

Anastasia Mosquito Control District of St. Johns County, Florida

Program Goals and Performance Measures

(FY 25/26)

Program #1: Customer & Professional Request Services

- 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.
 - 3). Provide peer reviewing services for professional journals, grant applications/proposals.
 - 4). Leadership activity in state and national professional associations
- C. Measurable Outcomes:**
- Update software and APP for service requests.
 - Respond to 100% of the service requests entered into the AMCD database.
 - Respond to 80% of the service requests within an average of 48 hours.
 - Maintain at least three collaborative projects with industry and or university/institutes per year.
 - Review DACS and other agencies' grant proposals.
 - Review 5-8 manuscripts for professional scientific journals.
 - Staff maintains in professional membership and possible leadership in AMCA, SOVE, and FMCA Board or key committees

Program #2. Surveillance of Arbovirus and Mosquito Population

- A. Goals: Reduce mosquito populations and potential mosquito-borne diseases.**
- B. Objectives:**
- 1). Update the location and presence of mosquito-borne diseases (pathogens).
 - 2). Explore new technology and methods (AI-powered & molecular-based) for arbovirus detection.
 - 3). Monitor vector mosquito species and their geographic distribution.
 - 4). Monitor nuisance floodwater/salt marsh mosquito populations and environmental factors that impact their population distribution
 - 5). Increase survey of mosquito larvae from storm drains.
 - 6). Adopt/promote new surveillance tools (BG counter 2 for *Aedes* mosquitoes).
- C. Measurable outcomes:**
- Maintain 10-11 arbovirus surveillance sites by sentinel chickens from April through November for the FY 25/26 season.

- Maintain 41 routine mosquito population surveillance sites (CDC traps, BG traps, and ovitraps). Surveillance sites will be added as St. Johns County's resident population increases.
- Survey of larval populations from storm drains in 3 new subdivisions.
- Generate weekly surveillance data reports to guide mosquito control operations.

Program #3. Source Reduction and Biorational Control

A. Goals: Promotion of environmentally friendly control methods.

B. Objectives:

- 1). Continue to 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.
- 3). Maintain a mosquito-fish program for providing to St. Johns County residents based on requests.

C. Measurable Outcomes:

- Pick up and dispose of waste tires as needed (note: AMCD policy limits the collection of no more than 10 tires per site).
- 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 reach 80% capacity in 2026.
- Finalize the longevity evaluation of SIT mosquitoes through 2 mark-release recapture trials in FY 2025/2026.
- Produce 50,000 males per week for release in 2026.
- Place a minimum of 50 fish per quarter in suitable aquatic habitats for biological control.

Program # 4. Larviciding and Adulticiding

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

8. 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, drones, and helicopters) and laboratory tools annually, before the mosquito season.
- When larvae are found, conduct larviciding mission within 24 hours by ground and aerial application.
- When adult thresholds are met, conduct adulticide applications within 48 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 and enhance collaboration with all related agencies, and improve 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, Clubs, and the Department of Environmental Protection.
- 2). Promote citizen science and encourage citizens to participate in the activity of mosquito prevention and control.
- 3). Enhance employee and intern training for more professionalism and adoption of new technology to make operational control more efficient.
- 4). Promote public education through the Disease Vector Education Center.
- 5). Evaluate the effectiveness of intern training and public education.
- 6). Provide public record request within legally required times.

C. Measurable Outcomes:

- Reach out to two to four related agencies in 2026.
- Ensure that 100% of seasonals and interns complete 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 21st annual workshop & the FMCA Fly In class, March 2-5, 2026.
- Provide 1-2 education & training events per month in the DVEC.
- Host the SOVE annual meeting in mid-September 2026.
- 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 all social media posts weekly.
- Provide monthly reports on the education and outreach events.
- Provide monthly reports on the number of visitors to the DVEC and increase the number of visitors by about 1,500 in 2026.
- Provide monthly reports on social media presence to increase viewers gradually.
- Post 100% of our aerial and ground adulticide missions on AMCD's website.
- Update and send email notifications to residents who have signed up for courtesy notifications 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, such as AI-powered surveillance tools and Robot tech for the application of insecticides.
- 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 three collaborations with industry and/or universities/institutes per year.
- Collaborate with universities and/or industry for the development and submission of at least two grant proposals per year.
- Submit and publish at least five manuscripts per year.
- Organize an annual adjunct/consulting meeting, before the annual workshop.
- Review GLP's SOPS based on needs.
- Conduct annual GLP Facilities Audit.
- Review MOUS with AMCD partners on an annual basis.
- Send AMCD representatives to three 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 2025/2026 as mandated by Chapter 388 and DACS 5E-13 regulations.
- 2). Ensure effective financial planning for FY 2025/2026 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 safety, buildings, and equipment repair needs.
- 5). Update on district pay plan and policy, and other policies and procedures.

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, Integrated Mosquito Management Plan, and the Annual Certified Budget for Arthropod Control amendments to DACS by the specified

deadlines.

- Submit/comply with the TRIM law on time and keep the millage rate under 0.16 for the FY 25/26.
- Submit the financial auditor report to the Auditor General on time.
- Distribute and publish annual program reports, yearly program goals, and measures on our website by October 1.

2). Personnel Management:

- Study and reorganize the District programs and organizational chart.
- Conduct job description reviews and compensation study in FY25/26 to update AMCD pay plan and pay policy.
- Promote two full-time Mosquito Control Technicians from seasonal and or intern positions.
- Update employee public health pest control licenses and continuing education credits annually.
- Conduct annual employee performance evaluations from January to February.
- Conduct quarterly management meetings to identify, document, and prioritize areas requiring maintenance attention.
- Adopt the HR software to improve HR management.
- Update and increase employee training about HR items.

3). Equipment/Facility Maintenance:

- Convert 100% of our adulticide truck fleet in the FY 2025/2026 to new adulticide tracking software and monitoring systems.
- Conduct annual physical inventory and monthly chemical inventory included resale at the DVEC gift shop.
- Renew property, fleet, health, and helicopter insurance on time.
- Collaborate with FDACS, FDOH, DEP, Fire Marshall, and other related agencies for their mandatory inspections.
- Update our Biomedical, SOS database, route location book, notification list, NPDES, hurricane/emergency, flooding, and disaster response plan annually.
- Complete the drainage system repair in 2025.
- Complete database software conversion in 2026.
- Conduct the RFP for the storage building in FY25/26.
- Study analysis of the aerial program cost effectiveness and efficiency.