Attached is Additional Information for Agenda Item #19

Acceptance of a Status Report Regarding Newly Implemented Changes to the Mosquito Control Program's Adulticiding Services

Meeting of Tuesday, May 25, 2010

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BOARD OF COUNTY COMMISSIONERS

MEMORANDUM

DATE: May 20, 2010

TO: Honorable Chairman and Members of the Board

FROM: Alan Rosenzweig, Assistant County Administrator

SUBJECT: Agenda Item #19: Acceptance of a Status Report Regarding Newly Implemented Changes to the Mosquito Control Program's Adulticiding Services

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As requested by Commissioner Desloge, attached is information from the February 9, 2010 Workshop on the Leon County Mosquito Control Program and Adulticiding Alternatives. The information provided addresses the total cost of the spraying program and comparisons in cost to other jurisdictions.

Attachment:

- Information from the Mosquito Control Workshop

In addition to programs established by local governments, licensed pest control companies provide mosquito control for private landowners, homeowners associations, resorts, etc. All of these activities are, however, still required to operate under the requirements of state law and rules.

Integrated Pest Management System:

The Leon County Mosquito Control Program (Program), has been in existence since the late 1950's. Prior to the mid 1990's, the program was under the direction of the Leon County Health Department and its primary responsibility was maintaining the large mosquito control ditches which are found throughout the city and county. Since then, the Program, governed by the Board of County Commissioners and funded through general revenue, resides within the Department of Public Works. The transition allowed for the Program to acquire staffing such that source reduction and control programs, such as larviciding, adulticiding, and citizen education, could be expanded.

The Program, within the Division of Operations, employs Integrated Pest Management (IPM) strategies to control mosquitoes in Leon County; and it accomplishes this with a current budget of $563,000 (Table #1). IPM strategies, in general, utilize source reduction techniques; monitoring to determine if and when treatments are needed; physical, mechanical, cultural, biological, and chemical treatments; and community education in an effort to reduce mosquito populations and mosquito-borne illnesses.

Table 1: Budget Summary

Program	Amount	% of Total
Source Reduction		
Mosquitofish Program	$ 9,673	1.7
Waste Tire Program	$ 10,763	1.9
Surveillance Techniques*		
Sentinel Chicken	$ 15,530	2.8
Community Education Program	$ 14,983	2.7
Larviciding Program	$ 229,703	40.8
Adulticiding Program		
Hand-Fogging Program	$ 76,193	13.5
ULV Truck Spraying Program	$ 206,331	36.6
Total	$ 563,177	

* Other surveillance techniques are not broken out specifically and absorbed in the overall budget.

Source Reduction

In Leon County, the first lines of defense for the mosquito control program are to use environmentally-sound source reduction techniques to disrupt the mosquito's life cycle. The two primary techniques used are stocking mosquitofish in abandoned swimming pools, backyard ornamental ponds, etc. and the waste tire program.

labeling process reflects the permitted use and safety precautions that pesticide applicators must follow.

Comparisons to Other Programs

In preparation for the workshop, staff researched other counties in Florida and throughout the United States to make comparisons in budgets and services provided and explore alternatives for county-wide adulticiding. Staff employed the use of websites such as the American Mosquito Control Association; conducted e-mail inquiries and communications with other programs and agencies; and utilized data and resources from DACS. Some of the jurisdictions examined include: the Florida counties of Alachua, Escambia, Lake, Manatee, Marion, Osceola, Sarasota and St. Lucie; Oregon Vector Control; Southern Nevada Health District; Grand River Mosquito Control District (Colorado); the Delaware Department of Natural Resources and Environmental Control, Division of Fish & Wildlife, Mosquito Control Section; and Winnipeg, Canada.

Organizational structures for mosquito control programs vary considerably from county to county and state to state. They include independent taxing districts, dependent taxing districts, county departments, situations where there are multiple jurisdictions operating mosquito control programs within the same county, and situations where the activity is centralized at a state level.

In terms of budget, wide variation exists. A comparison of like-sized Florida counties reveals that Leon County is the lowest for dollars spent per county resident for counties with a single, county-wide mosquito control programs (Table 2). As depicted, per capita funding for mosquito control programs range from $2.04 in Leon County to $20.75 in St. Lucie County.

Table 2: Comparison of Mosquito Control Funding for Like-Sized Counties

Jurisdiction	MC Budget	Area Serviced (Sq. Miles)	Type	Population (thousands)	Net Budget per Capita
Leon	$ 563,177	667	BOCC	275	$ 2.04
Osceola[1]	$ 914,865	1,322	BOCC	274	$ 3.33
Escambia	$ 708,502	663	BOCC	313	$ 2.26
Manatee	$ 4,063,075	741	Independent District	318	$ 12.77
Lake	$ 1,021,868	953	BOCC	288	$ 3.54
St. Lucie[2]	$ 5,748,007	572	Dependent District	277	$ 20.75
Alachua[3]	> $600,000[5]	826	Multiple Jurisdictions	252	See Note[5]
Marion[4]	> $ 70,000[5]	1,530	Multiple Jurisdictions	329	See Note[5]

Notes:
1) Osceola County has budgeted $815,000 for contracted services. The remainder is budgeted for mosquito control contract oversight.
2) Saint Lucie County responsibilities include the management of 4,000 acres of coastal mangrove swamps and salt marshes.

3) Alachua County has multiple programs operated by various jurisdictions. For Example, the Alachua County commission has budgeted $216,000 for larviciding, adult trapping and chicken flocks in the unincorporated area. Whereas, the City of Gainesville has allocated $350,000 for mosquito control services within the city limits.
4) Marion County has multiple programs operated by various jurisdictions. For example, the Marion County commission has budgeted $50,000 for contracted ULV truck spraying. Whereas, the City of Ocala has budgeted $20,000 for contracted ULV truck spraying and the Stormwater Division full-time personnel handle the larviciding program.
5) Unable to determine total amount due to multiple jurisdictions operating programs within the county.

Table 3 represents some of the additional jurisdictions examined, and their associated budgets.

Table 3: Additional Jurisdictions and Associated Budgets

Jurisdiction	Budget	Area Serviced (Sq. Miles)	Type
Leon County, FL	$ 563,177	667	BOCC
Grand River Mosquito Control District (CO)	$ 928,000	78	Independent Special District
West Umatilla Vector Control – Oregon	$800,000	515	Independent District
Southern Nevada Health District	$690,000	8,012	Independent District
Jacksonville (Duval County) Mosquito Control	$2,490,953	757	City Commission
Beach Mosquito Control (Bay County)	$1,621,524	59	Independent Special District
Florida Keys Mosquito Control	$14,795,750	200	Independent Special District
Lee County Mosquito Control	$24,758,853	797	Independent Special District
Sarasota County Mos. Control	$2,985,756	572	BOCC

With regard to services performed within those budgetary parameters, staff research has concluded that an overwhelming majority of programs utilize an IPM strategy which includes an adulticiding component. Once that was established, additional research examined which programs have no-spray policies.

A survey of 60, Florida mosquito control jurisdictions was conducted to determine common practices across the state as they pertain to no-sprays for ULV truck spraying programs (Attachment #8). Staff received 30 responses. Of the responses, 84% of the programs have some form of a no-spray policy in place; however, none had formal written policies describing their procedures. Staff, however, was able to locate two out-of-state programs that had parameters for no-spray zones. Those two were Delaware and Winnipeg, Canada.

The policies from these two jurisdictions indicate a 300 foot/100 meter radius-drift is presumed when fogging techniques are utilized (Attachments #9 and #10). The Board may wish to provide direction to staff in this regard, since, as previously mentioned, the Leon County Program does not currently have a set buffer zone.