

# Westside Mosquito Control

Council Discussion  
April 17, 2018

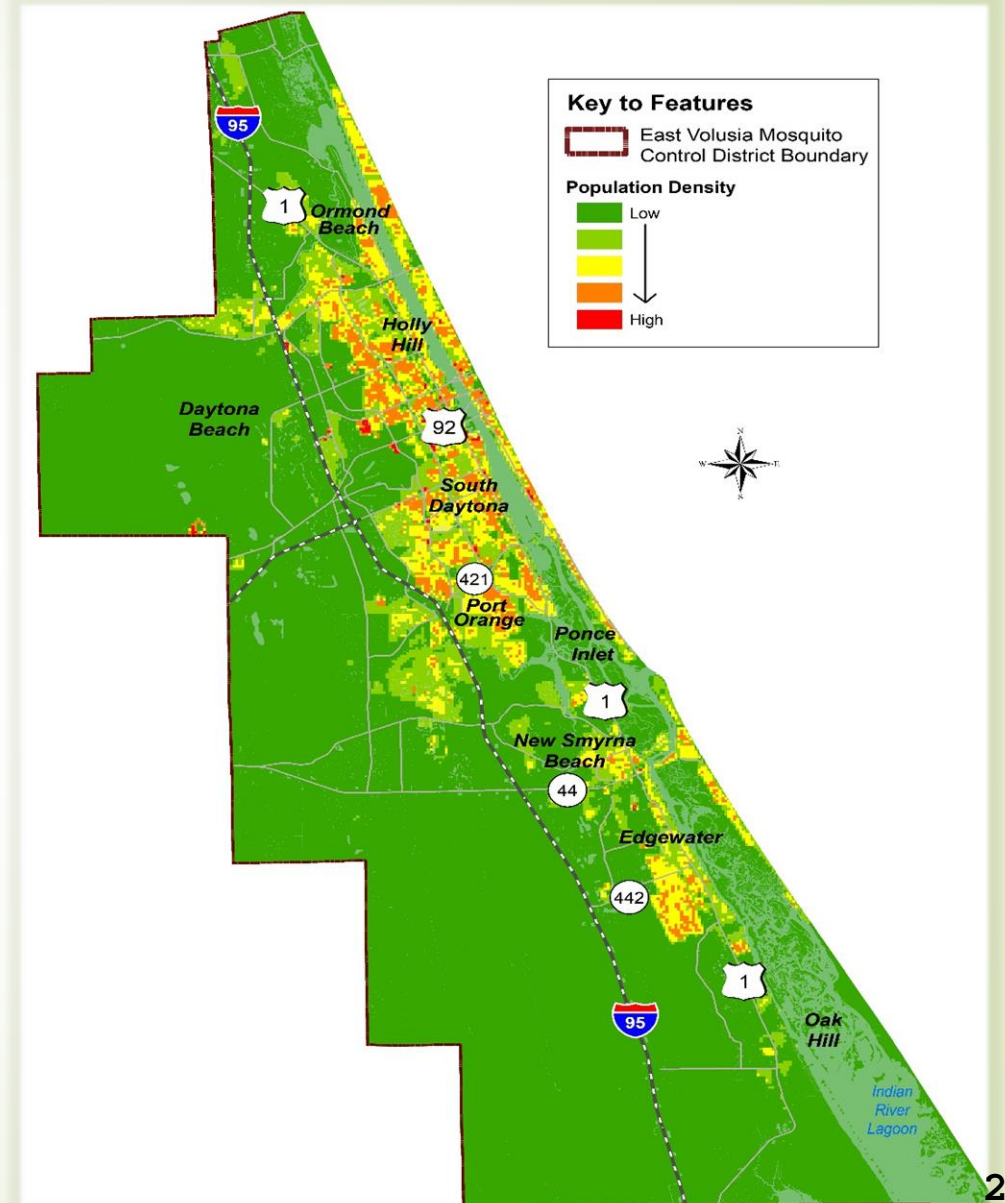


Public Works Department  
Mosquito Control Division



# East Volusia Mosquito Control District

- 537 square miles
- Habitats
  - Salt Marsh
  - Vectors
  - Domestic
- 50,000 acres of salt marsh
- 2017 Population Est: 300,198
- 2017 Taxable Value: \$ 22,512,853,910
- District assessment: 0.1880 mils
- 2017 Ad valorem revenue: \$4,063,120
- Target Mosquito Species



# East Volusia Mosquito Control District

## Integrated Pest Management (IPM) Services

### Proactive surveillance

- Larval and adult
- Monitor population and virus presence
- Mosquito traps and sentinel chickens
- Targeted mosquito species
  - Salt Marsh
  - Domestic
  - Vectors

**Continual efficacy assessment**

### Proactive treatment and response

- Treat when surveillance dictates
  - Larviciding – earlier the better
  - Adulticiding – ground and air
  - Biological control - fish
- Customer service inquiries (3,202)
- Source reduction i.e. ditch maintenance
- Virus response
- Education
- Special events

# Existing Westside Services

## Service areas

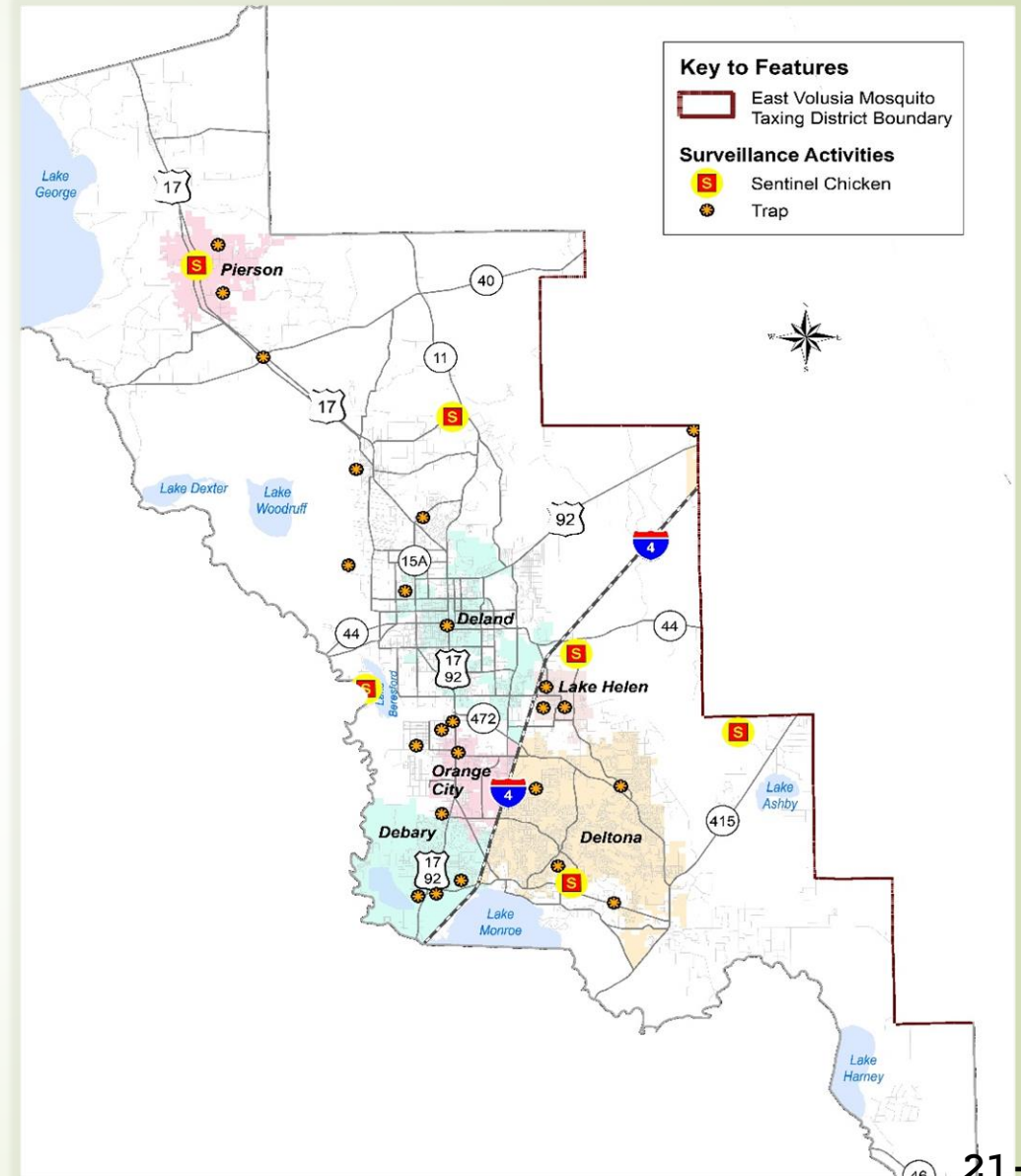
- Unincorporated areas
  - \$300,000 MSD funding
  - Avg Annual expenditure ~\$150,000
- City contracts
  - Avg annual expenditure ~\$21,000

## Limited proactive surveillance

- Virus presence
  - Mosquito traps and sentinel chickens
- Targeted mosquito species
  - Domestic
  - Vectors

## Reactive treatment and response

- Customer service inquiry driven
- City authorization required
- Virus response driven





# Mosquito Control Division Resources

- **Location: 801 South St., New Smyrna Beach Airport**
- **25 Full time positions (21 Public Health Licensed)**
  - 15 Professional/Scientific/Technical Staff
  - 2 Licensed pilots
  - 1 Certified IA mechanic
  - 3 Field/Trades staff
  - 2 Administrative
  - 2 Managers
- **10 Part time special workers seasonal positions**
  - 3 Licensed evening drivers
  - 5 Student interns
  - 2 Licensed pilots



# Mosquito Control Division Resources

## Specialized Equipment

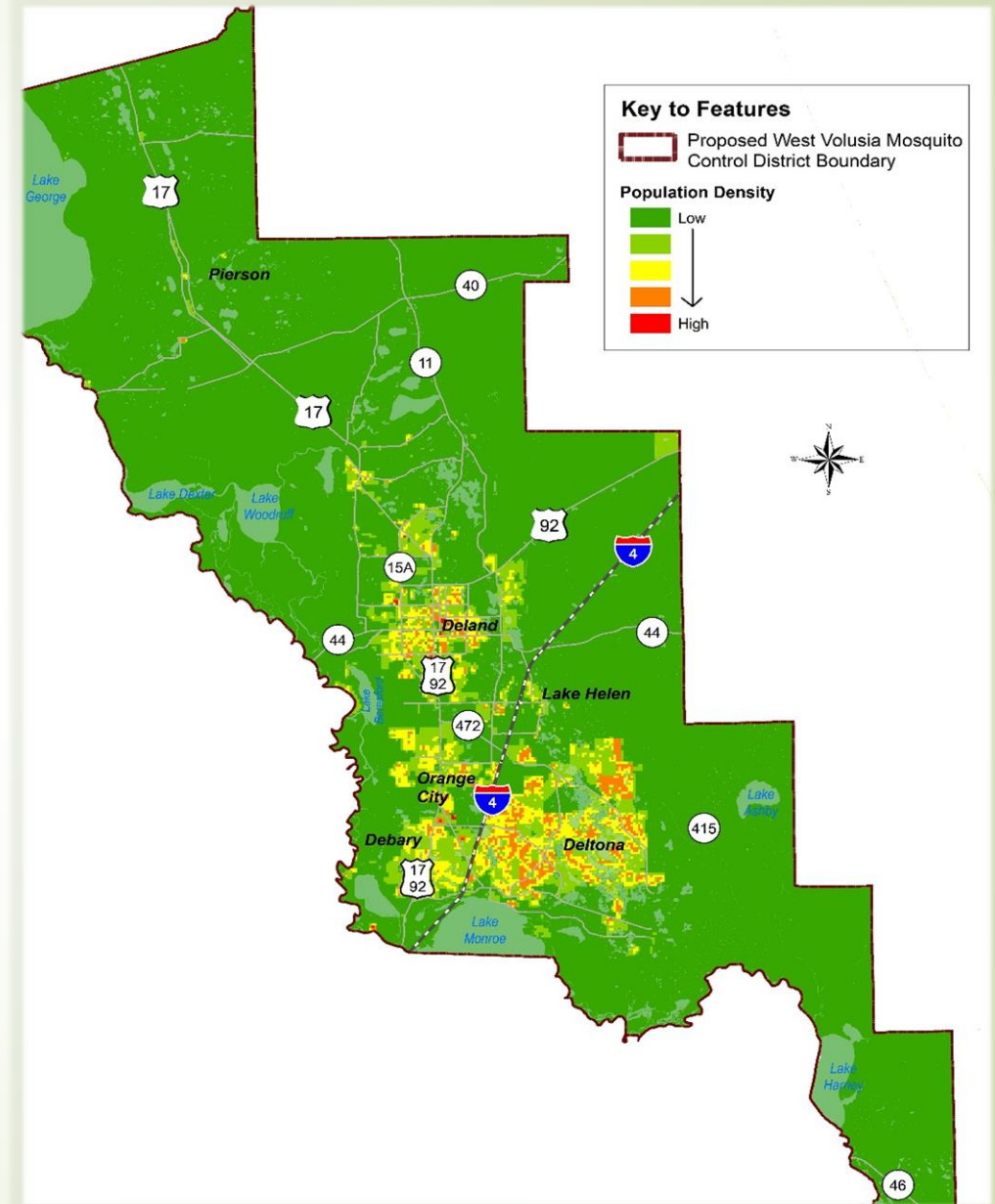
- 12 Larvicide sprayer/trucks
- 9 ULV Adulticide trucks
- 4 Surveillance trucks
- 2 Helicopters with sprayers
- 3 Aerial support trucks
- 2 Right hand steer Jeeps
- 4 Buffalo turbine/mozzie
- 4 Boats
- 4 ATV
- 1 Light barge (midges)
- Back pack sprayers

## Materials 2017

- Adulticide- Liquid
  - Truck ULV 1,000 gal
  - Aerial 3,300 gal\*  
\*1,575 Hurricane Irma response
- Larvicide- Granular
  - Truck/ground 5,000 lbs
  - Aerial 54,000 lbs
  - Packets 3,000 pkt
- Biological-Fish
  - Gambusia 47,000 fish

# Potential West Volusia Mosquito Control District

- 726 square miles
- Habitats
- St. Johns River floodplain
- 2017 Population Est: 223,207
- Target Mosquito Species
  - Vectors
  - Domestic



# Potential West Volusia Mosquito Control District

## Integrated Pest Management (IPM) Services

### Proactive surveillance

- Larval and Adult
- Monitor population and virus presence
- Mosquito traps and sentinel chickens
- Targeted mosquito species
  - Domestic
  - Vectors

**Continual efficacy assessment**

### Proactive treatment and response

- Treat when surveillance dictates
  - Adulticiding – ground and air
  - Larviciding – ground only
  - Biological control - fish
- Customer service inquiries
  - *Direct to VC Mosquito Control staff*
- Virus response
- Education
- Special events

- Limited larval surveillance and treatment in population centers only
  - No source reduction i.e. ditch maintenance



# Potential West Volusia Mosquito Control District

## Resources Required

- New site - R&B Barn West SR 44
  - Office space
  - Covered storage
  - Chemical storage - secured
- 9 Full time positions
- 3 Seasonal special workers

### Specialized Equipment

- 6 Larvicide trucks
- 6 ULV Adulticide units
- Helicopters (utilize existing)
- Buffalo Turbine
- Back pack sprayers
- Boats (utilize existing)

### Materials

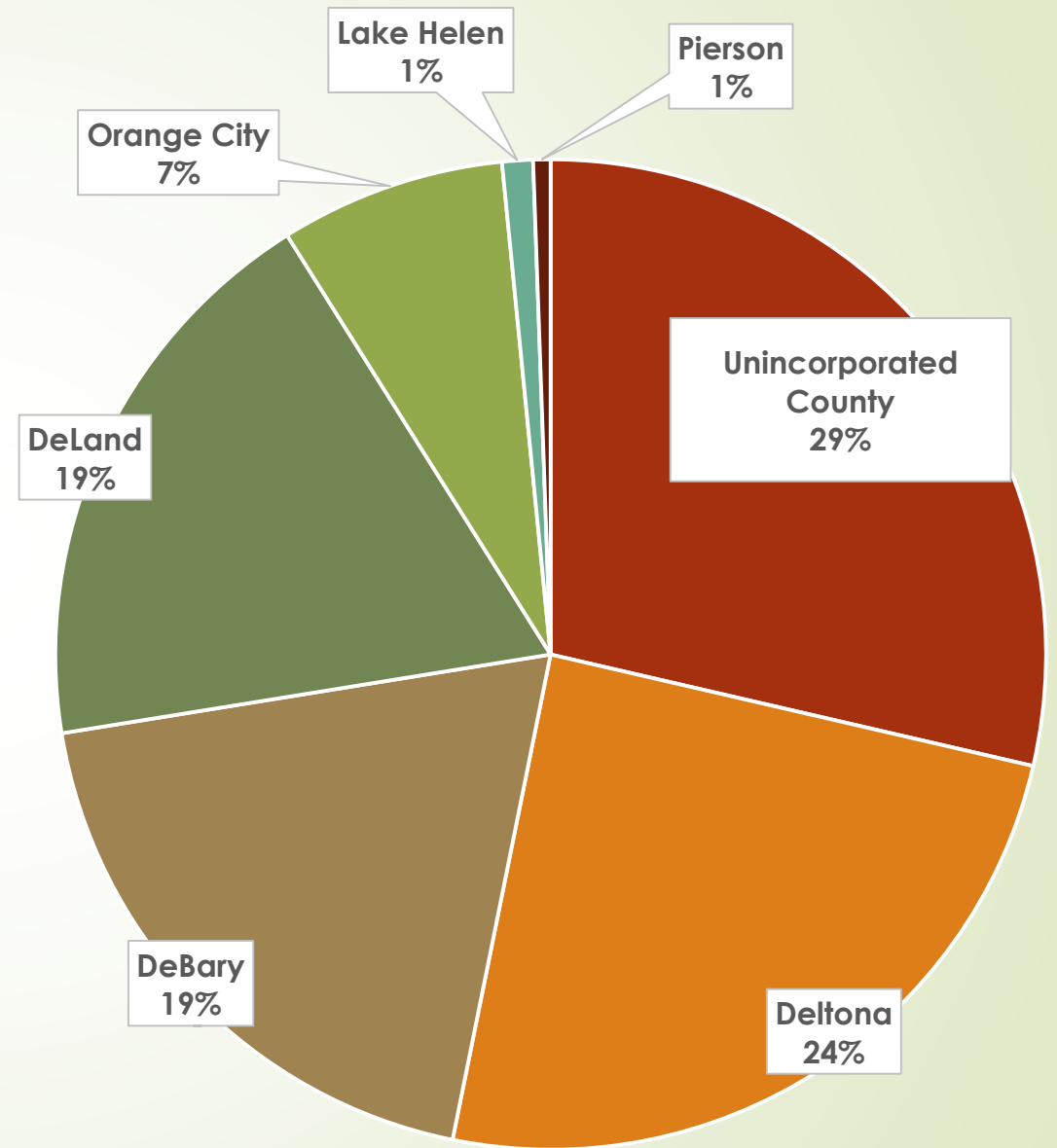
- Adulticides
- Larvicides
- Biological control - fish

# Potential West Volusia Mosquito Control District

2017 Taxable Value - \$ 8,583,337,320

Combined City – 71%  
Unincorporated County – 29%

Percent of Total Taxable Value



# Challenges

- Determining funding mechanism
- Tailoring service based on funding
- Program start-up capital
- Construct facilities
- Purchase equipment and supplies
- Recruit personnel
- Managing expectations
- 1<sup>st</sup> year – development year
  - Set-up Westside operations
  - Surveillance sites
  - Treatment sites
  - Staff training