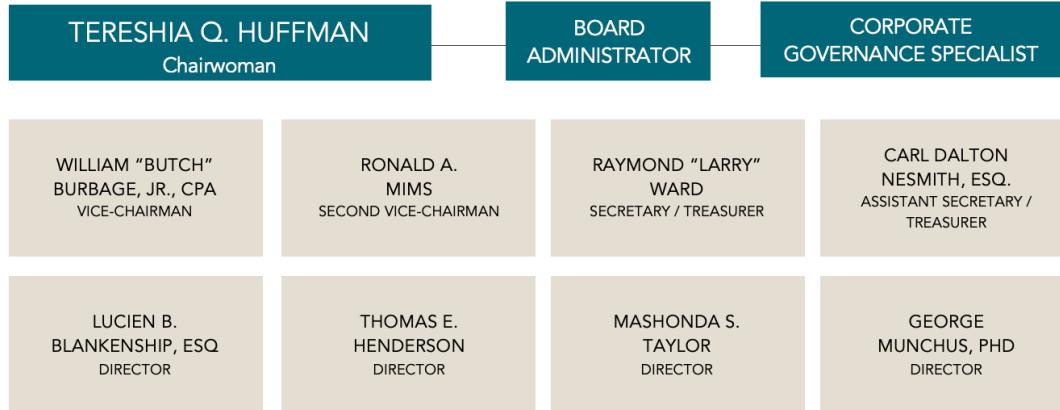
Job Title	2019	2020	2021	2022	2023
Manager - General	1.00	1.00	1.00	1.00	1.00
Manager - Assistant General	3.00	3.00	3.00	3.00	3.00
Executive Assistant To The Board	1.00	0.00	0.00	0.00	0.00
Board Administrator	0.00	1.00	1.00	1.00	1.00
Corporate Governance Specialist	0.00	1.00	1.00	1.00	1.00
Executive Assistant II	1.00	1.00	1.00	1.00	1.00
Executive Assistant	3.00	2.00	2.00	2.00	2.00
Cash & Debt Mgmt Analyst	1.00	1.00	1.00	1.00	1.00
Comptroller	0.00	0.00	0.00	0.00	1.00
Regulatory Compliance Specialist	0.00	0.00	0.00	0.00	2.00
TOTAL DEPARTMENT PERSONNEL	10.00	10.00	10.00	10.00	13.00

KEY PERFORMANCE MEASURES

1. Continue to provide quality water service despite the impact of COVID-19 Continue to provide quality water service despite the impact of COVID-19 protocols on available workforce
2. Continue to deliver quality customer service as measured by canvassing the environment for positive or negative customer and stakeholder feedback
3. Continue to emphasize performance of the Historically Underutilized Business (HUB) program by reaching a spending target of 30% or higher
4. Identify and prioritize projects that should be implemented to achieve goals listed in the Strategic Plan
5. Develop a report and provide updates on the status of the strategic plan
6. Leverage governmental affairs consultants to monitor and advise BWB on federal, state, and local legislation and initiatives
7. Take advantage of opportunities to engage with customers and stakeholders through various communication platforms
8. Ensure operations of the department are conducted in accordance with all applicable rules and regulations



BOARD OF DIRECTORS



BOARD DEPARTMENT O&M EXPENDITURES BUDGET SUMMARY

COMMITMENT ITEM	2023 NET BUDGET	2022 NET BUDGET	\$ VARIANCE	% VARIANCE
Labor	\$99,403.95	\$99,403.95	-	-
Mileage Reimbursement	430.60	861.20	(430.60)	(50.00%)
Supplies & Expenses	10,088.40	13,451.20	(3,362.80)	(25.00%)
Board Meeting Expenses	27,612.00	32,214.00	(4,602.00)	(14.29%)
Misc Gen Exp Membership Dues	2,153.00	2,153.00	-	-
Travel Misc Other	51,672.00	93,009.60	(41,337.60)	(44.44%)
Total Operation & Maintenance	\$191,359.95	\$241,092.95	(\$49,733.00)	-20.63%

HIGHLIGHTS OF BUDGET CHANGES

The 2023 Approved Budget decreased by \$49,733 or 20.63% from the 2022 Approved Budget.

The major reason for the variance is:

- Travel expenses decreased based on trend



COMPANY WIDE DEPARTMENT

The Company Wide Department is used to account for employee benefits and other administrative costs not directly related to a specific department. Expenditures budgeted in this department are listed below.

COMPANY WIDE EXPENSES O&M EXPENDITURES BUDGET SUMMARY

COMMITMENT ITEM	2023 NET BUDGET	2022 NET BUDGET	\$ VARIANCE	% VARIANCE
Employee Recognition Program	90,000.00	90,000.00	-	-
Employee Expenses Competition Program	100,000.00	50,000.00	50,000.00	100.00%
Salary Survey/New Position Benefits	475,211.32	791,546.11	(316,334.79)	(39.96%)
State Unemployment Insurance	40,000.00	15,000.00	25,000.00	166.67%
Federal Insurance Contributions Act Tax	2,582,922.27	2,669,720.00	(86,797.73)	(3.25%)
Employee Awards / Incentive Program	100,000.00	100,000.00	-	-
Other Post Employment Benefits	1,193,451.82	768,126.67	425,325.15	55.37%
Employer Pension	5,515,902.52	5,303,752.42	212,150.10	4.00%
Healthcare Claims Employees	5,930,366.82	5,274,399.59	655,967.23	12.44%
Group Insurance Life and Disability	208,410.40	206,688.00	1,722.40	0.83%
Fire Hydrant Team Competition Supplies	500.00	-	500.00	100.00%
Service Line	10,000.00	-	10,000.00	100.00%
General Inventory Consumption	1,000.00	80.00	920.00	1150.00%
Tapping Team Water Competition Supplies	25,000.00	25,000.00	-	0.00%
License fees	4,835,000.00	4,600,000.00	235,000.00	5.11%
Legal	1,159,704.00	1,063,982.40	95,721.60	9.00%
Top Operators Competition Supplies	230.00	230.00	-	-
Insurance - Contract	2,741,598.69	2,388,021.47	353,577.22	14.81%
Community Education Programs	500,000.00	-	500,000.00	100.00%
Bad Debt Expenses	4,900,000.00	4,436,895.00	463,105.00	10.44%
Supplies & Expenses	54,645.50	84,070.00	(29,424.50)	(35.00%)
Contributions	100,000.00	600,000.00	(500,000.00)	(83.33%)
Misc Gen Expenses Membership Dues	124,874.00	103,860.72	21,013.28	20.23%
Consultants	2,816,022.37	2,458,831.49	357,190.88	14.53%
Total Operation & Maintenance	\$33,504,839.71	\$31,030,203.87	\$2,474,635.84	7.97%

HIGHLIGHTS OF BUDGET CHANGES

The 2023 Approved Budget increased by \$2,474,636 or 7.97% from the 2022 Approved Budget.

The major reasons for the variance are:

- Healthcare expenses increased due to trends
- Other post-employment benefits increased based on actuarial projections.
- Bad debt expense increased due to a 2022 increase in delinquent receivables
- Property insurance premium increased due to an increase in rates and carriers exiting the utility market
- Consulting expense shifted from Capital to O&M Budget





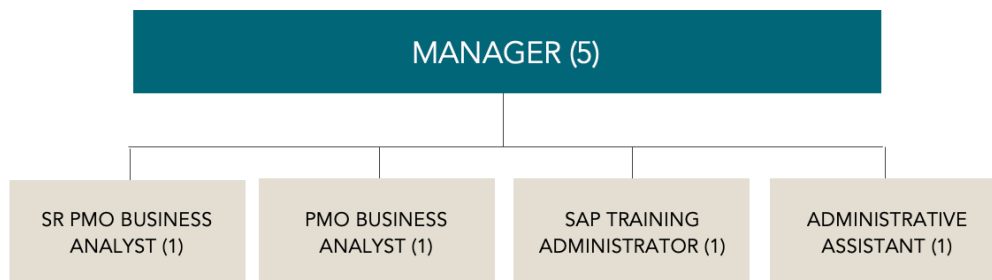
BUSINESS SYSTEMS & TRANSFORMATION

The Project Management Office (PMO) Business Systems department is responsible for championing the implementation and maintenance of the Systems, Applications and Products (SAP) system for the organization. This effort aids in improved workflow processes, real time reporting, financial reporting, and customer updates. In addition, this tool provides reduction in loss of productivity due to research of issues and building of reporting to support business requests needed internally and in response to the Executive team and the Board of Directors.

The PMO team is responsible for tracking trends of the end-users and reporting items that differ from the prescribed purpose for the intention of the program. As trends are identified, they are responsible to train, coach and provide help desk support to the end users with the goal to increase the user's productivity and their ability to navigate the systems.

The PMO Business Analysts work with SAP consultants as they continue to support current system development and future implementations. This support includes the building and documentation of functional changes and the writing of processes for accurate data in customer and financial reporting.

This group is expected to be leaders in change management as they facilitate the leaders in the organization on new features and benefits of the system. They are responsible for leading periodic meetings meant to create a learning and sharing environment for feedback and best practices in the use of the system.





BUSINESS SYSTEMS & TRANSFORMATION

As a market leader in enterprise application software, SAP helps companies of all types and sizes run better. From the back office to the boardroom, warehouse to storefront, desktop to mobile device – SAP empowers people and organizations to work together more efficiently and use business insight more effectively to stay ahead of the competition. SAP people, applications, and services enable approximately 300,000 customers to operate profitably, adapt continuously, and grow sustainably.

BUSINESS SYSTEMS & TRANSFORMATION MISSION

Helping our internal and external customers perform at their best by delivering excellent technical support and training.

SUMMARY OF ACTIVITIES

- Serves as project manager for implementation of all SAP Enterprise Resource Planning (ERP) Systems
- Manages project team with a focus on developing, establishing, and improving procedures, processes, and computer operations to ensure efficient operations within departments and across multiple departments as well as companywide
- Ensures integrity of information systems, internal controls, and data, including recommendations as required
- Recommends modifications to program policies and procedures to minimize risk to the company
- Mentors, coaches, and manages the total competencies of multiple organizational units, including working with multiple managers, supervisors, and supervisory level employees to improve operational efficiencies
- Leads a transition from old to new programs at the department and division levels and participates in the development and implementation of goals and objectives, recommendations and status to Executive Management and the Board of Directors
- Analyzes moderately complex situations to establish/recommend solutions and alternatives and alerts leadership to the impact on the company
- Leads periodic informational and planning meetings with internal departmental units as well as Executive Management
- Coordinates periodic meetings with external agencies to strategically update project implementation impacts



BUSINESS SYSTEMS & TRANSFORMATION DEPARTMENT O&M EXPENDITURES BUDGET SUMMARY

COMMITMENT ITEM	2023 NET BUDGET	2022 NET BUDGET	\$ VARIANCE	% VARIANCE
Labor	\$485,362.70	\$495,006.00	(\$9,643.30)	(1.95%)
Supplies & Expenses	6,305.25	8,827.35	(2,522.10)	(28.57%)
Misc Gen Exp Membership Dues	3,014.20	2,217.59	796.61	35.92%
Travel Misc Other	15,889.14	15,157.12	732.02	4.83%
Consultants	1,100,965.47	295,133.61	805,831.86	273.04%
Employee Recognition	200.00	0.00	200.00	100.00%
Total Operation & Maintenance	\$1,611,536.76	\$816,341.67	\$795,195.09	97.41%

HIGHLIGHTS OF BUDGET CHANGES

The 2023 Approved Budget increased by \$795,195 or 97.41% from the 2022 Approved Budget.

The major reason for the variance is:

- Consulting expense increased due to changes from capitalized implementation that is now operating

BUSINESS SYSTEMS & TRANSFORMATION DEPARTMENT PERSONNEL SUMMARY

Job Title	2019	2020	2021	2022	2023
Business Systems Manager	1.00	1.00	1.00	1.00	1.00
Sap Business Analyst	1.00	1.00	0.00	1.00	1.00
Sap Business Analyst Sr.	2.00	2.00	3.00	1.00	1.00
Sap / Business Sys Training Admin.	1.00	1.00	1.00	1.00	1.00
Administrative Assistant II	1.00	1.00	1.00	1.00	1.00
TOTAL DEPARTMENT PERSONNEL	6.00	6.00	6.00	5.00	5.00



THE BIRMINGHAM WATER WORKS EMPLOYS MORE THAN 600 PEOPLE IN THE BIRMINGHAM AREA.

KEY PERFORMANCE MEASURES

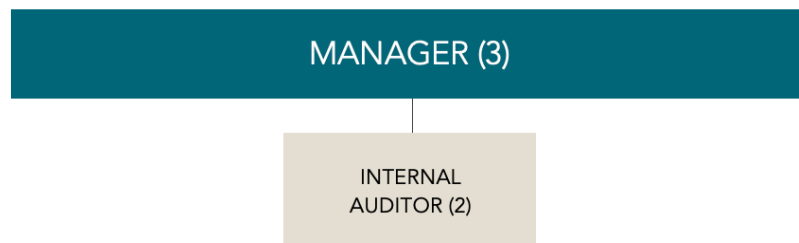
1. Complete approved projects on time (based on agreed upon schedule) and within budget
2. Conduct at least 3 SAP navigation classes for new hires and promoted employees during the year
3. Conduct at least 4 SAP content courses for approximately 60 employees during the year
4. Distribute exit surveys to stakeholders at the end of each project
5. Coordinate and monitor the Dashboard Reporting initiative to ensure its completion no later than end of third quarter

INTERNAL AUDIT

The internal audit function was established by the Finance Committee (the Committee) of the Board of Directors in the Internal Audit Charter in September 2004. The Committee defines the internal audit responsibilities as part of their oversight role. The Internal Auditing Department reports functionally to the Committee and administratively to the General Manager.

The Internal Auditing Department is the BWW's independent internal function that performs financial, compliance, operational, information and technology, as well as internal controls audits and special investigations that are designed to:

- Provide assurance of BWW's strategic financial and operational controls
- Identify and manage BWW's risks and achieve BWW's strategic objectives in an efficient, effective, and ethical manner
- Add value to BWW's operations
- Help BWW achieve its strategic objectives by bringing a systematic and disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes



INTERNAL AUDIT MISSION

To enhance and protect organizational value by providing risk-based and objective assurance, recommendations, and insight so that management can make the best possible future-focused decisions, identify areas of concern, present them to management in a balanced manner and provide the information they will need to make informed decisions on how to correct deficiencies moving forward.

SUMMARY OF ACTIVITIES

- Evaluate controls and advise management at all levels on the improvement of controls
- Evaluate risk management assuring that adequate controls are in place to mitigate risks
- Analyze operations, confirm information, verify the existence of assets, and recommend proper safeguards
- Assess compliance with policies and procedures and sound business practices
- Ensure compliance with state and local laws and regulations
- Review operations to ascertain whether results are consistent with established objectives and are being carried out as planned
- Inspect reported occurrences of anomaly, embezzlement, theft, waste, etc.
- Publish and issue written reports, making recommendations for correcting problems, following the conclusion of each internal audit engagement
- Perform follow-up reviews of audit recommendations
- Publish an internal audit plan at least annually that includes risk assessment criteria and audits for the next 3 calendar years for the Committee review and approval



INTERNAL AUDITING DEPARTMENT O&M EXPENDITURES BUDGET SUMMARY

COMMITMENT ITEM	2023 NET BUDGET	2022 NET BUDGET	\$ VARIANCE	% VARIANCE
Labor	\$286,299.12	\$265,397.22	20,901.90	7.88%
Mileage Reimbursement	121.11	123.80	(2.69)	(2.17%)
Supplies & Expenses	452.30	452.30	-	-
Misc Gen Exp Membership Dues	2,618.05	2,605.13	12.92	0.50%
Travel Misc Other	1,550.16	1,347.78	202.38	15.02%
Consultants	1,005.00	1,005.00	-	-
Employee Recognition	120.00	-	120.00	100.00%
Total Operation & Maintenance	\$292,165.74	\$270,931.23	\$21,234.51	7.84%

HIGHLIGHTS OF INTERNAL AUDITING BUDGET CHANGES

The 2023 Approved Budget increased by \$21,235 or 7.84% from the 2022 Approved Budget.

The major reason for the variance is:

- Merit and cost of living adjustment increases



INTERNAL AUDITING DEPARTMENT PERSONNEL SUMMARY

Job Title	2019	2020	2021	2022	2023
Manager - Internal Audit	1.00	1.00	1.00	1.00	1.00
Internal Audit Trainee	1.00	1.00	1.00	1.00	1.00
Associate Auditor III	1.00	1.00	1.00	1.00	1.00
TOTAL DEPARTMENT PERSONNEL	3.00	3.00	3.00	3.00	3.00

KEY PERFORMANCE MEASURES

1. Complete greater than 90% of the total annual audits from Audit Plan
2. Complete special request audits at 100%. Audit recommendations are accepted and implemented at 100%
3. Track the number of significant audit findings, audit issues and repeat findings at 100%
4. Utilize ALESSA continuous monitoring software monthly to minimize financial loss
5. Evaluate percentage of employees who receive ethics compliance training and number of calls to fraud/ethics hotline with resolution, semi-annually
6. Require 32 hours of training and professional development for employees, including 8 hours of accounting and auditing, 10 hours of fraud and 2 hours of ethics
7. Publish an internal audit plan annually, including audits for the next 3 calendar years for the Finance Committee review and approval
8. Meet annually with the Finance Committee of the Board of Directors

PUBLIC RELATIONS

The BWW Public Relations (PR) Department is responsible for setting a message calendar to detail primary monthly topics for customer-facing news and information, educational efforts, and PR initiatives throughout the year. Along with being the point of contact for the media, the Public Relations Department also works closely with the BWW’s public relations agency.



PUBLIC RELATIONS MISSION

The mission of the Public Relations Department is to consistently enhance and illustrate the image, mission, and values of BWW by educating the public and media about the utility’s ongoing initiatives and commitment to providing customers the best water at the lowest possible price.





SUMMARY OF ACTIVITIES

- Develops and implements communication strategies for the organization
- Represents BWV to the media and public by acting as corporate spokesperson
- Fields and directs responses to all media- related inquiries and events
- Plans and implements the organization's public relations strategies, policies, and procedures
- Provides feedback and oversight on media, creative and strategic plans developed by the public communications consultant
- Develops contacts and relationships with media representatives to create opportunities for BWV products and services to maintain a positive image in the public's view
- Maintains public relations database and contacts
- Applies journalistic writing, grammar, editing, proofreading, and interviewing principles
- Advises on the preparation and presentation of product or service information at displays and exhibits
- Develops ideas and opportunities for feature articles, interviews, presentations, and other public relations activities that promote awareness of the organization and the services BWV provides
- Prepares and gives speeches on various subjects relating to water supply and conservation, as needed
- Assists and coaches BWV staff with public speaking engagements, presentations, and preparation of articles for publication
- Advises management on community relations projects and activities
- Works closely with the Communications Committee and the Board's public relations consultant on various tasks and projects
- Meets with staff to review issues to maintain awareness of developments and the status of capital improvement programs
- Develops, implements, and manages social media systems such as Twitter, Facebook, and other similar platforms; understands the social media ecosystem and uses this knowledge to leverage each channel's capabilities to achieve and reach engagement objectives
- Plans and executes campaigns to grow the reach of the BWV social media channels; curates external, third -party content sources
- Develops and writes public service announcements for media outlets and ensure Public Service Announcements (PSAs) are broadcast or published

PUBLIC RELATIONS DEPARTMENT O&M EXPENDITURES BUDGET SUMMARY

COMMITMENT ITEM	2023 NET BUDGET	2022 NET BUDGET	\$ VARIANCE	% VARIANCE
Labor	\$312,483.65	\$274,561.81	\$37,921.84	13.81%
Mileage Reimbursement	-	500.00	(500.00)	(100.00%)
Transportation Expense	500.00	500.00	-	-
Supplies & Expenses	25,000.00	40,000.00	(15,000.00)	(37.50%)
Fuel	1,000.00	1,500.00	(500.00)	(33.33%)
Misc Gen Exp Membership Dues	2,750.00	5,000.00	(2,250.00)	(45.00%)
Travel Misc Other	11,200.00	11,200.00	-	-
Consultants	566,210.00	514,210.00	52,000.00	10.11%
Employee Recognition	200.00	-	200.00	100.00%
Total Operation & Maintenance	\$919,343.65	\$847,471.81	\$71,871.84	8.48%

HIGHLIGHTS OF BUDGET CHANGES

The 2023 Approved Budget increased by \$71,872 or 8.48% from the 2022 Approved Budget.

The major reasons for the variance are:

- 2 positions were added
- Merit and cost of living allowance increases
- Public engagement initiatives and rebranding





PUBLIC RELATIONS DEPARTMENT PERSONNEL SUMMARY

Job Title	2019	2020	2021	2022	2023
Public Communications Specialist	1.00	0.00	0.00	0.00	0.00
Public Relations Manager	0.00	1.00	1.00	1.00	1.00
Public Relations Specialist	0.00	1.00	1.00	1.00	1.00
Communications Coordinator	0.00	1.00	1.00	1.00	1.00
Public Information Officer	0.00	0.00	0.00	0.00	2.00
TOTAL DEPARTMENT PERSONNEL	1.00	3.00	3.00	3.00	5.00

APPROVED NEW POSITIONS

PUBLIC INFORMATION OFFICER (2)

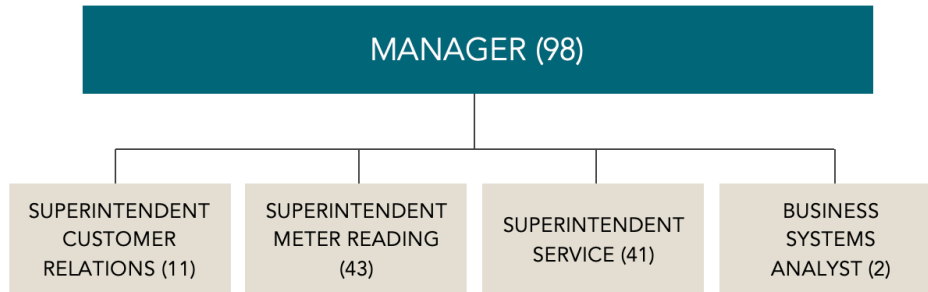
- Develops contacts and relationships with media representatives to create opportunities for BWVB products and services to maintain a positive image in the public’s view. Maintains public relation database and contacts.
- Develops ideas and opportunities for feature articles, interviews, presentations, and other public relations activities that promote awareness of the company and the services that BWVB provides

KEY PERFORMANCE MEASURES

1. Monitor and manage all public relations and communication initiatives for the utility on a daily basis
2. Maintain updated social media platforms daily to ensure a clear two-way communication channel for customers while building our audience reach
3. Review local, state, and national media outlets daily for stories that pertain to or may impact the image of BWV
4. Sustain and build on internal working relationships with all departments and the executive team to effectively communicate to the public on a weekly basis
5. Meet with local elected and appointed officials and neighborhood groups monthly to discuss issues that impact them as it relates to BWV

CUSTOMER SUPPORT SERVICES

The Customer Support Services Department is responsible for maintaining and ensuring operational standards of excellence and directing supervisors and team leaders to ensure professional quality service is provided to customers in the areas of Meter Reading, Field Services and Customer Relations.

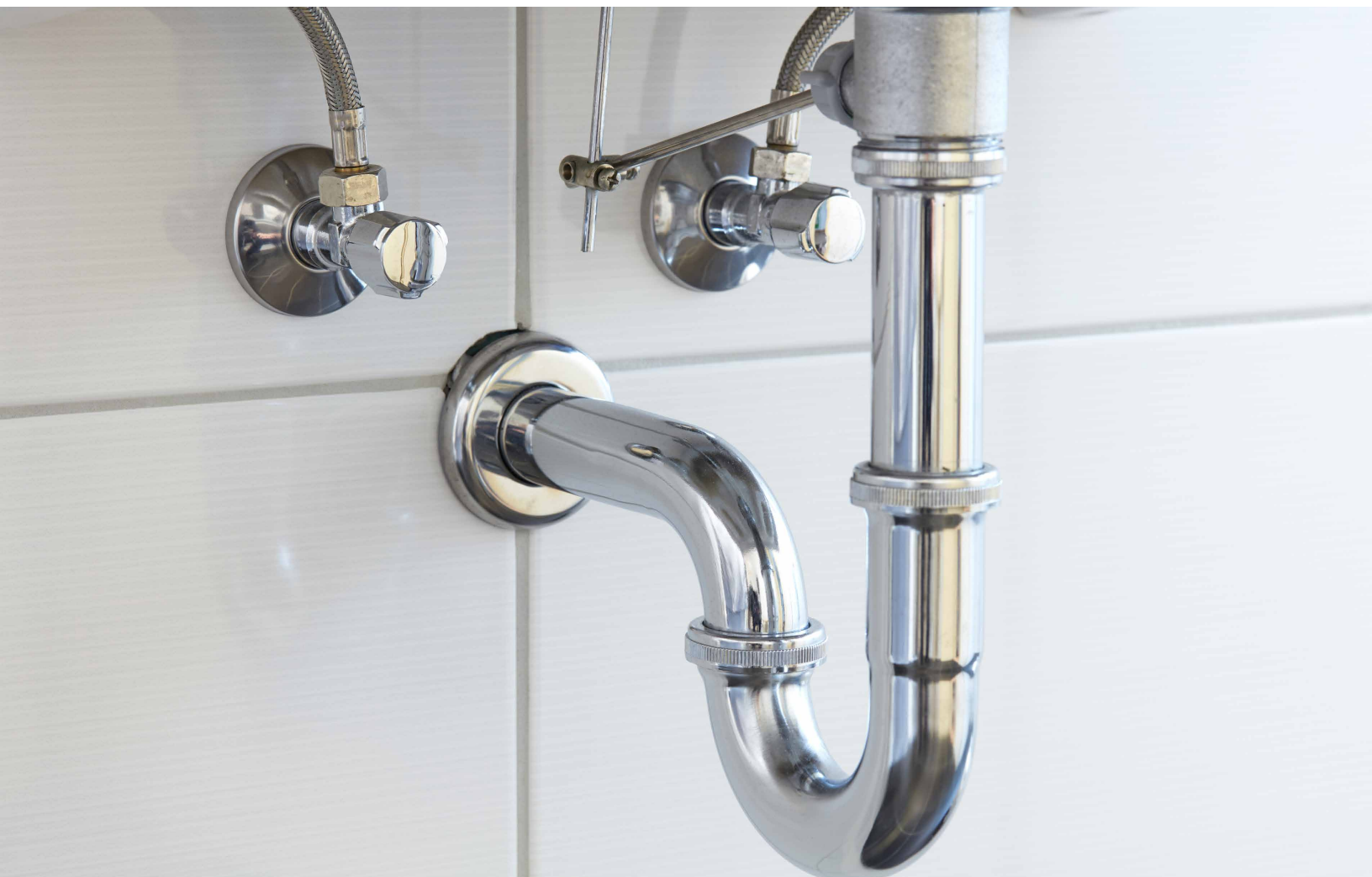


CUSTOMER SUPPORT MISSION

Customer Support Services is committed to providing accurate meter reading, quality professional field services and making timely billing adjustments to resolve customers' concerns in the 5 leading municipalities. Our goal is to improve the public perception of BWB as a leader in the water industry.

SUMMARY OF ACTIVITIES

- Read residential, commercial, and small industrial water meters on handheld devices
- Ensure the loading and unloading of handheld devices are performed daily
- Maintain the Geo Code Route Smart system for routing collections on accounts
- Create sequencing and travel paths for efficiency in meter reading for geocoded locations
- Review, edit and release implausible meter readings
- Identify and investigate account issues such as high bills and provide explanations regarding customers' bills/service
- Disconnect water service for delinquent accounts
- Install new meters at customers' premises when necessary
- Shut water off for plumbing defects or irregularities as requested
- Inspect water services for correct installation or any other irregularities
- Make repairs, advise customer of needed repairs, or discontinue service if unauthorized connection is discovered
- Utilize the BPEM cases to process, investigate and make corrections for billing errors, misread meters and leak adjustments
- Provide customer account information to third party collection agency to support collection efforts on charged off accounts
- Inspect private meters and measure pools for sewer billing adjustments





CUSTOMER SUPPORT SERVICES DEPARTMENT O&M EXPENDITURES BUDGET SUMMARY

COMMITMENT ITEM	2023 NET BUDGET	2022 NET BUDGET	\$ VARIANCE	% VARIANCE
Labor	\$6,014,360.73	\$5,872,361.46	\$141,999.27	2.42%
Cafeteria Expense	27,000.00	30,000.00	(3,000.00)	(10.00%)
Transportation Expense	240,000.00	215,000.00	25,000.00	11.63%
Uniforms	6,000.00	6,000.00	-	-
Meters	16,000.00	16,000.00	-	-
General Inventory Consumption	30,500.00	31,500.00	(1,000.00)	(3.17%)
Facilities Other	1,000.00	3,500.00	(2,500.00)	(71.43%)
Utilities - Electric	130,000.00	130,000.00	-	0.00%
Uniforms - Non-Stock	28,250.00	21,750.00	6,500.00	29.89%
Bad Debt Collection Expenses	120,000.00	180,000.00	(60,000.00)	-33.33%
Utilities-Telephone	4,000.00	3,700.00	300.00	8.11%
Utilities - Gas & Water	60,000.00	55,000.00	5,000.00	9.09%
Supplies & Expenses	22,377.10	37,101.01	(14,723.91)	(39.69%)
Fuel	265,000.00	225,355.00	39,645.00	17.59%
Materials Collecting	7,000.00	6,500.00	500.00	7.69%
Materials Meter Reading	13,000.00	35,500.00	(22,500.00)	(63.38%)
Travel Misc Other	4,994.10		4,994.10	100.00%
Employee Recognition	3,920.00	-	3,920.00	100.00%
Other O&M Expenses	4,995.20	8,579.12	(3,583.92)	(41.77%)
Total Operation & Maintenance	\$6,998,397.13	\$6,877,846.59	\$120,550.54	1.75%

HIGHLIGHTS OF BUDGET CHANGES

The 2023 Approved Budget increased by \$120,551 or 1.75% from the 2022 Approved Budget.

The major reasons for the variance are:

- 3 Positions were added
- Merit and cost of living allowance increases



CUSTOMER SUPPORT SERVICES DEPARTMENT PERSONNEL SUMMARY

Job Title	2019	2020	2021	2022	2023
Manager - Customer Support Services	1.00	1.00	1.00	1.00	1.00
Superintendent - Service Representatives	1.00	1.00	1.00	1.00	1.00
Superintendent - Customer Relations	1.00	1.00	1.00	1.00	1.00
Superintendent - Meter Readers	1.00	1.00	1.00	1.00	1.00
Business Systems Analyst	2.00	2.00	2.00	2.00	2.00
Customer Relations - Team Leader	0.00	1.00	1.00	1.00	1.00
Collections Specialist II	7.00	8.00	8.00	8.00	8.00
Customer Support Specialist - Team Leader	2.00	2.00	2.00	2.00	2.00
Customer Support Specialist III	12.00	10.00	10.00	7.00	7.00
Customer Support Specialist II	0.00	0.00	0.00	4.00	7.00
Field Service Technician - Team Lead	5.00	5.00	5.00	5.00	5.00
Field Service Technician	29.00	29.00	29.00	29.00	29.00
Meter Reader - Team Leader	4.00	4.00	4.00	4.00	4.00
Meter Reader - Senior	7.00	6.00	6.00	6.00	6.00
Meter Reader II	8.00	7.00	7.00	5.00	5.00
Meter Reader Trainee	14.00	16.00	19.00	21.00	21.00
GIS Technician	1.00	1.00	1.00	0.00	0.00
TOTAL DEPARTMENT PERSONNEL	95.00	95.00	98.00	98.00	101.00

APPROVED NEW POSITION

CUSTOMER SERVICE SPECIALIST II (3)

- Editing, reviewing, and releasing high bills
- Releasing re-reads and working BPEM cases
- Assist with the daily reporting on status of unbilled customers and reading of routes

KEY PERFORMANCE MEASURES

1. Maintain meter reading performance of 95% to ensure accurate customer billing and consumption information
2. Collect on delinquent accounts in-house within 45 days of shutoff and prior to the accounts being written off and turned over to a collection agency
3. Manage all debt collection to ensure 95% compliance with BWW rules and standards
4. Investigate and respond to 100% of customer and employees' issues/concerns as they relate to meter reading, billing issues, meter service and repairs within 72 hours of receipt
5. Perform preventive and predictive maintenance on essential equipment to maintain equipment readiness of 100%

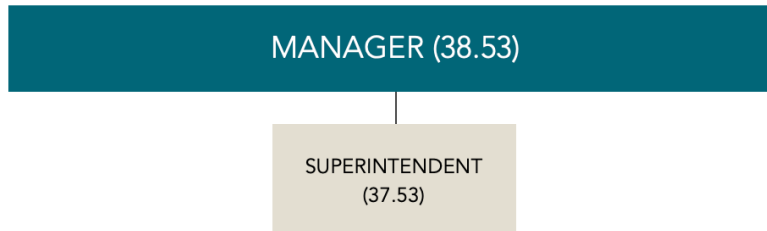
WATER LINE REPLACEMENT PROJECT: BWW WILL CONTINUE REPLACEMENT OF THE SYSTEM'S OLDER DISTRIBUTION MAINS, PARTICULARLY GALVANIZED STEEL, DUE TO EXCESSIVE REPAIRS, WATER QUALITY, LOW FIRE FLOW, ETC.





CALL CENTER

The Call Center is responsible for ensuring that operational standards of excellence for the Call Center Department are met for all water and sewer customers in the service territory, while following through on customer inquiries related to new connections, disconnections, transfer service requests, refunds, account adjustments and invoice-related issues.



CALL CENTER MISSION

The Customer Service-Call Center Team is committed to upholding the highest standards of customer service outlined in the vision and goals of the BWW. We are determined to provide the highest quality of service to our customers and stakeholders while understanding the critical need to make our customers' experience as unique and satisfactory as possible.



SUMMARY OF ACTIVITIES

- Answer incoming calls concerning customer service records and services
- Assist walk-in customers in the Payment Center Lobby and promptly provide customers with information and explanations regarding their bills as needed in English, Spanish and/or Sign Language for the hearing impaired
- Take applications for new services, discontinue service and update customer’s records
- Provide detailed information and/or instructions to requesting parties concerning BWW services and billing information, i.e., deposit requirements, rates, meter reading, disconnect dates, inquiries related to refunds, account adjustments and invoicing issues
- Initiate work orders for service or repairs
- Initiate calls to delinquent account holders regarding the Collections Department’s operating procedures after review of customer’s account history
- Maintain and improve customer satisfaction by resolving customer issues
- Review, investigate and respond to the State Attorney General’s office regarding customer complaints
- Research, investigate and resolve Better Business Bureau (BBB) complaints from residential and commercial customers

CALL CENTER DEPARTMENT O&M EXPENDITURES BUDGET SUMMARY

COMMITMENT ITEM	2023 NET BUDGET	2022 NET BUDGET	\$ VARIANCE	% VARIANCE
Labor	\$1,970,909.49	\$1,835,797.24	\$135,112.25	7.36%
Uniforms - Non-Stock	600.00	600.00	-	-
Utilities-Telephone	840.70	840.70	-	-
Supplies & Expenses	7,145.95	8,499.96	(1,354.01)	(15.93%)
Misc Gen Exp Membership Dues	861.20	1,085.11	(223.91)	(20.63%)
Materials Customer Accounting	4,500.00	5,600.00	(1,100.00)	(19.64%)
Travel Misc Other	5,597.80	4,349.06	1,248.74	28.71%
Employee Recognition	1,480.00	-	1,480.00	100.00%
Total Operation & Maintenance	\$1,991,935.14	\$1,856,772.07	\$135,163.07	7.28%

HIGHLIGHTS OF BUDGET CHANGES

The 2023 Approved Budget increased by \$135,163 or 7.28% from the 2022 Approved Budget.

The major reason for the variance is:

- 2 Positions were added
- Merit and cost of living adjustment increases



CALL CENTER DEPARTMENT PERSONNEL SUMMARY

Job Title	2019	2020	2021	2022	2023
Manager - Call Center	1.00	1.00	1.00	1.00	1.00
Call Center Superintendent	1.00	1.00	1.00	1.00	1.00
Call Center Team Leader	2.00	2.00	2.00	2.00	4.00
Call Center Rep III	8.00	8.00	8.00	7.00	7.00
Call Center Rep II	7.00	7.00	7.00	5.00	5.00
Call Center Rep I	15.00	15.00	15.00	18.00	18.00
Operator - Telephone	2.23	2.23	2.23	2.53	2.53
TOTAL DEPARTMENT PERSONNEL	36.23	36.23	36.23	36.53	38.53

APPROVED NEW POSITION

CALL CENTER TEAM LEADER (2)

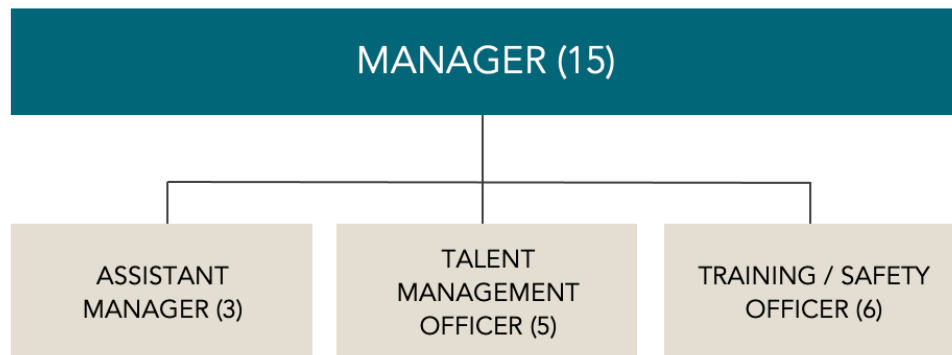
- Coordinates and monitors activities of the Call Center Team ensuring individual member goals are achieved in support of assigned Team goals.
- Interprets and communicates overall organizational directives and applies them to Team and individual objectives.
- Acting as liaison, represents the Call Center Team in a general interfacing with the rest of the organization. May provide input to management regarding individual team performance.

KEY PERFORMANCE MEASURES

1. Sustain an average talk time of within 3 minutes annually
2. Maintain an average wait time of under 3 minutes annually
3. Maintain an average abandonment call rate of less than 10% annually
4. Answer and handle (investigate and resolve) over 95% of customer calls annually
5. Maintain a monthly quality score of 85% on 6 random customer calls
6. Initiate 100% of field service work orders from customers

HUMAN RESOURCES

The Human Resources Department oversees the development and implementation of human resources policies, programs and services including talent acquisition, onboarding, retention, employee benefits and compensation administration, employee relations, career development and succession planning, employment practices and procedures, performance management, legal compliance, employee engagement, and safety and risk management areas and programs.



HUMAN RESOURCES MISSION

Recruit, develop, reward, and retain a committed and high performing workforce.

SUMMARY OF ACTIVITIES

- Plan, develop, organize, implement, direct, and evaluate the organization's human capital management function and performance
- Act as a strategic business partner and advisor to the Executive Staff, Management, and all levels of employees throughout the organization
- Provide leadership in the critical area of talent acquisition by developing the most creative and cost-effective ways of generating high-quality candidates in the marketplace for BWW
- Responsible for advising management to ensure complete compliance with all federal, state, and local laws related to employment, benefits, compensation, and training
- Oversee employee benefit programs including medical, dental, life, and disability insurance, pension plan, 457 plan, paid time off plans, worker's compensation, etc.
- Ensure Organizational Learning & Development programs are aligned with business strategy and support career development and succession planning goals



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- Develop a highly effective new hire orientation program that emphasizes the critical importance and value of welcoming and integrating new employees into the corporate culture
- Administer an effective wage and salary administration program to support business goals
- Oversee and administer personnel record keeping, employee performance reviews, promotions, transfers, separations and exit interviews
- Oversee job analyses process to establish the specific requirements of individual jobs within each department for the creation and oversight of job descriptions
- Oversee safety and risk management programs in compliance with regulatory standards & business needs

AWARDS

BWW's Human Resource Training and Organizational Development received the Training Magazine's Apex Awards in each of the last ten years. This award is given by a worldwide leader in the learning industry to organizations that have demonstrated success in conducting organizational development programs.

THE BWW PLACED:

2022	7
2021	8
2020	6
2019	7
2018	19
2017	21
2016	10
2015	24
2014	75
2013	95



BWW RECEIVED THE 2022 TRAINING MAGAZINE'S TRAINING APEX AWARD (L TO R: GENERAL MANAGER MICHAEL JOHNSON, TRAINING COORDINATOR MEREDITH HOLLINS, TRAINING ORGANIZATIONAL DEVELOPMENT & SAFETY/ RISK MANAGEMENT OFFICER RHONDA LEWIS, HUMAN RESOURCES MANAGER PAUL LLOYD, PUBLIC RELATIONS MANAGER RICK JACKSON)

HUMAN RESOURCES DEPARTMENT O&M EXPENDITURES BUDGET SUMMARY

COMMITMENT ITEM	2023 NET BUDGET	2022 NET BUDGET	\$ VARIANCE	% VARIANCE
Labor	\$1,324,880.22	\$1,279,511.22	\$45,369.00	3.55%
Training - HR	203,750.00	156,000.00	47,750.00	30.61%
Emp Retirement/Anniversary	40,000.00	45,000.00	(5,000.00)	(11.11%)
Special Screening	9,473.20	9,473.20	-	-
Flexible Benefit	76,908.00	74,786.00	2,122.00	2.84%
Health Screening	10,334.40	10,334.40	-	-
Health Club	73,202.00	73,202.00	-	-
Emp Asst Program	40,000.00	44,000.00	(4,000.00)	(9.09%)
Emp Recruiting	94,732.00	77,508.00	17,224.00	22.22%
Tuition Reimbursement	68,896.00	77,508.00	(8,612.00)	(11.11%)
Workers Comp Expense	516,720.00	569,567.66	(52,847.66)	(9.28%)
Facilities Other	12,610.50	12,610.50	-	-
Insurance	350,000.00	400,000.00	(50,000.00)	(12.50%)
Supplies & Expenses	47,034.97	47,034.97	-	-
Structural Expenses	31,105.90	29,424.50	1,681.40	5.71%
Misc Gen Exp Membership Dues	8,394.97	6,372.88	2,022.09	31.73%
Travel Misc Other	45,643.60	33,586.80	12,056.80	35.90%
Consultants	119,000.00	45,000.00	74,000.00	164.44%
Employee Recognition	600.00	-	600.00	100.00%
Other O&M Expenses	12,551.47	11,779.47	772.00	6.55%
Total Operation & Maintenance	\$3,085,837.23	\$3,002,699.60	\$83,137.63	2.77%

**HIGHLIGHTS OF BUDGET CHANGES**

The 2023 Approved Budget increased by \$83,138 or 2.77% from the 2022 Approved Budget.

The major reasons for the variance are:

- Merit and cost of living adjustment increases
- Consulting expense increased based on projections for healthcare consulting
- HR training expenses increased due to a new hires and employee development

HUMAN RESOURCES DEPARTMENT PERSONNEL SUMMARY

Job Title	2019	2020	2021	2022	2023
Manager - Human Resources	1.00	1.00	1.00	1.00	1.00
Assistant HR Manager	1.00	1.00	1.00	1.00	1.00
Talent Management Officer	1.00	1.00	1.00	1.00	1.00
Training / Od & Safety Officer	1.00	1.00	1.00	1.00	1.00
Human Resources Business Partner II	1.00	1.00	1.00	1.00	1.00
Human Resources Business Partner	1.00	1.00	1.00	1.00	1.00
Comp / Benefits / HRIS Administrator	1.00	1.00	1.00	1.00	1.00
Talent Management Coordinator	0.00	0.00	0.00	1.00	1.00
Human Resources Assistant	1.00	1.00	1.00	0.00	0.00
Human Resources Coordinator	0.00	0.00	0.00	1.00	1.00
Training & Od Specialist	1.00	1.00	1.00	2.00	2.00
Training Specialist	1.00	1.00	1.00	0.00	0.00
Training Coordinator	1.00	1.00	1.00	1.00	1.00
Safety / Risk Management Supervisor	1.00	1.00	1.00	0.00	0.00
Risk Management Supervisor	0.00	0.00	0.00	1.00	1.00
Safety / Risk Management Specialist	1.00	1.00	1.00	0.00	0.00
Safety Representative	0.00	0.00	0.00	1.00	1.00
Safety / Risk Management Coordinator	1.00	1.00	1.00	1.00	1.00
TOTAL DEPARTMENT PERSONNEL	14.00	14.00	14.00	15.00	15.00



KEY PERFORMANCE MEASURES

1. Monitor and evaluate the employee benefit program's compliance, structure, and cost annually against industry trends to determine appropriate resolutions for reducing cost while maintaining quality and value
2. Update HR policies and procedures annually to certify 100% compliance with all federal, state, and local employment laws and requirements
3. Investigate and resolve 100% of HR complaints in accordance with BWV employee relations goals
4. Maintain an average time-to-fill metric in line with Gartner's benchmark time-to-fill average
5. Lead and support an organization-wide employee engagement strategy that reinforces an engagement score consistent or above the global benchmark of like-sized organizations
6. Manage and distribute quarterly reports on HR metrics approved by senior management
7. Report annual worker's compensation, personal injury and property claim costs and manage the budget
8. Develop and administer annual organizational programs and training solutions which impact behavioral change (Kirkpatrick Model Level 3) and business results (Kirkpatrick Model Level 4)
9. Implement annual preventive safety plans aimed at reducing vehicle accidents and personal injury costs





WELLNESS & HEALTH MANAGEMENT

The Wellness & Health Management programs are provided to employees and spouses covered under the BWW health insurance plan to increase employee productivity and wellbeing.

WELLNESS & HEALTH MANAGEMENT MISSION

To help control and decrease future health insurance costs by preventing or better managing certain medical conditions.

SUMMARY OF ACTIVITIES

HUMANA GO365 REWARDS PROGRAM:

- Encourage participants to be healthier and more productive, reduce health claims cost, reduce unscheduled absences, reduce lifestyle risk factors for chronic conditions and fewer emergency room visits

ABACUS DIABETES REWARDS PROGRAM:

- Assist participants with pre-diabetes or diabetes with improved adherence to care standards, provide lifestyle and behavioral support and increase medication adherence

FRESHBENIES PROGRAM:

- Provides advocacy, telehealth, and potential medical savings services. With telehealth services: 24/7 access to a doctor by phone or video to get a diagnosis, treatment options and a prescription. Employees save time and money by avoiding crowded waiting rooms in the doctor's office, urgent care clinic or the ER. The program provides unlimited visits with no per-visit fee.

WELLNESS & HEALTH MANAGEMENT DEPARTMENT O&M EXPENDITURES BUDGET SUMMARY

COMMITMENT ITEM	2023 NET BUDGET	2022 NET BUDGET	\$ VARIANCE	% VARIANCE
BWWB Wellness Ctr Ex	\$385,084.22	\$337,407.83	\$47,676.39	14.13%
Total Operation & Maintenance	\$385,084.22	\$337,407.83	\$47,676.39	14.13%

HIGHLIGHTS OF BUDGET CHANGES

The 2023 Approved Budget increased by \$47,676 or 14.13% from the 2022 Approved Budget.

The major reason for the variance is:

- Expenses increased due to the re-implementation of annual onsite health screening that was suspended during COVID

PERSONNEL SUMMARY

There are no personnel in this cost center.

WATER WATCHERS

In a continuing effort to educate our community, the BWW extends the Young Water Ambassador Program to high school students within our water service area with the primary objective of effectively assisting students to successfully enter the workforce while increasing their awareness of water quality, conservation, and pollution.

WATER WATCHERS MISSION

To promote understanding, appreciation, enjoyment, and stewardship of our water resources while providing the Young Water Ambassadors with basic life skills, knowledge, and awareness of potential careers in the water industry.



SUMMARY OF ACTIVITIES

Young Water Ambassadors are exposed to the following:

- Visit the EnviroLab and learn the functions and responsibilities of the teams
- Visit the Call Center and listen to customer calls
- Visit Water Treatment Plants and learn about the water treatment process
- Observe Distribution Training which includes the simulation of a water main break
- Learn the dynamics of Public Speaking
- Learn skills such as making water taps, operating fire hydrants, and assembling and installing water meters
- Visit Birmingham Southern College's Southern Environmental Center and learn the importance of protecting our environment
- Visit Turkey Creek Nature Preserve to learn about various endangered species of fish within our water sources
- Visit the Cahaba River on a guided tour to learn about water resource protection, conservation, and restoration
- Participate in team building activities facilitated by the staff of Red Mountain Park to impart students with knowledge regarding various personality types and how best to work together to accomplish common goals
- Attend programs facilitated by Junior Achievement relative to the importance of saving and maintaining finances
- Attend a day program by the Safe Kids Coordinator at Children's of Alabama, to take place at Trussville Play Station to learn the importance of not driving while distracted or under the influence
- Tour Junior Colleges (Jefferson State, Lawson State and Shelton State) to gain information about various trades (i.e., welding, plumbing, brick mason, HVAC, etc.)
- Tour 4-year college campuses at UAB, Birmingham Southern and Samford University
- Participate in numerous community service projects, such as participating in functions spearheaded by the Public Relations department, such as Hydrate the City (sharing information with our citizens about the importance of staying hydrated), community clean ups and other
- Assist with our Clean, Paint, and Repair Program (CPR) whereby they perform tasks such as painting, etc.
- Ensure the cleanliness of the grounds as well as inside the MLK Recreation Center, which was our reporting location



WATER WATCHERS DEPARTMENT O&M EXPENDITURES BUDGET SUMMARY

COMMITMENT ITEM	2023 NET BUDGET	2022 NET BUDGET	\$ VARIANCE	% VARIANCE
Labor	\$225,474.78	\$278,799.49	(\$53,324.71)	(19.13%)
Transportation Expense	91,602.78	79,657.00	11,945.78	15.00%
General Inventory Consumption	550.00	550.00	-	-
Rent / Storage Facil	1,500.00	1,500.00	-	-
Uniforms - Non-Stock	3,000.00	3,000.00	-	-
Supplies & Expenses	10,000.00	10,000.00	-	-
Fuel	4,000.00	4,000.00	-	-
Total Operation & Maintenance	\$336,127.56	\$377,506.49	(\$41,378.93)	-10.96%

HIGHLIGHTS OF BUDGET CHANGES

The 2023 Approved Budget decreased by \$41,379 or 10.96% from the 2022 Approved Budget.

The major reason for the variance is:

- Labor expense decreased based on historical trend

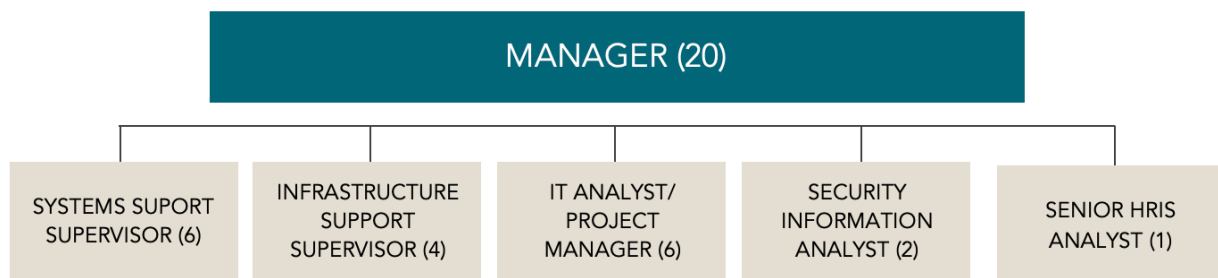
PERSONNEL SUMMARY

The BWW hires 100 Water Watchers, 11 Teachers and 10 Ambassadors In Training (AITs) annually during the summer.



INFORMATION TECHNOLOGY

The Information Technology (IT) Department focuses on the overall computing needs of BWW. The IT Team is responsible for the fulfillment of data processing performed within BWW, including equipment selection, systems analysis, programming, operations, and control. This includes hardware, software, telecommunications and generally anything involved in the transmittal of information or the systems that facilitate communication. The scope of responsibility includes several types of physical equipment, virtual systems, management of automation tools, operating systems and application software used to perform essential business functions. Key responsibilities also include technology architectures, methodologies and regulations governing the use and storage of data. The IT Team focuses on understanding technology issues, patterns, and trends to aid BWW in strategic decision-making and overall service delivery.



INFORMATION TECHNOLOGY MISSION

To provide technology solutions and service delivery excellence in alignment with BWW strategic goals and objectives. Seek to anticipate and respond effectively with useful, reliable, and secure technological services and solutions for BWW.

SUMMARY OF ACTIVITIES

- Support company-wide use of digital telephone systems which includes testing, installation, configuration, monitoring and maintenance
- Support application software utilized by various BWW departments which includes cloud-based applications, custom programming, business analytics testing, installation, configuration, monitoring and maintenance
- Manage configuration management process which involves identifying, controlling, maintaining, and verifying the versions of all configuration items in the BWW technical environment
- Provide Help Desk support to the entire BWW employee base regarding requests for service, including problems, technical modifications, and request for IT services
- Provide support to BWW end users for laptops, desktops, mobile devices, applications, software, and maintenance which includes change control, break-fix diagnosis, patch management, anti-virus management and end user acclimation
- Responsible for BWW's server systems, data storage platforms and network connectivity components which includes design, installation, configuration, monitoring and maintenance
- Responsible for the availability, integrity, and confidentiality of BWW IT systems to ensure their maintenance is compliant with defined organizational service levels
- Maintain specific utility-wide services related to electronic mail, internet connectivity, web platforms and



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- network connectivity (data, voice)
- Install, configure, and support the local area network (LAN), wide area network (WAN), wireless and related network segments to ensure operability and availability
 - Maintain company data backup/restoral systems, processes, and data replication
 - Handle risk management within information technology and identify risks and deficiencies within the organization's computing infrastructure (software, hardware, networks) and determines steps for remediation
 - Provide internal technical leadership for preventing and responding to computer security breaches/viruses by planning, and implementing
 - Perform vulnerability testing, risk analyses and cyber security-related assessments
 - Maintain the current Cyber security, IT security, and other security related systems to provide continuous protection of organization technology infrastructure/data and train employees on cyber security awareness and operational procedures
 - Evaluate end-user business needs to recommend, develop, implement, and support solutions to meet those needs
 - Lead, plan and manage projects and assess operational implications to achieve business strategy and vision and improve existing systems/applications, and design and develop new solutions
 - Responsible for the BWW's intranet and internet websites which includes content management and administration
 - Focus on streamlining the life cycle of information with electronic document management and automated workflows (capture, manage, store, preserve, deliver)
 - Develop, publish, and enforce policies and processes governing corporate data, including but not limited to data collection, warehousing, data validation, integrity, timeliness, protection, relationships, and ownership
 - Champion and oversee the key business process for change control, incident (outages) management and problem (post-incident review) management
 - Partner with the HR Team, Accounting /Payroll, IT, PMO, internal clients and external vendors to analyze system process design and flow, improve processes, and leverage the return on HR technology capabilities



INFORMATION TECHNOLOGY DEPARTMENT O&M EXPENDITURES BUDGET SUMMARY

COMMITMENT ITEM	2023 NET BUDGET	2022 NET BUDGET	\$ VARIANCE	% VARIANCE
Labor	\$1,418,796.27	\$1,521,087.00	(\$102,290.73)	(6.72%)
Mileage Reimbursement	387.54	637.29	(249.75)	(39.19%)
Permits	1,115,000.00	1,115,000.00	-	-
Uniforms - Non-Stock	500.00	500.00	-	-
Utilities-Telephone	350,000.00	300,000.00	50,000.00	16.67%
Supplies & Expenses	4,185.82	4,858.38	(672.56)	(13.84%)
Software Maintenance Support	1,280,500.00	1,285,000.00	(4,500.00)	(0.35%)
NonCapital Software Replacement	827,000.00	892,000.00	(65,000.00)	(7.29%)
Equipment Maintenance/Support	477,000.00	357,000.00	120,000.00	33.61%
NonCapital Equipment Replacement	58,000.00	65,000.00	(7,000.00)	(10.77%)
Misc Gen Exp Membership Dues	5,541.82	2,966.83	2,574.99	86.79%
Travel Misc Other	34,878.60	37,380.39	(2,501.79)	(6.69%)
Consultants	91,241.84	107,215.10	(15,973.26)	(14.90%)
Employee Recognition	800.00	-	800.00	100.00%
Total Operation & Maintenance	\$5,663,831.89	\$5,688,644.99	(\$24,813.10)	-0.44%

HIGHLIGHTS OF BUDGET CHANGES

The 2023 Approved Budget decreased by \$24,813 or 0.44% from the 2022 Approved Budget.

The major reasons for the variance are:

- Labor expense decreased due to vacant positions partially funded for the year
- Non-Capital software maintenance expenses are projected to decrease for infrastructure and systems software



INFORMATION TECHNOLOGY DEPARTMENT PERSONNEL SUMMARY

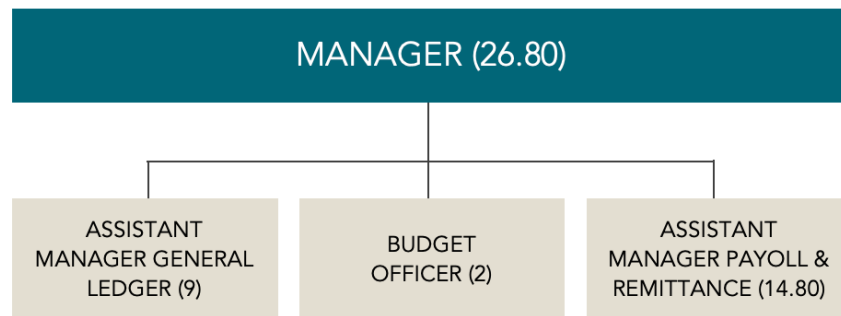
Job Title	2019	2020	2021	2022	2023
Manager - Information Technology	1.00	1.00	1.00	1.00	1.00
Business Analyst / Project Manager	4.00	4.00	4.00	3.00	3.00
Business Analyst / Project Mgr I	0.00	0.00	0.00	1.00	1.00
Sr Technical Analyst - Infrastructure Supv	1.00	1.00	1.00	1.00	1.00
It Systems Support Supervisor	1.00	1.00	1.00	1.00	1.00
Business Systems Analyst	2.00	2.00	2.00	2.00	2.00
It Web Information Security Analyst	1.00	1.00	1.00	2.00	2.00
Cyber Security Analyst	0.00	0.00	1.00	0.00	0.00
Routing / Switching Analyst	1.00	0.00	0.00	0.00	0.00
Sap Technical Analyst	1.00	0.00	0.00	0.00	0.00
Technical Analyst III	1.00	2.00	2.00	2.00	2.00
Technical Support Analyst II	1.00	1.00	1.00	1.00	1.00
Technical Support Analyst I	3.00	3.00	3.00	3.00	3.00
Computer Operator II	1.00	0.00	0.00	0.00	0.00
Help Desk Coordinator / Tech	1.00	2.00	2.00	2.00	2.00
HRIS & Analytics Officer	0.00	0.00	0.00	1.00	1.00
TOTAL DEPARTMENT PERSONNEL	19.00	18.00	19.00	20.00	20.00

KEY PERFORMANCE MEASURES

1. Implement and manage Information Technology infrastructure changes with little to no impact on business processing while maintaining no less than a 99% quarterly change success rate
2. Maintain no less than 99% business applications availability for all critical production systems
3. Resolve Help Desk tickets with an average first response time of the assigned priority level
4. Maintain a monthly average Help Desk ticket work time of one hour
5. Resolve direct and indirect customer service disruptions within 60 minutes and determine the root cause within three business days
6. Maintain a monthly average of maintenance performed on BW&B transportation fleet

ACCOUNTING

The Accounting Department administers the organization's accounting principles, procedures, initiatives and internal controls through financial reporting and analysis, budgeting, payment processing, payroll, capital assets and depreciation, long-term debt, investments, accounts payable, accounts receivable, inventory, unclaimed property processing and reporting. The department provides accounting support for cost-of-service studies, actuarial reviews, audits, and system implementations.



ACCOUNTING MISSION

To provide accurate and timely financial information for decision making and to provide outstanding customer service and support to internal and external customers.

SUMMARY OF ACTIVITIES

- Provide the Board of Directors, Executive Management, Department Managers and Supervisors with accurate and timely financial information and support
- Establish and maintain a strong system of internal controls
- Analyze Operation & Maintenance budget variances
- Process accurate and timely biweekly, monthly and supplemental payrolls
- Process customer payments remitted electronically and via mail
- Provide outstanding customer service while processing walk-in and drive-through customer payments
- Process all vendor invoices on a timely basis while taking advantage of eligible discounts
- Maintain the general ledger and related subsidiary ledgers
- Analyze capital purchases and developer contributions for proper recording and depreciation
- Reconcile all balance sheet accounts monthly
- Conduct annual physical inventory counts
- Process and report unclaimed property
- Provide management of the annual audits
- Provide support for system implementations
- Provide pension benefit estimates
- Provide data and support for cost-of-service studies, actuarial analysis, benchmarking surveys and other initiatives
- Analyze costs for system development projects



ACCOUNTING DEPARTMENT O&M EXPENDITURES BUDGET SUMMARY

COMMITMENT ITEM	2023 NET BUDGET	2022 NET BUDGET	\$ VARIANCE	% VARIANCE
Labor	\$1,793,738.60	\$1,871,334.26	(\$77,595.66)	10.24%
Cafeteria Expense	1,722.40	1,722.40	-	-
Mileage Reimbursement	258.36	637.29	(378.93)	(9.20%)
Misc NonOperating Expenses	76,000.00	62,000.00	14,000.00	12.73%
Supplies & Expenses	68,180.78	64,150.07	4,030.71	42.72%
Misc Gen Exp Membership Dues	6,198.92	7,679.76	(1,480.84)	(0.01%)
Materials Collecting	13,600.00	15,100.00	(1,500.00)	0.67%
Travel Misc Other	29,822.50	29,539.05	283.45	6.57%
Consultants	8,614.74	8,614.42	-	-
Employee Recognition	1,080.00	-	1,080.00	100.00%
Other O&M Expenses	5,506.00	5,456.00	50.00	0.92%
Total Operation & Maintenance	\$2,004,722.30	\$2,066,233.25	(\$61,511.27)	-2.98%

HIGHLIGHTS OF BUDGET CHANGES

The 2023 Approved Budget decreased by \$61,511 or 2.98% from the 2022 Approved Budget.

The major reason for the variance is:

- 1 position transferred to the Executive Department



ACCOUNTING DEPARTMENT PERSONNEL SUMMARY

Job Title	2019	2020	2021	2022	2023
Comptroller	0.00	0.00	0.00	1.00	0.00
Manager - Accounting	1.00	1.00	1.00	1.00	1.00
Assistant Accounting Manager	2.00	2.00	2.00	3.00	3.00
General Ledger Supervisor	0.00	1.00	1.00	0.00	0.00
Accountant III	3.00	2.00	2.00	2.00	2.00
Accountant II	3.00	3.00	3.00	3.00	3.00
Accountant I	1.00	2.00	2.00	2.00	2.00
Accounts Payable Clerk II	2.00	1.00	1.00	1.00	1.00
Officer - Budget	1.00	1.00	1.00	1.00	1.00
Budget Accountant II	1.00	1.00	1.00	1.00	1.00
Superintendent - Payment Center	1.00	1.00	1.00	1.00	1.00
Supervisor-Cashiers	1.00	1.00	1.00	1.00	1.00
Cashier Team Leader	2.00	2.00	2.00	2.00	2.00
Cashier III	1.00	0.00	0.00	0.00	0.00
Cashier II	2.00	2.00	2.00	2.00	2.00
Cashier I	4.45	5.45	4.80	4.80	4.80
Remittance Processing Specialist II	2.00	2.00	2.00	2.00	2.00
TOTAL DEPARTMENT PERSONNEL	27.45	27.45	26.80	27.80	26.80

KEY PERFORMANCE MEASURES

1. Administer the accounting principles, procedures, and programs to certify 100% compliance with the utility industry and generally accepted accounting principles reporting requirements
2. Manage the annual budgeting process for the organization by analyzing statistical data to increase financial productivity
3. Process payroll production biweekly to maintain 100% organizational and statutory compliance
4. Review payroll production processes and procedures annually to ensure corporate governance and financial security
5. Review and pay all requisitions to ensure 100% compliance with BW&B accounting policies and procedures
6. Monitor all trustee accounts activity to maintain 100% compliance with bond agreements
7. Reconcile all general ledger balance sheet accounts monthly
8. Review and pay all sewer authorities through Automated Clearing House (ACH) according to each schedule and contractual agreements
9. Process customer payments daily from the post office, night deposit, electronic payments, and collection agencies with 100% accuracy and balance the totals to SAP
10. Collect and process walk-in, drive-up and online payments from internal and external customers, with a goal of 100% accuracy and efficiency
11. Conduct daily, weekly, and monthly cash audits within Payment Center to ensure proper cash handling and efficiency
12. Perform daily reconciliation of checks and currency received before processing deposits to the bank



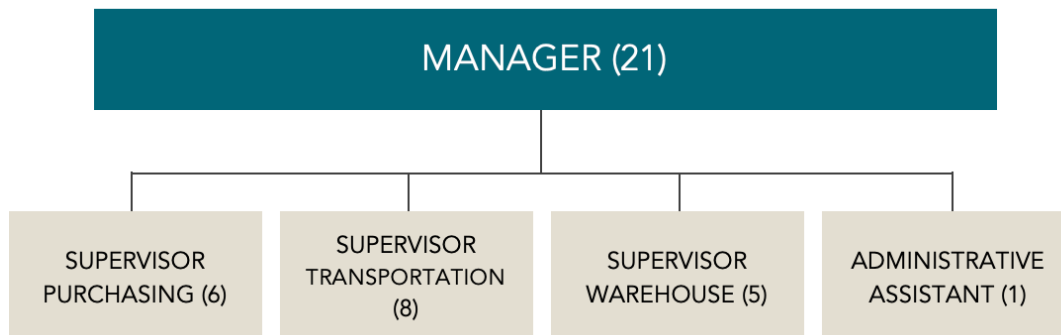
PURCHASING

The Purchasing Department is responsible for purchasing all materials utilized by the BWW. Purchasing has several groups that perform duties such as the oversight of building cleaning and maintenance, inventory control (warehouse), fleet maintenance (transportation) and management of main campus utilities.

The Warehouse group is responsible for ordering, storing, and issuing materials, tools, safety supplies, uniformed t-shirts, hats and various miscellaneous items needed to install and repair water mains and services and to equip the personnel performing those services. The Warehouse staff also receives, directs, and delivers shipments for all areas of the organization, as needed.

The Transportation group maintains the BWW's current fleet of vehicles (approximately 347 vehicles). The BWW spends approximately \$2 million annually for vehicle purchases and maintenance. Transportation staff runs diagnostics on large vehicles and diesel engines to perform repairs. Major repairs which include large equipment are outsourced.

The department has other responsibilities that include the BWW's Historically Underutilized Businesses (HUB) program, which is designed to encourage the participation of historically underutilized businesses. Its goal is to exercise positive financial control over purchases and to meet the needs of internal customers and all BWW departments by acquiring the most appropriate products and services at the lowest possible prices.



PURCHASING MISSION

To provide excellent service and meet the needs of internal customers by acquiring the most appropriate products and services at the lowest possible prices, operate an efficient warehouse and provide reliable and well-maintained vehicles.

It is the intent of the BWW to foster competition among contractors, suppliers and vendors that will result in better quality and more economical services through the BWW's Historically Underutilized Business (HUB) program.



SUMMARY OF ACTIVITIES

- Responsible for the purchase of supplies, materials, equipment, and services necessary for the operation of BWB's system in compliance with the Alabama State bid laws and other regulations
- Develop the organization's procurement policies and procedures, teach procurement classes and Alabama State Bid Law to help potential suppliers to qualify for future consideration
- Direct the development of formal and informal bids, including requests for bids, requests for quotes/ qualifications, requests for information and requests for proposal. Bid goods and services to meet Alabama State Bid Law and ensure all applicable legal and contractual provisions are met
- Work with the Board of Directors to establish and execute a strategy that will increase minority and HUB participation, which involves attending conferences and seminars, meeting with vendors, preparing reports and monitoring the budget
- Review purchase orders and contracts for compliance with company policy
- Order, store, and issue materials needed to install and repair water mains and services
- Review and investigate material count discrepancies related to receipts and issues in the warehouse
- Responsible for the purchase of all company vehicles and equipment
- Responsible for the proper maintenance of the entire fleet of vehicles
- Inspect and perform minor repairs and maintenance on material handling equipment
- Review, evaluate and approve specifications for issuing and awarding supplier bids through the bid process
- Responsible for the building maintenance & repair of all BWB-owned facilities



PURCHASING DEPARTMENT O&M EXPENDITURES BUDGET SUMMARY

COMMITMENT ITEM	2023 NET BUDGET	2022 NET BUDGET	\$ VARIANCE	% VARIANCE
Labor	\$1,421,225.43	\$1,372,344.76	\$48,880.67	3.56%
Cafeteria Expense	22,994.04	23,252.40	(258.36)	(1.11%)
Transportation Expense	155,800.00	156,300.00	(500.00)	(0.32%)
General Inventory Consumption	4,300.00	17,750.00	(13,450.00)	(75.77%)
Transmission Mains	5,000.00	-	5,000.00	100.00%
Facilities Other	25,000.00	24,000.00	1,000.00	4.17%
Distributions Mains	1,000.00	35,000.00	(34,000.00)	(97.14%)
Janitorial Services	333,800.00	437,611.80	(103,811.80)	(23.72%)
HVAC	62,587.50	60,918.50	1,669.00	2.74%
Utilities - Electric	319,000.00	316,500.00	2,500.00	0.79%
Utilities - Gas & Water	92,500.00	104,500.00	(12,000.00)	(11.48%)
Supplies & Expenses	23,363.54	34,840.44	(11,476.90)	(32.94%)
Fuel	33,550.00	27,975.00	5,575.00	19.93%
Miscellaneous Property	17,107.25	25,000.12	(7,892.87)	(31.57%)
Structural Expenses	187,762.50	146,037.50	41,725.00	28.57%
Misc Gen Exp Membership Dues	5,683.92	9,688.50	(4,004.58)	(41.33%)
Material Collecting	75,000.00	70,000.00	5,000.00	7.14%
Travel Misc Other	9,645.44	11,066.42	(1,420.98)	(12.84%)
Employee Recognition	760.00	-	760.00	100.00%
Other O&M Expenses	9,294.90	11,513.35	(2,218.45)	(19.27%)
Total Operation & Maintenance	\$2,805,374.52	\$2,884,298.79	(\$78,924.27)	-2.74%

HIGHLIGHTS OF BUDGET CHANGES

The 2023 Approved Budget decreased by \$78,924 or 2.74% from the 2022 Approved Budget.

The major reason for the variance is:

- Janitorial services decreased based on new vendor contract



PURCHASING DEPARTMENT PERSONNEL SUMMARY

Job Title	2019	2020	2021	2022	2023
Manager - Purchasing	1.00	1.00	1.00	1.00	1.00
Supervisor - Purchasing	1.00	1.00	1.00	1.00	1.00
Coordinator - Purchasing	1.00	1.00	1.00	1.00	1.00
Buyer	1.00	1.00	1.00	1.00	1.00
Administrative Assistant III	1.00	1.00	1.00	1.00	1.00
Facilities Supervisor	0.00	0.00	0.00	1.00	0.00
Attendant - Building / Messenger II	1.00	1.00	1.00	1.00	1.00
Attendant - Building / Maintenance	0.75	0.75	0.75	2.00	2.00
Supervisor - Warehouse	1.00	1.00	1.00	1.00	1.00
Senior Materials Handler - Team Ldr	1.00	1.00	1.00	1.00	1.00
Materials Handler	3.00	3.00	3.00	3.00	3.00
Supervisor - Transportation	1.00	1.00	1.00	1.00	1.00
Sr Automotive Technician	1.00	1.00	1.00	1.00	1.00
Jr Automotive Technician	1.00	1.00	1.00	1.00	1.00
Diesel Mechanic	0.00	0.00	0.00	1.00	1.00
Automotive Technician	3.00	3.00	3.00	3.00	3.00
Clerical Assistant	1.00	1.00	1.00	1.00	1.00
TOTAL DEPARTMENT PERSONNEL	18.75	18.75	18.75	22.00	21.00



KEY PERFORMANCE MEASURES

1. Monitor and evaluate price and cost control for the organization by reducing cost for all supplies, materials, and contracts
2. Regulate all BWW bids to ensure 100% compliance with Alabama Competitive Bid Laws and BWW Purchasing Requirements and Guidelines
3. Review and approve all purchase orders and requisitions to ensure 100% compliance with BWW company policies and procedures
4. Manage performance and preventive maintenance on vehicles and equipment to ensure 100% compliance with BWW and manufacturer's specifications
5. Maintain the BWW's fleet to improve asset life and reduce unplanned maintenance activities or breakdowns by 5%
6. Track and manage fleet to sustain downtime by 10% and availability by at least 90% annually
7. Track and manage warehouse inventory to maintain no more than 10% lost or damaged materials and supplies annually



ENVIROLAB

The EnviroLab is one of the largest utility-owned certified laboratories in the state of Alabama among drinking water systems. In 1993, the EnviroLab had six employees. Due to the growth of the system, regulatory demands, customer complaints and inquiries as well as source water monitoring and plant optimization, the department has grown to include the Water Quality Operations and the Regulatory Compliance groups. The BWW EnviroLab is a state-of-the-art, on-site, testing laboratory that provides immediate access to analytical data and quality control information to help optimize the filter plants' daily operations and ensure the safety of the drinking water supply. EnviroLab tests over 100,000 different parameters and more than 60,000 samples each year while also performing as a testing lab for six consecutive water systems and as a secondary lab for two contract labs.

The Laboratory is currently certified to analyze the following drinking water parameters:

- Primary Metals and Minerals
- Secondary Inorganics
- Volatile Organic Compounds (VOCs)
- Pesticides and Herbicides
- Synthetic Organic Compounds
- Trihalomethanes (THMs)
- Haloacetic Acids (HAAs)
- Total Organic Carbon, Nutrients – Chlorite, Bromide
- Total Coliform & E. coli – Bacteriological

The Water Quality Operations group is the first line of defense and is committed to maintaining quality control in the distribution system; from the outer gates of the water treatment (filter) plants to the customer's tap. This part of our operations monitors and performs corrosion control, particulate removal, sediment removal, taste-and-odor control, and discolored water control. Water Quality also makes residual improvements for low chlorine, controls bacteriological growths, responds to customer complaints and system emergencies, collects customer-requested samples, makes water mains rehabilitation recommendations, and installs water quality control devices.

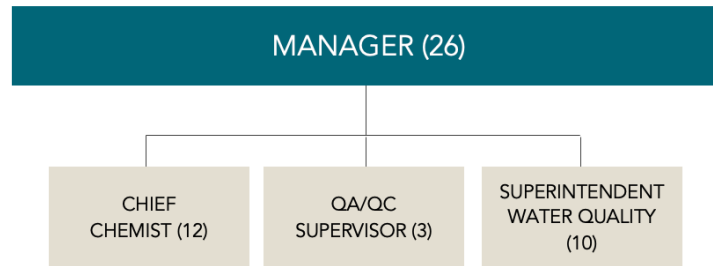
SECTION 7: OVERVIEW OF DEPARTMENTS

To facilitate these operations along with conventional and unidirectional flushing, we utilize the following:

- 38 5/8-inch Meter Box Sample Stations
- 60 – 5 1/4-inch Fire Hydrants Flush points, utilized because of its strategic location
- 113 Mueller HG2 Hydro-Guard Automatic Programmable Flushing Devices
- 4 – 2-inch Safety Guard Sample Stations at the request of the Shades Mountain Treatment Plant
- 112 – 2-inch Safety Guard Sample Stations around the Distribution System
- 8 Maxi-Me Flush Hydrants, 6-inch pipe and above with dual (2) 2 1/2 NST thread connections
- 98 Mini-Me Flush Hydrants (1) 2-inch NST connection
- 16 Mueller Pressure Monitoring Systems
- 20 – 2-inch Air Release Valves
- 2 Mueller's S.M.A.R.T. Intelligent Automatic Programmable Flushing Systems Devices
- Kupferle's Intelligent Turbine Controlled Automatic Programmable Flushing Systems Device



MAINTENANCE AND IMPROVEMENTS TO OUR EXCEPTIONAL TREATMENT FACILITIES ENSURES WE ARE ABLE TO PRODUCE QUALITY WATER THAT EXCEEDS DRINKING WATER STANDARDS.



ENVIROLAB MISSION

To maintain the highest quality of water for the BWW distribution system through routine monitoring, legally defensible data, flushing (both conventional and unidirectional) while keeping our customers educated about water concerns and maintaining quality service, integrity, productivity, reliability, and safety.

SUMMARY OF ACTIVITIES

- Approve testing data and submit to ADEM
- Maintain the Laboratory Information Management System (LIMS)
- Perform internal audits of the EnviroLab
- Perform routine flushing to rid the system of unpleasant water quality issues
- Collect samples that are analyzed for microbiology parameters and wet chemistry parameters
- Maintain all water quality control equipment throughout the distribution system
- Perform compliance testing for consecutive systems
- Schedule inside residence plumbing verifications to support the lead and copper project
- Perform lead and copper testing
- Prepare the annual Consumer Confidence Report (CCR) also known as the Annual Water Quality Report
- Install quality control flushing devices, sample stations, flush hydrants, and intelligent automatic programmable flushing system devices
- Maintain flushing operations throughout all pumping gradients in the BWW distribution system while responding 24/7 as needed during system emergencies
- Collect customer requested samples, investigate complaints and address customer concerns after a main break or a customer technical service complaint



ENVIROLAB DEPARTMENT O&M EXPENDITURES BUDGET SUMMARY

COMMITMENT ITEM	2023 NET BUDGET	2022 NET BUDGET	\$ VARIANCE	% VARIANCE
Labor	\$2,037,719.60	\$2,218,851.71	(\$181,132.11)	(8.16%)
Cafeteria Expense	7,861.20	7,361.20	500.00	6.79%
Transportation Expense	38,500.00	37,500.00	1,000.00	2.67%
Contractor Charges	50,000.00	50,000.00	-	-
Facilities Other	103,370.00	100,000.00	3,370.00	3.37%
CCR/Lead Copper Expenses	142,098.00	109,306.00	32,792.00	30.00%
Supplies Purification	400,000.00	341,250.00	58,750.00	17.22%
Material Equipment Purification	175,000.00	165,000.00	10,000.00	6.06%
Sampling	80,000.00	45,000.00	35,000.00	77.78%
Utilities - Electric	125,888.00	134,131.90	(8,243.90)	(6.15%)
Uniforms - Non-Stock	4,500.00	4,500.00	-	-
Utilities - Gas & Water	60,000.00	60,000.00	-	-
Fuel	54,500.00	47,350.00	7,150.00	15.10%
Miscellaneous Property	8,073.00	13,500.00	(5,427.00)	(40.20%)
Misc Gen Exp Membership Dues	8,784.24	7,153.00	1,631.24	22.80%
Travel Misc Other	36,601.00	43,882.61	(7,281.61)	(16.59%)
Consultants	10,512.55	10,512.16	-	-
Employee Recognition	1,040.00	-	1,040.00	100.00%
Other O&M Expenses	9,943.18	9,344.48	598.70	6.41%
Total Operation & Maintenance	\$3,354,390.77	\$3,404,643.06	(\$50,252.68)	-1.48%

HIGHLIGHTS OF BUDGET CHANGES

The 2023 Approved Budget decreased by \$50,253 or 1.48% from the 2022 Approved Budget.

The major reason for the variance is:

- 2 positions transferred to the Executive department

ENVIROLAB DEPARTMENT
PERSONNEL SUMMARY

Job Title	2019	2020	2021	2022	2023
Manager - EnviroLab	1.00	1.00	1.00	1.00	1.00
Assistant Manager - Chief Chemist	1.00	1.00	1.00	1.00	1.00
Quality Control Assurance Officer	1.00	1.00	1.00	1.00	1.00
Quality Control Specialist	2.00	2.00	2.00	2.00	2.00
Lab Data Coordinator	1.00	1.00	1.00	1.00	1.00
Chemist II	1.00	1.00	1.00	1.00	1.00
Chemist I	2.00	3.00	3.00	4.00	4.00
Lab Technician III	2.00	1.00	1.00	1.00	1.00
Lab Technician II	2.00	2.00	2.00	2.00	2.00
Lab Technician I	1.00	1.00	1.00	2.00	2.00
Regulatory Compliance Specialist	1.00	1.00	1.00	2.00	0.00
Superintendent - Water Quality Operations	1.00	1.00	1.00	1.00	1.00
Technical Service Coordinator I	1.00	1.00	1.00	1.00	1.00
Water Quality Tech - Team Leader	1.00	1.00	1.00	1.00	1.00
Water Quality Technician II	4.00	7.00	7.00	7.00	7.00
Water Quality Technician I	2.00	0.00	0.00	0.00	0.00
Utility Worker I (Light Duty)	1.00	0.00	0.00	0.00	0.00
TOTAL DEPARTMENT PERSONNEL	25.00	25.00	25.00	28.00	26.00



KEY PERFORMANCE MEASURES

1. Collect and perform bacteriological testing on 210 – 240 samples monthly for the water treatment plants, raw water sources and distribution to maintain 100% compliance with Alabama Department of Environmental Management (ADEM)
2. Collect and perform disinfection byproducts testing on 26 samples monthly and quarterly at distribution, consecutive systems master meters and water treatment plants (entry point) to maintain 100% compliance with ADEM regulations
3. Collect and perform Distribution System Evaluation (DSE) testing on 12 samples bi-monthly (every 60 days) to maintain 100% compliance with ADEM regulations
4. Collect and perform inorganic/organic chemicals (primary, synthetic, and volatile) testing monthly and quarterly at all water treatment plants to maintain 100% compliance with ADEM regulations
5. Collect and perform secondary inorganic drinking water contaminants testing every first and third quarter at all water treatment plants to maintain 100% compliance with ADEM regulations
6. Collect and perform unregulated volatile and synthetic organic chemicals testing every first and third quarter at all water treatment plants to maintain 100% compliance with ADEM regulations
7. Perform and analyze lead and copper testing on 50 samples at predetermined customer tap locations every three years to maintain 100% compliance with ADEM
8. Perform and analyze lead and copper corrosivity testing semi-annually from a representative entry point to the water distribution system per water treatment plant to maintain 100% compliance with ADEM regulations
9. Perform and analyze radiological contaminants testing annually at all water treatment plants to maintain 100% compliance with ADEM regulations
10. Collect and perform Long-Term 2 (LT2) testing for Giardia, Cryptosporidium, E. coli and Turbidity bi-monthly at all water treatment plants to maintain 100% compliance with ADEM regulations
11. Collect and monitor additional raw water and source water testing as needed to maintain 100% compliance with ADEM regulations
12. Perform and document monthly facility, property, and equipment maintenance to certify 100% compliance with the Clean, Paint, and Repair (CPR) program
13. Analyze and record testing samples for consecutive systems to maintain 100% compliance with ADEM regulations
14. Maintain lab certification by passing the annual audit for organic, bacteriological, and inorganic analysis according to the Environmental Protection Agency (EPA) certification regulations and guidelines
15. Retain 100% of the required 14-day testing turnaround time (TAT) for all samples
16. Sustain the Minimum Detection Limits (MDL) and Reporting Limits (RL) to certify 100% compliance with the Environmental Protection Agency (EPA) methods
17. Perform and document monthly preventive and predictive maintenance on essential testing and flushing equipment to maintain equipment readiness of at least 90%
18. Investigate and respond to at least 95% of customer water quality complaints within 2 hours to remove sediment, eliminate low chlorine residual and/or to resolve taste, color, and air concerns



WATER TREATMENT

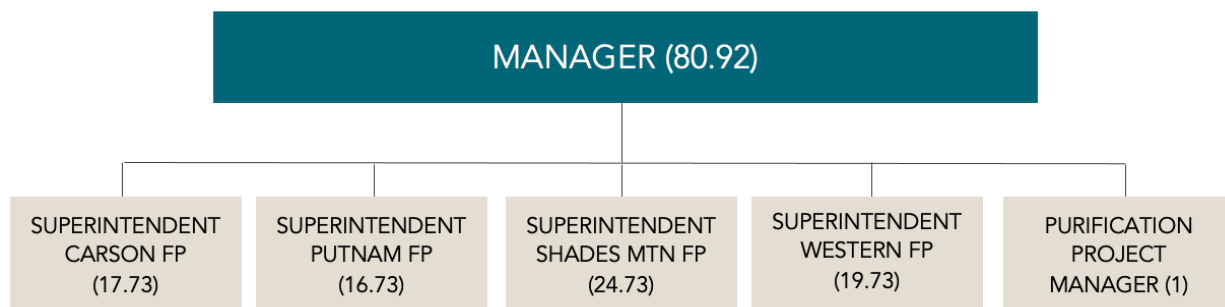
The BWW Water Treatment Department produces potable water to serve approximately 655,000 people via direct retail service in Jefferson County and four surrounding counties. Additionally, approximately 115,000 people are served via wholesale sales to consecutive systems. Four water filtration plants process and treat the raw water as follows:

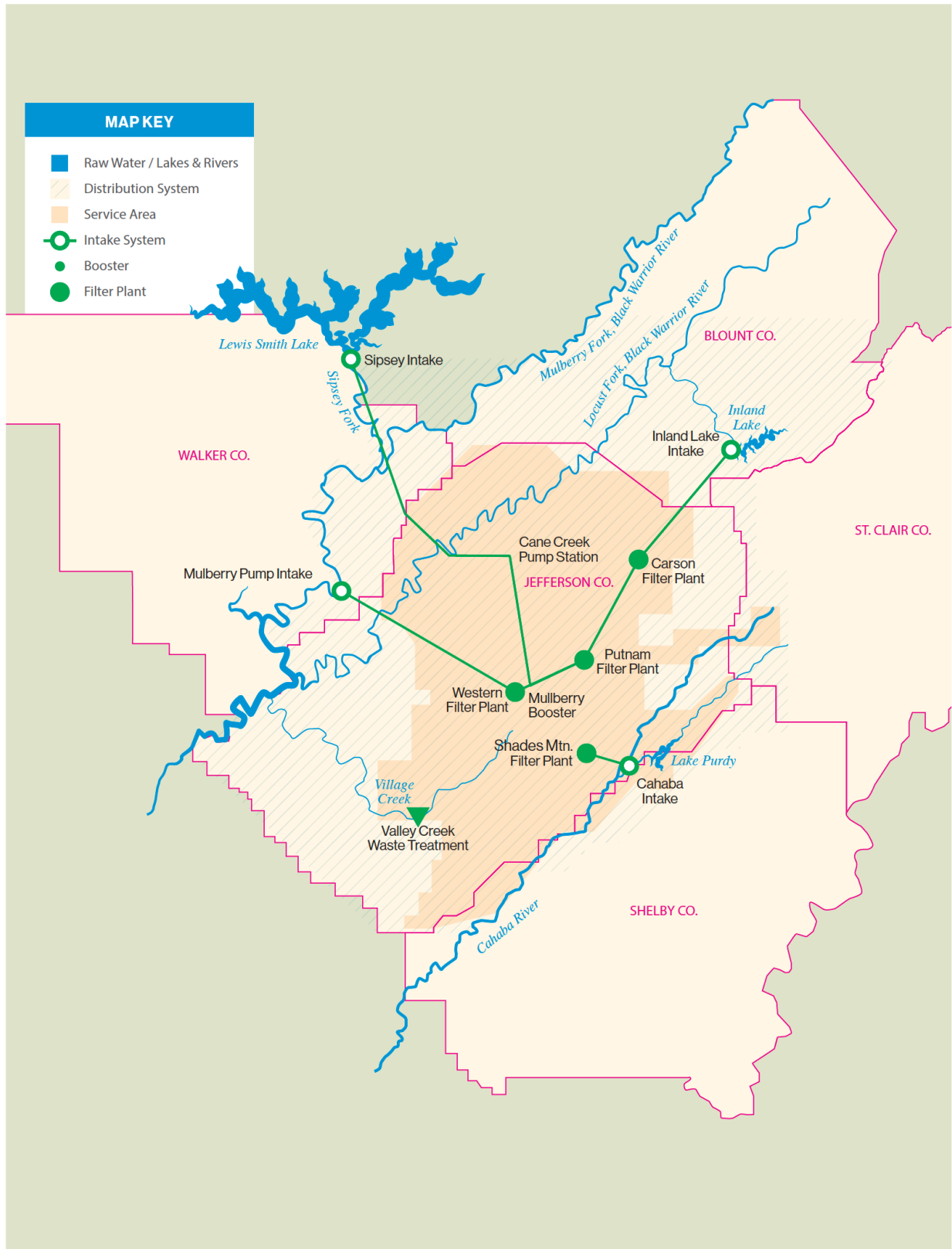
JEFFERSON COUNTY FILTRATION PLANT SOURCES AND CAPACITY

FILTRATION PLANT	RATED CAPACITY	SOURCE OF SUPPLY
Shades Mountain	80 MGD	Cahaba River - Lake Purdy
Putnam	24 MGD	Mulberry Fork, Smith Lake or Inland Lake
Western	60 MGD	Mulberry Fork or Smith Lake
Carson	25 MGD	Inland Lake, Smith Lake or Mulberry Fork

Alabama Department of Environmental Management (ADEM) requires Grade IV Certified Operators at each filtration plant to ensure water quality and quantity meets or exceeds state and federal regulations. Each filtration plant is recognized annually for meeting and/or exceeding standards.

The department's goal is to ensure that local and federal drinking water regulations are implemented and enforced and to be recognized at the national level for safe and clean water.







SHADES MOUNTAIN FILTER PLANT



PUTNAM FILTER PLANT



WESTERN FILTER PLANT



CARSON FILTER PLANT

WATER TREATMENT MISSION

To provide our customers with the highest quality water possible at the most affordable rate. To provide efficient, effective, and reliable water services in a manner that preserves and conserves our precious water resources and the natural environment to ensure adequate water quality and supply for future generations.

SUMMARY OF ACTIVITIES

- Produce a high quality and quantity of water to the Birmingham area and systems that purchase water
- Perform water quality tests to ensure water quality
- Dose and maintain chemical feed points
- Fill and maintain storage tanks for drinking water and fire protection
- Backwash filters
- Adjust basins and clear well levels
- Coordinate with E&M staff to schedule maintenance of equipment
- Run lab tests to monitor required water characteristics and maintain highest quality of water
- Test and maintain all backflow devices



AS PART OF OUR OVERALL FILTER REHABILITATION PROGRAM, BWW HAS CHOSEN TO UPGRADE THE FILTERS AT EACH PLANT TO PROVIDE THE FLEXIBILITY FOR INSTALLATION OF GRANULAR ACTIVATED CARBON (GAC) IN THE FILTERS.

AWARDS

CARSON

- AWPCA Best Operated Plant Award 20.1 – 30.0 MGD
- EPA and AWWA Partnership for Safe Drinking Water President’s Award (6 Years)
- Water Quality Fluoridation Award from the CDC
- EPA and AWWA Partnership for Safe Drinking Water Director’s Award (17 Years)
- AWWA Alabama Water Treatment Plant of the Year 2022

PUTNAM

- AWPCA Award of Excellence for Surface Water Plant Category 20.1 to 30 MGD
- Water Quality Fluoridation Award from the CDC
- ADEM AWOP 11 Year Optimized Plant Award
- EPA and AWWA Partnership for Safe Drinking Water President’s Award (6 Years)
- EPA and AWWA Partnership for Safe Drinking Water Director’s Award (16 Years)

WESTERN

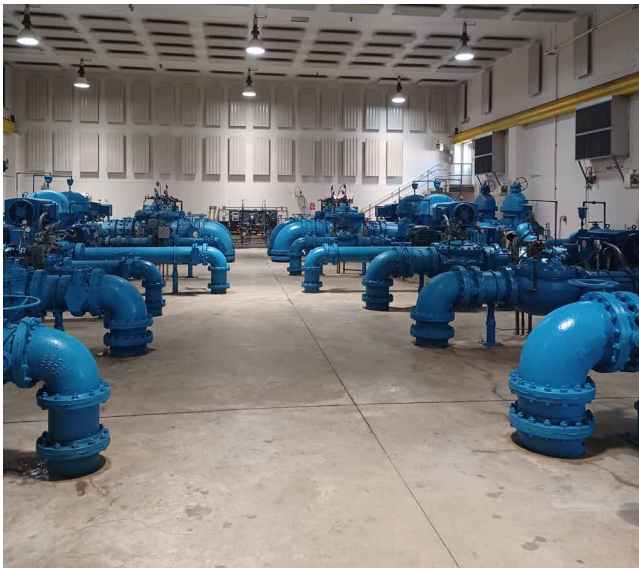
- Water Quality Fluoridation Award from the CDC
- EPA and AWWA Partnership Award of Excellence (9 Years)
- EPA and AWWA Partnership Director’s Award (14 Years)
- AWPCA Best Operated Plant Award for Surface Water 50 to 60 MGD
- Operator of The Year Award (Christopher Scott Gormley)

SHADES MOUNTAIN

- ADEM AWOP 11-year Optimized Plant Award
- AWPCA Best Operated Plant Award for Surface Water Greater than 60 MGD
- Water Quality Fluoridation Award from the CDC
- EPA and AWWA Partnership for Safe Drinking Water Directors Award (5 Years)



OUR VISION IS TO BE RECOGNIZED LOCALLY AND NATIONALLY FOR PROVIDING THE HIGHEST QUALITY WATER TO OUR CUSTOMERS BY FOCUSING ON CUSTOMER SERVICE, INNOVATION, FISCAL RESPONSIBILITY, AND SUSTAINABLE GROWTH.





WATER TREATMENT DEPARTMENT O&M EXPENDITURES BUDGET SUMMARY

COMMITMENT ITEM	2023 NET BUDGET	2022 NET BUDGET	\$ VARIANCE	% VARIANCE
Labor	\$5,576,588.90	\$5,085,482.86	\$491,106.04	9.66%
Cafeteria Expense	7,492.44	5,783.92	1,708.52	29.54%
Power	3,551,000.00	3,196,492.00	354,508.00	11.09%
Transportation Expense	46,460.00	37,600.00	8,860.00	23.56%
General Inventory Consumption	9,450.00	10,300.00	(850.00)	(8.25%)
Rent / Storage Facilities	12,500.00	500.00	12,000.00	2400.00%
Chemicals	9,115,231.80	6,802,538.37	2,312,693.43	34.00%
Purchased Water	50,000.00	0.00	50,000.00	100.00%
Materials Structure Purification	291,750.00	258,000.00	33,750.00	13.08%
Supplies Expense Purification	411,750.00	385,950.00	25,800.00	6.68%
Sludge Handling Purification	21,000.00	22,100.00	(1,100.00)	(4.98%)
Materials Equipment Purification	404,750.00	391,000.00	13,750.00	3.52%
Materials Other P&P Maintenance	75,500.00	65,500.00	10,000.00	15.27%
Materials Oil P&P Maintenance	1,500.00	2,500.00	(1,000.00)	(40.00%)
Materials Electrical P&P Maintenance	38,500.00	34,500.00	4,000.00	11.59%
Uniforms - Non-Stock	38,250.00	61,250.00	(23,000.00)	(37.55%)
Utilities-Telephone	7,100.00	6,900.00	200.00	2.90%
Utilities - Gas & Water	97,400.00	86,800.00	10,600.00	12.21%
Pump Expenses Electrical P&P	44,000.00	42,000.00	2,000.00	4.76%
Fuel	133,000.00	78,800.00	54,200.00	68.78%
Miscellaneous Property	110,988.50	85,953.50	25,035.00	29.13%
Misc Gen Exp Membership Dues	9,731.56	7,948.88	1,782.68	22.43%
Travel Misc Other	40,374.78	27,989.00	12,385.78	44.25%
Employee Recognition	3,240.00	0.00	3,240.00	100.00%
Other O&M Expenses	10,818.59	14,678.24	(3,859.65)	(26.30%)
Total Operation & Maintenance	\$20,108,376.57	\$16,710,566.77	\$3,397,809.80	20.33%

HIGHLIGHTS OF BUDGET CHANGES

The 2023 Approved Budget increased by \$3,397,810 or 20.33% from the 2022 Approved Budget.

The major reasons for the variance are:

- Power expenses increased based on Alabama Power Company rate increase
- Chemical prices increased based on vendor and supply price increases
- 4 new positions were added
- Merit and cost of living adjustment increases



WATER TREATMENT DEPARTMENT PERSONNEL SUMMARY

Job Title	2019	2020	2021	2022	2023
Manager - Water Treatment	1.00	1.00	1.00	1.00	1.00
Superintendent - Filter Plant - Senior	1.00	1.00	1.00	1.00	1.00
Superintendent - Filter Plant	3.00	3.00	3.00	3.00	3.00
Operator - Filter - Chief	1.00	1.00	1.00	1.00	1.00
Operator - Filter - Senior	3.00	3.00	3.00	3.00	3.00
Operator IV	4.00	4.00	4.00	4.00	4.00
Operator III	12.00	12.00	12.00	12.00	12.00
Operator II	9.00	10.00	10.00	11.00	14.00
Operator Trainee	4.00	4.00	4.00	7.00	7.00
Operator Intern	2.90	2.90	2.90	2.92	2.92
Worker - Maintenance - Purification	12.00	10.00	10.00	14.00	15.00
Pmw Trainee	3.00	5.00	5.00	0.00	0.00
Supervisor - Filter Plant - Maintenance	3.00	3.00	3.00	4.00	4.00
Maintenance Crew Leader	4.00	4.00	4.00	4.00	4.00
Purification Special Projects Coordinator	1.00	1.00	1.00	1.00	1.00
Residual Plant Operator II	2.00	4.00	4.00	4.00	4.00
Residual Plant Operator I	5.00	4.00	4.00	4.00	4.00
Solids Handler I	2.00	0.00	0.00	0.00	0.00
TOTAL DEPARTMENT PERSONNEL	72.90	72.90	72.90	76.92	80.92

APPROVED NEW POSITIONS

OPERATOR II (3)

- Provide additional staffing reliability and resilience while also mitigating overtime and facilitating enhanced maintenance levels at our critical facilities
- Assist operator in collecting water samples and perform routine chemical, bacteriological and physical tests
- Assist the Filter Plant Operator in maintaining compliance with the Safe Drinking Water Act to ensure Take readings and keep logs and records and assist with data collection and data entry on operations and equipment per ADEM Rules and Regulations (Turbidity records and Turbidimeters maintenance).

PLANT MAINTENANCE WORKER (PMW) II (1)

- To enhance maintenance and reliability at SMFP.
- Provide additional staffing reliability and resilience while also mitigating overtime and facilitating enhanced maintenance levels at our critical facilities
- Responsible for Preventive/Predictive Maintenance & Repair of plant pumps, chemical feeders, air handling equipment, and all related plant equipment and calibration of instruments

KEY PERFORMANCE MEASURES

1. Maintain 100% compliance with all BWW, state and federal regulations for water treatment
2. Perform plant and facility maintenance to certify 100% compliance with the Clean, Paint, and Repair (CPR) program
3. Collect daily water samples and perform required ADEM process testing and treatment for microbial contaminants and bacteria on site
4. Adhere to all monthly ADEM requirements for water treatment control, monitoring and operations reporting
5. Perform preventative and predictive equipment maintenance to maintain equipment readiness of 95%
6. Develop, maintain, and record maintenance schedules for all equipment located at the water treatment plants on a daily, weekly, and monthly timetable
7. Process 10–15 million pounds of sludge (dry solids) annually through dewatering operations and deliver to BWW landfills



SECURITY

The Security Department is responsible for all matters related to the security of BWW's critical facilities and personnel. The team develops and enforces security policies to ensure a safe environment for employees and visitors, along with ensuring the safety and security of all water operations. Console Operators monitor an integrated security system 24/7 from a central command center, an integrated security system that protects our 11 manned sites (4 treatment plants, 4 intake pumping stations, 2 dams, and our main campus) and over 50 unmanned pump stations and tanks.



SECURITY MISSION

To strive for excellence by continuing its standing as one of the top security departments in the country by protecting BWW's employees, customers, assets and reputation through leadership, exceptional staff, technology, and innovation while maintaining an environment that fosters teamwork and enables our employees to grow.



SUMMARY OF ACTIVITIES

- Manage the development and implementation of global security policies, standards, guidelines, and procedures to ensure ongoing maintenance of security
- Work with the Executive Management team to prioritize security initiatives and spending based on appropriate risk management and/or financial methodology
- Oversee the development, implementation, and maintenance of the company's policies, standards, guidelines, processes, procedures and plans that will serve to govern and manage physical security for BWOB
- Establish a security policy to remain compliant with critical infrastructure standards and other relevant security standards
- Lead operational security-related activities to enhance the value of the organization's brand
- Review the organization's vulnerability assessment and update the emergency response plan
- Develop relationships with the Department of Homeland Security (DHS) and the local police
- Develop security outreach programs for all employees
- Develop and conduct workplace violence prevention/situational awareness training
- Oversee maintenance of all security equipment
- Work with consultants to design security improvements
- Develop a loss prevention program
- Develop and conduct ongoing training for security personnel
- Develop relationship with the local Emergency Management Agency (EMA)
- Conduct tabletop exercises with local and federal agencies
- Conduct threat assessments for assets not deemed "critical" per the vulnerability assessment



SECURITY DEPARTMENT O&M EXPENDITURES BUDGET SUMMARY

COMMITMENT ITEM	2023 NET BUDGET	2022 NET BUDGET	\$ VARIANCE	% VARIANCE
Labor	\$781,952.16	\$761,573.52	\$20,378.64	2.68%
Outsourced Security	1,769,374.80	1,627,536.94	141,837.86	8.71%
Uniforms - Non-Stock	8,616.96	3,000.00	5,616.96	187.23%
Supplies & Expenses	19,322.00	23,000.00	(3,678.00)	(15.99%)
Fuel	6,670.00	5,000.00	1,670.00	33.40%
Software Maintenance Support	9,700.00	9,000.00	700.00	7.78%
Non-Capital Software Replacement	2,895.00		2,895.00	100.00%
Equipment Maintenance/Support	18,354.00	65,000.00	(46,646.00)	(71.76%)
NonCapital Equipment Replacement	80,000.00	130,000.00	(50,000.00)	(38.46%)
Miscellaneous Property	28,980.00	-	28,980.00	100.00%
Structural Expenses	31,050.00		31,050.00	100.00%
Misc Gen Exp Membership Dues	12,175.00	12,000.00	175.00	1.46%
Travel Misc Other	11,050.00	8,800.00	2,250.00	25.57%
Consultants	14,535.00	14,535.08	-	-
Other O&M Expenses	9,413.95	7,300.00	2,113.95	28.96%
Employee Recognition	480.00	-	480.00	100.00%
Total Operation & Maintenance	\$2,804,568.87	\$2,666,745.54	\$137,823.41	5.17%

HIGHLIGHTS OF BUDGET CHANGES

The 2023 Approved Budget increased by \$137,823 or 5.17% from the 2022 Approved Budget.

The major reasons for the variance are:

- Outsourced security increased due to vendor price increase and newly added site
- Merit and cost of living adjustment increases



SECURITY DEPARTMENT PERSONNEL SUMMARY

Job Title	2019	2020	2021	2022	2023
Security Manager	1.00	1.00	1.00	1.00	1.00
Security Superintendent	1.00	1.00	1.00	1.00	1.00
Security Coordinator	1.00	1.00	1.00	1.00	1.00
Sr Security Console Operator	1.00	1.00	1.00	1.00	1.00
Security Console Operator	4.00	4.00	4.00	4.00	4.00
Security Officer	1.00	1.00	1.00	1.00	1.00
PT Security Officer	0.73	0.73	0.73	0.73	0.73
Security Maintenance Technician	1.00	1.00	1.00	1.00	1.00
Utility Worker I	0.00	0.00	0.00	0.00	1.00
Security Systems Technician	0.00	0.00	0.00	0.00	1.00
TOTAL DEPARTMENT PERSONNEL	10.73	10.73	10.73	10.73	12.73

APPROVED NEW POSITION SECURITY SYSTEMS TECHNICIAN

- Maintain day-to-day operations and assume responsibility for maintaining the Organization’s fully integrated, Physical Protection System under the direction of the Security Management team.
- Assist Sr. Technician in programming OnGuard, maintaining card readers, alarms, badges, etc.
- Responsible for programming video management system software as it relates to alarms, cameras, etc., for all campuses/sites in the organization.
- Conduct regular maintenance and service for all BW&B security equipment.

KEY PERFORMANCE MEASURES

1. Maintain National Incident Management System (NIMS) compliance through the annual tabletop training exercise and demonstrate lessons learned to enhance the BW&B’s emergency readiness
2. Perform and record quarterly security and facility testing to certify the Physical Integrated Security System is performing accurately
3. Monitor and notify Security Management team of 100% of security emergencies, threats, and issues in a timely manner
4. Conduct annual security audits and risk assessments for all BW&B facilities and assets
5. Perform quarterly system tests to maintain equipment readiness

WATER RESOURCES

The Water Resources Department is responsible for ensuring the reliable and efficient operation of 4 intake stations, 4 industrial water pumping stations and 6 groundwater well sites. This is accomplished by supervising and maintaining operations of stations, tank sites, a 115kv substation, reservoirs, dams, and other related sites.

MANAGER (33)

SUPERINTENDENT
WATER RESOURCES
(32)

WATER RESOURCES MISSION

To provide an adequate supply of high-quality raw water to BWW filter plants and commercial/industrial customers and to efficiently operate and maintain all facilities. Develop and implement the best management practices for watershed protection policy.





SUMMARY OF ACTIVITIES

- Repair malfunctioning equipment and arrange maintenance schedules for motors, cone valves, pumps, and other associated appurtenances
- Record and monitor all pump stations and reservoir data (multilins, vibration levels, river/lake levels, packing, cooling water, chemical feeds)
- Maintain reservoir levels (tanks and basins) within the desired ranges with the least amount of starts and stops on motors and pumps
- Perform and record preventative and predictive equipment maintenance to maintain equipment readiness
- Perform and document monthly structural and ground maintenance in accordance with the Clean, Paint, and Repair (CPR) program
- Collect 150 water samples monthly from intakes and source water throughout the service area for required ADEM testing and treatment of microbial contaminants and bacteria
- Pre-treat raw water as directed by Water Treatment to maintain compliance with all regulatory requirements
- Consult with SCADA, Security, Filter Plants and Emergency Response Units as it relates to emergency, security and raw water supply concerns, issues, and incidents
- Host training seminars, social events and conduct guided tours at the Historic Cahaba Museum



WATER RESOURCES DEPARTMENT O&M EXPENDITURES BUDGET SUMMARY

COMMITMENT ITEM	2023 NET BUDGET	2022 NET BUDGET	\$ VARIANCE	% VARIANCE
Labor	\$2,471,105.90	\$2,318,612.66	\$152,493.24	6.58%
Cafeteria Expense	6,676.82	5,358.68	1,318.14	24.60%
Power	5,904,000.00	4,905,389.00	998,611.00	20.36%
Mileage Reimbursement	13,412.48	14,201.44	(788.96)	(5.56%)
Transportation Expense	13,450.00	13,500.00	(50.00)	(0.37%)
Supplies Expense Purification	23,600.00	27,400.00	(3,800.00)	(13.87%)
Materials Electrical Pump Equipment	35,200.00	42,000.00	(6,800.00)	(16.19%)
Utilities - Electric	59,282.00	56,282.00	3,000.00	5.33%
Uniforms - Non-Stock	12,300.00	22,800.00	(10,500.00)	(46.05%)
Utilities-Telephone	8,060.00	10,080.00	(2,020.00)	(20.04%)
Pump Expenses Electrical	1,700.00	9,700.00	(8,000.00)	(82.47%)
Materials Electrical Structures	17,000.00	54,400.00	(37,400.00)	(68.75%)
Other Structural Material	18,000.00	18,000.00	-	-
Intake Material Maintenance	32,000.00	29,000.00	3,000.00	10.34%
Reservoir Materials SOS Maintenance	51,500.00	51,500.00	-	-
Fuel	29,600.00	24,600.00	5,000.00	20.33%
Miscellaneous Prop	52,021.05	57,983.75	(5,962.70)	(10.28%)
Structural Expenses	20,000.00	20,000.00	-	-
Supplies Expense	126,000.00	79,500.00	46,500.00	58.49%
Travel Misc Other	12,399.54	9,163.31	3,236.23	35.32%
Consultants	48,000.00	47,000.00	1,000.00	2.13%
Other O&M Expenses	19,973.48	21,070.64	(1,097.16)	(5.21%)
Employee Recognition	1,320.00	-	1,320.00	100.00%
Total Operation & Maintenance	\$8,976,601.27	\$7,837,541.48	\$1,139,059.79	14.53%

HIGHLIGHTS OF BUDGET CHANGES

The 2023 Approved Budget increased by \$1,139,060 or 14.53% from the 2022 Approved Budget.

The major reasons for the variance are:

- Power expenses increased based on Alabama Power Company rate increase
- Merit and cost of living adjustment increases



WATER RESOURCES DEPARTMENT PERSONNEL SUMMARY

Job Title	2019	2020	2021	2022	2023
Manager Water Resources	1.00	1.00	1.00	1.00	1.00
Superintendent - Water Resources	1.00	1.00	1.00	1.00	1.00
Supervisor / Inland Dam & Reservoir	1.00	1.00	1.00	1.00	1.00
Supervisor - Cahaba Pump Station	1.00	1.00	1.00	1.00	1.00
Supervisor - Pump Station	3.00	3.00	3.00	3.00	3.00
Supervisor - Inland Pump Station	1.00	1.00	1.00	1.00	1.00
Caretaker - Lake Purdy	1.00	1.00	1.00	1.00	1.00
Pump Station Operator	14.00	12.00	12.00	13.00	13.00
Museum Coordinator	1.00	1.00	1.00	1.00	1.00
Station Operator Trainee	3.00	5.00	5.00	4.00	4.00
Worker - Maintenance - Purification	6.00	6.00	6.00	6.00	6.00
TOTAL DEPARTMENT PERSONNEL	33.00	33.00	33.00	33.00	33.00

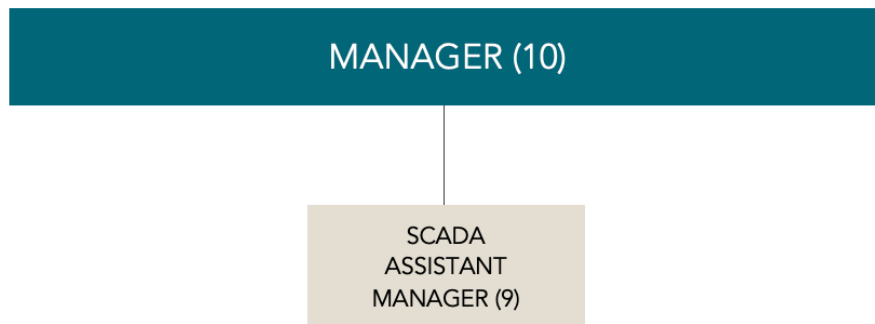
KEY PERFORMANCE MEASURES

1. Record and monitor all pump stations and reservoir data (multilins, vibration levels, river/lake levels, packing, cooling water, chemical feeds) with a 95% accuracy rate
2. Maintain reservoir levels (tanks and basins) daily within the desired ranges with the least amount of starts and stops on motors and pumps
3. Perform and record preventative and predictive equipment maintenance to maintain equipment readiness of at least 90%
4. Perform and document monthly structural and ground maintenance to certify 100% compliance with the Clean, Paint, and Repair (CPR) program
5. Collect 150 water samples monthly from intakes and source water throughout our service area for required ADEM testing and treatment of microbial contaminants and bacteria
6. Pre-treat raw water as directed by Water Treatment for Shades Mountain Filter Plant to maintain 100% compliance with all regulatory requirements

SUPERVISORY CONTROL & DATA ACQUISITION (SCADA)

Supervisory Control & Data Acquisition (SCADA) is the use of technology to monitor and control processes locally and remotely. SCADA systems usually have “analog” information (e.g., numbers indicating the water level in a tank) and digital or status information. They can send a status value (e.g., start a pump) and receive it (e.g., the pump has started). The computer can be used to summarize and display the data it is processing. Trends (graphs) of analog values over time are very common. Collecting the data and summarizing it into reports for operators and management are normal features of a SCADA system.

The BWW's SCADA system consists of Distributive Control System (DCS) equipment at all treatment plants and raw water pump stations and remote telemetry systems that connect the respective plant to tank sites, pump stations and pressure reducing stations that are miles away. The Central Operations Room and Emergency (CORE) recovery command center is connected to all major operational facilities of the BWW. The CORE maintains programs and data that are necessary to support the entire SCADA system. During adverse weather conditions and operational challenges, the CORE becomes the heartbeat of the water system, and the most critical operational decisions are made based on the data provided



SCADA MISSION

To maximize the functions of the SCADA System to assure that BWW provides the highest quality water to its customers. To accomplish this with sincere effort, intelligent direction, and skillful execution by providing superior controls, accurate data, and great service.

SUMMARY OF ACTIVITIES

- Program and configure the control system at all major BWW water treatment plants and raw water pump stations to allow these facilities to operate with automatic controls
- Provide graphical user interface at each plant for operators' use
- Acquire data on plant and distribution system operations
- Perform the duties of the Emergency Switchboard Operator after normal work hours, weekends, and holidays
- Assist and coordinate BWW personnel in after-hours emergencies to help limit the impact on customers
- Monitor and maintain operations for all communication equipment
- Provide data to management for analysis and decision making



SCADA DEPARTMENT O&M EXPENDITURES BUDGET SUMMARY

COMMITMENT ITEM	2023 NET BUDGET	2022 NET BUDGET	\$ VARIANCE	% VARIANCE
Labor	\$311,620.78	\$328,552.54	(\$16,931.76)	(5.15%)
Mileage Reimbursement	430.60	645.90	(215.30)	(33.33%)
Transportation Expense	1,000.00	1,000.00	-	-
Materials Equipment Purchase	1,000.00	2,000.00	(1,000.00)	(50.00%)
General Inventory Consumption	500.00	1,500.00	(1,000.00)	(66.67%)
Facilities Other	5,000.00	5,000.00	-	-
Other Office Materials	566.20	566.20	-	-
Uniforms - Non-Stock	500.00	500.00	-	-
Utilities-Telephone	600.00	600.00	-	-
Miscellaneous Property	1,251.75	1,251.75	-	-
Misc Gen Exp Membership Dues	508.11	602.84	(94.73)	(15.71%)
SCADA Operations	75,100.00	80,200.00	(5,100.00)	(6.36%)
Supervisory Materials	1,100.68	9,050.34	(7,949.66)	(87.84%)
Fuel	2,000.00	1,200.00	800.00	66.67%
Communication Equipment Maintenance	350,490.00	325,455.00	25,035.00	7.69%
Software Maintenance Support	20,000.00	15,000.00	5,000.00	33.33%
Equipment Maintenance Support	210,000.00	196,000.00	14,000.00	7.14%
Travel Misc Other	12,918.00	12,918.00	-	-
Employee Recognition	400.00	-	400.00	100.00%
	\$994,986.12	\$982,042.57	\$12,943.55	1.32%

HIGHLIGHTS OF BUDGET CHANGES

The 2023 Approved Budget increased by \$12,944 or 1.32% from the 2022 Approved Budget.

The major reasons for the variance are:

- Communication equipment maintenance expenses increased based on new contract
- Equipment maintenance & support expenses increased based on trend



SCADA DEPARTMENT PERSONNEL SUMMARY

Job Title	2019	2020	2021	2022	2023
Manager - SCADA System	1.00	1.00	1.00	1.00	1.00
Assistant Manager - SCADA	0.00	0.00	0.00	1.00	1.00
SCADA System Analyst	2.00	2.00	2.00	2.00	2.00
SCADA System Analyst Trainee	1.00	1.00	1.00	0.00	0.00
SCADA System Operator II	1.00	0.00	0.00	1.00	1.00
SCADA System Operator	3.00	4.00	4.00	4.00	4.00
Wireless Communication Technician	1.00	1.00	1.00	1.00	1.00
Total Department Personnel	9.00	9.00	9.00	10.00	10.00

KEY PERFORMANCE MEASURES

1. Conduct and record monthly maintenance of the SCADA system to confirm the system and servers will be operational 100% of the time
2. Investigate and respond within four hours of notification and resolve problems within 24 hours
3. Monitor SCADA operations of raw and finished water systems 24/7 to maintain 100% compliance with all BWW, state and federal regulations
4. Operate Raw Water Pump Stations to maintain a supply of water through operation of pumps and valves 100% of the time
5. Perform preventative and predictive radio communication hardware equipment maintenance to sustain equipment readiness of at least 98%
6. Implement an annual strategy to reduce electricity usage cost
7. Perform and verify the SCADA control system backup quarterly to confirm authenticity



INDUSTRIAL & COMMERCIAL ACCOUNTS

The growth of our customer base translates to greater water usage. This growth assists BWW in having dependable sources of revenue to maintain and expand our quality services. We currently sell potable water to residential, commercial (non-residential), and wholesale customers. In addition, we sell non-potable raw water to industrial clients.

The healthcare facilities are integral to the health and well-being of the communities we serve. The resilience of a community depends on the ability of its critical infrastructure sectors to reliably respond to its needs, particularly during emergency events. Healthcare facilities make up an essential component of this critical infrastructure and must consistently maintain their water capabilities to meet the needs of their community members. Water supply interruption can be caused by several types of events such as a natural disaster, construction damage or even an act of terrorism. Because water supplies can and do fail, it is imperative to understand and address how patient safety, quality of care, and the operations of our facilities will be impacted.

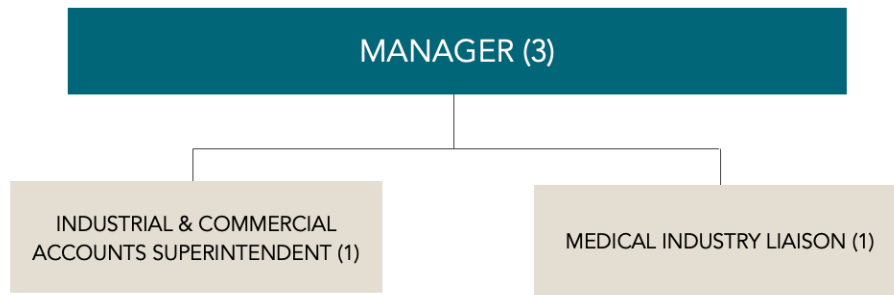
The beverage industry in our service area is growing rapidly due to the high quality of water that we provide. When the water supply to a facility is interrupted, we should assess the problem quickly. The response to the interruption will depend greatly on the type of interruption; complete loss of water, reduced pressure, or water discoloration and the estimated length of time necessary to return water service to normal. As water is the main ingredient to produce their product it is essential to correct any issue as soon as possible.

Alabama Department of Environmental Management (ADEM) defines a consecutive system as "A public water system that receives some or all of its finished water from one or more wholesale systems. Delivery may be through a direct connection or through the distribution system of one or more consecutive systems." (ADEM Admin. Code r. 335-7-1-.01). BWW has:

- Four sole source consecutive systems (Graysville Water Works, Mulga Water Department, West Jefferson Water System and Brookside Water System)
- One "take or pay" consecutive systems which are required to take a minimum consumption (Pine Bluff Water Authority).
- Two compliance systems (Alabama Power and University of Alabama – Birmingham)
- Five emergency connections (Shelby County Water, Irondale Water, Trussville Water, Blount County Water and Bessemer Water).

The consecutive systems' distribution systems have been optimized to reduce disinfection byproducts. They have also been designed and/or upgraded to mimic BWW's system (compliance, standard operating procedures, etc.). Each consecutive system can maintain water services for at least 24 hours (non-emergency) as needed for BWW system repair. BWW conducts water quality testing for its consecutive systems and has assisted with leak surveys in the past. Approximately 115,000 residents are served via BWW consecutive systems.

One of the largest non-potable water customers is US Steel. In the 1980s, their water consumption averaged 35-40 MGD; however, consumption reduced significantly due to unfavorable market conditions that led to the closure of the Fairfield blast furnace. US Steel recently constructed an electric arc furnace and an ASU (Air Separation Unit) with a projected water consumption of 8-10 MGD.



INDUSTRIAL AND COMMERCIAL MISSION

The Industrial and Commercial Accounts Department is committed to providing the highest quality of water to meet the needs and expectations of our customers and stakeholders. Our services enhance the economic, social, and environmental well-being of the communities we serve.

SUMMARY OF ACTIVITIES

- Manage company initiatives to ensure resolution of compliance issues, annual rate notification, technical/regulatory notifications, and service calls
- Coordinate with internal departments to ensure all filings are complete and ready for the annual consumer confidence report for public consumption
- Act as a proactive liaison between BWW and industrial/commercial/wholesale/medical customers, helping with water issues by communicating with individuals and groups face-to-face and hosting one-on-one meetings by telephone or in person
- Address compliance issues per ADEM with our consecutive partners. Provide reporting to the Office of Water Resources
- Manage secured customer website containing real-time SCADA data to ensure integrity for customer reporting dashboards
- Coordinate the planning requirements and execution for the annual raw water conference with internal departments, customers, and industry agencies
- Proactively monitor customer reporting data to design strategies that will support compliance and consistency according to the ADEM requirements
- Work with customers to develop action plans based on findings from ADEM system audits
- Create and maintain emergency contracts for customers and consecutive systems to support any deviation in normal production of raw water
- Meet and communicate orally and in writing with customers, other city departments, and service providers to discuss water operation issues
- Provide resolution to service calls, Mayor concerns, and raw water updates to our customers
- Provide onsite training and water system presentations
- Provide oversight in the administration of contracts relating to industrial, wholesale, and commercial water customers
- Conduct annual rate review and test calculation on rate schedule and billing. Send notification of rate change to our customers and respond to any billing questions
- Demonstrate ongoing efforts to improve operations, decrease turnaround times, streamline work processes, and work cooperatively and jointly to provide quality, seamless customer service
- Review reports and research discrepancies relating to unaccounted for water and account contracts
- Provide executive reports/briefing on the activity of customers and impact on revenue
- Track and report on non-revenue water and volume and status of collections



INDUSTRIAL & COMMERCIAL DEPARTMENT O&M EXPENDITURES BUDGET SUMMARY

COMMITMENT ITEM	2023 NET BUDGET	2022 NET BUDGET	\$ VARIANCE	% VARIANCE
Labor	\$397,317.22	\$363,999.53	\$33,317.69	9.15%
Cafeteria Expense	1,100.00	1,100.00	-	-
Mileage Reimbursement	-	645.90	(645.90)	(100.00%)
Transportation Expense	1,500.00	2,500.00	(1,000.00)	(40.00%)
Uniforms	250.00	250.00	-	-
General Inventory Consumption	1,000.00	1,000.00	-	-
Facilities Other	3,500.00	3,500.00	-	-
Uniforms - Non-Stock	1,500.00	1,500.00	-	-
Supplies & Expenses	15,973.30	15,132.60	840.70	5.56%
Fuel	8,250.00	8,250.00	-	-
Misc Gen Exp Membership Dues	7,475.22	3,337.15	4,138.07	124.00%
Travel Misc Other	24,458.08	24,458.08	-	-
Employee Recognition	120.00	-	120.00	100.00%
Total Operation & Maintenance	\$462,443.82	\$425,673.26	\$36,770.56	8.64%

HIGHLIGHTS OF BUDGET CHANGES

The 2023 Approved Budget increased by \$36,771 or 8.64% from the 2022 Approved Budget.

The major reason for the variance is:

- Merit, longevity, and cost of living adjustment increases



INDUSTRIAL & COMMERCIAL DEPARTMENT PERSONNEL SUMMARY

Job Title	2019	2020	2021	2022	2023
Manager - Industrial & Commercial Accts	1.00	1.00	1.00	1.00	1.00
Superintendent - Industrial & Commercial Accts	1.00	1.00	1.00	1.00	1.00
Medical Industry Liaison	0.00	0.00	1.00	1.00	1.00
TOTAL DEPARTMENT PERSONNEL	2.00	2.00	3.00	3.00	3.00

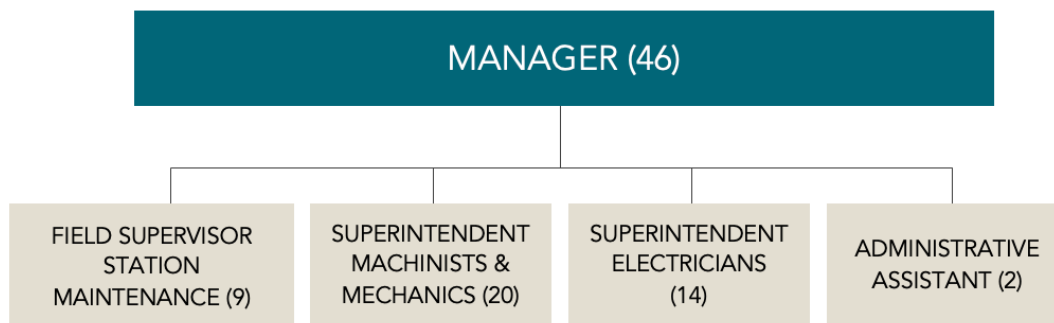
KEY PERFORMANCE MEASURES

1. Manage all industrial and commercial accounts to ensure 100% compliance with all local, state, and BWW regulations and requirements
2. Review monthly SAP reporting to make sure that 100% of accounts are read and billed per their contract requirements
3. Review Consumer Confidence Report (CCR) information with ADEM at all consecutive locations to ensure 100% reliability
4. Complete SCADA and meter upgrades at all entry points and provide updated web pages to our consecutive system partners at 100%
5. Investigate and respond to 100% of consecutive, raw water, medical and beverage issues/concerns as it relates to meter reading, billing issues, meter service and repair within 72 hours of receipt

ELECTRICAL & MECHANICAL

The Electrical & Mechanical Maintenance Department (E&M Shop) supports the maintenance of electrical and mechanical equipment throughout the entire BWW system. The E&M Shop is on call 24/7 to repair and maintain the system's assets for the operation of machines, pumps, and mechanical equipment, including fabrication.

The E&M Shop is responsible for the preventive and predictive program that increases the longevity of BWW's assets.



ELECTRICAL AND MECHANICAL MISSION

To provide high-quality electrical and mechanical support to ensure BWW's infrastructure is operable at full capacity with limited interruptions in service.

SUMMARY OF ACTIVITIES

- Maintain plants and all assets on a continuous improvement path for quality and efficiency
- Coordinate maintenance activities for facilities and production equipment
- Develop and implement a predictive and preventive maintenance program
- Track and control maintenance inventory
- Maintain close coordination with production departments to resolve equipment breakdowns and other production related opportunities
- Perform root cause analysis for any abnormal conditions and failures which may result in corrective actions to prevent recurrences



ELECTRICAL & MECHANICAL DEPARTMENT O&M EXPENDITURES BUDGET SUMMARY

COMMITMENT ITEM	2023 NET BUDGET	2022 NET BUDGET	\$ VARIANCE	% VARIANCE
Labor	\$2,817,432.62	\$2,623,242.88	\$194,189.74	7.40%
Power	1,730,000.00	1,785,338.52	(55,338.52)	(3.10%)
Transportation Expense	119,000.00	94,315.00	24,685.00	26.17%
General Inventory Consumption	11,600.00	12,400.00	(800.00)	(6.45%)
Material Structures/Tanks	6,000.00	15,000.00	(9,000.00)	(60.00%)
Facilities Other	63,000.00	62,865.00	135.00	0.21%
Rent / Storage Facilities	53,500.00	45,000.00	8,500.00	18.89%
Material Electrical Pump Equipment	363,100.00	317,010.96	46,089.04	14.54%
Uniforms - Non-Stock	53,000.00	51,000.13	1,999.87	3.92%
Utilities-Telephone	8,000.00	9,000.00	(1,000.00)	(11.11%)
Utilities - Gas & Water	27,000.00	24,000.00	3,000.00	12.50%
Material Electrical Structures	30,000.00	35,500.00	(5,500.00)	(15.49%)
Fuel	165,253.00	144,207.00	21,046.00	14.59%
Miscellaneous Property	9,596.75	21,279.75	(11,683.00)	(54.90%)
Supplies	44,250.00	38,000.00	6,250.00	16.45%
Travel Misc Other	66,056.77	18,347.56	47,709.21	260.03%
Other O&M Expenses	30,702.94	28,310.82	2,392.12	8.45%
Employee Recognition	1,760.00	-	1,760.00	100.00%
Total Operation & Maintenance	\$5,599,252.08	\$5,324,817.62	\$274,434.46	5.15%

HIGHLIGHTS OF BUDGET CHANGES

The 2023 Approved Budget increased by \$274,434 or 5.15% from the 2022 Approved Budget.

The major reasons for the variance are:

- 2 positions transferred from Purchasing (1) and Distribution (1)
- Merit and cost of living adjustment increases
- Training & Travel expenses increased due to CDL & Vibration training
- Equipment maintenance expenses increased due to increase in material costs



ELECTRICAL & MECHANICAL DEPARTMENT PERSONNEL SUMMARY

Job Title	2019	2020	2021	2022	2023
Manager - Electrical & Machine Maintenance	1.00	1.00	1.00	1.00	1.00
Superintendent - Electrical	1.00	1.00	1.00	1.00	1.00
Superintendent - Mechanical	1.00	1.00	1.00	1.00	1.00
Industrial Control Master Electrician	6.00	7.00	7.00	9.00	9.00
Industrial Control Electrician - Journey	2.00	1.00	1.00	2.00	2.00
Building Maintenance Electrician Journeyman	1.00	1.00	1.00	1.00	1.00
Instrumentation Technician	1.00	1.00	1.00	0.00	0.00
Field Supervisor	1.00	1.00	1.00	1.00	1.00
Mechanic - Senior	1.00	1.00	1.00	1.00	1.00
Maintenance Mechanic II	9.00	9.00	9.00	10.00	10.00
Maintenance Mechanic I	6.00	6.00	6.00	7.00	7.00
Machinists	1.00	1.00	1.00	1.00	1.00
Project Coordinator	1.00	1.00	1.00	1.00	1.00
Station Maintenance Worker III	1.00	1.00	1.00	1.00	1.00
Station Maintenance Worker II	2.00	2.00	2.00	2.00	2.00
Station Maintenance Worker I	3.00	3.00	3.00	3.00	3.00
Team Lead	0.00	0.00	0.00	0.00	1.00
HVAC Tech II	0.00	0.00	0.00	0.00	1.00
Administrative Assistant II	1.00	1.00	1.00	1.00	1.00
Administrative Assistant I	1.00	1.00	1.00	1.00	1.00
TOTAL DEPARTMENT PERSONNEL	40.00	40.00	40.00	44.00	46.00

APPROVED NEW POSITIONS

TEAM LEAD

- Manage and perform quality control oversight for the cleaning and sanitation of multiple facilities
- Assist with the development of work orders and project request for facility maintenance
- Perform quality control review of vendors payments and ensure payments are executed

HVAC TECHNICIAN II

- Diagnose, repair, and perform preventative maintenance of facilities HVAC equipment
- Analyze equipment trend data to ensure it is performing at optimal conditions
- Train users on proper use of equipment, maintenance schedule, and operating manual



KEY PERFORMANCE MEASURES

1. Perform preventive and predictive maintenance on essential equipment to maintain equipment readiness of at least 80% at all remote pump stations
2. Inspect, evaluate and repair 50 pressure reducing valves quarterly to confirm consistent operation
3. Collect water samples monthly from all remote portable water tank sites throughout our service area in coordination with the EnviroLab
4. Assess, coordinate, and complete grounds maintenance monthly for all remote pump stations and tank sites
5. Assign and distribute all SAP plant maintenance requests within 24 – 48 hours of receipt
6. Resolve at least 80% of work orders received annually



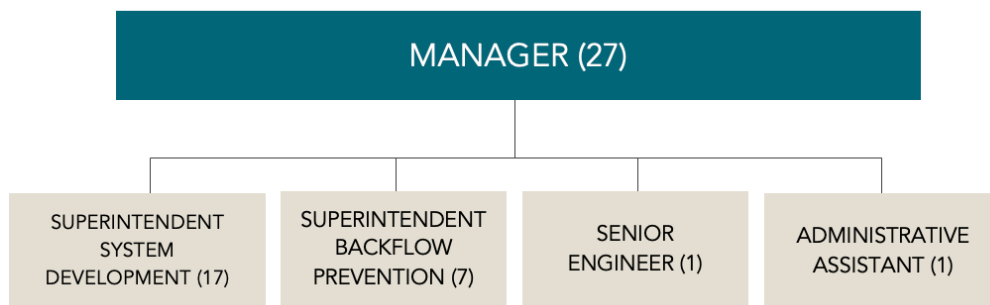
BIRMINGHAM WATER WORKS CUSTOMERS CAN BE CONFIDENT THAT THEIR DRINKING WATER IS HIGH QUALITY AND MEETS OR SURPASSES THE STRICT STANDARDS SET BY THE ENVIRONMENTAL PROTECTION AGENCY (EPA) AND THE ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM).

SYSTEM DEVELOPMENT

System Development determines the Distribution System’s capacity to provide water service for individual customers and residential/commercial developments throughout the BWW’s service area.

The department prioritizes, designs, and manages main replacements, relocation and reinforcement projects for the Buried Infrastructure Program funded by the BWW’s Capital Budget. The department prepares and implements contractual agreements relative to plans and specifications in conjunction with developers, governing bodies and the BWW’s Capital Improvement Program for the installation, replacement, reinforcement and relocation of water mains and related appurtenances in the Distribution System.

The department administers the BWW’s Backflow Prevention and Cross Connection Control Policy through field inspections, customer correspondence and compliance recordkeeping.



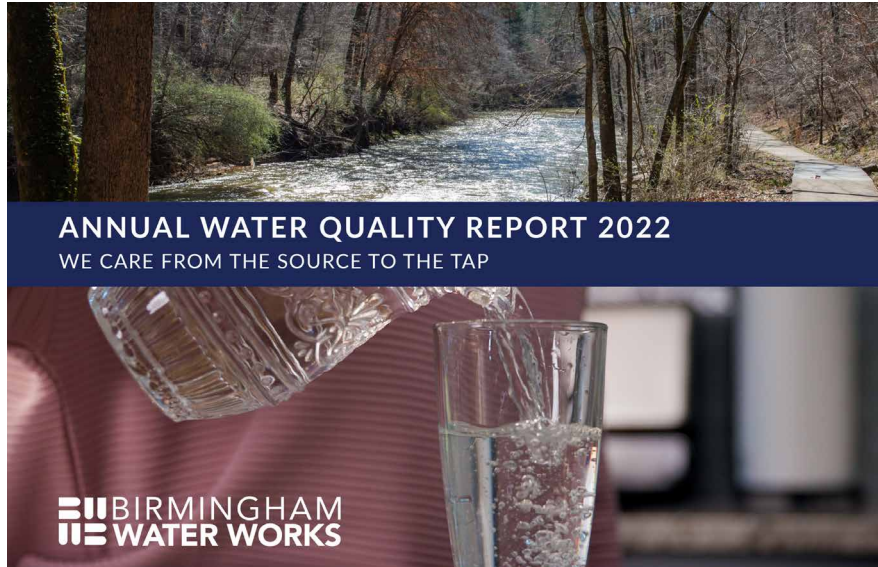
SYSTEM DEVELOPMENT MISSION

To administer the development of the BWW’s Distribution System to ensure that superior water quality is delivered to customers at a minimal cost.

SUMMARY OF ACTIVITIES

- Review and prepare water availability correspondence for individual customers and commercial/residential developers
- Determine the Distribution Systems’ capacity to provide water to individual customers and residential/commercial developers
- Review, approve and issue all new water service connections (domestic, fire and irrigation) to the BWW’s distribution mains
- Prepare contractual agreements for the installation of water mains and related appurtenances, 4-inch and larger domestic and fire service connections and fire hydrants
- Prioritize water main replacement projects based upon criteria consisting of excessive maintenance, water quality and/or fire protection due to aging infrastructure
- Design water main relocation projects based upon conflicts with state and local governing bodies performing roadway improvements
- Develop construction drawings and specifications for water main replacement and reinforcement projects
- Review and approve construction drawings and develop specifications for new main installations (residential and commercial developments), reinforcement and relocation projects
- Prepare bid packages, hold pre-bid conferences, evaluate bids, and recommend bid award to the lowest responsive and responsible bidder
- Approve and coordinate the installation of all new fire hydrants
- Maintain records on all public fire hydrants and fire service connections

- Complete estimates of cost for installations and adjust contractual agreements upon completion of installations
- Coordinate all water main installations with other departments and obtain approval from governing bodies
- Administer the Backflow Prevention and Cross Connection Control Policy requirements by performing field inspections on commercial and residential connections and maintaining compliance records and reports
- Inspect the installation of new water mains, valves and fire hydrants on bid reinforcement projects and new development installation projects



www.bwwb.org/water/AWQR

AS PART OF EPA'S RULES, WE PRODUCE AN ANNUAL WATER QUALITY REPORT, WHICH IS ALSO KNOWN AS A CONSUMER CONFIDENCE REPORT. OUR REPORT DETAILS AND OUTLINES THE TESTING WE DO FOR DRINKING WATER CONTAMINANTS AND THEIR LEVELS IN BIRMINGHAM WATER WORKS' DRINKING WATER.



SYSTEM DEVELOPMENT DEPARTMENT O&M EXPENDITURES BUDGET SUMMARY

COMMITMENT ITEM	2023 NET BUDGET	2022 NET BUDGET	\$ VARIANCE	% VARIANCE
Labor	\$861,579.45	\$702,326.33	\$159,253.12	22.68%
Transportation Expense	26,500.00	23,200.00	3,300.00	14.22%
General Inventory Consumption	4,680.00	5,680.00	(1,000.00)	(17.61%)
Facilities Other	1,500.00	5,600.00	(4,100.00)	(73.21%)
Uniforms - Non-Stock	4,900.00	4,145.00	755.00	18.21%
Utilities-Telephone	-	1,000.00	(1,000.00)	(100.00%)
Supplies & Expenses	16,406.08	20,666.21	(4,260.13)	(20.61%)
Fuel	45,000.00	30,400.00	14,600.00	48.03%
Misc Gen Exp Membership Dues	2,674.02	3,216.58	(542.56)	(16.87%)
Travel Misc Other	\$13,374.43	\$9,430.14	\$3,944.29	41.83%
Consultants	5,870.93	5,870.87	-	-
Employee Recognition	\$1,000.00	-	\$1,000.00	100.00%
Other O&M Expenses	1,956.01	4,627.67	(2,671.66)	(57.73%)
Total Operation & Maintenance	\$985,440.92	\$816,162.80	\$169,278.06	20.74%

HIGHLIGHTS OF BUDGET CHANGES

The 2023 Approved Budget increased by \$169,278 or 20.74% from the 2022 Approved Budget.

The major reason for the variance is:

- Merit and cost of living adjustment increases
- Deleted one part-time position and added one full time position



SYSTEM DEVELOPMENT DEPARTMENT PERSONNEL SUMMARY

Job Title	2019	2020	2021	2022	2023
Manager - System Development	1.00	1.00	1.00	1.00	1.00
Superintendent - Backflow Enforcement	1.00	1.00	1.00	1.00	1.00
Superintendent - Project Coordinators	1.00	1.00	1.00	1.00	1.00
Engineer II	0.00	1.00	1.00	1.00	1.00
Senior Engineer	1.00	1.00	1.00	1.00	1.00
Senior Project Coordinator	1.00	1.00	1.00	1.00	1.00
Project Coordinator	3.00	3.00	3.00	5.73	5.00
Field Investigator	2.00	2.00	2.00	1.00	1.00
Backflow Inspector	2.00	2.00	2.00	3.00	4.00
Backflow Specialist	1.00	1.00	1.00	1.00	1.00
Administrative Assistant II	1.00	1.00	1.00	1.00	1.00
System Development Specialist III	1.00	1.00	1.00	1.00	1.00
System Development Specialist II	1.00	1.00	1.00	1.00	1.00
Construction Inspectors	0.00	6.00	6.00	7.00	7.00
TOTAL DEPARTMENT PERSONNEL	16.00	23.00	23.00	26.73	27.00

APPROVED NEW POSITION

BACKFLOW INSPECTOR

- Conduct inspections of commercial, industrial, and residential sites
- Review all preliminary plans, design drawings and mechanical specifications relative to proposed commercial fire and domestic service connections.
- Assist Project Coordinator with large services
- Maintain compliance with local, State and Federal laws pertaining to Backflow Prevention to ensure public health and safety



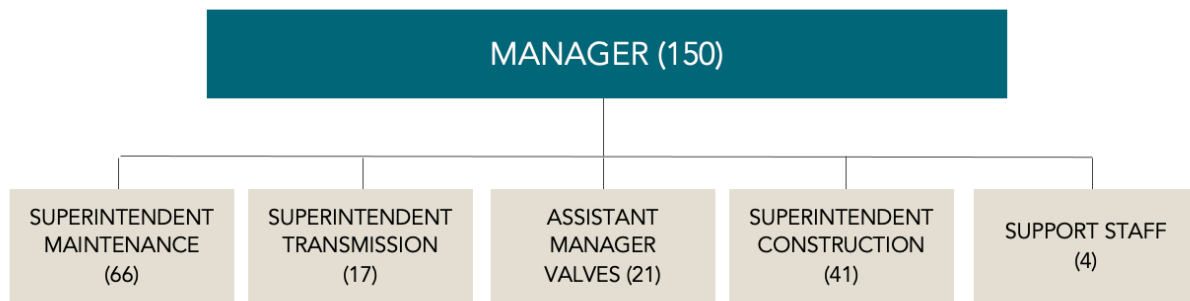
KEY PERFORMANCE MEASURES

1. Collaborate with the Distribution Department to successfully complete at least 64% of the yearly water main, service line and valve replacements capital projects on budget and within the designated project timeline
2. Prepare and distribute 100% of the Backflow Program Notification letters annually to BW&B customers to maintain certified backflow testing documentation for 100% compliance with state laws and regulations
3. Distribute information to formalize acceptance of the assessment / project / service order and perform project closure within 60 business days of actual completion of the work
4. Receive and respond to customer complaints within three business days with no more than 10% of complaints escalated to management
5. Implement at least 80% of System Development's projects in accordance with the Capital Budget requested and authorized by the Board of Directors
6. Complete at least 90% of the construction worksheets for any updates or changes to the distribution system and submit to the Mapping and Records Department within 30 business days

DISTRIBUTION

The Distribution Department is responsible for overseeing the maintenance and construction of BWW's infrastructure to include scheduling the repair and replacement of pipelines, fire hydrants, valves, and other BWW distribution assets. The department ensures that regulatory requirements and standards are consistent with operational improvements.

The Distribution Department assists with and oversees the construction for implementation of the Capital Improvement Plan (CIP).



DISTRIBUTION MISSION

To ensure our customers receive the highest quality water possible by effectively and efficiently replacing, installing, and repairing the system's pipes, valves and hydrants while minimizing downtime.

SUMMARY OF ACTIVITIES

- Install new water lines and replace older infrastructure
- Make large taps (4 to 36 inches)
- Install fire, domestic, and irrigation vaults with meter settings
- Install water mains, service lines, meter settings, fire hydrants and valves for reinforcement projects
- Collect water samples for EnviroLab testing as a prerequisite for turning on new water mains
- Complete drawings for the new installation of reinforcement jobs
- Repair and replace fire hydrants
- Install loops in the water mains when there is a conflict with other utility lines
- Maintain transmission lines
- Maintain the right-of-way easements
- Build and maintain roads and access points
- Repair water main leaks



DISTRIBUTION DEPARTMENT O&M EXPENDITURES BUDGET SUMMARY

COMMITMENT ITEM	2023 NET BUDGET	2022 NET BUDGET	\$ VARIANCE	% VARIANCE
Labor	\$8,108,209.96	\$7,690,838.11	\$417,371.85	5.43%
Cafeteria Expense	14,179.20	16,583.95	(2,404.75)	(14.50%)
Service Line	403,000.00	320,900.00	82,100.00	25.58%
Transportation Expense	1,047,000.00	1,067,000.00	(20,000.00)	(1.87%)
Meters	150,000.00	125,200.00	24,800.00	19.81%
Valves	11,500.00	12,000.00	(500.00)	(4.17%)
General Inventory Consumption	649,500.00	685,000.00	(35,500.00)	(5.18%)
Materials Distribution Mains TD	330,000.00	270,000.00	60,000.00	22.22%
Materials Transmission Mains TD	30,500.00	36,000.00	(5,500.00)	(15.28%)
Contractor Charges Distribution Mains	1,300,000.00	1,300,000.00	-	-
Contractor Charges Services	2,450,000.00	2,375,000.00	75,000.00	3.16%
Paving Meter Installation	5,000.00	5,000.00	-	-
Paving Distribution Mains	900,000.00	950,000.00	(50,000.00)	(5.26%)
Paving Services	275,000.00	301,500.00	(26,500.00)	(8.79%)
Contractor Charges Meter	24,000.00	13,000.00	11,000.00	84.62%
Facilities Other	146,500.00	153,500.00	(7,000.00)	(4.56%)
Distributions Mains	16,500.00	17,450.00	(950.00)	(5.44%)
Supplies Expenses Purification	6,700.00	9,200.00	(2,500.00)	(27.17%)
Utilities - Electric	75,000.00	79,000.00	(4,000.00)	(5.06%)
Uniforms - Non-Stock	55,500.00	64,600.00	(9,100.00)	(14.09%)
Utilities - Gas & Water	43,000.00	49,500.00	(6,500.00)	(13.13%)
Fuel	526,000.00	426,500.00	99,500.00	23.33%
Miscellaneous Property	71,516.65	100,333.74	(28,817.09)	(28.72%)
Structural Expenses	5,841.50	9,962.40	(4,120.90)	(41.36%)
Uniforms	17,700.00	14,700.00	3,000.00	20.41%
Travel Misc Other	8,439.76	7,299.82	1,139.94	15.62%
Consultants	26,350.24	26,350.08	-	-
Other O&M Expenses	10,788.48	13,154.43	(2,365.95)	(17.99%)
Employee Recognition	5,680.00	-	5,680.00	100.00%
Total Operation & Maintenance	\$16,713,405.79	\$16,139,572.53	\$573,833.10	3.56%

HIGHLIGHTS OF BUDGET CHANGES

The 2023 Approved Budget increased by \$573,833 or 3.56% from the 2022 Approved Budget.

The major reasons for the variance are:

- Merit and cost of living adjustment increases
- Contractor charges Distribution Mains increased based on trends
- Service Line charges increased based on trends
- Fuel expenses increased due to inflation
- Deleted multiple part-time positions

WATER IS TRANSPORTED TO HOUSES AND BUSINESSES. THE BIRMINGHAM WATER WORKS DELIVERS, ON AVERAGE, 100 MILLION GALLONS OF WATER PER DAY.





DISTRIBUTION DEPARTMENT PERSONNEL SUMMARY

Job Title	2019	2020	2021	2022	2023
Manager - Distribution	1.00	1.00	1.00	1.00	1.00
Assistant Manager-Distribution	1.00	1.00	1.00	1.00	1.00
Superintendent of Construction	0.00	1.00	1.00	1.00	1.00
Superintendent of Maintenance	1.00	1.00	1.00	1.00	1.00
Superintendent of Transmission	1.00	1.00	1.00	1.00	1.00
Assistant Superintendent Maintenance	1.00	1.00	1.00	1.00	1.00
District Supervisor	14.00	13.00	13.00	13.00	13.00
Field Supervisor	7.00	6.00	6.00	6.00	6.00
Inspector - Construction	6.00	0.00	0.00	0.00	0.00
Leak Utility Worker I	22.00	22.00	22.00	22.00	22.00
Leak Utility Worker II	18.00	17.00	17.00	17.00	17.00
Raw Water Mechanic/Welder	1.00	1.00	1.00	1.00	1.00
Raw Water Technician	4.00	4.00	4.00	4.00	4.00
Senior Utility Worker II	1.00	1.00	1.00	1.00	1.00
Utility Worker I	21.00	21.00	21.00	25.00	25.00
Utility Worker II	9.00	10.00	10.00	13.65	10.00
Dump Truck Utility Worker I	6.00	6.00	6.00	6.00	6.00
Distribution Maintenance Worker II	10.00	10.00	10.00	10.00	10.00
Distribution Maintenance Worker	17.00	18.00	18.00	25.00	25.00
Distribution Maintenance Worker Trainee	5.00	5.00	5.00	0.00	0.00
Administrative Assistant III	1.00	1.00	1.00	1.00	1.00
Distribution Specialist Team Leader	1.00	1.00	1.00	0.73	0.00
Distribution Specialist I	3.80	0.80	0.80	0.00	0.00
Distribution Specialist II	0.00	3.00	3.00	3.00	3.00
TOTAL DEPARTMENT PERSONNEL	151.80	145.80	145.80	154.38	150.00



KEY PERFORMANCE MEASURES

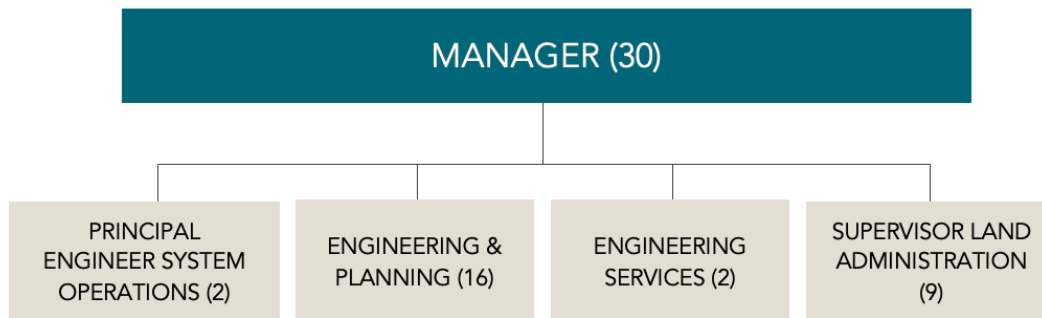
1. Inspect 15% of fire hydrants annually through maintenance, repair, and replacement
2. Restore service to 100% of reported fire hydrants for maintenance within three days after notification
3. Evaluate and exercise 100 valves monthly to confirm consistent operations
4. Repair at least 95% of the reported water main breaks within 30 days
5. Assign and dispatch personnel within 48 hours to at least 90% of leak notifications and reported main breaks to evaluate and schedule repairs
6. Resolve 100% of Level 1 (main break or no water) leak orders within five business days
7. Resolve at least 80% of Level 2 (water leak, no property damage) leak orders within 14 business days and 100% within 30 business days from the initial complaint/report
8. Collaborate with System Development Project Coordinators to successfully complete at least 64% of the yearly capital projects within budget and within the designated project timeline
9. Complete at least 90% of the construction worksheets for any updates or changes to the distribution system and submit to the Mapping and Records Department within 30 business days
10. Maintain raw water transmission lines, pipelines, right of ways and underground facilities within 30 business days from initial complaint/report of leaks, irregularities, or encroachments
11. Confirm the construction materials used for capital projects within 90 business days

ENGINEERING

The Engineering Department designs and oversees new Capital Improvement Plan (CIP) infrastructure projects, manages, and approves designs from external consultants and oversees the design and construction of our Capital Maintenance Repair and Replacement projects. The Engineering Department is responsible for addressing drinking water regulatory issues in the system to attain reliable, high quality and great tasting water.

The department is responsible for land administration and land surveying services which include monitoring all activities on BWW property, developing, coordinating, and surveying property maintenance projects, and acting as a liaison to the Board on all property issues.

The department is responsible for environmental services and watershed protection through source water monitoring, watershed construction activities, plant residuals disposal and excavated spoil management.



ENGINEERING MISSION

To provide professional engineering and management services in the planning, design, construction, and maintenance of the BWW infrastructure, water quality initiatives, environmental services, and land administration necessary to provide safe, reliable, high quality and great tasting water to our customers.

SUMMARY OF ACTIVITIES

- Design, bid, and manage construction for maintenance, repair, and replacement projects
- Manage the Capital Improvement Plan (CIP)
- Investigate and resolve water pressure complaints
- Research alternative water quality treatment options
- Oversee asset management and reliability planning
- Manage the BWW Watershed Protection Policy
- Provide land administration surveying and management services for BWW property
- Manage environmental services necessary for residuals and spoil handling
- Operate a Mobile Pilot Plant that tests water process treatment alternatives



ENGINEERING DEPARTMENT O&M EXPENDITURES BUDGET SUMMARY

COMMITMENT ITEM	2023 NET BUDGET	2022 NET BUDGET	\$ VARIANCE	% VARIANCE
Labor	\$880,928.36	\$1,070,031.46	(\$189,103.10)	(17.67%)
Transportation Expense	23,000.00	23,900.00	(900.00)	(3.77%)
Facilities Other	1,200.00	8,000.00	(6,800.00)	(85.00%)
Other Office Materials	6,001.72	8,113.29	(2,111.57)	(26.03%)
Material Structures/Tanks	40,000.00	45,000.00	(5,000.00)	(11.11%)
Supplies Expense	10,000.00	15,000.00	(5,000.00)	(33.33%)
Material Equipment Purchase	65,000.00	50,000.00	15,000.00	30.00%
Landfill - Midfield	10,000.00	10,000.00	-	-
Landfill - Sicard Hollow Road	10,000.00	10,000.00	-	-
Spoil Stockpile - Putnam	20,000.00	20,000.00	-	-
Spoil Stockpile - Sicard Hollow	15,000.00	15,000.00	-	-
Fuel	22,500.00	16,800.00	5,700.00	33.93%
Misc Gen Exp Membership Dues	8,141.61	8,962.66	(821.05)	(9.16%)
Supplies Expenses SoS Ops	65,000.00	60,800.00	4,200.00	6.91%
Travel Misc Other	46,172.60	55,648.96	(9,476.36)	(17.03%)
Consultants	55,890.49	55,890.49	-	-
Employee Recognition	1,200.00	-	1,200.00	100.00%
Other O&M Expenses	12,868.77	13,983.39	(1,114.62)	(7.97%)
Total Operation & Maintenance	\$1,292,903.55	\$1,487,130.25	(\$194,226.70)	(13.06%)

HIGHLIGHTS OF BUDGET CHANGES

The 2023 Approved Budget decreased by \$194,227 or 13.06% from the 2022 Approved Budget.

The major reason for the variance is:

- Vacant positions were partially funded for the year

ENGINEERING DEPARTMENT
PERSONNEL SUMMARY

Job Title	2019	2020	2021	2022	2023
Chief Engineer	1.00	1.00	1.00	1.00	1.00
Engineer - Principal	5.00	5.00	5.00	5.00	5.00
Engineer - Senior	4.00	4.00	4.00	4.00	4.00
Engineer II	1.00	1.00	1.00	1.00	1.00
Engineer	4.00	4.00	4.00	4.00	4.00
Engineering Technician	1.00	1.00	1.00	1.00	1.00
Land Surveyor	1.00	1.00	1.00	1.00	1.00
Land Surveyor Technician	2.00	2.00	2.00	2.00	2.00
Maintenance Planner	2.00	2.00	2.00	0.00	0.00
Nace Paint % Coating Inspector	1.00	1.00	1.00	1.00	1.00
Coordinator - Project - Senior	1.00	1.00	1.00	1.00	1.00
Project Coordinator	2.00	2.00	2.00	2.00	2.00
Property Maintenance Worker I	1.00	1.00	1.00	1.00	1.00
Property Maintenance Worker II	1.00	1.00	1.00	1.00	1.00
Supervisor - Land Administration	1.00	1.00	1.00	1.00	1.00
Watershed Protection Specialist	1.00	1.00	1.00	1.00	1.00
Watershed - QCI	0.00	0.00	0.00	1.00	1.00
Administrative Assistant I	1.00	1.00	1.00	1.00	1.00
Administrative Assistant II	1.00	1.00	1.00	1.00	1.00
Total Department Personnel	31.00	31.00	31.00	30.00	30.00



BWW'S MOBILE PILOT PLANT TESTS WATER PROCESS TREATMENT ALTERNATIVES.

KEY PERFORMANCE MEASURES

1. Collaborate with other departments to successfully complete at least 64% of the yearly capital projects within budget and within the designated project timeline
2. Finalize all the engineering planning and design for assigned projects within 60 to 90 business days, according to applicable industry specifications and standards
3. Contract, certify and manage 100% of all Engineering Department projects that are overseen by consulting engineers
4. Conduct yearly water quality research and development throughout the utility system to ensure compliance with all national and state requirements
5. Identify and analyze all water pressure issues and complaints within 2 business days
6. Resolve at least 80% of water pressure issues and complaints within 5 to 7 business days
7. Survey and manage 100% of BWW facilities, properties, and contractual assets yearly to ensure 100% compliance with all local, state, and federal requirements
8. Complete at least 90% of the construction worksheets for any updates or changes to the distribution system and submit to the Mapping and Records Department within 30 business days

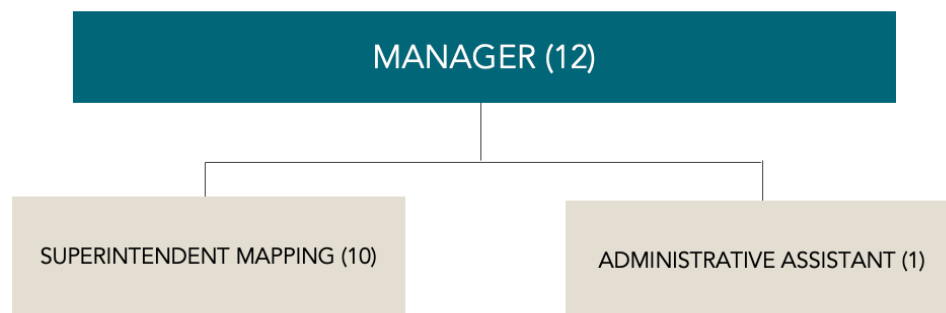
MAPPING & RECORDS

The Mapping & Records Department is responsible for providing accurate visuals that depict the components of the BWW's system and meeting internal and external customer needs as well as promoting excellent record-keeping standards. The department is comprised of the Drafting Team, the Geographic Information System (GIS) Team and the Records Retention Team.

The Drafting Team maintains and updates all BWW's detail pages, valve maps, line maps, valve cards, worksheets, construction drawings, design drawings, graphic renderings, "as-built" drawings and other special projects.

The GIS Team updates and maintains the company's GIS database and produces various types of special project maps. The team is in the process of coordinating a companywide GPS collection project to capture all valves and fire hydrants.

The Records Retention Team assists each department with requests to purge files for record disposal in compliance with the State of Alabama Department of Archives and History (ADAH) rules and regulation.



MAPPING & RECORDS MISSION

To provide accurate visuals that depict the components of the BWW system and meet internal and external customer needs.

SUMMARY OF ACTIVITIES

- Maintain and update worksheets, construction drawings, electrical and contract drawings
- Update and maintain GIS database
- Track water leak notifications and work orders
- Produce special project maps
- Assist departments with retention questions and provide recommendations for purging records
- Fulfill printing needs for the company
- Update map corrections
- Maintain leak data
- Create and maintain permanent records storage
- Program, troubleshoot and download the GPS units
- Deploy an SAP/GIS web interface for the purpose of tracking water leak notifications and work orders



MAPPING & RECORDS DEPARTMENT O&M EXPENDITURES BUDGET SUMMARY

COMMITMENT ITEM	2023 NET BUDGET	2022 NET BUDGET	\$ VARIANCE	% VARIANCE
Labor	\$244,626.37	\$233,841.90	\$10,784.47	4.61%
Cafeteria Expense	688.96	688.96	-	-
Uniforms	100.00	100.00	-	-
Maps and Records Materials	9,066.33	7,995.00	1,071.33	13.40%
Uniforms - Non-Stock	100.00	100.00	-	-
Utilities-Telephone	-	600.00	(600.00)	(100.00%)
Supplies & Expenses	10,088.40	10,000.05	88.35	0.88%
Misc Gen Exp Membership Dues	861.20	1,722.40	(861.20)	(50.00%)
Travel Misc Other	-	2,583.60	(2,583.60)	(100.00%)
Employee Recognition	480.00	-	480.00	100.00%
Consultants	3,316.01	3,315.96	-	-
Total Operation & Maintenance	\$269,327.27	\$260,947.87	\$8,379.35	3.21%

HIGHLIGHTS OF BUDGET CHANGES

The 2023 Approved Budget increased by \$8,379 or 3.21% from the 2022 Approved Budget.

The major reason for the variance is:

- Merit and cost of living adjustment increases



MAPPING & RECORDS DEPARTMENT PERSONNEL SUMMARY

Job Title	2019	2020	2021	2022	2023
Manager- Mapping Records	1.00	1.00	1.00	1.00	1.00
Mapping And Records - Superintendent	1.00	1.00	1.00	1.00	1.00
Drafter - Senior	3.00	3.00	3.00	2.00	2.00
Drafter	3.00	3.00	3.00	3.00	3.00
GIS Tech II	1.00	1.00	1.00	1.00	1.00
GIS Analyst	0.00	0.00	1.00	1.00	1.00
GIS Tech I	2.00	2.00	2.00	2.00	2.00
Administrative Assistant II	1.00	1.00	1.00	1.00	1.00
Total Department Personnel	12.00	12.00	13.00	12.00	12.00

KEY PERFORMANCE MEASURES

1. Process 85% of certified worksheets and other work requests to draft, design and modify maps for internal and external customer needs within 90 business days of receipt
2. Collect, organize, and maintain 100% of all permanent records received in accordance with the State of Alabama Department of Archives and History rules and regulations

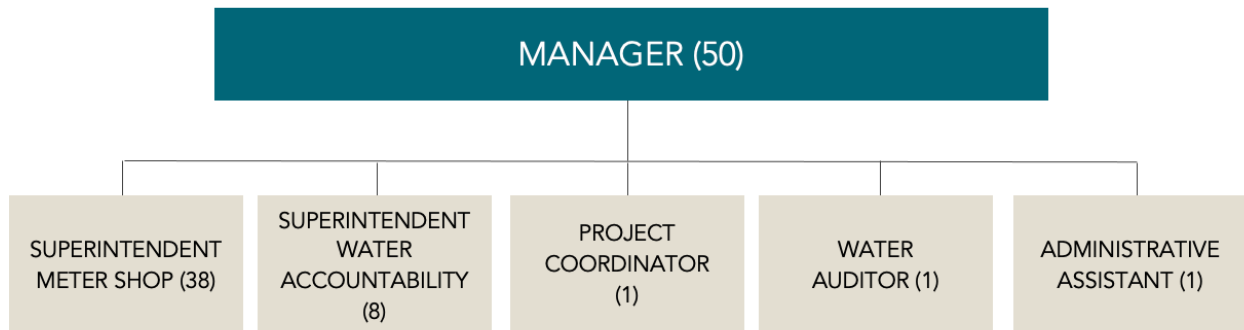
WATER ACCOUNTABILITY

The Water Accountability Department is comprised of the Meter Shop, the Leak Survey and the Water Accountability Administration teams.

The Meter Shop Team makes all new taps 2 inches and smaller, constructs all meter vaults 4 inches and larger, tests meters, maintains meter sets and meter boxes and replaces meters as part of the annual meter changeout program.

The Leak Survey Team surveys and detects leaks in water mains and service lines and assists the Distribution Department, as needed.

The Water Accountability Administration Team sets strategy and tactics to be used by the Meter Shop and the Leak Survey teams to help manage non-revenue water.



WATER ACCOUNTABILITY MISSION

To provide water service to our customers by responding in a timely manner to their needs, addressing potential problems in the system before they fail, and improving areas of operation that will benefit customers and help prepare BWW for future growth

SUMMARY OF ACTIVITIES

- Maintain, test and repair residential and commercial metering equipment and enclosures
- Perform annual leak survey of BWW distribution system that includes handheld leak detection equipment, leak noise correlators and leak noise logging systems
- Define areas of concern for potential upgrades and replacement
- Create new service taps and connections
- Maintain meter box/vault enclosures for protection of BWW assets and customer safety
- Bench and field test new and used customer meters for accuracy
- Repair/replace meter loops, meters, meter valves and other meter related piping as needed
- Assist the Distribution Department’s Leak Repair Crew by locating leaks that are difficult to pinpoint
- Provide monthly reports of leaks detected, leak volumes and leak locations
- Provide overall guidance and strategy for the monitoring and reporting of non-revenue water
- Gather data and perform testing in compliance with the AWWA approved methodology for the annual water audit
- Provide reports and data on non-revenue water



WATER ACCOUNTABILITY DEPARTMENT O&M EXPENDITURES BUDGET SUMMARY

COMMITMENT ITEM	2023 NET BUDGET	2022 NET BUDGET	\$ VARIANCE	% VARIANCE
Labor	\$1,984,746.35	\$1,862,238.25	\$122,508.10	6.58%
Mileage Reimbursement	-	861.20	(861.20)	100.00%
Transportation Expense	92,000.00	82,000.00	10,000.00	12.20%
Uniforms	4,500.00	4,500.00	-	-
General Inventory Consumption	91,400.00	106,400.00	(15,000.00)	(14.10%)
Facilities Other	95,000.00	113,000.00	(18,000.00)	(15.93%)
Oth Office Mat TD Op	6,472.12	2,472.12	4,000.00	161.80%
Utilities - Electric	14,400.00	14,400.00	-	-
Uniforms - Non-Stock	18,500.00	19,000.00	(500.00)	(2.63%)
Utilities-Telephone	-	350.00	(350.00)	(100.00%)
Supplies & Expenses	3,500.00	3,500.00	-	-
Fuel	188,000.00	152,500.00	35,500.00	23.28%
Miscellaneous Property	-	2,500.00	(2,500.00)	(100.00%)
Structural Expenses	2,000.00	1,000.00	1,000.00	100.00%
Misc Gen Exp Membership Dues	1,500.00	1,350.00	150.00	11.11%
Travel Misc Other	34,000.00	34,000.00	-	-
Employee Recognition	2,040.00	-	2,040.00	100.00%
Total Operation & Maintenance	\$2,538,058.47	\$2,400,071.57	\$137,986.90	5.75%

HIGHLIGHTS OF BUDGET CHANGES

The 2023 Approved Budget increased by \$137,987 or 5.75% from the 2022 Approved Budget.

The major reasons for the variance are:

- Merit and cost of living adjustment increases
- Fuel expenses increased due to inflation



WATER ACCOUNTABILITY DEPARTMENT PERSONNEL SUMMARY

Job Title	2019	2020	2021	2022	2023
Revenue Water Manager	1.00	1.00	1.00	1.00	1.00
Superintendent - Meter Shop	1.00	1.00	1.00	1.00	1.00
Superintendent, Water Accountability	1.00	1.00	1.00	1.00	1.00
Supervisor - Meter Shop	1.00	1.00	1.00	1.00	1.00
Water Auditor	1.00	1.00	1.00	1.00	1.00
Commercial Meter Maintenance Tech	2.00	2.00	2.00	2.00	2.00
Meter Repair Technician	2.00	2.00	2.00	2.00	2.00
Meter Setter - Helper	12.00	12.00	12.00	12.00	12.00
Meter Setter I	5.00	5.00	5.00	5.00	5.00
Meter Setter II	10.00	10.00	10.00	10.00	10.00
Project Coordinator	1.00	1.00	1.00	1.00	1.00
Representative III - Customer Account	3.00	3.00	3.00	3.00	3.00
Revenue Meter Inspector	2.00	2.00	2.00	2.00	2.00
Water Accountability Technician I	1.00	1.00	1.00	1.00	1.00
Water Accountability Technician II	6.00	6.00	6.00	6.00	6.00
Administrative Assistant III	1.00	1.00	1.00	1.00	1.00
Total Department Personnel	50.00	50.00	50.00	50.00	50.00

KEY PERFORMANCE MEASURES

1. Collaborate with other departments to successfully complete at least 64% of the yearly capital projects within budget and within the designated project timelines
2. Evaluate and resolve all service orders within 3 business days
3. Test new meters for accuracy of 98.5% or greater and replacement meters 90% or greater accuracy annually as established by the AWWA M6 Manual standards
4. Finalize all leak surveys for the distribution system every 30 months
5. Provide necessary or requested data to the Engineering Department to enable an AWWA methodology standard water audit on all water usage within BW&B's service area yearly by September 30
6. Complete at least 90% of the construction worksheets for any updates or changes to the distribution system and submit to the Mapping & Records Department within 30 business days



APPENDIX

IN THIS SECTION

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Comparison of Water Rates with Other Systems 185

Results of Operations 186

Major Industrial/Governmental Customers 186

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DESCRIPTION OF THE SYSTEM

Birmingham Water Works serves an area of approximately 700 square miles within the Birmingham-Hoover Metropolitan Area including portions of Jefferson, Shelby, Blount, St. Clair, and Walker Counties. Potable water service is provided to a population of approximately 655,000 with an additional population of approximately 115,000 served by consecutive systems that are fed with BWW-produced water.

The System presently has four separate sources of raw water as described below:

LAKE PURDY-CAHABA RIVER SYSTEM

Part of the BWW's original purchase from The Birmingham Water Works Company in July 1951, included the Lake Purdy-Cahaba River System which dates to the 1880s. The Cahaba River watershed in Jefferson, St. Clair and Shelby counties is east of Birmingham and drained by the Cahaba and Little Cahaba Rivers. With a drainage area of approximately 196 square miles, this watershed includes an impoundment in Lake Purdy, formed by a dam across the Little Cahaba River. The storage capacity of Lake Purdy is 5.6 billion gallons. The safe yield from the Lake Purdy-Cahaba River System is approximately 52 million gallons per day. The Lake Purdy-Cahaba River System is the primary source of supply to the Shades Mountain Filtration Plant.

SIPSEY SYSTEM

Operated under a permit from the U.S. Army Corps of Engineers, the Sipsey System consists of an intake pumping station immediately below the Alabama Power Company's L. M. Smith Dam on the Sipsey Fork of the Black Warrior River in Cullman County, 35 miles northwest of Birmingham, as well as a booster pumping station, a transmission pipeline, and terminal control reservoirs. The pipeline consists of approximately 44 miles of 60-inch, 48-inch and 42-inch steel and cast-iron supply lines. The Sipsey System has a firm yield of about 74 million gallons per day. At present, the intake pumping station can deliver the maximum quantity of water to the system's booster pumping station. The booster pumping station has a capacity of 90 million gallons per day. Water can be pumped from this station to the Western, Putnam and Carson Filtration Plants.

INLAND LAKE SYSTEM

This system consists of an impounding reservoir, a booster pumping station, chemical treatment facilities, a balancing reservoir, and a transmission pipeline. The impounding dam of earth and rock fill construction is 200 feet high and 1,060 feet long and creates a reservoir with a capacity of 20.5 billion gallons. The watershed above the dam is about 72 square miles in area. The dam is located approximately 27 miles northeast of Birmingham on the Blackburn Fork of the Black Warrior River in Blount County. The pipeline consists of approximately 44 miles of steel and cast-iron supply lines ranging in size from 16 to 60 inches in diameter. The Inland Lake reservoir has a safe yield of about 49 million gallons per day. The booster pumping station has a capacity of 88 million gallons per day. Water from Inland Lake is delivered to both Carson and Putnam Filtration Plants.

MULBERRY SYSTEM

With its source the Mulberry Fork of the Black Warrior River in Walker County, the intake pumping station is operated under a permit from the U.S. Army Corps of Engineers. Water is withdrawn at a maximum rate not to exceed 85 million gallons per day for a two-hour duration, with a maximum of 65 million gallons per day during a 24-hour period. Work was completed in 1995 to increase the pump station capacity to the fully permitted withdrawal rate. This work included the installation of pumps, motors, and other general improvements. Water from this supply is delivered through approximately 20 miles of welded steel pipe 72 inches in diameter. Surge tanks are installed at various points along the pipeline and four 5-million-gallon control reservoirs are located at the terminus at the Western Filtration Plant. The Mulberry System includes a booster pumping station with a 25-million-gallons-per-day capacity located in the vicinity of the control reservoirs. Water can be pumped via this station to the Western and Putnam Filtration Plants.

WATER FROM THE ABOVE SOURCES IS DELIVERED THROUGH LONG TRANSMISSION LINES TO THE FOUR FILTRATION PLANTS, WHICH ARE A PART OF THE SYSTEM. THE DIVERSE LOCATIONS OF THE SOURCES OF SUPPLY AID IN MAINTAINING WATER SERVICE IN THE EVENT OF A PARTIAL FAILURE AT ANY PLANT.



ADDITIONAL SOURCES

The BWW currently has a sufficient water supply and is projected to be able to meet its needs through at least the year 2032 barring any unforeseen circumstances. In 2007, the BWW prepared a Water Supply Needs Assessment, which examined future needs for water supply through the year 2075. In 2009, the BWW prepared a "Report on Plans for Improving Water Supply Reliability and Evaluation of Alternatives to Meet Future Water Demands," which examined alternatives for additional water supply and improving connectivity among its sources and filtration plants.

By adding additional supply from existing water resources in the Warrior River Basin at Holt Lake and making other improvements to its raw water delivery system, the BWW can meet the expected demands of the Birmingham-Hoover Metropolitan Area through the year 2075. While obtaining additional water supply from existing water resources will require additional capital improvements to transport water from Holt Lake to the filtration plants, this cost is lower than developing a new source of supply.

Between now and 2032, the BWW will work toward acquiring necessary property, permitting a new intake at Holt Lake, and other project development activities. The BWW believes that it will have sufficient supply to meet its needs through the year 2075 upon completion of the Holt Lake improvements.

ANNUAL RAINFALL

Established by records of the United States Weather Bureau, the average annual rainfall since 1900 has been approximately 55 inches. The lowest annual rainfall on record was 28.86 inches recorded in 2007. The absence of any major seasonal variations in rainfall in the Birmingham-Hoover Metropolitan Area usually ensures a dependable supply of surface water.

FILTRATION PLANTS

Four water filtration plants process and treat the raw water from the aforementioned sources of supply. The rated capacity and sources of supply of the filtration plants are as follows:

FILTRATION PLANT SOURCES AND CAPACITY

FILTRATION PLANT	RATED CAPACITY	SOURCE OF SUPPLY
Shades Mountain	80 MGD	Cahaba River - Lake Purdy
Putnam	24 MGD	Mulberry Fork, Smith Lake or Inland Lake
Western	60 MGD	Mulberry Fork or Smith Lake
Carson	25 MGD	Inland Lake, Smith Lake or Mulberry Fork

The present maximum capacity of the four filtration plants is 189 MGD. The four filtration plants feed into an integrated distribution system increasing the overall reliability of the system. (See "DESCRIPTION OF THE SYSTEM – Sources of Supply.")

PUMPING FACILITIES

Pumping facilities at each of the four filtration plants deliver water into the 13 major and 7 minor service areas of the distribution system. In addition to these pumping facilities, the system has 16 major pumping stations, pumping from 1 million to 28 million gallons per day. These major pumping stations deliver water from lower service areas to higher service areas. In addition to the above, there are several smaller booster pumping stations delivering water to isolated areas at higher elevations. These smaller stations range in pumping capacity from 20 to 400 gallons per minute.

TANKS AND STANDPIPES

Storage is provided in the distribution system by 51 elevated tanks or standpipes having a total capacity of 75.7 million gallons. The tanks, ranging in size from 100,000 gallons to 6.3 million gallons capacity, improve the flow and pressure throughout the distribution system. All but two of the tanks have been built or acquired by the BWW since it purchased the System from the Birmingham Water Works Company in 1951. In addition to the above distribution storage, the BWW has a total of 27 million gallons of filtered water storage capacity in clear wells at its various filtration plants. The BWW also has raw water storage of approximately 36 million gallons at its Shades Mountain Filtration Plant.

TRANSMISSION AND DISTRIBUTION LINES

The general topography of the Birmingham-Hoover Metropolitan Area, ranging in elevation from 300 to 1,200 feet above sea level, requires that the distribution system be separated into 13 major and 7 minor zones, and this requires long transmission and supply mains. These mains are interconnected with loops to form a completed arterial system, which supplies a grid system of smaller secondary mains particularly in congested areas. This distribution system is supplied with water pumped from the four filtration plants in such a way that maximum reliability of the System is afforded for all zones.

In the past several years, BWW's distribution system has been extended into outlying rural areas, particularly in the north and northeast in Blount and Walker counties, the south in Shelby County, and the east in St. Clair County. As a result, the service area has more than quadrupled in size since the BWW purchased the System in 1951.

ENVIRONMENTAL MATTERS

The BWW is subject to numerous governmental laws and regulations relating to water resources, water treatment, pollution control and other environmental matters. The BWW cannot predict whether additional legislation or regulations may be adopted and what the impact, if any, of any such future legislation or regulations might be. The BWW has residual removal systems in service at its Shades Mountain, Western and Putnam Filtration Plants. Dewatered residuals from these plants are transported to either of two BWW-operated landfills, with remaining useful lives ranging from 15 to 60 years.



WATER RATES

Water rates are fixed by resolution of the Board in compliance with the rate covenants in the Senior Indenture and the Subordinate Indenture. From the time the BWW acquired the System in 1951 until the System was acquired by the City in 1998, the BWW imposed rate increases from time to time. The annual rate increases since 2005 are as follows:

2005 (JANUARY)	7.3%
2006 (JUNE)	6.5%
2006	8.75%
2007	7.75%
2008	7.70%
2009	13.20%
2010	6.90%
2011	6.90%
2012	3.90%
2013	4.90%
2014	3.90%
2015	3.90%
2016	4.90%
2017	3.90%
2018	2.90%
2019	3.90%
2020	3.90%
2021	0.00%
2022	3.90%
2023	3.90%

The Board adopted the use of a Rate Stabilization and Equalization Model ("RSE") to determine necessary rate adjustments beginning in 2006. The RSE will calculate and automatically adjust the rates which, when implemented, will provide the appropriate levels of debt service coverage for the BWW's obligations.

**CURRENT WATER RATES ARE AS FOLLOWS (EFFECTIVE JANUARY 1, 2023):**

Typical Rates for Each 100 Cubic Feet of Water Delivered*

CURRENT WATER RATES**RESIDENTIAL AND IRRIGATION RATES**

For the first 300 cubic feet per month	\$2.73
For 400 to 1,500 cubic feet per month	\$4.52
Over 1,500 cubic feet per month	\$7.91

COMMERCIAL AND ALL OTHER WATER USERS RATES

Per cubic feet per month	\$4.32
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WHOLESALE RATES

Per cubic feet per month	\$3.55
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BASE CHARGE RATES

Monthly base charge - per month for 5/8" meter (in addition to the above)	\$25.92
Varied monthly base charges for other meter sizes	\$34.37 - \$2,012.12

FIRE SERVICE RATES

Fire Service Rental Rates (per year) (based on size)	\$346.80 - \$8,683.68
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MUNICIPAL FIRE HYDRANTS RATES

Fire Hydrants (per year through September 2023)	\$237.72
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These rates apply for approximately 90% of all revenues generated from water supply service.



COMPARISON OF WATER RATES WITH OTHER SYSTEMS

A comparison of the BWB's residential water charges based on average customer usage of 10 CCF (7,480 gallons) of water per month, 5/8-inch meter, with that of other regional surface water systems as of August 11, 2022 follows:

Charlottesville, Virginia	86.09
Montgomery, Alabama	70.87
New Orleans, Louisiana	70.31
Chapel Hill, North Carolina	65.84
Birmingham, Alabama	61.96
Richmond, Virginia	61.24
Austin, Texas	60.06
Norfolk, Virginia	58.7
Atlanta, Georgia	54.96
Asheville, North Carolina	53.88
San Antonio, Texas	49.57
Knoxville, Tennessee	47
Chattanooga, Tennessee	40.37
Louisville, Kentucky	39.53
Mobile, Alabama	39.44
Marietta, Georgia	38.69
Nashville, Tennessee	33.95
Charlotte, North Carolina	33.56



RESULTS OF OPERATIONS

The following table sets forth certain operational statistics for the System:

OPERATIONS STATISTICS YEAR ENDED DECEMBER 31

	2017	2018	2019	2020	2021
Number of customers	192,636	192,429	193,530	195,212	199,569
Miles of mains in service	4,025	4,052	4,060	4,095	4,114
Number of fire hydrants	13,688	12,805	13,894	13,032	12,268
Capacity of storage (in thousand gallons)	75,172	75,172	75,172	75,172	75,172
Water delivered to the distribution system (in billion gallons)	37.1	38.8	40.5	41.4	42.0
Single day, peak day demand (in million gallons)	115.6	125.3	138.5	131.1	134.9

MAJOR INDUSTRIAL/GOVERNMENTAL CUSTOMERS

The following table contains the 10 largest customers of the system during the periods indicated and the gross revenues derived from each of such customers. Total operating revenues for the year ending December 31, 2021 were \$195,158,964.

JEFFERSON COUNTY

CUSTOMER	REVENUE	% OF TOTAL OPERATING REVENUE
University of Alabama - Birmingham	4,111,310	2.11%
US Steel	2,966,372	1.52%
ERP Compliant Coke	1,580,498	0.81%
Birmingham Housing Authority	1,284,540	0.66%
ACIPCO	941,673	0.48%
Graysville Water Co	925,902	0.47%
Tenet Healthcare	836,430	0.43%
St. Vincent's Hospital	788,315	0.40%
Buffalo Rock Co	727,752	0.37%
Town of Mulga	604,491	0.31%
Grand Total	14,770,283	7.57%



GLOSSARY

Accrual Basis of Accounting – A basis of accounting under which increases and decreases in economic resources are recognized as soon as the underlying event or transaction occurs. Revenues are recognized when earned and expenses are recognized when incurred, regardless of the timing of related cash flows.

Amortization – The gradual elimination of a liability in regular payments over a specified time period.

Annual Budget – A plan covering a single fiscal year (January 1 - December 31) that details how BWW will generate income and prioritize spending based on priorities, goals and needs.

Backflow Prevention and Cross Connection Control Policy – Program mandated by the Alabama Department of Environmental Management (ADEM), the U.S. Environmental Protection Agency (EPA) Office of Water and the Federal Safe Drinking Water Act. The purpose of the policy is to protect BWW's potable water system against actual or potential cross connections, back pressure, and back siphonage.

Balanced Budget – The projected annual revenues and existing fund balances are sufficient to meet budgeted expenses.

Bond – A debt instrument/security used to fund capital projects or asset purchase with a written promise to pay a specific amount of money with interest within a specific period, usually long term.

Budget Process – The process by which the BWW prepares and adopts a financial plan for the next fiscal year (January 1 through December 31). The plan includes determining the appropriate rates, fees, and charges necessary to provide sufficient revenues to meet anticipated expenses for operating and maintenance, asset repair or replacement, asset acquisition or construction to meet the service needs of the customer base and debt service requirements for existing and projected debt.

Buried Infrastructure Program – The program is funded by the BWW's Capital Budget. It is focused on the replacement of 2-inch galvanized steel pipe and 2-inch unlined cast iron pipe that have exceeded their useful life in older communities in the BWW's service area. This improves water quality, service, and reliability to customers in the older communities and has been instrumental in the utility's water loss initiative to reduce leakage in the distribution system.

Business Sustainability and Capacity Building (BSCB) Program – Program created to increase the number of contractors and vendors required to meet the needs of the Operation & Maintenance and Capital Improvement Plan budgets by providing guidance on how to access capital and capacity to the many small local businesses including Historically Underutilized Businesses.

Capital Expenditure – Expenditures that result in the acquisition of or the addition of fixed assets.

Consumer Confidence Report (CCR Report) – The CCR is an annual report on the quality of water. The report details and outlines contaminants and their levels in drinking water. BWW is federally mandated to provide this report to customers and wholesalers.

Capital Improvement Plan (CIP) – Process by which BWW evaluates the operating condition of the organization's assets to identify the need for upgrades and improvements.

Capital Project – Planned process to construct, purchase, or install a new asset or improve an existing asset.

Capital Reserve Fund – Established for unexpected capital needs when shortfalls in anticipated capital funding occur.

Consecutive Water Systems – Other public water systems that receive some or all their finished water from BWW through direct connection to the BWW distribution system.



Debt Service Coverage – Generally expressed as a percentage of current-year debt service, generally in the range of 115 to 150 percent, and is a requirement included in the bond indentures associated with revenue bonds.

Debt Service Coverage Ratio – The margin of safety ratio associated with bond indebtedness reflecting the ratio of the actual or projected net revenue available for debt service to annual debt service payments.

Demand Shortfall Fund – Established for unexpected capital and operating needs when demand is significantly below projections due to climatic events.

Development Impact Fees – Charges established to recoup the cost of installing or extending water lines to service a certain defined group of properties, some of which may not currently be developed.

Economic Development Fund – Established to provide funding for capital projects that would enable the growth of the utility system.

Enterprise Fund – Fund used to account for operations that are financed and operated in a manner similar to private business enterprises.

EUM Framework – The framework which BW&B manages the utility to ensure that implemented strategies support effective utility management and ultimately result in mission accomplishment and vision fulfillment. The adoption of EUM has been essential in communicating a clear direction to all who are responsible for ensuring the success of the BW&B.

Historically Underutilized Business Program (HUB) – This is a program designed to encourage the participation of underserved firms. The program fosters competition and ensures non-discrimination in contract awards with a goal of at least 30% of goods and services sourced by BW&B from these marginalized vendors.

Mobile Pilot Plant – This is a mobile test lab that navigates between filter plants. The pilot plant is designed to evaluate differing raw water sources and distribution systems at each plant and functions as an alternative test process treatment.

Potable Water – Water that is free of contaminants and ready for consumption.

PAYGO (Pay As You Go) – It is the practice of financing expenditures with funds that are currently available rather than borrowed.

Project Drivers (Capital Budget) – Capital projects are classified/listed by priority. Each project is placed into one of the six categories; however, it is possible that a project could fall into multiple categories. When this occurs, effort is made to identify the most significant reason for the project.

Rate Stabilization Fund – Funds reserved for unexpected capital and operating needs if the BW&B faced events that severely challenge its financial position during the year.

Revenue Fund – Funds reserved to maintain 45 days of operating revenues.

Watershed Protection Policy – This policy establishes requirements for development in the Cahaba River/Lake Purdy Watershed to manage/control pollution and to protect the public water supply.



ACRONYMS

ADAH Alabama Dept. of Archives and History	HVAC Heating, Ventilation and Air Conditioning
ADEM Alabama Dept. of Environmental Management	IT Information Technology
ACH Automated Clearing House	KV Kilo Volts
A/R Accounts Receivable	LAN Local Area Network
AWPCA Alabama Water Pollution Control Association	LT2 Long Term Testing (Lab)
BBB Better Business Bureau	LIMS Laboratory Information Management System
BCIA Birmingham Construction Industry Authority	MDL Minimum Detection Limits
BPEM Business Process Exception Management	MGD Million Gallons per Day
BSBC Business Sustainability and Capacity Building	M&R Maintenance & Repair
BWW Birmingham Water Works Board	NIMS National Incident Management System
CADD Computer Aided Design and Drafting	NRW Non-Revenue Water
CCF Centum Cubic Feet	NST National Standard Thread
CCR Consumer Confidence Report	O&M Operation & Maintenance
CCTV Closed Circuit Television	OPEB Other Post-Employment Benefits
CDC Centers for Disease Control	PAYGO Pay As You Go
CI Pipe Cast Iron Pipe	PFP Putnam Filter Plant
COLA Cost-of-Living Adjustment	PMO Project Management Office
CORE Control Operations Room & Emergency Recovery	PS Pump Station
CPI Consumer Price Index	PSA Public Service Announcement
CPR Clean Paint and Repair	QA Quality Assurance
CRM Customer Relationship Management (SAP)	QC Quality Control
DHS Department of Homeland Security	RL Reporting Limits
DSE Distribution System Evaluation	R&R Renewal and Replacement
E&M Electrical & Mechanical Department	RSE Rate Stabilization and Equalization Model
EMA Emergency Management Agency	SAP Systems, Applications and Products
EPA Environmental Protection Agency	SCADA Supervisory Control and Data Acquisition
ERP Enterprise Resource Planning	SMFP Shades Mountain Filter Plant
EUM Effective Utility Management	TAT Testing Turnaround Time
FI Financial Information System (SAP)	UAB University of Alabama at Birmingham
FTE Full Time Equivalent	VOC Volatile Organic Compounds
GAC Granular Activated Carbon	WAN Wide Area Network
GFOA Government Financial Officers Association	WFP Western Filter Plant
GIS Geographic Information System	WIFIA Water Infrastructure Finance and Innovation Act
GPS Global Positioning System	WQO Water Quality Operations
HR Human Resources	
HUB Historically Underutilized Business	

