

# Mosquito Control Incident Response Team (MCIRT)



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**Environmental Manager**  
**Division of Agricultural and Environmental Services**  
**Florida Department of Agriculture and Consumer Services**

# **Mosquito Control Incident Response Team**

## **Our Mission**

**Assist Florida counties undergoing repair and recovery activities following a disaster with mosquito control abatement.**

# Mosquito Control Incident Response Team

*Our team is comprised of:*

- **56 Field Inspectors with experience in agricultural pesticide, structural pest control, animal feed, seed and fertilizer**
- **6 Field Supervisors**
- **Management, mosquito/insect experts/scientists, GIS mappers and staff from the Division of Agricultural Environmental Services (AES)**



# Mosquito Control Incident Response Team

## *Activation of the MCIRT*

- **Emergency declaration by President of the United States and/or Governor of Florida**
- **Recovery/repair efforts have commenced in the county requesting assistance**
- **Public assistance eligibility requirements have been met**

# **Mosquito Control Incident Response Team**

## ***Is There A Need for Vector Control Assistance?***

- **Program capability of County (program unaffected with ground and aerial capabilities to no program at all)**
- **Flood damage and standing water**
- **Structural damage and loss of utilities**
- **Arbovirus disease potential (mosquito borne illness alert/advisory)**
- **Adult female mosquito surveillance levels**

# Mosquito Control Incident Response Team

## *Recent Deployments*

- **Hurricane Michael, 2018**
- **Bay, Calhoun, Gulf, Holmes, Jackson, Liberty and Washington Counties**
- **786,483 acres sprayed via aerial application of Dibrom**



# Mosquito Control Incident Response Team

## *Recent Deployments*

- **Hurricane Irma, 2017**
- **25 Counties** (Baker, Bradford, Clay, Columbia, Desoto, Flagler, Glades, Hardee, Hendry, Hernando, Highlands, Marion, Martin, Nassau, Okeechobee, Orange, Osceola, Polk, Putnam, Seminole, St. Lucie, Sumter, Suwannee, Union, Volusia Counties)
- **Over 3 million acres sprayed via aerial application of Dibrom**
- **3,648 spray miles via truck**



# Mosquito Control Incident Response Team

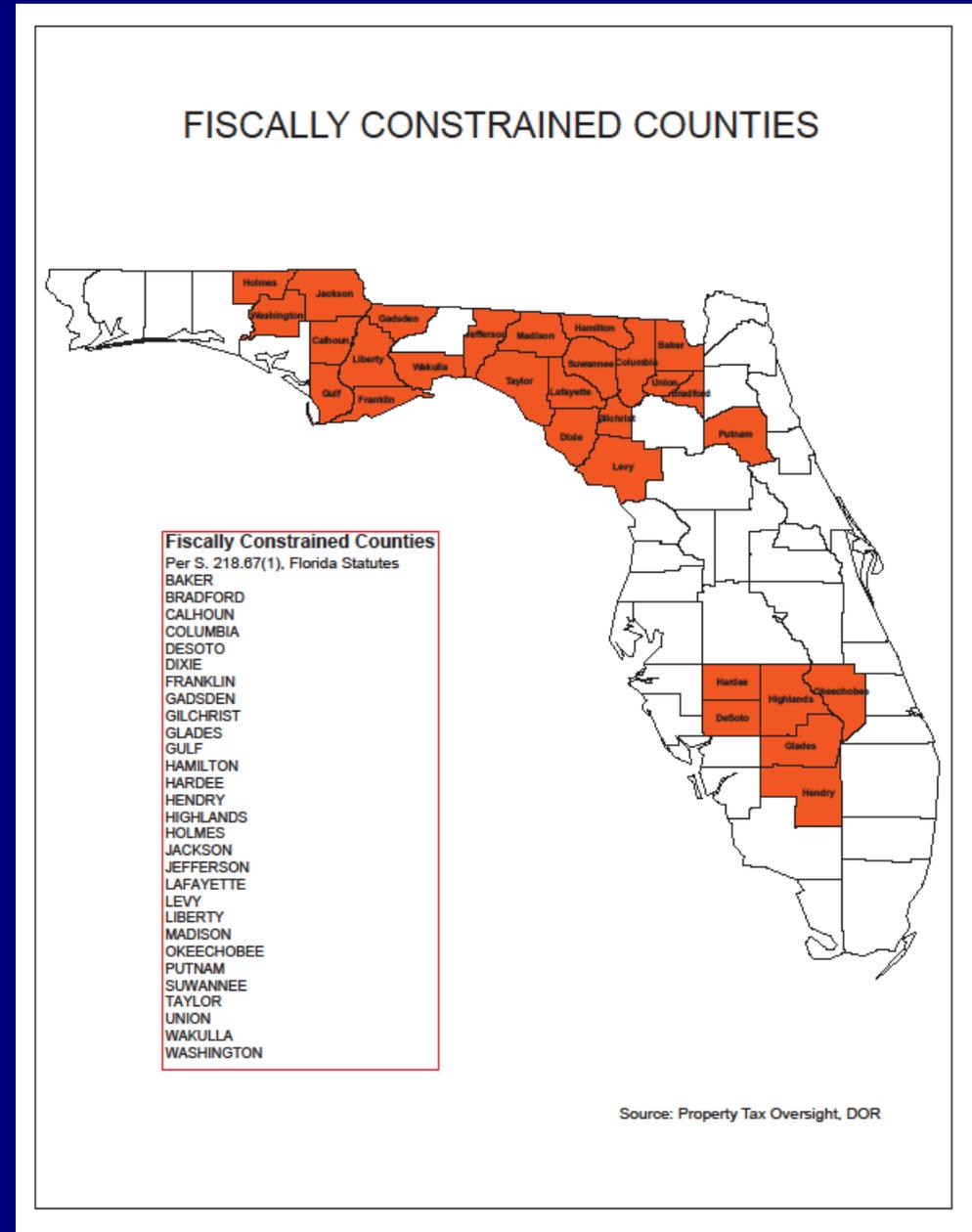
## *Cost sharing of mosquito control pesticide applications*

- **Reimbursement based on FEMA/State agreement**
- **Typically 75% (FEMA) / 25% (State and County) Cost Share**
- **25% = 12.5% State and 12.5% County**

# Mosquito Control Incident Response Team

## *Cost sharing of mosquito control pesticide applications*

- **Fiscally constrained counties may be exempt**



## **Mosquito Control Incident Response Team**

***Along with the mission request, these documents need to be entered by County Emergency Management into WebEOC prior to receiving assistance:***

- **County Health Department letter**
- **Letter from County authorizing pesticide application**
- **County GIS map of proposed spray zone(s)**
- **Public information/press release plan**
- **Three-year baseline trap data**
- **Pre-treatment mosquito surveillance data**

# Mosquito Control Incident Response Team

## *How we assist our Florida counties*

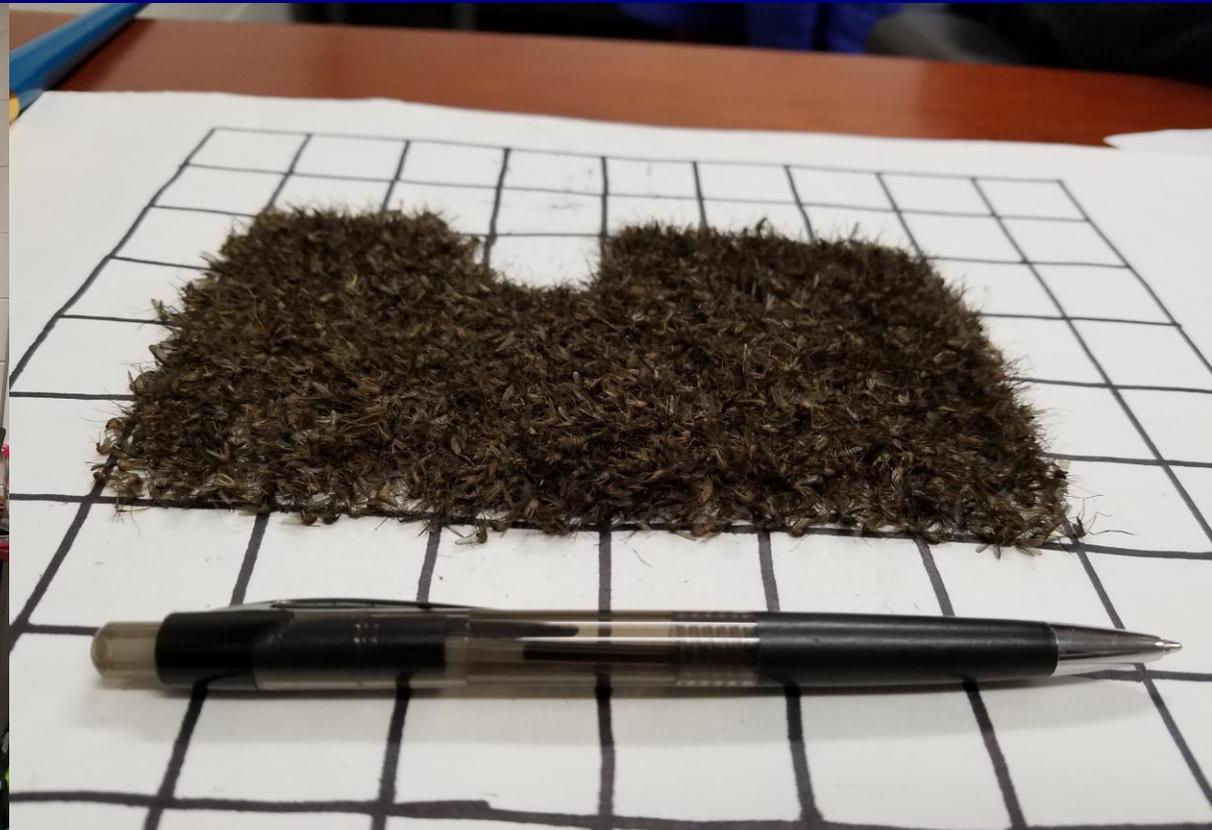
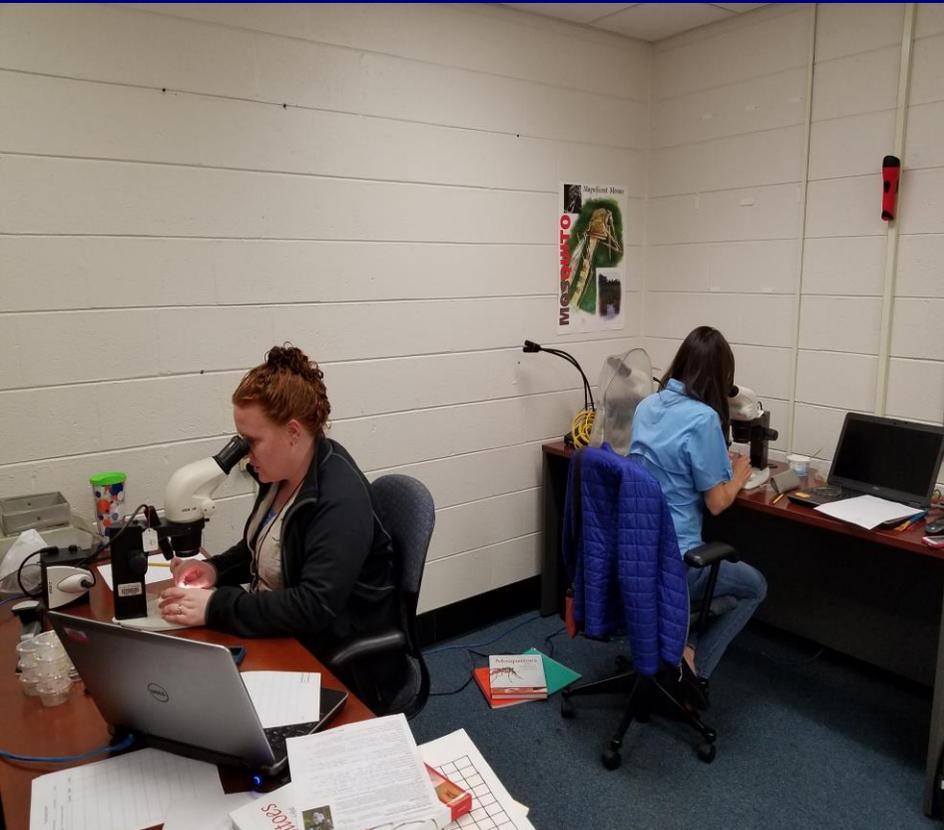
- Pre-treatment mosquito surveillance
- Trap evaluation (count and identification)
- GIS mapping of treatment zones
- Public notifications (beekeepers, aquaculture)
- Concurrency with USFWS, CDC and FDEP
- Coordinate with our contractors for aerial and/or truck mosquito control application
- Post-treatment surveillance



# Mosquito Control Incident Response Team

## *How we assist our Florida counties*

- Pre-treatment mosquito surveillance
- Trap evaluation (count and identification)



# Mosquito Control Incident Response Team



# Mosquito Control Incident Response Team

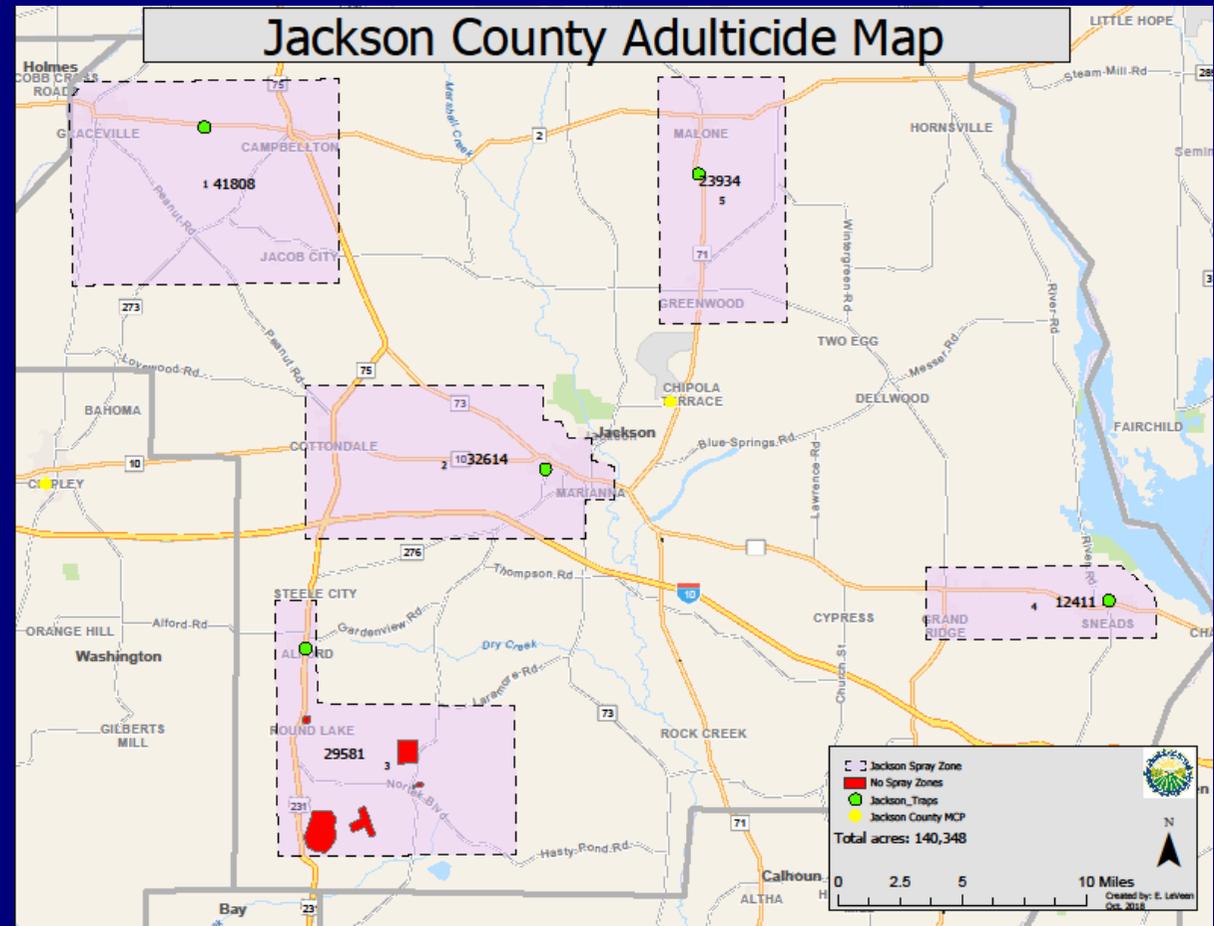
Trap Number/Name:	Okeechobee 1	Okeechobee/St Lucie	Okeechobee 3	Okeechobee 4	Okeechobee 5					
Trap Type:	CDC light trap	CDC light trap	CDC light trap	CDC light trap	CDC light trap					
Meteorological conditions:	overcast, NE wind	clear	clear	cloudy	clear					
Zone #:	1	1	1	2	2					
GPS/LatLong:	27.4802, -80.8061	27.4483, -80.6597	27.37053, -80.82394	27.22039, -80.83976	27.2424, -80.9050					
Vicinity/Location:	Bell south			Osceola Middle School						
Date Traps set-up:	9/23/2017	<u>9/23/2017</u>	9/23/2017	<u>9/23/2017</u>	9/23/2017					
Time Traps set-up:	4:55 PM	<u>5:31 PM</u>	5:50 PM	<u>5:15 PM</u>	7:50 PM					
Date Traps Collected:	9/24/2017	<u>9/24/2017</u>	9/24/2017	<u>9/24/2017</u>	9/24/2017					
<b>Species Found</b>	<b>Female</b>	<b>Male</b>	<b>Female</b>	<b>Male</b>	<b>Female</b>	<b>Male</b>	<b>Female</b>	<b>Male</b>	<b>Female</b>	<b>Male</b>
<b>Aedes species</b>										
<i>Ae. aegypti</i>										
<i>Ae. albopictus</i>										
<i>Ae. atlanticus/Ae.tormentor</i>									90	
<i>Ae. bahamensis</i>										
<i>Ae. canadensis canadensis</i>										
<i>Ae. canadensis mathesoni</i>										
<i>Ae. cinereus</i>										
<i>Ae. condolecens</i>										
<i>Ae. dupreei</i>										
<i>Ae. fulvus pallens</i>										
<i>Ae. hendersoni</i>										
<i>Ae. infirmatus</i>									295	
<i>Ae. mitchellae</i>										
<i>Ae. pertinax</i>										
<i>Ae. sollicitans</i>										
<i>Ae. sticticus</i>										
<i>Ae. taeniorynchus</i>										
<i>Ae. thelcter</i>										
<i>Ae. thibalti</i>										
<i>Ae. tortilis</i>										
<i>Ae. triseriatus</i>										
<i>Ae. vexans</i>							93			
<b>Undetermined Aedes species</b>										
<b>Ae. species total</b>	0	0	0	0	0	0	93	0	385	0
<b>Anopheles species</b>										
<i>An. albimanus</i>										
<i>An. atropos</i>										
<i>An. barberi</i>										
<i>An. bradleyi/ An. crucians /An. georginaus</i>							183			



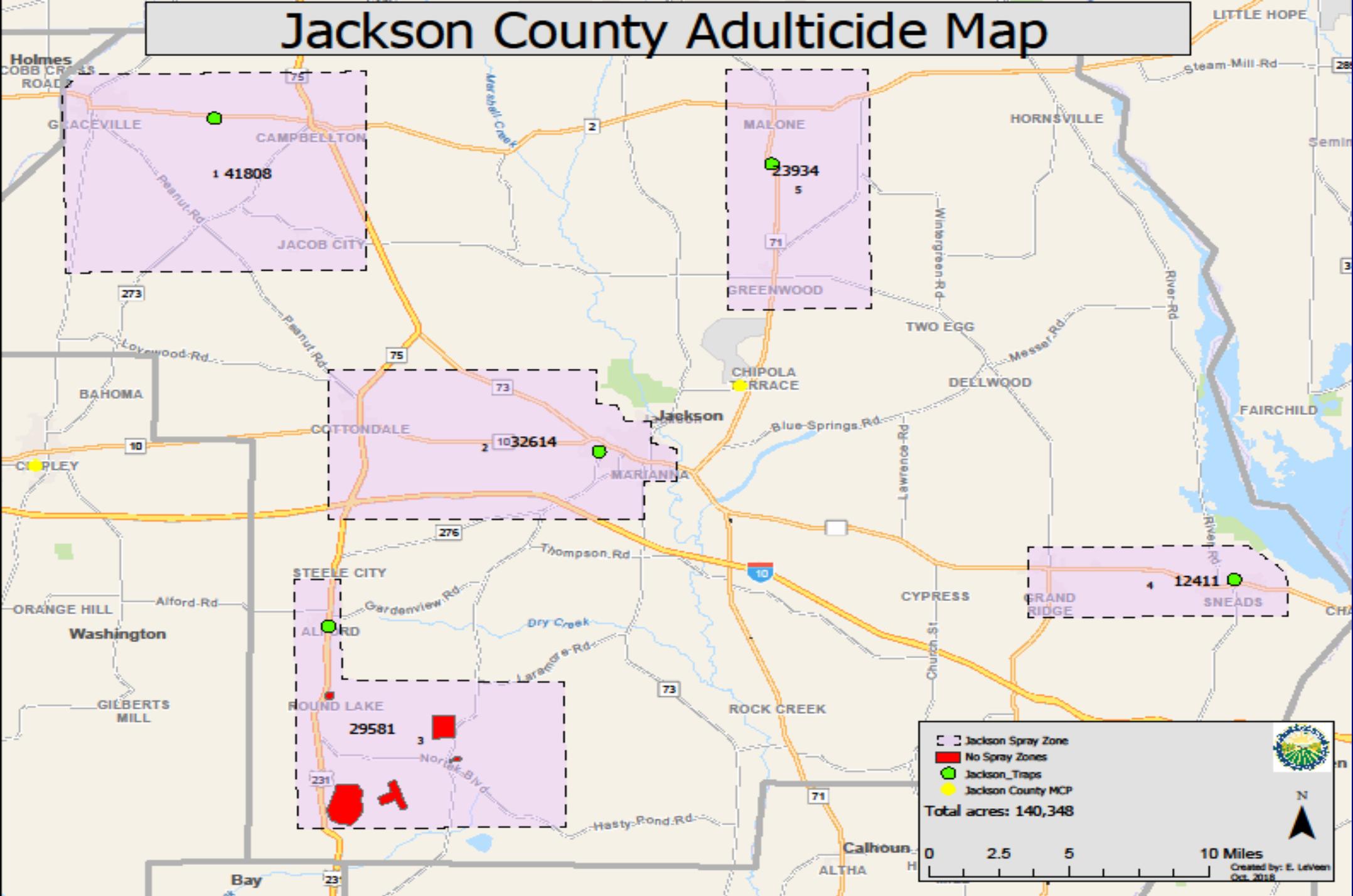
# Mosquito Control Incident Response Team

## *How we assist our Florida counties*

- GIS mapping of treatment zones, coordination with applicators



# Jackson County Adulticide Map



# Mosquito Control Incident Response Team

## *How we assist our Florida counties*

- **Public notifications (inform beekeepers, aquaculture)**



FOR IMMEDIATE RELEASE

October 23, 2018

### **LOW-FLYING AIRCRAFT TO BE USED FOR MOSQUITO CONTROL**

**LIBERTY COUNTY, Fla.** – Due to the impacts from Hurricane Michael in Liberty County, mosquito control will be implemented through aerial insecticides applied by low-flying aircraft. Mosquito eggs laid in wet soil and standing water hatch in great numbers following hurricanes, resulting in large nuisance mosquito populations.

A vendor contracted by the Florida Department of Agriculture and Consumer Services will address mosquitoes by aerial spraying of insecticides on the night of Wednesday, October 24, weather permitting. The time of day was selected to ensure that honeybees and other pollinators are protected.

Mosquito adulticides are applied as ultra-low volume (ULV) sprays. ULV sprayers dispense very fine aerosol droplets that stay aloft and kill flying mosquitoes on contact. ULV applications involve small quantities of pesticide active ingredient in relation to the size of the area treated, typically less than 3 ounces per acre, which minimizes exposure to people and the environment.

Residents can also take steps to help control mosquitoes in and around their homes to prevent mosquito bites: Remove standing water where mosquitoes could lay eggs. Once a week, empty and scrub, turn over, cover, or throw out any items that hold water like tires, buckets, planters, toys, pools, birdbaths, flowerpot saucers, or trash containers.

###

# Mosquito Control Incident Response Team

## *How we assist our Florida counties*

- **Concurrency with USFWS, CDC and FDEP**



# Mosquito Control Incident Response Team

## *How we assist our Florida counties*

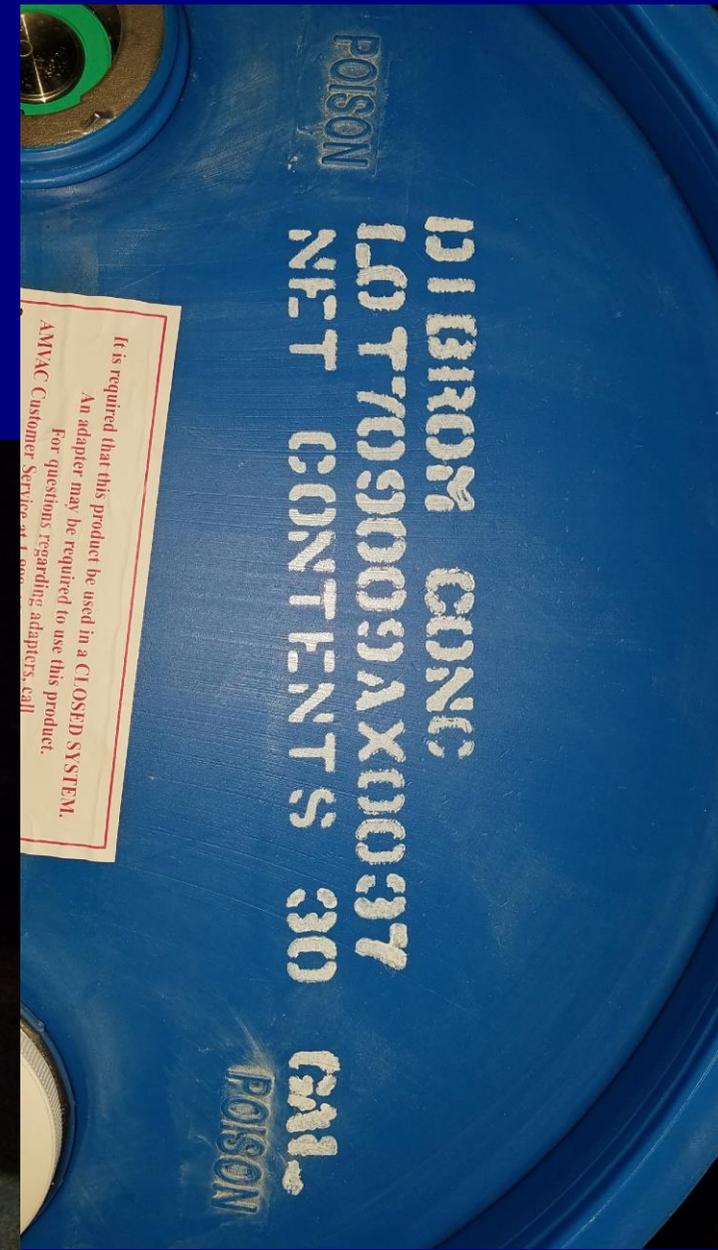
- Coordinate with our contractors for aerial and/or truck mosquito control application



# Mosquito Control Incident Response Team

## *How we assist our Florida counties*

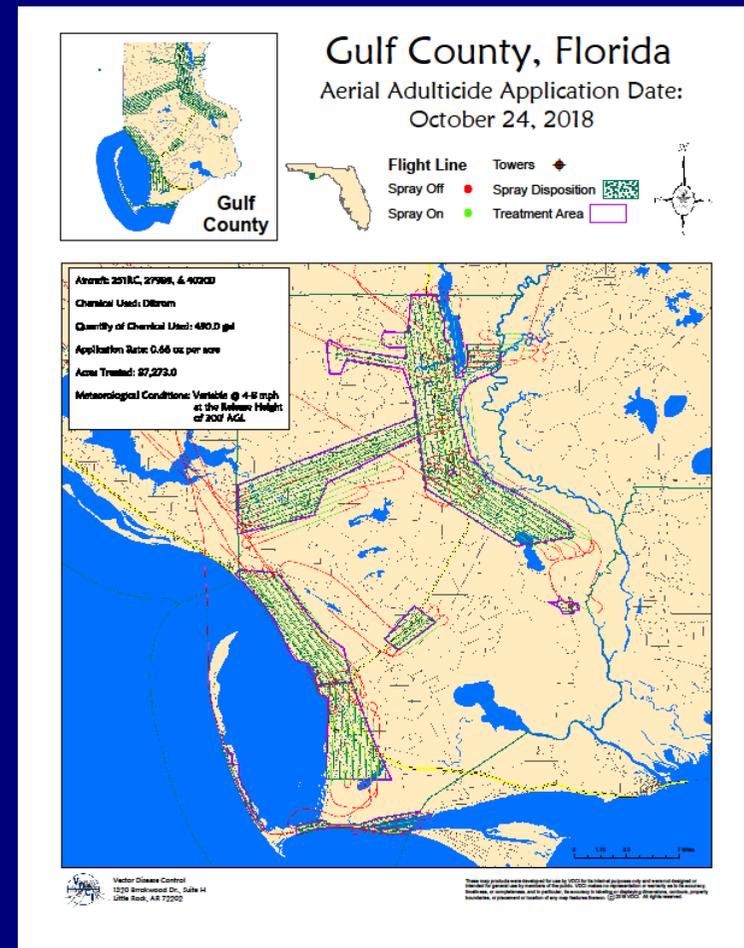
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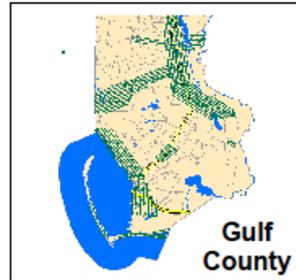
# Mosquito Control Incident Response Team

## *How we assist our Florida counties*

- **Post-treatment surveillance - repeat trap, identification and count**



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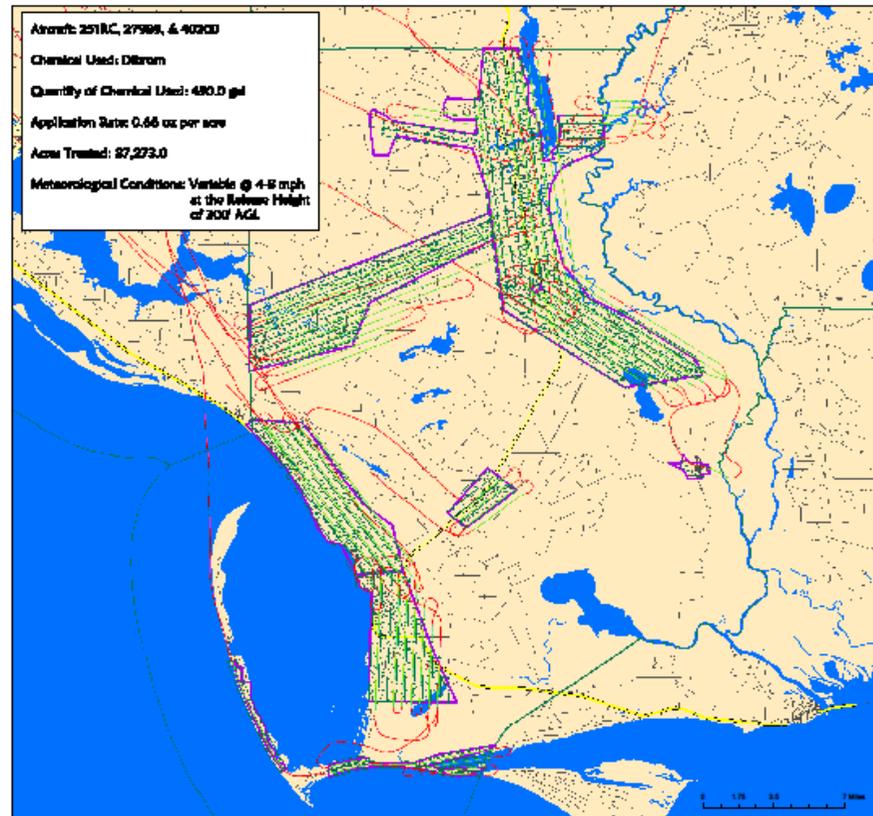


## Gulf County, Florida

Aerial Adulticide Application Date:  
October 24, 2018



Flight Line    Towers    ◆  
Spray Off    ●    Spray Disposition    [Green Grid]  
Spray On    ●    Treatment Area    [Pink Box]



Vector Disease Control  
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# Mosquito Control Incident Response Team

*Thank you for your service to the State of Florida!*

- For more information, please visit [flsart.org](http://flsart.org)
- Under “Resources,” go to “Vector Control”

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