A photograph of a water treatment facility. In the foreground, a long, narrow metal walkway with railings leads towards a series of large, circular, light-colored tanks. The tanks are filled with a light blue liquid. In the background, there are more tanks, some buildings, and a line of trees under a blue sky with scattered white clouds. The entire image is framed by a thin black border.

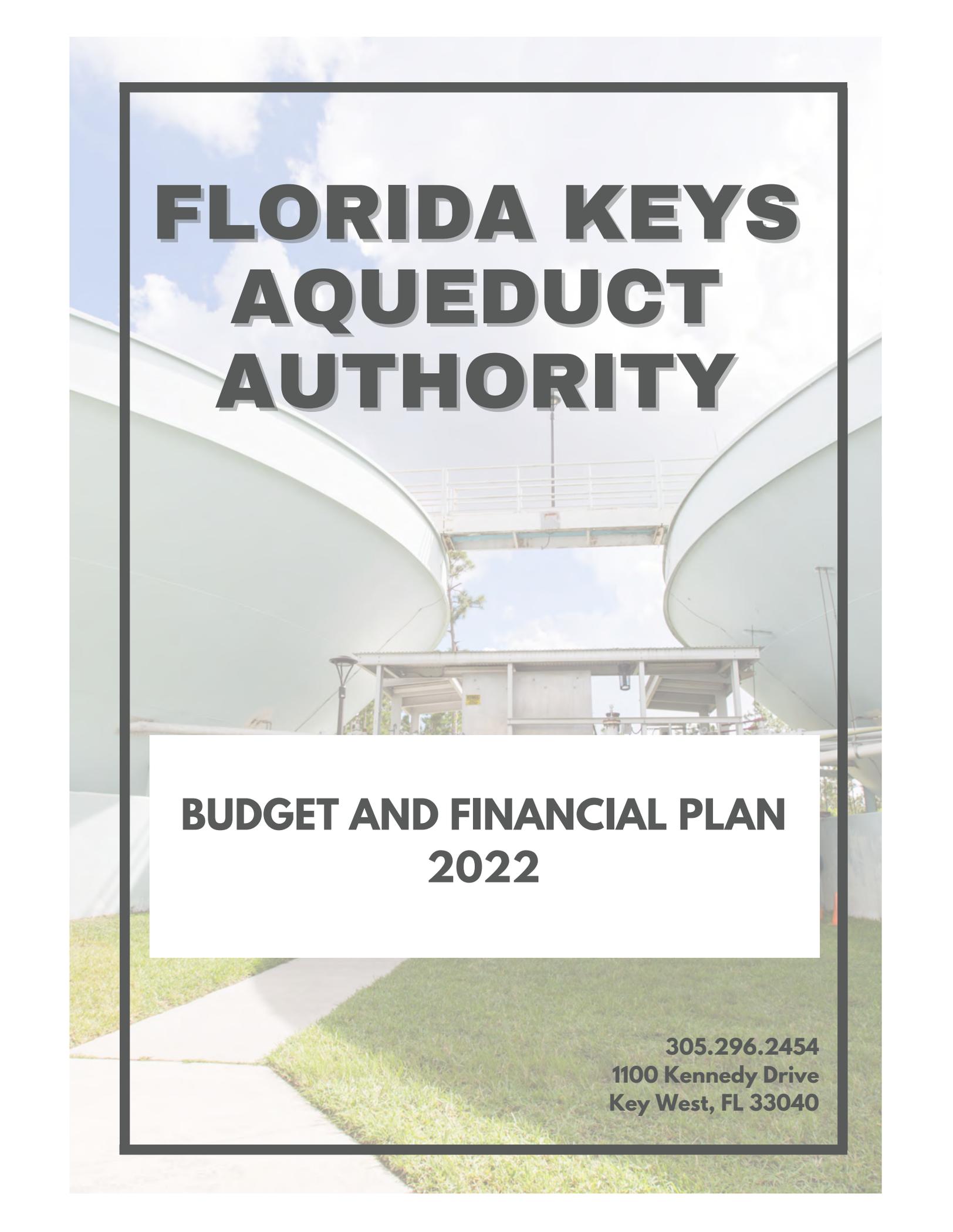
2022

FLORIDA KEYS AQUEDUCT AUTHORITY

**2022 BUDGET AND FINANCIAL
PLAN**

WWW.FKAA.COM

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A photograph of a water treatment facility. In the foreground, there is a concrete walkway and a grassy area. In the middle ground, there are several large, light-colored circular tanks. A metal walkway with railings spans across the tanks. The background shows a blue sky with white clouds.

FLORIDA KEYS AQUEDUCT AUTHORITY

BUDGET AND FINANCIAL PLAN 2022

**305.296.2454
1100 Kennedy Drive
Key West, FL 33040**

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FLORIDA KEYS AQUEDUCT AUTHORITY

2022 BOARD OF DIRECTORS

J. ROBERT DEAN CHAIRMAN

District 3- Current term expires December 31, 2024
Owner and Director, Dean-Lopez Funeral Home

RICHARD J. TOPPINO VICE CHAIRMAN

District 2- Current term expires December 31, 2022
Treasurer, Charley Toppino & Sons, Inc.
Vice President, Monroe Concrete Products, Inc.

ANTOINETTE M. APPELL SECRETARY/ TREASURER

District 4- Current term expires December 31, 2024
Highly Qualified Paraprofessional with the
Monroe County School District, Retired

NICHOLAS W. MULICK BOARD MEMBER

District 5- Current term expires December 31, 2024
Owner, The Law Offices of Nicholas W. Mulick

CARA HIGGINS BOARD MEMBER

District 1- Current term expires December 31, 2022
Owner, Cara Higgins Law

Message from the Executive Director

Kerry Shelby



On behalf of the Board of Directors and staff of the Florida Keys Aqueduct Authority, we are pleased to present our annual budget for the fiscal year ending September 30, 2022, as adopted by the Board of Directors on August 24, 2021, and the related five-year financial plan and capital financing plan.

The document is organized into five main sections. First is an introductory overview of the organization followed by a summary of our financial structure, policies and budget process. The next three sections provide financial summaries, the capital budget and debt and a detailed discussion of the operating budgets for each of our departments. This budget will remain in effect through September 30, 2022 and may only be amended through specific action of the Board. In accordance with our

enabling legislation, actual expenditures for the fiscal year may not exceed the final budgeted expenditures as amended.

Operating revenue is budgeted to increase slightly over the current year due to a 5.1% inflation index effective October 1, 2021. Water sales volumes are projected to increase 1% based on recent trends. Operating expenses are budgeted slightly higher than the current year due mainly to additional personnel costs, increased operating costs and replacement of aging equipment and vehicles. Capital projects are focused on projects that are critical to sustaining continued reliable operations. These projects will be funded through rates and reserves, including the remaining proceeds from the Series 2019A Water Revenue Bond issue and the Series 2021B Water Revenue Bonds. No reimbursement amounts are budgeted, however, due to uncertainty of timing or amount. The economy is recovering from the COVID-19 pandemic which is reflected in our increase in revenue.

Specific budget priorities and economic factors affecting the budget can be found in the introduction and overview section. Further information about the Authority can be found at our website, fkaa.com, or may be obtained by calling our contact center at (305) 296-2454.

We take pride in providing reliable water and wastewater services to the residents of and visitors to the Florida Keys in the most cost-effective manner while providing quality workmanship and customer service. This budget was developed to support that mission.

Respectfully submitted,

A handwritten signature in black ink, appearing to be 'Kerry G. Shelby'.

Kerry G. Shelby
Executive Director

August 24, 2021

VISION, MISSION, VALUES AND GUIDING PRINCIPLES

For fiscal year 2022



VISION

The Florida Keys Aqueduct Authority will be recognized nationally as a leader in the provision of safe, reliable water and wastewater services by seamlessly integrating advanced technology to enhance the customer experience and maximize efficiencies while leading as well in environmental awareness and resource protection.

MISSION

The Florida Keys Aqueduct Authority is a nationally renowned and community oriented publicly owned utility that provides reliable, safe and efficient water and wastewater services in a fiscally and environmentally responsible manner with a highly trained, professional, and dedicated team of employees.

VALUES

To achieve our mission, the Authority is committed to the following values:

- Customer satisfaction
- Excellent water quality
- Community involvement
- Strong working relationships with municipal, county, state and federal government agencies
- Employee development, communication and career growth
- Well maintained, reliable and secure systems
- Cost effective services
- Protection of environmental resources
- Financial stability

VISION, MISSION, VALUES AND GUIDING PRINCIPLES

For fiscal year 2022

GUIDING PRINCIPLES

In providing the highest quality water services to our customers, we embrace the following ten attributes of effectively managed water sector utilities as our guiding principles.

FINANCIAL VIABILITY

We understand the full life-cycle costs of the utility and maintain an effective balance between long-term debt, asset values, operations and maintenance expenditures, and operating revenues. We establish predictable rates that are equitable and consistent with community expectations and acceptability, adequate to recover costs, provide for reserves, maintain support from bond rating agencies, and plan and invest for future needs.

- Cost effective services
- Protection of environmental resources
- Financial stability

OPERATIONAL RESILIENCY

We ensure our leadership and staff work together to anticipate and avoid problems. We proactively identify, assess, establish tolerance levels for, and effectively manage a full range of business risks including legal, regulatory, financial, environmental, safety, security, and natural disaster related.

PRODUCT QUALITY

We produce safe, high quality potable water and treated wastewater effluent in full compliance with regulatory and reliability requirements and consistent with customer, public health, and ecological needs.

INFRASTRUCTURE STABILITY

We maintain and enhance the condition of all assets over the long-term at the lowest possible life-cycle cost and acceptable risk consistent with customer, community, and regulator-supported service levels, and consistent with anticipated growth and system reliability goals.

WATER SUPPLY AVAILABILITY

We ensure water availability through long-term water supply and demand analysis, conservation, agency interaction, and public education.

CUSTOMER SATISFACTION

We provide reliable, responsive, and affordable services in line with our customer expectations. We value their opinions and suggestions.

OPERATIONAL OPTIMIZATION

We ensure ongoing, timely, cost-effective, reliable, and sustainable performance improvements in all facets of our operation.

EMPLOYEE AND LEADERSHIP DEVELOPMENT

We recruit and retain a workforce team that is skilled, motivated, adaptive, and safe working. We encourage a participatory, collaborative organization culture dedicated to continual learning and improvement. We emphasize opportunities for professional and leadership development and strive to maintain an integrated and well-coordinated senior leadership team.

COMMUNITY SUSTAINABILITY

Manage operations, infrastructure, and investments to protect, restore, and enhance the natural environment. We efficiently use water and energy resources; promote economic vitality; and engender overall community involvement and improvement.

STAKEHOLDER UNDERSTANDING AND SUPPORT

We actively involve stakeholders in the decisions that will affect them. We garner understanding and support from community interests for service levels, rate structures, operating budgets, capital improvement programs and risk management decisions.

VISION, MISSION, VALUES AND GUIDING PRINCIPLES

For fiscal year 2022

STRATEGIC GOALS, INITIATIVES, AND IMPLEMENTATION STRATEGIES

Our strategic goals define what we seek to accomplish to fulfill FCAA's vision. They reflect the unique challenges that FCAA faces as provider of water services for the Florida Keys. These goals simultaneously address infrastructure needs, opportunities to enhance customer services, and responsibilities for stewardship of our environmental resources:

1. Develop a sustainable utility and related infrastructure
2. Proactive public outreach and superior customer service
3. Enhance employee communication and development
4. Financial optimization
5. Maximize energy efficiency
6. Optimize utility operations and treatment

Our approach to accomplishing these goals is framed by the institutional and legal position as a Special District of the State of Florida.

Other Planning Processes And Their Impact On The Budget

For fiscal year 2022

	TYPE OF PLANNING PROCESS	DESCRIPTION OF PROCESS	BUDGET IMPACTS
STRATEGIC PLANNING	Long range (3 to 10 years) with objectives established for budget year	Strategic goals, initiatives and implementation strategies are reviewed with the Board as part of the budget process and updated accordingly	Provides direction for allocation of resources to meet predetermined strategic goals and objectives
FINANCIAL FORECASTING	Five-year operating plan to facilitate financial planning	Finance staff works with all departments to determine key forecast assumptions to project major revenue sources and expenditures	Provides for budget stability, planning and direction for future resource allocation decision making
CAPITAL IMPROVEMENT MASTER PLAN	Long-range plan to renew and replace water and wastewater infrastructure	Staff evaluates capital needs on an annual basis and programs the plan through a systematic prioritization process	Provides for predictable funding level from year to year to allow adequate planning for debt service requirements and operating costs of new facilities and infrastructure improvements
INFORMATION TECHNOLOGY MASTER PLAN	Multi-year plan to replace certain software applications and computer equipment	Initiatives and technology gaps identified in the plan have been prioritized by year, based on needs assessment with adjustments made as necessary	Allows for the funding of software and equipment replacements, maintenance, helpdesk support and network infrastructure replacement annually at established levels.

The Florida Keys

The Florida Keys are a chain-like cluster of about 1,700 islands in the southeast United States. They begin at the southeastern tip of the Florida peninsula, about 15 miles south of Miami, and extend in a gentle arc south to southwest to Key West, the southernmost city in the contiguous United States. The islands lie along the Florida Straits, dividing the Atlantic Ocean to the east from the Gulf of Mexico to the west, and defining one edge of Florida Bay. At the nearest point, the southern tip of Key West is just 89 miles from Cuba. The total land area is approximately 137 square miles and the county-wide population is about 75,000. Much of the population is concentrated in a few areas of much higher density, such as the city of Key West, which has 32% of the entire population of the Keys.

Early History

The Keys were originally inhabited by the Tequesta Native Americans and were later found and charted by Juan Ponce de Leon. “Key” is corrupted from the Spanish cayo, meaning small island. For many years, Key West was the largest town in Florida, and it grew prosperous from sponging, cigar making and salvaging ships that wrecked on the nearby reef. The isolated outpost was well located for trade with Cuba and the Bahamas, and was on the main trade route from New Orleans. Improved navigation led to new trade routes and fewer shipwrecks, and spongers and cigar-makers moved to other parts of Florida, leaving Key West in decline by the Great Depression. The economy rebounded with an expanded Navy presence and increased tourism in the years that followed.

Profile of The Florida Keys (continued)

For fiscal year 2022

Overseas Railway

The Keys were once accessible only by water. This changed with the completion of Henry Flagler's Overseas Railway in the early 1900s. Flagler, a major developer of Florida's Atlantic coast, extended his Florida East Coast Railway down to Key West with an ambitious series of over-sea railroad trestles. The Labor Day hurricane of 1935 ended the 23-year run of the Overseas Railway. The damaged tracks were never rebuilt, and the Overseas Highway replaced the railroad as the main transportation route from Miami to Key West.

Seven Mile Bridge

One of the longest bridges in the country when it was built, the Seven Mile Bridge connects Knight's Key (part of the city of Marathon in the Middle Keys) to Little Duck Key in the Lower Keys. The water transmission line is housed inside this bridge and crosses 42 other bridges before ending in Key West.

Natural Environment and Geology

The Keys are in the subtropics between 24- and 25-degrees north latitude. The climate and environment are closer to that of the Caribbean than the rest of Florida, though unlike the Caribbean's volcanic islands, the Keys were built by plants and animals.

The Upper Keys islands are remnants of large coral reefs, which became fossilized and exposed as sea levels declined. The Lower Keys are composed of sandy-type accumulations of limestone grains produced by plants and marine organisms.

The natural habitats of the Keys are upland forests, inland wetlands and shoreline zones. Soil ranges from sand to marl to rich, decomposed leaf litter. In some places, "cap-rock" (the eroded surface of coral formations) covers the ground. Rain falling through leaf debris becomes acidic and dissolves holes in the limestone, where soil accumulates and trees root.

The climate is classified as tropical, and the Keys are the only frost-free place in Florida. There are two main seasons, hot, wet, and humid from about June through October, and somewhat drier and cooler weather from November through May. Many plants grow slowly or go dormant in the dry season. Some native trees are deciduous, and drop their leaves in the winter or with spring winds.

The Keys have distinctive plant and animal species, some found nowhere else in America, as the Keys define the northern extent of their ranges. The native flora of the Keys is diverse, including both temperate families, such as maple, pine and oak, growing at the southern end of their ranges, and tropical families, including mahogany, gumbo limbo, stoppers, Jamaican dogwood, and many others which grow only as far north as 25- or 26-degrees north latitude.

Profile Of The Florida Keys (continued)

For fiscal year 2022

The Keys are also home to unique animal species, including the Key deer, protected by the National Key Deer Refuge, and the American crocodile. The waters surrounding the Keys are part of a protected area known as the Florida Keys National Marine Sanctuary.

Local Economy and Demand Trends

The primary industries in the Authority's service area are related to tourism. Other industries include military operations and commercial fishing. Although the permanent population of Monroe County is estimated at approximately 74,000 residents, the average functional population, defined as the sum of the permanent population and the peak seasonal population is estimated by the Monroe County Growth Management Division to be approximately 150,000. Due to this difference in population, the demands on the water and wastewater systems are highly seasonal.



Demographic and Economic Information

For fiscal year 2022

**FLORIDA
KEYS**

**ESTIMATED
POPULATION**

**Resident
Year Population**

2020	74,228
2019	75,027
2018	73,940
2017	79,077
2016	76,047
2015	56,745
2014	74,044
2013	73,560
2012	72,897
2011	72,670
2010	73,090
2000	79,589

**PERCENTAGE
OF POPULATION BY AGE**

% Under 18
years of age
18.0%

% 65 years of
age and over
10.1%

DEMOGRAPHICS

Average household size	2.18
Median household income	\$ 70,033
Per capita personal income	\$ 101,262
Persons below the poverty level	9.90%
Total housing units	51617
Median single family home value	\$ 589,000
Median travel time to work (minutes)	18.4

Demographic and Economic Information (continued)

For fiscal year 2022

LOCAL UNEMPLOYMENT

2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
3.8%	1.8%	3.0%	3.2%	3.7%	3.6%	4.0%	5.4%	7.6%	7.9%	6.3%

ANNUAL RAINFALL FOR THE LAST 10 FISCAL YEARS

Fiscal Year	Key West International Airport
2020	48.00
2019	38.77
2018	39.80
2017	33.49
2016	40.80
2015	37.88
2014	33.94
2013	44.43
2012	60.58
2011	35.05

AVERAGE MONTHLY TEMPERATURES IN KEY WEST

	Average high	Average Low
October	85	76
November	80	72
December	76	67
January	74	64
February	76	66
March	78	68
April	81	72
May	85	76
June	88	79
July	89	80
August	89	80
September	88	79

Demographic and Economic Information (continued)

For fiscal year 2022

Water Availability and Sales

The Authority is permitted by the South Florida Water Management District (SFWMD) to withdraw its supply of water from the Biscayne Aquifer at the Authority's wellfield in Florida City. The Authority's water use permit was approved for a twenty-year term in 2008, allowing the Authority to withdraw an annual daily average of 17.79 million gallons per day (mgd) from the Biscayne Aquifer. The permit also allows for the Authority to withdraw up to 8 mgd from the brackish Floridan Aquifer for treatment through reverse osmosis. This withdrawal should support an additional 6 mgd of treated water supply.

Due to severe drought conditions that occur in South Florida from time to time, mandatory water use restrictions are now being imposed by the SFWMD. With permanent restrictions in place, reduced consumption level remained consistent and is considered the "new normal" for budgeting purposes. As the economy improved in recent years and the reopening of the economy from the COVID-19 pandemic, water use is trending upward slightly. Volume growth in the 2022 budget is estimated at 1% over previous budgets based on recent trends.

The U.S. Navy remains the Authority's largest water customer. The Navy's presence in the lower keys and Key West remains strong due in part to the large amount of unrestricted air space available for pilot training. Hotels, resorts and government make up most of the Authority's other top ten customers. Economic conditions have improved over previous years. Tourism and tourism-related development is strong, with occupancy rates high and water using increasing.

Workforce Issues

The Authority's linear geography requires the Authority to maintain staff in all areas to respond to operational and customer needs. This makes staff levels and staffing costs higher than in a centrally located system. Service personnel and customer service offices are located in three areas of the Keys in addition to the Authority's administrative headquarters in Key West (southern end of the system) and its water treatment plant in Florida City (northern end of the system).

Demographic and Economic Information (continued)

For fiscal year 2022

Workforce Issues (continued)

The cost of living in Monroe County is the highest in the state of Florida, mainly due to the cost of housing. This makes recruiting and retaining staff a challenge. This high cost of living has forced some employees to relocate. Therefore, overall compensation must be carefully considered each year in order to assure a sufficient workforce.

10 largest customers-year ended September 30, 2020

	2020	Total Gallons Consumed (000)	Total Water Revenues	% of Water Revenue
1	United States Navy	245,446	\$ 1,115,602	2.0%
2	City of Key West	52,978	614,379	1.1%
3	Monroe County School Board	43,917	507,431	0.9%
4	Ocean Reef Club	31,221	374,079	0.7%
5	NWCL LLC	28,410	350,053	0.6%
6	Monroe County Detention Center	27,155	343,559	0.6%
7	Keys Hotel Operator	26,441	335,482	0.6%
8	Resort Hotels of Key West	26,137	286,832	0.5%
9	Casa Marina Owner LLC	19,845	258,173	0.5%
10	NHC FL 13 LP	18,647	222,407	0.4%

10 largest customers-year ended September 30, 2011

	2011	Total Gallons Consumed (000)	Total Water Revenues	% of Water Revenue
1	United States Navy	286,988	\$ 1,025,057	2.8%
2	Monroe County	47,090	495,784	1.4%
3	Ocean Reef Club Inc.	30,272	265,841	0.7%
4	Board of Public Instruction	29,467	263,782	0.7%
5	Heartland Hotel	27,476	269,874	0.7%
6	Hawk's Cay Properties	27,420	246,444	0.7%
7	Cheeca Holdings LLC	25,958	256,142	0.7%
8	NHC FL 13 LP	24,472	258,151	0.7%
9	Angler's Club Inc.	21,061	192,689	0.5%
10	CHL Partnership	19,139	180,048	0.5%

SYSTEM OVERVIEW

**24 MGD LIME SOFTENING WATER
TREATMENT PLANT**

10 BISCAYNE AQUIFER SUPPLY WELLS

5 FLORIDAN AQUIFER SUPPLY WELLS

**6 MGD BRACKISH WATER REVERSE OSMOSIS
PLANT**

**2 SEAWATER REVERSE OSMOSIS PLANTS
(3 MGD TOTAL CAPACITY)**

**181 MILES OF STEEL AND DUCTILE IRON
TRANSMISSION MAIN (18"-36") AT UP TO
250 PSI**

**6 TRANSMISSION BOOSTER AND BACK PUMP
STATIONS**

42 BRIDGE CROSSINGS

46 MG CAPACITY IN 33 STORAGE TANKS

**684 MILES OF POTABLE WATER
DISTRIBUTION MAIN AT UP TO 55 PSI**

17 DISTRIBUTION PUMPING STATIONS

5 WASTEWATER TREATMENT PLANTS

**195 MILES OF WASTEWATER COLLECTION
AND FORCE MAIN LINES**

**14 APPROXIMATE MILES OF RECLAIMED
DISTRIBUTION WATER LINES**



Profile of the Authority

For fiscal year 2022

History and Purpose

In 1937, the legislature of the state of Florida created the Florida Keys Aqueduct Commission, the predecessor to the Authority. The Commission purpose, working with the US Navy, the City of Key West and Monroe County was obtaining, supplying and distributing potable water to the Florida Keys. In 1970, the Authority was established by the state legislature to succeed the Commission as the sole provider of water. The Authority currently operates under Special Legislation 76-441, Laws of Florida, as amended.

The Authority is the sole provider of potable water for all the residents of the Florida Keys. The Authority also provides wastewater collection and treatment in certain areas of the Florida Keys. The Authority provides service to over 50,000 customers throughout the Florida Keys. The reporting entity consists of the operations of the water and wastewater utility.

The Authority is governed by a five-member board of directors appointed by the Governor of the State of Florida from districts identical to the county commission districts in Monroe County. Members serve four-year terms. The Board employs an executive director who is the chief executive officer of the Authority.

The Authority's Facilities

The Authority has made significant improvements to the infrastructure of the water system over the years to accommodate increased demand. The initial phase of the transmission pipeline replacement was completed in the early 1980s. The Authority then established a long-range capital improvement master plan to address anticipated future water demands. This master plan is updated based on a prioritization methodology designed to identify the criticality of all currently identified projects.

An overview of the Authority's facilities follows.

Wellfields

The Authority draws its primary raw water supply from the Biscayne Aquifer through ten wells with screened depths of 20 to 60 feet. The wellfield is adjacent to the outskirts of the Everglades National Park and is within an environmentally protected pine rockland. The location of the wellfield, along with restrictions enforced by state and local regulatory agencies, contribute to the unusually high quality of the raw water, which meets all federal and state finished drinking water standards prior to any treatment.

Water production and treatment facilities

The Authority's primary water production facilities are a lime softening plant that treats water withdrawn from the Biscayne Aquifer and a reverse osmosis plant that treats brackish water from the deeper Floridan Aquifer. Water treated at these facilities is then blended and disinfected before entering the transmission line. The lime softening plant has a design capacity of 24 mgd. The water treatment process consists primarily of lime softening, filtration, disinfection and fluoridation. The reverse osmosis plant treats brackish groundwater and has a design capacity of 6 mgd.

Profile of the Authority (continued)

For fiscal year 2022

Water production and treatment facilities, continued

The Authority also maintains seawater reverse osmosis facilities in Stock Island and Marathon capable of producing 2 mgd and 1 mgd, respectively. These facilities were constructed primarily for emergency operations in the event of a major transmission main break.

Water transmission and distribution systems

The Authority maintains approximately 181 miles of transmission main and approximately 684 miles of distribution lines. The transmission main ranges in size from 36 inches leaving the water treatment plant in Florida City to 18 inches at the end of the line in Key West and in areas with redundant lines. The Authority operates transmission pump stations at the water treatment plant in Florida City, Key Largo, Long Key, Marathon, Ramrod Key and Stock Island. These pump stations boost the water pressure to meet water demands throughout the service area and can also back pump in the event of a line break. The stations have pumps with electric variable speed drives as well as diesel engine drives for emergencies. The Authority also operates nineteen distribution pump stations located throughout the service area to maintain water pressure in the distribution system.

Wastewater treatment facilities

The Authority owns and operates a .054 mgd wastewater treatment facility in Bay Point, a .274 mgd facility in Duck Key and a .066 mgd facility in Layton. Additionally, the Authority operates a .84 mgd facility in Cudjoe Key and a .323 mgd facility in Big Coppitt that are owned by Monroe County. The Authority and Monroe County are parties to a 99-year lease agreement that grants the Authority the right to operate and maintain county-owned wastewater systems, including setting rates sufficient to fund those operations.

Wastewater transmission and collection systems

The Authority's wastewater collection systems are comprised of gravity, low-pressure and vacuum systems. There are also transmission force mains that carry the effluent from the collection systems to the wastewater treatment facilities.

Reclaimed water distribution systems

The Authority provides reclaimed water in certain areas that supplies non-potable irrigation water to residents and resort facilities. This reclaimed water is priced at a reduced rate to encourage customers to use it for non-potable uses rather than using potable water.

Profile of the Authority (continued)

For fiscal year 2022

The Authority's Operations

The Authority serves over 50,000 water customers in a service area that includes all the Florida Keys. Due to the geography of the Florida Keys, operations crews and facilities must be located throughout the service area. In addition to operating the water system, these crews respond to line breaks and other service interruptions, perform scheduled preventive maintenance and leak surveys, and maintain facilities and structures.

The Authority's service area for wastewater services includes all areas in unincorporated Monroe County except Ocean Reef, the Key Largo Wastewater Treatment District (Tavernier, Key Largo and Cross Key), and the area of Stock Island served by Key West Resort Utilities. The Authority also serves the City of Layton. The Authority currently serves approximately 11,000 wastewater customers.

Water quality assurance

The water quality staff is responsible for water quality assurance for the Authority. In 1996, the Safe Drinking Water Act was approved in response to improvements to the regulatory process for the protection of public health based on sound science. This law regulates the drinking water quality standard setting process, operator certification, monitoring requirements, consumer confidence reports and source water protection. The Authority strives to ensure that the Florida Keys water supply meets the highest quality standards possible for safety, aesthetics and taste. The Authority employs staff that is certified in the treatment, testing, monitoring and distribution of the water supply. Water is tested regularly, both prior to and after treatment, to ensure that it complies with or surpasses all federal and state water quality requirements. An annual consumer confidence report is provided to Authority customers in July of each year.

Protection of the groundwater source from potential pollution is a very important water quality issue. The Authority has an ongoing agreement with the Dade County Department of Environmental Resource Management (DERM) to regulate and manage issues relating to the protection of the Authority's wellfield. DERM monitors ground and surface water to establish water quality trends, enforces laws against illegal discharges, protects important aquifer recharge areas, and regulates underground storage tanks, liquid waste haulers and other hazardous waste

The Authority monitors a network of wells and structures for saltwater intrusion monthly. This network includes thirteen Authority wells and three United States Geological Survey wells. These sixteen sites provide valuable information on the location, movement and velocity of the saline/fresh water interface.

The Authority uses chloramines as its primary disinfecting agent. Chloramines are more stable than free chlorine and do not produce potentially harmful by-products. The Authority performs bacteriological testing on samples taken from approximately 100 sample sites throughout the system to ensure that appropriate disinfection is taking place.

In the state of Florida, water utilities are required to establish an ongoing cross-connection control program to detect and prevent cross-connections that may create a potential health hazard. A cross-connection is any physical connection between the water supply and any private piping arrangement that contains a foreign liquid or substance. To prevent potential backflow from such an arrangement, the Authority must either discontinue water service until the cross-connection is eliminated or require installation of an approved backflow prevention device.

Profile of the Authority (continued)

For fiscal year 2022

Awards



Distinguished Budget Presentation Award

The Government Finance Officers Association of the United States and Canada (GFOA) awarded the Distinguished Budget Presentation Award for Excellence in Budget Presentation for the Authority's 2020 budget year. This was the 15th consecutive year that the Authority has achieved this prestigious award. The award represents a significant achievement by The Authority. It reflects the commitment of The Authority's staff to meet the highest principles of governmental budgeting. To receive the award The Authority had to satisfy nationally recognized guidelines for effective budget presentation. A Distinguished Budget Presentation Award is valid for a period of one year only. We believe that our current budget and financial plan for the fiscal year ending September 2021 continues to meet the Distinguished Budget Presentation Award's requirements and we have submitted it to the GFOA to determine its eligibility for another award.

Certificate of Achievement for Excellence in Financial Reporting

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Authority for its Comprehensive Annual Financial Report for the fiscal year ended September 30, 2019. This was the 29th consecutive year that the Authority has achieved this prestigious award. To be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements. A Certificate of Achievement is valid for a period of one year only. We believe that our current comprehensive annual financial report continues to meet the Certificate of Achievement Program's requirements and it has been submitted to the GFOA to determine its eligibility for another certificate.



Profile of the Authority (continued)

For fiscal year 2022

Acknowledgements

The preparation of the budget and financial plan for the year ending September 30, 2022 was made possible by the dedicated service of the entire staff of the Florida Keys Aqueduct Authority. Each participant has our sincere appreciation for the contributions made in support of this effort.

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Profile of the Authority (continued)

For fiscal year 2022

Milestones

1937

State of Florida creates the Florida Keys Aqueduct Commission, the only water utility in Florida at the time that reported directly to the governor's office.

1941

First water supply system is completed by the U.S. Navy and the Commission. Shortly thereafter, a water treatment plant is built at Florida City having an original capacity of 2.4 mgd.

Mid 40s-60s

Water transmission and distribution systems are upgraded to meet rising demand, the Florida City WTP is expanded, booster pumping stations are strategically built along the Keys to boost water pressures, storage tanks are built. By 1962, water system capacity is 6.5 mgd.

1966

A flash desalination facility is constructed to supplement water supply and pressure in Key West due to increased water demands that exceeded the pipeline capacity.

1974

State of Florida amends enabling legislation changing Florida Keys Aqueduct Commission to Florida Keys Aqueduct Authority.

1976

U.S. Navy sells the water system to the Authority for \$2.1 million. The Authority board becomes elected rather than appointed by the governor.

1979

A 3 mgd reverse osmosis plant is built on Stock Island replacing the flash desalination facility to supplement water supply and pressure in Key West until the new, large-diameter pipeline from Florida City becomes operational.

1982

New, larger diameter pipeline from Florida City to Key West is completed, financed through a loan from the Farmers Home Administration.

1989

J. Robert Dean Water Treatment Facility replaces original Navy plant in Florida City, having a design capacity of 22 mgd.

1992

In August, Hurricane Andrew, one of the worst storms of the century, slams into the J. Robert Dean Water Treatment facility causing a considerable amount of damage. The rebuilding of the facility begins immediately after the hurricane passes. Despite the damage, the plant continues to provide disinfected potable water to the Florida Keys by operating on emergency back-up generation for 21 days.

1997

Reverse osmosis facility on Stock Island is renovated. The plant's capacity is split between Stock Island (2 mgd) and Marathon (1 mgd) to provide potable water during emergencies.

2001

The lime-softening water plant is upgraded and expanded to provide more treatment and storage capacity.

2005

The Keys are impacted by four named hurricanes, culminating in October with Hurricane Wilma which caused extensive flooding throughout the Keys. The damage to the Authority from Wilma were substantial, yet water service was not interrupted.

2008

The David C. Ritz Booster Pumping Station at Key Largo is placed into service to assure adequate water pressures are maintained in the transmission pipeline for the delivery of water to the Florida Keys.

2009

The Authority completed construction of a 6 mgd reverse osmosis plant adjacent to its lime softening plant in Florida City. The facility helps the Authority meet dry season permit limitations and reduced the strain placed on the Biscayne Aquifer. The Authority also placed in service the Big Coppitt Regional Wastewater system serving approximately 1,100 customers in the lower keys.

2011

South Florida experiences severe drought conditions, with one of the driest periods in 80 years. Water conservation efforts, along with the effects of an extended financial recession, resulted in a ten-year low in water demand.

2017

In September, Hurricane Irma causes severe damage throughout the Florida Keys. Uprooted trees cause multiple breaks in the distribution lines resulting in a loss of pressure in the main pipeline and a disruption in the availability of water for much of the service area for 11 consecutive days.

2019

The Authority has completed a \$200 million wastewater system to service the lower Keys. This system is the last major wastewater treatment throughout the Keys.

2020

The COVID-19 pandemic struck the entire planet, with south Florida becoming the global epicenter of the disease for a time. The significant disruption of the economy and society in general impacted the Authority's customers both financially and emotionally, with many businesses permanently closing and residents relocating to other parts of the country.

Budget Highlights, Issues and Priorities

For fiscal year 2022

Key Highlights

The 2022 budget reflects the impacts of several important initiatives and internal factors as well as certain external factors. Some of the important initiatives and internal factors include:

- Extensive capital improvement plan based on long-range capital needs analysis
- Receipt of \$36 million federal grants for refurbishment and expansion of reverse osmosis facility
- Obtaining a government loan up to \$48.6 million under the Water Infrastructure Finance and Innovation Act (WIFIA)
- Contractual salary increases

Other budget impacts that are driven by external factors include the following:

- Continued impacts of the COVID-19 pandemic
- Continued repairs and increased system hardening
- Potential impacts of future hurricanes
- Impacts of high cost-of-living on recruitment and workforce retention

These impacts, as well as other budget drivers, are discussed in more detail below.

Operating Revenue

Utility operating revenue

With the reopening of the economy since the COVID-19 pandemic, water sales have been improving in 2021. The future effects of this ongoing global crisis are unknown and may continue to impact water demand. Water volume sales are budgeted to increase by 1% over current year budget. The budget includes a 5.1% rate adjustment for inflation effective October 1, 2021 for all fees and charges.

Other revenue and capital contributions

System development fees and interest income both remain relatively insignificant, with each comprising less than 1% of total revenue.

Operating Expenses and Operating Capital Outlay

The total overall budgeted operating expenditures, including capital outlay for ongoing operations, are about 5.4% higher than those budgeted in the current year. Some of the significant budgeted expenditures are discussed below.

Personnel costs

Salaries and benefits are budgeted at \$30,377,600 or about 4.4% higher than the current budget. A cost-of-living salary adjustment of 3% is budgeted to go into effect for all employees on October 1, 2022 along with an average estimated merit increase of about 1.1%. These amounts will vary based on actual percentages. Six new permanent positions are being added to the 2022 budget.

Budget Highlights, Issues and Priorities (continued)

For fiscal year 2022

Other operating expenses

Operating costs, such as materials and maintenance are budgeted to increase, mainly due to increased costs of materials needed for major repair and the operation of an additional wastewater treatment facility. Legal costs are also budgeted to increase due to FEMA appeals and litigation. Bank charges are increasing as more customers are opting to pay electronically, which will also save customer service costs in the future.

Capital outlay

Capital outlay is budgeted at \$4,798,000, which is down 1% from the current year budget. These costs are for replacement of aging vehicles and equipment, system upgrades at the water treatment plant.

Capital Improvement Projects

The capital improvement plan is centered around projects that are critical to sustaining continued reliable operations. The 2022 portion of the plan calls for \$65,175,000 in capital expenditures and includes costs for distribution and transmission line replacements in areas identified as vulnerable to breaks. The plan also includes funds to complete construction of a new headquarters building in Key West that will replace the current structure that was damaged during Hurricane Irma and rehabilitation of the reverse osmosis facility on Stock Island. See a detailed discussion of capital projects under the section entitled Capital and Debt.

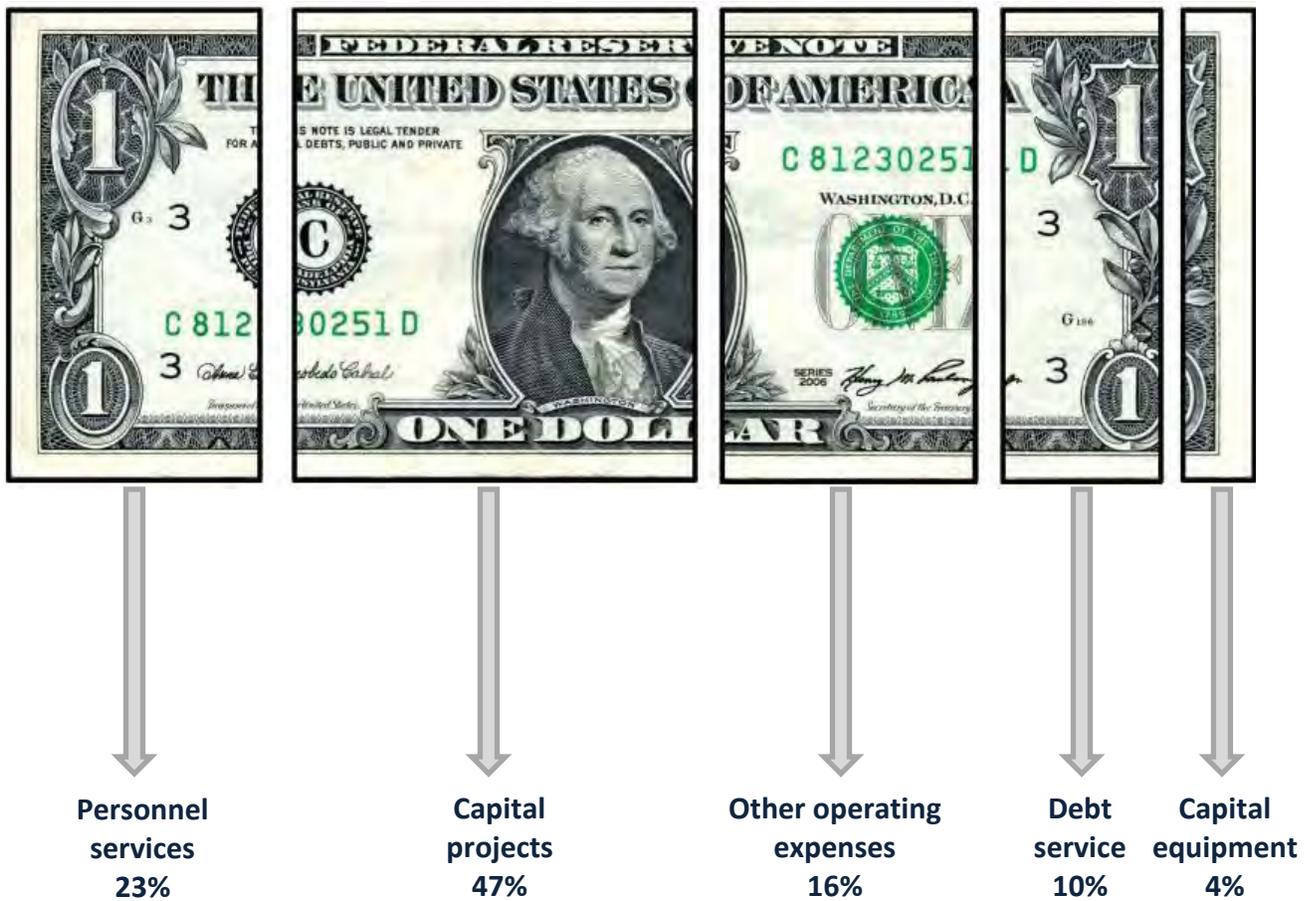
Capital Financing and Debt Service

The Authority may issue debt for constructing and maintaining the system's infrastructure or for refunding previously issued debt by pledging the revenue of the individual systems. No legal debt limit exists. However, revenue must be sufficient to fund operations, service the debt payments and provide a coverage factor as defined in the bond covenants.

Debt service is budgeted at approximately \$13.1 million. Remaining proceeds from the Series 2019A Water Revenue Bond issue will be used in 2022 for ongoing capital improvements. An interim loan of up to \$35 million for capital projects is included in the 2022 budget. This interim loan will be paid in full with a draw from a portion of the WIFIA low interest loan in 2025.

The finance team continually evaluates the cash requirements of the capital improvement plan and proposes financing alternatives to the Board for consideration throughout the budget year.

HOW EACH DOLLAR OF THE BUDGET WILL BE SPENT



FINANCIAL STRUCTURE, POLICY AND PROCESS



ORGANIZATION CHART

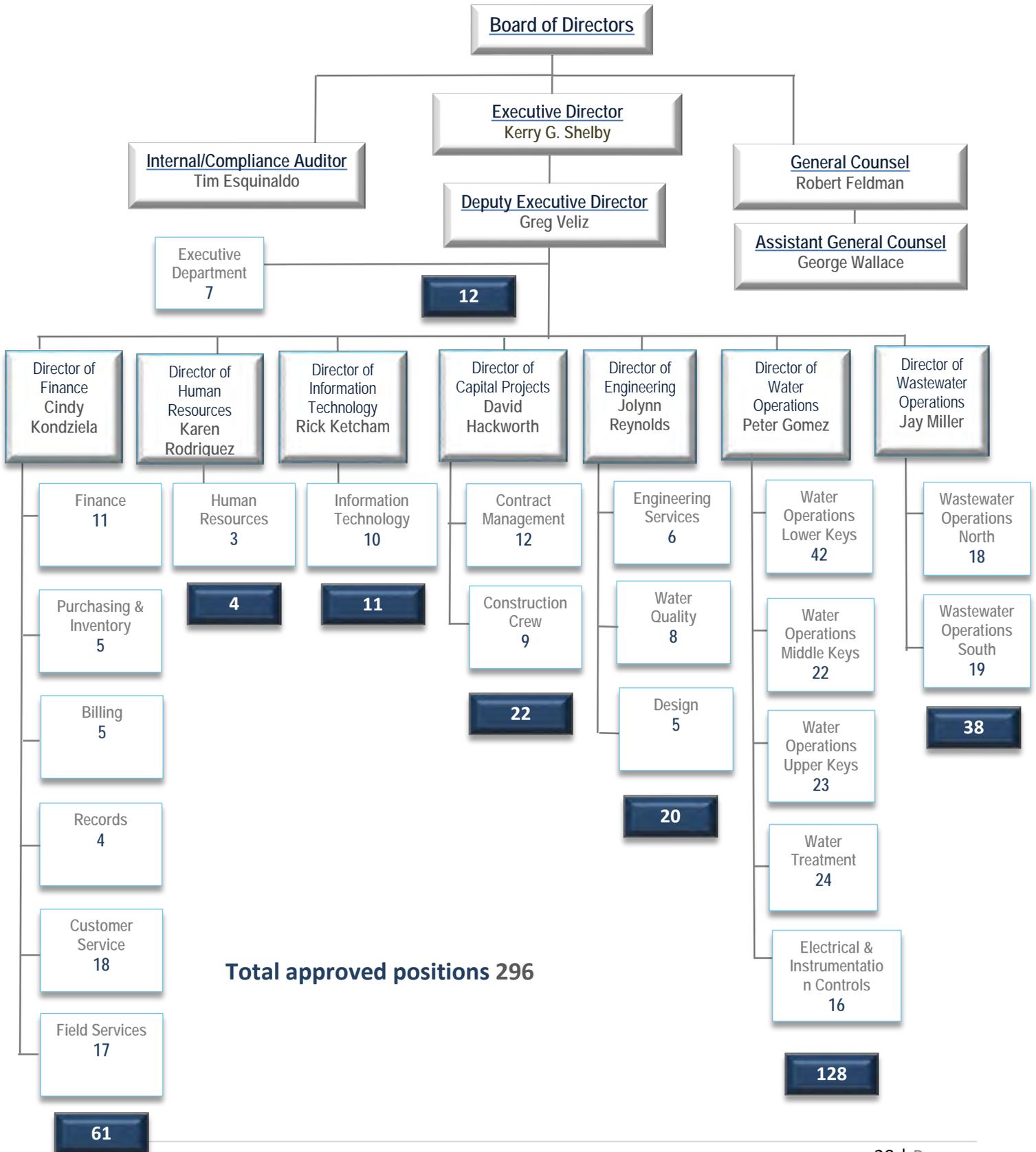
FINANCIAL POLICIES THAT IMPACT THE BUDGET

BUDGET PROCESS

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ORGANIZATION CHART

FOR FISCAL YEAR 2021



CONTACT INFORMATION

FOR FISCAL YEAR 2022

Executive and Director Contacts	
Kerry G. Shelby, Executive Director	kshelby@fkaa.com . 305-295-2230.
Robert Feldman, General Counsel	rfeldman@fkaa.com . 305-295-2201.
Tim Esquinaldo, Internal Auditor	tesquinaldo@fkaa.com . 305-295-2206.
Greg Veliz, Deputy Executive Director	gveliz@fkaa.com . 305-295-2200.
Rick Ketcham, Director of Information Technology	rketcham@fkaa.com . 305-295-2124.
Cindy Kondziela, Director of Finance	ckondziela@fkaa.com . 305-295-2234.
Karen Rodriguez, Director of Human Resources	krodriguez@fkaa.com . 305-295-2210.
Peter Gomez, Director of Water Operations	pgomez@fkaa.com . 305-295-6357.
David Hackworth, Director of Capital Projects	dhackworth@fkaa.com . 305-295-2152.
Jay Miller, Director of Wastewater Operations	jmiller@fkaa.com . 305-809-2623.
Jolynn Reynolds, Director of Engineering	joreynolds@fkaa.com . 305-295-2141.

Financial Policies That Impact The Budget

For fiscal year 2022

Performance Measurement Policies

The Authority will update its strategic plan that identifies the strategic initiatives each year as part of the budget process.

Annually, each department will develop departmental performance measures that support successful results in achieving its strategic initiatives. Goals should be related to core services of the department and should reflect customer needs. The measures should be a mix of different types, including effectiveness, efficiency, demand and workload.

Performance measures will be used as a basis for preparing the Authority's budget. All budgeted amounts should be directly or indirectly linked to accomplishing the department's and the Authority's strategic initiatives.

Planning

The Authority will prepare and maintain an ongoing five-year financial plan. The plan will include projections of existing revenue and expenses as well as operating costs and revenue of future capital improvements included in the capital budget.

Interim Financial Reporting

The Authority will prepare and distribute interim budget reports comparing actual versus budgeted revenue and expense activity. The Authority will establish and maintain accounting practices that can relate budget amounts to actual results.

Capital Improvement Policies

The Authority will develop and maintain a multi-year plan for capital improvements. The Authority will enact an annual capital budget based on the multi-year capital improvement plan.

The Authority will develop the capital improvement budget along with the operating budget. Future operating costs associated with new capital improvements will be projected and included in operating budget forecasts.

The Authority will maintain all its assets at a level adequate to protect the Authority's capital investment and to minimize future maintenance and replacement costs.

The Authority will identify the estimated costs and potential funding sources for each capital project proposal before it is submitted to the Authority board for approval.

The Authority will determine the most favorable financing method for all new projects.

Debt Management Policies

The Authority will continually review its outstanding debt to evaluate whether the financial marketplace will afford the Authority the opportunity to lessen its debt service costs.

The Authority will confine long-term borrowing to capital improvements or projects that cannot be financed from current revenues.

Financial Policies That Impact The Budget (continued)

For fiscal year 2022

When the Authority finances capital projects by issuing bonds, it will pay back the bonds within a period not to exceed the estimated useful life of the project. The Authority will strive to have the final maturity of revenue bonds at or below thirty years.

The Authority will not use long-term debt proceeds for current operations.

The Authority will maintain good communications with bond rating agencies regarding its financial condition.

The Authority will follow a policy of full disclosure on every financial report and borrowing prospectus.

Revenue Policies

The Authority will maintain a diversified and stable revenue system to shelter it from unforeseeable short-run fluctuations in any revenue source.

The Authority will estimate its annual revenue by an objective, analytical process, wherever practical. Each existing and potential revenue source will be re-examined annually.

Each year the Authority will evaluate the full costs of activities supported by user fees for rate recovery sufficiency.

The Authority will automatically revise user fees annually to adjust for the effects of inflation.

Investment Policies

The Authority will adhere to the investment policies adopted by its Board of Directors. These policies apply to the investment of short-term operating funds of the Authority available after meeting current expenditures. These policies do not apply to longer-term funds and proceeds from bond issues. Topics included in the investment policies include information on:

- Investment objectives
- Safety
- Liquidity
- Yield
- Prudence and ethical standards
- Authorized investments
- Risk and diversification
- Authorized investment institutions and dealers
- Internal controls
- Reporting

Working Capital

The Authority will strive to maintain operating reserves in an amount greater than or equal to three months of basic operating expenses.

The Authority will strive to maintain a reserve of at least \$12,000,000 for working capital in the event of a natural disaster or operating emergency.

Financial Policies That Impact The Budget (continued)

For fiscal year 2022

Surplus Policies

It is the intent of the Authority to use all surpluses generated to accomplish these goals:

- Meeting reserve policies
- Avoidance of future debt
- Capital replacement
- Retirement or refinancing of existing debt
- Cash payments for capital improvement program project

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Budget Process

For fiscal year 2022

Budget Preparation

The Authority begins the budgeting process in January of each year by updating its strategic initiatives and identifying specific goals to be accomplished during the upcoming budget year. Based on those initiatives, each department prepares a preliminary summary of significant budget items and changes from the previous year, including staffing changes, major capital purchases, technology needs, capital projects and changes in debt service requirements. These summaries are reviewed with the board's budget committee in a public workshop or board meeting to get preliminary feedback from the Board on the final development of the budget.

Acting on the input from the Board, staff prepares a detailed draft budget for each cost center within the Authority. This draft budget is reviewed by the budget committee and the entire board before a public hearing is held to provide an opportunity for input from the public. The budget committee may schedule additional meetings or hearings during this process as necessary. A draft budget must be advertised in newspapers of general circulation in the Florida Keys no later than August 1st to comply with the Authority's enabling legislation. At a public board meeting prior to September 1st, after all comments have been received from members of the public, the board must adopt a final budget.

Budget Monitoring

Compliance with the budget is monitored on a continuing basis. Monthly budget reports are prepared and distributed to the members of the board, the Authority's staff and others to ensure ongoing analysis. The total budget may not be changed during the fiscal year without specific action by the board to do so. Any line item transfers may be approved by the staff.

The Authority's budget is designed to fund operations, capital expenditures and debt service. A balanced budget is one that provides current year sources that, along with past years' reserves, are sufficient to fund the current year's expenditures.

Budget Presentation

The Authority's operations are accounted for in an enterprise fund. The fund is budgeted on the accrual basis of accounting. Rates for water and wastewater service are established by the Board. The revenue generated by these rates is used to fund the Authority's operations.

The budget summary is presented as budgeted sources and uses so that the reader can see all aspects of the budget in one place. Although the budget is prepared on the accrual basis, sources and uses are approximations of cash flows. The budget summary shows the budgeted excess or shortfall of sources over uses and the estimated ending reserve position. This reserve position differs from ending net position (which is presented in the five-year financial plan). Ending net position is essentially the Authority's net equity (assets less liabilities).

Budgeted expenditures are characterized as operating expenses, capital expenditures or debt service. Capital expenditures are those expenditures for assets costing over \$5,000 and having a useful life of at least three years. Routine capital expenditures are assets purchased as a part of ongoing operations. Non-routine capital expenditures are referred to as capital improvement projects and are defined in the 20-year capital improvement master plan. Debt service includes the payment of principal and interest on outstanding debt issues which, in the Authority's case, take the form of revenue bonds.

Budget Process (continued)

For fiscal year 2022

Budget Preparation Timeline

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Strategic Planning												
Board and customer input (informal)	■	■	■	■	■	■	■	■	■	■	■	■
Staff input (informal)	■	■	■	■	■	■	■	■	■	■	■	■
Update vision, mission and strategic goals		■	■									
Update policies, demographics and economics		■	■									
Develop goals and objectives		■	■									
Capital Improvement and Financing Plan												
Review projects and priorities		■	■									
Estimate five-year operational impact		■	■									
Review plan with budget team		■	■									
Develop proposed financing strategy		■	■									
Review draft with Executive Director		■	■									
Operating Budget												
Update budget formats		■										
Update revenue assumptions and proposed rate changes		■										
Estimate impacts of salary increases, retirements, etc.		■										
Develop detailed cost center expenditure budgets		■	■									
Prepare roll-forward of staff and fleet		■	■									
Review budgets with budget team		■	■									
Review draft with Executive Director		■	■									
Five-Year Financial Plan												
Review and update sales and expenditure projections			■	■								
Project necessary borrowings for next five years			■	■								
Prepare schedule of necessary rates for five years			■	■								
Project debt service coverage based on projections			■	■								
Board and Public Input												
Budget committee workshops				■	■							
Public hearings						■	■	■				
Budget advertised								■				
Budget adopton								■				

Budget Process (continued)

For fiscal year 2022

Budget Calendar

Dates for Preparation of the 2022 Budget

Jan-21							May-21						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
						1 2							1
3	4	5	6	7	8	9	2	3	4	5	6	7	8
10	11	12	13	14	15	16	9	10	11	12	13	14	15
17	18	19	20	21	22	23	16	17	18	19	20	21	22
24	25	26	27	28	29	30	23	24	25	26	27	28	29
31							30	31					
<p>Informal input from our Board of Directors, staff and customer's year around. Prepare budget sheets for distribution to Departments.</p>							<p>The first final draft of the budget is presented to the Executive Director</p>						
Feb-21							Jun-21						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
		1	2	3	4	5 6				1	2	3	4 5
7	8	9	10	11	12	13	6	7	8	9	10	11	12
14	15	16	17	18	19	20	13	14	15	16	17	18	19
21	22	23	24	25	26	27	20	21	22	23	24	25	26
28							27	28	29	30			
<p>In February, Departments are working on their budgets.</p>							<p>The first final draft of the budget is presented to the Board</p>						
Mar-21							Jul-21						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
		1	2	3	4	5 6						1	2 3
7	8	9	10	11	12	13	4	5	6	7	8	9	10
14	15	16	17	18	19	20	11	12	13	14	15	16	17
21	22	23	24	25	26	27	18	19	20	21	22	23	24
28	29	30	31				25	26	27	28	29	30	31
<p>Week 3 budget meetings with Deputy Executive Director</p>							<p>The second draft is presented to the Board</p>						
<p>Week 4 budget meetings with Executive Director</p>													
Apr-21							Aug-21						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1	2	3	1	2	3	4	5	6	7
4	5	6	7	8	9	10	8	9	10	11	12	13	14
11	12	13	14	15	16	17	15	16	17	18	19	20	21
18	19	20	21	22	23	24	22	23	24	25	26	27	28
25	26	27	28	29	30		29	30	31				
<p>CIP is discussed</p>							<p>The final budget public hearing. Budget adoption planned for regular board meeting agenda.</p>						

FINANCIAL SUMMARIES

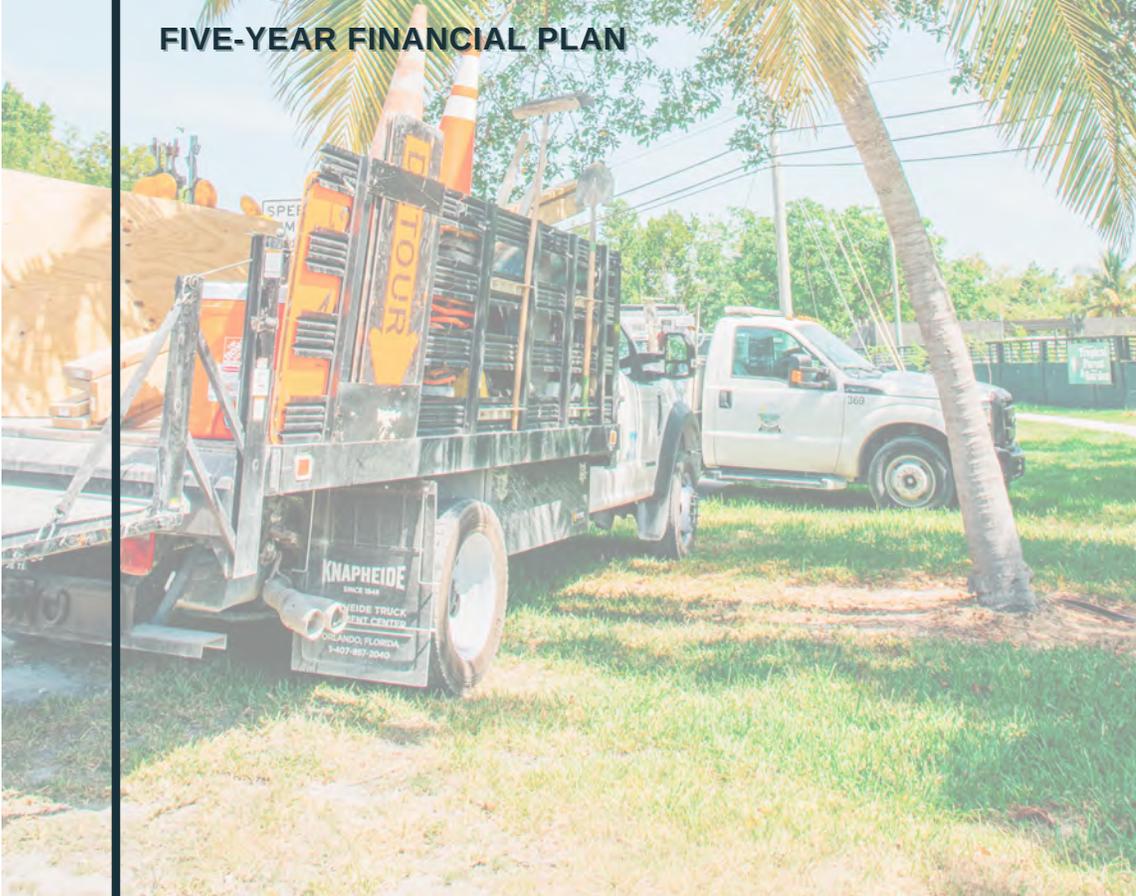
SUMMARY OF BUDGET SOURCES AND USES

SUMMARY OF REVENUE SOURCES

RATE STRUCTURE

OPERATING BUDGET BY EXPENDITURE TYPE

FIVE-YEAR FINANCIAL PLAN



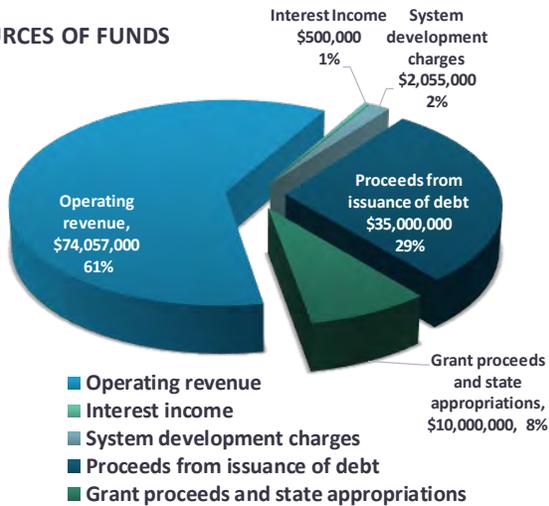
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Summary of Budgeted Sources and Uses

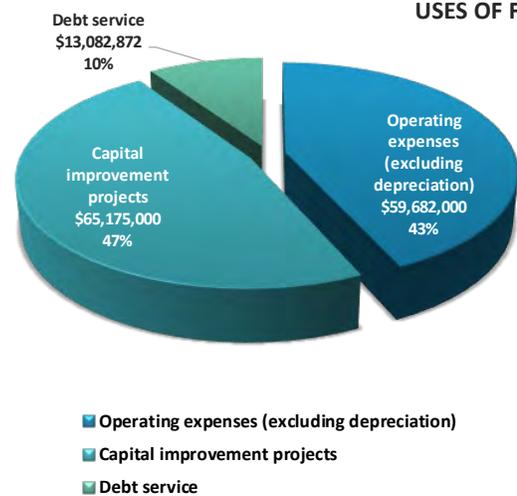
For fiscal year 2022

	2020	2021 Budget (amended)			2022 budget			% Change
	Actual	Water	Wastewater	Total	Water	Wastewater	Total	
Total budgeted sources of funds								
Utility operating revenue	\$ 71,880,135	\$ 59,165,000	\$ 10,037,000	\$ 69,202,000	\$ 62,559,000	\$ 11,498,000	\$ 74,057,000	7.0%
Interest income	882,217	500,000	-	500,000	500,000	-	500,000	0.0%
System development fees and other income	7,187,489	1,534,000	138,000	1,672,000	1,555,000	500,000	2,055,000	22.9%
Grant proceeds and state appropriations	-	6,000,000	-	6,000,000	10,000,000	-	10,000,000	66.7%
Proceeds from issuance of debt, net of issue costs	42,858,016	-	-	-	35,000,000	-	35,000,000	-
Total budgeted sources of funds	122,807,857	67,199,000	10,175,000	77,374,000	109,614,000	11,998,000	121,612,000	57.2%
Total budgeted uses of funds								
Operating expenditures (excluding depreciation)	50,932,265	47,805,000	8,987,000	56,792,000	49,035,000	10,647,000	59,682,000	5.1%
Capital improvement projects	15,553,986	39,340,000	7,000,000	46,340,000	59,525,000	5,650,000	65,175,000	40.7%
Debt service	3,596,631	10,277,000	853,000	11,130,000	12,231,872	851,000	13,082,872	17.6%
Total budgeted uses of funds	70,082,882	97,422,000	16,840,000	114,262,000	120,791,872	17,148,000	137,939,872	20.7%
Excess (deficit) sources over uses	52,724,975	(30,223,000)	(6,665,000)	(36,888,000)	(11,177,872)	(5,150,000)	(16,327,872)	
Adjustments to cash basis from accrual	(56,693,485)	-	-	-	-	-	-	
Change in cash and investments	(3,968,510)	(30,223,000)	(6,665,000)	(36,888,000)	(11,177,872)	(5,150,000)	(16,327,872)	
Beginning cash and investments	87,150,118	76,516,608	6,665,000	83,181,608	46,293,608	-	46,293,608	-44.4%
Ending cash and investments	83,181,608	46,293,608	-	46,293,608	35,115,736	(5,150,000)	29,965,736	-35.3%
Reserves and restricted cash and investments	(63,588,988)	(20,250,000)	(71,000)	(20,321,000)	(20,250,000)	(71,000)	(20,321,000)	0.0%
Estimated ending unrestricted cash and investments	\$ 19,592,620	\$ 26,043,608	\$ (71,000)	\$ 25,972,608	\$ 14,865,736	\$ (5,221,000)	\$ 9,644,736	-62.9%

SOURCES OF FUNDS



USES OF FUNDS



Summary of Revenue Sources

For fiscal year 2022

	2020			2021 Budget			2022 budget			Increase / Decrease	% change from prior budget
	Actual	Water	Wastewater	Total	Water	Wastewater	Total	Water	Wastewater		
Number of locations											
Estimated locations billed	52,574	51,600	10,500				52,500	11,700			
Volume											
Estimated gallons (000s) billed at retail rates	4,801,761	5,249,000					5,406,000				
Estimated gallons (000s) billed to US Navy	245,358	254,000					254,000				
Total estimated gallons(000s) sold	5,047,119	5,503,000					5,660,000				
Operating revenue											
Fees for service											
Retail water rate revenue	\$ 55,370,983	\$ 53,916,000		\$ 53,916,000	\$ 57,232,000		\$ 57,232,000		\$ 3,316,000	6.2%	
US Navy water rate revenue	1,109,539	1,197,000		1,197,000	1,271,000		1,271,000		74,000	6.2%	
US Navy distribution system charge	2,443,631	2,487,000		2,487,000	2,487,000		2,487,000		-	0.0%	
Retail reclaimed water rate revenue	176,705	65,000		65,000	69,000		69,000		4,000	6.2%	
Retail wastewater rate revenue	8,494,601		8,436,000	8,436,000		\$ 9,664,000	9,664,000		1,228,000	14.6%	
US Navy wastewater revenue	1,473,774		1,601,000	1,601,000		1,834,000	1,834,000		233,000	14.6%	
Total fees for service	69,069,233	57,665,000	10,037,000	67,702,000	61,059,000	11,498,000	72,557,000		4,855,000	7.2%	
Other operating revenue	2,810,902	1,500,000	-	1,500,000	1,500,000	-	1,500,000		-	0.0%	
Total operating revenue	71,880,135	59,165,000	10,037,000	69,202,000	62,559,000	11,498,000	74,057,000		4,855,000	7.0%	
Non-operating revenue											
Interest income	882,217	500,000	-	500,000	500,000	-	500,000		-	0.0%	
Grant proceeds	3,079,590	6,000,000	-	6,000,000	10,000,000	-	10,000,000		4,000,000	-	
Charges to other utilities for billing services	522,000	414,000	-	414,000	435,000	-	435,000		21,000	5.1%	
Other income	950,656	120,000	-	120,000	120,000	-	120,000		-	0.0%	
Total non-operating revenue	5,434,463	7,034,000	-	7,034,000	11,055,000	-	11,055,000		4,021,000	57.2%	
Total budgeted revenue	77,314,598	66,199,000	10,037,000	76,236,000	73,614,000	11,498,000	85,112,000		8,876,000	11.6%	
System development fees (including assessments)	2,661,466	1,000,000	138,000	1,138,000	1,000,000	500,000	1,500,000		362,000	31.8%	
State appropriations	-	-	-	-	-	-	-		-	32.0%	
Total revenue and system development fees	\$ 79,976,064	\$ 67,199,000	\$ 10,175,000	\$ 77,374,000	\$ 74,614,000	\$ 11,998,000	\$ 86,612,000		\$ 9,238,000	11.9%	

Budget assumptions:

Water volume sales increase	1.0%	9.0%
Rate inflation index	5.1%	5.1%
Additional water rate increase (decrease)	0.0%	
Additional wastewater rate increase (decrease)		0.0%
Average interest rate (applied to average cash balance)	0.3%	
System development fee growth factor	0.0%	0.0%

Rate Structure

For fiscal year 2022

The Authority's current water rate structure is an inverted block structure intended to encourage conservation. The rates for monthly water service includes a monthly base facility charge that varies by meter size bill and a consumption charge based on metered water usage.

The wastewater rate structure is similar to the one used for water, with monthly base facility charges and flow charges based on water flow. Single family residential customers are capped at 10,000 gallons of water flow for wastewater billing purposes.

User charges are indexed annually on October 1 of each year to adjust for inflationary impacts on the cost of operations based on the Consumer Price Index for Miami-Ft. Lauderdale published by the US Bureau of Labor Statistics.

SUMMARY OF WATER, RECLAIMED AND WASTEWATER RATES

The following table summarizes the Authority's existing rates for water and wastewater service and projected rates after annual indexing for inflation.

	Rates in effect on October 1, 2020		After October 1, 2021 index	
Potable Water Rates				
Base facilities charge				
5/8-inch or 3/4-inch	\$	16.21	\$	17.04
1-inch		40.57		42.64
1½-inch		81.10		85.24
2-inch		129.78		136.40
3-inch		243.32		255.73
4-inch		402.61		423.14
6-inch		812.61		854.05
8-inch		1,297.67		1,363.85
Consumption charge ^[1]				
Block 1	\$	6.81	\$	7.16
Block 2		9.95		10.46
Block 3		11.16		11.73
Block 4		12.45		13.08
Block 5		13.66		14.36
Reclaimed Water Rates				
Consumption charge ^[1]				
Block 1	\$	3.41	\$	3.58
Block 2		4.98		5.23
Block 3		5.58		5.86
Block 4		6.23		6.54
Block 5		6.83		7.18

Rate Structure (continued)

For fiscal year 2022

	Rates in effect on October 1, 2020	After October 1, 2021 index
Wastewater Rates		
Base facilities charge		
5/8-inch or 3/4-inch	\$ 26.19	\$ 27.53
1-inch	98.24	103.25
1½-inch	196.48	206.50
2-inch	314.38	330.41
3-inch	589.44	619.50
4-inch	982.40	1,032.50
6-inch	1,965.75	2,066.00
8-inch	2,693.61	2,830.98
Flow collection charge		
Residential (up to 10,000 gallons)	\$ 9.91	\$ 10.42
Non-residential (all consumption)	9.91	10.42

Note: Block 1 for 5/8" meter customers, which includes the majority of FCAA customers, is 6,000 gallons. Consumption blocks for customers with larger meters increase based on meter equivalents.

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Operating Expenditure Budget By Expenditure Type

For fiscal year 2022

SCHEDULE OF BUDGETED EXPENDITURES FOR THE YEAR ENDING SEPTEMBER 30, 2022 Total Company

BUDGETED 2022							
	2020 Actual	2021 Budget	Water	Wastewater	Total	Increase /Decrease	% change from prior budget
Operating capital expenditures							
Additions to utility plant	\$ 3,967,222	\$ 4,824,300	\$ 4,333,000	\$ 465,000	\$ 4,798,000	\$ (26,300)	-1%
Capitalized salaries	1,021,289	1,186,200	1,528,700	-	1,528,700	342,500	29%
Capitalized overtime	84,705	-	-	-	-	-	-
Total operating capital expenditures	5,073,216	6,010,500	5,861,700	465,000	6,326,700	316,200	5.3%
Operating expenses							
Personnel services							
Salaries	19,727,574	20,165,900	18,563,500	2,458,300	21,021,800	855,900	4%
Overtime	819,119	585,800	451,700	155,000	606,700	20,900	4%
Retirement	2,207,825	2,541,001	2,544,900	285,100	2,830,000	288,999	11%
Payroll taxes	1,606,264	1,678,400	1,571,600	199,900	1,771,500	93,100	6%
Employee health insurance	3,759,225	3,900,000	3,900,000	-	3,900,000	-	0%
Other benefits	262,620	241,500	233,200	14,400	247,600	6,100	3%
Total personnel services	28,382,627	29,112,601	27,264,900	3,112,700	30,377,600	1,264,999	4.4%
Other operating expenses							
Electricity	3,092,243	3,349,800	3,075,000	460,000	3,535,000	185,200	6%
Fuel for power production	82,556	127,800	127,300	10,000	137,300	9,500	7%
Chemicals	2,104,276	2,329,800	1,988,900	712,500	2,701,400	371,600	16%
Maintenance and materials	5,654,589	5,722,200	4,812,600	996,500	5,809,100	86,900	2%
Engineering services	194,022	250,000	280,000	-	280,000	30,000	12%
Accounting and auditing services	95,500	115,000	115,000	-	115,000	-	0%
Legal services	237,781	380,000	380,000	-	380,000	-	0%
Outsourced operations	977,856	1,848,420	1,555,100	253,000	1,808,100	(40,320)	-2%
Other consulting and support services	2,286,764	2,040,200	2,309,300	-	2,309,300	269,100	13%
Sludge removal	260,810	242,600	124,000	183,700	307,700	65,100	27%
Rental of building - real property	31,319	143,000	97,000	32,000	129,000	(14,000)	-10%
Rent expense - equipment	28,933	60,800	48,100	11,250	59,350	(1,450)	-2%
Transportation expense	559,794	545,700	560,200	500	560,700	15,000	3%
Insurance - vehicles	87,758	113,000	113,000	-	113,000	-	0%
Insurance - general liabilities	123,425	140,000	140,000	-	140,000	-	0%
Insurance - workers' compensation	257,459	300,000	300,000	-	300,000	-	0%
Insurance - property and flood	1,064,817	1,185,000	1,430,000	-	1,430,000	245,000	21%
Advertising	50,473	74,000	69,000	-	69,000	(5,000)	-7%
Bad debt expense	74,000	81,000	81,000	-	81,000	-	0%
Office supplies	81,056	149,900	138,600	9,000	147,600	(2,300)	-2%
Other utilities and technical services	736,542	1,005,400	992,000	-	992,000	(13,400)	-1%
Postage	25,800	52,700	46,500	3,000	49,500	(3,200)	-6%
Travel	62,929	141,200	166,800	5,400	172,200	31,000	22%
Training	58,572	246,350	267,900	15,300	283,200	36,850	15%
Miscellaneous	195,752	236,110	214,600	8,800	223,400	(12,710)	-5%
Bank charges	799,228	725,000	725,000	-	725,000	-	0%
Public information and outreach	20,801	54,000	109,000	-	109,000	55,000	102%
Freight charges	6,072	10,000	10,000	-	10,000	-	0%
Total other operating expenses	19,251,127	21,668,980	20,275,900	2,700,950	22,976,850	1,307,870	6.0%
Total operating budget	\$ 47,633,754	\$ 50,781,581	\$ 47,540,800	\$ 5,813,650	\$ 53,354,450	\$ 2,572,869	5.1%
Allocation of administrative expenses			\$ (4,368,000)	\$ 4,368,000	\$ -		
Total operating expenses after allocation	47,633,754	50,781,581	43,172,800	10,181,650	53,354,450	2,572,869	5.1%
Total operating budget	\$ 52,706,970	\$ 56,792,081	\$ 49,034,500	\$ 10,646,650	\$ 59,681,150	\$ 2,889,069	5.1%
Amendments to current year budget		240,900					
Total operating budget as amended		\$ 57,032,981			\$ 59,681,150	\$ 2,648,169	4.6%

Five Year Financial Plan

For fiscal year 2022

PROJECTED CHANGES IN NET POSITION

FOR FISCAL YEARS 2022 - 2026

	2022	2023	2024	2025	2026
Projected operating results					
Operating revenue	\$ 74,057,000	\$ 78,198,000	\$ 82,569,000	\$ 84,646,000	\$ 86,776,000
Operating expenses (before depreciation)	(59,682,000)	(60,279,000)	(60,882,000)	(61,491,000)	(62,106,000)
Net operating income (before depreciation)	14,375,000	17,919,000	21,687,000	23,155,000	24,670,000
Interest income	500,000	500,000	500,000	500,000	500,000
Other income	555,000	562,000	569,000	576,000	583,000
Interest expense	(7,417,872)	(7,687,500)	(7,436,500)	(5,657,500)	(5,501,500)
Projected net income before depreciation	8,012,128	11,293,500	15,319,500	18,573,500	20,251,500
System development fees (including assessments)	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000
Grant proceeds	10,000,000	20,000,000	-	-	-
Projected increase (decrease) in net position before depreciation	19,512,128	32,793,500	16,819,500	20,073,500	21,751,500
Projected beginning net position	139,600,000	144,682,128	163,045,628	165,435,128	171,078,628
Projected net position before depreciation	159,112,128	177,475,628	179,865,128	185,508,628	192,830,128
Estimated depreciation	(14,430,000)	(14,430,000)	(14,430,000)	(14,430,000)	(14,430,000)
Projected ending net position after depreciation	\$ 144,682,128	\$ 163,045,628	\$ 165,435,128	\$ 171,078,628	\$ 178,400,128

PROJECTED SOURCES AND USES OF FUNDS

FOR FISCAL YEARS 2022-2026

	2022	2023	2024	2025	2026
Total projected sources of funds					
Utility operating revenue	\$ 74,057,000	\$ 78,198,000	\$ 82,569,000	\$ 84,646,000	\$ 86,776,000
Interest income	500,000	500,000	500,000	500,000	500,000
System development fees and other income	2,055,000	2,062,000	2,069,000	2,076,000	2,083,000
Grant proceeds	10,000,000	20,000,000	-	-	-
Proceeds from issuance of debt, net of issue costs	35,000,000	-	-	-	-
Total projected sources of funds	121,612,000	100,760,000	85,138,000	87,222,000	89,359,000
Total projected uses of funds					
Operating expenditures (excluding depreciation)	59,682,000	60,279,000	60,882,000	61,491,000	62,106,000
Capital improvement projects	65,175,000	40,790,000	28,950,000	17,570,000	23,410,000
Debt service	13,082,872	13,622,500	13,631,500	12,122,500	11,971,500
Total projected uses of funds	137,939,872	114,691,500	103,463,500	91,183,500	97,487,500
Additions to (uses of) cash	\$ (16,327,872)	\$ (13,931,500)	\$ (18,325,500)	\$ (3,961,500)	\$ (8,128,500)

Five Year Financial Plan (continued)

For fiscal years 2022-2026

PROJECTED REVENUE AND CONTRIBUTIONS

	FOR FISCAL YEARS 2022 - 2026				
	2022	2023	2024	2025	2026
Estimated gallons (000s) sold to customers at retail rates	5,406,000	5,460,000	5,515,000	5,570,000	5,626,000
Estimated gallons (000s) sold to US Navy	254,000	257,000	260,000	263,000	266,000
Total estimated sales gallons (000s)	5,660,000	5,717,000	5,775,000	5,833,000	5,892,000
Operating revenue					
Fees for service					
Retail water rate revenue	\$ 57,232,000	\$ 60,432,000	\$ 63,810,000	\$ 65,415,000	\$ 67,060,000
US Navy water rate revenue	1,271,000	1,342,000	1,417,000	1,453,000	1,490,000
US Navy distribution system charge	2,487,000	2,626,000	2,773,000	2,843,000	2,915,000
Retail reclaimed water rate revenue	69,000	73,000	77,000	79,000	81,000
Retail wastewater rate revenue	9,664,000	10,204,000	10,774,000	11,045,000	11,323,000
US Navy wastewater revenue	1,834,000	1,937,000	2,045,000	2,096,000	2,149,000
Total fees for service	72,557,000	76,614,000	80,896,000	82,931,000	85,018,000
Other operating revenue	1,500,000	1,584,000	1,673,000	1,715,000	1,758,000
Total operating revenue	74,057,000	78,198,000	82,569,000	84,646,000	86,776,000
Non-operating revenue					
Interest income	500,000	500,000	500,000	500,000	500,000
Grant proceeds	10,000,000	20,000,000	-	-	-
Charges to other utilities for billing services	435,000	442,000	449,000	456,000	463,000
Other income	120,000	120,000	120,000	120,000	120,000
Total non-operating revenue	11,055,000	21,062,000	1,069,000	1,076,000	1,083,000
Total budgeted revenue	85,112,000	99,260,000	83,638,000	85,722,000	87,859,000
System development fees (including assessments)	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000
Total revenue and contributions	\$ 86,612,000	\$ 100,760,000	\$ 85,138,000	\$ 87,222,000	\$ 89,359,000

Budget assumptions					
Water volume growth sales increase	1.0%	1.0%	1.0%	1.0%	1.0%
Rate index increase	5.1%	1.5%	1.5%	1.5%	1.5%
Additional water rate increase (decrease)	0.0%	3.0%	3.0%	0.0%	0.0%
Additional wastewater rate increase (decrease)	0.0%	0.0%	0.0%	0.0%	0.0%
Average interest rate (applied to average cash balance)	0.3%	1.5%	1.5%	1.5%	1.4%
System development fee growth factor	0.0%	0.0%	0.0%	0.0%	0.0%

Five Year Financial Plan (continued)

For fiscal years 2022-2026

FIVE YEAR CAPITAL IMPROVEMENT AND CAPITAL FINANCING PLAN

Description	2022	2023	2024	2025	2026	Estimated five-year expenditures
Water Projects						
Repair/upgrade subaqueous crossing	125,000					125,000
Repair/upgrade cathodic protection	1,200,000					1,200,000
Rockland yard building	700,000					700,000
Grassy Key transmission line replacement	-					-
Stock Island pump station and generator replacement	3,500,000					3,500,000
Stock Island RO	20,000,000	12,000,000	4,000,000			36,000,000
Stock Island RO generator	4,000,000	4,800,000	400,000			9,200,000
Key West administration building	3,000,000					3,000,000
Islamorada transmission line replacement	13,000,000	13,000,000				26,000,000
Front/Whitehead/Eaton distribution line replacement	1,000,000					1,000,000
Transmission Terminus rehabilitation		1,000,000	4,500,000			5,500,000
Cross Key water distribution upgrade	-					-
South/United Street water distribution upgrade	1,100,000	1,500,000				2,600,000
Utility coordination relocates	500,000					500,000
Navy- connection tank feed	-					-
Navy- connection A distribution	600,000	750,000	1,500,000	1,300,000	810,000	4,960,000
Navy- connection B distribution		340,000				340,000
Navy- second feed to Boca Chica		500,000				500,000
Navy- fire system West	400,000					400,000
Navy- fire system East	1,000,000	1,000,000	950,000			2,950,000
No name Key						-
Stock Island garage replacement				520,000	3,600,000	4,120,000
Electrical improvement at Florida City - phase 1	3,000,000					3,000,000
Chemical system improvements at Florida City				950,000	-	950,000
Box Girder bridge coating/coupling					6,000,000	6,000,000
Transmission system valve replacement		500,000	1,000,000	1,000,000	1,000,000	3,500,000
Marathon pump station tank installation			500,000	3,800,000	-	4,300,000
Coco Plum 3				2,300,000	-	2,300,000
Ocean Reef distribution and storage improvements		200,000	3,000,000	4,000,000	-	7,200,000
Crawl Key tank repairs	500,000	-	-	-		500,000
Key Colony Beach 4 (23,920 lf of pipe)					2,000,000	2,000,000
Various locations from US1 - 187th Ave - Transmission Main Protection	300,000					300,000
New Town 7 - Marathon (10,280 LF of Pipe)					2,200,000	2,200,000
Duck Key Inner Island Distribution (13,525 LF of Pipe)				3,200,000		3,200,000
Snake Creek subaqueous pipe				200,000	2,000,000	2,200,000
Diesel Pump upgrades at WTP	100,000	100,000	5,000,000			5,200,000
Grassy Key 2 (2,985 LF of Pipe)					700,000	700,000
Florida City gravity thickener and flooring maintenance	1,500,000					1,500,000
5MG Storage Tank at Florida City					5,000,000	5,000,000
Purchase of New Wellfield Property	4,000,000					4,000,000
Total water projects	\$ 59,525,000	\$ 35,690,000	\$ 20,850,000	\$ 17,270,000	\$ 23,310,000	\$ 156,645,000

Five Year Financial Plan (continued)

For fiscal years 2022-2026

FIVE YEAR CAPITAL IMPROVEMENT AND CAPITAL FINANCING PLAN (CONT.)

Description	2022	2023	2024	2025	2026	Estimated five-year expenditures
Wastewater projects						
Decentralized Program (Cross Key, Pigeon Key and On-site)	1,750,000	-				1,750,000
Big Coppitt treatment plant expansion	1,000,000	5,000,000	8,000,000			14,000,000
Big Coppitt WW treatment filters	-					-
Navy lift station rehabilitation	2,800,000					2,800,000
Cudjoe Regional Manhole Repairs	100,000	100,000	100,000	100,000	100,000	500,000
Duck Key collection system rehabilitation				200,000	-	200,000
Total wastewater projects	5,650,000	5,100,000	8,100,000	300,000	100,000	19,250,000
Total capital improvement projects	\$ 65,175,000	\$ 40,790,000	\$ 28,950,000	\$ 17,570,000	\$ 23,410,000	\$ 174,395,000
Funding sources						
Funds from retail rates and cash on hand	\$ 21,850,000	\$ 8,400,000	\$ 12,100,000	\$ 13,270,000	\$ 22,600,000	\$ 78,220,000
Navy water rates	2,000,000	2,590,000	2,450,000	1,300,000	810,000	9,150,000
Federal and state appropriations	19,750,000	14,000,000	4,000,000	-	-	37,750,000
Bond proceeds	21,575,000	15,800,000	10,400,000	3,000,000	-	50,775,000
Total	\$ 65,175,000	\$ 40,790,000	\$ 28,950,000	\$ 17,570,000	\$ 23,410,000	\$ 175,895,000

Five Year Financial Plan (continued)

For fiscal years 2022-2026

PROJECTED NEW DEBT ISSUES AND DEBT SERVICE

	2022	2023	2024	2025	2026
Bond issuance assumptions:					
Projected principal amount of new bonds issued	\$ 35,000,000	\$ -	\$ -	\$ -	\$ -
Available for construction fund	\$ 35,000,000	\$ -	\$ -	\$ -	\$ -
Estimated issue costs					
Projected interest rate					
Amortization period (years)					
Projected Debt Service					
Principal					
Series 2008 water refunding and revenue bonds	2,745,000	2,905,000	3,045,000	3,170,000	3,170,000
Series 2012 wastewater revenue bonds	370,000	370,000	370,000	365,000	365,000
Series 2013A water refunding bonds	-	-	-	-	-
Series 2013B water revenue bonds	360,000	375,000	385,000	400,000	400,000
Series 2014A water revenue bonds	125,000	120,000	125,000	130,000	135,000
Series 2015A water refunding bonds	1,690,000	1,890,000	1,980,000	-	-
Series 2015B water refunding bonds	115,000	-	-	2,090,000	2,090,000
Series 2016 wastewater bonds	260,000	275,000	290,000	310,000	310,000
Series 2019A water revenue bonds	-	-	-	-	-
Series 2021B water revenue bonds	-	-	-	-	-
Total principal	5,665,000	5,935,000	6,195,000	6,465,000	6,470,000
Interest					
Series 2008 water refunding and revenue bonds [1]	2,036,400	1,892,000	1,770,000	1,660,000	1,500,000
Series 2012 wastewater revenue bonds	71,000	60,000	49,000	39,000	71,000
Series 2013A water refunding bonds	-	-	-	-	-
Series 2013B water revenue bonds	186,000	172,000	159,000	146,000	140,000
Series 2014A water revenue bonds	65,000	60,000	56,000	51,000	50,000
Series 2015A water refunding bonds	1,315,000	1,231,000	1,136,000	1,037,000	1,020,000
Series 2015B water refunding bonds	340,000	335,000	335,000	335,000	335,000
Series 2016 wastewater bonds	150,000	149,000	143,000	139,000	135,000
Series 2019A water revenue bonds	2,250,500	2,250,500	2,250,500	2,250,500	2,250,500
Series 2021B water revenue bonds	1,003,972	1,538,000	1,538,000	-	-
Total interest	7,417,872	7,687,500	7,436,500	5,657,500	5,501,500
Total projected debt service	\$ 13,082,872	\$ 13,622,500	\$ 13,631,500	\$ 12,122,500	\$ 11,971,500

[1] Includes ancillary costs of remarketing and letter of credit fees

Five Year Financial Plan (continued)

For fiscal years 2022-2026

PROJECTED DEBT SERVICE COVERAGE

	Water Operations				
	2022	2023	2024	2025	2026
Funds available for debt service					
Operating revenue	\$ 62,559,000	\$ 66,057,000	\$ 69,750,000	\$ 71,505,000	\$ 73,304,000
Interest income	500,000	500,000	500,000	500,000	500,000
Other income	10,555,000	20,562,000	569,000	576,000	583,000
Less operating expenses	(43,172,800)	(43,605,000)	(44,041,000)	(44,481,000)	(44,926,000)
Net funds available for debt coverage	\$ 30,441,200	\$ 43,514,000	\$ 26,778,000	\$ 28,100,000	\$ 29,461,000
Debt service requirements	\$ 12,231,872	\$ 12,768,500	\$ 12,779,500	\$ 11,269,500	\$ 11,090,500
Coverage factor (minimum of 1.10 required)	2.49	3.41	2.10	2.49	2.66
System development charges	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000
Coverage factor with system development charges (minimum of 1.20)	2.57	3.49	2.17	2.58	2.75

	Wastewater Operations				
	2022	2023	2024	2025	2026
Funds available for debt service					
Operating revenue	\$ 11,498,000	\$ 12,141,000	\$ 12,819,000	\$ 13,141,000	\$ 13,472,000
Interest income	-	-	-	-	-
Other income	-	-	-	-	-
Less operating expenses	(10,181,650)	(10,334,400)	(10,489,400)	(10,646,700)	(10,806,400)
Net funds available for debt coverage	\$ 1,316,350	\$ 1,806,600	\$ 2,329,600	\$ 2,494,300	\$ 2,665,600
Debt service requirements	\$ 851,000	\$ 854,000	\$ 852,000	\$ 853,000	\$ 881,000
System development charges	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000
Coverage factor with system development charges (minimum of 1.20)	2.13	2.70	3.32	3.51	3.59

Note: Wastewater bonds have no requirement to meet both 1.10 and 1.20 tests. Therefore, only the 1.20 result is shown.

Five Year Financial Plan (continued)

For fiscal years 2022-2026

ESTIMATED RATE ADJUSTMENTS AND AVERAGE MONTHLY BILL

Potable water

Estimated percentage increase Average monthly bill (for 4,500 gallons)

	Estimated percentage increase	Average monthly bill (for 4,500 gallons)
Current bill		\$ 46.86
2022	6.1%	\$ 49.71
2023	4.5%	\$ 51.95
2024	4.5%	\$ 54.29
2025	1.5%	\$ 55.10
2026	1.5%	\$ 55.93

Reclaimed water

Estimated percentage increase Average monthly bill (for 1,100 gallons)

	Estimated percentage increase	Average monthly bill (for 1,100 gallons)
Current bill		\$ 3.75
2022	6.1%	\$ 3.97
2023	4.5%	\$ 4.15
2024	4.5%	\$ 4.34
2025	1.5%	\$ 4.40
2026	1.5%	\$ 4.47

Wastewater

Estimated percentage increase Average monthly bill (for 4,500 gallons)

	Estimated percentage increase	Average monthly bill (for 4,500 gallons)
Current bill		\$ 70.79
2022	5.1%	\$ 74.40
2023	1.5%	\$ 75.51
2024	1.5%	\$ 76.64
2025	1.5%	\$ 77.79
2026	1.5%	\$ 78.96

CAPITAL AND DEBT

CAPITAL IMPROVEMENT BUDGET

PROJECT SUMMARIES

CAPITAL OUTLAY BUDGET DETAIL

CAPITAL FINANCING PLAN SUMMARY

DEBT SERVICE REQUIREMENTS

DEBT SERVICE COVERAGE ANALYSIS



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Capital Improvement Budget

For fiscal years 2022-2026

Description	2022	2023	2024	2025	2026	Estimated five-year expenditures
Water Projects						
Repair/upgrade subaqueous crossing	125,000					125,000
Repair/upgrade cathodic protection	1,200,000					1,200,000
Rockland yard building	700,000					700,000
Grassy Key transmission line replacement	-					-
Stock Island pump station and generator replacement	3,500,000					3,500,000
Stock Island RO	20,000,000	12,000,000	4,000,000			36,000,000
Stock Island RO generator	4,000,000	4,800,000	400,000			9,200,000
Key West administration building	3,000,000					3,000,000
Islamorada transmission line replacement	13,000,000	13,000,000				26,000,000
Front/Whitehead/Eaton distribution line replacement	1,000,000					1,000,000
Transmission Terminus rehabilitation		1,000,000	4,500,000			5,500,000
Cross Key water distribution upgrade	-					-
South/United Street water distribution upgrade	1,100,000	1,500,000				2,600,000
Utility coordination relocates	500,000					500,000
Navy- connection tank feed	-					-
Navy- connection A distribution	600,000	750,000	1,500,000	1,300,000	810,000	4,960,000
Navy- connection B distribution		340,000				340,000
Navy- second feed to Boca Chica		500,000				500,000
Navy- fire system West	400,000					400,000
Navy- fire system East	1,000,000	1,000,000	950,000			2,950,000
No name Key						-
Stock Island garage replacement				520,000	3,600,000	4,120,000
Electrical improvement at Florida City - phase 1	3,000,000					3,000,000
Chemical system improvements at Florida City				950,000	-	950,000
Box Girder bridge coating/coupling					6,000,000	6,000,000
Transmission system valve replacement		500,000	1,000,000	1,000,000	1,000,000	3,500,000
Marathon pump station tank installation			500,000	3,800,000	-	4,300,000
Coco Plum 3				2,300,000	-	2,300,000
Ocean Reef distribution and storage improvements		200,000	3,000,000	4,000,000	-	7,200,000
Crawl Key tank repairs	500,000	-	-	-		500,000
Key Colony Beach 4 (23,920 lf of pipe)					2,000,000	2,000,000
Various locations from US1 - 187th Ave - Transmission Main Protection	300,000					300,000
New Town 7 - Marathon (10,280 LF of Pipe)					2,200,000	2,200,000
Duck Key Inner Island Distribution (13,525 LF of Pipe)				3,200,000		3,200,000
Snake Creek subaqueous pipe				200,000	2,000,000	2,200,000
Diesel Pump upgrades at WTP	100,000	100,000	5,000,000			5,200,000
Grassy Key 2 (2,985 LF of Pipe)					700,000	700,000
Florida City gravity thickener and flooring maintenance	1,500,000					1,500,000
5MG Storage Tank at Florida City					5,000,000	5,000,000
Purchase of New Wellfield Property	4,000,000					4,000,000
Total water projects	\$ 59,525,000	\$ 35,690,000	\$ 20,850,000	\$ 17,270,000	\$ 23,310,000	\$ 156,645,000

Capital Improvement Budget (cont.)

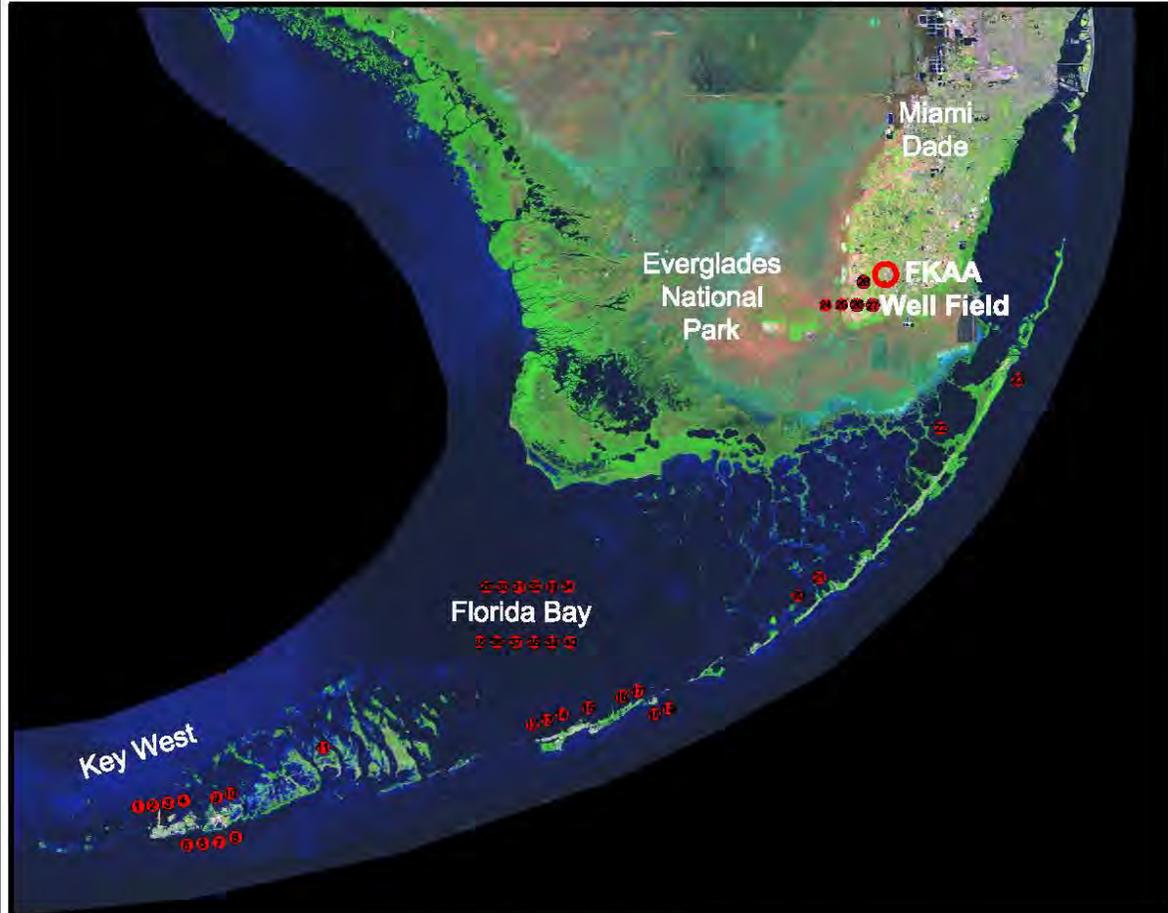
For fiscal years 2022-2026

Description	2022	2023	2024	2025	2026	Estimated five-year expenditures
Wastewater projects						
Decentralized Program (Cross Key, Pigeon Key and On-site)	1,750,000	-				1,750,000
Big Coppitt treatment plant expansion	1,000,000	5,000,000	8,000,000			14,000,000
Big Coppitt WW treatment filters	-					-
Navy lift station rehabilitation	2,800,000					2,800,000
Cudjoe Regional Manhole Repairs	100,000	100,000	100,000	100,000	100,000	500,000
Duck Key collection system rehabilitation				200,000	-	200,000
Total wastewater projects	5,650,000	5,100,000	8,100,000	300,000	100,000	19,250,000
Total capital improvement projects	\$ 65,175,000	\$ 40,790,000	\$ 28,950,000	\$ 17,570,000	\$ 23,410,000	\$ 174,395,000
Funding sources						
Funds from retail rates and cash on hand	\$ 21,850,000	\$ 8,400,000	\$ 12,100,000	\$ 13,270,000	\$ 22,600,000	\$ 78,220,000
Navy water rates	2,000,000	2,590,000	2,450,000	1,300,000	810,000	9,150,000
Federal and state appropriations	19,750,000	14,000,000	4,000,000	-	-	37,750,000
Bond proceeds	21,575,000	15,800,000	10,400,000	3,000,000	-	50,775,000
Total	\$ 65,175,000	\$ 40,790,000	\$ 28,950,000	\$ 17,570,000	\$ 23,410,000	\$ 175,895,000

Project Summaries

For fiscal years 2022-2026

Florida Keys Aqueduct Authority Projects



Project Legend

1 Key West Administration Building Replacement	21 Snake Creek Subaqueous Pipe
2 South/United Street Water Distribution-Key West	22 Repair/Upgrade Subaqueous Crossing
3 Front/Whitehead/Eaton-Key West	23 Ocean Reef Distribution & Storage Improvements
4 Transmission Terminus Rehabilitation-Key West	24 Electric Improvement at Florida City-Phase 1
5 Stock Island Pump Station & Generator Replacement	25 Chemical System Improvements at Florida City
6 Stock Island Garage Replacement	26 Diesel Pump Upgrades at WTP
7 Stock Island RO Facility Treatment(Water)	27 5MG Storage Tank at Florida City
8 Stock Island RO Generator Treatment(Water)	28 Purchase of New Wellfield Property
9 Rockland Yard Building	29 Utility Coordination Relocates(Conjunction with FDOT)
10 Big Coppitt Treatment Plant Expansion-Wastewater	30 Box Girder Coating/Coupling Replacement
11 Cudjoe Regional Manhole Repairs	31 Transmission System Valve Replacement
12 Marathon Pump Station 4 MG Tank Installation	32 Decentralized Program(Cross Key, Pigeon Key & On-Site
13 Coco Plum 3 Distribution Upgrade-Marathon	33 US1-187th Avenue-Transmission Main Protection
14 New Town 7-Marathon(10,280 LF of Pipe)	34 Repair/Upgrade Cathodic Protection
15 Key Colony Beach 4(23,920 LF of Pipe)	35 Navy-Lift Station Rehabilitation
16 Crawl Key Tank Repairs	36 Navy-Connection A Distribution
17 Grassy Key 2(2,985 LF of Pipe)	37 Navy-Connection B Distribution
18 Duck Key Collection System Rehabilitation	38 Navy-Fire System West
19 Duck Key Inner Island Distribution	39 Navy-Fire System East
20 Islamorada Transmission Line Replacement	40 Navy-Second Feed to Boca Chica

Project Summaries (continued)

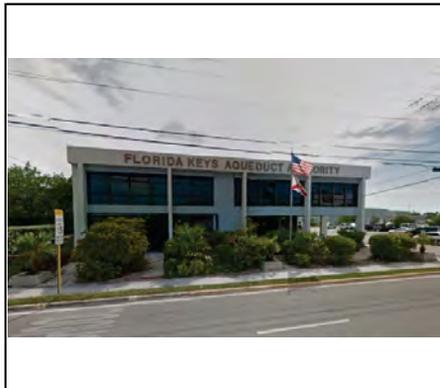
For fiscal years 2022-2026

New Joe Pinder Administration Building

Renewal and Replacement

Project Information

Location	1100 Kennedy Drive, Key West
Project Type	Administration
Category	Replacement
Project Number	7054-18
Design Engineer	Thomas E. Pope, PA
Project Manager	Jolynn Reynolds, P.E.
Contractor	Gulf-Keystar, LLC
Start Date	2018
Completion Date	2022
Bond Funded	Yes
Facilities Master Plan Project	Yes



Description/Justification:

Following Hurricane Irma, an evaluation of the building by an independent engineering firm concluded the building does not appear to be in satisfactory structural condition. There is a considerable amount of evidence indicating that the building has experienced damage associated with the storm. The building has deflected in an inelastic manner and structural cracks have opened up and have not closed. This signifies that the steel and/or concrete have exhibited non-recoverable movement which results in a reduced structural capacity. It was estimated that the building repairs required to bring the building to a condition consistent with the original design conditions, or improved to meet current applicable building codes, would not be practical and, if possible, would be cost prohibitive.

Status/Recent Developments:

Gulf-Keystar, LLC is the Construction Management At Risk firm who is facilitating the construction of the new building. Thomas E. Pope, PA, is providing architectural and construction administration services during construction.

Financial Information:

Capital Funding:

	Five Year Plan					Total Cost
	2022	2023	2024	2025	2026	
Capital Engineering & Construction Costs	\$3,000,000	\$0	\$ -	\$ -	\$ -	\$3,000,000
Total Costs	\$3,000,000	\$0	\$0	\$ -	\$ -	\$3,000,000

Operating Impact:

	Annual Operating Cost (Savings)					Total
	2022	2023	2024	2025	2026	
New Personnel (FTEs)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Personal Services Costs	-	-	-	-	-	-
Other Operating Costs	-	-	-	-	-	-
Total Operating Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Project Summaries (continued)

For fiscal years 2022-2026

SOUTH/UNITED STREETS WATER DISTRIBUTION UPGRADE

Water Distribution

Project Information

Location	Key West
Project Type	Water Distribution
Category	Water
Project Number	2218-06
Design Engineer	Emmy Koenig, P.E.
Project Manager	Emmy Koenig, P.E.
Contractor	In-house Construction Crew
Start Date	2006
Completion Date	2023
Bond Funded	No
Facilities Master Plan Project	Yes



Description/Justification:

This project will replace old 8" Cast Iron pipe with 8" PVC water main.

Status/Recent Developments:

The project is in the design phase.

Financial Information:

Capital Funding:

	Five Year Plan					Total Cost
	2022	2023	2024	2025	2026	
Capital Engineering & Construction Costs	\$ 1,100,000	\$ 1,500,000	\$ -	\$ -	\$ -	\$ 2,600,000
Total Costs	\$ 1,100,000	\$ 1,500,000	\$ -	\$ -	\$ -	\$ 2,600,000

Operating Impact:

	Annual Operating Cost (Savings)					Total
	2022	2023	2024	2025	2026	
New Personnel (FTEs)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Personal Services Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Operating Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Operating Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Project Summaries (continued)

For fiscal years 2022-2026

Front/Whitehead Distribution Replacement

Renewal and Replacement

Project Information

Location	Key West
Project Type	Water Distribution Replacement
Category	Renewal and Replacement
Project Number	2358-21
Design Engineer	David Hackworth, P.E.
Project Manager	David Hackworth, P.E.
Contractor	TBD
Start Date	2019
Completion Date	2022
Bond Funded	No
Facilities Master Plan Project	Yes



Description/Justification:

This project includes the replacement of existing 5,468 feet of 12" ductile iron distribution pipe, located in Downtown Key West, for replacement. The area of pipe is located from Simonton St to Front St and Whitehead St in a very congested area.

Status/Recent Developments:

Suspected pipe throughout this area is the focus of replacement due to multiple leaks within this area. This project will partially be funded by a low interest federal loan administered by the Water Infrastructure Finance and Innovation Act (WIFIA).

Financial Information:

Capital Funding:

	Five Year Plan					Total Cost
	2022	2023	2024	2025	2026	
Capital Engineering & Construction Costs	\$ 1,000,000	\$ -	\$ -	\$ -	\$ -	\$ 1,000,000
Total Costs	\$ 1,000,000	\$ -	\$ -	\$ -	\$ -	\$ 1,000,000

Operating Impact:

	Annual Operating Cost (Savings)					Total
	2022	2023	2024	2025	2026	
New Personnel (FTEs)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Personal Services Costs	30,000	30,000	30,000	30,000	30,000	150,000
Total Operating Costs	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 150,000

Project Summaries (continued)

For fiscal years 2022-2026

KEY WEST TRANSMISSION MAIN TERMINUS REPLACEMENT

Renewal and Replacement

Project Information

Location	Key West
Project Type	Transmission System
Category	Renewal and Replacement
Project Number	1153-17
Design Engineer	TBD
Project Manager	Emmy Koenig, P.E.
Contractor	TBD
Start Date	2023
Completion Date	2024
Bond Funded	No
Facilities Master Plan Project	Yes



Description/Justification:

This project includes the final section of transmission in Key West that needs to be replaced. This section is the remaining original 18" pipeline that was installed in the 1940's which has pressure limitations and poses a high risk of failure.

Status/Recent Developments:

This project is in the planning phase. The project is expected to be partially financed from a federal low interest loan administered by the Water Infrastructure Finance and Innovation Act (WIFIA).

Financial Information:

Capital Funding:

	Five Year Plan					Total Cost
	2022	2023	2024	2025	2026	
Capital Engineering & Construction Costs	\$ -	\$ 1,000,000	\$ 4,500,000	\$ -	\$ -	\$ 5,500,000
Total Costs	\$ -	\$ 1,000,000	\$ 4,500,000	\$ -	\$ -	\$ 5,500,000

Operating Impact:

	Annual Operating Cost (Savings)					Total Cost
	2022	2023	2024	2025	2026	
New Personnel (FTEs)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Personal Services Costs	50,000	50,000	50,000	50,000	50,000	250,000
Total Operating Costs	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 250,000

Project Summaries (continued)

For fiscal years 2022-2026

STOCK ISLAND GENERATOR FACILITY

New Facilities

Project Information

Location	Stock Island
Project Type	Facility
Category	Facility
Project Number	3237-20
Design Engineer	Black and Veatch
Project Manager	Brian Stark
Contractor	TBD
Start Date	2020
Completion Date	2024
Bond Funded	No
Facilities Master Plan Project	Yes



Description/Justification:

The proposed Stock Island Generator Facility will serve to power the New Kermit H. Lewin Reverse Osmosis Facility, Desal Pump Station, and other buildings on the site.

Status/Recent Developments:

The project is in the design phase. FCAA will be receiving Florida Department of Emergency Management grant to fund this project.

Financial Information:

Capital Funding:

	Five Year Plan					Total Cost
	2022	2023	2024	2025	2026	
Capital Engineering & Construction Costs	\$ 4,000,000	\$ 4,800,000	\$ 400,000	\$ -	\$ -	\$ 9,200,000
Total Costs	\$ 4,000,000	\$ 4,800,000	\$ 400,000	\$ -	\$ -	\$ 9,200,000

Operating Impact:

	Annual Operating Cost (Savings)					Total
	2022	2023	2024	2025	2026	
New Personnel (FTEs)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Personal Services Costs	-	-	-	-	-	-
Other Operating Costs	-	-	-	-	-	-
Total Operating Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Project Summaries (continued)

For fiscal years 2022-2026

STOCK ISLAND GARAGE REPLACEMENT

Renewal and Replacement

Project Information

Location	Stock Island Maintenance Garage
Project Type	Building Replacement
Category	Renewal and Replacement
Project Number	3233-19
Design Engineer	TBD
Project Manager	Jolynn Reynolds, P.E.
Contractor	TBD
Start Date	2025
Completion Date	2026
Bond Funded	No
Facilities Master Plan Project	Yes



Description/Justification:

The existing maintenance garage at Stock Island is in poor condition and needs to be replaced.

Status/Recent Developments:

FKAA will retain a design engineer in 2025.

Financial Information:

Capital Funding:

	Five Year Plan					Total Cost
	2022	2023	2024	2025	2026	
Capital Engineering & Construction Costs	\$ -	\$ -	\$ -	\$ 520,000	\$ 3,600,000	\$ 4,120,000
Total Costs	\$ -	\$ -	\$ -	\$ 520,000	\$ 3,600,000	\$ 4,120,000

Operating Impact:

	Annual Operating Cost (Savings)					Total
	2022	2023	2024	2025	2026	
New Personnel (FTEs)						
Personal Services Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Operating Costs	-	-	-	-	-	-
Total Operating Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Project Summaries (continued)

For fiscal years 2022-2026

New Kermit H. Lewin Reverse Osmosis Facility

Renewal and Replacement

Project Information

Location	Stock Island
Project Type	Water Supply and Treatment
Category	Resiliency
Project Number	1150-17/7050-18
Design Engineer	Carollo
Project Manager	David Hackworth, P.E.
Contractor	TBD
Start Date	2017
Completion Date	2024
Bond Funded	Yes
Facilities Master Plan Project	Yes



Description/Justification:

The existing 2 Million Gallon per Day (MGD) Stock Island Reverse Osmosis (SIRO) is maintenance intensive, lacks reliability, and fails to meet production goals. To promote public health and safety, the goal of this project is develop a water production facility on Stock Island that will provide sufficient capacity during emergency conditions, provide system reliability, new equipment, and membrane technology.

Status/Recent Developments:

Final design is nearly complete. This project will partially be funded by a grant from Department of Economic Opportunity and a low interest federal loan administered by the Water Infrastructure Finance and Innovation Act (WIFIA).

Financial Information:

Capital Funding:

	Five Year Plan					Total Cost
	2022	2023	2024	2025	2026	
Capital Engineering & Construction Costs	\$ 20,000,000	\$ 12,000,000	\$ 4,000,000	\$ -	\$ -	\$ 36,000,000
Total Costs	\$ 20,000,000	\$ 12,000,000	\$ 4,000,000	\$ -	\$ -	\$ 36,000,000

Operating Impact:

	Annual Operating Cost (Savings)					Total
	2022	2023	2024	2025	2026	
New Personnel (FTEs)						
Personal Services Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Operating Costs	-	-	-	-	-	-
Total Operating Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Project Summaries (continued)

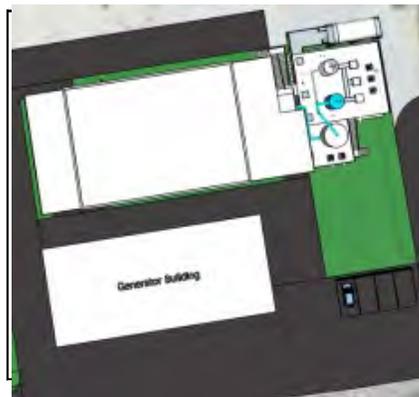
For fiscal years 2022-2026

STOCK ISLAND GENERATOR FACILITY

New Facilities

Project Information

Location	Stock Island
Project Type	Facility
Category	Facility
Project Number	3237-20
Design Engineer	Black and Veatch
Project Manager	Brian Stark
Contractor	TBD
Start Date	2020
Completion Date	2024
Bond Funded	No
Facilities Master Plan Project	Yes



Description/Justification:

The proposed Stock Island Generator Facility will serve to power the New Kermit H. Lewin Reverse Osmosis Facility, Desal Pump Station, and other buildings on the site.

Status/Recent Developments:

The project is in the design phase. FCAA will be receiving Florida Department of Emergency Management grant to fund this project.

Financial Information:

Capital Funding:

	Five Year Plan					Total Cost
	2022	2023	2024	2025	2026	
Capital Engineering & Construction Costs	\$ 4,000,000	\$ 4,800,000	\$ 400,000	\$ -	\$ -	\$ 9,200,000
Total Costs	\$ 4,000,000	\$ 4,800,000	\$ 400,000	\$ -	\$ -	\$ 9,200,000

Operating Impact:

	Annual Operating Cost (Savings)					Total
	2022	2023	2024	2025	2026	
New Personnel (FTEs)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Personal Services Costs	-	-	-	-	-	-
Other Operating Costs	-	-	-	-	-	-
Total Operating Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Project Summaries (continued)

For fiscal years 2022-2026

BIG COPPITT WASTEWATER RECLAMATION FACILITY EXPANSION

Treatment and Reclaimed Water

Project Information

Location	Big Coppitt WWTP
Project Type	Wastewater System
Category	WWTP Expansion
Project Number	4069-17
Design Engineer	Wharton-Smith/Carollo DB Team
Project Manager	David Hackworth, P.E.
Contractor	TBD
Start Date	2020
Completion Date	2024
Bond Funded	No
Facilities Master Plan Project	Yes



Description/Justification:

The Big Coppitt Wastewater Reclamation Facility is being expanded to accommodate the wastewater flows from Boca Chica Wastewater Treatment Plant and future growth of service area.

Status/Recent Developments:

Project is in the design and permitting phase.

Financial Information:

Capital Funding:

	Five Year Plan					Total Cost
	2022	2023	2024	2025	2026	
Capital Engineering & Construction Costs	\$1,000,000	\$ 5,000,000	\$ 8,000,000	\$ -	\$ -	\$ 14,000,000
Total Costs	\$1,000,000	\$ 5,000,000	\$ 8,000,000	\$ -	\$ -	\$ 14,000,000

Operating Impact:

	Annual Operating Cost (Savings)					Total Cost
	2022	2023	2024	2025	2026	
New Personnel (FTEs)						
Personal Services Costs	\$ -	\$ -	\$ -	\$ 200,000	\$ 200,000	\$ 400,000
Other Operating Costs	-	-	-	-	-	-
Total Operating Costs	\$ -	\$ -	\$ -	\$ 200,000	\$ 200,000	\$ 400,000

Project Summaries (continued)

For fiscal years 2022-2026

BIG COPPITT WASTEWATER RECLAMATION FACILITY FILTER REPLACEMENT

Renewal and Replacement

Project Information

Location	Big Coppitt WWTP Filter Replacement
Project Type	Wastewater System
Category	WWTP Upgrade
Project Number	4081-19
Design Engineer	CPH Engineering
Project Manager	David Hackworth, P.E,
Contractor	Reynolds Construction
Start Date	2019
Completion Date	2021
Bond Funded	No
Facilities Master Plan Project	Yes



Description/Justification:

The Big Coppitt Wastewater Reclamation Facility is being expanded to accommodate the wastewater flows from Boca Chica Wastewater Treatment Plant and future growth of service area.

Status/Recent Developments:

Project is in the construction phase.

Financial Information:

Capital Funding:

	Five Year Plan					Total Cost
	2021	2022	2023	2024	2025	
Capital Engineering & Construction Costs	\$1,300,000	\$ -	\$ -	\$ -	\$ -	\$ 1,300,000
Total Costs	\$1,300,000	\$ -	\$ -	\$ -	\$ -	\$ 1,300,000

Operating Impact:

	Annual Operating Cost (Savings)					Total Cost
	2021	2022	2023	2024	2025	
New Personnel (FTEs)						
Personal Services Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Operating Costs	-	-	-	-	-	-
Total Operating Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Project Summaries (continued)

For fiscal years 2022-2026

Bay Point Treatment Plant Decommissioning

Wastewater Improvements

Project Information

Location	Bay Point
Project Type	Wastewater
Category	Treatment
Project Number	TBD
Design Engineer	TBD
Project Manager	David Hackworth, P.E.
Contractor	TBD
Start Date	2025
Completion Date	2025
Bond Funded	No
Facilities Master Plan Project	Yes



Description/Justification:

The Bay Point Wastewater Treatment Plant meets Best Available Technology Treatment Standards in the treatment of the wastewater. The future goal of the FCAA would be to transfer wastewater to the Cudjoe Regional Wastewater Treatment Facility where the wastewater would be treated Advanced Wastewater Treatment Standards. This would allow decommissioning of the wastewater treatment plant along with elimination of operational expenses at this facility.

Status/Recent Developments:

This project is in the planning phase.

Financial Information:

Capital Funding:

	Five Year Plan					Total Cost
	2021	2022	2023	2024	2025	
Capital Engineering & Construction Costs	\$ -	\$ -	\$ -	\$ -	\$ 5,100,000	\$ 5,100,000
Total Costs	\$ -	\$ -	\$ -	\$ -	\$ 5,100,000	\$ 5,100,000

Operating Impact:

	Annual Operating Cost (Savings)					Total
	2021	2022	2023	2024	2025	
New Personnel (FTEs)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Personal Services Costs	(90,000.00)	(90,000.00)	(90,000.00)	(90,000.00)	(90,000.00)	(450,000)
Other Operating Costs						
Total Operating Costs	\$ (90,000)	\$ (90,000)	\$ (90,000)	\$ (90,000)	\$ (90,000)	\$ (450,000)

Project Summaries (continued)

For fiscal years 2022-2026

NO NAME KEY DISTRIBUTION INSTALLATION

New Distribution System

Project Information

Location	No Name Key
Project Type	Distribution System
Category	Water Main Extension
Project Number	2332-17
Design Engineer	David Hackworth, P.E.
Project Manager	David Hackworth, P.E.
Contractor	TLC Diversified, Inc. and FCAA Construction Crew
Start Date	2020
Completion Date	2021
Bond Funded	No
Facilities Master Plan Project	Yes



Description/Justification:

Residents of No Name Key are not currently served by FCAA with potable water. Residents in these areas are reliant upon cisterns and non-potable water deliveries for water and have expressed interest in connecting to the FCAA distribution system to improve their water quality. The purpose of this project is to install approximately 17,790 linear feet of distribution mains to serve No Name Key and connect to the existing distribution system serving Big Pine Key.

Status/Recent Developments:

The installation of the pipe on the bridge is currently underway. FCAA's Engineering Department is currently completing the design and permitting for the remaining distribution system.

Financial Information:

Capital Funding:

	Five Year Plan					Total Cost
	2021	2022	2023	2024	2025	
Capital Engineering & Construction Costs	\$ 1,300,000	\$ -	\$ -	\$ -	\$ -	\$ 1,300,000
Total Costs	\$ 1,300,000	\$ -	\$ -	\$ -	\$ -	\$ 1,300,000

Operating Impact:

	Annual Operating Costs (Savings)					Total Cost
	2021	2022	2023	2024	2025	
New Personnel (FTEs)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Personal Services Costs	-	5,000	5,000	5,000	5,000	20,000
Total Operating Costs	\$ -	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 20,000

Project Summaries (continued)

For fiscal years 2022-2026

MARATHON 4 MG STORAGE TANK, DISTRIBUTION PUMP STATION IMPROVEMENTS

Renewal & Replacement

Project Information

Location	Marathon Booster Pump Station
Project Type	Water System
Category	Renewal and Replacement
Project Number	1134-15
Design Engineer	Baxter Woodman
Project Manager	Jolynn Reynolds, P.E.
Contractor	TBD
Start Date	2024
Completion Date	2025
Bond Funded	No
Facilities Master Plan Project	Yes



Description/Justification:

There is an existing 3.0 Million Gallon (MG) concrete tank located at the Marathon Booster Pump Station that was built in 1974. The 3.0 MG tank is used for both distribution supply and emergency events that require back-pumping water from the tank to transmission pipeline. During the tank inspection in 2010, the tank was noted to be in fair condition with numerous settling cracks along with indications of leakage. Subsequently, repairs were made to the tank, but there are indications that leakage is still occurring. This proposed project will replace the 3MG tank with a 4 MG tank providing additional storage for distribution supply and emergency events and upgrade the distribution pump station.

Status/Recent Developments:

Final Design has been completed.

Financial Information:

Capital Funding:

	Five Year Plan					Total Cost
	2022	2023	2024	2025	2026	
Capital Engineering & Construction Costs	\$ -	\$ -	\$ 500,000	\$ 3,800,000	\$ -	\$ 4,300,000
Total Costs	\$ -	\$ -	\$ 500,000	\$ 3,800,000	\$ -	\$ 4,300,000

Operating Impact:

	Annual Operating Cost (Savings)					Total Cost
	2022	2023	2024	2025	2026	
New Personnel (FTEs)						
Personal Services Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Operating Costs	-	-	-	-	-	-
Total Operating Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Project Summaries (continued)

For fiscal years 2022-2026

Coco Plum Distribution System Upgrade

Renewal and Replacement

Project Information

Location	Marathon	
Project Type	Water	
Category	Distribution	
Project Number	2351-18	
Design Engineer	In-house	
Project Manager	Justin Dacey, E.I.	
Contractor	TBD	
Start Date	2025	
Completion Date	2025	
Bond Funded	No	
Facilities Master Plan Project	Yes	

Description/Justification:

This project has sub-standard pipe and has experience many leaks. This project includes the replacment and upgrade of 10,940 linear feet of pipe with 4", 6", and 8" pipe along with valves and hydrants.

Status/Recent Developments:

This project is in the planning phase.

Financial Information:

Capital Funding:

	Five Year Plan					Total Cost
	2022	2023	2024	2025	2026	
Capital Engineering & Construction Costs	\$ -	\$ -	\$ -	\$ 2,300,000	\$ -	\$ 2,300,000
Total Costs	\$ -	\$ -	\$ -	\$ 2,300,000	\$ -	\$ 2,300,000

Operating Impact:

	Annual Operating Cost (Savings)					Total
	2022	2023	2024	2025	2026	
New Personnel (FTEs)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Personal Services Costs	-	-	-	-	-	-
Other Operating Costs	-	-	-	-	-	-
Total Operating Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Project Summaries (continued)

For fiscal years 2022-2026

GRASSY KEY DISTRIBUTION UPGRADE

Water Distribution

Project Information

Location	Grassy Key
Project Type	Distribution System
Category	Water
Project Number	2363-21
Design Engineer	Emmy Koenig, P.E.
Project Manager	Emmy Koenig, P.E.
Contractor	TBD
Start Date	2025
Completion Date	2026
Bond Funded	No
Facilities Master Plan Project	Yes



Description/Justification:

This project will replace 2" thin-walled PVC and galvanized pipe with approximately 2,985 LF of 4" and 6" PVC watermains on Grassy Key.

Status/Recent Developments:

This project is in the planning phase.

Financial Information:

Capital Funding:

	Five Year Plan					Total Cost
	2022	2023	2024	2025	2026	
Capital Engineering & Construction Costs	\$ -	\$ -	\$ -	\$ -	\$ 700,000	\$ 700,000
Total Costs	\$ -	\$ -	\$ -	\$ -	\$ 700,000	\$ 700,000

Operating Impact:

	Annual Operating Cost (Savings)					Total
	2022	2023	2024	2025	2026	
New Personnel (FTEs)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Personal Services Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Operating Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Operating Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Project Summaries (continued)

For fiscal years 2022-2026

DUCK KEY INNER ISLAND DISTRIBUTION UPGRADE

Water Distribution

Project Information

Location	Duck Key
Project Type	Distribution System
Category	Water
Project Number	2362-21
Design Engineer	Emmy Koenig, P.E.
Project Manager	Emmy Koenig, P.E.
Contractor	TBD
Start Date	2024
Completion Date	2025
Bond Funded	No
Facilities Master Plan Project	Yes



Description/Justification:

This project will replace 2" thin-walled PVC and galvanized pipe with approximately 13,525 LF of 4" and 6" PVC watermains on Duck Key - Inner island.

Status/Recent Developments:

This project is in the planning phase.

Financial Information:

Capital Funding:

	Five Year Plan					Total Cost
	2022	2023	2024	2025	2026	
Capital Engineering & Construction Costs	\$ -	\$ -	\$ -	\$ 3,200,000	\$ -	\$ 3,200,000
Total Costs	\$ -	\$ -	\$ -	\$ 3,200,000	\$ -	\$ 3,200,000

Operating Impact:

	Annual Operating Cost (Savings)					Total
	2022	2023	2024	2025	2026	
New Personnel (FTEs)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Personal Services Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Operating Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Operating Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Project Summaries (continued)

For fiscal years 2022-2026

ISLAMORADA TRANSMISSION MAIN REPLACEMENT

Renewal and Replacement

Project Information

Location	Islamorada
Project Type	Transmission System
Category	Renewal and Replacement
Project Number	1163-18
Design Engineer	Emmy Koenig, P.E.
Project Manager	Emmy Koenig, P.E.
Contractor	TBD
Start Date	2019
Completion Date	2023
Bond Funded	Yes
Facilities Master Plan Project	Yes



Description/Justification:

As transmission pipe condition assessments are performed, sections of transmission main that pose the highest risk of failure are identified for future replacement. A portion of transmission main in Islamorada has been determined as one of these high risk areas. This area has a maximum pressure limitation which reduces the flow capacity needed to supply demands downstream of the area. In addition, it restricts the operation of Key Largo Pump Station to boost flow and pressure.

Status/Recent Developments:

The FCAA's Engineering Department will be designing the replacement transmission main. The project is expected to be financed from a federal low interest loan administered by the Water Infrastructure Finance and Innovation Act (WIFIA).

Financial Information:

Capital Funding:

	Five Year Plan					Total Cost
	2022	2023	2024	2025	2026	
Capital Engineering & Construction Costs	13,000,000	13,000,000	-	\$ -	\$ -	\$26,000,000
Total Costs	\$ 13,000,000	\$ 13,000,000	-	\$ -	\$ -	\$26,000,000

Operating Impact:

	Annual Operating Cost (Savings)					Total Cost
	2022	2023	2024	2025	2026	
New Personnel (FTEs)						
Personal Services Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Operating Costs	80,000	80,000	80,000	80,000	80,000	400,000
Total Operating Costs	\$ 80,000	\$ 80,000	\$ 80,000	\$ 80,000	\$ 80,000	\$ 400,000

Project Summaries (continued)

For fiscal years 2022-2026

OCEAN REEF DISTRIBUTION SYSTEM AND STORAGE IMPROVEMENTS

Renewal & Replacement

Project Information

Location	Ocean Reef Distribution Station
Project Type	Water
Category	Renewal and Replacement
Project Number	2352-18
Design Engineer	TBD
Project Manager	Justin Dacey, E.I.
Contractor	TBD
Start Date	2023
Completion Date	2025
Bond Funded	No
Facilities Master Plan Project	Yes



Description/Justification:

The distribution pumps serving Ocean Reef Club are approaching their end-of-life. The goals of this project are to determine the future needs of the Ocean Reef Club and add the storage and pumping capacity to meet those needs.

Status/Recent Developments:

FKAA retained Carollo Engineers to perform a hydraulic analysis of the Ocean Reef system to recommend a solution to improve the storage volume and system pressures in Ocean Reef.

Financial Information:

Capital Funding:

	Five Year Plan					Total Cost
	2022	2023	2024	2025	2026	
Capital Engineering & Construction Costs	\$ -	\$ 200,000	\$ 3,000,000	\$ 4,000,000	\$ -	\$ 7,200,000
Total Costs	\$ -	\$ 200,000	\$ 3,000,000	\$ 4,000,000	\$ -	\$ 7,200,000

Operating Impact:

	Annual Operating Cost (Savings)					Total
	2022	2023	2024	2025	2026	
New Personnel (FTEs)						
Personal Services Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Operating Costs	-	-	-	-	-	-
Total Operating Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Project Summaries (continued)

For fiscal years 2022-2026

ELECTRICAL IMPROVEMENTS AT FLORIDA CITY

Renewal and Replacement

Project Information

Location	J.R. Dean WTF, Florida City
Project Type	Water
Category	Renewal and Replacement
Project Number	1170-19
Design Engineer	Black and Veatch
Project Manager	Brian Stark
Contractor	Florida Design Contractors, Inc.
Start Date	2021
Completion Date	2022
Bond Funded	No
Facilities Master Plan Project	Yes



Description/Justification:

This project would address electrical improvements at Florida City.

Status/Recent Developments:

Black and Veatch completed an electrical assessment and identified/prioritized electrical improvements. They recently completed design and bidding. Florida Design Contractors, Inc. was awarded contract.

Financial Information:

Capital Funding:

	Five Year Plan					Total Cost
	2022	2023	2024	2025	2026	
Capital Engineering & Construction Costs	\$ 3,000,000	\$ -	\$ -	\$ -	\$ -	\$ 3,000,000
Total Costs	\$ 3,000,000	\$ -	\$ -	\$ -	\$ -	\$ 3,000,000

Operating Impact:

	Annual Operating Cost (Savings)					Total
	2022	2023	2024	2025	2026	
New Personnel (FTEs)						
Personal Services Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Operating Costs						
Total Operating Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Project Summaries (continued)

For fiscal years 2022-2026

CHEMICAL SYSTEM IMPROVEMENTS AT FLORIDA CITY

Renewal and Replacement

Project Information

Location	J.R. Dean WTF, Florida City
Project Type	Water
Category	Renewal and Replacement
Project Number	1164-18
Design Engineer	TBD
Project Manager	Justin Dacey
Contractor	TBD
Start Date	2025
Completion Date	2025
Bond Funded	No
Facilities Master Plan Project	Yes



Description/Justification:

Project includes adding control for auto-pacing of the chemical feeds supporting the water treatment process. This includes new dosing pumps, piping, valving, and remote SCADA control of equipment. This will help provide for a more stable treatment process and allow for more efficient use of treatment chemicals.

Status/Recent Developments:

Financial Information:

Capital Funding:

	Five Year Plan					Total Cost
	2022	2023	2024	2025	2026	
Capital Engineering & Construction Costs	\$ -	\$ -	\$ -	\$ 950,000	\$ -	\$ 950,000
Total Costs	\$ -	\$ -	\$ -	\$ 950,000	\$ -	\$ 950,000

Operating Impact:

	Annual Operating Cost (Savings)					Total
	2022	2023	2024	2025	2026	
New Personnel (FTEs)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Personal Services Costs	-	-	-	-	(10,000)	(10,000)
Total Operating Costs	\$ -	\$ -	\$ -	\$ -	\$ (10,000)	\$ (10,000)

Project Summaries (continued)

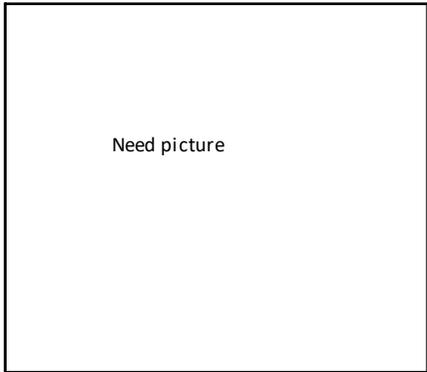
For fiscal years 2022-2026

UTILITY COORDINATION RELOCATES

Water Infrastructure Relocation

Project Information

Location	Various locations
Project Type	Relocation
Category	Water, Wastewater, Reclaimed
Project Number	2356-20/2355-20/2357-20
Design Engineer	Various locations
Project Manager	Justin Dacey, E.I.
Contractor	TBD
Start Date	2020
Completion Date	2022
Bond Funded	No
Facilities Master Plan Project	Yes



Description/Justification:

The FCAA will be performing water infrastructure relocations to accommodate other utility work. Currently, the county is performing bridge work on Duck Key and Lower Sugarloaf which require the FCAA to relocate pipes.

Status/Recent Developments:

The projects are currently in the design or construction phase.

Financial Information:

Capital Funding:

	Five Year Plan					Total Cost
	2022	2023	2024	2025	2026	
Capital Engineering & Construction Costs	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ 500,000
Total Costs	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ 500,000

Operating Impact:

	Annual Operating Cost (Savings)					Total
	2022	2023	2024	2025	2026	
New Personnel (FTEs)						
Personal Services Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Operating Costs	-	-	-	-	-	-
Total Operating Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Project Summaries (continued)

For fiscal years 2022-2026

TRANSMISSION MAIN REHABILITATION

Renewal and Replacement

Project Information

Location	Various Locations
Project Type	Transmission System
Category	Renewal and Replacement
Project Number	1169-19
Design Engineer	TBD
Project Manager	Jolynn Reynolds, P.E.
Contractor	TBD
Start Date	2026
Completion Date	2032
Bond Funded	No
Facilities Master Plan Project	Yes



Description/Justification:

The expansion joints and dresser couplings on the transmission main located within the box girder bridges at Channel 5, Long Key, 7-Mile and Niles Channel need to be replaced.

Status/Recent Developments:

FKAA Engineering and Operations staff are collaborating in the development of a work plan to make the necessary repairs while maintaining water service to the Middle-Lower Keys.

Financial Information:

Capital Funding:

	Five Year Plan					Total Cost
	2022	2023	2024	2025	2026	
Capital Engineering & Construction Costs	-	-	-	\$ -	\$ 6,000,000	\$6,000,000
Total Costs	\$ -	\$ -	\$ -	\$ -	\$ 6,000,000	\$6,000,000

Operating Impact:

	Annual Operating Cost (Savings)					Total Cost
	2022	2023	2024	2025	2026	
New Personnel (FTEs)						
Personal Services Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Operating Costs						
Total Operating Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Project Summaries (continued)

For fiscal years 2022-2026

US NAVY SYSTEM UPGRADES

Renewal and Replacement

Project Information

Location	Navy properties in lower Keys
Project Type	Distribution System
Category	Renewal and Replacement
Project Number	8000 series
Design Engineer	In-house Design Team/Consultants
Project Manager	Assignments to staff engineers
Contractor	In-house crew and others
Start Date	2008
Completion Date	Ongoing
Funding	Revenue from Navy contract
Facilities Master Plan Project	Yes



Description/Justification:

The Authority entered into a contract in January 2008 to own and operate the Navy's water distribution systems in the Keys. Many of the lines are reaching end of life, water tanks need maintenance and valves and/or replacement other infrastructure is lacking. Revenue from the Navy includes funding for renewal and replacement that will be sufficient to fund the following upgrades through 2025. The following upgrades are located on Boca Chica:

- Connection Tank Feed
- Connection A Distribution Upgrades
- Connection B Distribution Upgrades
- Second Feed Transmission Feed to Boca Chica
- Fire System - West
- Fire System - East

Status/Recent Developments:

The projects are in the planning, design, and bidding phases.

Financial Information:

Capital Funding:

	Five Year Plan					Total Cost
	2022	2023	2024	2025	2026	
Capital Engineering & Construction Costs	\$ 2,000,000	\$ 2,590,000	\$ 2,450,000	\$ 1,300,000	\$ 810,000	\$ 9,150,000
Total Costs	\$ 2,000,000	\$ 2,590,000	\$ 2,450,000	\$ 1,300,000	\$ 810,000	\$ 9,150,000

Operating Impact:

	Annual Operating Costs (Savings)					Total Cost
	2021	2022	2023	2024	2025	
New Personnel (FTEs)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Personal Services Costs	-	-	-	-	-	-
Other Operating Costs	-	-	-	-	-	-
Total Operating Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Project Summaries (continued)

For fiscal years 2022-2026

Florida City Gravity Thickener and Flooring Maintenance

Renewal & Replacement

Project Information

Location	J. Robert Dean Water Treatment Plant
Project Type	Water
Category	Renewal and Replacement
Project Number	3238-21
Design Engineer	CPH Engineering
Project Manager	Emmy Koenig
Contractor	Florida Design Contractors, Inc.
Start Date	2022
Completion Date	2022
Bond Funded	No
Facilities Master Plan Project	No



Description/Justification:

The project consists of replacement of gravity thickener drive unit, submerged thickener components, all associated hardware, and repair and epoxy coating to the interior lime room concrete floor.

Status/Recent Developments:

FKAA received bids on August 9, 2021. The low responsive and responsible bidder was Florida Design Contractors inc with a bid amount of \$1,418,621.00

Financial Information:

Capital Funding:

	Five Year Plan					Total Cost
	2022	2023	2024	2025	2026	
Capital Engineering & Construction Costs	\$ 1,500,000	\$ -	\$ -			\$ 1,500,000
Total Costs	\$ 1,500,000	\$ -	\$ -	\$ -	\$ -	\$ 1,500,000

Operating Impact:

	Annual Operating Cost (Savings)					Total
	2021	2022	2023	2024	2025	
New Personnel (FTEs)						
Personal Services Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Operating Costs	-	-	-	-	-	-
Total Operating Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Capital Outlay Budget Detail

For fiscal year 2022

			Amount	Water cost centers	Wastewater cost centers	Total
Executive Division						
<u>Executive</u>						
1011	Executive Office	None	\$ -	\$ -		
1012	Public Information	None	-	-		\$ -
Administration Division						
<u>Customer Service</u>						
3030	Customer Service Administration	None	-	-		
3031	Central Payment Processing	None	-	-		
3032	Customer Service-Key West	None	-	-		
3034	Customer Service-Marathon	None	-	-		
3035	Customer Service-Tavernier	None	-	-		
3037	Field Services-Key West	None	-	-		
3038	Field Services-Marathon	None	-	-		
3039	Field Services-Tavernier	None	-	-		
<u>Finance</u>						
6010	Finance	None	-	-		
6020	Billing	None	-	-		
6030	Purchasing and Inventory	New roll up door for LKWH	7,000			
		Backflow meter change out program	175,000			
		Meters (new service)	100,000			
		Small meter replacement	35,000			
		Large meter replacement	100,000	417,000		
6040	Records	None	-	-		
						417,000
<u>Human Resources</u>						
7010	Human Resources	None	-	-		
<u>Information Technology</u>						
8010	Information Technology	Barcode software and hardware	40,000			
		SCADA Firewalls	30,000			
		SCADA Infrastructure Servers	14,000			
		Infrastructure Servers	14,000			
		Printers (2)	20,000			
		Fiber Tester	25,000			
				143,000		
						143,000
Utility Operations Division						
<u>Engineering</u>						
2021	General Engineering	Large scanner/ printer	6,500	6,500		
2022	Contract Management	GPS Equipment	15,000	15,000		
2023	Water Quality	None	-	-		
2024	Design	Plotter	37,500			
		Larger Scanner/ Printer	6,500	44,000		
2025	Construction Crew	(1) Skid Steer	70,000	70,000		
						135,500
<u>Water Operations</u>						
4001	Operations Office Key West	None	-	-		
4101	Operations Office Stock Island/lower keys	Portable backup generator	60,000	60,000		
4102	Distribution/Maintenance-Area I	Vachunter Excavator	118,000	118,000		
4103	Distribution/Maintenance-Area II	Backhoe Loader (replace # 832)	89,800			
		Skid Steer Loader (replace # 850)	43,400	133,200		
4104	Distribution Pump Station-Key West	None	-	-		
4105	Distribution Pump Station-Stock Island	Back pump station valve replacement	55,000	55,000		
4108	Fleet Maintenance-lower keys	Vehicles (see below)	519,100	519,100		
4110	Stock Island Reverse Osmosis Plant	None	-	-		

Capital Outlay Budget Detail (continued)

For fiscal year 2022

4201	Operations Marathon/Middle keys	Leak detection equipment (new)	6,000		
		Landscape trailer (replace # 876)	5,500		
		AC unit for supervisor offices	7,600	19,100	
4202	Distribution/Maintenance-Area III	6" Complete flow valve for Crawl Key pump station	21,000	21,000	
4203	Transmission Maintenance-Area III	30" Valve (spare)	17,000		
		24" Valve (spare)	12,000	29,000	
4204	Transmission Pump Station-Marathon	Pump (replacement)	110,000		
		16" Check valve (2)	80,000	190,000	
4205	Transmission Pump Station-Ramrod	14" Check valve (replacement)	32,000		
		20" Check valve (replacement)	53,000		
		Diesel engine pump (replacement)	90,000		
		Ramrod VFD pump (replacement)	70,000	245,000	
4208	Fleet Maintenance-middle keys	Vehicles (see below)	515,800		
		Ice machine (replacement)	5,800		
		Diesel diagnostic tool	9,700	531,300	
4210	Reverse Osmosis Plant-Marathon	Filter cartridge (replacement)	50,000	50,000	
4301	Operations Key Largo and upper keys	None	-	-	
4302	Distribution Maintenance Area IV	Tilt trailer (replace # 291)	10,700	10,700	
4303	Distribution Maintenance Area V	None	-	-	
4304	Transmission Maintenance Areas IV and V	Forklift (new)	50,000		
		Backhoe trailer (replace # 837)	27,000	77,000	
4308	Fleet Maintenance-upper keys	Vehicles (see below)	33,500	33,500	
5010	Water Treatment Plant-Florida City	Refurbish accelerator	485,000	485,000	
5020	Transmission Pump Station-Florida City	Nagle pump (replacement)	40,000		
		F valves (10) (replacements)	50,000		
		Fluoride pump (replacement)	15,000		
		WACH trash pump (replacement)	16,000	121,000	
5030	Transmission Pump Station-Long Key	Diesel gasket replacement	10,200		
		Rotating pumps (3)	135,000		
		6 - 20" BF Valve (replacements)	72,000	217,200	
5040	Transmission Pump Station-Key Largo	Goulds pump (spare)	111,000		
		24" check valve (spare)	65,000		
		12" pressure reducing valve (replacement)	29,500		
		12" pressure relief valve (replacement)	37,500		
		Expansion joint	10,000		
		6" pressure relief valve (replacement)	11,500	264,500	
5050	Florida City RO Plant	Meter for Gamma X pump	18,000	18,000	
5060	Electrical and Instrumentation Controls	Marathon diesel PLC upgrade	35,800		
		Key Largo diesel PLC upgrade	33,500		
		Marathon spare motor	63,700		
		FL City transformer replacement	16,900		
		FL City feeder wire replacement for K-6	30,000		
		FL City High Service Pump VFD cell upgrade	200,000		
		KW Plant VFD	60,000	439,900	
2027	Water Data Management and Loss Division	None	-	-	
					3,637,500
	Wastewater Operations				
4112	Bay Point Wastewater Treatment Plant	None	-	-	
4113	Bay Point Collection	None	-	-	
4114	Big Coppitt Wastewater Treatment	WAS pump (replacement)	5,300		
		Composite sampler (replacement)	7,200	12,500	
4115	Big Coppitt Collection	None	-	-	
4116	Key Haven Wastewater Treatment	None	-	-	
4117	Key Haven Collection	None	-	-	
4118	Cudjoe Regional Wastewater Treatment	Polymer skid for RDT (replacement)	13,300		
		Bar screen replacement (2)	245,000		
		Permanent cover for CCC	36,000		
		Replacement composite sampler	7,200		
		Banana blade mixer (replacement)	9,900	311,400	

Capital Outlay Budget Detail (continued)

For fiscal year 2022

4119	Cudjoe Regional Collection	None	-	-	
4120	Navy Wastewater System	None	-	-	
4213	Wastewater Treatment Plant-Duck Key	Wilo pump (replacement)	8,500		
		RAS/WAS Pump (replacement)	6,500	15,000	
4214	Wastewater Operations and Maintenance	Hydraulic dump trailer (new)	7,700		
		Asphalt millings Big Pine yard	14,200	21,900	
4216	Duck Key Collection	Resort manhole repair (4)	24,000		
		Grinder pump replacement (1)	5,600	29,600	
4312	Wastewater Treatment Plant-Layton	Hoist and winch replacement	5,600		
		Permanent office 12x28	60,000	65,600	
4313	Layton Collection	Flygt 3127.170 11 HP Pump Main Lift Station	9,000	9,000	
4314	Cross Key	None	-	-	
					465,000

Total Capital Outlay \$ **4,798,000**

Fleet details

4108	Fleet Maintenance-lower keys	1/2 ton dual cab (replace vehicle # 173)	34,000		
		1/2 ton (replace vehicle # 536)	30,500		
		1/2 ton (replace vehicle # 341)	30,500		
		1/2 ton (replace vehicle # 111)	30,500		
		(1) Mechanic Service Truck (replacement)	180,000		
		1 ton (replace vehicle # 107)	46,200		
		1 ton (replace vehicle # 308)	46,200		
		1 ton w/Knapheide body and toolboxes (replace vehicle # 122)	56,200		
		1 ton cattle truck (replace vehicle # 101)	65,000		
4208	Fleet Maintenance-middle keys	1/2 ton (replace vehicle # 344)	30,500	519,100	
		1/2 ton (replace vehicle # 172)	30,500		
		1/2 ton (replace vehicle # 333)	30,500		
		1/2 ton (replace vehicle # 404)	30,500		
		1 ton w/crane (replace vehicle # 306)	77,700		
		F-550 w/crane (replace vehicle # 316)	83,000		
		3 ton w/crane for WW position (new)	233,100	515,800	
4308	Fleet Maintenance-upper keys	1/2 ton (replace vehicle # 192)	33,500	33,500	
					1,068,400

Capital Financing Plan Summary

For fiscal year 2022

Background

The Authority has developed a long-range capital financing plan that is intended to identify when bonds must be issued to fund capital projects. Since Monroe County will be funding all future capital costs relating to wastewater, this plan centers around the water system capital improvement plan.

The Authority's ratings for water bonds are Aa3, A+, and AA- from Moody's Investor Services, Standard and Poor's, and Fitch Ratings, respectively. The Authority has no legal debt limits.

Summary of Debt

Anticipated Budget Year Bond Issues

No water bond issues are anticipated for the 2022 budget year. Water capital projects will be funded using proceeds from the Series 2019A bonds issued in June 2019, a short term interim loan from series 2021B, as well as available cash reserves and revenue from a dedicated source such as assessments, state appropriations and rate revenue from U.S. Navy.

Wastewater projects will be funded by a combination of rate revenue and existing cash reserves.

Total projected outstanding debt at the end of budget year 2022 is estimated to be approximately \$202 million and debt service is approximately \$13.1 million.

Existing Outstanding Bond Issues

Water Revenue and Revenue Refunding Bonds

In June 2008 the Authority issued \$52,625,000 in water revenue refunding bonds. The 2008 bonds bear interest at a variable rate that is set each week when the bonds are remarketed (.07% at June 10, 2015). The proceeds from these bonds were used to refund Series 2006 bonds, which were insured by a failed bond insurer. The refunding was necessary to replace the bond insurer with a letter of credit. The interest rate swap executed at the issuance of the Series 2006 bonds in place with the notional amount now tied to the Series 2008 bonds.

In July 2013, the Authority issued \$19,900,000 in Series 2013A refunding revenue bonds to a bank. The proceeds from this issue were used to refund Series 2003 water revenue bonds. The bonds bear interest at a fixed rate of 1.64%. This issue resulted in an economic benefit to the Authority of about \$2.6 million in savings.

In November 2013, the Authority issued \$7,700,000 in Series 2013B revenue bonds to a bank to partially fund water distribution line replacements that are being accelerated by wastewater line construction. In January 2014, the Authority issued \$2,670,000 in Series 2014B bonds to the same bank to fully fund the project. Both series bear interest at a fixed rate of 3.52%.

In April 2015, the Authority issued \$34,560,000 in Series 2015A bonds and \$16,435,000 in Series 2015B bonds to advance-refund outstanding Series 2007 bonds maturing after 2019. The 2015A bonds have an effective interest rate of approximately 3.75% and the Series 2015B bonds bear interest at a rate of 2.52%.

In June 2019, the Authority issued \$50,000,000 in Series 2019A water revenue bonds to finance certain critical projects in the capital improvement plan. The bonds have an effective interest rate of 4.18%.

Capital Financing Plan Summary (continued)

For fiscal year 2022

In March 2021, the Authority closed on a WIFIA loan in series 2021A water revenue bonds to finance certain capital improvement projects. A draw on this loan will occur in 2025. The bond has an effective interest rate of 2.32%

Water revenue and revenue refunding bonds are issued under the Authority's Resolution No. 03-12. The payment of the principal and interest on these bonds is collateralized by a pledge of and lien upon the net revenues derived from the operation of the Authority's water utility and other monies including investments held in certain accounts established by the bond resolution. Under the bond resolution, the Authority will fix, establish, maintain and collect the water rates and revise the same from time to time, whenever necessary, that will always provide in each fiscal year, (a) net revenues adequate at all times to pay in each fiscal year at least one hundred ten percent (110%) of the annual debt service requirement becoming due in such fiscal year on each series of outstanding bonds and at least one hundred percent (100%) of any amounts required by the terms of the bond resolution to be deposited in the reserve account or reserve account insurance policy in such fiscal year, and (b) net revenues, together with impact fees deposited in the current account in the impact fees fund, adequate to pay at least one hundred twenty percent (120%) of the current annual debt service requirement becoming due in such fiscal year on the outstanding bonds. The rates will not be reduced to a level that would be insufficient to provide net revenues fully adequate for the purposes provided by the bond resolution.

Wastewater Revenue Bonds

In September 2012, the Authority issued Series 2012 wastewater refunding revenue bonds to a bank in an amount of \$5,635,000. The proceeds were used to refund Series 2001, 2004 and 2009 wastewater revenue bonds and bear interest at a fixed rate of 2.86%. Principal payments are due annually on September 1 until 2029 at which time all outstanding principal is payable in full. Interest is payable on March 1 and September 1 of each year through 2029.

In November 2016, the Authority issued Series 2016 wastewater revenue bonds to a bank in an amount of \$10,000,000. The proceeds are being used to fund wastewater capital improvements in the lower keys. The bonds bear interest at a fixed rate of 1.72%. Principal payments are due annually on September 1 until 2036 at which time all outstanding principal is payable in full. Interest is payable on March 1 and September 1 of each year through 2036.

Wastewater revenue and revenue refunding bonds were issued under the Authority's Resolution No. 00-20 adopted October 18, 2000 and Resolution No. 01-25 adopted September 19, 2001. The payment of the principal and interest on these bonds is collateralized by a pledge of and lien upon the net revenues derived from the operation of the Authority's wastewater utility and other monies including investments held in certain accounts established by the bond resolution. Under the bond resolution, the Authority will fix, establish, maintain and collect the wastewater rates and revise the same from time to time, whenever necessary, that will always provide in each fiscal year, (a) net revenues adequate at all times to pay in each fiscal year at least one hundred ten percent (110%) of the annual debt service requirement becoming due in such fiscal year on each series of outstanding bonds or (b) net revenues, together with impact fees collected, adequate to pay at least one hundred twenty percent (120%) of the current annual debt service requirement becoming due in such fiscal year on the outstanding bonds. The rates will not be reduced to a level that would be insufficient to provide net revenues fully adequate for the purposes provided by the bond resolution.

Debt Service Requirements

For fiscal year 2022

SUMMARY OF OUTSTANDING PRINCIPAL OF LONG TERM DEBT

	Projected outstanding principal, 10/1/21	2022 proceeds from issuance of debt	2022 budgeted principal payments	Projected outstanding principal, 9/30/22
Series 2008 water refunding and revenue bonds ^[1]	\$ 52,625,000	\$ -	\$ 2,745,000	\$ 49,880,000
Series 2012 wastewater revenue bonds	3,200,000	-	370,000	2,830,000
Series 2013A water refunding bonds	5,255,000	-	-	5,255,000
Series 2013B water revenue bonds	5,955,000	-	360,000	5,595,000
Series 2014A water revenue bonds	2,080,000	-	125,000	1,955,000
Series 2015A water refunding bonds	34,560,000	-	1,690,000	32,870,000
Series 2015B water refunding bonds	14,745,000	-	115,000	14,630,000
Series 2016 wastewater revenue bonds	9,395,000	-	260,000	9,135,000
Series 2019 water revenue bonds	45,010,000	-	-	45,010,000
Series 2021A water revenue bonds	-	-	-	-
Series 2021B water revenue bonds [2]	-	35,000,000	-	35,000,000
Total bonds	\$ 172,825,000	\$ 35,000,000	\$ 5,665,000	\$ 202,160,000

SUMMARY OF DEBT SERVICE

	Fixed / Variable	Budgeted 2021 debt service			Budgeted 2022 debt service		
		Principal	Interest	Total	Principal	Interest	Total
Series 2008 water refunding and revenue bonds ^[1]	Variable	\$ -	\$ 1,992,000	\$ 1,992,000	\$ 2,745,000	\$ 2,036,400	\$ 4,781,400
Series 2012 wastewater revenue bonds	Fixed 2.86%	360,000	91,000	451,000	370,000	71,000	441,000
Series 2013A water refunding bonds	Fixed 1.64%	2,615,000	86,000	2,701,000	-	-	-
Series 2013B water revenue bonds	Fixed 3.52%	335,000	209,000	544,000	360,000	186,000	546,000
Series 2014A water revenue bonds	Fixed 3.52%	120,000	73,000	193,000	125,000	65,000	190,000
Series 2015A water refunding bonds	Fixed 3.375-5.00%	245,000	1,340,000	1,585,000	1,690,000	1,315,000	3,005,000
Series 2015B water revenue bonds	Fixed 2.52%	640,000	372,000	1,012,000	115,000	340,000	455,000
Series 2016 wastewater revenue bonds	Fixed 1.72%	240,000	162,000	402,000	260,000	150,000	410,000
Series 2019A water revenue bonds	Fixed 5.00%	-	2,250,000	2,250,000	-	2,250,500	2,250,500
Series 2021B water revenue bonds [2]	Fixed 5.00%	-	-	-	-	1,003,972	1,003,972
Total bonds		\$ 4,555,000	\$ 6,575,000	\$ 11,130,000	\$ 5,665,000	\$ 7,417,872	\$ 13,082,872

^[1] Includes ancillary costs of remarketing and letter of credit fees

[2] Assumes delivery date of June 19, 2021

Debt Service Coverage Analysis

For fiscal year 2022

PROJECTED DEBT SERVICE COVERAGE

	Budgeted 2021		Budgeted 2022	
	Water	Wastewater	Water	Wastewater
	Revenue available for debt service			
Total operating revenue	\$ 59,165,000	\$ 10,037,000	\$ 62,559,000	\$ 11,498,000
Interest income-revenue funds	500,000	-	500,000	-
Other revenue available for debt service	6,534,000	-	10,555,000	-
Less operating expenses before depreciation	(41,959,581)	(8,822,000)	(43,172,800)	(10,182,000)
Net funds available for debt coverage	24,239,419	1,215,000	30,441,200	1,316,000
Debt service requirements	\$ 10,277,000	853,000	\$ 12,231,872	851,000
Coverage factor (minimum of 1.10 for water only)	2.36		2.49	
System development fees	\$ 1,000,000	\$ 138,000	\$ 1,000,000	\$ 500,000
Coverage factor with system development fees (minimum of 1.20)	2.46	1.59	2.57	2.13

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DEPARTMENTAL INFORMATION

EXECUTIVE DIVISION SUMMARY

FINANCE DEPARTMENT SUMMARY

CUSTOMER SERVICE DEPARTMENT SUMMARY

HUMAN RESOURCES DEPARTMENT SUMMARY

INFORMATION TECHNOLOGY DEPARTMENT SUMMARY

ENGINEERING DEPARTMENT SUMMARY

CAPITAL PROJECTS DEPARTMENT SUMMARY

OPERATIONS DEPARTMENT SUMMARY

POSITION AND FLEET SUMMARY

OPERATING EXPENDITURE BUDGET BY FUNCTIONAL

EXECUTIVE DEPARTMENT

Executive Director

Kerry G. Shelby



Executive

Legislative Affairs

Responsibilities and Budget Issues

The Executive division represents the executive branch of the organization, including the executive director, general counsel, internal auditor and support staff. The budget supports all external legal services, government liaison management audit costs and public information. Since the department employs several specialized, professional and senior level management positions, salaries are a substantial part of its budget.



Deputy Executive Director
Greg Veliz

Executive Division Summary

For fiscal year 2022

Executive Division

KEY DEPARTMENT INDICATORS

	Actual 2020	Budgeted 2021	Budgeted 2022
Key department indicators			
Number of full time department employees budgeted	10	10	13
Positions budgeted last year that are eliminated	-	-	-
Positions transferred in (out)	2	-	-
Number of regular and special board meeting	14	14	26
Number of board workshop meetings	3	3	3
Number of board committee meetings	4	4	4
Number of public hearings	6	6	2

DEPARTMENTAL GOALS, OBJECTIVES, AND PERFORMANCE MEASURES

Provide leadership and support to all departments and divisions to ensure that the Authority provides safe, efficient, resilient and sustainable water and wastewater services in a fiscally responsible manner.

Initiate an evaluation and retooling of the FCAA’s Strategic Plan.

Enhance customer awareness and education programs with an emphasis on the value of water.

Strengthen partnerships and collaborations with agencies regulating water and wastewater activities.

Develop an internal communications strategy.

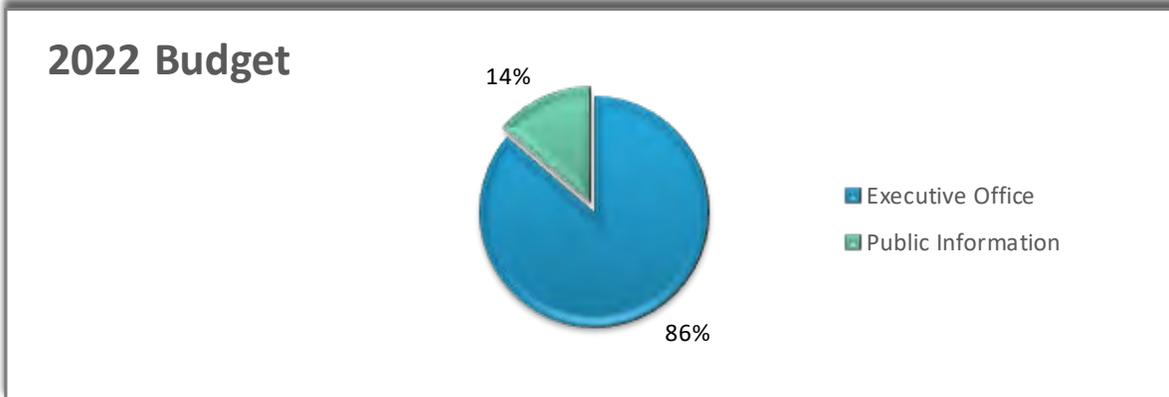
Continue building relationships with local, state and federal elected officials.



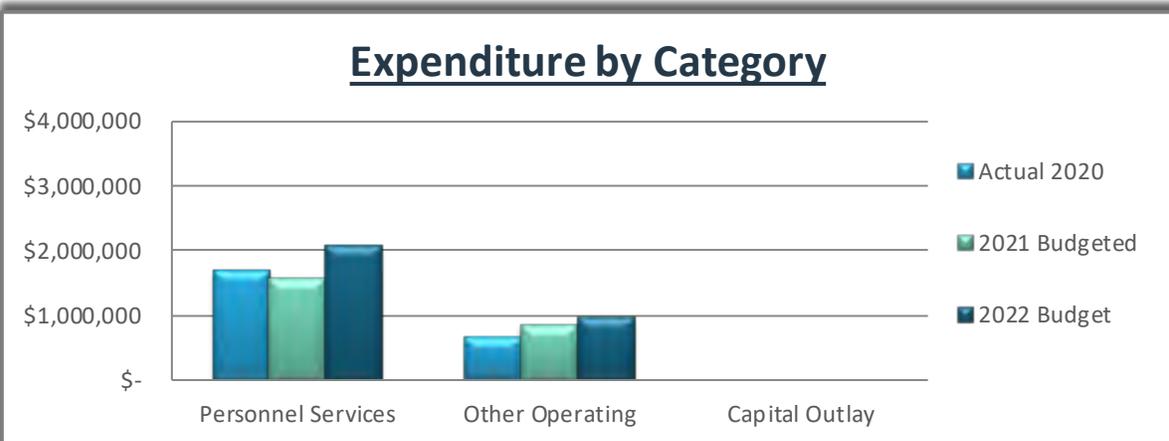
Executive Division Summary (continued)

For fiscal years 2022

Executive



Division	2022 Budget
Executive Office	\$ 2,599,300
Public Information	414,600
Total	\$ 3,013,900



Expenditure	Actual 2020	2021 Budgeted	2022 Budget
Personnel Services	\$ 1,685,098	\$ 1,556,000	\$ 2,064,300
Other Operating	656,678	850,100	949,600
Capital Outlay	-	-	-
Total	\$ 2,341,776	\$ 2,406,100	\$ 3,013,900



Cindy Kondziela

FINANCE AND CUSTOMER SERVICE DEPARTMENTS

- Finance
- Billing
- Records
- Purchasing and Inventory
- Customer Service
- Field Services

Responsibilities and Budget Issues

The Finance department consists of finance, accounts receivable, purchasing and inventory, billing and records retention department. The department's budget supports contractual services for banking, investment services, financial and rate consultant fees and billing.

The Customer Service department establishes new accounts, receives and processes payments, researches customer inquiries, administers the contact center, collects meter readings for billing purposes, researches unusual consumption situations and handles service calls. The budget's largest component is salaries and benefits for adequate staff at three strategically located area offices.

Finance Department Summary

For fiscal year 2022

**Finance Department
KEY DEPARTMENT INDICATORS**

	Actual 2020	Budgeted 2021	Budget 2022
Key department indicators			
Number of full time department employees budgeted	28	28	26
New positions not in prior year's budget	-	-	-
Positions transferred in (out)	-	-	(2)
Total bills/payments processed	609,270	610,000	610,000
Vendor payments	2,738	3,200	3,200
Customer deposit refunds	8,754	9,500	9,500
Number of purchase orders	1,648	1,680	1,680
Number of bids and RFps/RFQ's issued	20	25	25
Number of warehouses	5	5	5
Number of stock items	2,186	2,210	2,210

**DEPARTMENTAL GOALS,
OBJECTIVES, AND PERFORMANCE
MEASURES**

Expand electronic interaction capabilities to enhance customer experience and improve operational efficiencies, including interactive voice recognition, e-bill, payment kiosk and auto-pay.

Increase public awareness of excellent quality and value of tap water.

Continue to monitor debt structure to identify possible opportunities for cost savings.

Continue to monitor water and wastewater rates for sufficiency.

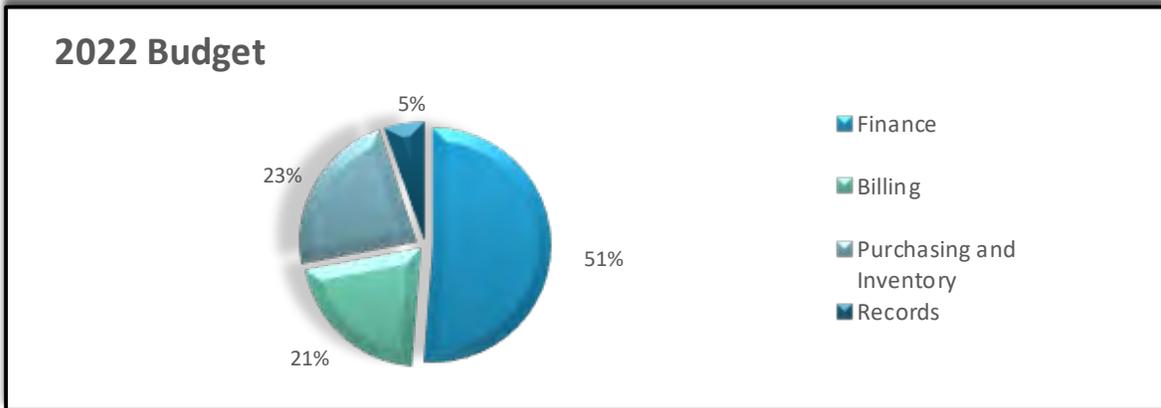
Continue to monitor internal processes to capitalize on staffing and monetary efficiencies.



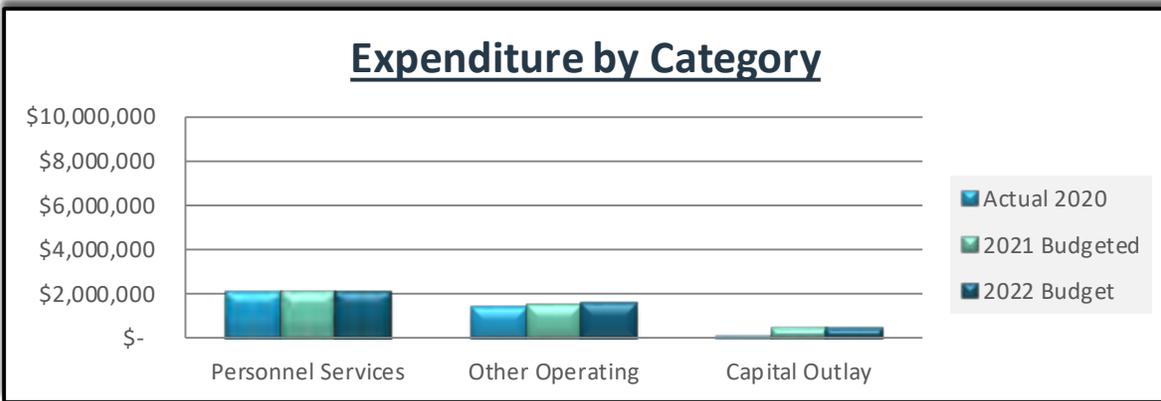
Finance Department Summary (continued)

For fiscal years 2022

Finance



Division	2022 Budget
Finance	2,080,800
Billing	846,100
Purchasing and Inventory	925,600
Records	210,000
Total	\$ 4,062,500



Expenditure	Actual 2020	2021 Budgeted	2022 Budget
Personnel Services	\$ 2,045,028	\$ 2,117,100	\$ 2,105,900
Other Operating	1,372,959	1,515,600	1,539,600
Capital Outlay	994	440,000	417,000
Total	\$ 3,418,981	\$ 4,072,700	\$ 4,062,500

Customer Service Department Summary

For fiscal year 2022

**Customer Service Department
KEY DEPARTMENT INDICATORS**

	Actual 2020	Budgeted 2021	Budget 2022
Key department indicators			
Number of full time department employees budgeted	35	35	35
New positions not in prior year's budget	-	-	-
Positions budgeted last year that are eliminated	-	-	-
Positions transferred in (out)	-	-	-
Number of calls received from call center	86,000	90,000	90,000
Number of meters in service	53,000	53,000	53,000
Number of automated read meters	53,000	53,000	53,000
Number of data collection units	70	70	70
Number of delinquent service orders	6,000	6,000	6,000
Number of high consumption investigations	6,000	6,000	6,000
New meter installations (not including replacements)	600	600	600
Total field service orders	39,000	39,000	39,000
Assist Customers	1,000	1,000	1,000
Total Number of data extracts performed	2,000	2,000	2,000
Number of zero read investigations	3,000	3,000	3,000
Number of MIU's changes	8,000	8,000	8,000

**DEPARTMENTAL GOALS,
OBJECTIVES, AND PERFORMANCE
MEASURES**

Pursue new processes, technologies and solutions to improve how we operate and better serve our customers and community.

Identify and foster the next generation of leaders through mentoring, professional development and educational opportunities.

Enhance customer service skills by providing employee training and certifications. i.e. Notary services, computer training, GPS training, etc.

Improve customer satisfaction through friendly, reliable, timely services and improve our customers understanding and confidence in our resources.

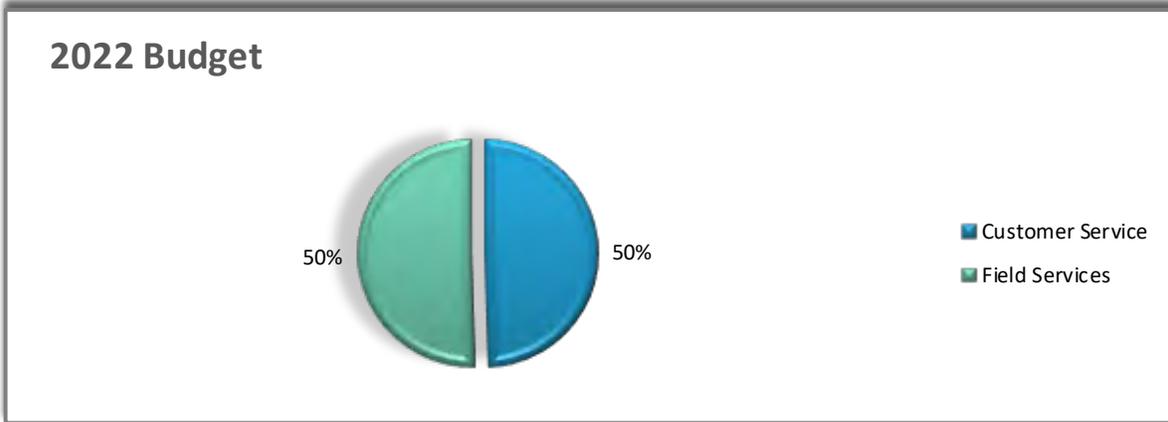
Actively mentor employees; promote and support training, continuing education, cross training (Backflow) and career development that aligns with our strategic needs.



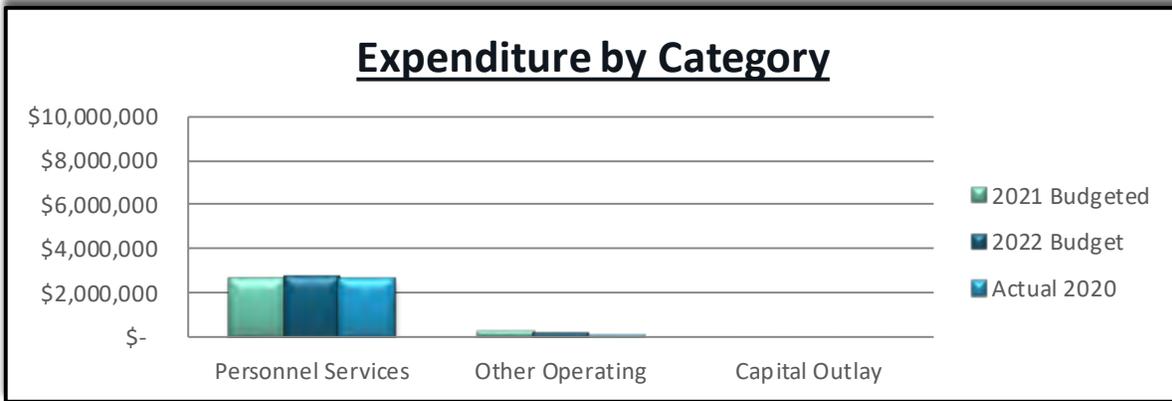
Customer Service Department Summary (continued)

For fiscal years 2022

Customer Service



Division	2022 Budget
Customer Service	1,451,800
Field Services	1,480,500
Total	\$ 2,932,300



Expenditure	Actual 2020	2021 Budgeted	2022 Budget
Personnel Services	\$ 2,589,184	\$ 2,632,900	\$ 2,707,800
Other Operating	80,514	250,010	224,500
Capital Outlay	-	-	-
Total	\$ 2,669,698	\$ 2,882,910	\$ 2,932,300



Karen Rodriguez

Human Resources Department

Human Resources

Risk Management

Responsibilities and Budget Issues

The Human Resources department consists of human resources and risk management. The budget supports all personnel related programs as well as all types of insurance.

The budget supports costs of recruitment, selection, orientation and retention of employees, employee health insurance (including estimated claims), workers' compensation insurance and property and liability insurance

Human Resources Department Summary

For fiscal year 2022

**Human Resources Department
KEY DEPARTMENT INDICATORS**

Key department indicators			
	Actual 2020	Budgeted 2021	Budget 2022
Number of full time department employees	4	4	4
Positions budgeted last year that are eliminated	-	-	-
Positions transferred in (out)	-	-	-
Number of student positions for the agency	3	3	3
Job postings for the organization	69	110	110
Number of applications received	1,139	1,450	1,450
Number of new hires	37	45	45
Number of resignations, retirements or terminations	22	20	20
Number of grievances filed	5	3	3
Number of arbitrations filed	1	1	1
Number of insurance claims (including workman's compensation and hurricane damage)	24	40	40

**DEPARTMENTAL GOALS,
OBJECTIVES, AND PERFORMANCE
MEASURES**

Optimize the functionality of the Human Resources information system by working with the I.T. Department to develop a central location and user freindly format to display important data analytics.

Utilize ADP's new Onboarding tool to reduce time and overloading of information for new hires during their initial orientation.

Continue to update our Leadership training program for new and seasoned supervisors and managers throughout the system.

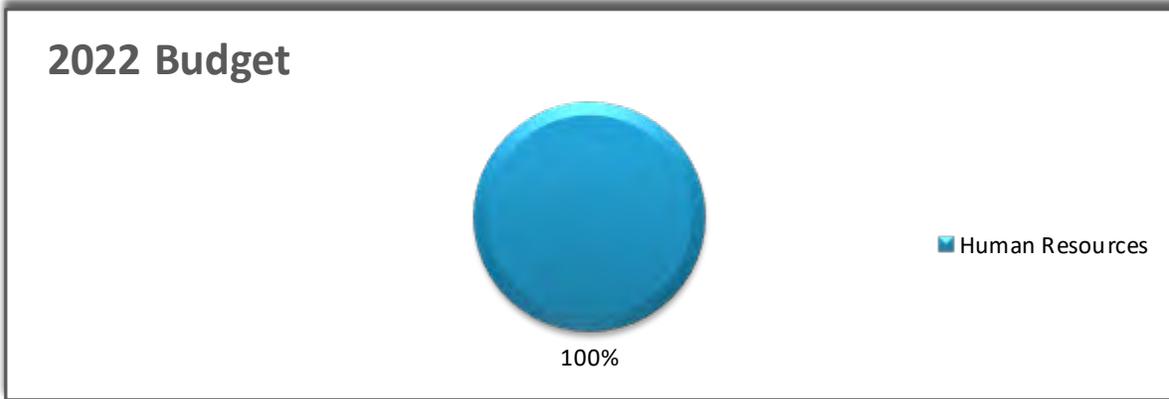
Provide hands-on training to all employees on the Talent Profile page in ADP to help them understand the importance of tracking their personal growth through obtaining industry related training and certifications for current and future career advancement.



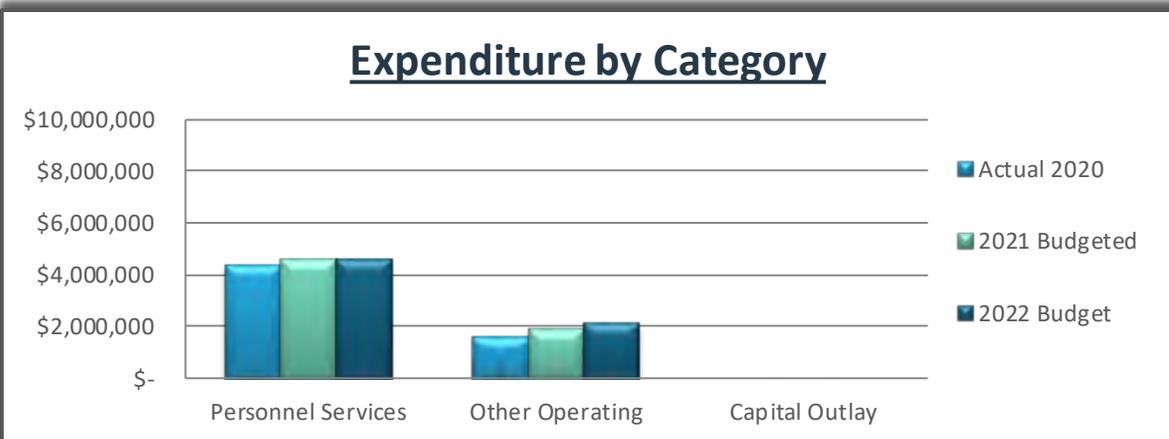
Human Resources Department Summary (continued)

For fiscal year 2022

Human Resources



Division	2022 Budget
Human Resources	\$ 6,681,400
Total	\$ 6,681,400



Expenditure	Actual 2020	2021 Budgeted	2022 Budget
Personnel Services	\$ 4,386,668	\$ 4,549,900	\$ 4,593,000
Other Operating	1,603,584	1,882,700	2,088,400
Capital Outlay	-	-	-
Total	\$ 5,990,252	\$ 6,432,600	\$ 6,681,400



Rick Ketcham

Information Technology Department

Information Technology

Responsibilities and Budget Issues

Information Technology is responsible for planning, designing, acquiring, building, operating and maintaining technical infrastructure and for developing jointly with management, technology policies, strategies, standards, guidelines, and architectural direction. The technical architecture includes data, applications, hardware, software, networks, security and control systems. The budget supports salaries for several specialized positions as well as software licensing and maintenance costs.

Information Technology Department Summary

For fiscal year 2022

Information Technology Department

KEY DEPARTMENT INDICATORS

	Actual 2020	Budgeted 2021	Budget 2022
Key department indicators			
Number of full time department employees	11	11	11
New positions not in prior year's budget	-		
Positions budgeted last year that are eliminated	-	-	-
Positions transferred in (out)	-	-	-
Help desk requests	2,673	2,500	2,500
Number of work stations/IPads maintained	520	450	475
Number of servers maintained	86	95	91
Routers/switches maintained	159	122	179
PBX switches maintained	-	-	-
Telephones maintained (includes fax & cell)	134	175	175
Radios maintained	-	-	-
PLCs maintained	-	-	-
Printers	127	155	300

DEPARTMENTAL GOALS, OBJECTIVES, AND PERFORMANCE MEASURES

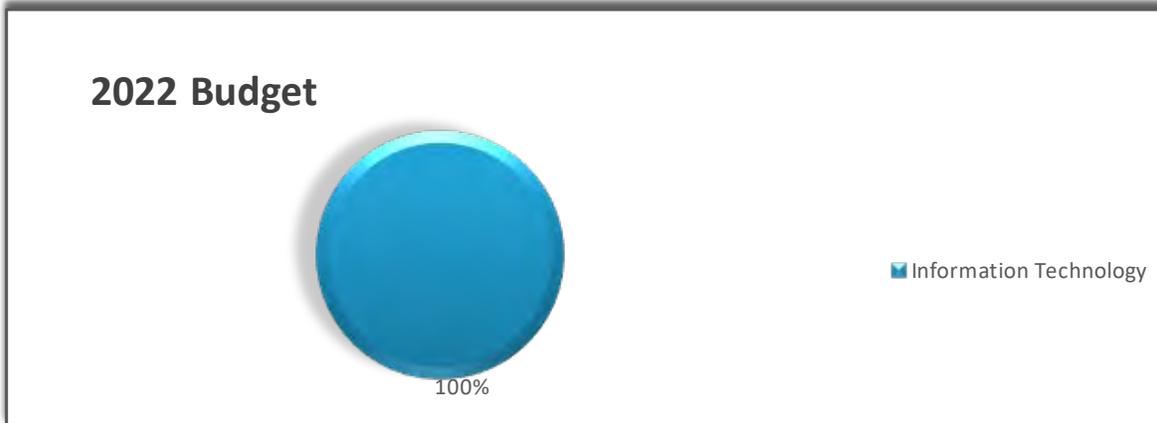
- Keep everyone educated on the long- term cost of implementation of all systems.
- Continue mobility initiative to improve efficiencies.
- Add redundancy to positions through formal and on-the-job training.
- Continue to improve technologies.
- Enhance network security to ensure utility safe operations.
- Develop a defensible utility and related infrastructure.



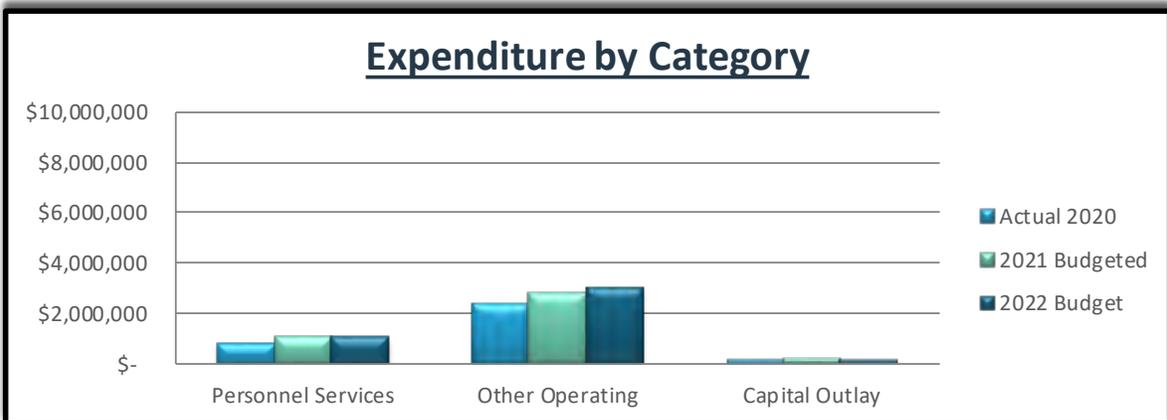
Information Technology Department Summary (continued)

For fiscal years 2022

Information Technology



Division	2022 Budget
Information Technology	\$ 4,244,900
Total	\$ 4,244,900



Expenditure	Actual 2020	2021 Budgeted	2022 Budget
Personnel Services	\$ 825,211	\$ 1,071,300	\$ 1,054,800
Other Operating	2,347,949	2,767,450	3,047,100
Capital Outlay	168,307	203,000	143,000
Total	\$ 3,341,467	\$ 4,041,750	\$ 4,244,900



Jolynn Reynolds

Engineering Department

General Engineering
Contract Management
Water Quality
Design
Construction Crew
Water Data Management & Loss Division

Responsibilities and Budget Issues

The Engineering Department consists of general engineering, contract management, water quality, design, and construction crew. The department's budget supports the development of capital project plans, project inspection, distribution project design and finished water testing, reporting and compliance, and wastewater project design and management. The department is responsible for designing, coordination and implementing the Authority's capital improvement budget, (see the Capital and Debt section) and developing future initiatives to maintain and improve system operations and sustainability. Future efforts will be concentrated on system renewal and replacement of aging assets and greenhouse footprint reduction.

Engineering Department Summary

For fiscal year 2022

**Engineering Department
KEY DEPARTMENT INDICATORS**

	Actual 2020	Budgeted 2021	Budget 2022
Key department indicators			
Number of full time department employees budgeted	47	47	19
New positions not in prior year's budget	-	5	-
Positions budgeted last year that are eliminated	-	-	-
Positions transferred in (out)		1	(22)
Number of construction design projects underway	14	14	14
Number of permits			
Number of construction projects underway	10	14	14
Number of general engineering task orders	11	12	12
Number of fixture reviews	629	850	850
Number of plan reviews	32	56	56
Feet of designed distribution	24,165	11,030	11,030
Number of Fire line/hydrant	42	62	62
Number of backflow inspections completed	500	1,000	1,000
Number of backflow prevention tests	2,466	3,000	3,000
Number of water quality samples	16,379	18,721	18,721
Feet of distribution pipe installed by in-house crew	4,200	10,000	10,000

**DEPARTMENTAL GOALS,
OBJECTIVES, AND PERFORMANCE
MEASURES**

Expand wireless meter reading to support FKAA's vision to use technology for enhancement of customer experience and efficiencies

Work with South Florida Water Management District on plans to prevent or mitigate saltwater intrusion

Enhance and provide cost effective services for compliance and protection of drinking water

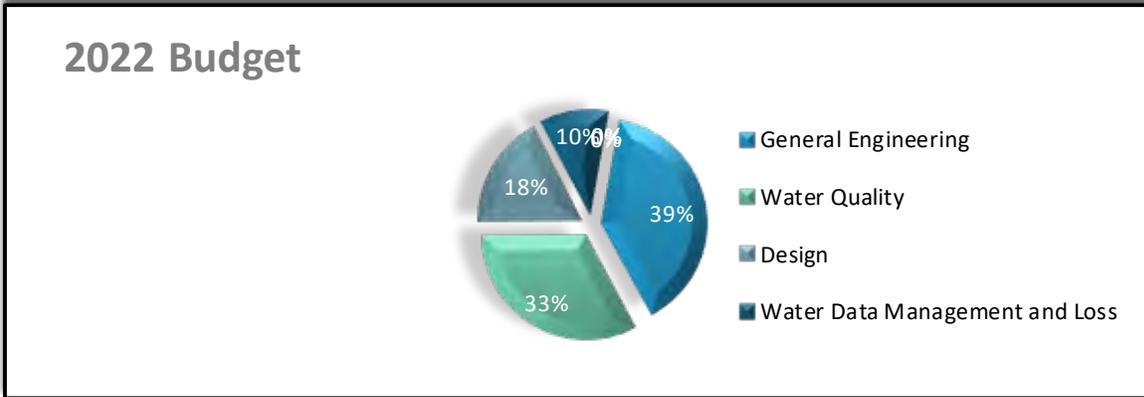
Support the delivery of the highest level of service to FKAA customers



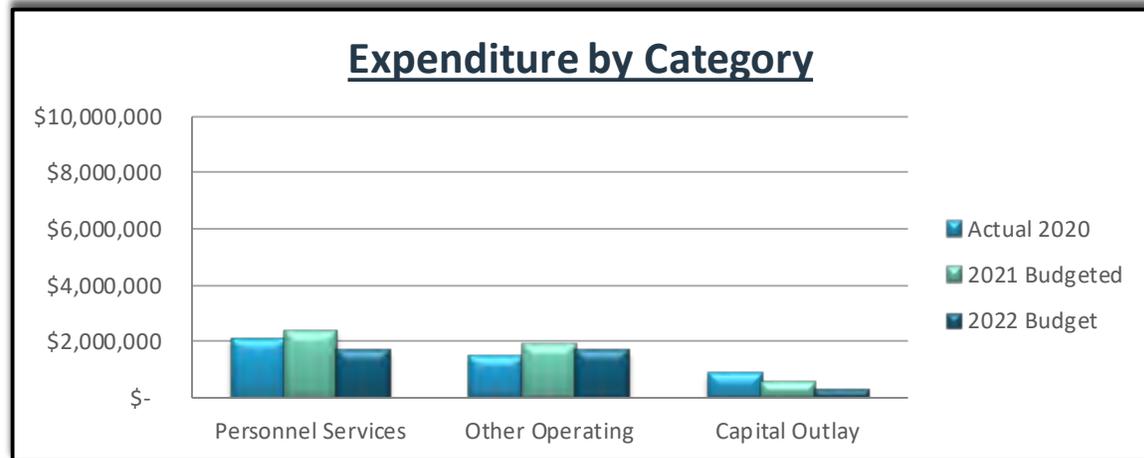
Engineering Department Summary (continued)

For fiscal years 2022

Engineering



Division	2022 Budget
General Engineering	\$ 1,444,800
Water Quality	1,201,300
Design	642,000
Water Data Management and Loss	382,800
Total	\$ 3,670,900



Expenditure	Actual 2020	2021 Budgeted	2022 Budget
Personnel Services	\$ 2,118,657	\$ 2,381,400	\$ 1,686,600
Other Operating	1,482,368	1,874,100	1,686,200
Capital Outlay	870,697	533,400	298,100
Total	\$ 4,471,722	\$ 4,788,900	\$ 3,670,900



David Hackworth

Capital Projects Department

Contract Management

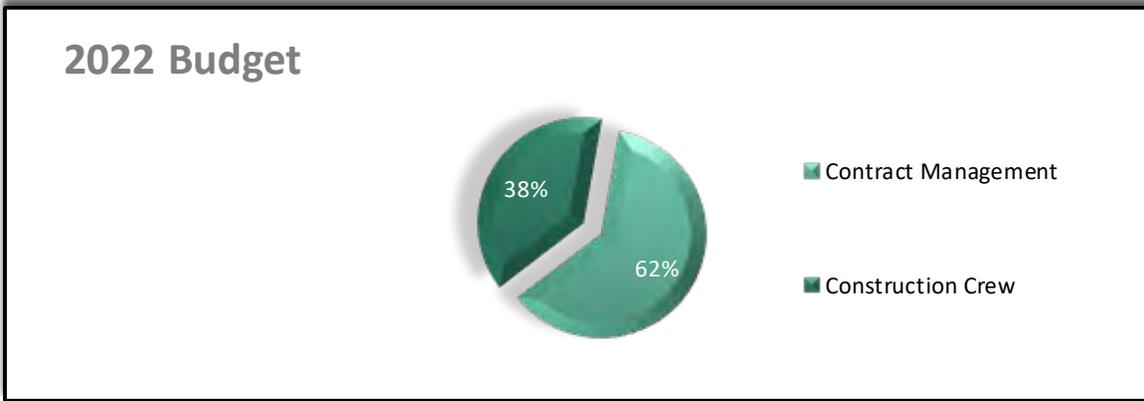
Construction Crew

Responsibilities and Budget Issues

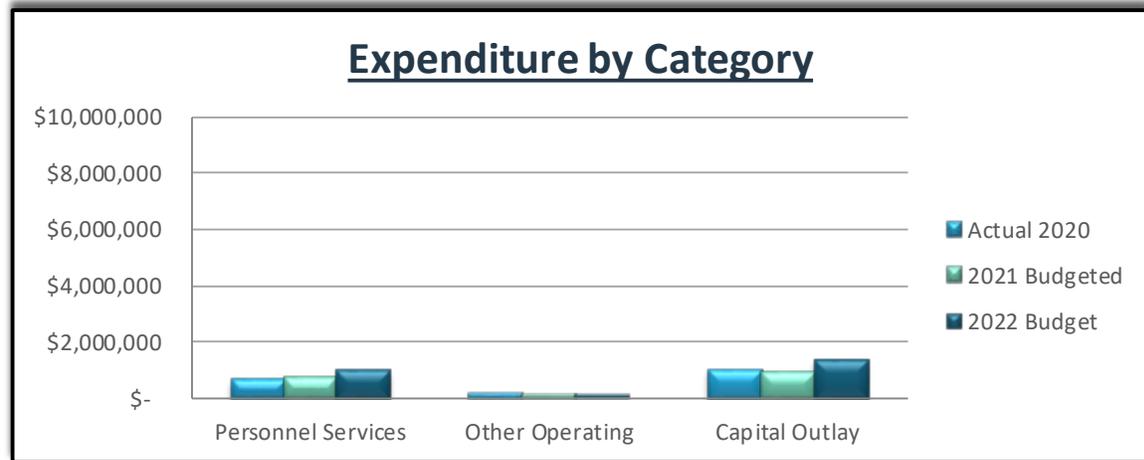
The Capital Projects Department consists of managing water and wastewater Capital projects and the FKAA construction crew. The Department is also responsible for inspection services for customer installed permitted work. The Department's budget supports contractual services for the implementation of capital projects from design to commissioning and labor and material for FKAA's in house construction crew and inspectors.

Capital Projects Department Summary

Capital Projects



Division	2022 Budget
Contract Management	1,530,700
Construction Crew	946,600
Total	\$ 2,477,300



Expenditure	Actual 2020	2021 Budgeted	2022 Budget
Personnel Services	\$ 666,370	\$ 720,200	\$ 997,900
Other Operating	183,438	122,300	113,300
Capital Outlay	1,032,358	927,800	1,366,100
Total	\$ 1,882,166	\$ 1,770,300	\$ 2,477,300



Water Operations Department

Area 1 Distribution System Operations (Key West)
Area 2 Distribution System Operations (Lower Keys)
Area 3 Distribution System Operations (Marathon)
Areas 1, 2 and 3 Transmission System Operations (Marathon)
J. Robert Dean Water Treatment Facility (Florida City)
Transmission System Control (Florida City) Middle Keys

Peter Gomez

Emergency Water Supply Treatment Facility (Marathon)
Lower Keys Emergency Water Supply Treatment Facility (Stock Island)
Area 4 Distribution System Operations (Key Largo/Islamorada)
Area 5 Distribution System Operations (Ocean Reef)
Areas 4 and 5 Transmission System Operations (Key Largo)
Fleet Maintenance

Responsibilities and Budget Issues

The Operations department is charged with the operations and maintenance of the Authority's transmission, distribution, water treatment and source of supply facilities throughout the system as well as collection and treatment of wastewater. The department's budget provides funding to maintain crews in all parts of the Authority's 130-mile service area. The department is also responsible for the operation and maintenance of two seawater reverse osmosis plants, four wastewater treatment plants, fleet vehicles and heavy equipment. Salaries and benefits are the major driver of the department's budget, along with electricity, chemicals and non-routine maintenance projects.

Water Operations Department Summary

For fiscal year 2022

Water Operations Department

KEY DEPARTMENT INDICATORS

	Actual 2020	Budgeted 2021	Budget 2022
Key department indicators			
Number of full time department employees	135	135	128
Positions budgeted last year that are eliminated	-	-	-
Positions transferred in (out)		-	(7)
Number of vehicles in the department	119	119	119
Water treated (billions of gallons)	6,454	6,454	6,454
Transmission line maintained (in feet)	987,360	987,360	987,360
Distribution lines maintained (in feet)	3,643,200	3,643,200	3,643,200
Reclaimed water lines maintained (feet)	19,000	19,000	19,000
Internal support service orders performed	100	100	100
Line locations performed	10,000	10,000	10,000
Water quality tests performed	82,050	82,050	82,050
Total fleet maintained	204	206	209

DEPARTMENTAL GOALS, OBJECTIVES, AND PERFORMANCE MEASURES

Continue to engage experts to assist with assessment of the integrity of the transmission system.

Continue the implementation of the Authority's new asset management system Cityworks.

Maximize effectiveness of existing RO plant on Stock Island.

Evaluate impact on operations from proposed Capital Improvement Plan (CIP) projects.

Meet and exceed all SDWA regulatory requirements.



Water Operations Department Summary (continued)

For fiscal years 2022

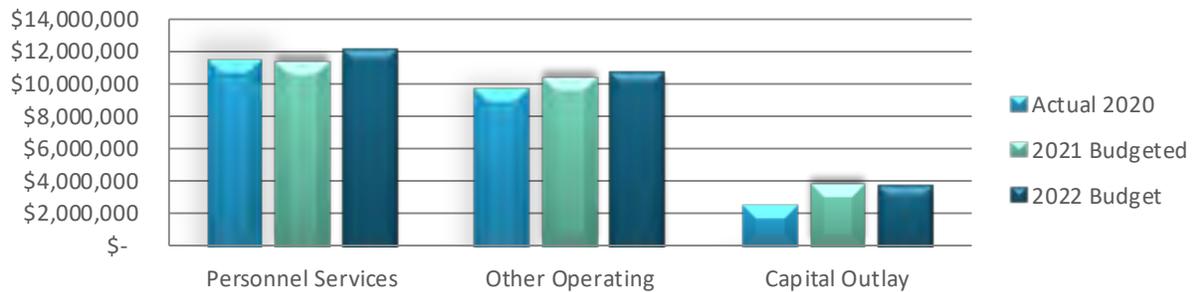
Water Operations

2022 Budget



Division	2022 Budget
Administration	\$ 765,800
Water Operations	22,419,400
Total	\$ 23,185,200

Expenditure by Category



Expenditure	Actual 2020	2021 Budgeted	2022 Budget
Personnel Services	\$ 11,366,199	\$ 11,269,700	\$ 12,054,600
Other Operating	9,604,672	10,302,800	10,627,200
Capital Outlay	2,437,285	3,741,500	3,637,500
Total	\$ 23,408,156	\$ 25,314,000	\$ 26,319,300



Wastewater Department

Wastewater Treatment Plant - Bay Point
Bay Point Collection
Big Coppitt Wastewater Treatment
Big Coppitt Collection
Key Haven Wastewater Treatment
Key Haven Collection
Wastewater Operations and Maintenance
Duck Key Collection

Jay Miller

Wastewater Treatment Plant - Layton
Layton Collection
Cudjoe Regional Wastewater Treatment
Cudjoe Regional Collection
Navy Wastewater Systems (Collection and Treatment)
Wastewater Treatment Plant - Duck Key

Responsibilities and Budget Issues

The Wastewater Operations department's primary objective is to provide safe and effective treatment and conveyance of wastewater, thus enabling The Aqueduct to convert it into an effluent that can be safely redistributed or returned to the water cycle with minimal impact on the environment. The budget supports the operation and maintenance of wastewater treatment facilities and collection systems along with training, licensing and salaries for staff.

Wastewater Operations Department Summary

For fiscal year 2022

**Wastewater Operations Department
KEY DEPARTMENT INDICATORS**

	Actual 2020	Budgeted 2021	Budget 2022
Key department indicators			
Number of full time department employees	32	35	38
Positions budgeted last year that are eliminated	-	-	-
Positions transferred in (out)	-	-	-
Number of vehicles in the department	27	27	27
Wastewater treatment plants operated	5	5	5
Reclaimed water pump stations operated	2	2	2

**DEPARTMENTAL GOALS,
OBJECTIVES, AND PERFORMANCE
MEASURES**

Continue to allocate staff resources to implement Monroe County wastewater systems.

Continue to progress with the contractually proposed wastewater repairs and upgrades for all Navy facilities.

Continue to grow the Wastewater Department in a measured and responsible fashion that meets the needs of our customers while also benefitting the organization.

Maintain numbers below FDEP mandated parameters at all wastewater facilities.

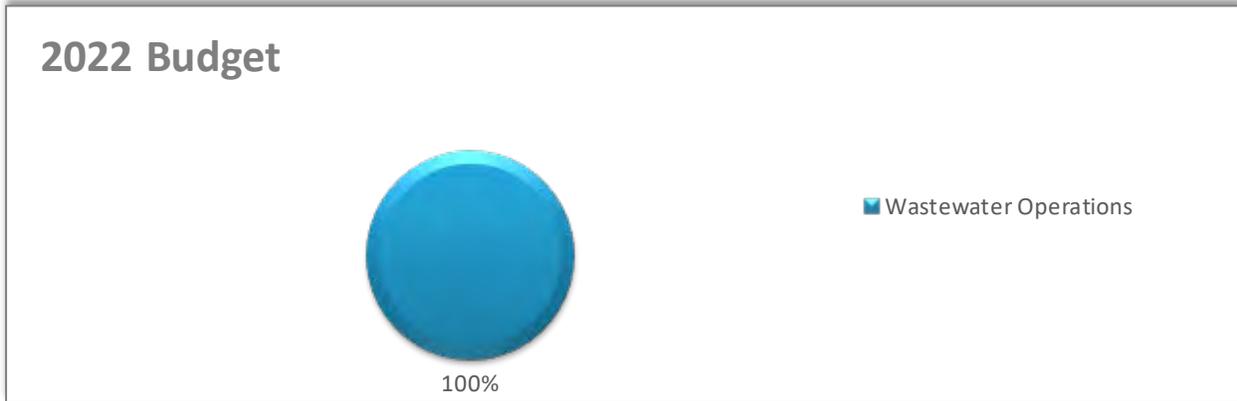
Complete the transition to ezDMR reporting for all wastewater facilities.



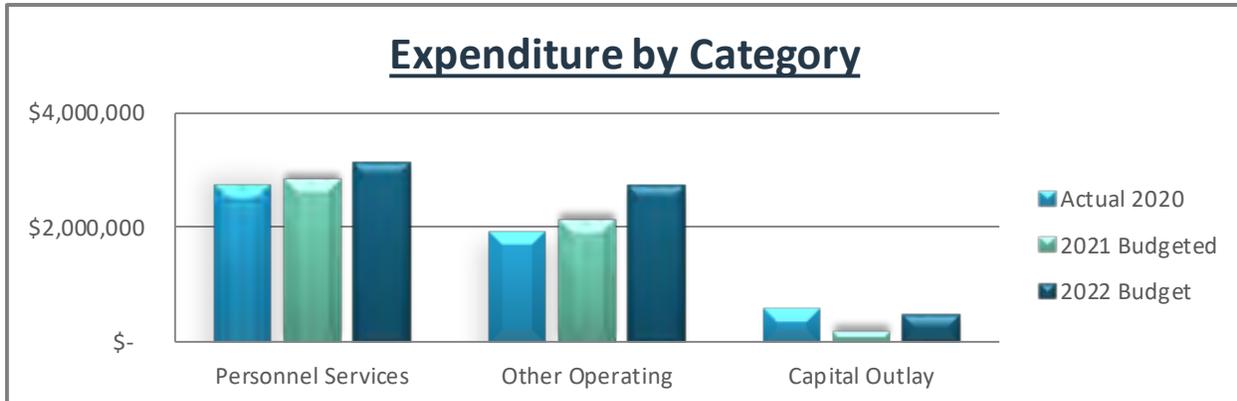
Wastewater Operations Department Summary (continued)

For fiscal years 2022

Wastewater Operations



Division	2022 Budget
Wastewater Operations	6,278,650
Total	\$ 6,278,650



Expenditure	Actual 2020	2021 Budgeted	2022 Budget
Personnel Services	\$ 2,700,212	\$ 2,814,101	\$ 3,112,700
Other Operating	1,918,965	2,103,920	2,700,950
Capital Outlay	563,575	164,800	465,000
Total	\$ 5,182,752	\$ 5,082,821	\$ 6,278,650

Position and Fleet

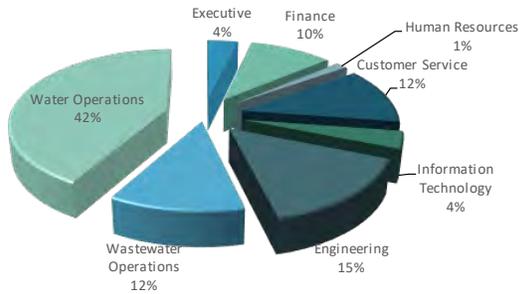
For fiscal years 2022

POSITION AND FLEET SUMMARY 2022

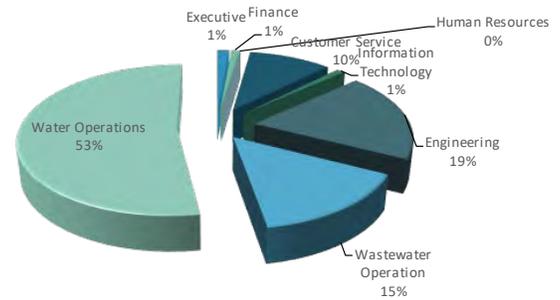
Positions	Executive	Finance	Human Resources	Customer Service	Information Technology	Engineering	Wastewater Operations	Water Operations	Total
Budgeted positions in 2020	8	30	4	36	11	45	32	122	288
New positions									
Distribution System Operator								2	2
Budgeted positions in 2021	8	30	4	36	11	45	32	124	290
New positions									
Assistant General Counsel	1								1
Legal Assistant	1								1
Public Information Officer	1								1
Wastewater Mechanic							3		3
Transferred positions									-
N/A									-
Eliminated positions									-
N/A									-
Budgeted positions in 2022	11	30	4	36	11	45	35	124	296

Fleet	Executive	Finance	Human Resources	Customer Service	Information Technology	Engineering	Wastewater Operation	Water Operations	Total
Budgeted vehicles in 2020	3	2	-	21	2	40	26	110	204
Added vehicles									
One ton							3		3
Eliminated vehicles									-
None									-
Transferred vehicles									-
None									-
Budgeted vehicles in 2021	3	2	-	21	2	40	28	110	206
Added vehicles									
One ton							3		3
Eliminated vehicles									-
None									-
Transferred vehicles									-
None									-
Budgeted vehicles in 2022	3	2	-	21	2	40	31	110	209

BUDGETED POSITIONS BY DEPARTMENT



BUDGETED VEHICLES BY DEPARTMENT



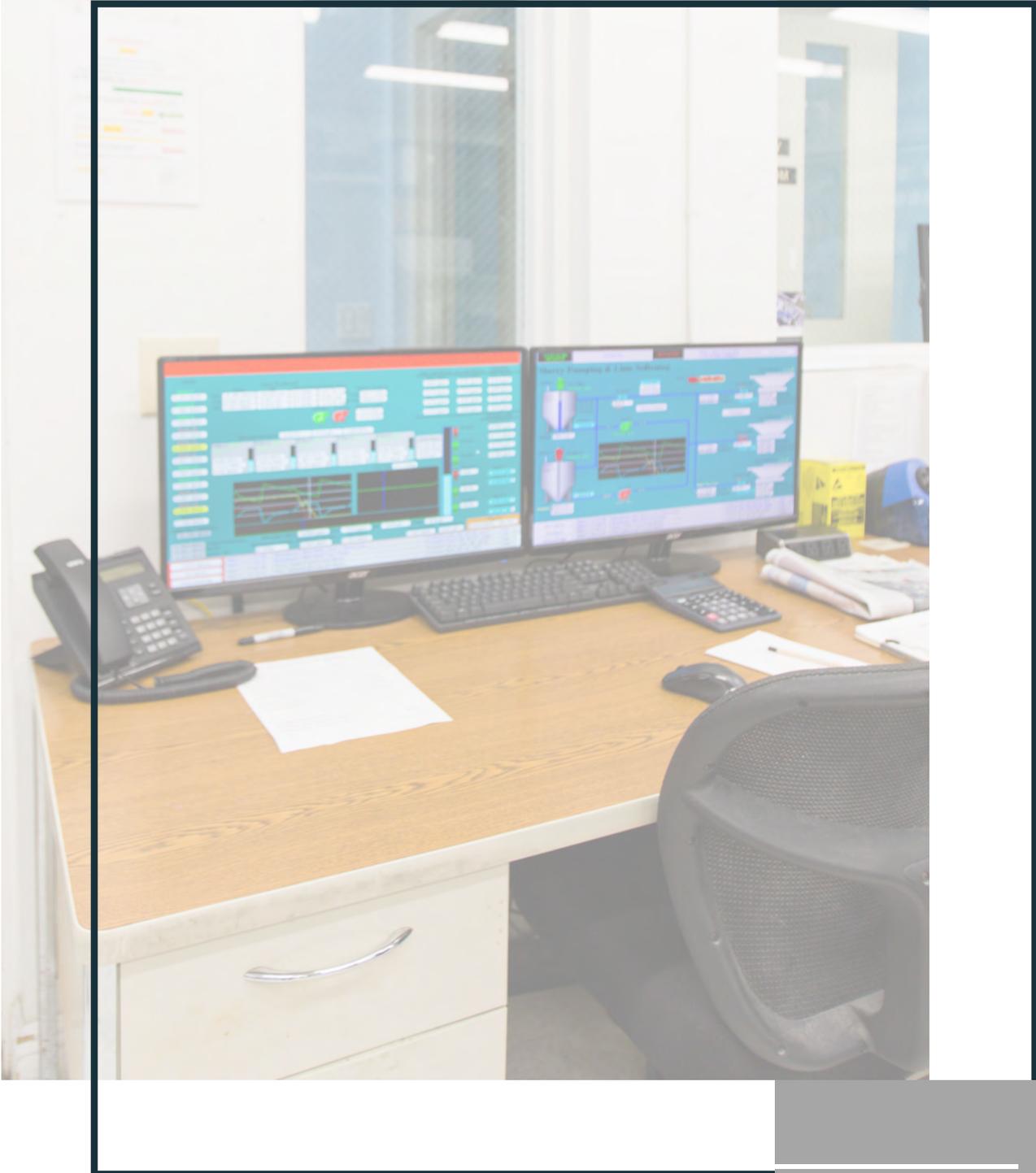
Operating Expenditure By Functional Unit

For fiscal years 2022

2022 Budget Summary

	2020 Actual	2021 Budget	2022 Budget	Increase/Decrease Amount	Change from previous year budget
<u>Executive Division</u>					
Executive Office	\$ 2,148,910	\$ 2,088,500	\$ 2,599,300	\$ 510,800	24%
Public Information	192,866	\$ 317,600	414,600	97,000	31%
Totals	2,341,776	2,406,100	3,013,900	607,800	25.3%
<u>Finance Department</u>					
Finance	2,086,394	2,099,500	2,080,800	(18,700)	-0.9%
Billing	610,232	776,300	846,100	69,800	9.0%
Purchasing and Inventory	473,865	924,200	925,600	1,400	0.2%
Records	248,471	272,700	210,000	(62,700)	-23.0%
Totals	3,418,962	4,072,700	4,062,500	(10,200)	-0.3%
<u>Human Resources Department</u>					
Human Resources	5,990,252	6,432,600	6,681,400	248,800	3.9%
Totals	5,990,252	6,432,600	6,681,400	248,800	3.9%
<u>Customer Service Department</u>					
Customer Service	2,669,698	2,882,910	2,932,300	49,390	1.7%
Totals	2,669,698	2,882,910	2,932,300	49,390	1.7%
<u>Information Technology Department</u>					
Information Technology	3,341,467	4,041,750	4,244,900	203,150	5.0%
Totals	3,341,467	4,041,750	4,244,900	203,150	5.0%
<u>Engineering Department</u>					
General Engineering	1,061,181	1,115,800	1,444,800	329,000	29.5%
Contract Management	934,459	963,700	1,530,700	567,000	58.8%
Water Quality	1,205,680	943,000	1,201,300	258,300	27.4%
Design	458,370	672,400	642,000	(30,400)	-4.5%
Construction Crew	947,707	806,600	946,600	140,000	17.4%
Water Data Management and Loss	1,746,491	2,057,700	382,800	(1,674,900)	-81.4%
Totals	6,353,888	6,559,200	6,148,200	(411,000)	-6.3%
<u>Water Operations</u>					
Water Operations	23,408,156	25,314,000	26,319,300	1,005,300	4.0%
Totals	23,408,156	25,314,000	26,319,300	1,005,300	4.0%
<u>Wastewater Operations</u>					
Wastewater Operations	5,182,752	5,082,821	6,278,650	1,195,829	23.5%
Totals	5,182,752	5,082,821	6,278,650	1,195,829	23.5%
Grand Totals	\$ 52,706,970	\$ 56,792,081	\$ 59,681,150	\$ 2,889,069	4.6%

GLOSSARY



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Glossary fo Terms and Acronyms

For fiscal years 2022

Accrual Basis of Accounting - The recording of expenses or charges incurred but not paid and revenue earned but not received within the same period. This method is intended to match revenue and expenses independent of the dates on which settlements of such items are made.

Amortization - The spreading of costs over time, usually the life of an intangible asset or the term of a debt.

Annual Water Rate Index - The formula by which the Authority annually adjusts the base facility charge and the consumption charge to reflect inflationary increases in the cost of providing services.

Assessment – A charge or special assessment (sometimes characterized as a non-ad valorem assessment) imposed by the Authority to fund the capital cost of utility improvements or the operating cost of related services.

Authority – Represents the Florida Keys Aqueduct Authority, unless a different intent clearly appears from the context.

AWWA - The American Water Works Association, an international water association of which the Authority is a member.

Balanced Budget – A budget with revenues equal to expenditures.

Biscayne Aquifer – An underground aquifer that serves as the Authority’s primary water source.

Bond - An interest-bearing certificate of debt; a written contract by the issuer to pay to the lender a fixed principal amount on a stated future date, and a series of interest payments (usually semiannually) during its life.

Capital Asset – An asset having a useful life of more than one year, and costing \$1,500 or more which includes additions, improvements, or replacements to buildings, facilities, land, and structures.

Capital Budget - The portion of the Budget devoted to the construction of new utility plant (additions, improvements, and replacements) and expenditures for the purchase or acquisition of existing utility plant facilities and capital assets.

Consumptive Use Permit – A permit issued by the South Florida Water Management District that regulates the amount of water that can be withdrawn from its water source.

Collection System – A system of pipes, manholes, pumps, etc. that collects wastewater and delivers it to a treatment plant.

Debt Service – The amounts necessary to pay principal, interest and other financing fees.

Depreciation - The specific allocation of the cost of a fixed asset due to usage or the passage of time. Depreciation is a non-cash expense and is not a budgeted expenditure. However, it must be considered in rate development to assure that the rates are sufficient to recover the cost of the asset.

DERM – Miami-Dade County Department of Environmental Resource Management, an agency that contracts with the Authority to monitor its wellfield for contaminants.

Glossary fo Terms and Acronyms (continued)

For fiscal years 2022

Enterprise Fund – A fund used to account for the business activities of a government. The Authority’s utility activities are accounted for in a single enterprise fund.

Expense – A use of financial resources to acquire goods or services consumed in a single year’s current operation.

Fiscal Year – A 12-month period that determines the time frame for the financial budget. At the end of the fiscal year, the financial position and results of operations are determined. The Authority’s fiscal year runs from October 1 through September 30.

FKAA or the Authority – Florida Keys Aqueduct Authority

Fleet – Any vehicle that requires a license for operation on a public highway, such as automobiles, trucks, vans, tractors, etc. Fleet does not refer to heavy equipment.

FSAWWA-The Florida section of the American Water Works Association, a state water association of which the Authority is a member

GAAP – Generally Accepted Accounting Principles

GFOA – Government Finance Officers Association

GIS – Geographic information system

MGD or mgd – Million gallons per day. Term usually used to define capacity of water and wastewater systems and their production.

Operating Expenses – Labor, materials and other expenses incurred for production, transmission and distribution of water, customer service, administrative overhead and other general expenses.

Potable Water – Water that meets all requirements and regulations for human consumption.

PSI-Pounds per square inch.

Reclaimed Water – Wastewater that has been treated and is available to reuse for irrigation or other non- potable purposes.

Revenue Bond – A bond that is payable from the revenue generated from the operation of the Utility. Any other revenue the Board of Directors decides to pledge can also secure a revenue bond.

Reverse Osmosis – A process through which chlorides are removed from ground water or sea water.

Service Area – The area within which water and wastewater service is provided. The Authority’s service area includes that section of Monroe County, Florida located in the Florida Keys.

SDWA – Federal Safe Drinking Water Act

SFWMD – The South Florida Water Management District, a water use regulator that issues the Authority’s consumptive use permit.

Glossary fo Terms and Acronyms (continued)

For fiscal years 2022

Strategic Planning – The process used to determine the Authority’s mission, vision, values, goals, objectives, roles and responsibilities, etc.

Transmission Force Mains – Pipes through with water is forcibly pumped under pressure to deliver it to distribution systems. The transmission line is usually under much higher pressure than a distribution line.