

# **Anastasia Mosquito Control District of St. Johns County, Florida**

## **Program Goals and Performance Measures**

**(FY 24/25)**

### ***Program #1: Customer Service & Service Requests***

- A. Goals: Provide high-quality service promptly.**
- B. Objectives:**
- 1).** Provide quick and efficient responses to mosquito control services, requested by residents.
  - 2).** Collaborate with industry and university/institutes for the evaluation and product development of mosquito control products and tools.
- C. Measurable Outcomes:**
- Respond to 100% of the service requests entered into the AMCD database.
  - Respond to 75% of the service requests within an average of 24 hours.
  - Maintain at least two collaborative projects with industry and or university/institutes per quarter.

### ***Program #2. Surveillance of Arbovirus and Mosquito Population***

- A. Goals: Reduce mosquito populations and potential mosquito-borne diseases.**
- B. Objectives:**
- 1).** Detect and understand the location and presence of mosquito-borne diseases (arboviruses).
  - 2).** Monitor/understand vector mosquito species and distribution.
  - 3).** Monitor nuisance floodwater mosquito populations.
- C. Measurable outcomes:**
- Maintain 8 arbovirus surveillance sites from May through October for the FY 24/25 season with plans to increase to 11 sites by Quarter 2 of 2025.
  - Maintain 41 routine mosquito population surveillance sites—Surveillance sites will be added as St. Johns County’s resident population increases. One additional site will be added for every resident population increase of 2%.
  - Generate weekly surveillance data reports to guide mosquito control operations.
  - Count all arbovirus operational traps within 8 hours of collection and research traps within 48 hours of collection.
  - Test all mosquitoes collected for arbovirus surveillance for operations within one week of collection and research within 2 weeks of collection.

### ***Program #3. Source Reduction and Biorational Control***

**A. Goals: Promotion of environmentally friendly control methods.**

**B. Objectives:**

- 1). Collect and reduce used tires and containers for source reduction.
- 2). Use /apply SIT (radiated male and *Wolbachia*-infected male) as a part of the Integrated Mosquito Management to control vector mosquitoes in hot spots.
- 3). Maintain a strong mosquito-fish program for providing these predators to St. Johns County residents.

**C. Measurable Outcomes:**

- Pick up and dispose of waste tires as needed (note: AMCD policy states no more than 10 tires per site collected).
- Conduct weekly surveillance in three identified mosquito breeding hot spot sites for SIT releases with 12 BG traps and 24 oviposition cups per site.
- Establish and administer an SIT program to 25% capacity by the end of 2025, reach 50% capacity in 2026.
- Develop and establish SIT larval diet resulting in 95% adult emergence.
- Determine the flight range of SIT mosquitoes through a mark-release recapture trial in FY 2024/2025.
- Produce 25,000 males per week in quarter 4 of the 24/25 FY with expectations of increasing to 75,000 per week in FY 25/26.
- Place a minimum of 50 fish per quarter in suitable aquatic habitats for biological control.

## ***Program # 4. Larviciding and Adulthood***

**A. Goals: Promotion of effective larval and adult mosquito control by ground and aerial applications.**

**B. Objectives:**

- 1). Select and use the most effective larvicides and tools to control larval mosquitoes.
- 2). Select and use the most effective adulticides and tools to control adult mosquitoes.
- 3). Monitor and manage insecticide resistance of larvicides and adulticides used by AMCD.

**C. Measurable Outcomes:**

- Conduct calibration for larviciding and adulticiding equipment (trucks and helicopters) and laboratory tools on an annual basis before the mosquito season.
- When larval thresholds are met conduct a larvicide mission within 24 hours by ground and aerial application.
- When adult thresholds are met conduct adulticide applications within 72 hours by ground and aerial application.
- When two consecutive adulticide applications fail (< 65% control between pre- and post-mosquito populations) conduct insecticide-resistant testing.

## ***Program # 5. Public Relations and Education***

**A. Goals: Develop/Enhance more collaboration with all related agencies and the improvement of St. Johns County citizens' knowledge about the prevention and control of mosquitoes and mosquito-borne diseases.**

**B. Objectives:**

- 1). Recognize and increase the collaboration with related agencies, especially local agencies, such as DOH, School Boards, Colleges, and the Department of Environmental Protection.
- 2). Enhance employee and intern training for more professionalism and adoption of new technology to make operational control more efficient.
- 3). Promote public education through the Disease Vector Education Center.

**C. Measurable Outcomes:**

- Reach out to two related agencies per quarter.
- Ensure 100% of the seasonals and interns conduct the mandatory classroom training within 2 weeks of their start date.
- Ensure 100% of AMCD full-time employees complete the FDACS/AMCD mandatory in-classroom training and for Mosquito Control Technicians 40 hours of field training annually.
- Organize the 20<sup>th</sup> annual workshop, March 25-27, 2025.
- Provide 1-2 education events per month in the DVEC.
- Increase community awareness by participating in popular public gatherings, for example: St. Augustine Annual Christmas,, Ancient City Kids Day, and Cracker Days.
- Increase community awareness with at least two social media posts per week.
- Provide monthly reports on the education and outreach events.
- Provide monthly reports on the number of visitors to the DVEC.
- Provide monthly reports on social media presence to increase viewers by 10% in FY 2024/2025.
- Post 100% of our aerial and at least 90% of our ground adulticide missions on AMCD's website.
- Send out email notifications to residents who have signed up for a courtesy notification and no-spray residents for 100% of the missions.

## ***Program # 6. Applied Research (Testing & Evaluation)***

**A. Goals: Enhance existing and test the most practical and efficient surveillance and control methods and tools for the control of mosquitoes and mosquito-borne diseases.**

**B. Objectives:**

- 1). Increase collaboration with the mosquito control industry to test/evaluate new products and technology.

- 2). Increase collaboration with universities/institutes and industry to find potential grants.
- 3). Promote AMCD's reputation through GLP, publications, leadership, and cooperation at state, national, and international levels.

**C. Measurable Outcomes:**

- Maintain at least two collaborations with industry and/or universities/institutes per quarter.
- Collaborate with universities and/or industry for the development and submission of at least 2 grants per year.
- Publish at least five manuscripts per year.
- Organize an annual adjunct/consulting meeting on March 24, 2025 before the annual workshop.
- Review 10% of GLP's SOPS on a quarterly basis.
- Conduct annual GLP Facilities Audit.
- Review MOUS with AMCD partners on an annual basis.
- Send AMCD representatives to a minimum of four scientific meetings annually.

## ***Program # 7. Administration and Facilities***

**A. Goals: Maintain AMCD's compliance with federal, state and local laws and regulations, and run programs more efficiently.**

**B. Objectives:**

1). Maintain a balanced budget during FY 2024/2025 as mandated by Chapter 388 and DACS 5E-13 regulations.

2). Ensure effective financial planning for FY 2024/2025 as mandated by Chapter 388 and the DACS 5E-13 regulations.

3). Recruit and train new employees based on program needs, retain skilled employees, and update employees' knowledge and technology.

4). Identify the critical areas of facility maintenance such as cleanliness, safety, buildings, and equipment repair needs.

**C. Measurable Outcomes:**

**1). Reports & Finance:**

- Submit the mosquito control Monthly Report-Local Funds report and the Monthly Pesticide Activity Report to the Department of Agriculture and Consumer Services (DACs) before the last day of each month.
- Submit the Detailed Work Plan Budget for Arthropod Control and the Annual Certified Budget for Arthropod Control amendments to DACs by the specified deadlines.
- Submit the District's Integrated Mosquito Management work plan on time.
- Submit/comply with the TRIM law on time and reduce the millage rate to 0.17 from 0.18 for the FY 23/24.

- Submit financial auditor report to the Auditor General on time.
- Distribute and publish annual program reports, annual program, goals, and measures on our website before on or before October 1.

**2). Personnel Management:**

- Promote 2 full-time Mosquito Control Technicians from seasonal and or intern position and one mutual position (three-year contract Mosquito Control Technician position) between AMCD & FDEP.
- Update employee public health pest control licenses and continuing education credits annually.
- Conduct annual employee performance evaluations annually from January to February.
- Conduct quarterly management meetings to identify, document, and prioritize areas requiring maintenance attention.

**3). Equipment/Facility Maintenance:**

- Convert 50% of our adulticide truck fleet in the FY 2024/2025 to new adulticide tracking software and monitoring systems.
- Conduct annual physical inventory and monthly chemical inventory.
- Renew property, fleet, health, and helicopter insurance on time.
- Collaborate with DACS, FDOH, Fire Marshall, and other related agencies for their mandatory inspections.
- Update our Biomedical, SDS database, route location book, notification list, NPDES, hurricane/emergency, flooding, and disaster response plan annually.
- Conduct an RFP/Bid in FY 2024/2025 for updating the drainage on AMCD property to be completed in FY 2025/2026.
- Complete and have a fully operational cold room for the SIT facility in early Spring of 2025.