

## Manatee County Mosquito Control District

### **Mission Statement:**

The Mission of the District is to provide a safe and fiscally responsible public health service to all residents of Manatee County utilizing proven Integrated Mosquito Management (IMM) methods that are efficient, effective, and environmentally sound in order to minimize the impact of both nuisance and disease-vectoring mosquitoes on the health and welfare of the community.

### **Goals:**

- 1) Disease/vector mosquitoes: Make every effort to eliminate all active vector populations and monitor efficacy of these efforts throughout the treatment period.
- 2) Nuisance mosquito populations: Good nuisance control is good disease control. The District will make every effort possible utilizing all aspects of Integrated Mosquito Management to control nuisance mosquito populations to ensure a high human quality of life. By extension, ensuring low populations of nuisance mosquito species often has the combined effect of also reducing populations of vector mosquito species.
- 3) Research: Actively engage in research including operational evaluations to optimize the District's ability to carry out its mission.
- 4) Employees: Management should make every effort to maintain a highly motivated, educated and productive staff that is aware of, and has access to, the latest materials, technologies, and techniques in vector control.
- 5) Customer service: Ensure that County residents and visitors are educated on mosquito control practices, the services the District provides and are satisfied with the service provided.
- 6) Economics: Utilize public funds as fiscally responsible as possible while maintaining premier level of mosquito control services.
- 7) Relationships: Cultivate strong, mutually beneficial relationships with local, state, county, and federal agencies.
- 8) Accountability: Conduct all aspects of District business in a transparent and accountable manner.
- 9) Political Responsibility: Ensure that the District Commissioners operate in an ethical manner, making sound decisions based on current and complete information.
- 10) Finances: Ensure that District finances are adequately managed to provide for long term financial stability and sustainability.

## **Strategic Management Plan: Calendar Year 2020-2025**

### **Preamble:**

The Manatee County Mosquito Control District was established by Legislative-approval and public referendum in 1947 to provide public health protection, ensure human quality of life and allow for economic prosperity as is often compromised from excessive (sometimes explosive) mosquito populations. Over the past several decades, the Manatee County Mosquito Control District has earned a reputation as one of the premier mosquito control programs in the Country due to exceptional leadership (Commissioners, Executive Director, Department Heads), advanced-level research and community involvement. In 2019, coinciding with pending retirement of the Executive Director, this Strategic Management Plan was developed to describe/outline future 5-year plans of the District to ensure that the mission of the program was upheld and advanced. This Strategic Management Plan was developed recognizing current limitations, future needs and addressing threats that may challenge the District and overall mission.

Background: Manatee County Mosquito Control Program was initially established to address salt-marsh mosquito populations that develop year-round along tidal wetlands, often migrate 10-20 miles from natal areas, are aggressive human biters and can spread diseases. In the late 1980's land development increased at an accelerated rate into agricultural areas located east of the Interstate and in turn, the County's human population began to significantly increase. The County is now home to the Lakewood Ranch Community (Schroeder-Manatee Ranch), one of the fastest growing and largest CDD in the United States coving 33,000 acres and responsible for the development of almost 25,000 new homes. Since 1980, human population of Manatee County has grown from 148,500 to 425,000 (est.) in 2022 resulting in a remarkable increase in demand for mosquito control services particularly within new residential developments. Commensurately, the District has also grown from approximately 10 employees in 1980 to 24 full-time in 2022.

The purpose of this document is to organize the efforts of Commissioners, staff and community partners to produce a clear focus of the District's future growth, needs and challenges along with plans to ensure public health and human quality-of-life services are delivered in a safe, responsible and economically-conservative manner. This plan will focus on capital improvements, fiscal demands, technology, personnel/employee retention, county growth, and service.

### **5-Year Strategic Plan (January 2020)**

#### **1) Infrastructure:**

- a. **Facilities/Campus:** The District currently operates from a facility initially built in 1964 with multiple physical additions over the past 55 years. The facility, while well maintained, has become too small for effective District operations with a growing County and service area. The District plans to purchase land and begin construction on a new facility/campus in the coming 5 -year period. (Update: campus construction began in September 2022 with an estimated completion date of October 2023).
- b. **Helicopter:** The District currently owns 2 Bell 407 and 1 MD500 helicopters for mosquito control services throughout the County to include activities such as applying

mosquito larvicides, adulticides and saltmarsh inspections. The Bell 407s were purchased in October 2018 to replace 2 (aging) MD 500s in order to provide greater lifting capacity and greater flight range to serve an expanding population. The 407s were purchased used for \$3.4m and required an additional \$100k each in FAA-required maintenance/updates but still represented a 50-60% savings over a new purchase. Two of the three MD500s were sold via broker for \$1.1m. *Future needs:* Other than annual maintenance and inspections, no additional updates are planned for any of the 3 aircraft. Management must always be aware that a mechanical failure can occur at any time and repair can sometimes approach \$1m depending upon severity even when repairs can be performed in-house. Reserve budgets must plan for this potential.

2) Employee Retention/Employee Retirement:

- a. Retirements: The District's largest and most valuable asset are the highly trained & dedicated employees. Of paramount importance to District management is employee morale and retention. Despite efforts to retain employees, retirement is inevitable and in the coming 5 years, the District anticipates the loss of the Chief Pilot, Lead Aircraft Mechanic, Manager of the Grounds Department and several technicians in various departments. All positions will be difficult to replace due to the highly specialized nature of each position's respective work tasks and, increasingly, due to the highly competitive worker/economic climate. In preparation for these retirements, District management needs to hire potential replacements at least 1 year prior to retirement dates for all management/leadership positions to ensure smooth transition, knowledge transfer and uninterrupted public service. Update: As of January 2023, the Chief Pilot retired June 2022 and a replacement Chief Pilot had been hired and trained a year earlier. Retirement of the Aircraft Mechanic is anticipated May 2023 and a replacement A/V Mechanic was hired October 2022. Retirement of the Grounds Department manager is anticipated July 31, 2026.
- b. Salary Evaluations & COLA: The District adopted a formal salary structure for each position based upon a salary survey performed by the Indian River Mosquito Control District in 2018. The salary of each position should be re-assessed every 2-3 years with adjustments made based upon market demands. Similarly, District management wants to ensure that employee salary, and more significantly, "dollar buying power" remains consistent or increasing each year relative to the US Bureau of Labor Statistics - Consumer Price Index for the Tampa-St. Petersburg-Clearwater area. Annual salary adjustments should reference the CPI ensuring fair employee compensation.

- 3) Data Management Software: For the past 25-30 years, the District has managed all data (daily/weekly mosquito populations, public service requests, chemical applications, flight records, rainfall, mosquito borne disease activity) with a DOS-based, in-house generated program that is cumbersome and lacks a friendly user-interface. The District needs to adopt a more modern, custom-built data management software program. Update: In May 2021, the District fully integrated all data into MapVision (Leading Edge Associates). Initially there were some stumbling blocks but overall, staff now seems to be very happy with the product.

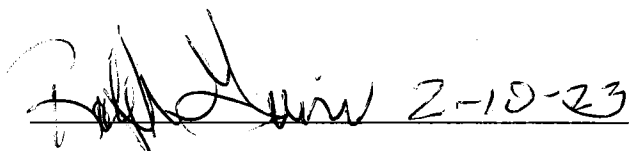
- 4) Existing Capital Infrastructure: The District needs to remain vigilant on condition of existing capital infrastructure to ensure reliable delivery of public services.
  - a. Vehicles: Due to the unique, rough, offroad environments that District vehicles are used, the District has found that a 5-year, 100k mile rotation is economically and mechanically justified. Efforts should be made to ensure this rotation is maintained.
  - b. Truck-based Spray Systems: Many of the truck ULV adulticide spray systems are now 15-20 years old and getting somewhat unreliable (electrically and mechanically). Efforts should be made to start replacing the 3-4 spray systems that are routinely used.
  - c. Helicopter Spray Tanks: Chemicals used to spray for adult mosquitoes are known to be somewhat corrosive/damaging to fiberglass, metal, rubber seals over long periods of exposure and in concentrated formulation. Efforts need to be made for annual inspections of these spray tanks, repairs made when needed and management should budget for replacement when required. Some of these spray tanks are \$100k or more.
  
- 5) Establishing Cooperative Agreements with Public Land Managers: One of the most significant producers of adult mosquitoes in the County are public-managed lands (FWC, FDEP, SWFWMD, etc). For many years, some public land managers have been tentative towards local mosquito control efforts on public lands. Effort needs to be made by the District in the next 5 years to improve communications and efforts with these public agencies to work cooperatively towards common goals.
  
- 6) Lack of New Chemistries Available for Adult Mosquito Control/Chemical Resistance Management: For the past 40 years, there has been just 2 major classes of chemicals available for adult mosquito control which, without proper management could easily result in population-level chemical resistance. Efforts need to be made to regularly measure chemical resistance in mosquito populations throughout the County, regularly rotate chemistries applied to control adult mosquitoes, continue to place a heavy emphasis on larvicide management and, finally encourage/support manufacturers to develop new chemistries that can be EPA-approved/EPA-registered for public health mosquito control.
  
- 7) Public Opposition: As the County has grown in population, many new residents come from areas outside of Florida and are often unfamiliar with public-health mosquito control practices. This lack of knowledge sometimes leads to both fear and opposition to any type of mosquito control activity. Continual efforts must be made to educate new residents on the proven safety and need for mosquito control using integrated mosquito management techniques.
  
- 8) Hurricane/Disaster Readiness: South Florida is a target for hurricane activity. Long-term and short-term efforts must be continually made to ensure the District is hardened for these potentially devastating impacts and can quickly re-establish a base of operations soon after weather conditions improve. Mosquito populations often spike after hurricane activity which hinders recovery efforts by first-responders and exposes residents to a public health threat when electrical infrastructure has often failed for weeks at a time. The District must be prepared to quickly mobilize helicopter, truck and personnel assets in response.

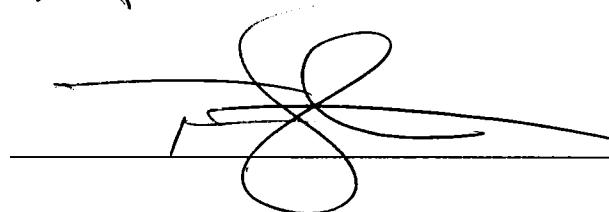
**Summary:**

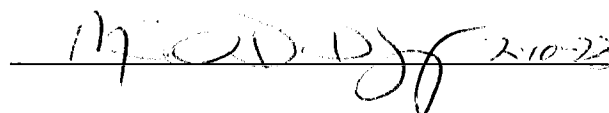
Significant effort has been put forth here to describe the District's mission, goals and planned objectives in the coming 5 years with the underlying theme of best serving the public's interest in a fiscally responsible manner. Many parts of this document are dynamic and may be changed as conditions/situations change. As such, updates may be made by District management and approved by Commissioners as needed.

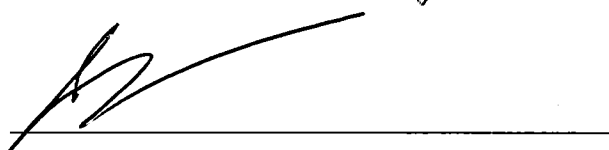
This document is not a unilateral statement and support is needed from employees, management and Commissioners. Comments are always welcome.

**Endorsed:**

 2-10-23  
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Ralph Garrison, Commissioner (Chair)

  
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Tim Matthews, Commissioner

 2-10-23  
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Michael Daugherty, Commissioner

  
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Christopher Lesser, Director