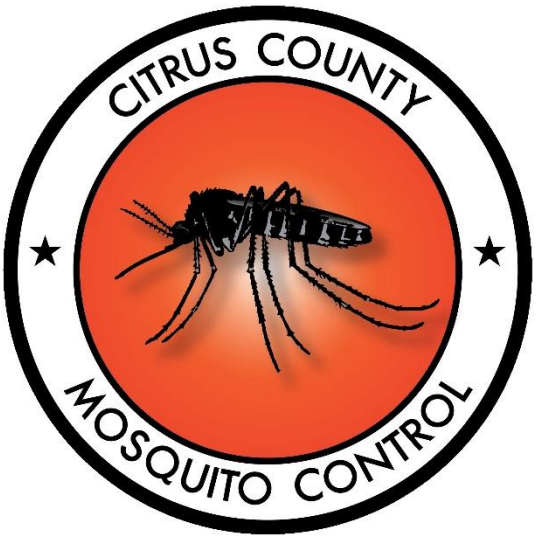
Citrus County Mosquito Control District



Strategic Plan

Commissioners

Joe Adams

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Mission

Our Mission at Citrus County Mosquito Control District is to promote the health, safety, and welfare of Citrus County residents and visitors through a program of Integrated Mosquito Management (IMM) practices to control populations of mosquitoes that may become a nuisance or a threat to public health.

About Citrus County Mosquito Control District

Citrus County Mosquito Control District has shifted its focus over the past two decades to becoming a proactive mosquito control that targets mosquitos in the larval stage before they can fly, blood feed, and potentially spread diseases. While our focus has shifted to more of a larvicide based program, we still use a well-rounded Integrated Mosquito Management plan to control our target.

This approach has allowed us to reduce the use of broad spectrum adulticides while utilizing more biorational mosquito control products and biological control agents such as the gambusia minnow. This approach to mosquito control also reduces the number of acres requiring treatment to control the mosquito population by focusing our control efforts to the bodies of water to which the larvae are confined.

Our Integrated Mosquito Management approach also includes source reduction and public education as additional means of controlling the mosquito population while reducing the need for more aggressive control products or techniques.

While our focus is on larval mosquito control there is still a need to utilize adult control products and techniques to subdue populations that emerge as adult mosquitos. Through mosquito surveillance, we monitor adult mosquito populations year-round, as well as mosquito-borne disease activity. Based on this data we can make informed targeted treatments that are effective while minimizing negative impacts on the environment.

While Citrus County Mosquito Control District is limited to the confines of the county lines, we recognize that mosquito-borne disease are not. Understanding this and maintaining our proactive approach to protecting the residents of Citrus County, we have included the surrounding counties in training events hosted at the District to not only ensure that our staff is well trained in preserving public health through the control of mosquitos but the mosquito control professionals that surround Citrus County as well.

This proactive approach to mosquito control to prevent the spread of mosquito-borne disease requires constant maintenance, refinement, and evolution to maintain control as weather patterns, geological makeup, population density, and technology changes.

Goals

1) Provide effective and efficient mosquito control while limiting negative impacts on the environment.
    a. Measurements
        i. Acres treated (adulticide vs. Larvicide) continue to support CCMCD's proactive approach to mosquito control by larvicide acres treated per year trending up and adulticide acres treated per year trending down.
        ii. Bottle Bioassay results yield greater than 75% mortality at diagnostic time.

iii. Post treatment inspections yield lower mosquito population than initial inspection.

2) Utilize a collaborative approach to limit threat of mosquito-borne disease.
    a. Measurements
        i. CEU's offered to Mosquito Control Professionals through in house training exceeds 4 per year.
        ii. Locally acquired human infection rate per mosquito-borne pathogen lower than state average. (Infection rate/100,000 residents)
3) Improve community awareness about the importance of mosquito control, the threat of mosquito-borne diseases, and the districts IMM approach to mosquito control.
    a. Measurements
        i. Number of residents reach through public outreach events exceeds 10-year average.
        ii. Diversity of audience exceeds 5 audience types per year.
        iii. Pre and post test results show elevated understanding of mosquito control post interaction.
4) Improve/maintain infrastructure and equipment.
    a. Measurements
        i. Less than 4 weeks per year without aerial treatment capabilities
5) Maintain highly trained personnel.
    a. Measurements
        i. Staff average CEU's are greater than minimum required by FDACS to maintain licenses.
        ii. Average experience level greater than 3 years.
        iii. Greater than 85% of staff having a current Public Health Pest Control License

Objectives

This five-year plan contains objectives that allow the district to continue to proactively control mosquito populations and the diseases that they spread over the next five years through the goals list above. This is a planning document and items listed within may be subject to board approval.

2025-2026

Construct new pole barn for outdoor educational events

Conduct Salary analysis (post state $15/hr. minimum wage implementation)

Commence Laboratory Remodel

Replace three of eight eligible vehicles

Complete overhaul of compound fencing

Develop interlocal agreements with surrounding counties for emergency situations

Complete resistance testing for an array of mosquito species at multiple locations

Attend/host regional roundtable to discuss mosquito control issues faced over the last year or likely to occur

Relocate fuel tanks and equipment storage shed

Collaborate with community partners to create a pollinator garden near beehives

Upgrade compound gates and signage

Purchase and Install Radar Altimeter on N452MC

Increase aerial adulticide application efficacy

Explore purchase of remote Landing Zone

2026-2027

Explore contracting for LiDar services

Consider feasibility of onsite fish hatchery

Replace three of five eligible vehicles

Complete resistance testing for an array of mosquito species at multiple locations

Attend/host regional roundtable to discuss mosquito control issues faced over the last year or likely to occur

Begin converting fleet to all 4X4 trucks

Host operational mosquito control/calibration workshop

2027-2028

Replace 2 vehicles, continue converting fleet to all 4X4 trucks

Complete resistance testing for an array of mosquito species at multiple locations

Attend/host regional roundtable to discuss mosquito control issues faced over the last year or likely to occur

Host operational mosquito control/calibration workshop

Consider feasibility of solar power to offset energy costs

Consider construction of additional wash racks

2028-2029

Attend/host regional roundtable to discuss mosquito control issues faced over the last year or likely to occur

Purchase and setup educational trailer

Replace 3 eligible vehicles, continue converting fleet to all 4X4 trucks

Host operational mosquito control/calibration workshop

Complete resistance testing for an array of mosquito species at multiple locations

2029-2030

Consider replacing N352MC (Formally N7JR) with larger Aircraft (Example: Bell 505, 407)

Attend/host regional roundtable to discuss mosquito control issues faced over the last year or likely to occur

Replace 2 eligible vehicles, continue converting fleet to all 4X4 trucks

Host operational mosquito control/calibration workshop

Complete resistance testing for an array of mosquito species at multiple locations

DISTRICT OVERVIEW

The District's strengths, weaknesses, potential opportunities, or threats/concerns (SWOT) may affect the District's abilities to provide services and/or require changes or modifications to services.

The following items could have an impact on the future success of the District:

STRENGTHS	WEAKNESSES
• Well trained and experienced personnel • All staff are licensed • Aerial capabilities • Up to date equipment • Good working relationship with community partners • Good rapport with residents • Fiscally responsible • Public education • Tire Amnesty • Long history of surveillance data • Short response time to service requests • Inhouse CEU opportunities • Proactive approach to Mosquito control • Centralized District location • Focused solely on Mosquito control • Regional resource for training	• Unfamiliar with new management at Citrus DOH • Success with aerial adulticide effectiveness • Inability to use aerial assets on Homosassa Wildlife Park • Limited Mosquito Control capabilities of surrounding counties • Restricted access or "Courtesy No spray" impeding efforts • Equipment failures
OPPORTUNITES	**THREATS**
• Improve Laboratory capabilities • Grant procurement • Conduct research • Mobile education trailer • Fish hatchery • Collaboration with other mosquito controls • Improve compound security • Interlocal agreement	• Limited treatment of Wildlife Park (likely disease introduction point) • Growth around District headquarters crowding facility • Product resistance • Sentinel Chicken husbandry • Travel related disease introduction • Hurricanes/tropical weather events