

COUNTY COUNCIL OF BEAUFORT COUNTY  
ADMINISTRATION BUILDING  
BEAUFORT COUNTY GOVERNMENT ROBERT SMALLS COMPLEX  
100 RIBAUT ROAD  
POST OFFICE DRAWER 1228  
BEAUFORT, SOUTH CAROLINA 29901-1228

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VICE CHAIRMAN

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SPECIAL COUNSEL

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CLERK TO COUNCIL

AGENDA  
GOVERNMENTAL COMMITTEE  
(Includes Public Safety Division)

Monday, May 4, 2015

4:00 p.m.

Executive Conference Room

Administration Building

Beaufort County Government Robert Smalls Complex

100 Ribaut Road, Beaufort

Governmental Committee Members:

Stu Rodman, Chairman  
Rick Caporale, Vice Chairman  
Cynthia Bensch  
Gerald Dawson  
Brian Flewelling  
Alice Howard  
Jerry Stewart

Staff Liaison:

Phil Foot, Assistant County Administrator  
Public Safety

1. CALL TO ORDER – 4:00 P.M.
2. AN ORDINANCE TO AMEND THE BEAUFORT COUNTY CODE OF ORDINANCES TO PROVIDE FOR THE REGULATION OF ACTIVITIES ON ALLJOY BEACH AND PENALTIES FOR VIOLATION OF THE SAME ([backup](#))
3. PRESENTATION / NEW MOSQUITO CONTROL APP FOR MOBILE DEVICES / MOSQUITO CONTROL, USC-BEAUFORT, AND INFORMATION TECHNOLOGY COLLABORATION ([backup](#))
4. ECONOMIC DEVELOPMENT PROPOSAL DISCUSSION ([backup](#))
5. CONSIDERATION OF REAPPOINTMENTS AND APPOINTMENTS
  - A. Bluffton Township Fire District
  - B. Burton Fire District
  - C. Daufuskie Island Fire District
6. ADJOURNMENT

2015 Strategic Plan Committee Assignments  
County Economic Development Policy Framework, Strategy and Action Plan  
Heritage / Historic Tourism Plan: Development, Action Plan



AN ORDINANCE ESTABLISHING RULES AND REGULATIONS FOR THE USE OF  
ALLJOY BEACH, BEAUFORT COUNTY, SOUTH CAROLINA

**WHEREAS**, Act 283 of 1975, The Home Rule Act, vested Beaufort County Council with the independent authority to control all acts and powers of local governmental that are not expressly prohibited by South Carolina law, and

**WHEREAS**, Beaufort County Council recognizes that public beaches, including Alljoy Beach, are for the use and enjoyment of the people; and

**WHEREAS**, Beaufort County has exercised dominion and control over the Alljoy Beach area by promulgating regulations regarding its use and by holding the property open for public use and enjoyment; and

**WHEREAS**, Beaufort County Council believes to best provide for the health, safety and welfare of its citizens, it is appropriate to amend Article III of the Beaufort County Code and to provide for additional terms to said Article under Section 90 – 66.

**NOW, THEREFORE, BE IT ORDAINED** by Beaufort County Council, that Article III, Section 90-66 of the Beaufort County Code shall be amended as follows:

Sec. 90-66 Alljoy Beach Definition, Rules & Regulations

- 1) *Alljoy Beach*. For the purposes of this section “Alljoy Beach” shall be defined as that area of land lying between the South Carolina Department of Transportation Right of Way for Alljoy Road and the waters of the May River. This property is further described as “Brighton Beach” in that certain deed from Thomas O. Lawton and C.E. Ulmer recorded in Book 54, Page 277 of the Beaufort County Register of Deeds Office and as shown on that certain plat recorded in Plat Book 3, Page 10.
- 2) *Alljoy Beach Hours of Access*. Beach access shall be permitted from 6:00 a.m. through 9:00 p.m. No other access shall be permitted except during these times without the express written permission of Beaufort County.
- 3) *Prohibitions*.

The following shall be prohibited within Alljoy Beach:

- a. *Vehicles*. Driving or operating a self-propelled motor vehicle of any kind or nature upon Alljoy Beach shall be unlawful, provided that county vehicles operated while cleaning or working on the beach and county sheriff and emergency vehicles shall be exempt from the application of this subsection.
- b. *Parking*. Parking shall be limited to designated areas. Any vehicle not parked within a designated space may be subject to being towed at the owner’s expense. There shall be no parking within Alljoy Beach outside of the 6:00

a.m. to 9:00 p.m. operating hours. Vehicles parked on private property without the owner's permission are subject to being towed per Article II, 70-26 *et. seq.*

- c. *Fires.* Burning of open fires shall be unlawful.
- d. *Fireworks.* Discharging of fireworks on Alljoy Beach shall be prohibited except by permit from the Beaufort County Sheriff's Office for planned fireworks displays. Such permits must be obtained 24 hours in advance of the planned fireworks display.
- e. *Overnight Camping.* Camping by persons on Alljoy Beach area shall be unlawful.
- f. *Littering.* Littering the Alljoy Beach with cans, bottles, paper, or other materials, trash, or debris shall be unlawful.
- g. *Animals.* All animals must be on a leash at all times. Pet owners are responsible for the collection and proper disposal of animal waste in receptacles provided.
- h. *Alcohol.* The consumption or possession of alcohol on Alljoy Beach shall be unlawful.
- i. *Illegal Substances.* The consumption, possession or use of illegal substances on Alljoy Beach shall be unlawful.
- j. *Soliciting.* Solicitation of services or other commercial activity on Alljoy Beach shall be unlawful.
- k. *Fishing.* Baiting or fishing at any time by persons from the Alljoy Beach shall be unlawful.
- l. *Trailers.* The use of trailers of any kind or nature upon Alljoy Beach shall be unlawful.

Any and all other previous actions of Beaufort County which are not consistent with these regulations are hereby superseded and replaced.

DONE, this \_\_\_\_ day of \_\_\_\_\_, 2015.

COUNTY COUNCIL OF BEAUFORT COUNTY

BY: \_\_\_\_\_  
D. Paul Sommerville, Chairman

APPROVED AS TO FORM:

\_\_\_\_\_  
Joshua A. Gruber, Deputy County Administrator  
Special Counsel

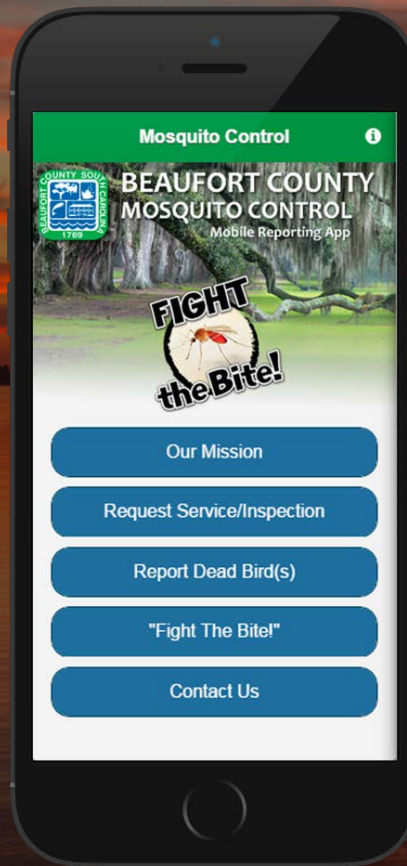
First Reading:

Second Reading:

Public Hearing:

Third and Final Reading:

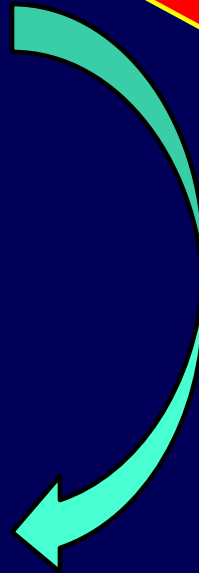
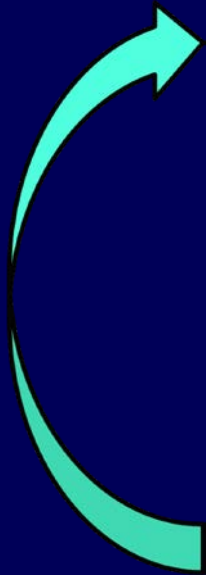
# New Mosquito Control App For Mobile Devices



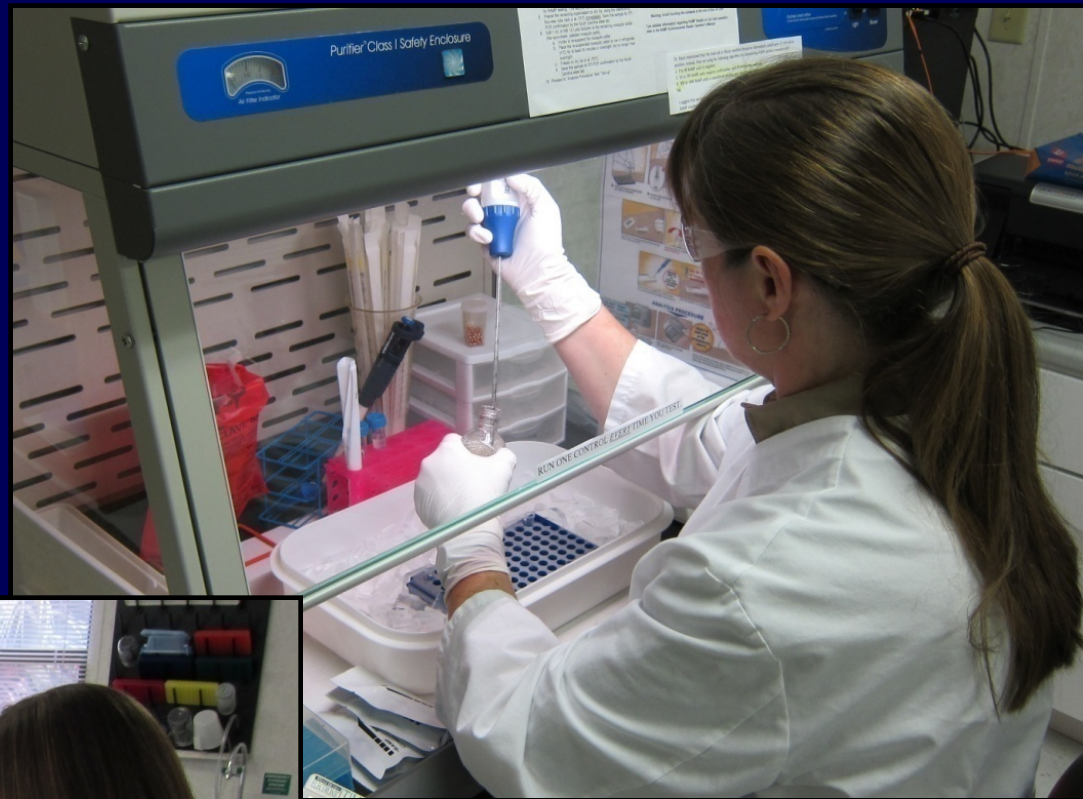
# West Nile Virus Epidemic in Texas (2012)

- 1,868 human cases with 89 deaths
- Economic impact: \$47.5 million
- City of Plano developed an App to report WNV





# Threat of West Nile Virus



# WNV Surveillance Program: Creation of an App



Dr. Kasia Pawelek (Asst. Professor)

Cristian Salmeron (graduated)

Patrick Niehaus (graduated)



Robert Gecy (Applications Programmer)



## Mosquito Control



# BEAUFORT COUNTY MOSQUITO CONTROL

Mobile Reporting App



Our Mission

Request Service/Inspection

Report Dead Bird(s)

"Fight The Bite!"

Contact Us

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## Our Mission

The mission of BCMC is to provide safe, effective, and economical abatement of mosquitoes and to reduce the risk of mosquito-borne diseases for the residents and visitors of Beaufort County. To accomplish this goal, we adhere to the principles of Integrated Mosquito Management (IMM). This strategy depends on a multidisciplinary approach including, but not limited to, the application of public health insecticides. Our IMM consists of:



OV-10 BRONCO

- surveillance of pest mosquitoes
- surveillance of vector mosquitoes and mosquito-borne diseases
- elimination of mosquito breeding sites
- strategic application of Environmental Protection Agency (EPA)-registered public health insecticides
- legislation
- continuing education for

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## Request Service

SUBMIT

Full Name\*

Click to find Location Address...

Location Address\*

Email\*

Phone\* XXX-XXX-XXXX

Where are the mosquitoes?



When are they biting?



Water sources on or near property?



Time Requested for Inspection?



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## West Nile Virus

### Report or Submit Dead Birds to Help Track West Nile Virus!

Birds play an important role in spreading West Nile virus (WNV).

Between mid-March through the end of November, please report and/or submit freshly dead (non-injured, non-decayed) Crows, Blue Jays, House Finches, and House Sparrows.



- Report a Dead Bird
- Images of Birds to Report
- Safe Handling of Dead Birds
- Where to Submit for Testing

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## Bird Images

### Birds to Report or Submit for Testing



American Crow



Blue Jay



Fish Crow



House Finch



House Sparrow

DHEC mainly test these five types of birds:

- **American Crows** are 17-21 inches long and all black.
- **Fish Crows** look almost exactly like the American Crow except for their silkier

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## Safe Handling



To protect your own health, **Do Not touch a bird (dead or alive) with your bare hands.**

Follow these instructions when handling or picking up a dead bird:

Either use gloves, or pick the bird up with doubled clear plastic bags that have been turned inside out (covering your hand). Invert the bag over the bird (uncovering your hand) and seal the bird in the doubled plastic bags. If possible, use clear plastic or clear zipper bags so that the bird can be seen through the bags.

Keep the bagged bird cool until it can be placed on ice or in a refrigerator. If you can not deliver the bird carcass to DHEC within 24-36 hours of collection, freeze it until you are able to deliver it or ship it.

**Be sure to record the physical**

Report a Dead Bird

Full Name \*

Phone #

Email Address \*

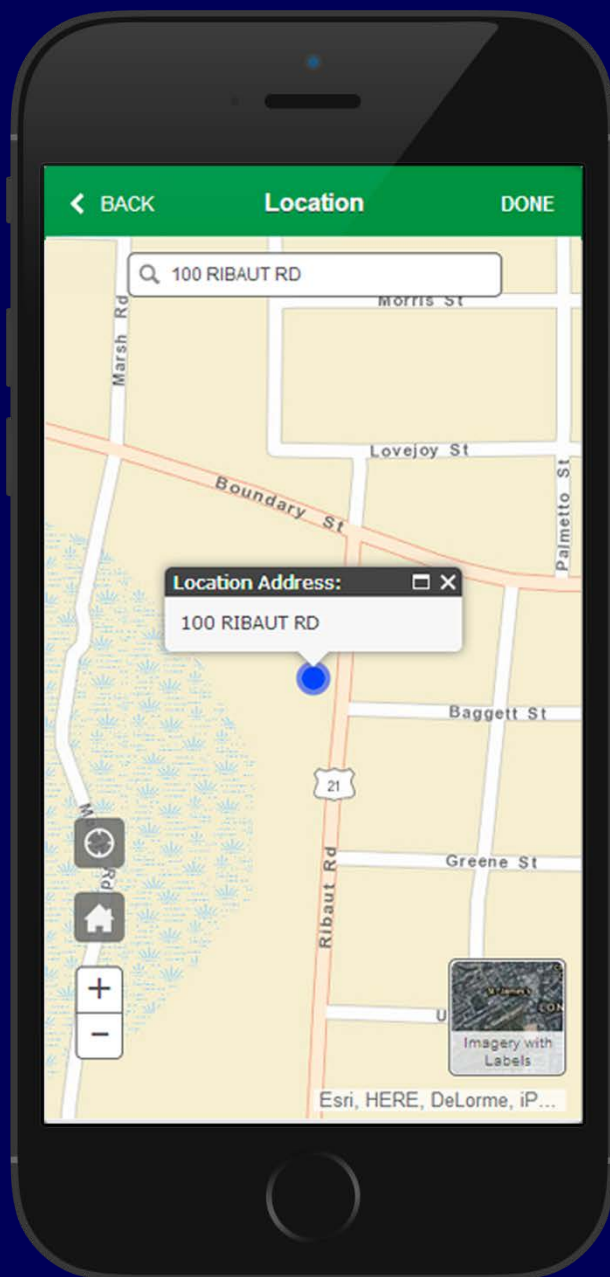
Click to find Location Address...

Location Address \*

Number of Dead Birds?

Additional Details

Attach Photo



Drop-Off Locations

Lowcountry EQC Beaufort -  
(preferred site)  
104 Parker Drive  
Beaufort, SC 29906  

Phone: (843) 846-1030

Map

Beaufort County Public Health  
Department  
601 Wilmington Street  
Beaufort, SC 29902  

Phone: (843) 525-7615

Map

Bluffton Public Health Department  
4819 Bluffton Parkway  
Bluffton, SC 29910  

Phone: (843) 757-2251

Map

Beaufort County Mosquito Control  
84 Shanklin Rd  
Beaufort, SC 29906  

Phone: (843) 255-5800

Map



< BACK **Fight the Bite!**

## Target the Sources! Eliminate Standing Water!

Container-breeding mosquitoes are a nuisance and a potential carrier of West Nile virus in the U.S., including Beaufort County. A cost-effective method for controlling these mosquitoes is to eliminate standing water on properties.

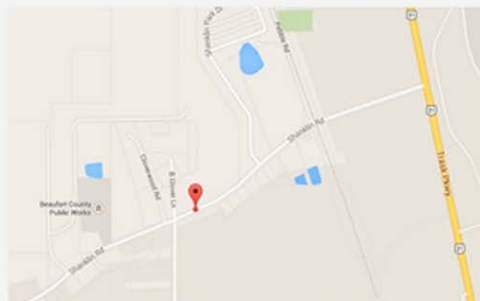
Many residents do not realize the surprising number of likely mosquito-breeding sources on their property. Any item that can hold water for more than a few days can breed mosquitoes!

- **Birdbaths** – replace water or flush out at least once a week
- **Buckets, watering cans, drinking glasses, plastic cups, bottle caps, any trash that**



< BACK **Contact Us**

**Beaufort County Mosquito Control**  
84 Shanklin Road  
Beaufort, SC 29906-8427



Hours: 7:30 a.m. - 4:00 p.m. (Mon - Fri)

Office: (843) 255-5800

Fax: (843) 255-9428

Email

Website

< BACK **About**

*This app was created in cooperation with students from the University of South Carolina Beaufort. Special thanks to Cristian Salmeron and Patrick Niehaus from Dr. Kasia Pawelek's Mathematical Modeling Research Group for their efforts in getting this project started.*



**Developed by the Beaufort County  
Information Technology Division**

Mobile Developers:

Robert Gecy  
Scott Hansen  
Ian deNeeve  
Josh Riley



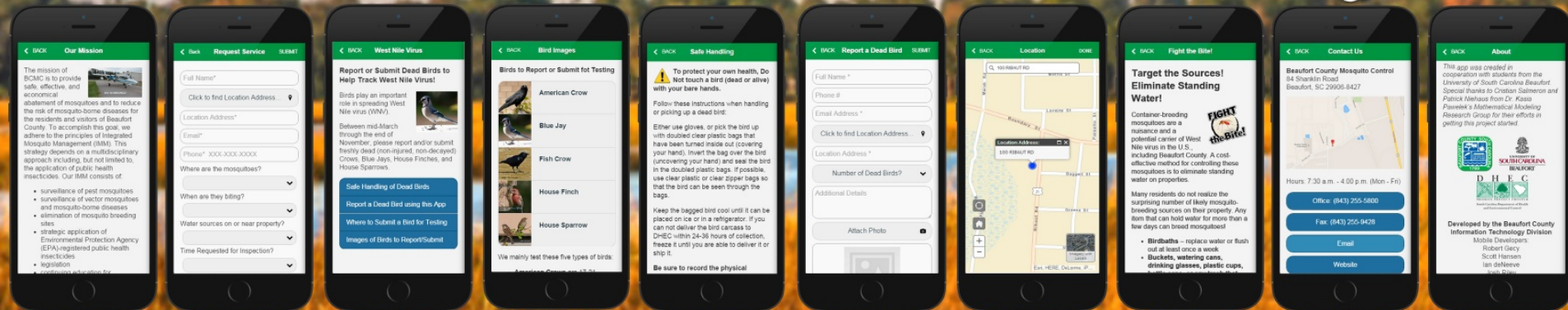
# Beaufort County Mosquito Control Mobile Reporting App

Cristian Salmeron<sup>1</sup>, Robert Gecy<sup>2</sup>, Kasia A. Pawelek<sup>1</sup>, and Gregg J. Hunt<sup>3</sup>

<sup>1</sup> Department of Mathematics and Computational Science, University of South Carolina Beaufort, Bluffton, SC 29909

<sup>2</sup> Beaufort County Information Technology, Beaufort, SC 29906

<sup>3</sup> Beaufort County Mosquito Control, Beaufort, SC 29906



## Abstract

A mobile application (app) to report dead birds with possible West Nile Virus (WNV) and/or to request service was conceived as part of the ongoing collaboration between Dr. Kasia Pawelek's Mathematical Modeling Research Group and Gregg Hunt, the Director of Beaufort County Mosquito Control (BCMC). The prototype app was started in January 2013 by USCB Computational Science students, Cristian Salmeron and Patrick Niehaus, and completed in August 2014. Robert Gecy, the new Applications Programmer for Beaufort County Information Technology, will adapt this app for Beaufort County and South Carolina Department of Health and Environmental Control (DHEC). The app will allow residents and visitors to assist with the monitoring of WNV in Beaufort County. Participants may submit reports of dead bird sightings, with location coordinates and images, to BCMC and DHEC simultaneously. Also, the app will provide easy access to BCMC and WNV-related information. The monitoring of WNV in the county is crucial because of the large population of senior citizens which may develop life threatening symptoms associated with WNV infections. The reports of potential WNV activity as well as requests for service will initiate subsequent inspections and/or abatement strategies by BCMC within a timely manner.

## Introduction

### Significance

WNV is a major health concern in the U.S. Senior citizens and immunocompromised individuals are at the highest risk of developing severe symptoms when infected with WNV [1]. Thus, it is essential to monitor WNV activity in Beaufort County given that a large portion of the population is above the age of 60.

### How does it spread?

- WNV is a vector-borne pathogen spread by infected mosquitoes, which are likely to develop in large numbers in the nutrient-rich water trapped in catch basins and in various water-holding containers [2].
- The transmission cycle consists of mosquitoes feeding on infected birds and, subsequently, feeding on other birds or mammals [1].



## Objectives

- Allow Beaufort County residents and visitors to report dead bird sightings and/or request services for BCMC and/or DHEC.
- Provide information regarding WNV and the types of birds it affects.
- Inform residents of ways in which they can partake in the effort to control mosquito populations

## Features

- GPS location reporting allows for more accurate data collection
- Easy to use image capture and submission enables users to submit dead birds images for identification
- Up-to-date information about WNV, birds, and mosquitoes
- Service requests and reports of dead bird sightings, with location coordinates and images, to BCMC and DHEC simultaneously

## Benefits

- Facilitates reporting and potential WNV activity mapping for residents
- Residents become more informed and involved in control efforts
- Allows users to submit service requests directly
- Easily accessible contact information
- More accurate WNV activity monitoring

## Future Research/Extensions

- Perform detailed analysis of data collected via the app to further study WNV and mosquito activity
- Utilize collected data in mathematical modeling of the spread of WNV and optimization of abatement strategies

## Acknowledgements

- Dr. Pawelek Mathematical Modeling Research Group is supported by the Sea Islands Institute Grant
- USCB Computational Science student, Cristian Salmeron, is a recipient of the S-STEM Scholarship
- Thanks to the USCB Computational Science, graduate Patrick Niehaus, for the initial work on the project
- Poster printing discount



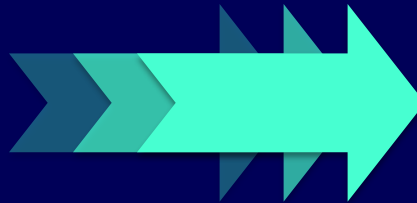
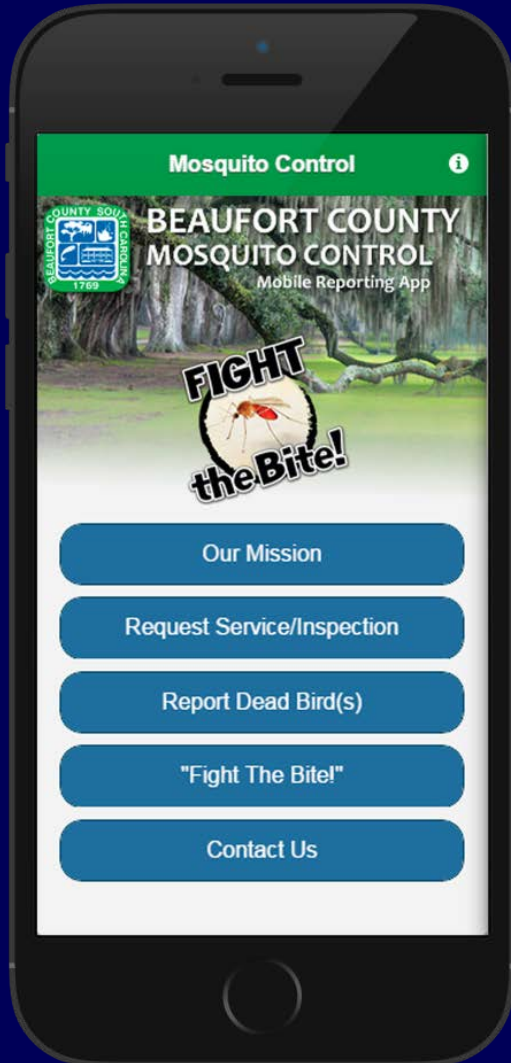
## References

1. CDC. West Nile virus. <http://www.cdc.gov/ncidod/dvbid/westnile/ga/symptoms.htm>
2. BCMC West Nile Virus. <http://www.co.beaufort.sc.us/departments/PublicSafety/mosquito-control/>

**Coming Soon**



# Beaufort Co. Mosquito Control



# ***Economic Development Organizational Proposal***

## **Council Consideration**

- **Corporate Structure (2Q15)**
- **Deal Making Director (4Q15)**
- **Executive Assistant**
- **Coordinating Role:**
  - Business Opportunities**
  - Commerce**
  - Municipalities & County**
  - Cooperative Marketing**
- **Publicly Funded - \$250K**
  - 70% (\$175K) - County (\$90K - '16)**
  - 30% (\$75K) - Municipalities (start '17)**
- **SC - \$150K**

## **Discussion Points**

- **Objective: Formation & Recruitment (Jobs)**
- **County: Deal Support (\$'s, tax relief, etc.)**
- **Board - 8 Members (3Q15):**
  - Municipalities (4) - Business or Elected**
  - County (1) - Business or Elected**
  - Board Selected (3) - Business**
- **Interim - Josh:**
  - Hilton Head EDC Model**
  - Deal Flow**
  - Director Search**
- **Job #1 - January, 2016**
- **Director to Recommend Alliance (1Q16)**

# ***Economic Development Product Proposal***

## **Research Park North**

**\$2.0M - Land**

**6.5 - Infrastructure**

**\$8.5M**

### **Factors:**

- **Healthcare - Task Force**
- **Aerospace**
- **Military**
- **Automotive**
- **Light Manufacturing**
- **Quality of Life**
- **Wage Structure**
- **Military (Bases & Retirees)**

## **Research Park South (Horse Farm)**

**\$11.5M - Option**

**(4.0) - R&C (comps = 16a @ \$308K = \$5M)**

**(.5) - Storm water**

**\$ 7.0M (64a @ \$110K / acre)**

**1.5 - Infrastructure**

**\$ 8.5M**

### **Factors:**

- **Healthcare (& High Tech) - Task Force**
- **Headquarters**
- **Quality of Life**
- **Residents (Active / Retirees / Private Equity)**



# ***Economic Development Financial Engineering***

## **Operations**

- Director, Assistant, Expense, etc. - \$250K
- Contributions:
  - \$100 K - County for Unincorporated
    - 39 - Hilton Head Island
    - 13 - Bluffton
    - 12 - Beaufort
    - 11 - Port Royal
  - \$175 K (\$1 per Resident)
    - 75 - County
- County Appropriation:
  - \$ 90K - '16
  - \$175K - '17

## **Investment**

\$ 8.5M - North

8.5 - South

\$17.0M

### **Factors:**

- BANs as Req'd ('16 Interest = \$150K = .1 Mills)
- Ref: GO Bonds (1 Mill Debt Service):
  - 1/3 Residents (4%) - \$4 / \$100K
  - 2/3 Others (6%) - \$6 / \$100K

### **Cost Offsets?**

- Public - Private Partnerships
- CIP Referendum
- Sale of Parcels
- Commerce