

MOSQUITO CONTROL DEPARTMENT SUMMARY

MISSION STATEMENT:

To protect public health and improve the quality of life for Brevard County citizens by controlling mosquito and aquatic plant populations.

PROGRAMS AND SERVICES:

ACCOMPLISHMENTS, INITIATIVES, TRENDS AND ISSUES AND SERVICE LEVEL IMPACTS:

Countywide Mosquito Control

Accomplishments:

- More than 1 million acres (1,640 square miles) treated by Mosquito Control this past year, including both night adulticiding and day-time larviciding missions
- 556 acres (0.9 square miles) treated by the Aquatic Weed Control section in the past year
- Mosquito Control staff has completed approximately two-thirds of the repairs to the mosquito impoundments that were damaged by Hurricanes Matthew and Irma
- The Aircraft Section has improved scheduling of night-time adulticide missions by notifying the public of two potential treatment locations per aircraft per night whenever possible; This decreases downtime and increases efficiency by allowing pilots the flexibility to complete a secondary mission if the primary mission is deemed unsafe or uncertain due to inclement weather
- The educational outreach team has grown significantly after conducting a dozen outreach events in 2018 at various Touch-a-Truck, School, Camp, Park, Public Safety, Halloween, and Cub Scout events
- Implemented initial changes to the organizational structure – specifically in the Ground Operations, Environmental Section, and Administration area to improve departmental efficiency and service
- Successfully converted fixed truck pesticide tanks to a removable design in order to decrease the spill risk and degradation of night-time adulticide pesticides during daytime activities

Initiatives:

- Continue to enhance the function and operations of impoundments through the replacement of poor performing and inadequate equipment that has reached the end of its useful life
- Continue to partner with state agencies on wetlands restoration projects in the County
- A new larvicide delivery system has been designed and will be constructed and tested to control mosquitoes in the larval stage of development; Ground crews will use the new system, which uses the more environmentally friendly “bio-rational” larvicides and reduces hydrocarbon output into the surface waters, the new system will enable crews to select up to three different liquid larvicides to treat mosquito larvae at various stages of development
- Continue to enhance, repair, and replace facilities that date back to the 1950’s
- Construct a mosquito fish (Gambusia) hatchery to increase biological control opportunities, an important aspect of an Integrated Pest Management (I P M) program
- Outfit the Aquatic Weed Control airboats with mosquito larviciding units and navigational software to support Aircraft and Ground Operations by increasing coverage in inaccessible mosquito breeding habitats

Trends and Issues:

- In response to the growing potential of exotic viruses coming to Florida, Mosquito Control is researching and evaluating specialized surveillance devices and equipment

Service Level Impacts:

Not Applicable

MOSQUITO CONTROL DEPARTMENT: SUMMARY

Mosquito Control Department Revenue & Expense Category	Actual F Y 2017-2018	Final Budget F Y 2018-2019	Adopted Budget F Y 2019-2020	Difference	% Change
Taxes Revenue	\$6,648,244	\$7,115,356	\$7,428,869	\$313,513	4.41%
Permits, Fees & Special Assessments Revenue	\$0	\$0	\$0	\$0	0.00%
Intergovernmental Revenue	\$2,883	\$0	\$0	\$0	0.00%
Charges for Services Revenue	\$24,221	\$60,000	\$60,000	\$0	0.00%
Fines and Forfeits Revenue	\$0	\$0	\$0	\$0	0.00%
Miscellaneous Revenue	\$156,252	\$92,500	\$121,500	\$29,000	31.35%
Statutory Reduction	\$0	-\$363,393	-\$380,518	-\$17,125	4.71%
Total Operating Revenues	\$6,831,600	\$6,904,463	\$7,229,851	\$325,388	4.71%
Balance Forward Revenue	\$3,114,573	\$3,099,579	\$3,325,000	\$225,421	7.27%
Transfers - General Revenue	\$0	\$0	\$0	\$0	0.00%
Transfers - Other Revenue	\$185,834	\$143,288	\$143,963	\$675	0.47%
Other Finance Source Revenue	\$0	\$0	\$0	\$0	0.00%
Total Non-Operating Revenues	\$3,300,407	\$3,242,867	\$3,468,963	\$226,096	6.97%
TOTAL REVENUES	\$10,132,006	\$10,147,330	\$10,698,814	\$551,484	5.43%
Compensation and Benefits Expense	\$2,875,220	\$3,244,378	\$3,360,874	\$116,496	3.59%
Operating Expense	\$3,029,812	\$3,677,621	\$3,496,623	-\$180,998	-4.92%
Capital Outlay Expense	\$382,859	\$328,900	\$367,500	\$38,600	11.74%
Operating Expenditures	\$6,287,891	\$7,250,899	\$7,224,997	-\$25,902	-0.36%
C I P Expense	\$108,252	\$203,000	\$500,000	\$297,000	146.31%
Debt Service Expense	\$0	\$0	\$0	\$0	0.00%
Reserves-Operating Expense	\$0	\$1,019,281	\$913,472	-\$105,809	-10.38%
Reserves - Capital Expense	\$0	\$1,019,183	\$1,400,325	\$381,142	37.40%
Reserves - Restricted Expense	\$0	\$0	\$0	\$0	0.00%
Grants and Aid Expense	\$0	\$0	\$0	\$0	0.00%
Transfers Expense	\$636,284	\$654,967	\$660,020	\$5,053	0.77%
Total Non-Operating Expenses	\$744,536	\$2,896,431	\$3,473,817	\$577,386	19.93%
TOTAL EXPENDITURES	\$7,032,427	\$10,147,330	\$10,698,814	\$551,484	5.43%

MOSQUITO CONTROL DEPARTMENT: BUDGET VARIANCES

Mosquito Control Department Revenue and Expense Category	Variance	% Variance	Explanation
Taxes Revenue	\$313,513	4.41%	Associated with increase in Ad Valorem tax revenue due to increased property values resulting from new construction
Permits, Fees & Special Assessments Revenue	\$0	0.00%	
Intergovernmental Revenue	\$0	0.00%	
Charges for Services Revenue	\$0	0.00%	
Fines and Forfeits Revenue	\$0	0.00%	
Miscellaneous Revenue	\$29,000	31.35%	Due to increase in interest earned revenue estimate
Statutory Reduction	-\$17,125	4.71%	Associated with changes in operating revenues
Balance Forward Revenue	\$225,421	7.27%	Primarily due to a decrease in pesticide chemical purchases in Fiscal Year 2019
Transfers - General Revenue	\$0	0.00%	
Transfers - Other Revenue	\$675	0.47%	Attributable to an increase in P I L T revenue transfers offset by a decrease in the Property Appraiser excess fees estimate
Other Finance Source Revenue	\$0	0.00%	
Compensation and Benefits Expense	\$116,496	3.59%	Attributable to Cost of Living Adjustments and F R S rate increases as well as the addition of two new positions offset by decreases in overtime
Operating Expense	-\$180,998	-4.92%	Due primarily to the non-recurring expense for acquiring helicopter crash resistant fuel tanks in Fiscal Year 2019
Capital Outlay Expense	\$38,600	11.74%	Due to the need to replace old, non-functioning capital equipment such as emergency backup generators
Grants and Aid Expense	\$0	0.00%	
C I P Expense	\$297,000	146.31%	Attributable to increased Capital Improvement needs in Fiscal Year 2020 associated with the Design phase of replacement Aircraft Hangar and Biology Lab
Debt Service Expense	\$0	0.00%	
Reserves-Operating Expense	-\$105,809	-10.38%	Primarily attributable to the addition of two new positions
Reserves - Capital Expense	\$381,142	37.40%	Primarily due to an increase in Ad Valorem tax revenue.
Reserves - Restricted Expense	\$0	0.00%	
Transfers Expense	\$5,053	0.77%	Attributable to an increase in the Tax Collector transfer due to the increase in Ad Valorem tax revenue

**MOSQUITO CONTROL DEPARTMENT
PERFORMANCE MEASURES**

Program	Objective	Measure	Actual FY 2017- 2018	Estimated FY 2018- 2019	Projected FY 2019- 2020
Mosquito Control	Safeguard Life, Safety, and Property; Maintaining Levels of Service	Total number of acres treated by Mosquito Control. (640 acres equals one square mile)	1,049,306	1,600,000	1,600,000
Mosquito Control	Effective and Efficient Operations	Percentage of scheduled mosquito adulticiding missions completed in 3 days or less	93%	95%	95%
Mosquito Control	Meet Financial and Budgetary Requirements	Operating Budget versus Operating Actuals	86%	90%	95%

**MOSQUITO CONTROL DEPARTMENT
PROGRAM SERVICE CHANGE JUSTIFICATION**

Program: Mosquito Control Countywide

Service Change Title: Add 2-positions: Environmental Specialist I and Mosquito Control Supervisor

Location/Area: Countywide

Level	Is it Mandated?	References
Federal Law	No	Not Applicable
State Statute	No	Not Applicable
Voter Referendum	No	Not Applicable
County Ordinance	No	Not Applicable
County Policy/Administrative Order	No	Not Applicable

Service Change Description:

An additional Mosquito Control Supervisor for the Ground Operations section is needed to maintain high quality service levels in increasingly dense urban areas. An additional Environmental Specialist I is needed for enhanced surveillance, testing, and environmental monitoring capabilities.

Justification of Need/Alternative Funding Statement:

Mosquito Control manages mosquitoes and diseases throughout a very diverse 72 mile long, 1,557 square mile County that is situated in and around the St. Johns River, Indian River Lagoon and the Atlantic Ocean. Increasing County residential populations justify an increased need for more thorough coverage, particularly in urban areas. Ground Operations, the Department's largest section, is comprised of 19 staff positions, including one supervisor and two lead workers. One additional position will help streamline the span of control and succession planning while improving Countywide responsiveness and customer service levels. Likewise, the Environmental Specialist position would allow the Department to add a second biologist to increase mosquito trapping capabilities, ensure more frequent pesticide efficacy and resistance testing, and protect the Indian River Lagoon and other local natural resources from inadvertent impacts.

Outcome of Service Change:

Externally, Mosquito Control will better serve the community with increased levels of efficiency, customer service, responsiveness, and environmental stewardship. Internally, the department will benefit by improving succession planning which ensures transfer of knowledge and promotes employee development and advancement. Overall, these two additional positions will ensure continuous improvement by maintaining and even exceeding existing levels of service and employee satisfaction.

Fiscal Impact

Funding source: Ad Valorem Tax Revenue

Expenditure Type	Is this a recurring expense?	Total
Compensation and Benefits	YES	\$127,640
Operating Expenses	YES	\$2,489
Capital Outlay	NO	\$2,700
Total Expenditures		\$132,829

Revenues generated as a result of this Service Change: \$0

Personnel Impact: 2

**MOSQUITO CONTROL DEPARTMENT
TRAVEL A&B SUMMARY**

Program Name	Description	Position	Destination	Funding Source	Total Cost
Countywide Mosquito Control	Airbus A-Star Helicopter Pilot Recurrent Training for Day and Night Emergencies	2 Pilots	Grand Prairie, Texas	Ad Valorem Taxes	\$39,806
Countywide Mosquito Control	Airbus H 125 Helicopter Field Maintenance Course	1 Aircraft Mechanic	Grand Prairie, Texas	Ad Valorem Taxes	\$8,450
Countywide Mosquito Control	Aircraft Maintenance Training - Safran Helicopter Engines	1 Aircraft Mechanic	Grand Prairie, Texas	Ad Valorem Taxes	\$5,400
Countywide Mosquito Control	Aerial Pesticide Chemical Applicator Training for Helicopter Pilots and Ground Crew	2 Pilots and 2 Mechanics	Lee County, Florida	Ad Valorem Taxes	\$1,700
Countywide Mosquito Control	Florida Mosquito Control Association Fall Meeting	2 Staff	TBD, Florida	Ad Valorem Taxes	\$1,200
Countywide Mosquito Control	Arbovirus Surveillance and Mosquito Control Workshop	2 Staff	St. Augustine, Florida	Ad Valorem Taxes	\$400
Countywide Mosquito Control	D O D D Short Courses - Florida Mosquito Control Association Training Courses	14 Staff	Gainesville, Florida	Ad Valorem Taxes	\$7,500
Total Funded For Department					\$64,456

**MOSQUITO CONTROL DEPARTMENT
CAPITAL OUTLAY SUMMARY**

Program Name	Description	Quantity	Unit Cost	Funding Source	Total Cost
Countywide Mosquito Control	20" Stainless Steel Pump (Honest Johns South Beaches)	1	\$73,000	Ad Valorem Taxes	\$73,000
Countywide Mosquito Control	Carports - Valkaria	4	\$2,200	Ad Valorem Taxes	\$8,800
Countywide Mosquito Control	Tire Changer	1	\$6,000	Ad Valorem Taxes	\$6,000
Countywide Mosquito Control	Welding Machine and Spool Gun	1	\$5,000	Ad Valorem Taxes	\$5,000
Countywide Mosquito Control	Storage Shed	1	\$5,400	Ad Valorem Taxes	\$5,400
Countywide Mosquito Control	Chevrolet Silverado 4500 with Crane	1	\$69,000	Ad Valorem Taxes	\$69,000
Countywide Mosquito Control	Emergency Backup Generator 100 K W	1	\$29,000	Ad Valorem Taxes	\$29,000
Countywide Mosquito Control	Emergency Backup Generator 60 K W	1	\$18,000	Ad Valorem Taxes	\$18,000
Countywide Mosquito Control	Emergency Backup Generator 30 K W	3	\$12,000	Ad Valorem Taxes	\$36,000
Countywide Mosquito Control	Vehicle Alignment System	1	\$15,900	Ad Valorem Taxes	\$15,900
Countywide Mosquito Control	Desktop Computers	8	\$1,100	Ad Valorem Taxes	\$8,800
Countywide Mosquito Control	Desktop Computer	1	\$1,400	Ad Valorem Taxes	\$1,400
Countywide Mosquito Control	Desktop Computer	1	\$1,600	Ad Valorem Taxes	\$1,600
Countywide Mosquito Control	iPad Pro Tablets	2	\$1,400	Ad Valorem Taxes	\$2,800
Countywide Mosquito Control	Airboat 12 Foot	1	\$39,800	Ad Valorem Taxes	\$39,800
Countywide Mosquito Control	Trailer for Airboat	1	\$3,500	Ad Valorem Taxes	\$3,500
Countywide Mosquito Control	Aircraft Jacks	3	\$3,500	Ad Valorem Taxes	\$10,500
Countywide Mosquito Control	Aircraft Scales	1	\$10,000	Ad Valorem Taxes	\$10,000
Countywide Mosquito Control	Aircraft Balancing Machine	1	\$23,000	Ad Valorem Taxes	\$23,000
Total Funded For Department					\$367,500

**MOSQUITO CONTROL DEPARTMENT
CAPITAL IMPROVEMENTS PROGRAM**

Program Name	Description	Funding Source	Total Cost
Countywide Mosquito Control	Mosquito Impoundment Land Purchase	Ad Valorem Taxes	\$100,000
Countywide Mosquito Control	Design Phase - Aircraft Hangar & Lab	Ad Valorem Taxes	\$400,000
Total Funded For Department			\$500,000