

FISCAL YEAR 2022-23

ANNUAL REPORT



2022/2023

At A Glance

2100

Mosquitofish distributed to residents by appointment

1319

Groups of mosquitoes tested for disease in our lab (no viruses found in 2021-22)

**1.609
mils**

Millage rate (at rolled-back rate)

50,000+

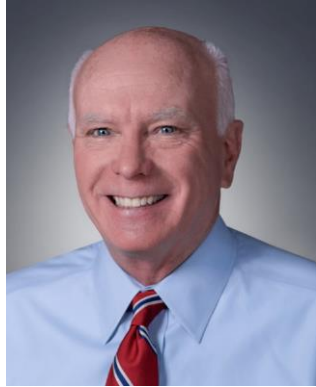
Acres treated with mosquito larvae control materials

900K+

Mosquitoes trapped

Board of Commissioners

The Collier Mosquito Control District operates under Chapter 388, Florida Statutes, governed by a five-member board of commissioners. Each member of the Board is elected at-large for a four-year term. As elected officials, the Commissioners provide a direct link between government and the District's residents. These individuals are charged with setting the ad valorem millage rate, approving the annual budget, overseeing the expenditure of taxpayers' dollars, and ensuring the Executive Director and staff are fulfilling the District's mission.



**Russell Burland -
Chair**

SEAT 5
Terms of office: 2021-2025



Sandra Lee Buxton - Treasurer

SEAT 2
Terms of office: 2023-2027



**Ed Brandt - Vice
Chair/Secretary**

SEAT 3
Terms of office: 2023-2027



Bruce Buchanan

SEAT 4
Terms of office: 2021-2025



John Johnson

SEAT 1
Terms of office: 2023-2027

William Owens

LEGAL COUNSEL TO THE DISTRICT



Patrick Linn, MS, MSHAPI



Director's Message

The 2022-2023 fiscal year continued the progress from the previous years and also presented its own unique challenges. The year started in the aftermath of Hurricane Ian, which partially destroyed our newly renovated building. After even more time away from the office and some costly repairs, the year saw us return to a fully functional office.

District expansion

Efforts to expand our District's boundaries to include areas undergoing rapid development continued. Unfortunately, our efforts fell short as our local bill that would've expanded the District failed in the Florida House without receiving a committee hearing. District expansion is one of CMCD's top priorities, and we will regroup to make another effort during the 2024 legislative session.

Immokalee Plans

Plans to eventually move CMCD's headquarters to a new facility at the Immokalee Airport have continued to advance. While not tied directly to district expansion, the majority of our aerial treatments already occur east of I75, and a move to Immokalee will make these treatments more efficient. In addition to the logistical advantages, we will undoubtedly

continue to see increasing threats to our area from tropical weather. A move to Immokalee protects the District from the devastating flood damage we experienced last year.

Our facilities at the Naples headquarters are nearing the end of their useful life, and we would need to be exploring capital improvement even if we stayed. Immokalee offers more space to build a HQ to the specifications that we want and allow us to continue to grow in the future.

OPPAGA Performance Evaluations

The long-awaited performance evaluations through the Office of Program Policy Analysis and Government Accountability (OPPAGA) occurred this year. The Balmoral Group was selected by OPPAGA to conduct these reviews. The Balmoral Group concluded that the Collier Mosquito Control District (the District) adheres to industry standards for integrated mosquito management, offers a comprehensive range of mosquito control services in line with the District's charter and statute, and found that no local governments within Collier County provide similar services. Moreover, they noted that the District manages its resources efficiently and effectively to achieve its goals and objectives. Although these goals and objectives are clearly defined and measurable, the District lacks performance standards to assess how well it meets them.

The Year to Come

Thank you to all of our staff for their hard work and adaptability during another successful year of serving our community. I look forward to continuing to innovate in the coming year as CMCD continues to serve as a leader in mosquito control.

Mission

The mission of the Collier Mosquito Control District (the District) is to provide valuable service to the community through suppression of both disease carrying and pestiferous mosquito populations by and through the safest and most economical means available. The District uses a variety of methods (Integrated Mosquito Management) in a manner consistent with the highest level of safety and minimal adverse impact on humans, wildlife, the environment, and non-target organisms.

Vision

Contributing to a healthy, high quality of life in southwest Florida and beyond by upholding public trust, applying sound science, utilizing best practices in mosquito control, economic responsibility, and an enduring search for solutions.

Dedication Professionalism Responsibility

The Collier Mosquito Control District is an independent special taxing district in the state of Florida. Its employees are tasked with the mission of protecting public health and comfort by and through the control of disease-carrying and nuisance mosquitoes.

Our professionals are dedicated to meeting the District's core mission of protecting public health and reducing nuisance mosquitoes while adhering to the highest level of safety and ensuring minimal impact to Southwest Florida's ecology.

Contributing to a healthy, high quality of life in southwest Florida and beyond by upholding public trust, applying sound science, using best practices in mosquito control, economic responsibility, and an enduring search for solutions.

Operations: From the War Room to the Front Lines of Mosquito Control



CMCD's safety program was honored with the Preferred Safety and Risk Management Member of the Year Award.

Districts Safety Program Receives Award

In 2023, the District's safety program, led by former Logistics and Safety Coordinator Sara Grant, was honored with the Preferred Safety and Risk Management Member of the Year award. This accolade is a testament to the District's commitment to the safety and health of all employees. Our safety program is distinguished by its comprehensive approach and proactive strategies that exceed standard safety and training requirements. This ensures a safe working environment for our team, fostering not only regulatory compliance but also promoting a culture of safety and well-being across all operations.

Keewaydin Barrier Treatments

The Operations department worked in partnership with the Research department to collect surveillance data and administer residual barrier spray applications on Keewaydin Island. This effort was bolstered by the District's acquisition of a new Pontoon boat, which significantly improved the efficiency of landing rate count data collection and trap deployments. Over the course of their collaboration, the Operations team visited multiple locations on the island, making a total of 35 visits and carrying out two barrier spray applications. In conjunction with the Research department, the Operations team refined their barrier spray application technique, enhancing overall efficacy and setting the stage for a productive year in 2024.

First Applications of ReMoa Tri

Following the promising results from field cage trials conducted by the Research department, the Operations department has incorporated ReMoa Tri into its general work plan. To facilitate this integration, the department acquired a DynaJet ULV applicator for ground-based adulticide applications, specifically for deploying ReMoa Tri.

This product has proven effective in targeting mosquito species resistant to traditional adulticides and in treatment areas too small for aerial applications. The integration of ReMoa Tri enhances the department's ability to control disease-carrying mosquitoes and increases the versatility of targeted treatments.

Treatment Operations



Granular Reloader in Full Operation

To enhance the efficiency and safety of hot reloading operations during granular larvicide missions, the granular loader was fully operational throughout the year. This strategic deployment improved operational workflows and ensured the health and safety of our personnel during the hot reloading process.

Wide-Area Larvicide Applications

With three Buffalo Turbine sprayers now in operations, the operations department increased usage of wide area larvicide applications to control mosquitoes breeding in containers of standing water around homes and businesses. The department completed over 130 applications covering over 50,000 acres using the Buffalo Turbines during the rainy season, a 255% increase from last year. This method has proved successful in reducing *Aedes aegypti* populations, which has shown resistance to conventionally available adulticide.

Granular Larvicide Applications

This year the District experienced lower-than-average rainfall, resulting in a significant reduction in aerial larvicide operations compared to previous years. In anticipation of salt marsh mosquito production from local mangrove swamps, the District proactively treated 2,250 acres using 17,995 pounds of Fourstar BTI CRG. Additionally, the scarcity of rainfall led to a 66% decrease in larvicide treatments within the District's freshwater swamps, within only 17,593 pounds of larvicide utilized to treat 2,513 acres.

Aerial Adulticide Applications

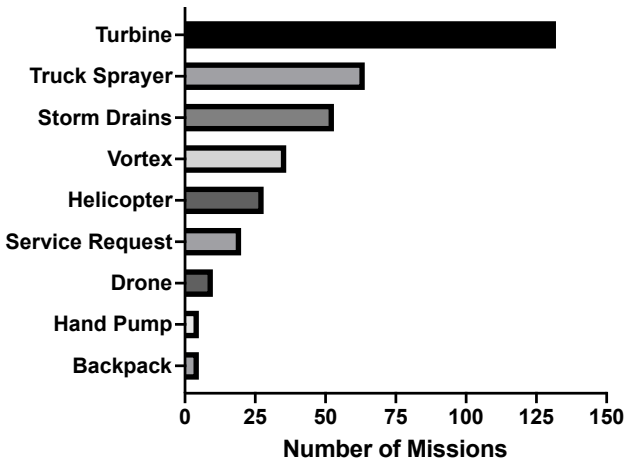
Compared to previous years, there was a 16% reduction in aerial adulticide applications during the fiscal year 2022-2023. The effectiveness of these applications was maintained at 66%, aligning with the District's standards for mission efficacy.

During this period, the District conducted 76 aerial adulticide missions. The majority of these missions utilized Dibrom in 68% of adulticide missions, treating over 1 million acres with a total of 3,820 gallons of Dibrom. Duet HD was deployed in 18% of adulticide missions, covering 232,800 acres with 1,455 gallons of product. Additionally, the District's Bell 407 helicopter, equipped with Merus 3.0, was utilized in 13% of adulticide missions to treat 49,658 acres with 322 gallons of Merus 3.0.

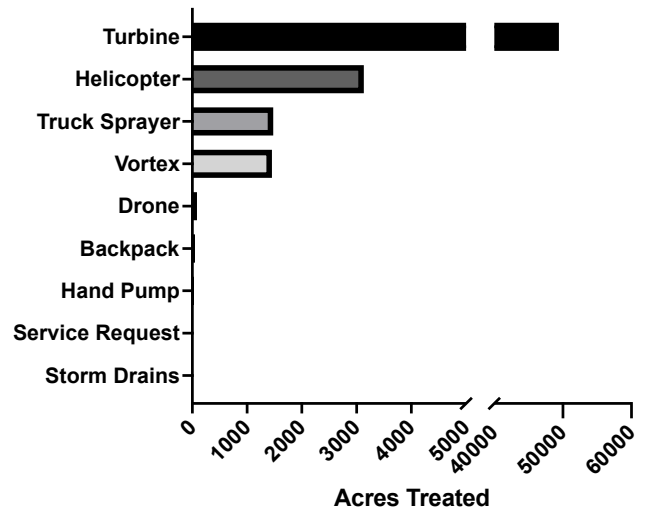
The reduced rainfall negatively impacted the mangrove swamps' ability to sustain natural mosquito predators. Consequently, this led to several unseasonable hatch-offs of salt marsh mosquitoes, necessitating 15 targeted treatment missions. Meanwhile, the majority of the missions (53) focused on addressing *Culex* mosquito populations within inland communities.

Larvicide Operations

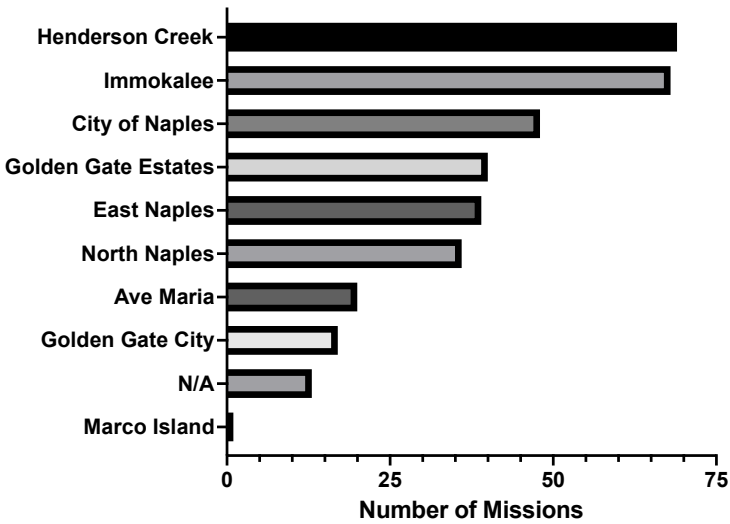
Number of Larvicide Missions by Application Type



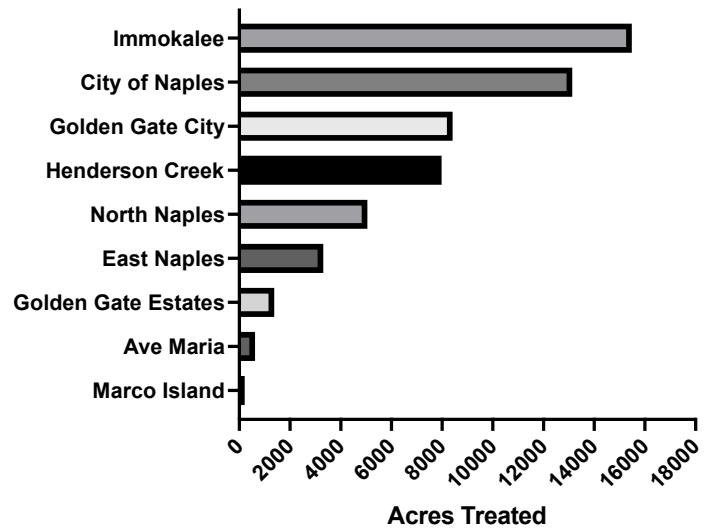
Acres Treated with Larvicide by Application Type



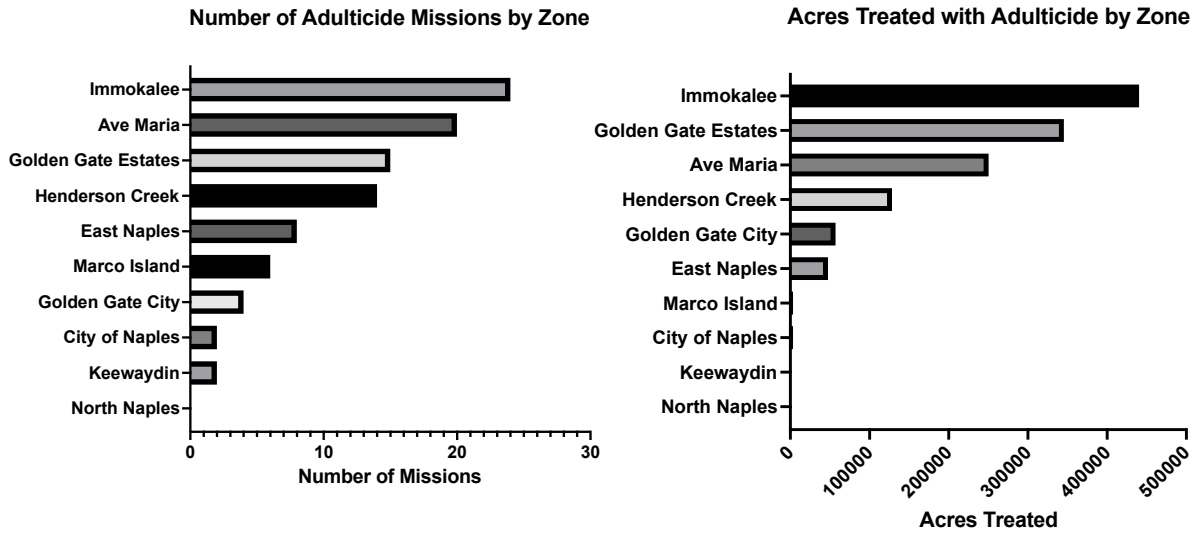
Number of Larvicide Missions by Zone



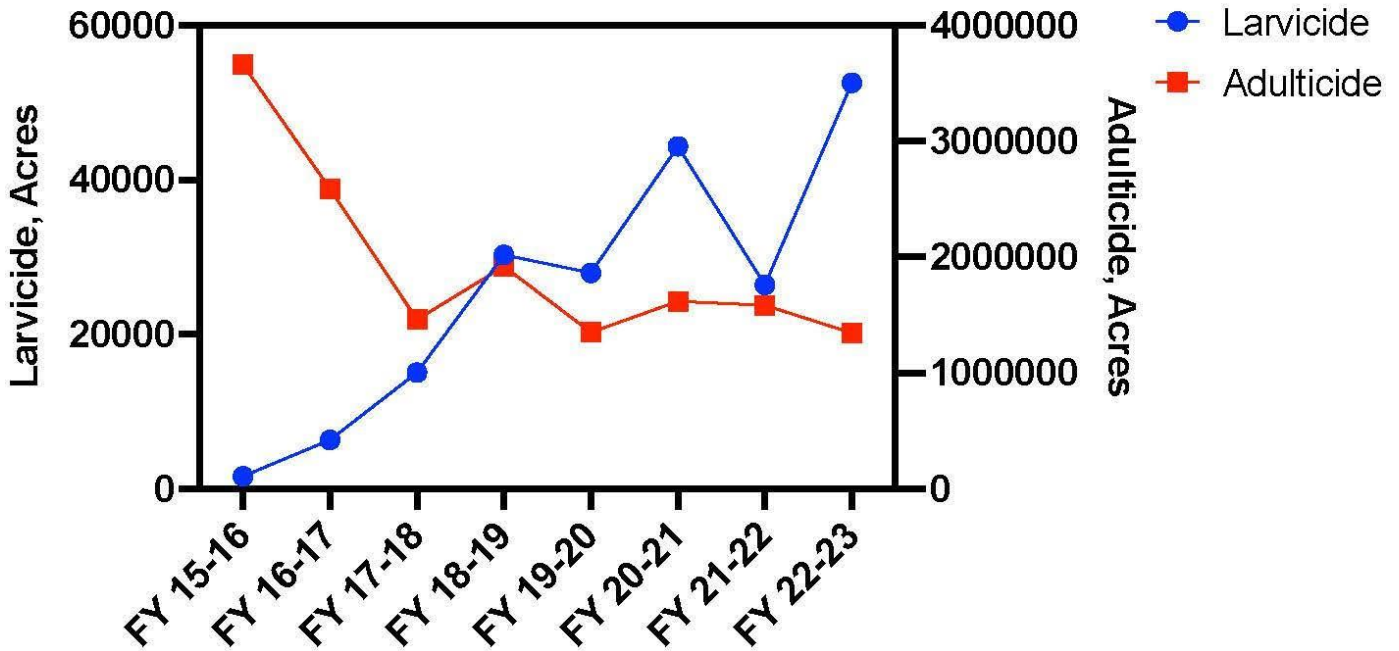
Acres Treated with Larvicide by Zone



Adulticide Operations



Acres Treated



New Hires

In 2023, the Operations department bid farewell to Field Technician Chris Berube, and to Logistics and Safety Coordinator, Sara Grant, who was promoted to the role of Technical Development Specialist. We were delighted to welcome Jesse Patridge to our team as a Field Technician. Jesse joined the District with a CDL license and began his tenure as an on-call spray truck operator before being hired full time as a Field Technician. The department also welcomed Nathan Rhodes-Zambrana as Logistics and Safety Coordinator, who comes to the district with a wealth of knowledge in occupation health and safety.

Research: New Discoveries and New Partnerships

Mosquito Trapping and Arbovirus Surveillance

In 2023, Collier County remained free of locally acquired mosquito-borne diseases, highlighting the success of measures implemented by our District. However, the state of Florida saw a significant increase in Dengue fever cases, with 186 locally acquired cases reported, predominantly in Miami-Dade County. Additionally, for the first time in two decades, Florida faced a malaria outbreak, a disease that had been eradicated from the state in the 1940s. This underscores the need for ongoing vigilance against neglected tropical diseases, which continue to pose a serious threat. Our District's mosquito control efforts are pivotal in preventing the resurgence and spread of these diseases.

To counter the threat of mosquito-borne diseases, the District maintained an intensive mosquito trapping and arbovirus surveillance program. Over 1,700 trap collections were made, and 1,300 pools were tested for mosquito-borne diseases, with no viruses detected in any of the samples. Collier County reported one case of travel-related malaria and six cases of travel-related Dengue, emphasizing the importance of our continued efforts.

Collaborative Partnerships with Public Lands

Collier Seminole State Park

The District continued its mosquito surveillance in Collier-Seminole State Park (CSSP) to enhance our understanding of mosquito population dynamics, monitor vector-borne disease activity, and assess the host associations of *Culex nigripalpus* mosquitoes. In 2023, a total of 44,468 female mosquitoes were collected from CSSP, with collection totals ranging from 1 to 8,656 female mosquitoes per night. Trap captures included high populations of potential disease vector species, including *Cx. nigripalpus*, *An. crucians*, various *Culex (Melanoconion)* spp. and *Ae. scapularis*.

During the course of the project, led by Biologist Gabby Steele, a total of 34 blood-fed mosquitoes from CSSP have been collected. Samples were sent to the University of Florida for DNA sequencing analysis, revealing that all *Cx. nigripalpus* specimens from CSSP had a feeding preference for a nonnative lizard species known as the Brown Anole. This finding is unique to CSSP, as reptiles constituted only 7% of the total identified blood meals across the county. This disparity indicates that mosquito blood-feeding patterns can vary significantly within geographic areas, potentially due to differences in host availability, land use, and environmental conditions.

Picayune Strand State Forest

The District also continued its mosquito surveillance in Picayune Strand State Forest, monitoring mosquito population trends, tracking mosquito-borne diseases, and identifying larval production sites adjacent to urban areas.

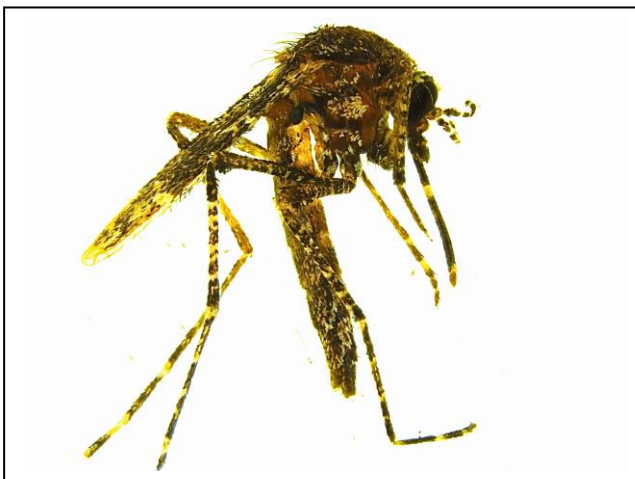
Trap captures included high populations of potential disease vector species, such as *Culex nigripalpus*, *Culex (Melanoconion)* spp., and *Aedes* floodwater species; however, no mosquito-borne disease was identified from the park. The information gathered from this work allows the District to better predict and pinpoint problematic areas of interest for improved mosquito management in Collier County, enhancing our ability to control disease vectors and protect public health.



Hunter Martin Discovers Collier's 51st Mosquito Species!

In 2023, Laboratory Technician Hunter Martin identified a new genus in Collier County: *Aedeomyia squamipennis*. Initially reported in Miami-Dade County in 2017 as a new state record, *Ad. squamipennis* has since been reported in Palm Beach and Monroe counties. This invasive species shows evidence of continued range expansion, underscoring the need for ongoing monitoring and control efforts to manage its impact on local ecosystems and public health.

This new species record has been submitted for publication in the Journal of the American Mosquito Control Association and will be officially published in 2024.



Aedeomyia squamipennis is the 51st known species of mosquito residing in Collier County.

Keeywaydin Barrier Treatment Evaluation

The District continued its studies on residual barrier treatment applications on Keeywaydin Island, where private parcels cannot be treated with traditional methods due to their proximity to state-managed lands. Our operations team collected surveillance data, including landing rate counts and CDC trap data, approximately once per week during the salt marsh mosquito season from early April to August 2023.

In response to high mosquito population densities, two treatments were performed, focusing on optimizing the application method. Biologist Gabby Steele collected leaf samples from the treatment areas, which showed insecticidal activity. However, Ms. Steele noted the need for a higher application rate for immediate effectiveness. Operations have since optimized their application method, yielding promising results and reinforcing the potential effectiveness of barrier treatments as a viable strategy for controlling mosquito populations in the area.



New Product Evaluations

In collaboration with Valent Bioscience, the District recently concluded a comprehensive two-year study on a groundbreaking adulticide product. The study, conducted under an experimental use permit, focused on the product known as ReMoa Tri. This triple-action space spray offers a unique mode of action compared to traditional adult mosquito control formulations, providing a potential solution for targeting mosquito species resistant to existing products.

To evaluate the efficacy of ReMoa Tri against resistant mosquito populations in Collier County, the study involved ground-based field cage trials. These trials utilized field-caught mosquitoes from the county, specifically pyrethroid-resistant *Culex quinquefasciatus* and *Aedes aegypti* as indicated by Biologist Decyo McDuffie's resistance testing results.

The results demonstrated that ReMoa Tri was highly effective against both of these resistant mosquito species, offering significant promise for future mosquito control efforts. This study provides the first field data on this innovative space spray, highlighting its potential to combat local mosquito populations that have developed resistance to currently available adulticides.

The results of this study were submitted for peer-review and publication in the Journal of Medical Entomology and will be officially published in 2024.



Mosquitofish program

In collaboration with the Technical Development department, Biologist Rachel Bales has led efforts to improve the workflow for mosquitofish requests and pickups. This initiative aims to streamline the entire process, making it more efficient and user-friendly for District residents. While we experienced a dry summer resulting in a reduced demand for mosquitofish, over 2,000 mosquitofish were still distributed to District residents during FY 2022-2023.

Additionally, the District has repurposed the drone van, which was previously limited in its ability to access drone-treated areas. The van has been converted into a mosquitofish van, equipped with a tank for mosquitofish collections and giveaways. To complement this transformation, the van has been wrapped with an eye-catching and educational design, promoting awareness and the benefits of mosquitofish.

FY 22-23 Publications

Heinig RL, Morreale R, Reeves LE, Llyod A, Hoel D, Lucas KJ. (2023) Detection of *Aedes scapularis* in southwest Florida. *J Am Mosq Control Assoc.* 39: 281-83.

Lucas KJ, Babcock E, Bales RB. (2023). Baseline susceptibility and effectiveness of adulticides to local *Aedes taeniorhynchus* from Collier County, Florida. *J Am Mosq Control Assoc.* 39: 212-15.

Heinig, RL, Reeves LE, and Lucas KJ. (2023) *Aedes tortilis*, *Culex declarator*, and *Culex tarsalis*: New county records for mosquito species in Collier County, Florida. *J Am Mosq Control Assoc.* 39: 149-56.

Lucas KJ, Heinig R. (2023) In-house testing of mosquito pools for West Nile virus using immunoassay and Real Time PCR test kits. *J Florida Mosq Control Assoc.* 70: 49-53.

Lucas KJ, Bales RB. (2022) Insecticide resistance evaluation of *Aedes aegypti* mosquitoes from Collier County, Florida. *Arthropod Management Tests.* 47(1).

Heinig R, Rosales A, Deile J, Lucas KJ. (2022) Improved sample tray for adult mosquito identification. *Wingbeats.* Fall 2022 Issue.

New Hires

In 2023, the Research Department bid farewell to Laboratory Technician Zackary Nickell and Research Entomologist Robert Strasser. In recognition of his expertise in GIS technology, Biologist Atom Rosales was promoted to Director of Technical Development. The department was pleased to welcome new team members: Laboratory Technician Hunter Martin, Biologist Gabby Steele, Biologist Decyo McDuffie and Research Intern Sara Kacinkas.



Technical Development: To Infinity... And Beyond!

Overview

In January 2023, Atom Rosales transitioned from Laboratory Technician in the Research Department to Director of Technical Development efforts. As the department that is tasked with developing and implementing modern technologies to enhance the District's integrated mosquito management program, it sought to accomplish two key objectives this season:

- A comprehensive overhaul and rebuild of the District's drone program necessitated by amendments to FS 934.50, which established security standards for drone use by governmental agencies. In addition, the team reassessed the capabilities of unmanned aerial systems (UAS) to better integrate drones to support the District's operations via aerial inspections, photogrammetry and larvicide treatments.
- Upgrade the District's aerial and ground-based mission planning software, procedures and data management practices through the use of Geographic Information Systems (GIS) to boost operational efficiency and foster data-driven decision-making.



Drone Program Advancements

Changes to State Law

In 2022, Florida passed a law requiring all governmental agencies to discontinue the use of any drones which were not on the Department of Management Service's (DMS) approved list of drone manufacturers by January 1st, 2023. Additionally, DMS established minimum security requirements for the use of drones for governmental agencies. This led to the temporary grounding of most drone and UAS operations, as the District's fleet was comprised primarily of Chinese-based manufacturers. Even the District's Skydio 2 and American-made Hyllo AG-110 drones were grounded as they did not meet security requirements due to key hardware components being of Chinese origin.

In response to these setbacks, the Florida Mosquito Control Association (FMCA) established a working group to support legislation that would alleviate some of these constraints and work with DMS to ensure that the new regulations would not severely impact mosquito control operations. The working group met with DMS to come up with solutions and amend the rule's language to allow mosquito control to operate drones again. As a result of these efforts, DMS amended the rule to a tiered system, classifying different drone use types and providing clarification on critical components. These changes softened the blow and limited the disruption for mosquito control drone operations.

Adapting and Innovating

With the amended rules, the District was able to begin rebuilding its fleet. The updated fleet includes:

- A Skydio X2E small camera drone which is capable of performing aerial inspections and photogrammetry. Its ease of use and small size allow us to rapidly respond and identify areas of standing water in otherwise impassible terrain. It is also capable of performing photogrammetry for creating maps to ensure drone treatment missions are performed precisely where standing water is present.
- Our existing Hyllo AG-110 treatment drone underwent extensive modification to its flight controller and air unit to ensure compliance with new security standard requirements. Although drone treatments got a late start this season due to making sure the drone was following the new standards, the team performed 24 UAS larvicide missions covering over 65 acres.
- A newly acquired Inspired Flight IF1200A heavy-lift drone which provides multiple payload options and is the platform for the District's light detection and ranging (LiDAR) scanner.



Software Upgrades

During the 2023 season, the department upgraded to AG-Mission for aerial mission planning, working closely with operations and the hangar to ensure a smooth transition.

Training was provided for critical tasks such as creating treatment polygons, assigning missions to aircraft and downloading jobs.

Post-mission data management saw major improvements to help with creating reports and viewing mission results. As a web-based software, AG-Mission is an intuitive and simplified platform for performing these essential tasks. AG-Mission also possesses an intuitive job list and polygon library to store and easily access the District's many treatment blocks.

The Technical Development team worked tirelessly to ensure all the necessary treatment polygons are available in the new system for the operations department. Missions can now be remotely assigned to each aircraft and post-mission spray data is directly viewable and downloadable from the job directly in AG-Mission on any computer that has been granted access. This upgraded mission planning software has made aerial treatment operations leaner and more streamlined to meet the challenges of the District moving forward.

A Growing Team

Sara Grant joined the department as a Technical Development Specialist—her past experience with drones significantly benefited the departments' efforts to achieve its UAS goals.

The department also welcomed Noah Wehner as a Technical Development intern, whose passion for 3-D printing and engineering enhanced the departments' capabilities to fabricate custom parts.

New Web App

We launched a new ultra-low volume (ULV) and turbine treatment manager web application, providing key summary metrics and reporting capabilities.

In conjunction with ArcGIS Field Maps, field technicians are now capable of collecting GPS tracks for their spray routes during missions and recording important treatment details, such as the product type and quantity. Technicians can also view their assigned truck polygon on a dynamic and interactive map that assists with routing to ensure effective treatment coverage.

The application also allows previous treatment activity to be viewed so that technicians can easily view blocks that were not complete the night before and need further treatment. Continuing development is underway to expand upon these features and provide additional real-time data to drivers, such as swath visualization and integration with spray data.



Human Resources: A Look Into the Future

New Department, Fresh Perspectives

In August of 2023, the District welcomed Jessica Burnham MBA-HRM, SHRM-SCP as the Director of Human Resources. Jessica's hiring also brought on the additions of the District's new Department of Human Resources to meet the needs of our growing organization. The District created this department with the goal of innovating human resource practices, refining recruitment and retention strategies and fostering a positive work environment that is intended to promote employee engagement and productivity.

Employee Benefits

The District continues its longstanding membership in a self-funded consortium comprising Florida public entities, leveraging collective bargaining power to secure cost advantages through volume pricing and streamlined administrative processes. United Health Care remains the preferred provider organization (PPO) within this framework.

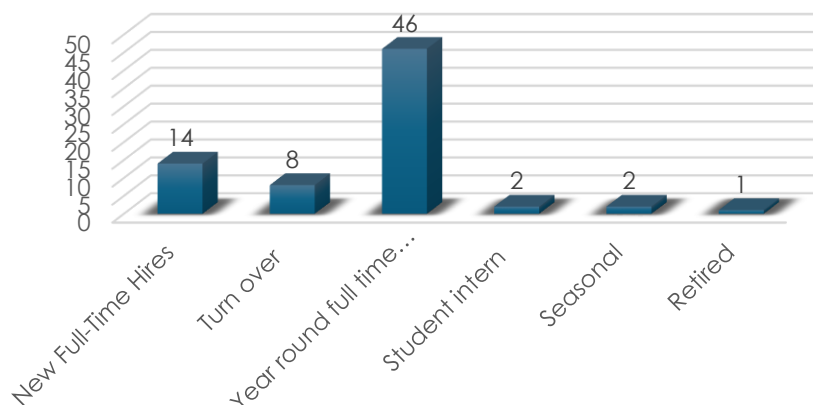
For the eighteenth consecutive year, employees and their dependents aged 18 and above were actively encouraged to engage with our comprehensive healthy living (wellness) program. This year, the program software, named Rally, was seamlessly integrated and managed through United Healthcare, incurring no additional costs to the District.

Rally represents a holistic wellness initiative incorporating essential components such as biometric screenings, health assessments, and an interactive wellness website/smartphone application. Participants not only benefit from valuable insights into their health status but also qualify for health insurance premium discounts and various rewards, fostering a culture of proactive health management and incentivized participation. The District has received more than \$950,000 in premium surplus as a member of this program.

New Hires and Turnover:

In 2023, our organization experienced significant changes in personnel composition, with a notable influx of new hires spanning diverse roles, including key management positions. While we observed fluctuations in turnover rates, particularly with a noteworthy spike in the year 2022-2023 compared to the hiring rate at the beginning of 2022, the overall turnover for the fiscal year remained low at 17%. Hurricane Ian played a crucial role in shaping our average number of full-time employees, even though CMCD hired fourteen new full-time talented employees throughout the fiscal year.

2022-2023 Employment Metrics



Communications, Outreach and Education: One with the Community

FMCA Tallahassee Days 2023

Dr. Keira Lucas, Deputy Executive Director, was appointed Chair of the Legislative Committee for the Florida Mosquito Control Association (FMCA). Under her leadership, the committee embarked on several key initiatives in 2023 that are crucial not only for the District but also for the broader mosquito control sector in Florida.

In January, several staff members from the District participated in the FMCA Tallahassee Days. This event provided an important platform for meeting with state legislators to discuss pivotal issues affecting mosquito control and the District's operations. During this event, Dr. Rebecca Heinig, Director of Research and Atom Rosales, Director of Technical Development, were recognized with travel awards. This acknowledgment provided them with a distinct opportunity to engage in a 'Day on the Hill,' which served as a vital educational session for legislators about mosquito control practices in Florida.

FMCA Dodd Short Courses 2023

In February, staff attended the FMCA Dodd Short Courses, making significant contributions to the program. Stacy Welch, Chief Financial Officer, collaborated with other District leadership to provide a short course designed for administrative departments of mosquito control programs. Dr. Rebecca Heinig, Director of Research, and Atom Rosales, Director of Technical Development, conducted courses focused on the practical applications of Excel and ArcGIS in mosquito control. Additionally, Dr. Keira Lucas, Deputy Executive Director, facilitated a District Accountability Workshop tailored for leadership and commissioners of independent mosquito control districts.

AMCA Annual Meeting 2023

In March, numerous staff members from the District attended the American Mosquito Control Association Annual Meeting, which took place amid very snowy conditions in Reno, NV. The team was formally invited to participate in various conference symposia where they presented on several important topics. These included the expansion of the District boundaries, trials of new control materials, details of aerial applications conducted by the District, and the utilization of BG-Counters. This participation underscored the District's active role and contributions to the broader field of mosquito control.

AMCA Washington Conference 2023

In May, Deputy Executive Director Dr. Keira Lucas and former Director of Communications Robin King were honored with travel awards to attend the American Mosquito Control Association (AMCA) Washington Conference. During this pivotal event, Dr. Lucas and Ms. King engaged in meaningful discussions with legislative aides from the offices of Senator Rick Scott and Representative Mario Diaz-Balart. These conversations centered around the critical role of mosquito control in Florida and the rest of the nation. Senator Scott, recognizing the significance of this issue, agreed to cosponsor the Strengthening Mosquito Abatement for Safety and Health (SMASH) Act, a key legislative initiative that was a focal point of our discussions. Personal invitations to the congressmembers were extended to visit the District. Following this, Erin Dever, Senator Scott's aide from Naples, conducted a visit to our District to gain a deeper understanding of our mission and vision.

In the News

- 39 News Stories in Local and State media



Rachel Bales, a biologist with the Collier County Mosquito Control District, wades through a dense swamp to set a mosquito trap in the CMCD's ongoing battle against the flying pests. Bales is a 2018 graduate of Florida Gulf Coast University, where she earned a degree in marine science. Contributed photo

By Therese McDevitt 2 JUNE 2023

Mosquitoes' nemesis: Meet CMCD biologist Rachel Bales

News from the Hangar

New Hires:

Seth Wisniewsky and John Delk were hired as pilots in April 2023

David Forman was hired as an aircraft mechanic in July 2023.

Trainings:

Mike Berkitsch and Derrick Klein attended Bell 407 training at the Bell Training Academy

Kevin Dunleavy attended Bell 407 and MD500 training at the Helicopter Institute



Admin and Finance: Spending Transparently

Budget Recap

The 2022-23 budget was adopted by the Board of Commissioners in September 2022 using a millage rate of 0.1609 mills – the rolled-back rate. This rate generated the prior year's tax revenue, less certain exceptions. The millage rate produces \$16.09 per \$100,000 of taxable property value for those within District boundaries. All statutory requirements were met as defined by the Florida Department of Revenue, Property Tax Oversight Department, utilizing the Truth in Millage process (TRIM).

An employee benefit – originally established to fund retirees' health insurance premiums for a set number of years – was sunset in 2016. To honor the promise made to those retirees (and to contain the future financial liability to the District), a Trust was established. This Retiree Benefit Trust is managed by the Administration department. During the fiscal year, the trust fund reached a fully funded level for the first time since inception.

The District continues its membership in a self-funded consortium which consists of Florida public entities, providing cost advantages via volume pricing and reduced administrative costs. United Health Care remains the preferred provider organization (PPO).

During FY2022-23, the District was financially audited by Grau & Associates for the fourth year as part of a five-year contract with a clause for yearly renewal thereafter.

The District continues to employ the services of Bond, Schoeneck, and King, with Bill Owens serving as District Counsel.

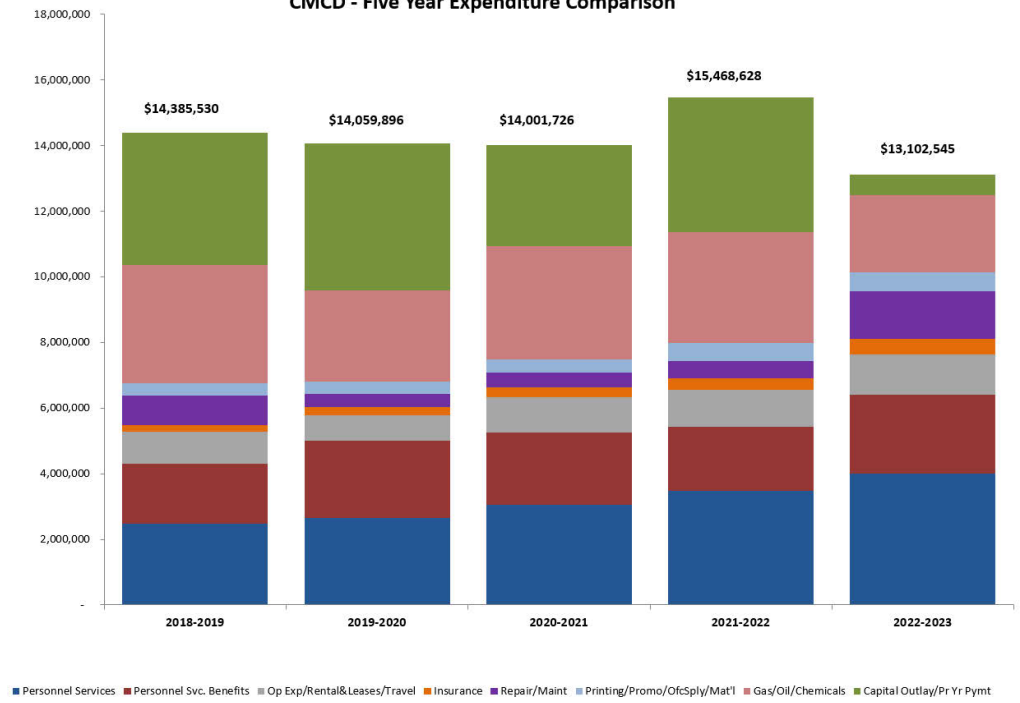
General Highlights

- Further implementation of Fleet Management software
- Substantial aircraft maintenance post-Ian
- Increased progress in architecture/engineering for the Immokalee project
- Significant expenditures related to Hurricane Ian cleanup/rebuilding
- Sizable increase in cost of benefits

**TOTAL REVENUE
\$21,233,679**

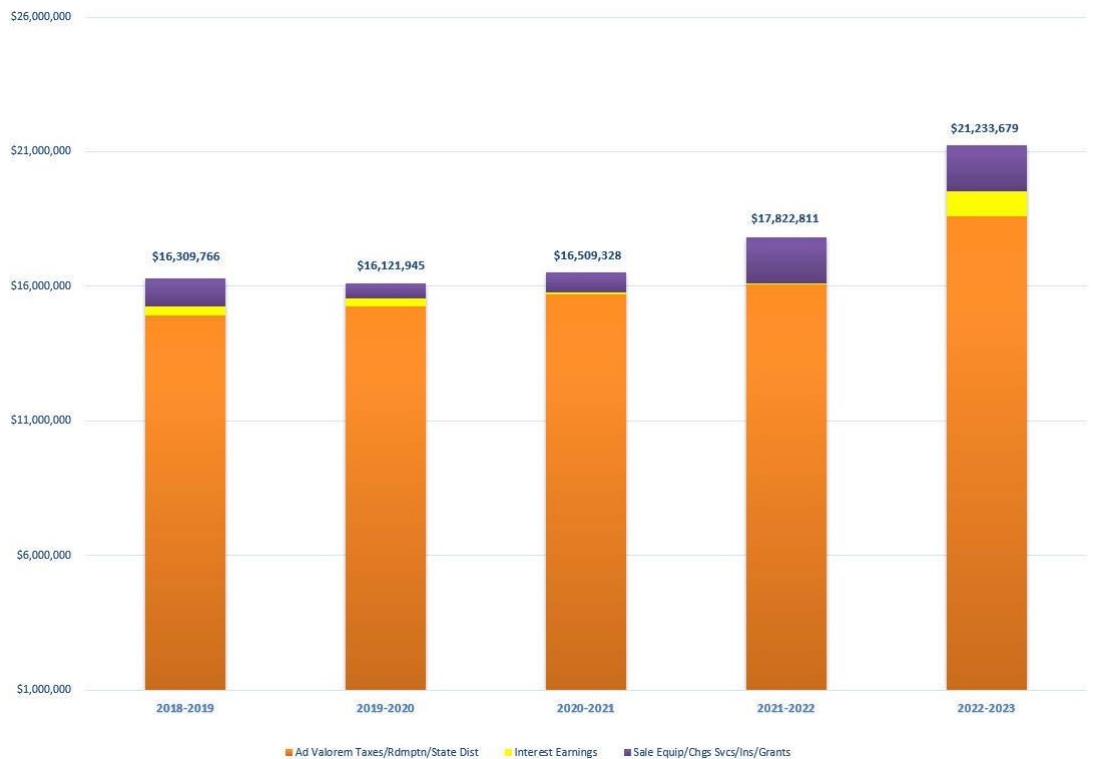
Total revenue for FY2022-23 was \$21,233,679 which included revenue from the Ave Maria Stewardship Community District for contractual mosquito control activities. Fiscal year expenditures were \$13,102,545.

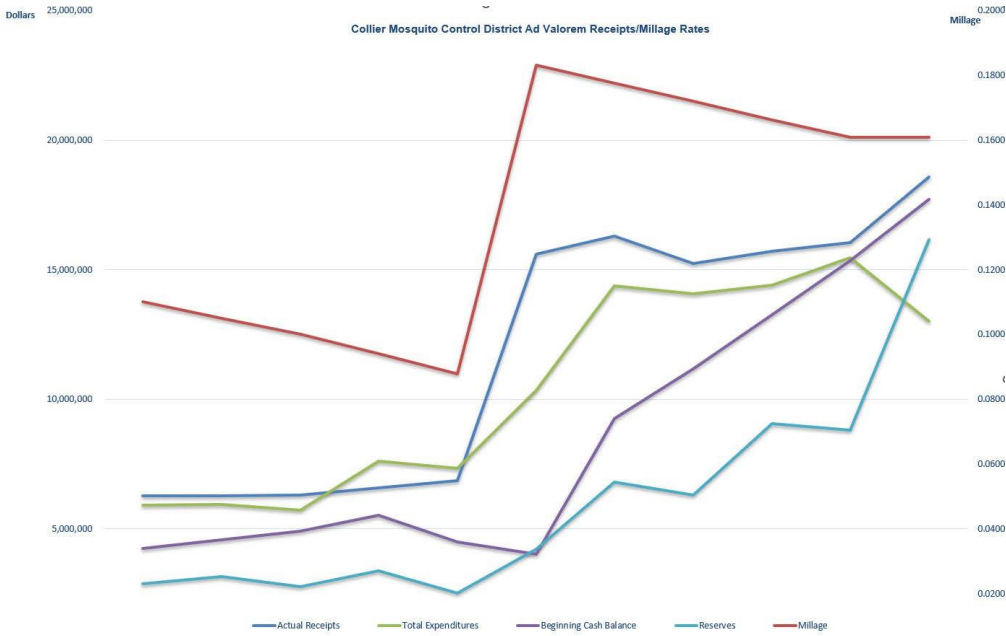
CMCD - Five Year Expenditure Comparison



The exact amount of expenditures, revenues, and fund balance will be verified by the auditors and released in early 2024 as part of the annual audit, and subsequent Financial Statements, which will be available on the District's website (cmcd.org).

CMCD - Five Year Revenue Comparison



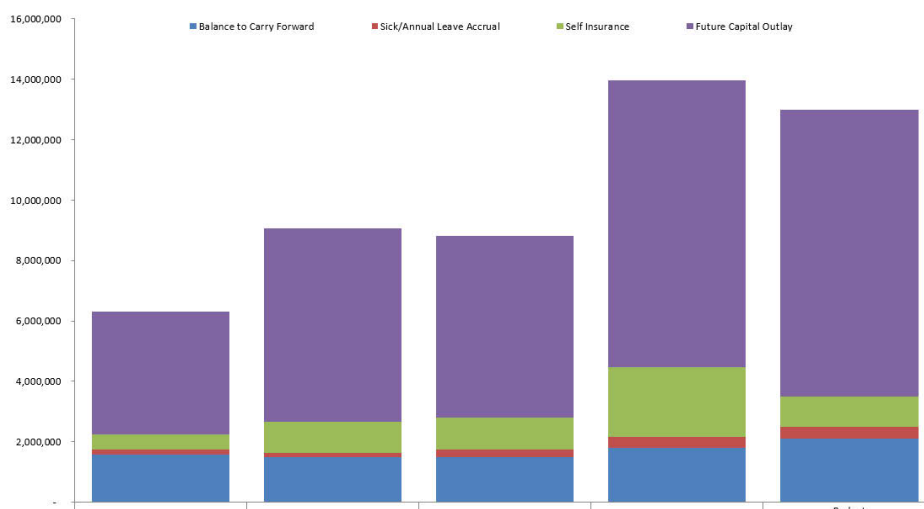


	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Actual Receipts	6,276,160	6,279,625	6,313,522	6,578,718	6,864,081	15,604,803	16,309,766	15,235,352	15,710,294	16,058,848	18,583,779
Total Expenditures	5,923,103	5,945,761	5,710,663	7,624,381	7,332,051	10,355,905	14,385,530	14,059,896	14,400,118	15,468,628	13,010,535
Beginning Cash Balance	4,237,836	4,590,893	4,924,755	5,532,559	4,486,896	4,018,926	9,267,824	11,192,060	13,254,109	15,363,320	17,717,503
Reserves	2,895,661	3,150,000	2,764,794	3,385,905	2,526,764	4,227,638	6,802,709	6,298,425	9,064,177	8,801,280	16,158,320
Millage	0.1102	0.1050	0.1001	0.0940	0.0878	0.1832	0.1775	0.1720	0.1662	0.1609	0.1609

**ENDING
CASH BALANCE
\$25,940,647**

The District concluded FY2021-22 with an ending cash balance of \$25,940,647. The budget was balanced, and the District maintained satisfactory reserves, as well as readily accessible funds for FY2023-24

Five Year Comparison of Reserves



	2019-2020	2020-2021	2021-2022	2022-2023	Budget 2023-2024
Future Capital Outlay	4,052,131	6,390,051	6,000,000	9,500,000	9,513,972
Self Insurance	500,000	1,037,375	1,051,248	2,302,890	1,000,000
Sick/Annual Leave Accrual	174,711	136,771	250,032	354,528	389,422
Balance to Carry Forward	1,571,593	1,500,000	1,500,000	1,800,000	2,100,000

Annual Report 2022-23

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