

***Call The Bomb Squad,  
To Be concluded***



*Revamping The City of  
Hinesville's  
Mosquito Control  
Program*





# Mosquito Control

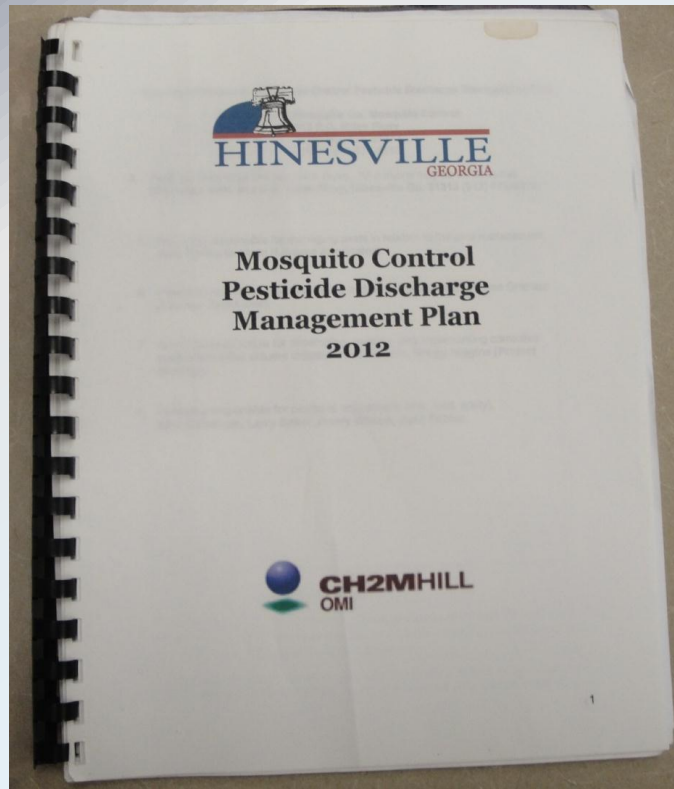


# Purpose

**Re-Vamping The City of Hinesville's Mosquito Control Program**

**To abate the mosquito population in the City with minimal impact on the environment and citizens.**

**Operate the program while under the regulations of The Hinesville PDMP**



# **The City of Hinesville,**

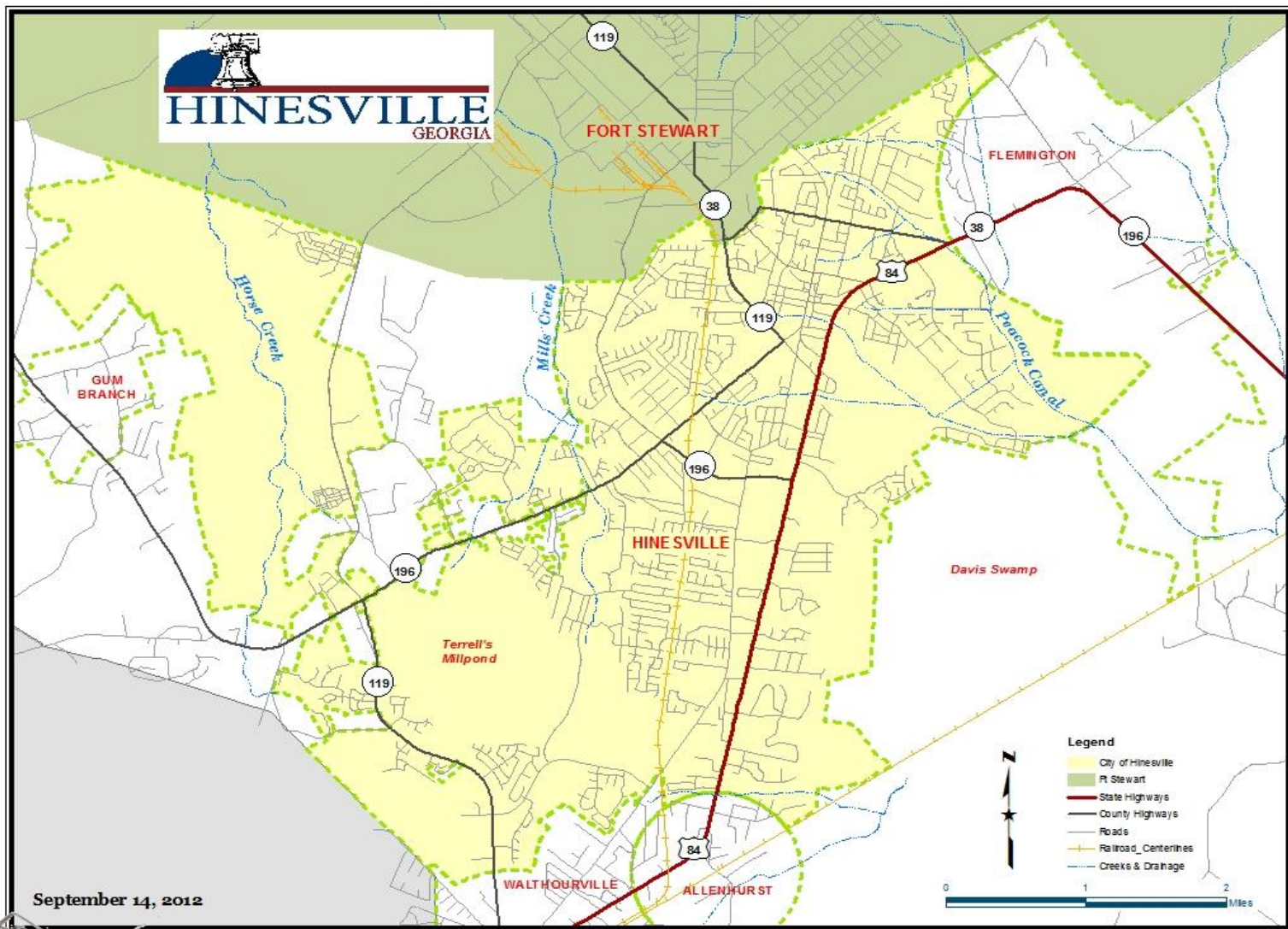
Georgia is located in Liberty County, which is in the Lower Coastal Plain Physiological Region of the state. The total square miles for Hinesville is 21.18.

The area is bordered by Fort Stewart Army Installation to the North, Long County to the West, the cities of Allenhurst and Walthourville to the South, and Flemington and Liberty County to the East. Hinesville has Terrell's Millpond within its city limits and Davis Swamp outside its city limits to the east.

Horse, Mill and Peacock Creeks serves as floodplains drain through the city.



# The City of Hinesville,



# Treatment History and Method

Prior to the coming aboard of the new administration in 1978, mosquito control was already in motion. The program started with a need to create a healthy and tolerate environment for the citizens and visitors of Hinesville GA. The program launched of with to spray trucks that used a chemical call Malathion, which had a very offensive smell. In 1997 New Jersey traps were brought on the scene as a surveillance (trapping) tool. The mosquitoes that were collected from the traps were delivered to the Liberty County Health Dept. The Liberty County Health Dept was responsible for separating the males from the females where in a report was generated and given to The City of Hinesville reflecting the mosquito count, thus threshold levels were developed. A female count of 60 from any zone or route initiated the spraying of all zones or routes. To this day, New Jersey traps are still being used as a means of mosquito collection.





**(Purpose)- To help create better communities and companies through innovative operations and maintenance solutions**

**(What do we do)-**CH2M HILL partners with communities and companies to deliver a complete range of custom-tailored operations and maintenance solutions. Our sustainable O&M solutions include water and wastewater system optimization; contract O&M of water, wastewater and other utilities; facilities management; and complete municipal operations, including administration, public works and community development – all backed by a commitment to safety, quality, innovation and customer service.



Because we stand behind our commitment to safety, quality, innovation and customer service we were obligated by those very attributes to regroup and form a huddle of brainstorming that would in return produce solutions that when put into motion, will provide the citizens of Hinesville with a comprehensive program. This is were revamping started

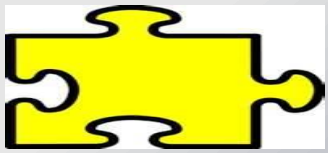


What peaces of the past program were we going to take up first?



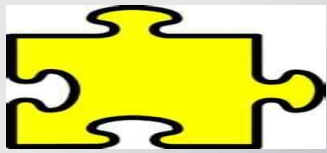
Well, first we had to yield and pick up the peace that dealt with the **SAFETY** aspect of the program





# What did we find?



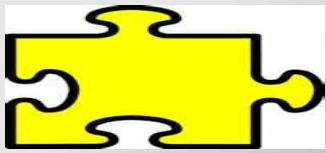


## Program safety



- New Jersey traps weren't properly grounded
- Faulty patching of wiring
- Fogging was not discontinued when close to the citizens
- Due to old construction, Chemicals storage areas had limited vitalization
- Spill kits were not carried in the trucks by operators





## Program Quality



See LAST PAGE

Page - 1

PARKS & GROUNDS  
MOSQUITO CONTROL ROUTE  
(MONDAY)

DRIVER \_\_\_\_\_ SECTION \_\_\_\_\_ DATE \_\_\_\_\_

INSTRUCTIONS FOR MOSQUITO CONTROL DRIVERS  
\*\*\*\*\*  
DO NOT SPRAY =If it is RAINING or if the WIND VELOCITY is over 15 MPH, and finally if the TEMPERATURE is below 55 degrees.  
WIND VELOCITY & WEATHER = 1-912-964-1700  
LOCAL TEMPERATURE & WEATHER = 369-1234

POINT OF CONTACTS (If needed)  
\*\*\*\*\*  
1st Point of Contact = \_\_\_\_\_ (369-9999)  
2nd Point of Contact = \_\_\_\_\_ (866-9999)  
3rd Point of Contact = \_\_\_\_\_ (Cell 999-1234)

FOR ANY MAINTENANCE PROBLEMS CONTACT = \_\_\_\_\_  
\*\*\*\*\*


ADDRESS/STREET

INITIALS WHEN COMPLETED

(ALL DRIVERS CHECK & FOLLOW PAGE - 1 & 4 VERY CAREFULLY)  
\*\*\*\*\*

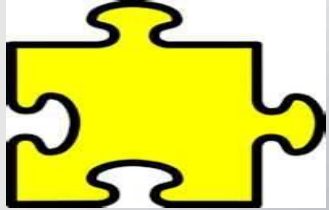
\_\_\_\_\_ FLEMING HWY 84 E.  
\_\_\_\_\_ FURNITURE WORLD PLAZA  
\_\_\_\_\_ \* 1725 (Dirt Road runs to house)  
\_\_\_\_\_ \* 1753 (Paved road runs to house)  
\_\_\_\_\_ 'S HOUSE (Pull into Car Port Back up & Spray Swimming Pool Area)  
\_\_\_\_\_ 'S HOUSE=Spray behind house and then go to Graybeard Ln.  
\_\_\_\_\_ GRAYBEARD LN. (Circle \_\_\_\_\_'s house)  
\_\_\_\_\_ SPIRES DR. (ENSURE TO SPRAY AROUND BOTH HOUSES.)  
\_\_\_\_\_ HINESVILLE CHURCH OF GOD (SPRAY ENTIRE AREA)



- 
- New Jersey traps were found in poor conditions.(poor maintenance practices)
  - The location of the traps were not placed in representative locations.
  - The traps had to be in locations with a electrical outlet.
  - The old way of running the routes were not ethically sound.
  - There was no justification for high operation expenses .

After Bringing the peaces of quality assessment to the table to continue the process of **revamping**, what peace did we pick up next?



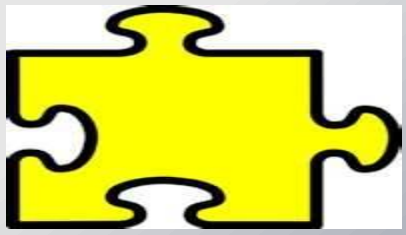


**Well, we had to pick up the peace of educating our employees**



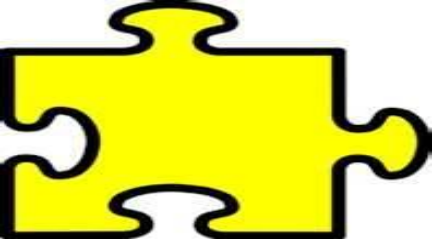
**Field Training**





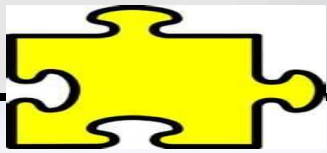
**Which included  
Interactive class  
room training**





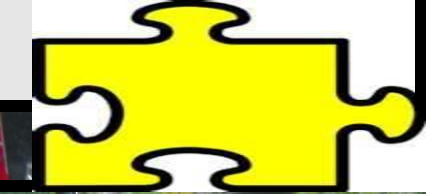
**The next piece to pick up was the team's commitment to source reduction**





# Teamwork with the Streets and Drainage





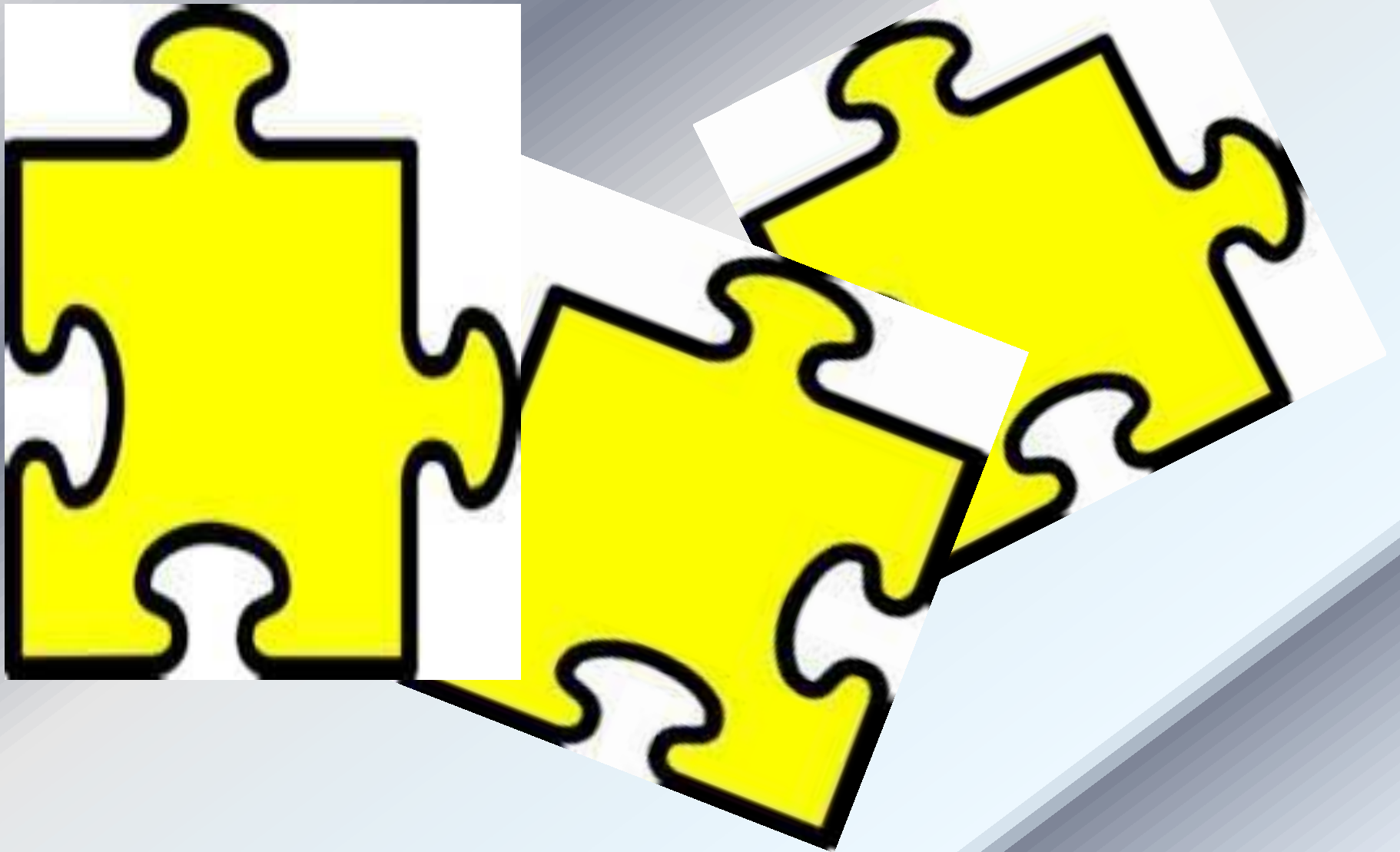
# Teamwork with Construction Maintenance

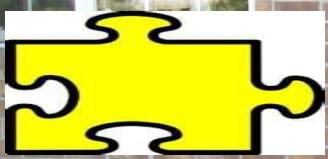


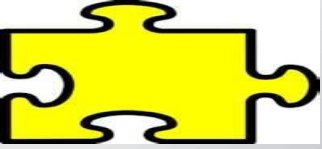


**Team work added numerous pieces to the puzzle**

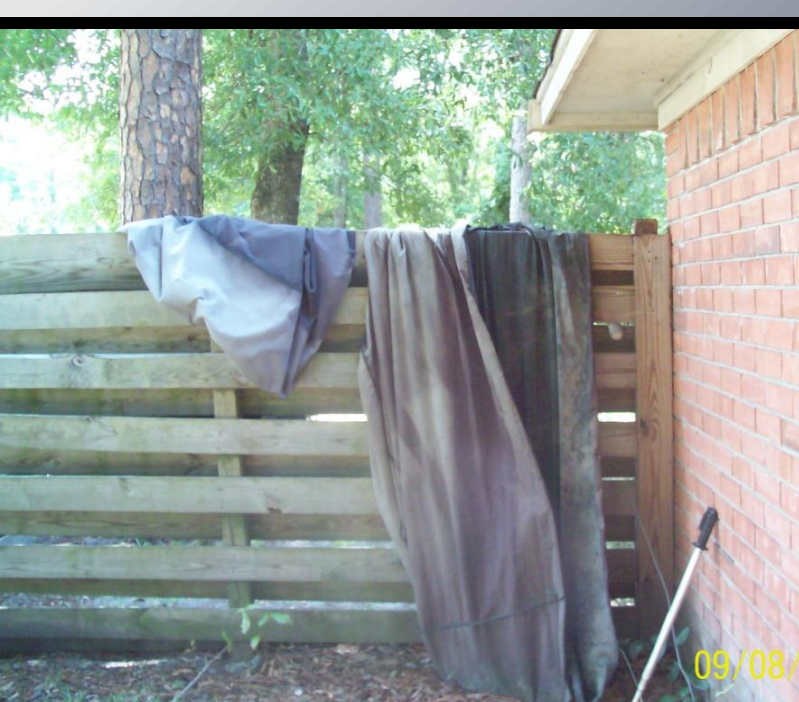
# Next Peaces, Public Education

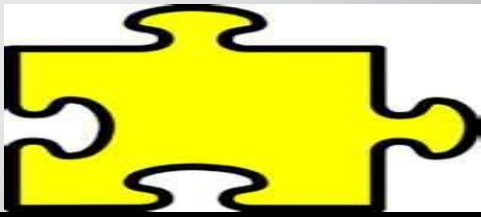






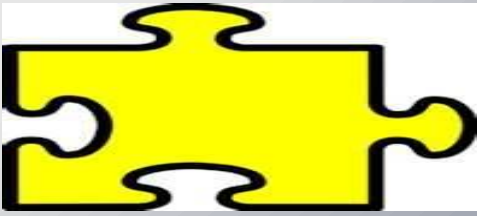
Public education allows the public to become more aware so that they can fulfill their roles in pushing the peaces together





# The Enforcer





## **Chapter 12 OFFENSES AND MISCELLANEOUS PROVISIONS\***

**\*State law references: Criminal Code of Georgia, O.C.G.A. § 16-1-1 et seq.**

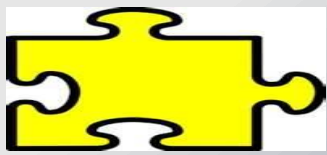
### **ARTICLE III. OFFENSES INVOLVING PUBLIC HEALTH**

#### **Sec. 12-70. Stagnant water.**

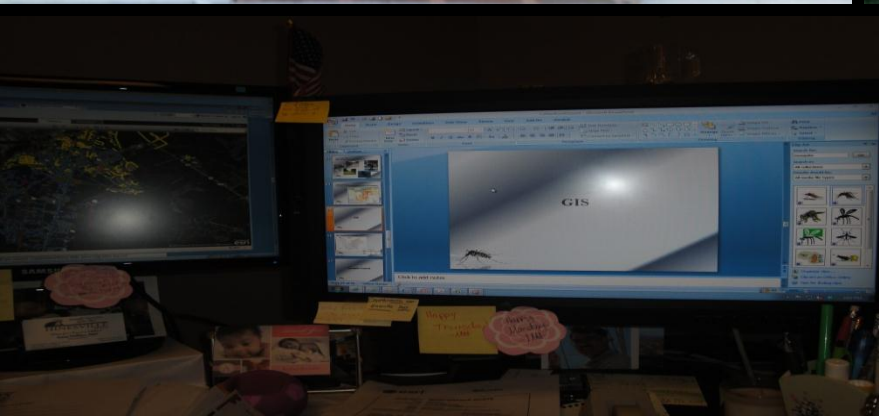
It shall be unlawful for any owner or occupant of property within the City to allow a pond, barrel, tin can, vehicle tire, or any container, in which water does or might collect and stagnate, or fail to remedy same within seven days after water collects therein, by draining or filling any such pond and by removing any such container. In the event it is not practical to drain or fill such pond, the same shall be effectually treated against mosquito breeding to the satisfaction of the Health Officer.

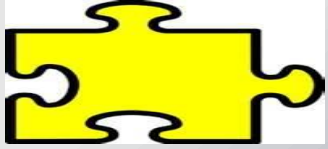
(Code 1978, § 12-33)

**Becky Widincamp**

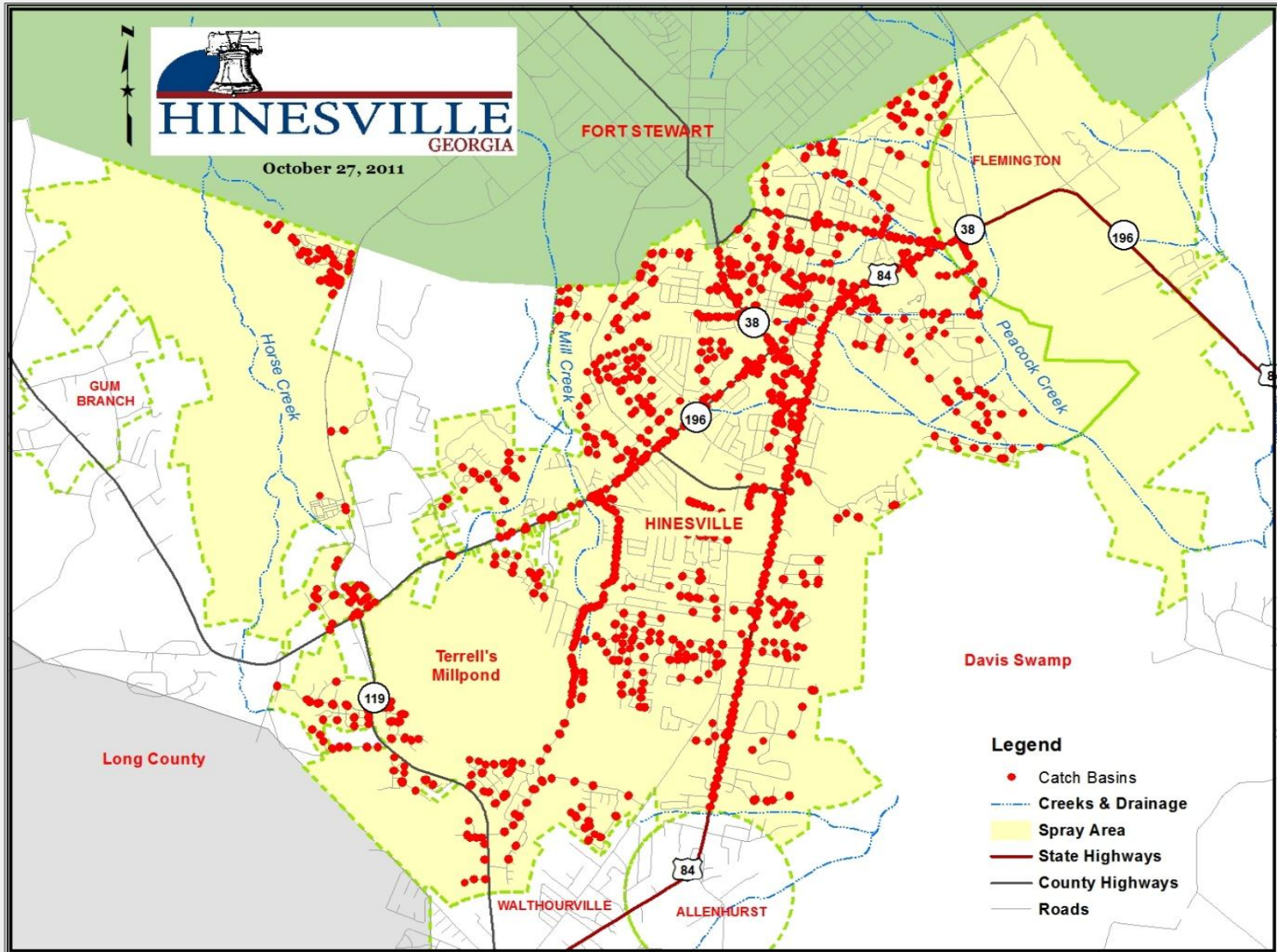


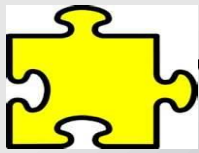
# Next, Inventory and Data Collection(GPS\GIS)



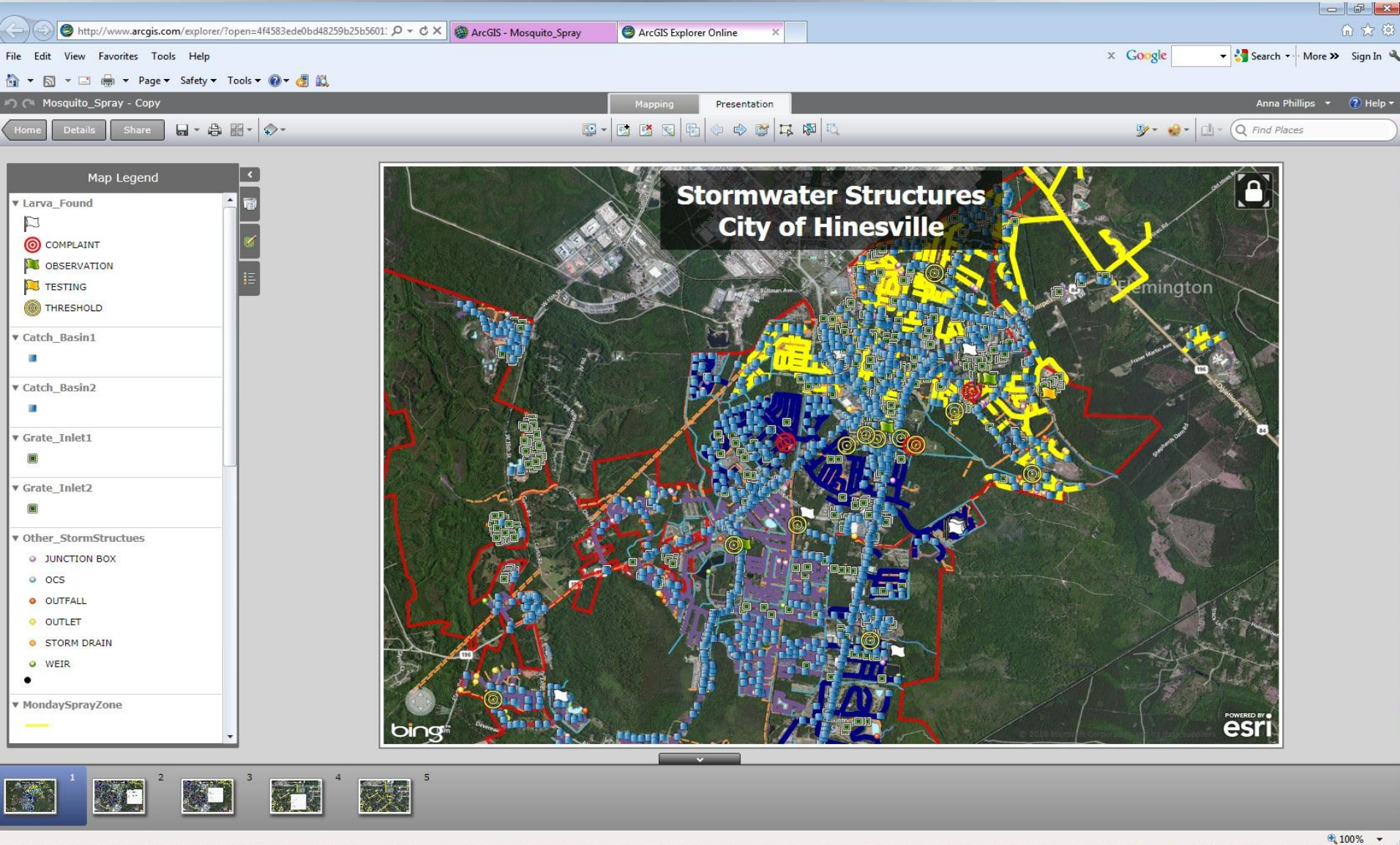


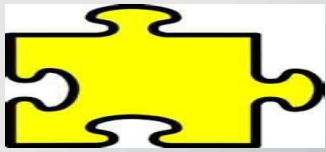
## Inventory





Which makes it for easy Inspections, documentations, and record keeping





http://www.arcgis.com/explorer/?open=4f4583ede0bd48259b25b5601: ArcGIS - Mosquito\_Spray ArcGIS Explorer Online

File Edit View Favorites Tools Help

Google Search More Sign In

Mosquito\_Spray - Copy Mapping Presentation Anna Phillips Help

Home Details Share

Map Legend

- Larva\_Found
  - COMPLAINT
  - OBSERVATION
  - TESTING
  - THRESHOLD
- Catch\_Basin1
- Catch\_Basin2
- Grate\_Inlet1
- Grate\_Inlet2
- Other\_StormStructues
  - JUNCTION BOX
  - OCS
  - OUTFALL
  - OUTLET
  - STORM DRAIN
  - WEIR
- MondaySprayZone

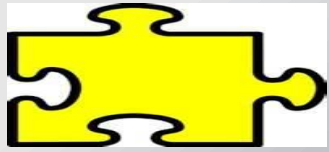
### Citizen's Complaint

#### Mosquito Inspections

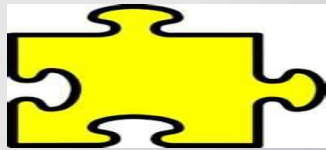
DATE	7/16/2012
ADDRESS	440 TIMBERLANE
MOSQ_FOUND	
LARV_FOUND	
COMMENTS	DRP 0642 0638 PCK
REQST_TYPE	COMPLAINT
ACTION_TAK	
DRP_TIME	
PCK_TIME	
TRAP_TYPE	
Treated	
Type_Treat	

1 2 3 4 5

100%



# Work order system Maintenance connection



## Request



### Work Order HIN-PG-311281

Hinesville Parks and Grounds

Closed

Printed 10/8/2012 - 4:43 AM

#### Maintenance Details

**Requested By:** GRAHAM, KENNA on 10/5/2012 4:10:00 AM  
**Taken By:** GRAHAM, KENNA  
**Target:** 10/4/2012 (1.5) hrs  
**Priority/Type:** Low Priority / Inspection  
**Supervisor:** GILLIARD, GARY  
**Shop:** HIN-STREET DEPT

Eastern Municipal Projects  
 Hinesville (HIN)  
 Hinesville Streets Department  
 Hinesville City Streets  
 Belmore  
 Granger Dr 900-918, 901-919 (HIN-STREETS-0538-001)

**Reason:** inspect area to see if it was conducive to mosquito emergence

☐ Warranty ☐ Shutdown ☐ Lockout ☐ Attach ☐ Charge

**Contact:** GRAHAM, KENNA  
**Phone:**

#### Tasks

#	Description	Rating	Meas.	Initials	Failed	Complete
10	Inspect site to see if area was conducive to mosquito emergence			KG	<input type="checkbox"/>	<input checked="" type="checkbox"/>
					<input type="checkbox"/>	<input type="checkbox"/>

#### Labor

Labor	Account	Assigned	Work Date	Start	End	Reg Hrs	OT Hrs	Other Hrs
GRAHAM, KENNA		10/4/2012 / 1.5						

#### Materials/Tools

Item	Location	Account	Est Qty	Actual Qty

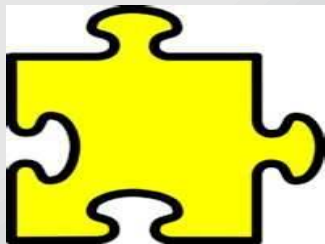
#### Labor Report

**Completed:** \_\_\_\_\_ **Failure:** \_\_\_\_\_

**Report:**

#### Approvals

Name	Approval Date	Description



Inspection  
sheet  
attached to  
request



CH2MHILL

Mosquito Inspection Report

Name: Kenna Graham

License #: 03953

Date: 10/4/2012

Time: 5:05 PM

Owner: Brian

Phone #: 912-572-8493

Address/ Parcel #: 907 Granger

Service Request: Customer concern that because flood is a issue in his area that West Nile can become a problem

Problem Areas

Swimming Pool		YES	✓	NO	Remarks
Pond		YES	✓	NO	Remarks
Tires		YES	✓	NO	Remarks
Containers		YES	✓	NO	Remarks
Tarps, Covers		YES	✓	NO	Remarks
Boats, Auto		YES	✓	NO	Remarks
Trailers		YES	✓	NO	Remarks
Roof Gutters		YES	✓	NO	Remarks
Planters, Dishes		YES	✓	NO	Remarks
Children's Toys		YES	✓	NO	Remarks
Pet, Livestock Water		YES	✓	NO	Remarks
Excess Vegetation		YES	✓	NO	Remarks
Storm Drains	✓	YES		NO	Remarks
Ditches	✓	YES		NO	Remarks
Retention Ponds		YES	✓	NO	Remarks
Low Areas	✓	YES		NO	Remarks
Adult Mosquitoes		YES	✓	NO	Remarks
Mosquito Larvae		YES	✓	NO	Remarks

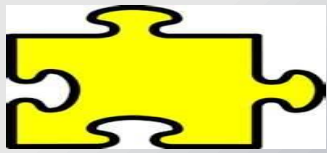
Comment

Visited Brian at his house. There was water standing water in the storm drain near his house and in the ditched near his house but the area had received rain the night before. I performed a landing count test and not one mosquito landed on me at the time, which is not a major concern. Whenever there is no rain in the forecast, I will set out mosquito traps in that area to sample for Culex Species which is a West Nile vector (carrier). At that date and time the environment was not conducive to mosquito breeding i.e. temperature and water retaining time.

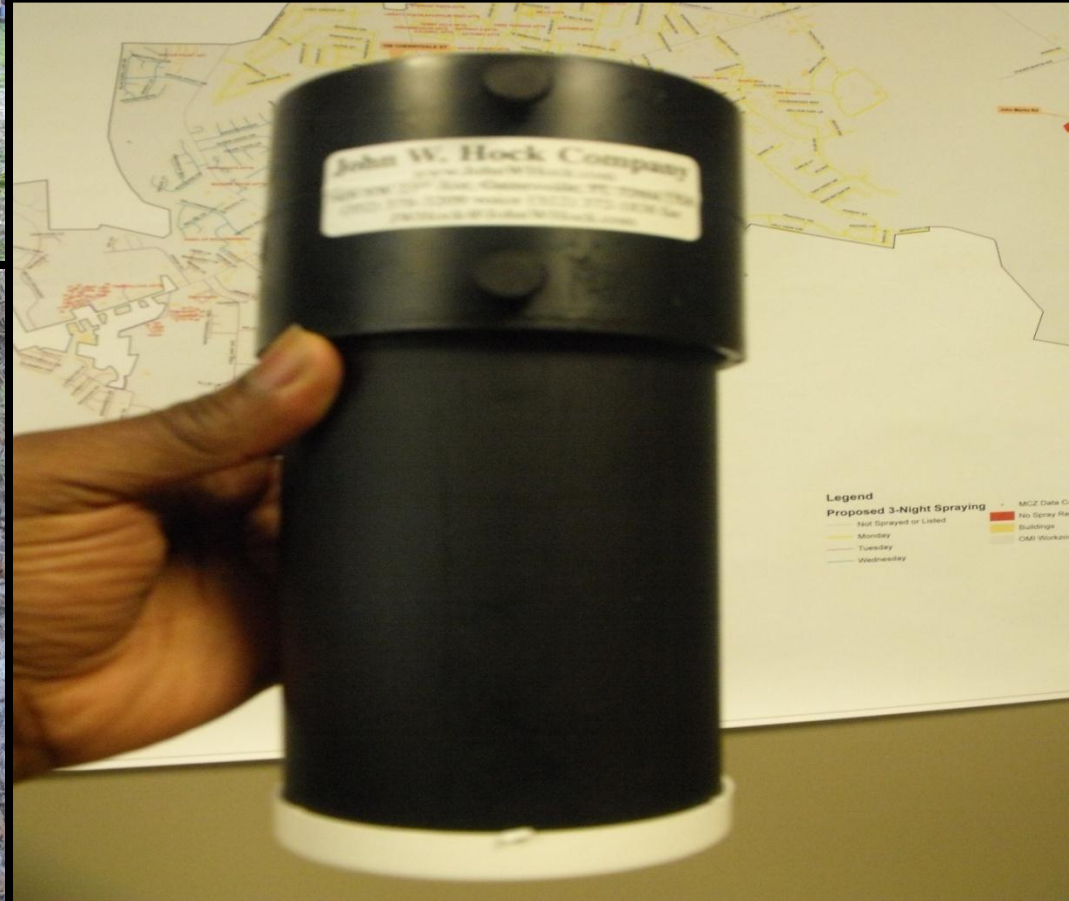
Sign: \_\_\_\_\_

*Kenna Graham*

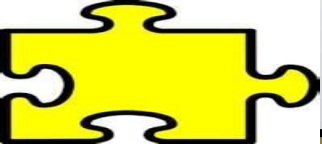
Date: 10/5/2012



## Modern Day Technology

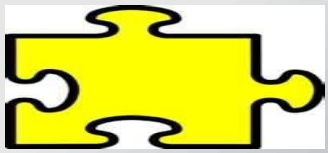


Legend  
Proposed 3-Night Spraying  
Not Sprayed or Listed  
Monday  
Tuesday  
Wednesday  
MCC Data Co.  
No Spray Res.  
Buildings  
CMI Workarea



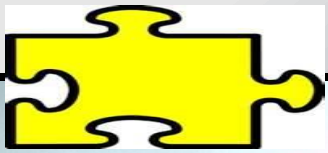
# Microscope (S8APO) and Camera





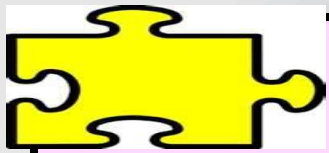
Now we perform mosquito counts, gender separation, species identification and also send mosquito poles to Danny (UGA) to be tested.

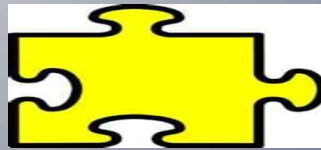




## Microscope (Camera)







# Back to the Bomb Squad.

Coastal Courier  
July 19, 2012

## Insect trap mistaken for bomb

Street closed, residents evacuated as authorities investigated

**By Lewis Levine**

Coastal Courier correspondent

POSTED: July 19, 2012 4:11 p.m.



Lewis Levine

**A mosquito catcher caused quite a stir Wednesday when it was mistaken for a bomb. A street was cleared and GBI was on its way when authorities on site realized the mechanism in question was an insect trap, not an explosive device.**

[View Larger](#)

A case of misidentification sent emergency personnel scrambling and closed streets Wednesday night in Hinesville.

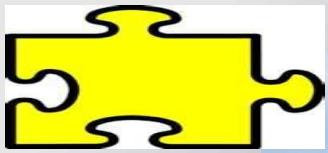
According to an incident report filed by Hinesville Police Department Patrolman Robert Smith, a mechanism thought to be an explosive device was found in the backyard of a home in the 500 block of Myrtle Lane.

Smith said he was dispatched to the home of Sharee Fountain shortly after 8 p.m., where Fountain told the officer she left her home around 6:30 Wednesday morning and returned later that evening to find a device covered in a trash bag in her backyard near the driveway. The device, Fountain said, was humming, had wires coming from it and was connected to a battery.

Smith, who was unsure what the device was, described it in his report as a plastic container like a drain pan with metal-frame bars and a black cone connected to a battery.

Within minutes, the quiet street was sealed and teeming with Hinesville Fire Department trucks, police and members of the Liberty





**Which concluded the first stage of revamping**



# Next Year 2013

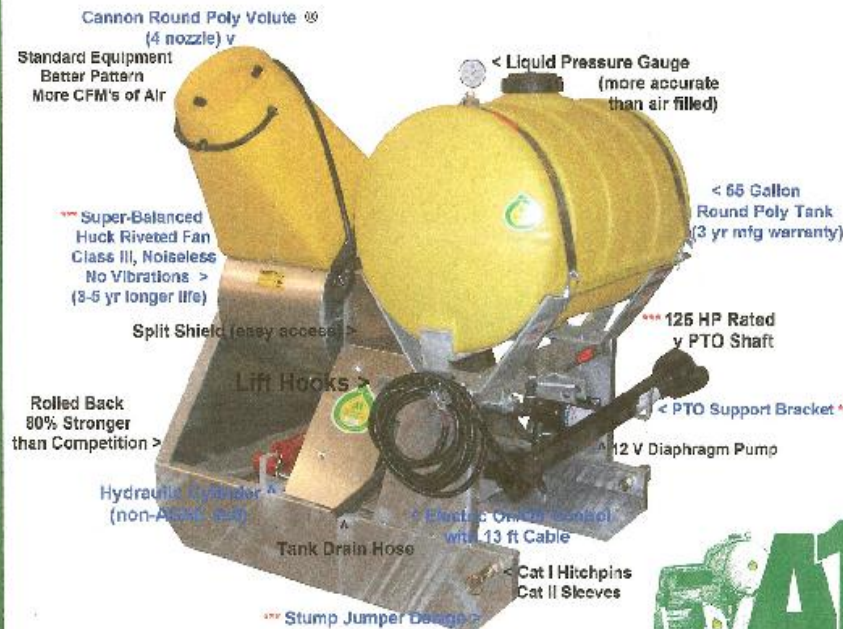


## A1 Mist Sprayers Resources, Inc. 3 PT TERMINATOR ®

- \*Fan rotation—Hydraulic/manual (standard) or electric (optional)      \*Hydraulic hoses not included
- \*Fan rotates 210° left to right (including straight up & down)      \*Lower profile than competition with 55 & 110 gal tank
- \*Height 53" Width 32" Length 48 1/2"      \*Empty weight 420 lbs, 878 lbs full      \*Hot dip galvanized (no paint, no peel, no rust)
- \*Fan safety rings (longer life & safety feature)\*\*\*      \*5/8" safety bar with stump jumper design to protect undercarriage
- \*PTO Powered by 20-300 HP tractor at 540 RPM      \*12V Diaphragm Pump 5 GPM (Standard) Roller pump (optional)



### HIGH PERFORMANCE PTO & ENGINE DRIVEN MIST SPRAYERS, BLOWERS, FOGGERS, PARTS & ACCESSORIES



110 W. 3<sup>rd</sup> St. PO Box 517 Ponca NE 68770  
402-755-4230 Fax 402-755-4143  
Toll Free 877-924-2474 or 877-524-2479  
Visit us at [www.a1mistsprayers.com](http://www.a1mistsprayers.com) or  
e-mail us at [sales@a1mistsprayers.com](mailto:sales@a1mistsprayers.com)