

# **Appendix A**

**GEMA Worksheet #3a**  
**Jurisdiction: Echols County**  
**Hazard: Hurricanes/Tropical Storms**

**Inventory of Assets**

**Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.**

| Type of Structure<br>(Occupancy Class) | Number of Structures    |                  |                  | Value of Structures      |                       |                  | Number of People        |                  |                  |
|--|-------------------------|------------------|------------------|--------------------------|-----------------------|------------------|-------------------------|------------------|------------------|
|  | # in Community of State | # in Hazard Area | % in Hazard Area | \$ in Community or State | \$ in Hazard Area     | % in Hazard Area | # in Community or State | # in Hazard Area | % in Hazard Area |
| Residential                            | 1,344                   | 1,344            | 100.000%         | \$ 52,296,462            | \$ 52,296,462         | 100.000%         | 3,936                   | 3,936            | 100.000%         |
| Commercial                             | 14                      | 14               | 100.000%         | \$ 2,059,967             | \$ 2,059,967          | 100.000%         | 0                       | 0                | 0%               |
| Industrial                             | 1                       | 1                | 100.000%         | \$ -                     | \$ -                  |                  | 0                       | 0                | 0%               |
| Agricultural                           | 703                     | 703              | 100.000%         | \$ 327,999,786           | \$ 327,999,786        | 100.000%         | 0                       | 0                | 0%               |
| Religious/ Non-profit                  | 35                      | 35               | 100.000%         | \$ 3,339,415             | \$ 3,339,415          | 100.000%         | 0                       | 0                | 0%               |
| Government                             | 20                      | 20               | 100.000%         | \$ 1,018,453             | \$ 1,018,453          | 100.000%         | 0                       | 0                | 0%               |
| Education                              | 6                       | 6                | 100.000%         | \$ 157,255               | \$ 157,255            | 100.000%         | 0                       | 0                | 0%               |
| Utilities                              | 1                       | 1                |                  | \$ -                     | \$ -                  |                  | 0                       | 0                | 0%               |
| <b>Total</b>                           | <b>2,124</b>            | <b>2,124</b>     |                  | <b>\$ 386,871,338</b>    | <b>\$ 386,871,338</b> |                  | <b>3,936</b>            | <b>3,936</b>     |                  |

**Task B. Determine whether (and where) you want to collect additional inventory data.**

- |   |          |          |
|---|----------|----------|
|   | <b>Y</b> | <b>N</b> |
| 1. Do you know where the greatest damages may occur in your area?   | Y        |          |
| 2. Do you know whether your critical facilities will be operational after a hazard event?   | Y        |          |
| 3. Is there enough data to determine which assets are subject to the greatest potential damages?  | Y        |          |
| 4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards?   | Y        |          |
| 5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? | Y        |          |
| 6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence?   |          | N        |
| 7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?   |          | N        |

**GEMA Worksheet #3a**  
**Jurisdiction: Echols County**  
**Hazard: Floods**

**Inventory of Assets**

**Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.**

| Type of Structure<br>(Occupancy Class) | Number of Structures    |                  |                  | Value of Structures      |                       |                  | Number of People        |                  |                  |
|--|-------------------------|------------------|------------------|--------------------------|-----------------------|------------------|-------------------------|------------------|------------------|
|  | # in Community of State | # in Hazard Area | % in Hazard Area | \$ in Community or State | \$ in Hazard Area     | % in Hazard Area | # in Community or State | # in Hazard Area | % in Hazard Area |
| Residential                            | 1,344                   | 87               | 6.473%           | \$ 52,296,462            | \$ 2,841,583          | 5.434%           | 3,936                   | 255              | 6.473%           |
| Commercial                             | 14                      | 1                | 7.143%           | \$ 2,059,967             | \$ 23,900             | 1.160%           | 0                       | 0                | 0%               |
| Industrial                             | 1                       | 1                | 100.000%         | \$ -                     | \$ -                  |                  | 0                       | 0                | 0%               |
| Agricultural                           | 703                     | 239              | 33.997%          | \$ 327,999,786           | \$ 194,193,578        | 59.205%          | 0                       | 0                | 0%               |
| Religious/ Non-profit                  | 35                      | 4                | 11.429%          | \$ 3,339,415             | \$ 769,600            | 23.046%          | 0                       | 0                | 0%               |
| Government                             | 20                      | 0                | 0.000%           | \$ 1,018,453             | \$ -                  | 0.000%           | 0                       | 0                | 0%               |
| Education                              | 6                       | 0                | 0.000%           | \$ 157,255               | \$ -                  | 0.000%           | 0                       | 0                | 0%               |
| Utilities                              | 1                       | 0                |                  | \$ -                     | \$ -                  |                  | 0                       | 0                | 0%               |
| <b>Total</b>                           | <b>2,124</b>            | <b>332</b>       |                  | <b>\$ 386,871,338</b>    | <b>\$ 197,828,661</b> |                  | <b>3,936</b>            | <b>255</b>       |                  |

**Task B. Determine whether (and where) you want to collect additional inventory data.**

- |   |          |          |
|---|----------|----------|
|   | <b>Y</b> | <b>N</b> |
| 1. Do you know where the greatest damages may occur in your area?   | Y        |          |
| 2. Do you know whether your critical facilities will be operational after a hazard event?   | Y        |          |
| 3. Is there enough data to determine which assets are subject to the greatest potential damages?  | Y        |          |
| 4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards?   | Y        |          |
| 5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? | Y        |          |
| 6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence?   |          | N        |
| 7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?   |          | N        |

**GEMA Worksheet #3a**  
**Jurisdiction: Echols County**  
**Hazard: Tornadoes**

**Inventory of Assets**

**Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.**

| Type of Structure<br>(Occupancy Class) | Number of Structures    |                  |                  | Value of Structures      |                       |                  | Number of People        |                  |                  |
|--|-------------------------|------------------|------------------|--------------------------|-----------------------|------------------|-------------------------|------------------|------------------|
|  | # in Community of State | # in Hazard Area | % in Hazard Area | \$ in Community or State | \$ in Hazard Area     | % in Hazard Area | # in Community or State | # in Hazard Area | % in Hazard Area |
| Residential                            | 1,344                   | 1,344            | 100.000%         | \$ 52,296,462            | \$ 52,296,462         | 100.000%         | 3,936                   | 3,936            | 100.000%         |
| Commercial                             | 14                      | 14               | 100.000%         | \$ 2,059,967             | \$ 2,059,967          | 100.000%         | 0                       | 0                | 0%               |
| Industrial                             | 1                       | 1                | 100.000%         | \$ -                     | \$ -                  |                  | 0                       | 0                | 0%               |
| Agricultural                           | 703                     | 703              | 100.000%         | \$ 327,999,786           | \$ 327,999,786        | 100.000%         | 0                       | 0                | 0%               |
| Religious/ Non-profit                  | 35                      | 35               | 100.000%         | \$ 3,339,415             | \$ 3,339,415          | 100.000%         | 0                       | 0                | 0%               |
| Government                             | 20                      | 20               | 100.000%         | \$ 1,018,453             | \$ 1,018,453          | 100.000%         | 0                       | 0                | 0%               |
| Education                              | 6                       | 6                | 100.000%         | \$ 157,255               | \$ 157,255            | 100.000%         | 0                       | 0                | 0%               |
| Utilities                              | 1                       | 1                |                  | \$ -                     | \$ -                  |                  | 0                       | 0                | 0%               |
| <b>Total</b>                           | <b>2,124</b>            | <b>2,124</b>     |                  | <b>\$ 386,871,338</b>    | <b>\$ 386,871,338</b> |                  | <b>3,936</b>            | <b>3,936</b>     |                  |

**Task B. Determine whether (and where) you want to collect additional inventory data.**

- |   |          |          |
|---|----------|----------|
|   | <b>Y</b> | <b>N</b> |
| 1. Do you know where the greatest damages may occur in your area?   | Y        |          |
| 2. Do you know whether your critical facilities will be operational after a hazard event?   | Y        |          |
| 3. Is there enough data to determine which assets are subject to the greatest potential damages?  | Y        |          |
| 4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards?   | Y        |          |
| 5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? | Y        |          |
| 6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence?   |          | N        |
| 7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?   |          | N        |

**GEMA Worksheet #3a**  
**Jurisdiction: Echols County**  
**Hazard: Wildfires**

**Inventory of Assets**

**Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.**

| Type of Structure<br>(Occupancy Class) | Number of Structures    |                  |                  | Value of Structures      |                       |                  | Number of People        |                  |                  |
|--|-------------------------|------------------|------------------|--------------------------|-----------------------|------------------|-------------------------|------------------|------------------|
|  | # in Community of State | # in Hazard Area | % in Hazard Area | \$ in Community or State | \$ in Hazard Area     | % in Hazard Area | # in Community or State | # in Hazard Area | % in Hazard Area |
| Residential                            | 1,344                   | 1,344            | 100.000%         | \$ 52,296,462            | \$ 52,296,462         | 100.000%         | 3,936                   | 3,936            | 100.000%         |
| Commercial                             | 14                      | 14               | 100.000%         | \$ 2,059,967             | \$ 2,059,967          | 100.000%         | 0                       | 0                | 0%               |
| Industrial                             | 1                       | 1                | 100.000%         | \$ -                     | \$ -                  |                  | 0                       | 0                | 0%               |
| Agricultural                           | 703                     | 703              | 100.000%         | \$ 327,999,786           | \$ 327,999,786        | 100.000%         | 0                       | 0                | 0%               |
| Religious/ Non-profit                  | 35                      | 35               | 100.000%         | \$ 3,339,415             | \$ 3,339,415          | 100.000%         | 0                       | 0                | 0%               |
| Government                             | 20                      | 20               | 100.000%         | \$ 1,018,453             | \$ 1,018,453          | 100.000%         | 0                       | 0                | 0%               |
| Education                              | 6                       | 6                | 100.000%         | \$ 157,255               | \$ 157,255            | 100.000%         | 0                       | 0                | 0%               |
| Utilities                              | 1                       | 1                |                  | \$ -                     | \$ -                  |                  | 0                       | 0                | 0%               |
| <b>Total</b>                           | <b>2,124</b>            | <b>2,124</b>     |                  | <b>\$ 386,871,338</b>    | <b>\$ 386,871,338</b> |                  | <b>3,936</b>            | <b>3,936</b>     |                  |

**Task B. Determine whether (and where) you want to collect additional inventory data.**

- |   |          |          |
|---|----------|----------|
|   | <b>Y</b> | <b>N</b> |
| 1. Do you know where the greatest damages may occur in your area?   | Y        |          |
| 2. Do you know whether your critical facilities will be operational after a hazard event?   | Y        |          |
| 3. Is there enough data to determine which assets are subject to the greatest potential damages?  | Y        |          |
| 4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards?   | Y        |          |
| 5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? | Y        |          |
| 6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence?   |          | N        |
| 7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?   |          | N        |

**GEMA Worksheet #3a**  
**Jurisdiction: Echols County**  
**Hazard: Thunderstorms/Lightning**

**Inventory of Assets**

**Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.**

| Type of Structure<br>(Occupancy Class) | Number of Structures    |                  |                  | Value of Structures      |                       |                  | Number of People        |                  |                  |
|--|-------------------------|------------------|------------------|--------------------------|-----------------------|------------------|-------------------------|------------------|------------------|
|  | # in Community of State | # in Hazard Area | % in Hazard Area | \$ in Community or State | \$ in Hazard Area     | % in Hazard Area | # in Community or State | # in Hazard Area | % in Hazard Area |
| Residential                            | 1,344                   | 1,344            | 100.000%         | \$ 52,296,462            | \$ 52,296,462         | 100.000%         | 3,936                   | 3,936            | 100.000%         |
| Commercial                             | 14                      | 14               | 100.000%         | \$ 2,059,967             | \$ 2,059,967          | 100.000%         | 0                       | 0                | 0%               |
| Industrial                             | 1                       | 1                | 100.000%         | \$ -                     | \$ -                  |                  | 0                       | 0                | 0%               |
| Agricultural                           | 703                     | 703              | 100.000%         | \$ 327,999,786           | \$ 327,999,786        | 100.000%         | 0                       | 0                | 0%               |
| Religious/ Non-profit                  | 35                      | 35               | 100.000%         | \$ 3,339,415             | \$ 3,339,415          | 100.000%         | 0                       | 0                | 0%               |
| Government                             | 20                      | 20               | 100.000%         | \$ 1,018,453             | \$ 1,018,453          | 100.000%         | 0                       | 0                | 0%               |
| Education                              | 6                       | 6                | 100.000%         | \$ 157,255               | \$ 157,255            | 100.000%         | 0                       | 0                | 0%               |
| Utilities                              | 1                       | 1                |                  | \$ -                     | \$ -                  |                  | 0                       | 0                | 0%               |
| <b>Total</b>                           | <b>2,124</b>            | <b>2,124</b>     |                  | <b>\$ 386,871,338</b>    | <b>\$ 386,871,338</b> |                  | <b>3,936</b>            | <b>3,936</b>     |                  |

**Task B. Determine whether (and where) you want to collect additional inventory data.**

- |   |          |          |
|---|----------|----------|
|   | <b>Y</b> | <b>N</b> |
| 1. Do you know where the greatest damages may occur in your area?   | Y        |          |
| 2. Do you know whether your critical facilities will be operational after a hazard event?   | Y        |          |
| 3. Is there enough data to determine which assets are subject to the greatest potential damages?  | Y        |          |
| 4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards?   | Y        |          |
| 5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? | Y        |          |
| 6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence?   |          | N        |
| 7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?   |          | N        |

**GEMA Worksheet #3a**  
**Jurisdiction: Echols County**  
**Hazard: Extreme Heat**

**Inventory of Assets**

**Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.**

| Type of Structure<br>(Occupancy Class) | Number of Structures    |                  |                  | Value of Structures      |                       |                  | Number of People        |                  |                  |
|--|-------------------------|------------------|------------------|--------------------------|-----------------------|------------------|-------------------------|------------------|------------------|
|  | # in Community of State | # in Hazard Area | % in Hazard Area | \$ in Community or State | \$ in Hazard Area     | % in Hazard Area | # in Community or State | # in Hazard Area | % in Hazard Area |
| Residential                            | 1,344                   | 1,344            | 100.000%         | \$ 52,296,462            | \$ 52,296,462         | 100.000%         | 3,936                   | 3,936            | 100.000%         |
| Commercial                             | 14                      | 14               | 100.000%         | \$ 2,059,967             | \$ 2,059,967          | 100.000%         | 0                       | 0                | 0%               |
| Industrial                             | 1                       | 1                | 100.000%         | \$ -                     | \$ -                  |                  | 0                       | 0                | 0%               |
| Agricultural                           | 703                     | 703              | 100.000%         | \$ 327,999,786           | \$ 327,999,786        | 100.000%         | 0                       | 0                | 0%               |
| Religious/ Non-profit                  | 35                      | 35               | 100.000%         | \$ 3,339,415             | \$ 3,339,415          | 100.000%         | 0                       | 0                | 0%               |
| Government                             | 20                      | 20               | 100.000%         | \$ 1,018,453             | \$ 1,018,453          | 100.000%         | 0                       | 0                | 0%               |
| Education                              | 6                       | 6                | 100.000%         | \$ 157,255               | \$ 157,255            | 100.000%         | 0                       | 0                | 0%               |
| Utilities                              | 1                       | 1                |                  | \$ -                     | \$ -                  |                  | 0                       | 0                | 0%               |
| <b>Total</b>                           | <b>2,124</b>            | <b>2,124</b>     |                  | <b>\$ 386,871,338</b>    | <b>\$ 386,871,338</b> |                  | <b>3,936</b>            | <b>3,936</b>     |                  |

**Task B. Determine whether (and where) you want to collect additional inventory data.**

- |   |          |          |
|---|----------|----------|
|   | <b>Y</b> | <b>N</b> |
| 1. Do you know where the greatest damages may occur in your area?   | Y        |          |
| 2. Do you know whether your critical facilities will be operational after a hazard event?   | Y        |          |
| 3. Is there enough data to determine which assets are subject to the greatest potential damages?  | Y        |          |
| 4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards?   | Y        |          |
| 5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? | Y        |          |
| 6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence?   |          | N        |
| 7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?   |          | N        |

**GEMA Worksheet #3a**  
**Jurisdiction: Echols County**  
**Hazard: Drought**

**Inventory of Assets**

**Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.**

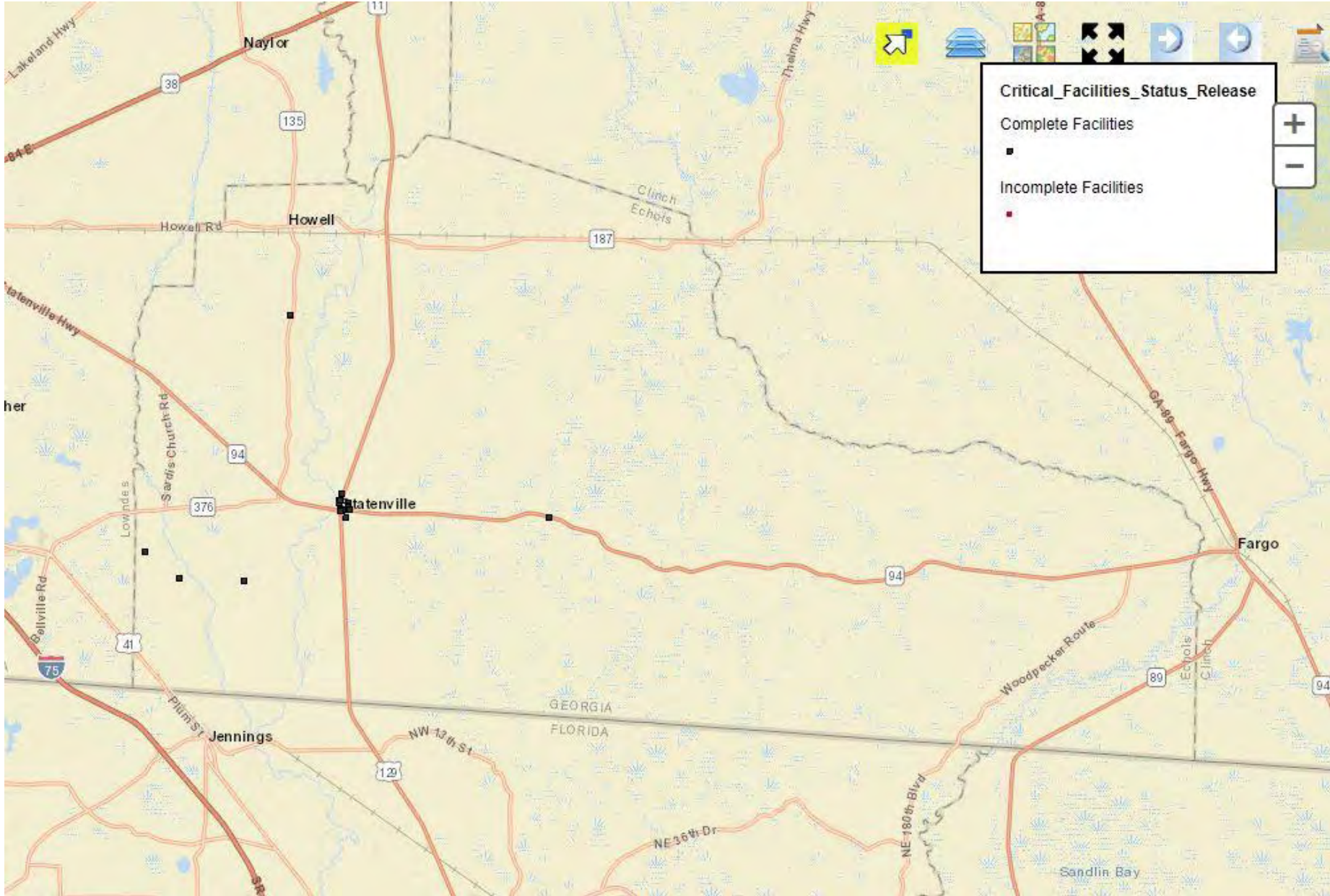
| Type of Structure<br>(Occupancy Class) | Number of Structures    |                  |                  | Value of Structures      |                       |                  | Number of People        |                  |                  |
|--|-------------------------|------------------|------------------|--------------------------|-----------------------|------------------|-------------------------|------------------|------------------|
|  | # in Community of State | # in Hazard Area | % in Hazard Area | \$ in Community or State | \$ in Hazard Area     | % in Hazard Area | # in Community or State | # in Hazard Area | % in Hazard Area |
| Residential                            | 1,344                   | 1,344            | 100.000%         | \$ 52,296,462            | \$ 52,296,462         | 100.000%         | 3,936                   | 3,936            | 100.000%         |
| Commercial                             | 14                      | 14               | 100.000%         | \$ 2,059,967             | \$ 2,059,967          | 100.000%         | 0                       | 0                | 0%               |
| Industrial                             | 1                       | 1                | 100.000%         | \$ -                     | \$ -                  |                  | 0                       | 0                | 0%               |
| Agricultural                           | 703                     | 703              | 100.000%         | \$ 327,999,786           | \$ 327,999,786        | 100.000%         | 0                       | 0                | 0%               |
| Religious/ Non-profit                  | 35                      | 35               | 100.000%         | \$ 3,339,415             | \$ 3,339,415          | 100.000%         | 0                       | 0                | 0%               |
| Government                             | 20                      | 20               | 100.000%         | \$ 1,018,453             | \$ 1,018,453          | 100.000%         | 0                       | 0                | 0%               |
| Education                              | 6                       | 6                | 100.000%         | \$ 157,255               | \$ 157,255            | 100.000%         | 0                       | 0                | 0%               |
| Utilities                              | 1                       | 1                |                  | \$ -                     | \$ -                  |                  | 0                       | 0                | 0%               |
| <b>Total</b>                           | <b>2,124</b>            | <b>2,124</b>     |                  | <b>\$ 386,871,338</b>    | <b>\$ 386,871,338</b> |                  | <b>3,936</b>            | <b>3,936</b>     |                  |

**Task B. Determine whether (and where) you want to collect additional inventory data.**

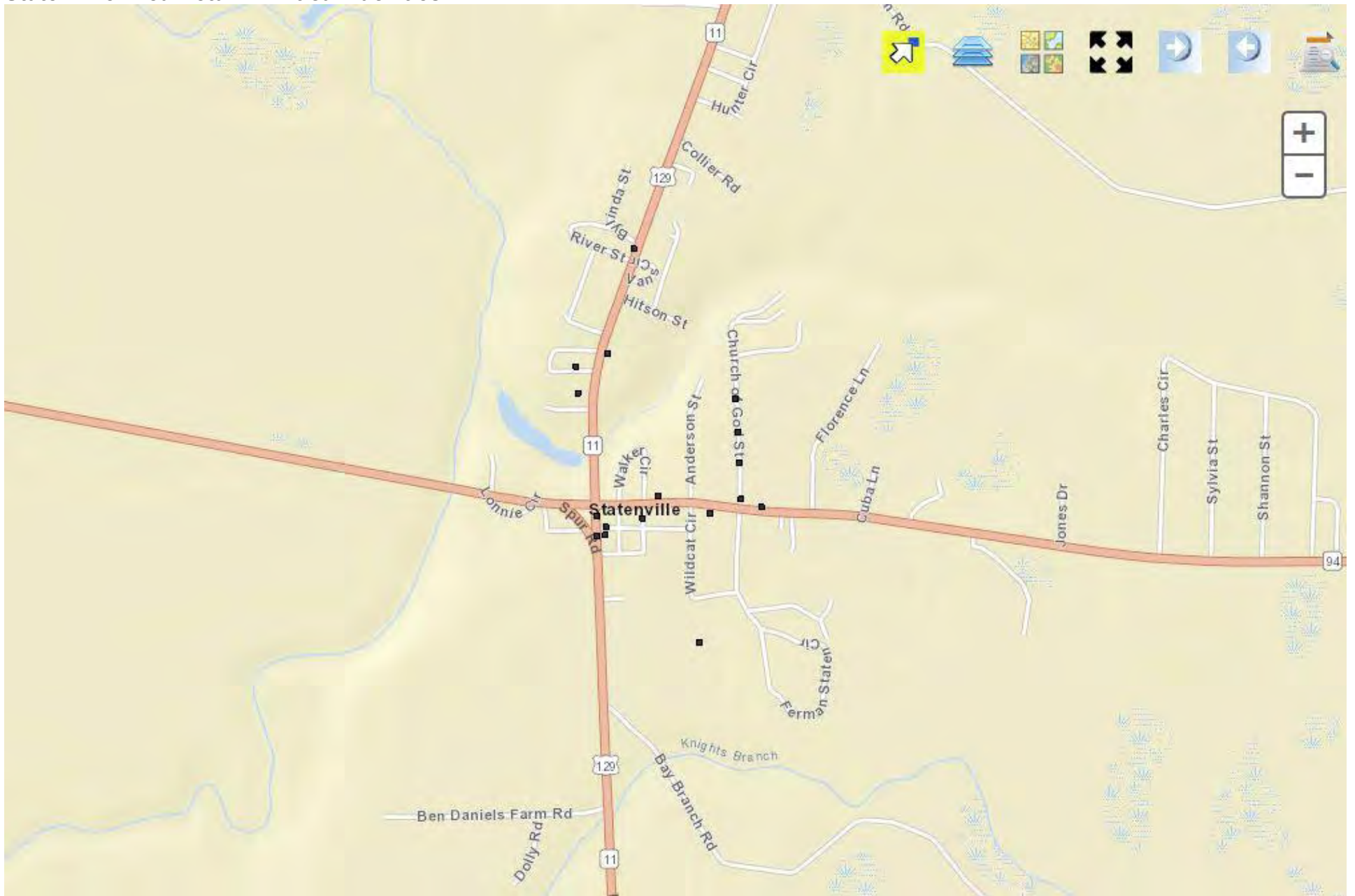
- |   |          |          |
|---|----------|----------|
|   | <b>Y</b> | <b>N</b> |
| 1. Do you know where the greatest damages may occur in your area?   | Y        |          |
| 2. Do you know whether your critical facilities will be operational after a hazard event?   | Y        |          |
| 3. Is there enough data to determine which assets are subject to the greatest potential damages?  | Y        |          |
| 4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards?   | Y        |          |
| 5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? | Y        |          |
| 6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence?   |          | N        |
| 7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?   |          | N        |



# Critical Facilities and Hazard Potential for Hazards Affecting the Entire Community (Hurricanes/Tropical Storms, Tornadoes, Thunderstorms/Lightning, Extreme Heat, and Drought)

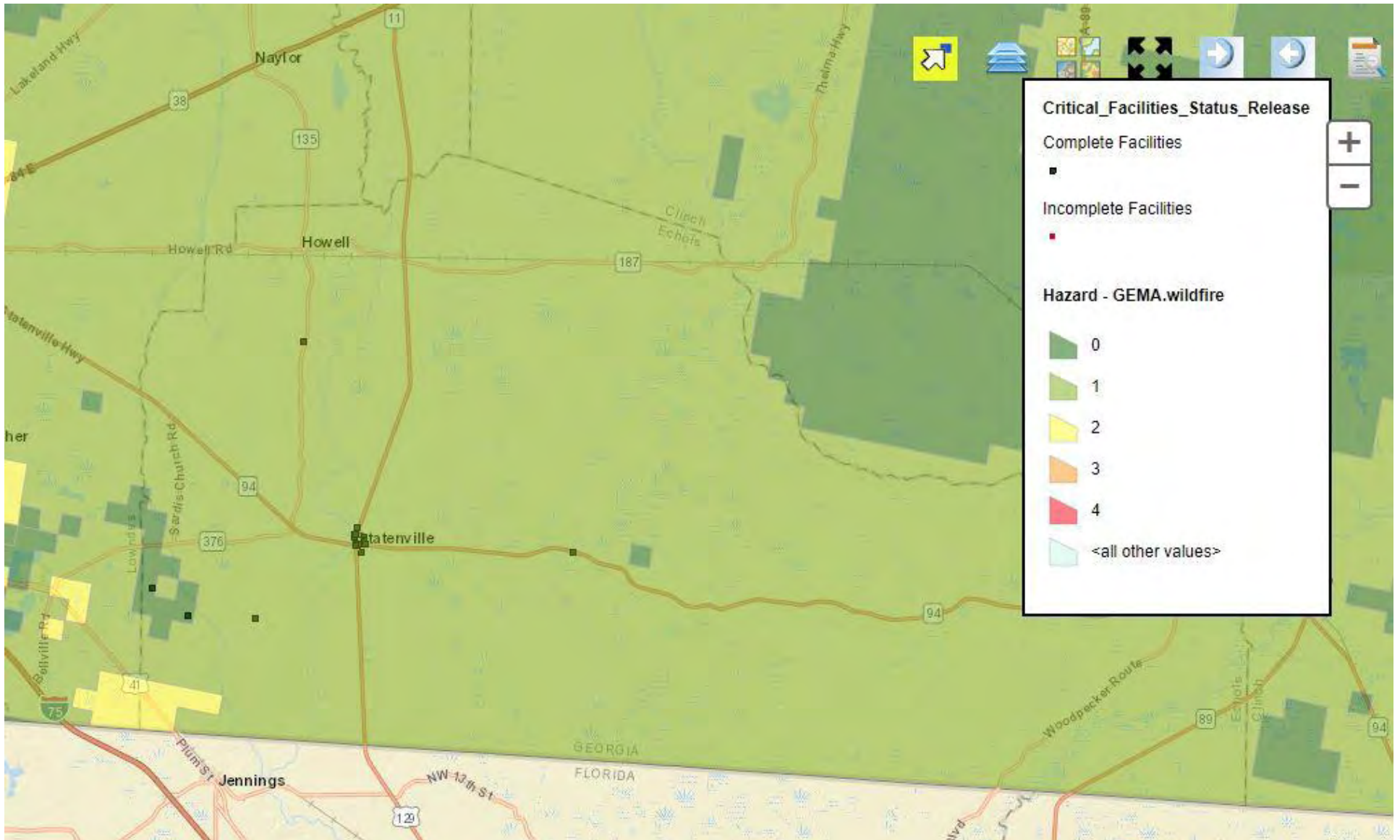


# Statenville Area Detail – Critical Facilities

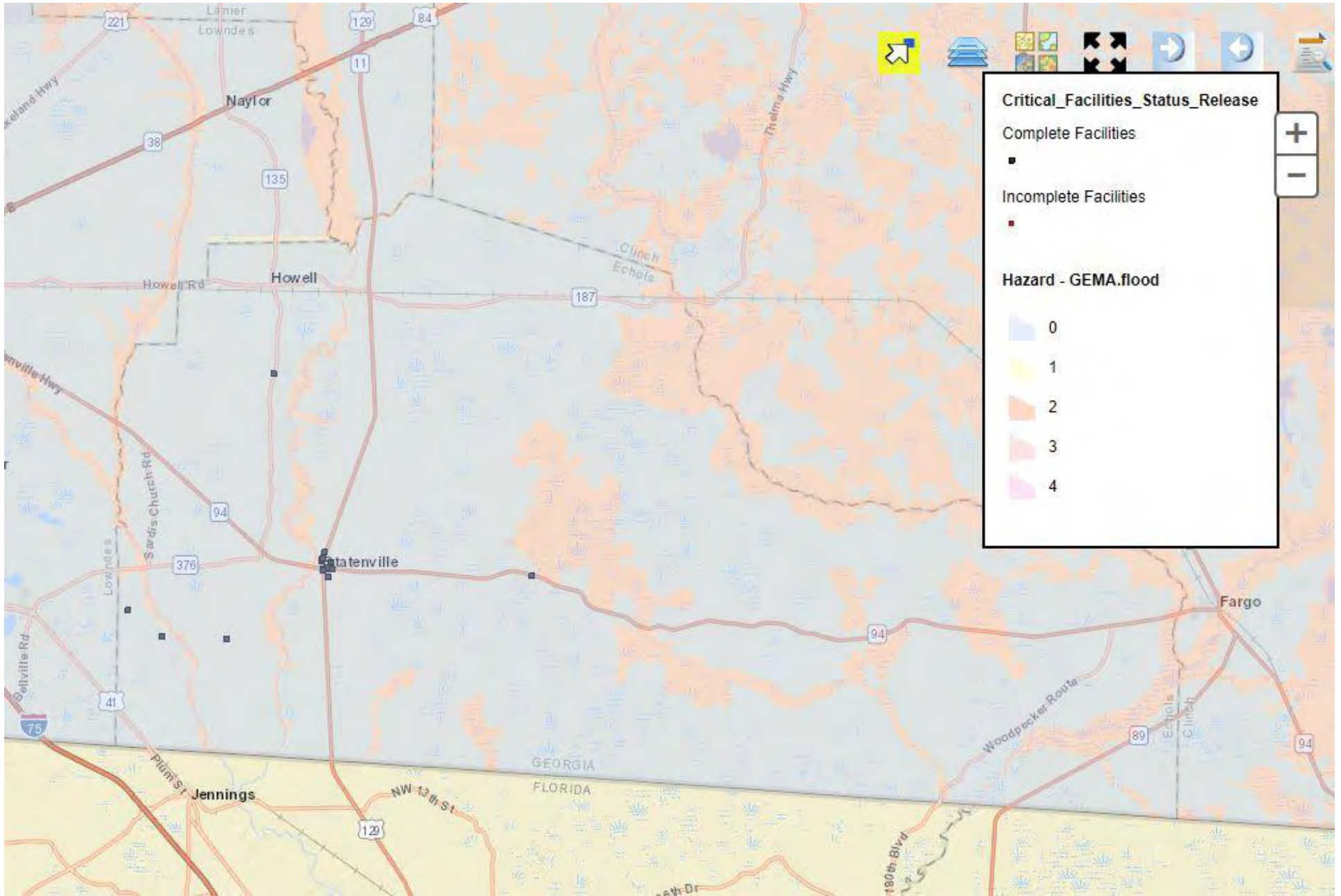




# Critical Facilities and Wildfire Hazard Areas (GMIS data)



# Critical Facilities and Flood Zones

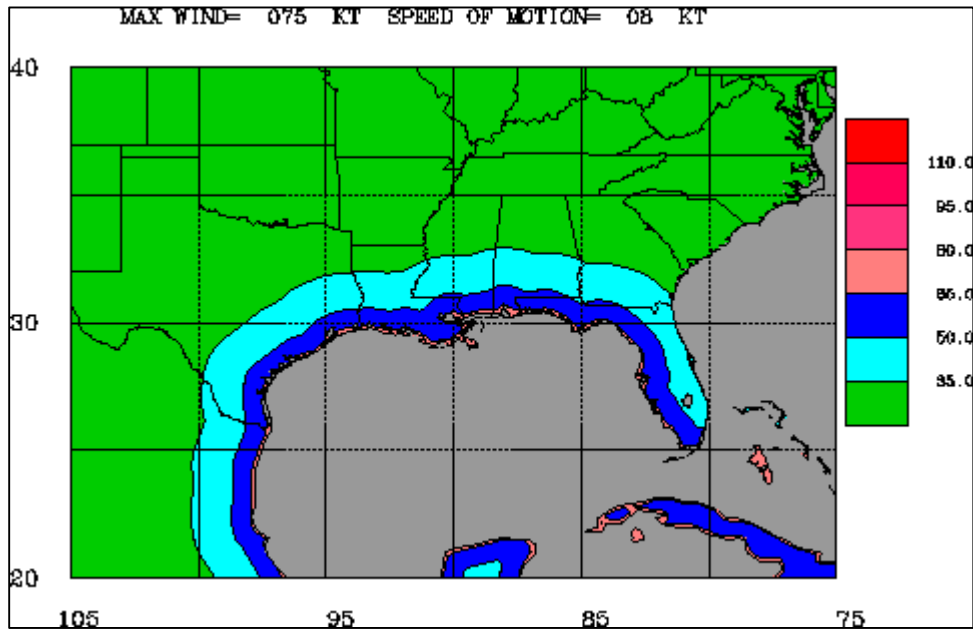


## Examples of the Maximum Envelope of Wind

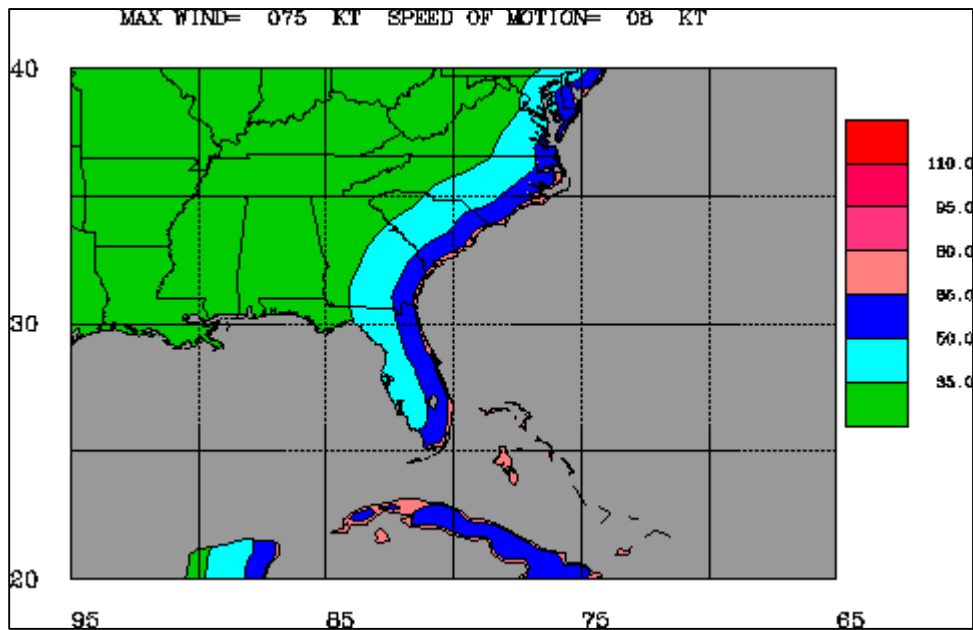
(Source: NOAA. <http://www.nhc.noaa.gov/aboutmeow.shtml>)

Mild case (Category 1, 8 knots forward motion)

### *Gulf Coast Region*



### *East Coast Region*

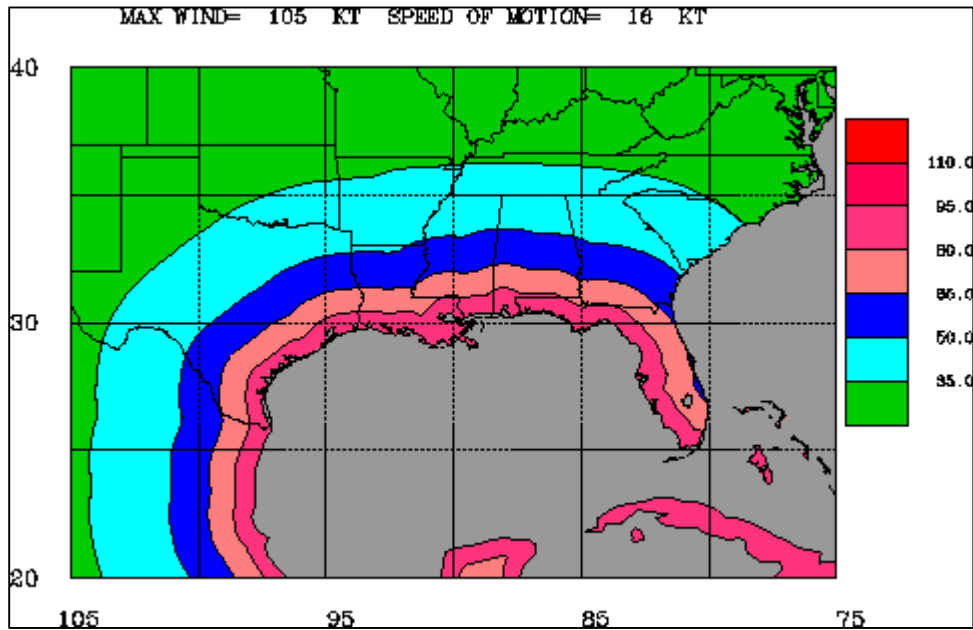


## Examples of the Maximum Envelope of Wind

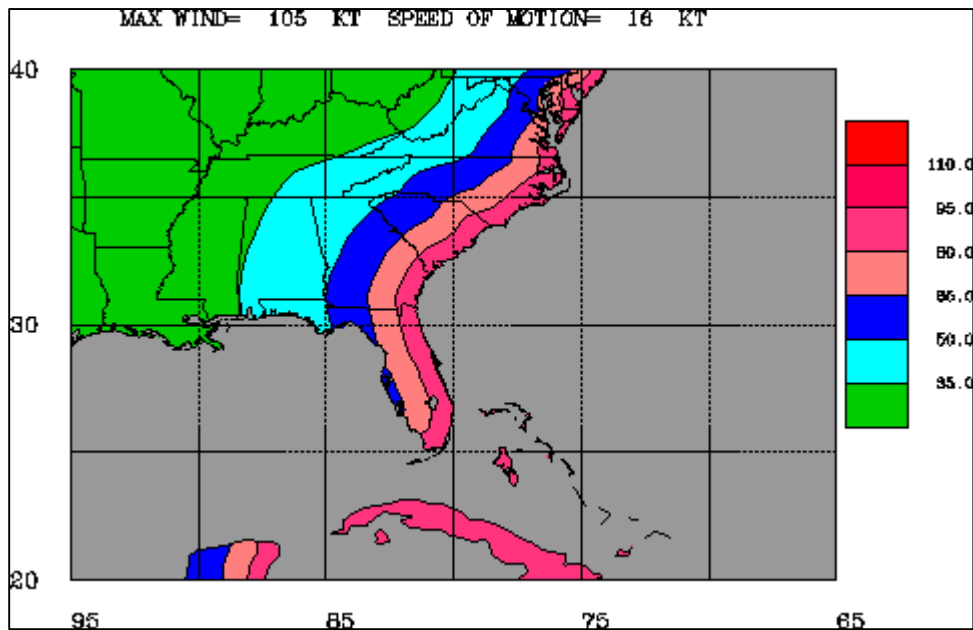
(Source: NOAA. <http://www.nhc.noaa.gov/aboutmeow.shtml>)

Mid-range case (Category 3, 16 knots forward motion)

### *Gulf Coast Region*



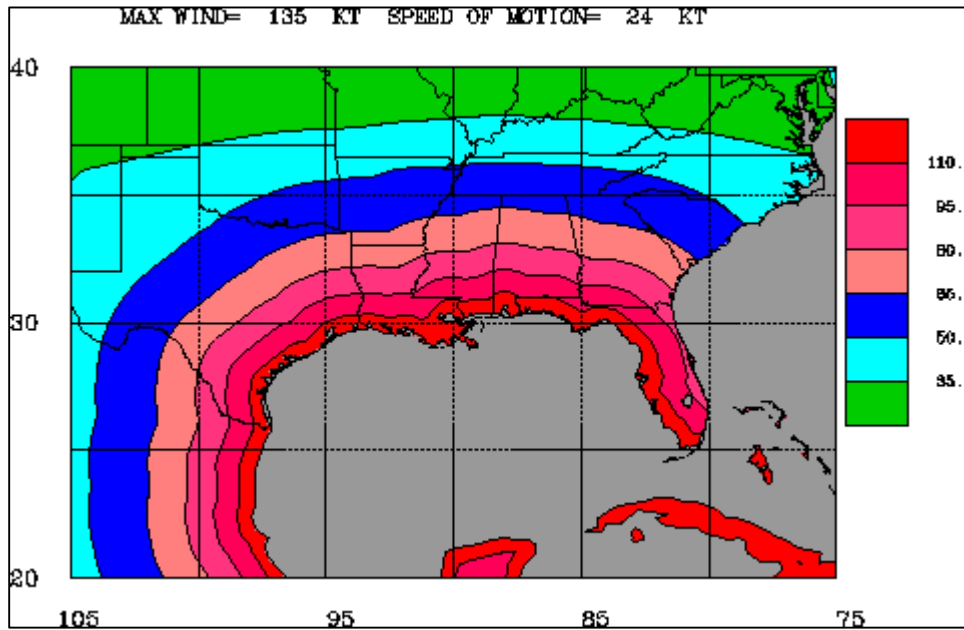
### *East Coast Region*



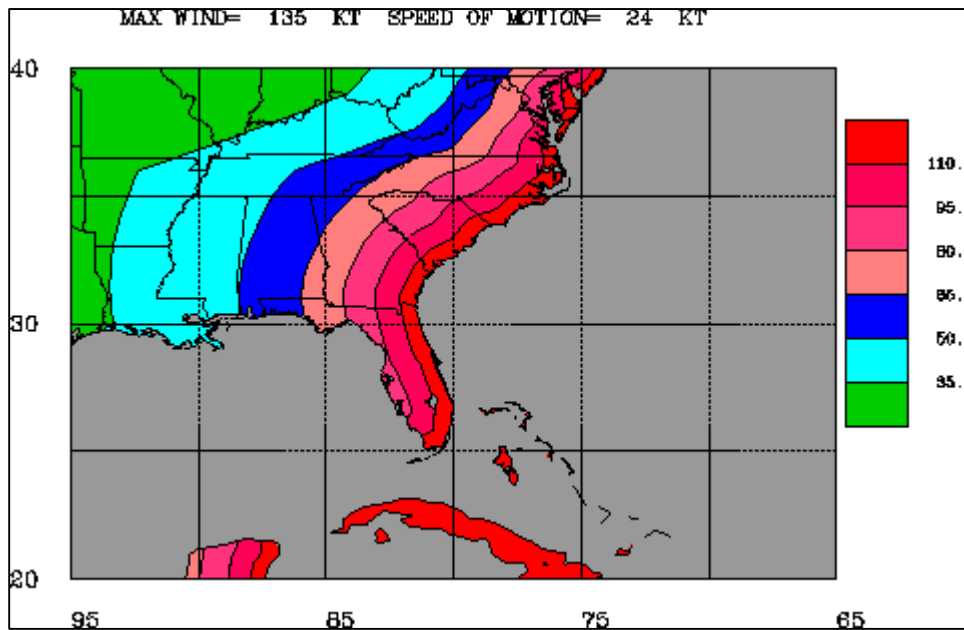
**Examples of the Maximum Envelope of Wind**  
(Source: NOAA. <http://www.nhc.noaa.gov/aboutmeow.shtml>)

Worst case (Category 5, 24 knots forward motion)

*Gulf Coast Region*



*East Coast Region*





- 5 EF5
- 4 EF4
- 3 EF3
- 2 EF2
- 1 EF1
- 0 EF0



# FEMA Flood Maps

Source: ArcGIS Online (FEMA data)

<https://fema.maps.arcgis.com/home/webmap/viewer.html?webmap=cbe088e7c8704464aa0fc34eb99e7f30>

## West Echols County



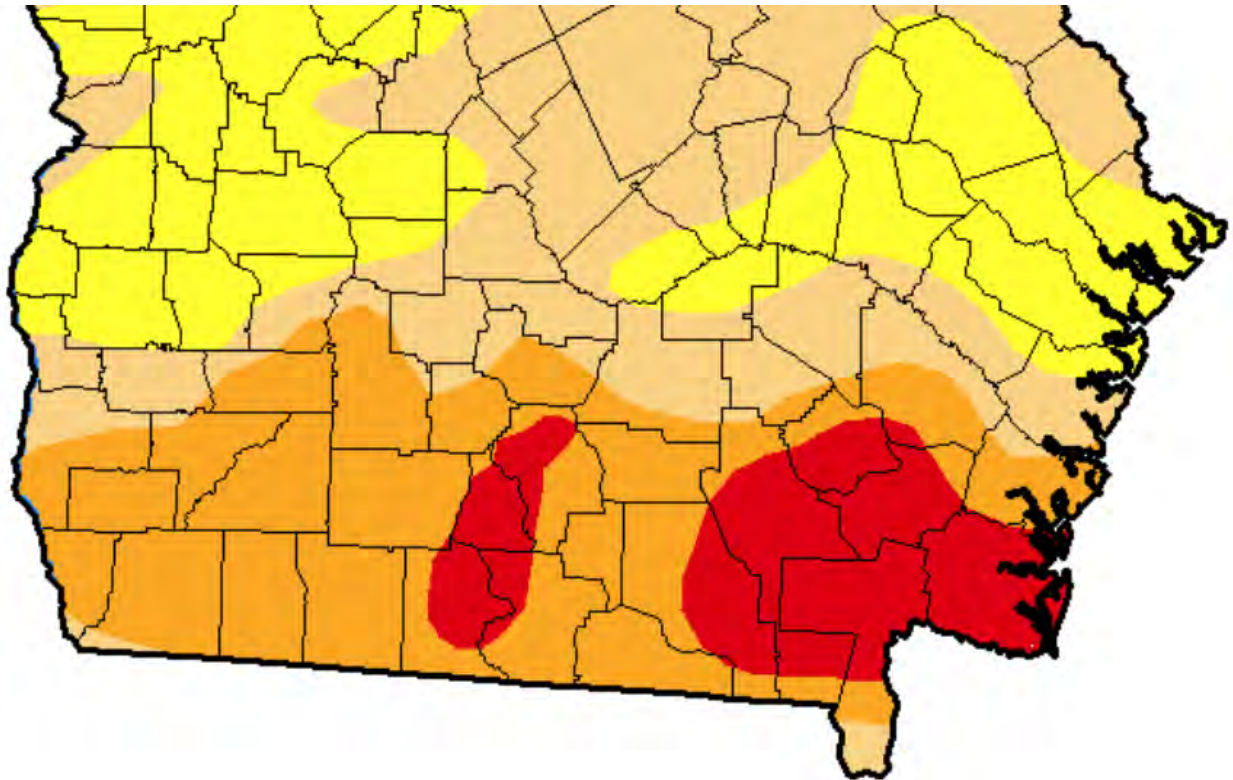


## Drought

The example map below, from the week of May 16, 2017, shows moderate to extreme drought conditions throughout southern Georgia.

Source: U.S. Drought Monitor

(<http://droughtmonitor.unl.edu/Maps/ComparisonSlider.aspx>)



## Drought Classification

None     D0 (Abnormally Dry)     D1 (Moderate Drought)

D2 (Severe Drought)     D3 (Extreme Drought)     D4 (Exceptional Drought)

# **Appendix B**

## QuickFacts

selected: Echols County , Georgia

QuickFacts provides statistics for all states and counties, and for cities and towns with a population of 5,000 or more .

### Table

| All Topics   | Echols County , Georgia   |
|--|---|
| Population estimates, July 1, 2016, (V2016)  | 3,962   |
|  PEOPLE |   |
| <b>Population</b>  |   |
| Population estimates, July 1, 2016, (V2016)  | 3,962   |
| Population estimates base, April 1, 2010, (V2016)  | 4,034   |
| Population, percent change - April 1, 2010 (estimates base) to July 1, 2016, (V2016)     | -1.8%   |
| Population, Census, April 1, 2010  | 4,034   |
| <b>Age and Sex</b>   |   |
| Persons under 5 years, percent, July 1, 2016, (V2016)                                    | 7.6%  |
| Persons under 5 years, percent, April 1, 2010  | 8.9%  |
| Persons under 18 years, percent, July 1, 2016, (V2016)                                   | 27.0%   |
| Persons under 18 years, percent, April 1, 2010   | 29.3%   |
| Persons 65 years and over, percent, July 1, 2016, (V2016)                                | 11.8%   |
| Persons 65 years and over, percent, April 1, 2010  | 9.9%  |
| Female persons, percent, July 1, 2016, (V2016)   | 49.4%   |
| Female persons, percent, April 1, 2010   | 49.4%   |
| <b>Race and Hispanic Origin</b>  |   |
| White alone, percent, July 1, 2016, (V2016) (a)  | 89.2%   |
| Black or African American alone, percent, July 1, 2016, (V2016) (a)                      | 5.2%  |
| American Indian and Alaska Native alone, percent, July 1, 2016, (V2016) (a)              | 2.8%  |
| Asian alone, percent, July 1, 2016, (V2016) (a)  | 0.8%  |
| Native Hawaiian and Other Pacific Islander alone, percent, July 1, 2016, (V2016) (a)     | 0.2%  |
| Two or More Races, percent, July 1, 2016, (V2016)  | 1.8%  |
| Hispanic or Latino, percent, July 1, 2016, (V2016) (b)                                   | 29.6%   |
| White alone, not Hispanic or Latino, percent, July 1, 2016, (V2016)                      | 62.3%   |
| <b>Population Characteristics</b>  |   |
| Veterans, 2011-2015  | 213   |
| Foreign born persons, percent, 2011-2015   | 13.5%   |
| <b>Housing</b>   |   |
| Housing units, July 1, 2016, (V2016)   | 1,528   |
| Housing units, April 1, 2010   | 1,558   |
| Owner-occupied housing unit rate, 2011-2015  | 65.8%   |
| Median value of owner-occupied housing units, 2011-2015                                  | \$67,600  |
| Median selected monthly owner costs -with a mortgage, 2011-2015                          | \$922   |
| Median selected monthly owner costs -without a mortgage, 2011-2015                       | \$313   |
| Median gross rent, 2011-2015   | \$612   |
| Building permits, 2016   | 3   |
| <b>Families &amp; Living Arrangements</b>  |   |
| Households, 2011-2015  | 1,416   |
| Persons per household, 2011-2015   | 2.86  |
| Living in same house 1 year ago, percent of persons age 1 year+, 2011-2015               | 83.6%   |
| Language other than English spoken at home, percent of persons age 5 years+, 2011-2015   | 23.2%   |
| <b>Education</b>   |   |
| High school graduate or higher, percent of persons age 25 years+, 2011-2015              | 71.5%   |
| Bachelor's degree or higher, percent of persons age 25 years+, 2011-2015                 | 8.3%  |
| <b>Health</b>  |   |
| With a disability, under age 65 years, percent, 2011-2015                                | 9.0%  |
| Persons without health insurance, under age 65 years, percent                            |  27.6% |
| <b>Economy</b>   |   |
| In civilian labor force, total, percent of population age 16 years+, 2011-2015           | 59.7%   |

|   |          |
|---|----------|
| In civilian labor force, female, percent of population age 16 years+, 2011-2015 | 47.1%    |
| Total accommodation and food services sales, 2012 (\$1,000) (c)                 | D        |
| Total health care and social assistance receipts/revenue, 2012 (\$1,000) (c)    | D        |
| Total manufacturers shipments, 2012 (\$1,000) (c)                               | 0        |
| Total merchant wholesaler sales, 2012 (\$1,000) (c)                             | D        |
| Total retail sales, 2012 (\$1,000) (c)  | D        |
| Total retail sales per capita, 2012 (c)   | NA       |
| Transportation  |          |
| Mean travel time to work (minutes), workers age 16 years+, 2011-2015            | 25.2     |
| Income & Poverty  |          |
| Median household income (in 2015 dollars), 2011-2015                            | \$32,959 |
| Per capita income in past 12 months (in 2015 dollars), 2011-2015                | \$16,954 |
| Persons in poverty, percent   | ▲ 25.9%  |


## BUSINESSES

|   |       |
|---|-------|
| Businesses                                  |       |
| Total employer establishments, 2015         | 27    |
| Total employment, 2015                      | 126   |
| Total annual payroll, 2015 (\$1,000)        | 3,795 |
| Total employment, percent change, 2014-2015 | 16.7% |
| Total nonemployer establishments, 2015      | 175   |
| All firms, 2012                             | 204   |
| Men-owned firms, 2012                       | 116   |
| Women-owned firms, 2012                     | 51    |
| Minority-owned firms, 2012                  | 58    |
| Nonminority-owned firms, 2012               | 143   |
| Veteran-owned firms, 2012                   | 27    |
| Nonveteran-owned firms, 2012                | 151   |

## GEOGRAPHY

|                                  |        |
|----------------------------------|--------|
| Geography                        |        |
| Population per square mile, 2010 | 9.7    |
| Land area in square miles, 2010  | 414.89 |
| FIPS Code                        | 13101  |

#### Value Notes

 This geographic level of poverty and health estimates is not comparable to other geographic levels of these estimates

Some estimates presented here come from sample data, and thus have sampling errors that may render some apparent differences between geographies statistically indistinguishable. Click the Quick Info left of each row in TABLE view to learn about sampling error.

The vintage year (e.g., V2016) refers to the final year of the series (2010 thru 2016). Different vintage years of estimates are not comparable.

#### Fact Notes

- (a) Includes persons reporting only one race
- (b) Hispanics may be of any race, so also are included in applicable race categories
- (c) Economic Census - Puerto Rico data are not comparable to U.S. Economic Census data

#### Value Flags

- Either no or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval of an open ended distribution.
- D Suppressed to avoid disclosure of confidential information
- F Fewer than 25 firms
- FN Footnote on this item in place of data
- NA Not available
- S Suppressed; does not meet publication standards
- X Not applicable
- Z Value greater than zero but less than half unit of measure shown

QuickFacts data are derived from: Population Estimates, American Community Survey, Census of Population and Housing, Current Population Survey, Small Area Health Insurance Estimates, Small Area Poverty Estimates, State and County Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Economic Census, Survey of Business Owners, Building Permits.





# Department of Revenue

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|  |   |
|--|---|
| GEORGIA DEPARTMENT OF REVENUE<br>Local Government Services Division<br>County Digest Section | 2016 TAX DIGEST CONSOLIDATED<br>SUMMARY |
|--|---|

County: ECHOLS County #: 050 Tax District: ECHOLS COUNTY

Dist #: 00 Assessment %: 040 Tot Parcels: 1916

| RESIDENTIAL              |       |            |            | UTILITY                           |            |                  |            |
|--------------------------|-------|------------|------------|-----------------------------------|------------|------------------|------------|
| Code                     | Count | Acres      | 40% Value  | Code                              | Count      | Acres            | 40% Value  |
| R1                       | 1,073 |            | 14,757,101 | U1                                | 0          |                  | 0          |
| R3                       | 811   | 1,153.73   | 1,519,424  | U2                                | 11         | 0                | 10,111,097 |
| R4                       | 495   | 1,732.76   | 1,603,320  | U3                                | 0          | 0                | 0          |
| R5                       | 23    | 262.86     | 161,360    | U4                                | 1          | 0                | 3,221      |
| R6                       | 2,298 |            | 2,419,489  | U5                                | 0          | 0                | 0          |
| R7                       | 0     | 0          | 0          | U7                                | 0          | 0                | 0          |
| R9                       | 1     | 2          | 600        | U9                                | 0          | 0                | 0          |
| RA                       | 0     |            | 0          | UA                                | 0          |                  | 0          |
| RB                       | 5     |            | 26,098     | UB                                | 0          |                  | 0          |
| RF                       | 0     |            | 0          | UF                                | 0          |                  | 0          |
| RI                       | 0     |            | 0          | UZ                                | 0          |                  | 0          |
| RZ                       | 0     |            | 0          |                                   |            |                  |            |
| RESIDENTIAL TRANSITIONAL |       |            |            | EXEMPT PROPERTY                   |            |                  |            |
| Code                     | Count | Acres      | 40% Value  | Code                              | Count      | 40% Value        |            |
| T1                       | 0     |            | 0          | E0                                | 0          | 0                |            |
| T3                       | 0     | 0          | 0          | E1                                | 30         | 417,213          |            |
| T4                       | 0     | 0          | 0          | E2                                | 86         | 1,141,980        |            |
|                          |       |            |            | E3                                | 3          | 6,840            |            |
| HISTORIC                 |       |            |            | E4                                | 4          | 14,400           |            |
| Code                     | Count | Acres      | 40% Value  | E5                                | 2          | 15,040           |            |
| H1                       | 0     |            | 0          | E6                                | 18         | 117,182          |            |
| H3                       | 0     | 0          | 0          | E7                                | 0          | 0                |            |
| AGRICULTURAL             |       |            |            | E8                                | 0          | 0                |            |
| Code                     | Count | Acres      | 40% Value  | E9                                | 10         | 38,969           |            |
| A1                       | 257   |            | 6,674,312  |                                   |            |                  |            |
| A3                       | 2     | 26.5       | 11,920     | <b>TOTAL</b>                      | <b>153</b> | <b>1,751,624</b> |            |
| A4                       | 87    | 838.11     | 474,120    | HOMESTEAD AND PROPERTY EXEMPTIONS |            |                  |            |
| A5                       | 156   | 124,182.35 | 24,819,240 | Code                              | Count      | M&O              | Bond       |
| A6                       | 861   |            | 1,466,432  | S1                                | 510        | 1,019,880        | 0          |
| A7                       | 0     | 0          | 0          | SC                                | 13         | 26,000           | 0          |
| A9                       | 0     | 0          | 0          | S2                                | 0          | 0                | 0          |
| AA                       | 0     |            | 0          | S3                                | 3          | 6,000            | 0          |
| AB                       | 0     |            | 0          | S4                                | 111        | 444,000          | 0          |
| AF                       | 9     |            | 7,531,268  | S5                                | 6          | 175,448          | 0          |
| AI                       | 6     |            | 2,266,720  | SD                                | 1          | 45,459           | 0          |
| AZ                       | 1     |            | 900        | SS                                | 0          | 0                | 0          |
| PREFERENTIAL             |       |            |            | SE                                | 0          | 0                | 0          |
| Code                     | Count | Acres      | 40% Value  | SG                                | 0          | 0                | 0          |

|    |   |          |         |    |   |         |   |
|----|---|----------|---------|----|---|---------|---|
| P3 | 0 | 0        | 0       | S6 | 0 | 0       | 0 |
| P4 | 2 | 27.85    | 13,800  | S7 | 0 | 0       | 0 |
| P5 | 5 | 2,400.86 | 946,920 | S8 | 0 | 0       | 0 |
| P6 | 4 |          | 3,840   | S9 | 0 | 0       | 0 |
| P7 | 0 | 0        | 0       | SF | 0 | 0       | 0 |
| P9 | 0 | 0        | 0       | SA | 7 | 241,140 | 0 |

**CONSERVATION USE**

| Code | Count | Acres     | 40% Value  | SB |     |            |   |
|------|-------|-----------|------------|----|-----|------------|---|
| V3   | 2     | 59.41     | 55,120     | SP | 5   | 13,546     | 0 |
| V4   | 54    | 996.23    | 520,440    | SH | 0   | 0          | 0 |
| V5   | 271   | 42,046.54 | 18,434,040 | ST | 0   | 0          | 0 |
| V6   | 1     |           | 168        | SV | 327 | 10,147,637 | 0 |
|      |       |           |            | SJ | 53  | 5,786,531  | 0 |

**BROWNFIELD PROPERTY**

| Code | Count | Acres | 40% Value | SW |   |   |   |
|------|-------|-------|-----------|----|---|---|---|
| B1   | 0     |       | 0         | SX | 0 | 0 | 0 |
| B3   | 0     | 0     | 0         | SN | 0 | 0 | 0 |
| B4   | 0     | 0     | 0         |    |   |   |   |
| B5   | 0     | 0     | 0         |    |   |   |   |
| B6   | 0     |       | 0         |    |   |   |   |

DO NOT USE CODES L1-L9 ON STATE SHEET

**FOREST LAND CONSERVATION USE**

| Code | Count | Acres     | 40% Value  | L1 |   |   |   |
|------|-------|-----------|------------|----|---|---|---|
| J3   | 0     | 0         | 0          | L2 | 0 | 0 | 0 |
| J4   | 0     | 0         | 0          | L3 | 0 | 0 | 0 |
| J5   | 53    | 89,619.46 | 21,942,692 | L4 | 0 | 0 | 0 |
| J9   | 0     | 0         | 0          | L5 | 0 | 0 | 0 |
|      |       |           |            | L6 | 0 | 0 | 0 |
|      |       |           |            | L7 | 0 | 0 | 0 |
|      |       |           |            | L8 | 0 | 0 | 0 |
|      |       |           |            | L9 | 0 | 0 | 0 |

**FLPA FAIR MARKET ASSMT**

| Code  | Count | Acres     | 40% Value  | TOTAL |       |            |   |
|-------|-------|-----------|------------|-------|-------|------------|---|
| F3    | 0     | 0         | 0          |       | 1,036 | 17,905,641 | 0 |
| F4    | 0     | 0         | 0          |       |       |            |   |
| F5    | 53    | 89,619.46 | 23,198,677 |       |       |            |   |
| F9    | 0     | 0         | 0          |       |       |            |   |
| Total | 53    | 89,619.46 | 23,198,677 |       |       |            |   |

**SUMMARY**

| Code                      | Count | Acres      | 40% Value   |
|---------------------------|-------|------------|-------------|
| Residential               | 4,706 | 3,151.35   | 20,487,392  |
| Residential Transitional  | 0     | 0          | 0           |
| Historical                | 0     | 0          | 0           |
| Agricultural Preferential | 1,379 | 125,046.96 | 43,244,912  |
| Conservation Use          | 328   | 43,102.18  | 19,009,768  |
| Brownfield Property       | 0     | 0          | 0           |
| Forest Land Cons Use      | 53    | 89,619.46  | 21,942,692  |
| Environmentally Sensitive | 0     | 0          | 0           |
| Commercial Industrial     | 94    | 37.46      | 2,251,860   |
| Utility                   | 12    | 0          | 10,114,318  |
| Motor Vehicle             | 2,652 |            | 4,161,570   |
| Mobile Home               | 251   |            | 1,140,716   |
| Timber 100%               | 198   | 88,736     | 10,210,083  |
| Heavy Equipment           | 0     |            | 0           |
| Gross Digest              | 9,684 | 352,122.12 | 133,527,871 |
| Exemptions Bond           |       |            | 0           |
| Net Bond Digest           |       |            | 133,527,871 |
| Gross Digest              | 9,684 | 352,122.12 | 133,527,871 |
| Exemptions-M&O            |       |            | 17,905,641  |
| Net M&O Digest            |       |            | 115,622,230 |

**ENVIRONMENTALLY SENSITIVE**

| Code | Count | Acres | 40% Value |
|------|-------|-------|-----------|
| W3   | 0     | 0     | 0         |
| W4   | 0     | 0     | 0         |
| W5   | 0     | 0     | 0         |

**COMMERCIAL**

| Code | Count | Acres | 40% Value |
|------|-------|-------|-----------|
| C1   | 38    |       | 595,742   |
| C3   | 6     | 8     | 27,280    |
| C4   | 5     | 29.46 | 25,520    |
| C5   | 0     | 0     | 0         |
| C7   | 0     | 0     | 0         |
| C9   | 0     | 0     | 0         |
| CA   | 0     |       | 0         |
| CB   | 0     |       | 0         |
| CF   | 36    |       | 1,540,816 |
| CI   | 8     |       | 62,308    |
| CP   | 0     |       | 0         |
| CZ   | 1     |       | 194       |

**INDUSTRIAL**

| Code | Count | Acres | 40% Value |
|------|-------|-------|-----------|
| I1   | 0     |       | 0         |
| I3   | 0     | 0     | 0         |
| I4   | 0     | 0     | 0         |
| I5   | 0     | 0     | 0         |

|    |   |   |   | TAX LEVIED |                   |         |      |
|----|---|---|---|------------|-------------------|---------|------|
|    |   |   |   | TYPE       | ASSESSED<br>VALUE | MILLAGE | TAX  |
| I7 | 0 | 0 | 0 |            |                   |         |      |
| I9 | 0 | 0 | 0 |            |                   |         |      |
| IA | 0 |   | 0 |            |                   |         |      |
| IB | 0 |   | 0 | M & O      | 115,622,230       | .000    | 0.00 |
| IF | 0 |   | 0 | BOND       | 133,527,871       | .000    | 0.00 |
| II | 0 |   | 0 |            |                   |         |      |
| IP | 0 |   | 0 |            |                   |         |      |
| IZ | 0 |   | 0 |            |                   |         |      |

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# **Appendix C**

**3. Community Work Program**

**ECHOLS COUNTY FIVE-YEAR SHORT-TERM WORK PROGRAM  
UPDATE (2016 - 2020)**

| PROJECTS  | Goal | Estimated Cost / Resp. | Funding                        | FY | FY | FY | FY | FY |
|---|------|------------------------|--------------------------------|----|----|----|----|----|
|   |      |                        |                                | 16 | 17 | 18 | 19 | 20 |
| <b>PLANNING</b>   |      |                        |                                |    |    |    |    |    |
| Re-instate the Echols County Planning Commission to implement the Comprehensive Plan  | 1    | \$2,500/y BOCC         | General Fund                   |    |    |    | x  |    |
| <b>NATURAL AND CULTURAL RESOURCES</b>   |      |                        |                                |    |    |    |    |    |
| Seek grants and provide technical assistance to Echols County Historical Society with the development of the museum of local history              | 1    | \$500/y BOCC           | General Fund                   | x  | x  | x  | x  | x  |
| Use completed historical resource inventory to preserve properties and use to encourage visitors and tourism to further the camera ready program. | 1    | \$1,500/y BOCC         | General Fund                   | x  | x  | x  | x  | x  |
| Hire a code officer to enforce environmental ordinances   | 3,4  | \$15,000/y BOCC        | General Fund, available grants |    |    | x  | x  |    |
| <b>HOUSING</b>  |      |                        |                                |    |    |    |    |    |
| Develop a list of potential grants and funding sources for financing a housing rehabilitation program.  | 3    | (Cost \$100) BOCC      | General Fund                   | x  | x  | x  |    |    |
| Establish a housing rehabilitation program for dilapidated areas throughout the County.   | 3    | (Cost 2,500) BOCC      | General Fund                   |    |    |    | x  | x  |
| Revitalize single family housing that can be used for affordable housing through available grants and housing programs.                           | 3    | (Cost \$500,000) BOCC  | CHIP, CDBG, Enterprise Zone    |    | x  | x  |    |    |
| <b>ECONOMIC DEVELOPMENT</b>   |      |                        |                                |    |    |    |    |    |
| Create an Industrial Development Authority to serve as the public catalyst for economic development   | 2    | (Cost \$2,500) BOCC    | General Fund                   |    | x  | x  | x  |    |
| Identify available land to purchase for a public industrial park  | 2    | \$1,000 BOCC           | General Fund                   | x  | x  |    |    |    |

| PROJECTS  | Goal  | Estimated Cost / Resp.                               | Funding                             | FY | FY | FY | FY | FY |
|---|-------|--|-------------------------------------|----|----|----|----|----|
|   |       |  |                                     | 16 | 17 | 18 | 19 | 20 |
| Develop a public industrial park with infrastructure (roads, water, sanitary sewer, etc.)   | 2     | \$500,000<br>BOCC /Industrial<br>Dev. Authority      | EIP, One Georgia and USDA<br>Grants |    |    |    | x  | x  |
| Recruit new industries to place in the industrial park, and further develop and expand existing industries through financial incentives and designation of industrial park as an Opportunity Zone.  | 2     | (Cost \$5,000)<br>BOCC /Industrial<br>Dev. Authority | General Fund                        | x  | x  | x  | x  | x  |
| Continue to pursue all applicable grants, loans, and technical assistance that will help enhance the community and foster economic development, including CDBG grants.                              | 2     | (Cost \$5,000)<br>BOCC/Industrial<br>Dev. Authority  | General Fund                        | x  | x  | x  | x  | x  |
| Become a Camera Ready Community to attract visitors and businesses  | 2     | \$5,000<br>BOCC                                      | General Fund                        | x  | x  | x  | x  | x  |
| Update the County website to raise awareness and promote the County   | 2     | \$10,000<br>BOCC                                     | General Fund                        | x  | x  | x  | x  | x  |
| <b>LAND USE</b>   |       |  |                                     |    |    |    |    |    |
| Prepare and adopt a land development regulations, which assists in implementing the Echols County Comprehensive Plan, revitalizes blighted areas, and regulates subdivisions and mobile home parks. | 3,4,5 | (Cost \$5,000)<br>BOCC/SGRC                          | General Funds                       | x  | x  | x  | x  | x  |
| <b>COMMUNITY FACILITIES &amp; SERVICES</b>  |       |  |                                     |    |    |    |    |    |
| Hire 2 new deputies as needed.  | 6     | (\$60,000) BOCC                                      | COPS Hiring Grant                   |    |    | x  | x  | x  |
| Upgrade police communication devices on as need basis.  | 6     | \$15,000 - \$20,000<br>BOCC                          | JAG Grants, General Fund            | x  | x  | x  |    |    |
| Purchase for volunteer fire services (Air packs, fire service training, communication devices, Class A Pumper, one fire truck) on an as needed basis.   | 6     | (\$497,000) BOCC /<br>SGRC                           | AFG Grant                           | x  | x  | x  | x  | x  |
| Pursue funding for the upgrading of the intersection at GA 94 and State Route 135 by renovating buildings and landscaping in order to attract more businesses.                                      | 3,6   | (\$50, 000) BOCC /<br>SGRC                           | GDOT                                |    | x  | x  | x  | x  |
| Install a new kitchen and 2 new bathrooms in the Court House  | 1,6   | (\$50,000) BOCC                                      | General Fund,                       |    |    |    | x  |    |

| PROJECTS  | Goal | Estimated Cost / Resp.                              | Funding            | FY | FY | FY | FY | FY |
|---|------|---|--------------------|----|----|----|----|----|
|   |      |   |                    | 16 | 17 | 18 | 19 | 20 |
| Seek grant funds to construct a paved walking trail at Recreation Dept.   | 6    | (Cost \$1,000)<br>BOCC                              | DNR Grant          |    |    | x  | x  | x  |
| Pave and maintain Coggins Farm Road.  | 6    | (Cost TBD)<br>BOCC                                  | LMIG, General Fund | x  | x  | x  | x  | x  |
| Prepare preliminary engineering plans and cost estimates for a sanitary sewer collection/treatment system for the Statenville area, County School, and possible new industrial park.                              | 6    | \$1,000,000<br>County /Industrial<br>Dev. Authority | General Fund, CDBG |    |    | x  | x  | x  |
| Improve Road Department Shop and purchase new equipment: 2 graders, 1 side cutter, 1 dump truck   | 6    | (Cost \$500,000)<br>BOCC                            | General Fund ,GEFA |    | x  | x  | x  | x  |
| Apply to the AFG for a fire truck pumper and equipment  | 6    | \$215,000<br>BOCC/SGRC                              | AFG Grant          |    | x  | x  | x  | x  |
| Research and review ways the community can improve its fire protection services and its ISO rating, and implement those measures.   | 6    | (Cost \$7,500)<br>BOCC                              | General Fund       | x  | x  | x  |    |    |
| Investigate potential funding sources to assist the community improve its water utilities services.   | 6    | (Cost \$5,000)<br>BOCC                              | General Fund       | x  |    |    |    |    |
| Expand the existing Board of Commissioners building to add office and storage space.  | 6    | \$50,000<br>BOCC                                    | General Fund       |    |    |    |    | x  |
| Improve the intersections of Spur Road and Highway 94 and Highway 129.  | 2    | (Cost \$250,000)<br>GDOT, BOCC                      | LMIG, General Fund |    | x  | x  | x  |    |
| Create a committee to research the feasibility of providing sewer services through the County for Statenville.  | 6    | (Cost \$3,000)<br>BOCC                              | General Fund       |    |    | x  | x  | x  |
| Establish recreational programs for youth   | 6    | (Cost \$7,500)<br>BOCC                              | General Fund       |    | x  |    |    |    |
| Create a public/private partnership between the water authority and the County Commission to address water issues, and enable the County to apply for CDBG grants to improve water supply and storage capability. | 6    | Cost \$8,500)<br>BOCC                               | General Fund       | x  |    |    |    |    |



# **Community Wildfire Protection Plan**

## ***An Action Plan for Wildfire Mitigation and Conservation of Natural Resources***

### **Echols County, Georgia**

---

A Program of the Georgia Forestry Commission  
with support from the U.S. Forest Service



SEPTEMBER 12, 2012



Prepared by;  
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Georgia Forestry Commission  
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Echols County Wildfire Pre-suppression Plan

NFPA 1141 Standard for Fire Protection Infrastructure for Land Development in Suburban and Rural Areas.

## Preface

The extreme weather conditions that are conducive to wildfire disasters (usually a combination of extended drought, low relative humidity and high winds) can occur in this area of Georgia as infrequently as every 10-15 years. This is not a regular event, but as the number of homes that have been built in or adjacent to forested or wildland areas increases, it can turn a wildfire under these weather conditions into a major disaster. Wildfires move fast and can quickly overwhelm the resources of even the best equipped fire department. Advance planning can save lives, homes and businesses.

This Community Wildfire Protection Plan (CWPP) includes a locally assessed evaluation of the wildland urban interface areas of the county, looking at the critical issues regarding access to these areas, risk to properties from general issues such as building characteristics and “fire wise” practices and response from local fire fighting resources. It further incorporates a locally devised action plan to mitigate these risks and hazards through planning, education and other avenues that may become available to address the increasing threat of wildland fire. The CWPP does not obligate the county financially in any way, but instead lays a foundation for improved emergency response if and when grant funding is available to the county.

The Plan is provided at no cost to the county and can be very important for county applications for hazard mitigation grant funds through the National Fire Plan, FEMA mitigation grants and Homeland Security. Under the Healthy Forest Restoration Act (HFRA) of 2003, communities (counties) that seek grants from the federal government for hazardous fuels reduction work are required to prepare a Community Wildfire Protection Plan.

This plan will:

- Enhance public safety
- Raise public awareness of wildfire hazards and risks
- Educate homeowners on how to reduce home ignitability
- Build and improve collaboration at multiple levels

The public does not have to fall victim to this type of disaster. Homes (and communities) can be designed, built and maintained to withstand a wildfire even in the absence of fire equipment and firefighters on the scene. It takes planning and commitment at the local level before the wildfire disaster occurs and that is what the Community Wildfire Protection Plan is all about.

## I. OBJECTIVES

The mission of the following report is to set clear priorities for the implementation of wildfire mitigation in Echols County. The plan includes prioritized recommendations for the appropriate types and methods of fuel reduction and structure ignitability reduction that will protect this community and its essential infrastructure. It also includes a plan for wildfire suppression. Specifically, the plan includes community-centered actions that will:

- Educate citizens on wildfire, its risks, and ways to protect lives and properties,
- Support fire rescue and suppression entities,
- Focus on collaborative decision-making and citizen participation,
- Develop and implement effective mitigation strategies, and
- Develop and implement effective community ordinances and codes.

## II. COMMUNITY COLLABORATION

The core team convened on October 4<sup>th</sup>, 2011 to assess risks and develop the Community Wildfire Protection Plan. The group is comprised of representatives from local government, local fire authorities, and the state agency responsible for forest management. Below are the groups included in the task force:

Echols County Board of Commissioners  
Echols County Fire Dept.  
Georgia Forestry Commission

It was decided to conduct community assessments on the basis individual fire districts in the county. The Chief of the Echols County Fire Department assessed the districts and the core team reconvened on April 24<sup>th</sup>, 2012 for the purpose of completing the following:

|                        |   |
|------------------------|---|
| Risk Assessment        | Assessed wildfire hazard risks and prioritized mitigation actions.  |
| Fuels Reduction        | Identified strategies for coordinating fuels treatment projects.  |
| Structure Ignitability | Identified strategies for reducing the ignitability of structures within the Wildland interface.                          |
| Emergency Management   | Forged relationships among local government and fire districts and developed/refined a pre-suppression plan.              |
| Education and Outreach | Developed strategies for increasing citizen awareness and action and to conduct homeowner and community leader workshops. |

### III. COMMUNITY BACKGROUND AND EXISTING SITUATION

#### Background

Echols County, on Georgia's border with Florida, was carved from Clinch and Lowndes counties in 1858 and named in honor of Robert M. Echols, who commanded troops in the Mexican War (1846-48) after serving a total of twenty years in the state legislature. Before white settlers arrived, the inhabitants of the area were Seminole Indians. Sparsely populated, Echols County contains no incorporated towns.

The county seat, Statenville, was first called "Troublesome" after nearby Troublesome Creek. The name was changed when the town was chartered in 1859. There are some stories that its new name was a misreading of "Statesville," which was subsequently used on some maps, but locals believe that the intent was to name it for James W. Staten, a local farmer and store owner. Two wooden courthouses were used from 1859 until 1897, when the second burned down. The business of government was then carried on in rented halls until 1899. The current courthouse was built in 1956. In 1958 the state legislature redrew the city's boundaries to include only the courthouse square; this action resulted in the city's having no residents, and in 1965 Statenville voters turned down the opportunity for a new city charter. Echols County is one of only three in Georgia whose county seat is unincorporated. In addition to Statenville, the county contains the unchartered communities of Fruitland, Haylow, Howell, Mayday, Needmore, Potter, and Tarver.

More than 90 percent of Echols County land is pine forest, most of it privately owned. Historically the economy has been based on agriculture and forestry.

The history of Echols County is dominated by the presence of the Langdale Forest Products Company, founded in 1894 by John Wesley Langdale. Langdale started the business by leasing acres of turpentine timber, and with his sons Billy, Harley, and Noah, he built it into one of the largest wood and wood by-product manufacturers in America. The company owns much of the land in Echols County, although it is based in Valdosta (Lowndes County).

In 1910 the Statenville Railway connected Statenville to Haylow, in the northern part of the county, but the railroad ceased operations in 1924. Despite the county's isolation, residents have joined together to form a unified school system. Between 1898 and 1945, there were seventy-seven schools scattered throughout the county, many of them open just six months a year. School-bus transportation was first provided in 1917, enabling some of the schools to consolidate their operations, and by 1928 the number of schools had been reduced to fourteen. In 1931 the Echols Consolidated School, a brick building in Statenville, was built, and by 1950 all white schoolchildren in the county attended it. Black schools began consolidating in 1941, and in 1948 the Herctoma School was built for African American children. The two schools were integrated in 1970, forming the Statenville Consolidated School. Situated on the campus of the former Echols Consolidated School, the school was added to the National Register of Historic Places in 1988.

According to the 2010 U.S. census, the population of Echols County is 4,034, an increase from the 2000 population of 3,754.

*Elizabeth B. Cooksey, Savannah, Courtesy New Georgia Encyclopedia*

## **Existing Situation**

Echols County located deep in south central Georgia, is over 91% forested, despite an agricultural presence scattered in the southwestern corner of the county. While there are large blocks of industrial woodlands in the eastern and central sections of the county, there are homes and communities scattered throughout the western third of the county. The risks and hazards from the wildland urban interface are fairly general and substantial throughout the county.

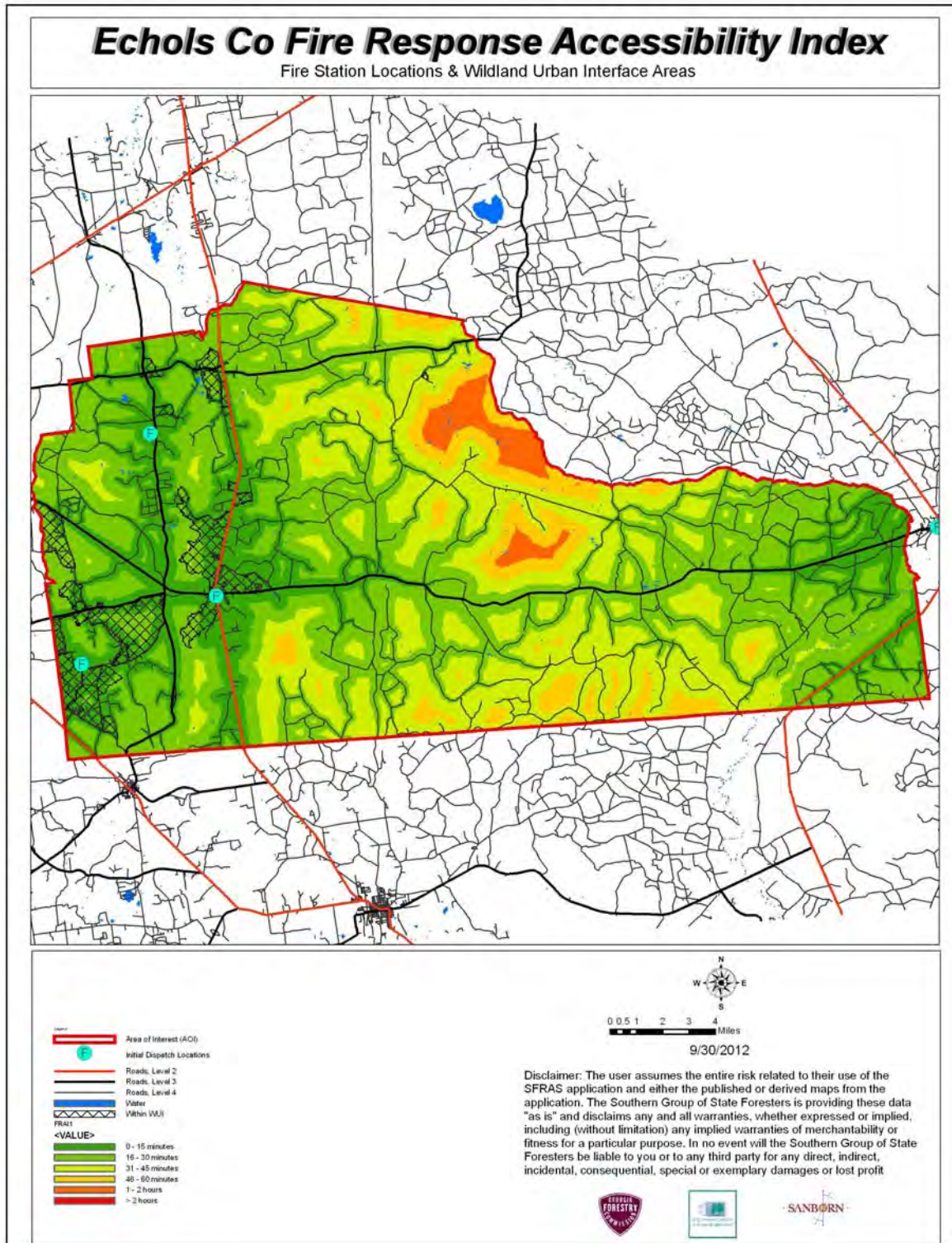
Echols County is protected by three organized volunteer fire departments located in Statenville, Chapel Station and in the Howell community. There is also a mutual aid agreement with the Fargo VFD located in Clinch County to cover the far eastern end of the county. The Georgia Forestry Commission maintains a county protection unit located just north of Statenville on US Hwy 129 to respond to wildfires throughout the county. The community of Statenville is serviced by a pressurized water system with hydrants available.

Over the past 55 years, Echols County has averaged 51 reported wildland fires per year, burning an average of 248 acres per year. Using more recent figures over the past 20 years, this number has dropped somewhat to an average of 43 fires per year burning on average 189 acres annually. While the number of fires during this later period remains rather level throughout the year, the acres burned show a significant increase during the summer months. There is a significant decrease in the acres burned during the remainder of the year, particularly during the fall months.

Over the past 20 years, the leading causes of these fires, was arson and debris burning causing 33% and 23% respectively of the fires and 25% and 29% respectively of the acres burned. Over the past six years records show that over 63% of the debris fires originated from residential burning.

Georgia Forestry Commission Wildfire Records show that in the past nine years, seven homes damaged by wildfire in Echols County resulting in estimated loss of \$149,150 along with six outbuildings valued at \$12,200. Additionally three pieces of mechanized equipment valued at \$100,140 were lost. This is a significant loss of non timber property attributed to wildfires in Echols County.

## IV. COMMUNITY BASE MAP



## V. COMMUNITY WILDFIRE RISK ASSESSMENT

### The Wildland-Urban Interface

There are many definitions of the Wildland-Urban Interface (WUI), however from a fire management perspective it is commonly defined as an area where structures and other human development meet or intermingles with undeveloped wildland or vegetative fuels. As fire is dependent on a certain set of conditions, the National Wildfire Coordinating Group has defined the wildland-urban interface as a set of conditions that exists in or near areas of wildland fuels, regardless of ownership. This set of conditions includes type of vegetation, building construction, accessibility, lot size, topography and other factors such as weather and humidity. When these conditions are present in certain combinations, they make some communities more vulnerable to wildfire damage than others. This “set of conditions” method is perhaps the best way to define wildland-urban interface areas when planning for wildfire prevention, mitigation, and protection activities.

There are three major categories of wildland-urban interface. Depending on the set of conditions present, any of these areas may be at risk from wildfire. A wildfire risk assessment can determine the level of risk.

1. **“Boundary” wildland-urban interface** is characterized by areas of development where homes, especially new subdivisions, press against public and private wildlands, such as private or commercial forest land or public forests or parks. This is the classic type of wildland-urban interface, with a clearly defined boundary between the suburban fringe and the rural countryside.
2. **“Intermix” wildland-urban interface** areas are places where improved property and/or structures are scattered and interspersed in wildland areas. These may be isolated rural homes or an area that is just beginning to go through the transition from rural to urban land use.
3. **“Island” wildland-urban interface**, also called occluded interface, are areas of wildland within predominately urban or suburban areas. As cities or subdivisions grow, islands of undeveloped land may remain, creating remnant forests. Sometimes these remnants exist as parks, or as land that cannot be developed due to site limitations, such as wetlands.

(courtesy *Fire Ecology and Wildfire Mitigation in Florida* 2004)



## **Wildland Urban Interface Hazards**

Firefighters in the wildland urban interface may encounter hazards other than the fire itself, such as hazardous materials, utility lines and poor access.

### **Hazardous Materials**

- Common chemicals used around the home may be a direct hazard to firefighters from a flammability, explosion potential and/or vapors or off gassing. Such chemicals include paint, varnish and other flammable liquids, fertilizer, pesticides, cleansers, aerosol cans, fireworks, batteries and ammunition. In addition, some common household products such as plastics may give off very toxic fumes when they burn. Stay out of smoke from burning structures and any unknown sources such as trash piles.

### **Illicit Activities**

- Marijuana plantations or drug production labs may be found in the wildland urban interface areas. Extremely hazardous materials such as propane tanks and flammable/toxic chemicals may be encountered.

### **Propane Tanks**

- Both large (household size) and small (gas grill size) liquefied propane gas (LPG) tanks can present hazards to firefighters, including explosion. See the “LPG Tank Hazards” discussion for details

### **Utility Lines**

- Utility Lines may be located above and below ground and may be cut or damaged by tools or equipment. Don't spray water on utility lines or boxes.

### **Septic Tanks and Fields**

- Below ground structures may not be readily apparent and may not support the weight of engines or other equipment.

### **New Construction Materials**

- Many new construction materials have comparatively low melting points and may “off-gas” extremely hazardous vapors. Plastic decking materials that resemble wood are becoming more common and may begin softening and losing structural strength at 180 degrees F, though they normally do not sustain combustion once direct flame is removed. However if they continue to burn they exhibit the characteristics of flammable liquids.

### **Pets and Livestock**

- Pets and livestock may be left when residents evacuate and will likely be highly stressed making them more inclined to bite and kick. Firefighters should not put themselves at risk to rescue pets or livestock.

### **Evacuation Occurring**

- Firefighters may be taking structural protect actions while evacuations of residents are occurring. Be very cautious of people driving erratically. Distraught residents may refuse to leave their property and firefighters may need to disengage from fighting fire to contact law enforcement officers for assistance. In most jurisdictions firefighters do not have the authority to force evacuations. Firefighters should not put themselves at risk trying to protect someone who will not evacuate!

### **Limited Access**

- Narrow one-lane roads with no turn around room, inadequate or poorly maintained bridges and culverts are frequently found in wildland urban interface areas. Access should be sized up and an evacuation plan for all emergency personnel should be developed.

The wildland fire risk assessments conducted in 2012 by the Echols County Fire Departments returned a number of communities in the moderate to high range. The risk assessment instrument used to evaluate wildfire hazards to Echols County's WUI was the Hazard and Wildfire Risk Assessment Checklist. The instrument takes into consideration accessibility, vegetation (based on fuel models), roofing assembly, building construction, and availability of fire protection resources, placement of gas and electric utilities, and additional rating factors. The following factors contributed to the wildfire hazard scores for Echols County:

- Unpaved roads and private driveways
- Narrow roads without drivable shoulders and inadequate overhead clearance
- Poor drainage in winter and sugar sand in summer on many roads
- Dead end roads without "turnarounds"
- Isolated homes and buildings
- Lack of uniform address signs
- Minimal defensible space around structures
- Homes with wooden siding
- Mobile homes without fire resistant underpinning
- Lack of pressurized or non-pressurized water systems available
- Large, adjacent areas of forest or wildlands
- Heavy fuel buildup in adjacent wildlands
- High occurrence of wildfires in the several locations
- Lack of homeowner or community organizations

## **Southern Fire Risk Assessment System Maps.**

The attached maps were generated from a computerized Geographical Information System (GIS) program developed by the Sanborn Company under contract from the Southern Group of State Foresters to model the various risks to life and property within the southeastern US. The program is known as the Southern Fire Risk Assessment System (SFRAS). It utilizes multiple layers of data developed cooperatively from the various states and the US Forest Service under the Southern Wildfire Risk Assessment (SWRA)

Wildland Urban Interface maps are developed using data from the SILVIS Lab at the University of Wisconsin at Madison. WUI is composed of both interface and intermix communities. In both interface and intermix communities, housing must meet or exceed a minimum density of one structure per 40 acres. Intermix communities are places where housing and vegetation intermingle. In intermix, wildland vegetation is continuous, more than 50 percent vegetation, in areas with more than one house per 40 acres. Interface communities are areas with housing in the vicinity of continuous vegetation. Interface areas have more than one house per 40 acres, have less than 50 percent vegetation, and are within 1.5 miles of an area (made up of one or more contiguous Census blocks) over 1,325 acres that is more than 75 percent vegetated. The minimum size limit ensures that areas surrounding small urban parks are not classified as interface WUI.

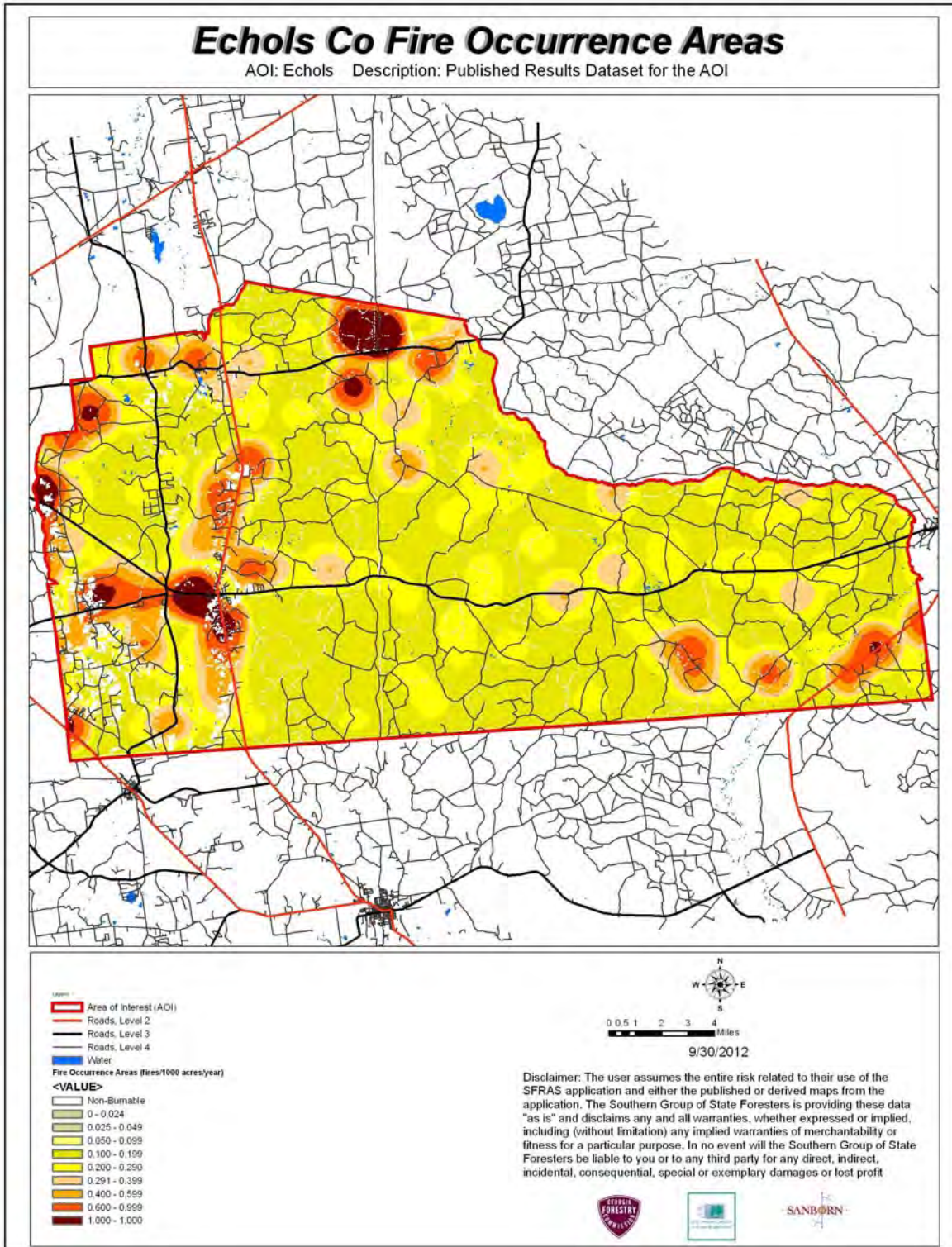
Fire Response Accessibility Index is a relative measure of how long it would take initial attack resources to drive from their station to various areas of the county. This index is derived from assigning average speeds to the various road classes in the county. For the purpose of this analysis the following speeds were assigned: 55 mph for level 1 roads, primarily interstates and four lane open highways, 50 mph for level 2 roads, primarily state and federal highways, 40 mph for level 3 roads, primarily paved two lanes collector roads and 25 mph for level 4 roads, mainly city streets and rural roads, paved and unpaved. For areas away from roads a travel speed of 3 mph is assigned as it is assumed travel will be by foot or extremely slow moving equipment.

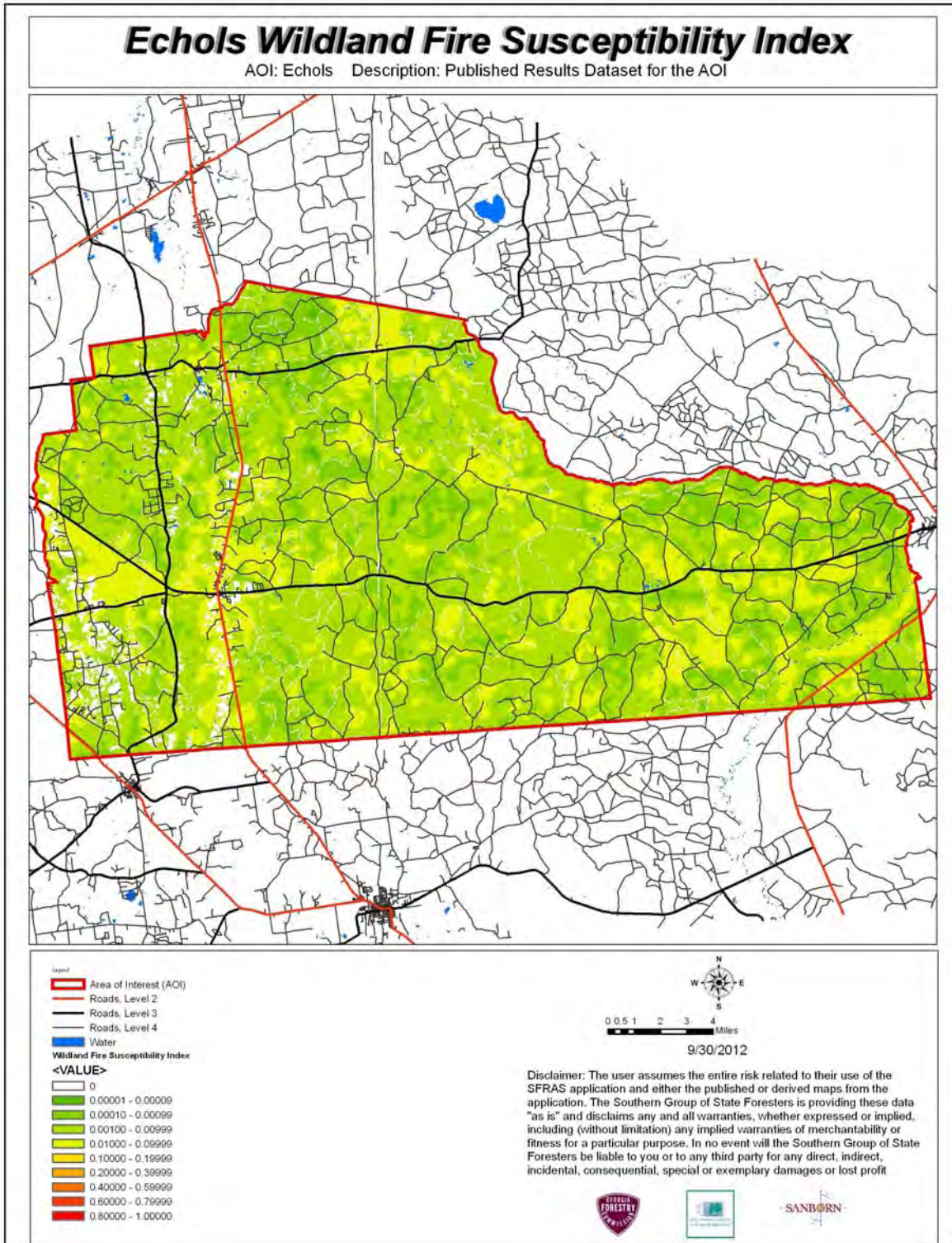
Fire Occurrence Areas maps use data from wildfire reports over the period from 1997-2002. The fire occurrence rates mapped are the probability of the number of fires occurring per 1000 acres per year base on this historic information.

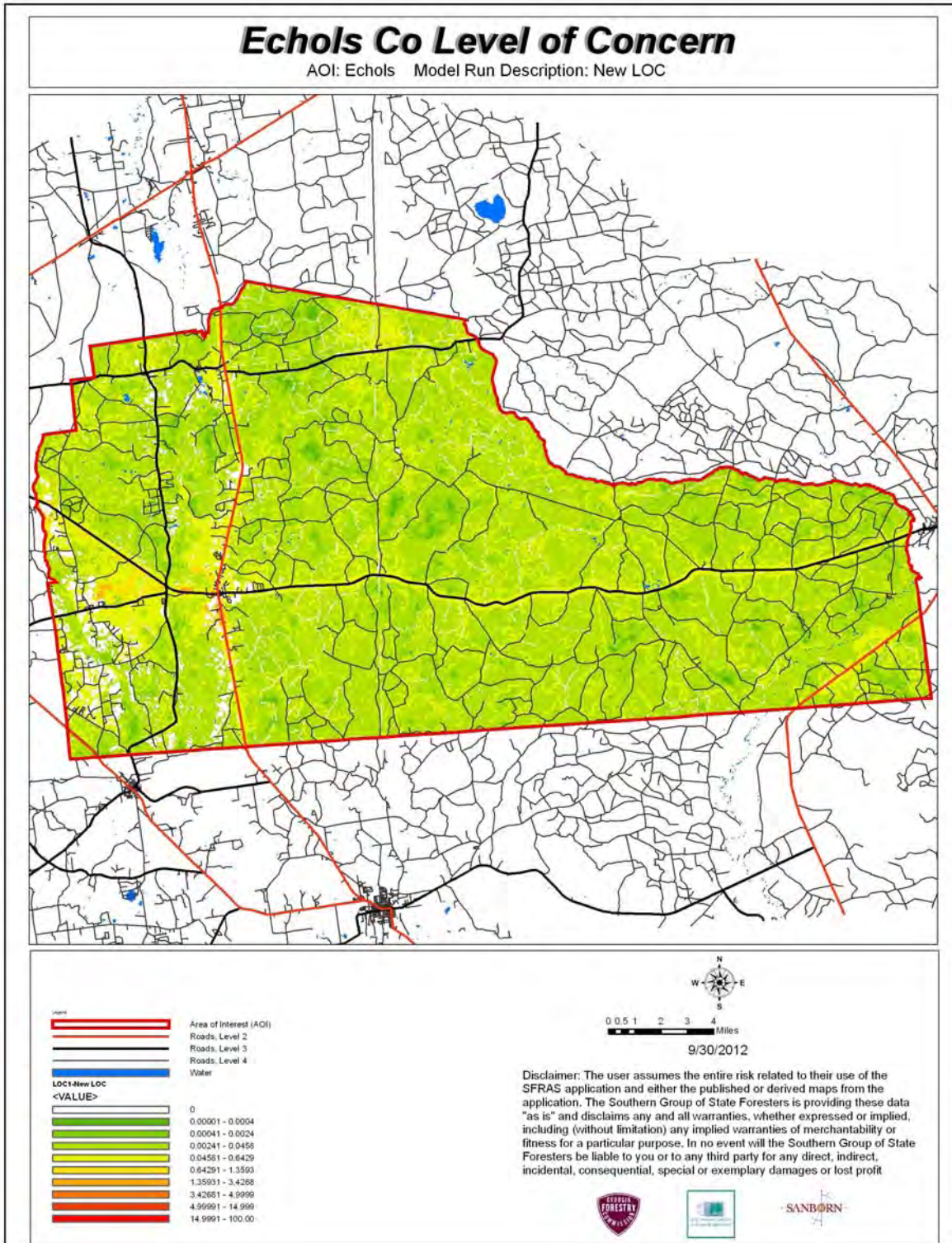
Wildland Fire Susceptibility maps show an index value between 0 and 1 and are developed by a mathematical calculation process for determining the probability of an acre burning and the expected final fire size. Many layers of data are used in developing this calculation including historic fire data, wildland fuels and rate of spread, canopy attributes (closure, height and density), weather influences, topography, soils and fire suppression effectiveness.

Level of Concern maps are a complex calculation using the Wildland Fire Susceptibility Index (previously described) and the Fire Effects Index which is calculated using data layers of transportation and infrastructure, urban interface and timber values along with suppression difficulty ratings. This provides an output categorizing the expected levels of concern from low to high.

## VI. COMMUNITY HAZARDS MAPS







## VII. PRIORITIZED MITIGATION RECOMMENDATIONS

### Executive Summary

As Southern Georgia continues to see increased growth from other areas seeking less crowded and warmer climates, new development will occur more frequently on forest and wildland areas. Echols County will have an opportunity to significantly influence the wildland fire safety of new developments. It is important that new development be planned and constructed to provide for public safety in the event of a wildland fire emergency.

Over the past 20 years, much has been learned about how and why homes burn during wildland fire emergencies. Perhaps most importantly, case histories and research have shown that even in the most severe circumstances, wildland fire disasters can be avoided. Homes can be designed, built and maintained to withstand a wildfire even in the absence of fire services on the scene. The national Firewise Communities program is a national awareness initiative to help people understand that they don't have to be victims in a wildfire emergency. The National Fire Protection Association has produced two standards for reference: NFPA 1144 Standard for Reducing Structure Ignition Hazards from Wildland Fire, 2008 Edition and NFPA 1141 Standard for Fire Protection Infrastructure for Land Development in Suburban and Rural Areas.

When new developments are built in the Wildland/Urban Interface, a number of public safety challenges may be created for the local fire services: (1) the water supply in the immediate areas may be inadequate for fire suppression; (2) if the Development is in an outlying area, there may be a longer response time for emergency services; (3) in a wildfire emergency, the access road(s) may need to simultaneously support evacuation of residents and the arrival of emergency vehicles; and (4) when wildland fire disasters strike, many structures may be involved simultaneously, quickly exceeding the capability of even the best equipped fire departments.

The following recommendations were developed by the Echols County CWPP Core team as a result of surveying and assessing fuels and structures and by conducting meetings and interviews with county officials. A priority order was determined based on which mitigation projects would best reduce the hazard of wildfire in the assessment area.



**Proposed Community Hazard and Structural Ignitability Reduction Priorities**

| Primary Protection for Community and Its Essential Infrastructure |   |  |
|---|---|--|
| Treatment Area  | Treatment Types                                 | Treatment Method(s)  |
| 1. All Structures   | Create minimum of 30-foot of defensible space** | Trim shrubs and vines to 30 feet from structures, trim overhanging limbs, replace flammable plants near homes with less flammable varieties, remove vegetation around chimneys.  |
| 2. Applicable Structures  | Reduce structural ignitability**                | Clean flammable vegetative material from roofs and gutters, store firewood appropriately, install skirting around raised structures, store water hoses for ready access, and replace pine straw and mulch around plantings with less flammable landscaping materials.  |
| 3. Community Hazards  | Utility services                                | Work with GA Power and EMC’s to encourage new underground service to rural homes. Adopt standards for safety zone around propane distribution tanks.   |
| 4. Driveway Access  | Right of Way Clearance                          | Maintain vertical and horizontal clearance for emergency equipment. See that adequate lengths of culverts are installed to allow emergency vehicle access.   |
| 5. Road Access  | Identify needed road improvements               | As roads are upgraded, widen to minimum standards with at least 50 foot diameter cul de sacs or turn arounds.  |
| 6. Codes and Ordinances   | Examine existing codes and ordinances.          | Amend and enforce existing building codes as they relate to skirting, propane tank locations, public nuisances (trash/debris on property), Property address marking standards and other relevant concerns<br><br>Review the need for subdivision and development ordinances for public safety concerns.<br><br>Enforce uniform addressing ordinance. |
| 7. Law Enforcement  | Traffic control                                 | Work with local law enforcement to better control non essential traffic during fire emergencies.   |

| <b>Proposed Community Wildland Fuel Reduction Priorities</b>         |                        |   |
|--|------------------------|---|
| Treatment Area   | Treatment Types        | Treatment Method(s)   |
| 1. Adjacent WUI Lands  | Reduce hazardous fuels | Encourage prescribed burning for private landowners and industrial timberlands particularly adjacent to residential areas.<br><br>Seek grant for mowing or prescribed burning in WUI areas.   |
| 2. Railroad Corridors  | Reduce hazardous fuels | Encourage railroads to better maintain their ROW eliminating brush and grass through herbicide and mowing. Maintain firebreaks along ROW adjacent to residential areas.   |
| 3. Existing Fire Lines   | Reduce hazardous fuels | Clean and re-harrow existing lines.   |
| <b>Proposed Improved Community Wildland Fire Response Priorities</b> |                        |   |
| 1. Water Sources   | Dry Hydrants           | Inspect, maintain and improve access to existing dry hydrants. Add signage along road to mark the hydrants.<br><br>Need improved drafting equipment, floating and turbo draft pumps.<br><br>Investigate possibility of placing compatible fittings on irrigation wells.<br><br>Update GFC Fire plan to include identified helicopter dip sites. |
| 2. Fire Stations   | Equipment              | Wildland hand tools. Lightweight Wildland PPE Gear.   |
| 3. Water Handling  | Tanker Capacity        | Investigate need for additional tankers and overhead refill tanks at rural stations.  |
| 4. Road Names  | Road Signage           | Improved Road Signage at Crossroads. "Dead End" or "No Outlet" Tags on Road Signs   |
| 5. Personnel   | Training               | Obtain Wildland Fire Suppression training for Fire Personnel.   |
| **Actions to be taken by homeowners and community stakeholders       |                        |   |

## Proposed Education and Outreach Priorities

|  |
|--|
| <p>1. Conduct “How to Have a Firewise Home” Workshop for Echols County Residents</p>   |
| <p>Set up and conduct a workshop for homeowners that teach the principles of making homes and properties safe from wildfire. Topics for discussion include defensible space, landscaping, building construction, etc. Workshop will be scheduled for evenings or weekends when most homeowners are available and advertised through local media outlets. Target local schools, community groups and local senior centers.</p> <p>Distribute materials promoting firewise practices and planning through local community and governmental meetings.</p>   |
| <p>2. Conduct “Firewise” Workshop for Community Leaders</p>  |
| <p>Arrange for GFC Firewise program to work with local community leaders and governmental officials on the importance of “Firewise Planning” in developing ordinances and codes as the county as the need arises. Identify “Communities at Risk” within the county for possible firewise community recognition.</p>  |
| <p>3. Spring Clean-up Event</p>  |
| <p>Conduct clean-up event every spring involving the Georgia Forestry Commission, Echols County Fire Department and community residents. Set up information table with educational materials and refreshments. Initiate the event with a morning briefing by GFC Firewise coordinator and local fire officials detailing plans for the day and safety precautions. Activities to include the following:</p> <ul style="list-style-type: none"> <li>• Clean flammable vegetative material from roofs and gutters</li> <li>• Trim shrubs and vines to 30 feet away from structures</li> <li>• Trim overhanging limbs</li> <li>• Clean hazardous or flammable debris from adjacent properties</li> </ul> <p>Celebrate the work with a community cookout, with Community officials, GFC and Echols County Fire Department discussing and commending the work accomplished.</p> |
| <p>4. Informational Packets</p>  |
| <p>Develop and distribute informational packets to be distributed by realtors, tax office and insurance agents. Included in the packets are the following:</p> <ul style="list-style-type: none"> <li>• Be Firewise Around Your Home</li> <li>• Firewise Guide to Landscape and Construction</li> <li>• Firewise Communities USA Bookmarks</li> </ul>  |

5. Wildfire Protection Display

Create and exhibit a display for the general public at Carrot Festival and Fourth of July. Display can be independent or combined with the Georgia Forestry Commission display.

Hold Open House at individual Fire Stations to promote Community Firewise Safety and develop community support and understanding of local fire departments and current issues.

6. Press

Invite the local news media to community “Firewise” functions for news coverage and regularly submit press releases documenting wildfire risk improvements in Echols County.

## VIII. ACTION PLAN

### Roles and Responsibilities

The following roles and responsibilities have been developed to implement the action plan:

| Role  | Responsibility   |
|---|--|
| Hazardous Fuels and Structural Ignitability Reduction |  |
| Echols County WUI Fire Council                        | Create this informal team or council comprised of residents, GFC officials, Echols County Fire Department officials, a representative from the county government along with EMA Director for Echols County. Meet periodically to review progress towards mitigation goals, appoint and delegate special activities, work with federal, state, and local officials to assess progress and develop future goals and action plans. Work with residents to implement projects and firewise activities. |
| Key Messages to focus on                              | <ol style="list-style-type: none"> <li>1 Defensible Space and Firewise Landscaping</li> <li>2 Debris Burning Safety</li> <li>3 Firewise information for homeowners</li> <li>4 Prescribed burning benefits</li> </ol>   |
| Communications objectives                             | <ol style="list-style-type: none"> <li>1 Create public awareness for fire danger and defensible space issues</li> <li>2 Identify most significant human cause fire issues</li> <li>3 Enlist public support to help prevent these causes</li> <li>4 Encourage people to employ fire prevention and defensible spaces in their communities.</li> </ol>   |
| Target Audiences                                      | <ol style="list-style-type: none"> <li>1 Homeowners</li> <li>2 Forest Landowners and users</li> <li>3 Civic Groups</li> <li>4 School Groups</li> </ol>   |
| Methods   | <ol style="list-style-type: none"> <li>1 News Releases</li> <li>2 Radio and TV PSA's for area stations and cable access channels</li> <li>3 Personal Contacts</li> <li>4 Key messages and prevention tips</li> <li>5 Visuals such as signs, brochures and posters</li> </ol>   |

|                       |  |
|-----------------------|--|
| Spring Clean-up Day   |  |
| Event Coordinator     | Coordinate day's events and schedule, catering for cookout, guest attendance, and moderate activities the day of the day of the event.   |
| Event Treasurer       | Collect funds from residents to cover food, equipment rentals, and supplies.   |
| Publicity Coordinator | Advertise event through neighborhood newsletter, letters to officials, and public service announcements (PSAs) for local media outlets. Publicize post-event through local paper and radio PSAs.   |
| Work Supervisor       | Develop volunteer labor force of community residents; develop labor/advisory force from Georgia Forestry Commission, Echols County Fire Department and Emergency Management Agency. Procure needed equipment and supplies. In cooperation with local county officials, develop safety protocol. Supervise work and monitor activities for safety the day of the event. |

### Funding Needs

The following funding is needed to implement the action plan:

| Project  | Estimated Cost | Potential Funding Source(s)   |
|--|----------------|---|
| 1. Create a minimum of 30 feet of defensible space around structures   | Varies         | Residents will supply labor and fund required work on their own properties. |
| 2. Reduce structural ignitability by cleaning flammable vegetation from roofs and gutters; appropriately storing firewood, installing skirting around raised structures, storing water hoses for ready access, replacing pine needles and mulch around plantings with less flammable material. | Varies         | Residents will supply labor and fund required work on their own properties. |
| 3. Amend codes and ordinances to provide better driveway access, increased visibility of house numbers, properly stored firewood, minimum defensible space brush clearance, required Class A roofing materials and skirting around raised structures, planned maintenance of community lots.   | No Cost        | To be adopted by county government.   |
| 4. Spring Cleanup Day  | Varies         | Community Business Donations.   |
| 5. Fuel Reduction Activities   | \$35/acre      | FEMA & USFS Grants  |

### POTENTIAL FUNDING SOURCES:

As funding is questionable in these times of tight government budgets and economic uncertainty, unconventional means should be identified whereby the need for funding can be reduced or eliminated.

#### Publications / Brochures –

- FIREWISE materials are available for cost of shipping only at [www.firewise.org](http://www.firewise.org).
- Another source of mitigation information can be found at [www.nfpa.org](http://www.nfpa.org).
- Access to reduced cost or free of charge copy services should be sought whereby publications can be reproduced.
- Free of charge public meeting areas should be identified where communities could gather to be educated regarding prevention and firewise principles.

#### Mitigation –

- Community Protection Grant:
  - USFS sponsored prescribed burn program. Communities with at risk properties that lie within 3 miles of the USFS border may apply with the GFC to have their forest land prescribed burned free of charge.
- FEMA Mitigation Policy MRR-2-08-01: through GEMA - Hazard Mitigation Grant Program (HMGP) and Pre Disaster Mitigation (PDM)
  - To provide technical and financial assistance to local governments to assist in the implementation of long term cost effective hazard mitigation measures.
  - This policy addresses wildfire mitigation for the purpose of reducing the threat to all-risk structures through creating defensible space, structural protection through the application of ignition resistant construction, and limited hazardous fuels reduction to protect life and property.
  - With a complete and registered plan (addendum to the State plan) counties can apply for pre-mitigation funding. They will also be eligible for HMGP if the county is declared under a wildfire disaster.
- GFC - Plowing and burning assistance can be provided through the Georgia Forestry Commission as a low cost option for mitigation efforts.
- Individual Homeowners –
  - In most cases of structural protection ultimately falls on the responsibility of the community and the homeowner. They will bear the cost; yet they will reap the benefit from properly implemented mitigation efforts.
  - GEMA Grant - PDM (See above)

Ultimately it is our goal to help the communities by identifying the communities threatened with a high risk to wildfire and educate those communities on methods to implement on reducing those risks.

### **Assessment Strategy**

To accurately assess progress and effectiveness for the action plan, the Echols County WUI Fire Council will implement the following:

- Annual wildfire risk assessment will be conducted to re-assess wildfire hazards and prioritize needed actions.
- Mitigation efforts that are recurring (such as mowing, burning, and clearing of defensible space) will be incorporated into an annual renewal of the original action plan.
- Mitigation efforts that could not be funded in the requested year will be incorporated into the annual renewal of the original action plan.
- Continuing educational and outreach programs will be conducted and assessed for effectiveness. Workshops will be evaluated based on attendance and post surveys that are distributed by mail 1 month and 6 months following workshop date.
- The Echols County WUI Council will publish an annual report detailing mitigation projects initiated and completed, progress for ongoing actions, funds received, funds spent, and in-kind services utilized. The report will include a “state of the community” section that critically evaluates mitigation progress and identifies areas for improvement. Recommendations will be incorporated into the annual renewal of the action plan.
- An annual survey will be distributed to residents soliciting information on individual mitigation efforts on their own property (e.g., defensible space). Responses will be tallied and reviewed at the next Echols County WUI Council meeting. Needed actions will be discussed and delegated.

This plan should become a working document that is shared by local, state, and federal agencies that will use it to accomplish common goals. An agreed-upon schedule for meeting to review accomplishments, solve problems, and plan for the future should extend beyond the scope of this plan. Without this follow up this plan will have limited value



GEORGIA FORESTRY  
COMMISSION



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# **Appendix D**

Echols County  
HAZARD FREQUENCY TABLE

| Hazard                      | Number of Events in Historic Record | Number of Years in Historic Record | Number of Events in Past 10 Years | Number of Events in Past 20 Years | Number of Events in Past 50 Years | Historic Recurrence Interval (years) | Historic Frequency % chance/year | Past 10 Year Record Frequency Per Year | Past 20 Year Record Frequency Per Year | Past 50 Year Record Frequency Per Year |
|-----------------------------|-------------------------------------|------------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|--------------------------------------|----------------------------------|--|--|--|
| Hurricanes/Tropical Storms  | 4                                   | 68                                 | 2                                 | 4                                 | 4                                 | 17.00                                | 5.88                             | 0.2                                    | 0.2                                    | 0.08                                   |
| Floods                      | 4                                   | 68                                 | 1                                 | 3                                 | 4                                 | 17.00                                | 5.88                             | 0.1                                    | 0.15                                   | 0.08                                   |
| Tornadoes                   | 4                                   | 68                                 | 0                                 | 2                                 | 4                                 | 17.00                                | 5.88                             | 0                                      | 0.1                                    | 0.08                                   |
| Wildfires                   | 2712                                | 50                                 | 168                               | 612                               | 2712                              | 0.02                                 | 5424.00                          | 16.8                                   | 30.6                                   | 54.24                                  |
| Thunderstorms and Lightning | 62                                  | 68                                 | 32                                | 55                                | 62                                | 1.10                                 | 91.18                            | 3.2                                    | 2.75                                   | 1.24                                   |
| Extreme Heat                | 34                                  | 22                                 | 34                                | 34                                | 34                                | 0.65                                 | 154.55                           | 3.4                                    | 1.7                                    | 0.68                                   |
| Drought                     | 461                                 | 19                                 | 336                               | 461                               | 461                               | 0.04                                 | 2426.32                          | 33.6                                   | 23.05                                  | 9.22                                   |

**NOTE: The historic frequency of a hazard event over a given period of time determines the historic recurrence interval. For example: If there have been 20 HazMat Releases in the County in the past 5 years, statistically you could expect that there will be 4 releases a year.**

**Realize that from a statistical standpoint, there are several variables to consider. 1) Accurate hazard history data and collection are crucial to an accurate recurrence interval and frequency. 2) Data collection and accuracy has been much better in the past 10-20 years (NCDC weather records). 3) It is important to include all significant recorded hazard events which will include periodic updates to this table.**

**By updating and reviewing this table over time, it may be possible to see if certain types of hazard events are increasing in the past 10-20 years.**



# GEMA Worksheet #2

# Profile Hazard Events Step 2

County:

Date:

How Bad Can It Get?

Task A. Obtain or create a base map.

GEMA will be providing you with a base map, USGS topos and DOQQ as part of our deliverables to local government for the planning process. Additionally, we will be providing you with detailed hazard layer coverages. These data layers originate from state or nationwide coverage or datasets. Therefore, it is important for local government to assess what you already have at the local level. It is important for you at the local level to have an idea of what existing maps you have available for the planning process. Some important things to think about:

- 1) What maps do we already have in the county that would be relevant to the planning process?
- 2) Have other local plans used maps or mapping technology where there is specific data that is also needed in my local plan?
- 3) What digital maps do we have?
- 4) Do we have any Geographic Information System (GIS) data, map themes or layers or databases here at the local level (or regional) that we can use?
- 5) If we do have any GIS data, where is it located at, and who is our local expert?
- 6) Are there any ongoing GIS or mapping initiatives at the local level in other planning or mapping efforts? If so, what are they, and what are the timetables for completion?
- 7) Are there mapping needs that have been identified at the local level in the past? If so, what are they and when were they identified?
- 8) Of the existing maps, GIS data and other digital mapping information, what confidence do we have at the local level that it is accurate data?

***Please answer the above questions on a separate sheet of paper and attach to this worksheet.***

It is important to realize that those counties that already have GIS and digital mapping, (ie: parcel level data, GPS fire hydrants, etc) higher levels of spatial accuracy and detail will exist for some data layers at the local level. However, for this planning process, that level of detail will not be needed on all layers in the overall mapping and analysis.

You can use existing maps from:

- Road Maps
- USGS topographic maps or Digital Orthophoto Quarter Quads (DOQQ)
- Topographic and/or planimetric maps from other agencies
- Aerial topographic and/or planimetric maps
- Field Surveys
- GIS software
- CADD software
- Digitized paper map

| Title of Map | Scale | Date |
|--------------|-------|------|
|              |       |      |
|              |       |      |
|              |       |      |
|              |       |      |
|              |       |      |

| Task B. Obtain a hazard event profile.  | Task C. Record your hazard event profile information.  |
|---|--|
| Avalanche   |  |
| Coastal Storm / Coastal Erosion <ol style="list-style-type: none"> <li>1. Get a copy of your FIRM. _____</li> <li>2. Verify that the FIRM is up-to-date and complete. _____</li> <li>3. Determine the annual rate of coastal erosion. _____</li> <li>4. Find your design wind speed. _____</li> </ol>     | <ol style="list-style-type: none"> <li>1. Transfer the boundaries of your coastal storm hazard areas onto your base map.</li> <li>2. Transfer the BFEs onto your base map.</li> <li>3. Record the erosion rates on your base map: _____</li> <li>4. Record the design wind speed here and on your base map: _____</li> </ol>           |
| Dam Failure   |  |
| Drought   |  |
| Earthquake <ol style="list-style-type: none"> <li>1. Go to the <a href="http://geohazards.cr.usgs.gov">http://geohazards.cr.usgs.gov</a> Website.</li> <li>2. Locate your planning area on the map.</li> <li>3. Determine your PGA. _____</li> </ol>  | <ol style="list-style-type: none"> <li>1. Record your PGA: _____</li> <li>2. If you have more than one PGA print, download or order your PGA map.</li> </ol>   |
| Expansive Soils   |  |
| Extreme Heat  |  |
| Flood <ol style="list-style-type: none"> <li>1. Get a copy of your FIRM. _____</li> <li>2. Verify the FIRM is up-to-date and complete. _____</li> </ol>   | <ol style="list-style-type: none"> <li>1. Transfer the boundaries from your firm onto your base map (floodway, 100-yr flood, 500-yr flood).</li> <li>2. Transfer the BFEs onto your base map.</li> </ol>   |
| Hailstorm   |  |
| Hurricane   |  |
| Land Subsidence   |  |
| Landslide <ol style="list-style-type: none"> <li>1. Map location of previous landslides. _____</li> <li>2. Map the topography. _____</li> <li>3. Map the geology. _____</li> <li>4. Identify thee high-hazard areas on your map. _____</li> </ol>   | <ol style="list-style-type: none"> <li>1. Mark the areas susceptible to landslides onto your base map.</li> </ol>  |
| Severe Winter Storm   |  |
| Tornado <ol style="list-style-type: none"> <li>1. Find your design wind speed. _____</li> </ol>   | <ol style="list-style-type: none"> <li>1. Record your design wind speed: _____</li> <li>2. If you have more than one design wind speed, print, download or copy your design wind speed zones, copy the boundary of your design wind speed zones on your base map, then record the design wind speed zones on your base map.</li> </ol> |
| Tsunami   |  |
| Wildfire <ol style="list-style-type: none"> <li>1. Map the fuel models located within the urban-wildland interface areas. _____</li> <li>2. Map the topography. _____</li> <li>3. Determine your critical fire weather frequency. _____</li> <li>4. Determine your fire hazard severity. _____</li> </ol> | <ol style="list-style-type: none"> <li>1. Draw the boundaries of your wildfire hazard areas onto your base map.</li> </ol>   |
| Other <ol style="list-style-type: none"> <li>1. Map the hazard. _____</li> </ol>  | <ol style="list-style-type: none"> <li>1. Record hazard event info on your base map.</li> </ol>  |

# Worksheet #4 Evaluate Alternative Mitigation Actions

1. Fill in the goal and its corresponding objective. Use a separate worksheet for each objective. The considerations under each criterion are suggested ones to use; you can revise these to reflect your own considerations (see Table 2-1).

2. Fill in the alternative actions that address the specific objectives the planning team identified in Worksheet #1.

3. **Scoring:** For each consideration, indicate a plus (+) for favorable, and a negative (-) for less favorable.

When you complete the scoring; negatives will indicate gaps or shortcomings in the particular action, which can be noted in the Comments section. For considerations that do not apply, fill in N/A for not applicable. Only leave a blank if you do not know an answer. In this case, make a note in the Comments section of the “expert” or source to consult to help you evaluate the criterion.

## Goal 1: Minimize damage caused by high winds of Hurricanes/Tropical Storms in Echols County.

Objective #1: Protect life, health and property of residents from high winds of Hurricanes/Tropical Storms.

| STAPLEE Criteria<br>→<br>for<br>Alternative Actions<br>↓   | S                    |                                 | T                     |                    |                   | A                |                   |                          | P                 |                |                | L               |                          |                           | E                 |                |                               |                          |                        |                              |                                |   |                              |
|--|----------------------|---------------------------------|-----------------------|--------------------|-------------------|------------------|-------------------|--------------------------|-------------------|----------------|----------------|-----------------|--------------------------|---------------------------|-------------------|----------------|-------------------------------|--------------------------|------------------------|------------------------------|--------------------------------|---|------------------------------|
|  | (Social)             |                                 | (Technical)           |                    |                   | (Administrative) |                   |                          | (Political)       |                |                | (Legal)         |                          |                           | (Economic)        |                |                               |                          | (Environmental)        |                              |                                |   |                              |
|  | Community Acceptance | Effect on Segment of Population | Technical Feasibility | Long-term Solution | Secondary Impacts | Staffing         | Funding Allocated | Maintenance / Operations | Political Support | Local Champion | Public Support | State Authority | Existing Local Authority | Potential Legal Challenge | Benefit of Action | Cost of Action | Contributes to Economic Goals | Outside Funding Required | Effect on Land / Water | Effect on Endangered Species | Effect on HAZMAT / Waste Sites | Consistent with Community Environmental Goals | Consistent With Federal Laws |
| Action Step 1:<br>Educate homeowners and builders on individual safe rooms.                                | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | N/A                    | N/A                          | N/A                            | N/A   | N/A                          |
| Action Step 2:<br>Distribute programs on personal emergency preparedness, i.e., emergency survival kits.   | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | N/A                    | N/A                          | N/A                            | N/A   | N/A                          |
| Action Step #3:<br>Encourage the American Red Cross to teach Citizen Disaster Courses on a frequent basis. | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | N/A                    | N/A                          | N/A                            | N/A   | N/A                          |

| STAPLEE Criteria   | S                    |                                 | T                     |                    |                   | A                |                   |                          | P                 |                |                | L               |                          |                           | E                 |                |                               |                          | E                      |                              |                                |   |                              |
|--|----------------------|---------------------------------|-----------------------|--------------------|-------------------|------------------|-------------------|--------------------------|-------------------|----------------|----------------|-----------------|--------------------------|---------------------------|-------------------|----------------|-------------------------------|--------------------------|------------------------|------------------------------|--------------------------------|---|------------------------------|
|  | (Social)             |                                 | (Technical)           |                    |                   | (Administrative) |                   |                          | (Political)       |                |                | (Legal)         |                          |                           | (Economic)        |                |                               |                          | (Environmental)        |                              |                                |   |                              |
| Considerations →<br>for<br>Alternative Actions<br>↓  | Community Acceptance | Effect on Segment of Population | Technical Feasibility | Long-term Solution | Secondary Impacts | Staffing         | Funding Allocated | Maintenance / Operations | Political Support | Local Champion | Public Support | State Authority | Existing Local Authority | Potential Legal Challenge | Benefit of Action | Cost of Action | Contributes to Economic Goals | Outside Funding Required | Effect on Land / Water | Effect on Endangered Species | Effect on HAZMAT / Waste Sites | Consistent with Community Environmental Goals | Consistent With Federal Laws |
| Action Step #4:<br>Encourage businesses to develop emergency plans.  | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | N/A                    | N/A                          | N/A                            | N/A   | N/A                          |
| Action Step #5:<br>Increase public awareness of the NOAA weather radios and available community safe shelters by publishing articles in the local newspaper, holding town hall meetings and providing bulletins to local churches and the schools. | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | N/A                    | N/A                          | N/A                            | N/A   | N/A                          |
| Action Step #6: Trim tree lines around roads, homes, utilities and businesses.   | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | N/A                    | N/A                          | N/A                            | N/A   | N/A                          |



## Worksheet #4 Evaluate Alternative Mitigation Actions

1. Fill in the goal and its corresponding objective. Use a separate worksheet for each objective. The considerations under each criterion are suggested ones to use; you can revise these to reflect your own considerations (see Table 2-1).

2. Fill in the alternative actions that address the specific objectives the planning team identified in Worksheet #1.

3. **Scoring:** For each consideration, indicate a plus (+) for favorable, and a negative (-) for less favorable.

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### Goal 1: Minimize damage caused by high winds of Hurricanes/Tropical Storms in Echols County.

Objective 2: Minimize damages from high winds to institutional/public buildings in Echols County.

| STAPLEE Criteria  | S                    |                                 | T                     |                    |                   | A                |                   |                          | P                 |                |                | L               |                          |                           | E                 |                |                               | E                        |                        |                              |                                |   |                              |
|---|----------------------|---------------------------------|-----------------------|--------------------|-------------------|------------------|-------------------|--------------------------|-------------------|----------------|----------------|-----------------|--------------------------|---------------------------|-------------------|----------------|-------------------------------|--------------------------|------------------------|------------------------------|--------------------------------|---|------------------------------|
|   | (Social)             |                                 | (Technical)           |                    |                   | (Administrative) |                   |                          | (Political)       |                |                | (Legal)         |                          |                           | (Economic)        |                |                               | (Environmental)          |                        |                              |                                |   |                              |
| Considerations →<br>for<br>Alternative Actions<br>↓   | Community Acceptance | Effect on Segment of Population | Technical Feasibility | Long-term Solution | Secondary Impacts | Staffing         | Funding Allocated | Maintenance / Operations | Political Support | Local Champion | Public Support | State Authority | Existing Local Authority | Potential Legal Challenge | Benefit of Action | Cost of Action | Contributes to Economic Goals | Outside Funding Required | Effect on Land / Water | Effect on Endangered Species | Effect on HAZMAT / Waste Sites | Consistent with Community Environmental Goals | Consistent With Federal Laws |
| Action Step 4:<br>Purchase and install mobile and fixed generators (including transfer switches) for all designated evacuation and emergency shelters, community water systems, and critical facilities, and wherever else they are needed. | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | N/A                    | N/A                          | N/A                            | N/A   | N/A                          |

# Worksheet #4 Evaluate Alternative Mitigation Actions

1. Fill in the goal and its corresponding objective. Use a separate worksheet for each objective. The considerations under each criterion are suggested ones to use; you can revise these to reflect your own considerations (see Table 2-1).

2. Fill in the alternative actions that address the specific objectives the planning team identified in Worksheet #1.

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When you complete the scoring; negatives will indicate gaps or shortcomings in the particular action, which can be noted in the Comments section. For considerations that do not apply, fill in N/A for not applicable. Only leave a blank if you do not know an answer. In this case, make a note in the Comments section of the “expert” or source to consult to help you evaluate the criterion.

## Goal 2: Minimize flood damage in Echols County.

Objective 1: Minimize losses to existing and future structures, especially community critical facilities, due to flooding caused by excessive rainfall.

| STAPLEE Criteria   | S                    |                                 | T                     |                    |                   | A                |                   |                          | P                 |                |                | L               |                          |                           | E                 |                |                               |                          |                        |                              |                                |   |                              |
|--|----------------------|---------------------------------|-----------------------|--------------------|-------------------|------------------|-------------------|--------------------------|-------------------|----------------|----------------|-----------------|--------------------------|---------------------------|-------------------|----------------|-------------------------------|--------------------------|------------------------|------------------------------|--------------------------------|---|------------------------------|
|  | (Social)             |                                 | (Technical)           |                    |                   | (Administrative) |                   |                          | (Political)       |                |                | (Legal)         |                          |                           | (Economic)        |                |                               |                          | (Environmental)        |                              |                                |   |                              |
| Considerations →<br>for<br>Alternative Actions<br>↓  | Community Acceptance | Effect on Segment of Population | Technical Feasibility | Long-term Solution | Secondary Impacts | Staffing         | Funding Allocated | Maintenance / Operations | Political Support | Local Champion | Public Support | State Authority | Existing Local Authority | Potential Legal Challenge | Benefit of Action | Cost of Action | Contributes to Economic Goals | Outside Funding Required | Effect on Land / Water | Effect on Endangered Species | Effect on HAZMAT / Waste Sites | Consistent with Community Environmental Goals | Consistent With Federal Laws |
| Action Step 1:<br>Review data on storm events to determine where repetitive Flooding occurs as a result of inadequate drainage infrastructure and identify & pursue grant funds to upgrade deficient drainage systems. | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | +                      | N/A                          | +                              | +   | +                            |
| Action Step 2:<br>Utilize tax evaluation data to determine cost effectiveness of acquiring properties in flood prone areas.  | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | +                      | N/A                          | N/A                            | +   | +                            |

| STAPLEE Criteria  | S                    |                                 | T                     |                    |                   | A                |                   |                          | P                 |                |                | L               |                          |                           | E                 |                |                               |                          |                        |                              |                                |   |                              |
|---|----------------------|---------------------------------|-----------------------|--------------------|-------------------|------------------|-------------------|--------------------------|-------------------|----------------|----------------|-----------------|--------------------------|---------------------------|-------------------|----------------|-------------------------------|--------------------------|------------------------|------------------------------|--------------------------------|---|------------------------------|
|   | (Social)             |                                 | (Technical)           |                    |                   | (Administrative) |                   |                          | (Political)       |                |                | (Legal)         |                          |                           | (Economic)        |                |                               |                          | (Environmental)        |                              |                                |   |                              |
| Considerations →<br>for<br>Alternative Actions<br>↓   | Community Acceptance | Effect on Segment of Population | Technical Feasibility | Long-term Solution | Secondary Impacts | Staffing         | Funding Allocated | Maintenance / Operations | Political Support | Local Champion | Public Support | State Authority | Existing Local Authority | Potential Legal Challenge | Benefit of Action | Cost of Action | Contributes to Economic Goals | Outside Funding Required | Effect on Land / Water | Effect on Endangered Species | Effect on HAZMAT / Waste Sites | Consistent with Community Environmental Goals | Consistent With Federal Laws |
| Action Step 3:<br>Identify and pursue funding to acquire properties in flood prone areas.                                     | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | N/A                    | N/A                          | N/A                            | +   | +                            |
| Action Step 4:<br>Continue membership in the NFIP by adopting updated ordinances and FIRM maps as updates are available.      | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | N/A                    | N/A                          | N/A                            | N/A   | N/A                          |
| Action Step 5<br>(formerly #4):<br>Encourage homeowners review benefits offered through the National Flood Insurance Program. | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | N/A                    | N/A                          | N/A                            | N/A   | N/A                          |

## Worksheet #4 Evaluate Alternative Mitigation Actions

1. Fill in the goal and its corresponding objective. Use a separate worksheet for each objective. The considerations under each criterion are suggested ones to use; you can revise these to reflect your own considerations (see Table 2-1).

2. Fill in the alternative actions that address the specific objectives the planning team identified in Worksheet #1.

3. **Scoring:** For each consideration, indicate a plus (+) for favorable, and a negative (-) for less favorable.

When you complete the scoring; negatives will indicate gaps or shortcomings in the particular action, which can be noted in the Comments section. For considerations that do not apply, fill in N/A for not applicable. Only leave a blank if you do not know an answer. In this case, make a note in the Comments section of the “expert” or source to consult to help you evaluate the criterion.

### Goal 2: Minimize flood damage in Echols County.

Objective 2: Protect and preserve flood prone areas for green space use, such as community parks and recreational areas.

| STAPLEE Criteria   | S                    |                                 | T                     |                    |                   | A                |                   |                          | P                 |                |                | L               |                          |                           | E                 |                |                               | E                        |                        |                              |                                |   |                              |
|--|----------------------|---------------------------------|-----------------------|--------------------|-------------------|------------------|-------------------|--------------------------|-------------------|----------------|----------------|-----------------|--------------------------|---------------------------|-------------------|----------------|-------------------------------|--------------------------|------------------------|------------------------------|--------------------------------|---|------------------------------|
|  | (Social)             |                                 | (Technical)           |                    |                   | (Administrative) |                   |                          | (Political)       |                |                | (Legal)         |                          |                           | (Economic)        |                |                               | (Environmental)          |                        |                              |                                |   |                              |
| Considerations →<br>for<br>Alternative Actions<br>↓  | Community Acceptance | Effect on Segment of Population | Technical Feasibility | Long-term Solution | Secondary Impacts | Staffing         | Funding Allocated | Maintenance / Operations | Political Support | Local Champion | Public Support | State Authority | Existing Local Authority | Potential Legal Challenge | Benefit of Action | Cost of Action | Contributes to Economic Goals | Outside Funding Required | Effect on Land / Water | Effect on Endangered Species | Effect on HAZMAT / Waste Sites | Consistent with Community Environmental Goals | Consistent With Federal Laws |
| Action Step 1:<br>Monitor comprehensive land use plans to ensure mapping of lands to be permanently protected.                               | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | +                      | +                            | N/A                            | +   | N/A                          |
| Action Step 2:<br>Monitor existing subdivision regulations to promote conservation of floodplains, wetlands, and groundwater recharge areas. | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | +                      | +                            | N/A                            | +   | N/A                          |

| STAPLEE Criteria  | S                    |                                 | T                     |                    |                   | A                |                   |                          | P                 |                |                | L               |                          |                           | E                 |                |                               |                          |                        |                              |                                |   |                              |
|---|----------------------|---------------------------------|-----------------------|--------------------|-------------------|------------------|-------------------|--------------------------|-------------------|----------------|----------------|-----------------|--------------------------|---------------------------|-------------------|----------------|-------------------------------|--------------------------|------------------------|------------------------------|--------------------------------|---|------------------------------|
|   | (Social)             |                                 | (Technical)           |                    |                   | (Administrative) |                   |                          | (Political)       |                |                | (Legal)         |                          |                           | (Economic)        |                |                               |                          | (Environmental)        |                              |                                |   |                              |
| Considerations →<br>for<br>Alternative Actions<br>↓   | Community Acceptance | Effect on Segment of Population | Technical Feasibility | Long-term Solution | Secondary Impacts | Staffing         | Funding Allocated | Maintenance / Operations | Political Support | Local Champion | Public Support | State Authority | Existing Local Authority | Potential Legal Challenge | Benefit of Action | Cost of Action | Contributes to Economic Goals | Outside Funding Required | Effect on Land / Water | Effect on Endangered Species | Effect on HAZMAT / Waste Sites | Consistent with Community Environmental Goals | Consistent With Federal Laws |
| Action Step 3: Seek funding from private foundations, individuals, federal and state grants, and local communities to leverage available green space grant funds. | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | +                      | +                            | N/A                            | +   | N/A                          |
| Action Step 4: Educate public and private organizations on methods for preserving parks and recreation areas.   | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | +                      | +                            | N/A                            | +   | N/A                          |

# Worksheet #4 Evaluate Alternative Mitigation Actions

1. Fill in the goal and its corresponding objective. Use a separate worksheet for each objective. The considerations under each criterion are suggested ones to use; you can revise these to reflect your own considerations (see Table 2-1).
2. Fill in the alternative actions that address the specific objectives the planning team identified in Worksheet #1.
3. **Scoring:** For each consideration, indicate a plus (+) for favorable, and a negative (-) for less favorable.

When you complete the scoring; negatives will indicate gaps or shortcomings in the particular action, which can be noted in the Comments section. For considerations that do not apply, fill in N/A for not applicable. Only leave a blank if you do not know an answer. In this case, make a note in the Comments section of the “expert” or source to consult to help you evaluate the criterion.

## Goal 2: Minimize flood damage in Echols County.

Objective 3: Establish correct boundaries for flood prone areas along the major rivers in Echols County.

| STAPLEE Criteria   | S                    |                                 | T                     |                    |                   | A                |                   |                          | P                 |                |                | L               |                          |                           | E                 |                |                               |                          |                        |                              |                                |   |                              |
|--|----------------------|---------------------------------|-----------------------|--------------------|-------------------|------------------|-------------------|--------------------------|-------------------|----------------|----------------|-----------------|--------------------------|---------------------------|-------------------|----------------|-------------------------------|--------------------------|------------------------|------------------------------|--------------------------------|---|------------------------------|
|  | (Social)             |                                 | (Technical)           |                    |                   | (Administrative) |                   |                          | (Political)       |                |                | (Legal)         |                          |                           | (Economic)        |                |                               |                          | (Environmental)        |                              |                                |   |                              |
| Considerations →<br>for<br>Alternative Actions<br>↓  | Community Acceptance | Effect on Segment of Population | Technical Feasibility | Long-term Solution | Secondary Impacts | Staffing         | Funding Allocated | Maintenance / Operations | Political Support | Local Champion | Public Support | State Authority | Existing Local Authority | Potential Legal Challenge | Benefit of Action | Cost of Action | Contributes to Economic Goals | Outside Funding Required | Effect on Land / Water | Effect on Endangered Species | Effect on HAZMAT / Waste Sites | Consistent with Community Environmental Goals | Consistent With Federal Laws |
| Action Step 1 (new):<br>Rebuild SR-135 bridge over the Alapahoochee River (known locally as the “Little River”)                | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | N/A                    | N/A                          | N/A                            | N/A   | N/A                          |
| Action Step 2 (new):<br>Repair J. Frank Culpepper Rd. bridge over the Alapahoochee River (known locally as the “Little River”) | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | N/A                    | N/A                          | N/A                            | N/A   | N/A                          |

## Worksheet #4 Evaluate Alternative Mitigation Actions

1. Fill in the goal and its corresponding objective. Use a separate worksheet for each objective. The considerations under each criterion are suggested ones to use; you can revise these to reflect your own considerations (see Table 2-1).
2. Fill in the alternative actions that address the specific objectives the planning team identified in Worksheet #1.
3. **Scoring:** For each consideration, indicate a plus (+) for favorable, and a negative (-) for less favorable.

When you complete the scoring; negatives will indicate gaps or shortcomings in the particular action, which can be noted in the Comments section. For considerations that do not apply, fill in N/A for not applicable. Only leave a blank if you do not know an answer. In this case, make a note in the Comments section of the “expert” or source to consult to help you evaluate the criterion.

### Goal 3: Enhance the community’s ability to issue early warning of Tornadoes in an effective, dependable, and rapid manner.

Objective 1: Ensure that a comprehensive early warning notification system is in place.

| STAPLEE Criteria  | S                    |                                 | T                     |                    |                   | A                |                   |                          | P                 |                |                | L               |                          |                           | E                 |                |                               |                          |                        |                              |                                |   |                              |
|---|----------------------|---------------------------------|-----------------------|--------------------|-------------------|------------------|-------------------|--------------------------|-------------------|----------------|----------------|-----------------|--------------------------|---------------------------|-------------------|----------------|-------------------------------|--------------------------|------------------------|------------------------------|--------------------------------|---|------------------------------|
|   | (Social)             |                                 | (Technical)           |                    |                   | (Administrative) |                   |                          | (Political)       |                |                | (Legal)         |                          |                           | (Economic)        |                |                               |                          | (Environmental)        |                              |                                |   |                              |
| Considerations →<br>for<br>Alternative Actions<br>↓   | Community Acceptance | Effect on Segment of Population | Technical Feasibility | Long-term Solution | Secondary Impacts | Staffing         | Funding Allocated | Maintenance / Operations | Political Support | Local Champion | Public Support | State Authority | Existing Local Authority | Potential Legal Challenge | Benefit of Action | Cost of Action | Contributes to Economic Goals | Outside Funding Required | Effect on Land / Water | Effect on Endangered Species | Effect on HAZMAT / Waste Sites | Consistent with Community Environmental Goals | Consistent With Federal Laws |
| Action Step 1: Get an early warning system horn in Statenville by seeking funding from various sources. | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | N/A                    | N/A                          | N/A                            | N/A   | N/A                          |

# Worksheet #4 Evaluate Alternative Mitigation Actions

1. Fill in the goal and its corresponding objective. Use a separate worksheet for each objective. The considerations under each criterion are suggested ones to use; you can revise these to reflect your own considerations (see Table 2-1).
2. Fill in the alternative actions that address the specific objectives the planning team identified in Worksheet #1.
3. **Scoring:** For each consideration, indicate a plus (+) for favorable, and a negative (-) for less favorable.

When you complete the scoring; negatives will indicate gaps or shortcomings in the particular action, which can be noted in the Comments section. For considerations that do not apply, fill in N/A for not applicable. Only leave a blank if you do not know an answer. In this case, make a note in the Comments section of the “expert” or source to consult to help you evaluate the criterion.

## Goal 3: Enhance the community’s ability to issue early warning of Tornadoes in an effective, dependable, and rapid manner.

Objective 2: Enhance the ability of the Echols County Emergency Management Agency to respond effectively and efficiently to emergency needs during and after a Tornado event.

| STAPLEE Criteria<br>→<br>for<br>Alternative Actions<br>↓   | S<br>(Social)        |                                 | T<br>(Technical)      |                    |                   | A<br>(Administrative) |                   |                          | P<br>(Political)  |                |                | L<br>(Legal)    |                          |                           | E<br>(Economic)   |                |                               |                          | E<br>(Environmental)   |                              |                                |   |                              |
|--|----------------------|---------------------------------|-----------------------|--------------------|-------------------|-----------------------|-------------------|--------------------------|-------------------|----------------|----------------|-----------------|--------------------------|---------------------------|-------------------|----------------|-------------------------------|--------------------------|------------------------|------------------------------|--------------------------------|---|------------------------------|
|  | Community Acceptance | Effect on Segment of Population | Technical Feasibility | Long-term Solution | Secondary Impacts | Staffing              | Funding Allocated | Maintenance / Operations | Political Support | Local Champion | Public Support | State Authority | Existing Local Authority | Potential Legal Challenge | Benefit of Action | Cost of Action | Contributes to Economic Goals | Outside Funding Required | Effect on Land / Water | Effect on Endangered Species | Effect on HAZMAT / Waste Sites | Consistent with Community Environmental Goals | Consistent With Federal Laws |
| Action Step 1: Become a designated “StormReady Community”.   | +                    | +                               | +                     | +                  | +                 | +                     | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | N/A                      | N/A                    | N/A                          | N/A                            | N/A   |                              |
| Action Step 2: Implement the “Community Emergency Response Team” (CERT) program.                               | +                    | +                               | +                     | +                  | +                 | +                     | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | N/A                      | N/A                    | N/A                          | N/A                            | N/A   |                              |
| Action Step 3: Seek funds to purchase 800 mhz (or similar) base station and portable radios for emergency use. | +                    | +                               | +                     | +                  | +                 | +                     | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | N/A                      | N/A                    | N/A                          | N/A                            | N/A   |                              |



# Worksheet #4 Evaluate Alternative Mitigation Actions

1. Fill in the goal and its corresponding objective. Use a separate worksheet for each objective. The considerations under each criterion are suggested ones to use; you can revise these to reflect your own considerations (see Table 2-1).

2. Fill in the alternative actions that address the specific objectives the planning team identified in Worksheet #1.

3. **Scoring:** For each consideration, indicate a plus (+) for favorable, and a negative (-) for less favorable.

When you complete the scoring; negatives will indicate gaps or shortcomings in the particular action, which can be noted in the Comments section. For considerations that do not apply, fill in N/A for not applicable. Only leave a blank if you do not know an answer. In this case, make a note in the Comments section of the “expert” or source to consult to help you evaluate the criterion.

## Goal 3a: Reduce the risks and vulnerability of citizens and critical facilities to Tornado damage.

Objective 1: Protect life, health, and property of residents from force of Tornadoes.

| STAPLEE Criteria<br>→<br>for<br>Alternative Actions<br>↓  | S                    |                                 | T                     |                    |                   | A                |                   |                          | P                 |                |                | L               |                          |                           | E                 |                |                               |                          |                        |                              |                                |   |                              |
|---|----------------------|---------------------------------|-----------------------|--------------------|-------------------|------------------|-------------------|--------------------------|-------------------|----------------|----------------|-----------------|--------------------------|---------------------------|-------------------|----------------|-------------------------------|--------------------------|------------------------|------------------------------|--------------------------------|---|------------------------------|
|   | (Social)             |                                 | (Technical)           |                    |                   | (Administrative) |                   |                          | (Political)       |                |                | (Legal)         |                          |                           | (Economic)        |                |                               |                          | (Environmental)        |                              |                                |   |                              |
|   | Community Acceptance | Effect on Segment of Population | Technical Feasibility | Long-term Solution | Secondary Impacts | Staffing         | Funding Allocated | Maintenance / Operations | Political Support | Local Champion | Public Support | State Authority | Existing Local Authority | Potential Legal Challenge | Benefit of Action | Cost of Action | Contributes to Economic Goals | Outside Funding Required | Effect on Land / Water | Effect on Endangered Species | Effect on HAZMAT / Waste Sites | Consistent with Community Environmental Goals | Consistent With Federal Laws |
| Action Step 1:<br>Educate homeowners and builders on individual safe rooms.                               | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | N/A                    | N/A                          | N/A                            | N/A   | N/A                          |
| Action Step 2:<br>Distribute programs on personal emergency preparedness, i.e., emergency survival kits   | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | N/A                    | N/A                          | N/A                            | N/A   | N/A                          |
| Action Step 3:<br>Encourage the American Red Cross to teach Citizen Disaster Courses on a frequent basis. | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | N/A                    | N/A                          | N/A                            | N/A   | N/A                          |

| STAPLEE Criteria   | S                       |                                    | T                        |                    |                   | A                |                   |                             | P                 |                |                | L               |                             |                              | E                 |                |                                  |                             |                           |                                    |                                   |  |                                 |
|--|-------------------------|------------------------------------|--------------------------|--------------------|-------------------|------------------|-------------------|-----------------------------|-------------------|----------------|----------------|-----------------|-----------------------------|------------------------------|-------------------|----------------|----------------------------------|-----------------------------|---------------------------|------------------------------------|-----------------------------------|--|---------------------------------|
|  | (Social)                |                                    | (Technical)              |                    |                   | (Administrative) |                   |                             | (Political)       |                |                | (Legal)         |                             |                              | (Economic)        |                |                                  |                             | (Environmental)           |                                    |                                   |  |                                 |
| Considerations →<br>for<br>Alternative Actions<br>↓  | Community<br>Acceptance | Effect on Segment<br>of Population | Technical<br>Feasibility | Long-term Solution | Secondary Impacts | Staffing         | Funding Allocated | Maintenance /<br>Operations | Political Support | Local Champion | Public Support | State Authority | Existing Local<br>Authority | Potential Legal<br>Challenge | Benefit of Action | Cost of Action | Contributes to<br>Economic Goals | Outside Funding<br>Required | Effect on Land /<br>Water | Effect on<br>Endangered<br>Species | Effect on HAZMAT<br>/ Waste Sites | Consistent with<br>Community<br>Environmental<br>Goals | Consistent With<br>Federal Laws |
| Action Step 4:<br>Encourage<br>businesses to<br>develop emergency<br>plans.  | +                       | +                                  | +                        | +                  | +                 | +                | +                 | +                           | +                 | +              | +              | +               | +                           | +                            | +                 | +              | +                                | +                           | N/A                       | N/A                                | N/A                               | N/A  | N/A                             |
| Action Step 5:<br>Increase public<br>awareness of the<br>Early Warning<br>Communication/<br>Notification System,<br>NOAA weather radios<br>and available<br>community safe<br>shelters by publishing<br>articles in the local<br>newspaper, holding<br>town hall meetings<br>and providing<br>bulletins to local<br>churches and the<br>schools. | +                       | +                                  | +                        | +                  | +                 | +                | +                 | +                           | +                 | +              | +              | +               | +                           | +                            | +                 | +              | +                                | +                           | N/A                       | N/A                                | N/A                               | N/A  | N/A                             |
| Action Step 6:<br>Purchase and install<br>mobile and fixed<br>generators (including<br>transfer switches) for<br>all designated<br>evacuation and<br>emergency shelters,<br>community water<br>systems, and critical<br>facilities, and<br>wherever else they<br>are needed.   | +                       | +                                  | +                        | +                  | +                 | +                | +                 | +                           | +                 | +              | +              | +               | +                           | +                            | +                 | +              | +                                | +                           | N/A                       | N/A                                | N/A                               | N/A  | N/A                             |

| STAPLEE Criteria  | S                    |                                 | T                     |                    |                   | A                |                   |                          | P                 |                |                | L               |                          |                           | E                 |                |                               |                          |                        |                              |                                |   |                              |
|---|----------------------|---------------------------------|-----------------------|--------------------|-------------------|------------------|-------------------|--------------------------|-------------------|----------------|----------------|-----------------|--------------------------|---------------------------|-------------------|----------------|-------------------------------|--------------------------|------------------------|------------------------------|--------------------------------|---|------------------------------|
|   | (Social)             |                                 | (Technical)           |                    |                   | (Administrative) |                   |                          | (Political)       |                |                | (Legal)         |                          |                           | (Economic)        |                |                               |                          | (Environmental)        |                              |                                |   |                              |
| Considerations →<br>for<br>Alternative Actions<br>↓   | Community Acceptance | Effect on Segment of Population | Technical Feasibility | Long-term Solution | Secondary Impacts | Staffing         | Funding Allocated | Maintenance / Operations | Political Support | Local Champion | Public Support | State Authority | Existing Local Authority | Potential Legal Challenge | Benefit of Action | Cost of Action | Contributes to Economic Goals | Outside Funding Required | Effect on Land / Water | Effect on Endangered Species | Effect on HAZMAT / Waste Sites | Consistent with Community Environmental Goals | Consistent With Federal Laws |
| Action Step 7: Trim tree lines around roads, homes, utilities and businesses.   | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | N/A                    | N/A                          | N/A                            | N/A   | N/A                          |
| Action Step 8: Seek funding to retrofit public buildings to reinforce windows, roofs and doors.                                       | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | N/A                    | N/A                          | N/A                            | N/A   | N/A                          |
| Action Step 9: Initiate an inspection program at critical facilities to identify construction weaknesses subject to high wind damage. | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | N/A                    | N/A                          | N/A                            | N/A   | N/A                          |

## Worksheet #4 Evaluate Alternative Mitigation Actions

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2. Fill in the alternative actions that address the specific objectives the planning team identified in Worksheet #1.

3. **Scoring:** For each consideration, indicate a plus (+) for favorable, and a negative (-) for less favorable.

When you complete the scoring; negatives will indicate gaps or shortcomings in the particular action, which can be noted in the Comments section. For considerations that do not apply, fill in N/A for not applicable. Only leave a blank if you do not know an answer. In this case, make a note in the Comments section of the “expert” or source to consult to help you evaluate the criterion.

### Goal 4. Prevent damage resulting from wildfires in Echols County, reduce the threat of Wildfires, and protect the life and property of residents.

Objective 1: Minimize the threat of Wildfires to persons and properties in Echols County.

| STAPLEE Criteria  | S                    |                                 | T                     |                    |                   | A                |                   |                          | P                 |                |                | L               |                          |                           | E                 |                |                               |                          |                        |                              |                                |   |                              |
|---|----------------------|---------------------------------|-----------------------|--------------------|-------------------|------------------|-------------------|--------------------------|-------------------|----------------|----------------|-----------------|--------------------------|---------------------------|-------------------|----------------|-------------------------------|--------------------------|------------------------|------------------------------|--------------------------------|---|------------------------------|
|   | (Social)             |                                 | (Technical)           |                    |                   | (Administrative) |                   |                          | (Political)       |                |                | (Legal)         |                          |                           | (Economic)        |                |                               |                          | (Environmental)        |                              |                                |   |                              |
| Considerations →<br>for<br>Alternative Actions<br>↓   | Community Acceptance | Effect on Segment of Population | Technical Feasibility | Long-term Solution | Secondary Impacts | Staffing         | Funding Allocated | Maintenance / Operations | Political Support | Local Champion | Public Support | State Authority | Existing Local Authority | Potential Legal Challenge | Benefit of Action | Cost of Action | Contributes to Economic Goals | Outside Funding Required | Effect on Land / Water | Effect on Endangered Species | Effect on HAZMAT / Waste Sites | Consistent with Community Environmental Goals | Consistent With Federal Laws |
| Action Step #1:<br>Request the Echols County Commission to consider the use of Urban/Wildland Interface in the development of its comprehensive plan. | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | N/A                    | N/A                          | N/A                            | N/A   | N/A                          |
| Action Step #2:<br>Implement Fire-Wise program in Echols County.  | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | N/A                    | N/A                          | N/A                            | N/A   | N/A                          |

| STAPLEE Criteria  | S                    |                                 | T                     |                    |                   | A                |                   |                          | P                 |                |                | L               |                          |                           | E                 |                |                               |                          |                        |                              |                                |   |                              |
|---|----------------------|---------------------------------|-----------------------|--------------------|-------------------|------------------|-------------------|--------------------------|-------------------|----------------|----------------|-----------------|--------------------------|---------------------------|-------------------|----------------|-------------------------------|--------------------------|------------------------|------------------------------|--------------------------------|---|------------------------------|
|   | (Social)             |                                 | (Technical)           |                    |                   | (Administrative) |                   |                          | (Political)       |                |                | (Legal)         |                          |                           | (Economic)        |                |                               |                          | (Environmental)        |                              |                                |   |                              |
| Considerations →<br>for<br>Alternative Actions<br>↓   | Community Acceptance | Effect on Segment of Population | Technical Feasibility | Long-term Solution | Secondary Impacts | Staffing         | Funding Allocated | Maintenance / Operations | Political Support | Local Champion | Public Support | State Authority | Existing Local Authority | Potential Legal Challenge | Benefit of Action | Cost of Action | Contributes to Economic Goals | Outside Funding Required | Effect on Land / Water | Effect on Endangered Species | Effect on HAZMAT / Waste Sites | Consistent with Community Environmental Goals | Consistent With Federal Laws |
| Action Step #3: Train all firefighters to FF1 & FF2 standards and ensure that emergency vehicle drivers are trained properly.   | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | N/A                    | N/A                          | N/A                            | N/A   | N/A                          |
| Action Step #4: Ensure that all firefighters have latest NFPA compliant PPE turnout gear sets and SCBAs.  | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | N/A                    | N/A                          | N/A                            | N/A   | N/A                          |
| Action Step #5: Obtain a new fire trucks and rehabilitate old trucks, as needed.  | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | N/A                    | N/A                          | N/A                            | N/A   | N/A                          |
| Action Step #6: Create a minimum of 30 feet of defensible space around all governmental structures and recommend to homeowners & community stakeholders that they create same space through the trimming of shrubs and vines, overhanging limbs, replacement of flammable plants with less flammable varieties and remove vegetation around chimneys. | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | N/A                    | N/A                          | N/A                            | N/A   | N/A                          |

| STAPLEE Criteria  | S                    |                                 | T                     |                    |                   | A                |                   |                          | P                 |                |                | L               |                          |                           | E                 |                |                               |                          |                        |                              |                                |   |                              |
|---|----------------------|---------------------------------|-----------------------|--------------------|-------------------|------------------|-------------------|--------------------------|-------------------|----------------|----------------|-----------------|--------------------------|---------------------------|-------------------|----------------|-------------------------------|--------------------------|------------------------|------------------------------|--------------------------------|---|------------------------------|
|   | (Social)             |                                 | (Technical)           |                    |                   | (Administrative) |                   |                          | (Political)       |                |                | (Legal)         |                          |                           | (Economic)        |                |                               |                          | (Environmental)        |                              |                                |   |                              |
| Considerations →<br>for<br>Alternative Actions<br>↓   | Community Acceptance | Effect on Segment of Population | Technical Feasibility | Long-term Solution | Secondary Impacts | Staffing         | Funding Allocated | Maintenance / Operations | Political Support | Local Champion | Public Support | State Authority | Existing Local Authority | Potential Legal Challenge | Benefit of Action | Cost of Action | Contributes to Economic Goals | Outside Funding Required | Effect on Land / Water | Effect on Endangered Species | Effect on HAZMAT / Waste Sites | Consistent with Community Environmental Goals | Consistent With Federal Laws |
| Action Step #7:<br>Reduce structural ignitability by cleaning flammable vegetative materials from roofs and gutters, store firewood appropriately, install skirting around raised structures, store water hoses for easy access and replace pine straw and mulch around plantings with less flammable landscaping materials around all governmental structures and recommend same to homeowners and community stakeholders. | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | N/A                    | N/A                          | N/A                            | N/A   | N/A                          |
| Action Step #8:<br>Work with GA Power and EMCs to encourage new underground service to rural homes.   | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | N/A                    | N/A                          | N/A                            | N/A   | N/A                          |
| Action Step #9:<br>Adopt standards for safety zones around propane distribution tanks.  | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | N/A                    | N/A                          | N/A                            | N/A   | N/A                          |

| STAPLEE Criteria   | S                       |                                    | T                        |                    |                   | A                |                   |                             | P                 |                |                | L               |                             |                              | E                 |                |                                  |                             |                           |                                    |                                   |  |                                 |
|--|-------------------------|------------------------------------|--------------------------|--------------------|-------------------|------------------|-------------------|-----------------------------|-------------------|----------------|----------------|-----------------|-----------------------------|------------------------------|-------------------|----------------|----------------------------------|-----------------------------|---------------------------|------------------------------------|-----------------------------------|--|---------------------------------|
|  | (Social)                |                                    | (Technical)              |                    |                   | (Administrative) |                   |                             | (Political)       |                |                | (Legal)         |                             |                              | (Economic)        |                |                                  |                             | (Environmental)           |                                    |                                   |  |                                 |
| Considerations →<br>for<br>Alternative Actions<br>↓  | Community<br>Acceptance | Effect on Segment<br>of Population | Technical<br>Feasibility | Long-term Solution | Secondary Impacts | Staffing         | Funding Allocated | Maintenance /<br>Operations | Political Support | Local Champion | Public Support | State Authority | Existing Local<br>Authority | Potential Legal<br>Challenge | Benefit of Action | Cost of Action | Contributes to<br>Economic Goals | Outside Funding<br>Required | Effect on Land /<br>Water | Effect on<br>Endangered<br>Species | Effect on HAZMAT<br>/ Waste Sites | Consistent with<br>Community<br>Environmental<br>Goals | Consistent With<br>Federal Laws |
| Action Step #10:<br>Ensure Driveway<br>Access/Right-Of-Way<br>Clearance by<br>maintaining vertical<br>and horizontal<br>clearance for<br>emergency<br>equipment and<br>seeing that adequate<br>lengths of culverts<br>are installed to allow<br>emergency vehicle<br>access. | +                       | +                                  | +                        | +                  | +                 | +                | +                 | +                           | +                 | +              | +              | +               | +                           | +                            | +                 | +              | +                                | +                           | N/A                       | N/A                                | N/A                               | N/A  | N/A                             |
| Action Step #11:<br>Ensure Road Access<br>by identifying needed<br>road improvements<br>and as roads are<br>upgraded, widen to<br>minimum standards<br>with at least 50 foot<br>diameter cul-de-sacs<br>or turn arounds.   | +                       | +                                  | +                        | +                  | +                 | +                | +                 | +                           | +                 | +              | +              | +               | +                           | +                            | +                 | +              | +                                | +                           | N/A                       | N/A                                | N/A                               | N/A  | N/A                             |

| STAPLEE Criteria  | S                    |                                 | T                     |                    |                   | A                |                   |                          | P                 |                |                | L               |                          |                           | E                 |                |                               |                          | E                      |                              |                                |   |                              |
|---|----------------------|---------------------------------|-----------------------|--------------------|-------------------|------------------|-------------------|--------------------------|-------------------|----------------|----------------|-----------------|--------------------------|---------------------------|-------------------|----------------|-------------------------------|--------------------------|------------------------|------------------------------|--------------------------------|---|------------------------------|
|   | (Social)             |                                 | (Technical)           |                    |                   | (Administrative) |                   |                          | (Political)       |                |                | (Legal)         |                          |                           | (Economic)        |                |                               |                          | (Environmental)        |                              |                                |   |                              |
| Considerations →<br>for<br>Alternative Actions<br>↓   | Community Acceptance | Effect on Segment of Population | Technical Feasibility | Long-term Solution | Secondary Impacts | Staffing         | Funding Allocated | Maintenance / Operations | Political Support | Local Champion | Public Support | State Authority | Existing Local Authority | Potential Legal Challenge | Benefit of Action | Cost of Action | Contributes to Economic Goals | Outside Funding Required | Effect on Land / Water | Effect on Endangered Species | Effect on HAZMAT / Waste Sites | Consistent with Community Environmental Goals | Consistent With Federal Laws |
| Action Step #12: Examine existing codes and ordinances and amend and enforce existing building codes as they relate to skirting, propane tank locations, public nuisances (trash/debris on property) and other relevant concerns; Review subdivision and development ordinances for public safety concerns; Enact and enforce uniform addressing ordinance. | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | N/A                    | N/A                          | N/A                            | N/A   | N/A                          |
| Action Step #13: Work with local law enforcement to better control non-essential traffic during fire emergencies.   | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | N/A                    | N/A                          | N/A                            | N/A   | N/A                          |
| Action Step #14: On adjacent WUI Lands, reduce hazardous fuels by encouraging prescribed burning for private landowners and industrial timberlands particularly adjacent to residential areas; Seek grant for mowing or prescribed burning in WUI areas.  | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | N/A                    | N/A                          | N/A                            | N/A   | N/A                          |



| STAPLEE Criteria  | S                    |                                 | T                     |                    |                   | A                |                   |                          | P                 |                |                | L               |                          |                           | E                 |                |                               |                          |                        |                              |                                |   |                              |
|---|----------------------|---------------------------------|-----------------------|--------------------|-------------------|------------------|-------------------|--------------------------|-------------------|----------------|----------------|-----------------|--------------------------|---------------------------|-------------------|----------------|-------------------------------|--------------------------|------------------------|------------------------------|--------------------------------|---|------------------------------|
|   | (Social)             |                                 | (Technical)           |                    |                   | (Administrative) |                   |                          | (Political)       |                |                | (Legal)         |                          |                           | (Economic)        |                |                               |                          | (Environmental)        |                              |                                |   |                              |
| Considerations →<br>for<br>Alternative Actions<br>↓   | Community Acceptance | Effect on Segment of Population | Technical Feasibility | Long-term Solution | Secondary Impacts | Staffing         | Funding Allocated | Maintenance / Operations | Political Support | Local Champion | Public Support | State Authority | Existing Local Authority | Potential Legal Challenge | Benefit of Action | Cost of Action | Contributes to Economic Goals | Outside Funding Required | Effect on Land / Water | Effect on Endangered Species | Effect on HAZMAT / Waste Sites | Consistent with Community Environmental Goals | Consistent With Federal Laws |
| Action Step #15:<br>Encourage railroads to better maintain their ROW eliminating brush and grass through herbicide and mowing. Maintain firebreaks along ROW adjacent to residential areas.   | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | N/A                    | N/A                          | N/A                            | N/A   | N/A                          |
| Action Step #16:<br>Improve existing fire lines by reducing hazardous fuels through the cleaning and re-harrowing of existing lines.  | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | N/A                    | N/A                          | N/A                            | N/A   | N/A                          |
| Action Step #17:<br>Ensure access to water sources and dry hydrants by inspecting, maintaining and improving access to existing dry hydrants, adding signage along roads to mark the hydrants, purchasing improved drafting equipment, floating and turbo drafts, investigating the possibility of placing compatible fittings on irrigation wells and updating the GFC Fire plan to include identified helicopter dip sites. | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | N/A                    | N/A                          | N/A                            | N/A   | N/A                          |

| STAPLEE Criteria  | S                    |                                 | T                     |                    |                   | A                |                   |                          | P                 |                |                | L               |                          |                           | E                 |                |                               |                          |                        |                              |                                |   |                              |
|---|----------------------|---------------------------------|-----------------------|--------------------|-------------------|------------------|-------------------|--------------------------|-------------------|----------------|----------------|-----------------|--------------------------|---------------------------|-------------------|----------------|-------------------------------|--------------------------|------------------------|------------------------------|--------------------------------|---|------------------------------|
|   | (Social)             |                                 | (Technical)           |                    |                   | (Administrative) |                   |                          | (Political)       |                |                | (Legal)         |                          |                           | (Economic)        |                |                               |                          | (Environmental)        |                              |                                |   |                              |
| Considerations →<br>for<br>Alternative Actions<br>↓   | Community Acceptance | Effect on Segment of Population | Technical Feasibility | Long-term Solution | Secondary Impacts | Staffing         | Funding Allocated | Maintenance / Operations | Political Support | Local Champion | Public Support | State Authority | Existing Local Authority | Potential Legal Challenge | Benefit of Action | Cost of Action | Contributes to Economic Goals | Outside Funding Required | Effect on Land / Water | Effect on Endangered Species | Effect on HAZMAT / Waste Sites | Consistent with Community Environmental Goals | Consistent With Federal Laws |
| Action Step #18:<br>Ensure all fire stations and firefighters are equipped with wildland hand tools & lightweight PPE gear and investigate the need for additional tankers and overhead refill tanks (at rural stations). | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | N/A                    | N/A                          | N/A                            | N/A   | N/A                          |
| Action Step #19:<br>Ensure that road names are adequately marked through improved road signage at crossroads and installation of "Dead End" or "No Outlet" tags on road signs.  | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | N/A                    | N/A                          | N/A                            | N/A   | N/A                          |
| Action Step #20:<br>Ensure that all personnel are trained in Wildfire Suppression.  | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | N/A                    | N/A                          | N/A                            | N/A   | N/A                          |
| Action Step #21:<br>Conduct "How to Have a Firewise Home" Workshop for Echols County Residents.   | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | N/A                    | N/A                          | N/A                            | N/A   | N/A                          |
| Action Step #22:<br>Conduct "Firewise" Workshop for Echols County Community Leaders.  | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | N/A                    | N/A                          | N/A                            | N/A   | N/A                          |

| STAPLEE Criteria  | S                       |                                    | T                        |                    |                   | A                |                   |                             | P                 |                |                | L               |                             |                              | E                 |                |                                  |                             | E                         |                                    |                                   |  |                                 |
|---|-------------------------|------------------------------------|--------------------------|--------------------|-------------------|------------------|-------------------|-----------------------------|-------------------|----------------|----------------|-----------------|-----------------------------|------------------------------|-------------------|----------------|----------------------------------|-----------------------------|---------------------------|------------------------------------|-----------------------------------|--|---------------------------------|
|   | (Social)                |                                    | (Technical)              |                    |                   | (Administrative) |                   |                             | (Political)       |                |                | (Legal)         |                             |                              | (Economic)        |                |                                  |                             | (Environmental)           |                                    |                                   |  |                                 |
| Considerations →<br>for<br>Alternative Actions<br>↓   | Community<br>Acceptance | Effect on Segment<br>of Population | Technical<br>Feasibility | Long-term Solution | Secondary Impacts | Staffing         | Funding Allocated | Maintenance /<br>Operations | Political Support | Local Champion | Public Support | State Authority | Existing Local<br>Authority | Potential Legal<br>Challenge | Benefit of Action | Cost of Action | Contributes to<br>Economic Goals | Outside Funding<br>Required | Effect on Land /<br>Water | Effect on<br>Endangered<br>Species | Effect on HAZMAT<br>/ Waste Sites | Consistent with<br>Community<br>Environmental<br>Goals | Consistent With<br>Federal Laws |
| Action Step #23:<br>Conduct a Spring<br>Clean-up Event Every<br>Spring.   | +                       | +                                  | +                        | +                  | +                 | +                | +                 | +                           | +                 | +              | +              | +               | +                           | +                            | +                 | +              | +                                | +                           | N/A                       | N/A                                | N/A                               | N/A  | N/A                             |
| Action Step #24:<br>Develop and<br>distribute Firewise<br>informational packets<br>to realtors, tax office<br>& insurance agents.   | +                       | +                                  | +                        | +                  | +                 | +                | +                 | +                           | +                 | +              | +              | +               | +                           | +                            | +                 | +              | +                                | +                           | N/A                       | N/A                                | N/A                               | N/A  | N/A                             |
| Action Step #25:<br>Create and Exhibit a<br>Wildfire Protection<br>Display at Local<br>Events such as the<br>Carrot Festival &<br>Fourth of July and<br>Hold Open Houses At<br>Fire Stations to<br>Develop Community<br>Support and<br>Understanding of<br>Local Fire<br>Departments and<br>Current Issues. | +                       | +                                  | +                        | +                  | +                 | +                | +                 | +                           | +                 | +              | +              | +               | +                           | +                            | +                 | +              | +                                | +                           | N/A                       | N/A                                | N/A                               | N/A  | N/A                             |
| Action Step #26:<br>Invite the Local News<br>Media to Community<br>"Firewise" Functions<br>for News Coverage<br>and Regularly Submit<br>Press Releases<br>Documenting Wildfire<br>Risk Improvements.  | +                       | +                                  | +                        | +                  | +                 | +                | +                 | +                           | +                 | +              | +              | +               | +                           | +                            | +                 | +              | +                                | +                           | N/A                       | N/A                                | N/A                               | N/A  | N/A                             |

## Worksheet #4 Evaluate Alternative Mitigation Actions

1. Fill in the goal and its corresponding objective. Use a separate worksheet for each objective. The considerations under each criterion are suggested ones to use; you can revise these to reflect your own considerations (see Table 2-1).

2. Fill in the alternative actions that address the specific objectives the planning team identified in Worksheet #1.

3. **Scoring:** For each consideration, indicate a plus (+) for favorable, and a negative (-) for less favorable.

When you complete the scoring; negatives will indicate gaps or shortcomings in the particular action, which can be noted in the Comments section. For considerations that do not apply, fill in N/A for not applicable. Only leave a blank if you do not know an answer. In this case, make a note in the Comments section of the "expert" or source to consult to help you evaluate the criterion.

### Goal 5: Protect Citizens of Echols County from the threat of Thunderstorms & Lightning strikes.

Objective #1: Provide tools necessary for warning of Thunderstorms & Lightning strikes.

| STAPLEE Criteria  | S                       |                                    | T                        |                    |                      | A                |                   |                             | P                 |                |                | L               |                             |                              | E                 |                |                                  |                             |                           |                                    |                                   |  |                                 |
|---|-------------------------|------------------------------------|--------------------------|--------------------|----------------------|------------------|-------------------|-----------------------------|-------------------|----------------|----------------|-----------------|-----------------------------|------------------------------|-------------------|----------------|----------------------------------|-----------------------------|---------------------------|------------------------------------|-----------------------------------|--|---------------------------------|
|   | (Social)                |                                    | (Technical)              |                    |                      | (Administrative) |                   |                             | (Political)       |                |                | (Legal)         |                             |                              | (Economic)        |                |                                  |                             | (Environmental)           |                                    |                                   |  |                                 |
| Considerations →<br>for<br>Alternative Actions<br>↓   | Community<br>Acceptance | Effect on Segment<br>of Population | Technical<br>Feasibility | Long-term Solution | Secondary<br>Impacts | Staffing         | Funding Allocated | Maintenance /<br>Operations | Political Support | Local Champion | Public Support | State Authority | Existing Local<br>Authority | Potential Legal<br>Challenge | Benefit of Action | Cost of Action | Contributes to<br>Economic Goals | Outside Funding<br>Required | Effect on Land /<br>Water | Effect on<br>Endangered<br>Species | Effect on HAZMAT<br>/ Waste Sites | Consistent with<br>Community<br>Environmental<br>Goals | Consistent With<br>Federal Laws |
| Action Step 1:<br>Provide every public<br>outdoor recreation<br>facility and every<br>public school outdoor<br>recreation facility with<br>an automatic warning<br>device, if feasible. | +                       | +                                  | +                        | +                  | +                    | +                | +                 | +                           | +                 | +              | +              | +               | +                           | +                            | +                 | +              | +                                | +                           | N/A                       | N/A                                | N/A                               | N/A  | N/A                             |
| Action Step 3:<br>Educate the public on<br>the risks of<br>thunderstorms &<br>lightning through<br>press releases on<br>thunderstorms &<br>lightning, brochures<br>and other methods.   | +                       | +                                  | +                        | +                  | +                    | +                | +                 | +                           | +                 | +              | +              | +               | +                           | +                            | +                 | +              | +                                | +                           | N/A                       | N/A                                | N/A                               | N/A  | N/A                             |

# Worksheet #4 Evaluate Alternative Mitigation Actions

1. Fill in the goal and its corresponding objective. Use a separate worksheet for each objective. The considerations under each criterion are suggested ones to use; you can revise these to reflect your own considerations (see Table 2-1).
2. Fill in the alternative actions that address the specific objectives the planning team identified in Worksheet #1.
3. **Scoring:** For each consideration, indicate a plus (+) for favorable, and a negative (-) for less favorable.

When you complete the scoring; negatives will indicate gaps or shortcomings in the particular action, which can be noted in the Comments section. For considerations that do not apply, fill in N/A for not applicable. Only leave a blank if you do not know an answer. In this case, make a note in the Comments section of the “expert” or source to consult to help you evaluate the criterion.

## Goal 7: Protect Echols County from the effects of drought conditions.

Objective 1: Ensure adequate drinking water supply is available during drought conditions.

| STAPLEE Criteria   | S                    |                                 | T                     |                    |                   | A                |                   |                          | P                 |                |                | L               |                          |                           | E                 |                |                               |                          |                        |                              |                                |   |                              |
|--|----------------------|---------------------------------|-----------------------|--------------------|-------------------|------------------|-------------------|--------------------------|-------------------|----------------|----------------|-----------------|--------------------------|---------------------------|-------------------|----------------|-------------------------------|--------------------------|------------------------|------------------------------|--------------------------------|---|------------------------------|
|  | (Social)             |                                 | (Technical)           |                    |                   | (Administrative) |                   |                          | (Political)       |                |                | (Legal)         |                          |                           | (Economic)        |                |                               |                          | (Environmental)        |                              |                                |   |                              |
| Considerations →<br>for<br>Alternative Actions<br>↓  | Community Acceptance | Effect on Segment of Population | Technical Feasibility | Long-term Solution | Secondary Impacts | Staffing         | Funding Allocated | Maintenance / Operations | Political Support | Local Champion | Public Support | State Authority | Existing Local Authority | Potential Legal Challenge | Benefit of Action | Cost of Action | Contributes to Economic Goals | Outside Funding Required | Effect on Land / Water | Effect on Endangered Species | Effect on HAZMAT / Waste Sites | Consistent with Community Environmental Goals | Consistent With Federal Laws |
| Action Step 1:<br>Develop a comprehensive study that will allow community leaders to understand when public and domestic underground water systems' water levels are threatened. | +                    | +                               | +                     | +                  | +                 | +                | +                 | +                        | +                 | +              | +              | +               | +                        | +                         | +                 | +              | +                             | +                        | N/A                    | N/A                          | N/A                            | N/A   | N/A                          |

# **Appendix E**

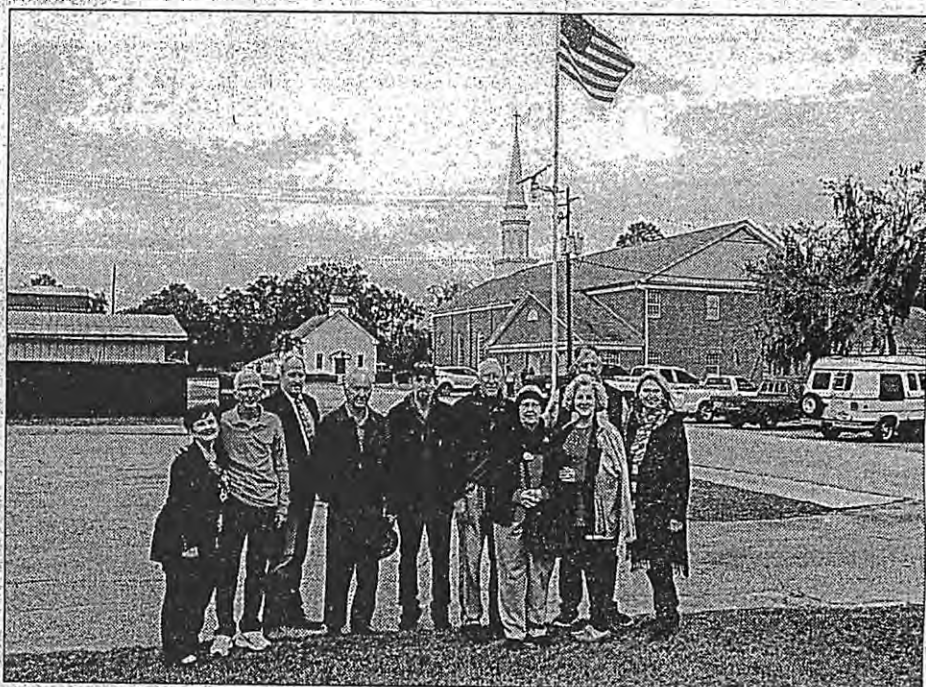
# Community & Life

Sunday, November 19, 2017

9A

## Lake Park celebrates Veterans Day

On Saturday Nov. 11, the City of Lake Park held a Veterans Day Memorial Celebration at the flag pole in front of City Hall. Residents were invited to attend along with city officials to show their appreciation to veterans. Pictured are Pamela Barr, Thomas Barr, council member-elect, Police Chief James Breletic, Wasyl Wojtaszewski, Mayor Eric Schindler, Council Member Ronald Carter, Dorothy Carter, Jennifer Taylor, Carl Taylor, council member-elect and Fran Wilbers.



SUBMITTED PHOTO

**YOU STOPPED SMOKING  
NOW START SCREENING**

Now there's a new way to stay on top of catching cancer early and saving lives. Talk to your doctor or learn more at [SavedByTheScan.org](http://SavedByTheScan.org)

## The Echols County Emergency Management Agency (EMA)

invites the public to attend the kick-off meeting for planning and updating our local Hazard Mitigation Plan. This plan is renewed every five (5) years. We would welcome any input from our citizens and local business owners. Some of those who will be part of the planning group will be: Planning specialist from GEMHSA (Georgia Emergency Management and Homeland Security Agency), Board of County Commissioners Fire/EMS, Sheriff's Department, Health Department, Code Enforcement, Public Works, Forestry, School Board, and hopefully...you. The meeting will be for an hour on December 6, 2017 at 2:00 p.m. at 110 General DeLoach St., Statesville, GA 31648.

11/22/17

SUBMITTED PHOTO  
or Lonnie Ledbetter  
tree assembled on  
public is invited to  
will be held here on  
kick off the holiday

ks off

AUTO SERVICE

DIRECTORY

11/22/17

**Southern Georgia Regional Commission  
 Echols County  
 Hazard Mitigation Plan Update – Kickoff  
 Date: Dec. 6, 2017**

| <u>Name</u>           | <u>Organization</u>         | <u>Title</u>   | <u>Email</u>                 |
|-----------------------|-----------------------------|----------------|------------------------------|
| Jackie L Carter       | Echols Co EMA               | Director       | JLCEMA@ATT.NET               |
| Christopher Shuler    | Echols Co GFC               | Ranger         | Cshuler@gfc.state.ga.us      |
| Kenneth Mason Terrell | Echols Co GFC               | Ranger I       | KTerrill@GFC.state.ga.us.    |
| Daryl Kinsey          | Echols Co. PD Dept          | superintendent | Ecboe.at.yahoo.com           |
| Rachel Rogers         | Echols Co Health Dept       | Nurse manager  | Rachel.Rogers@dph.ga.gov     |
| Haren Craft           | South Health District       | EP Director    | haren.craft@dph.ga.gov       |
| Myrna Turner          | Tax Comm. Office            | Tax Comm.      | echolstax@bellsouth.net      |
| Faye Pearson          | Echols Co. Extension        | Secretary      | uge4101@uga.edu              |
| Blake Stokes          | Echols Co. Sheriff's Office | Chief Deputy   | Echols699K@gmail.com         |
| Randy Carson          | Echols Co. Sheriff's Office | Sheriff        | echols.sheriff@gmail.com     |
| Lance Heard           | Echols Co. BOE              | Superintendent | lance.heard@echols.k12.ga.us |
| Shelby Meyers         | GEMA/HS                     |                |                              |
| Kristen Highton       | SGRC                        | Planner        |                              |
|                       |                             |                |                              |





**Echols County**  
**Hazard Mitigation Plan Update – Second Workshop**  
**Date: Feb. 27, 2018**

| <u>Name</u>          | <u>Organization</u>         | <u>Title</u>           | <u>Email</u>              |
|----------------------|-----------------------------|------------------------|---------------------------|
| Rachel Rogers RN     | Echols Co H.D               | RN                     | Rachel. Rogers@dph.ga.gov |
| Kristin Dixon SN VSU | VSU student nurse           | student nurse          | kdixon@valdosta.edu       |
| Ariel Godwin         | SGRC                        | planner                | agodwin@sgrc.us           |
| General Zeigler      | Fc. Co.                     |                        | zeiglerc@bellsouth.net    |
| Lataca Bennett       | Echols Co. Bd of Commission | County Admin.          | ecboc@yahoo.com           |
| Nora L. Rogers       | Superior Court              | <del>CLERK</del> Clerk | nora.rogers@gsccca.org    |
| Jodi Barts           | EM #                        | Dir                    | —                         |
| Justin Shull         | Extension                   | County Coordinator     | Justin1@usc.edu           |
| Blake Stokes         | Sheriff's office            | Chief Deputy           | Echols694@gmail.com       |
| Miqua Turner         | Tax Office                  | Tax Comm.              | echols_tax@bellsouth.net  |
| Daryl Kinney         | Echols Co                   | RD Superintendent      | ecboc@yahoo.com           |
| Amy Swails           | South Health District       | Risk Communicator      | amy.swails@dph.ga.gov     |
| C. P. L.             | ECPC                        | Judge                  | judge.rogers@plnntt.net   |
|                      |                             |                        |                           |
|                      |                             |                        |                           |



# **Appendix F**

## Storm Events Database

Search Results for Echols County, Georgia

Event Types: [Hurricane \(Typhoon\)](#), [Tropical Storm](#)

Echols county contains the following zones:

'[Echols](#)'

2 events were reported between 01/01/1950 and 12/31/2017 (24837 days)

### Summary Info:

|  |   |
|--|---|
| Number of County/Zone areas affected:          | 1 |
| Number of Days with Event:                     | 2 |
| Number of Days with Event and Death:           | 0 |
| Number of Days with Event and Death or Injury: | 0 |
| Number of Days with Event and Property Damage: | 0 |
| Number of Days with Event and Crop Damage:     | 0 |
| Number of Event Types reported:                | 1 |

### Column Definitions:

'Mag': Magnitude, 'Dth': Deaths, 'Inj': Injuries, 'PrD': Property Damage, 'CrD': Crop Damage

Click on Location below to display details.

Available Event Types have changed over time. Please refer to the [Database Details](#) for more information.

Sort By:  ▼

| <u>Location</u>               | <u>County/Zone</u> | <u>St.</u> | <u>Date</u> | <u>Time</u> | <u>T.Z.</u> | <u>Type</u>    | <u>Mag</u> | <u>Dth</u> | <u>Inj</u> | <u>PrD</u> | <u>CrD</u> |
|-------------------------------|--------------------|------------|-------------|-------------|-------------|----------------|------------|------------|------------|------------|------------|
| Totals:                       |                    |            |             |             |             |                |            | 0          | 0          | 0.00K      | 0.00K      |
| <a href="#">ECHOLS (ZONE)</a> | ECHOLS (ZONE)      | GA         | 09/05/2004  | 00:01       | EST         | Tropical Storm |            | 0          | 0          | 0.00K      | 0.00K      |
| <a href="#">ECHOLS (ZONE)</a> | ECHOLS (ZONE)      | GA         | 09/25/2004  | 12:00       | EST         | Tropical Storm |            | 0          | 0          | 0.00K      | 0.00K      |
| Totals:                       |                    |            |             |             |             |                |            | 0          | 0          | 0.00K      | 0.00K      |

## Storm Events Database

Search Results for Echols County, Georgia

Event Types: [Flash Flood](#), [Flood](#)

Echols county contains the following zones:

['Echols'](#)

4 events were reported between 01/01/1950 and 12/31/2017 (24837 days)

### Summary Info:

|  |   |
|--|---|
| Number of County/Zone areas affected:          | 2 |
| Number of Days with Event:                     | 3 |
| Number of Days with Event and Death:           | 0 |
| Number of Days with Event and Death or Injury: | 0 |
| Number of Days with Event and Property Damage: | 1 |
| Number of Days with Event and Crop Damage:     | 0 |
| Number of Event Types reported:                | 2 |

### Column Definitions:

'Mag': Magnitude, 'Dth': Deaths, 'Inj': Injuries, 'PrD': Property Damage, 'CrD': Crop Damage

Click on Location below to display details.

Available Event Types have changed over time. Please refer to the [Database Details](#) for more information.

Sort By:  ▼

| <u>Location</u>               | <u>County/Zone</u> | <u>St.</u> | <u>Date</u> | <u>Time</u> | <u>I.Z.</u> | <u>Type</u> | <u>Mag</u> | <u>Dth</u> | <u>Inj</u> | <u>PrD</u> | <u>CrD</u> |
|-------------------------------|--------------------|------------|-------------|-------------|-------------|-------------|------------|------------|------------|------------|------------|
| Totals:                       |                    |            |             |             |             |             |            | 0          | 0          | 25.00K     | 0.00K      |
| <a href="#">ECHOLS (ZONE)</a> | ECHOLS (ZONE)      | GA         | 03/01/1998  | 00:01       | EST         | Flood       |            | 0          | 0          | 25.00K     | 0.00K      |
| <a href="#">COUNTYWIDE</a>    | ECHOLS CO.         | GA         | 06/12/2001  | 02:05       | EST         | Flash Flood |            | 0          | 0          | 0.00K      | 0.00K      |
| <a href="#">COUNTYWIDE</a>    | ECHOLS CO.         | GA         | 06/12/2001  | 10:30       | EST         | Flash Flood |            | 0          | 0          | 0.00K      | 0.00K      |
| <a href="#">MAYDAY</a>        | ECHOLS CO.         | GA         | 04/05/2009  | 00:00       | EST-5       | Flood       |            | 0          | 0          | 0.00K      | 0.00K      |
| Totals:                       |                    |            |             |             |             |             |            | 0          | 0          | 25.00K     | 0.00K      |

## Storm Events Database

Search Results for Echols County, Georgia

Event Types: [Funnel Cloud](#), [Tornado](#)

4 events were reported between 01/01/1950 and 12/31/2017 (24837 days)

### Summary Info:

|  |   |
|--|---|
| Number of County/Zone areas affected:          | 1 |
| Number of Days with Event:                     | 4 |
| Number of Days with Event and Death:           | 0 |
| Number of Days with Event and Death or Injury: | 0 |
| Number of Days with Event and Property Damage: | 4 |
| Number of Days with Event and Crop Damage:     | 0 |
| Number of Event Types reported:                | 1 |

### Column Definitions:

'Mag': Magnitude, 'Dth': Deaths, 'Inj': Injuries, 'PrD': Property Damage, 'CrD': Crop Damage

Click on Location below to display details.

Available Event Types have changed over time. Please refer to the [Database Details](#) for more information.

Select:

Sort By:

| <u>Location</u>             | <u>County/Zone</u> | <u>St.</u> | <u>Date</u> | <u>Time</u> | <u>I.Z.</u> | <u>Type</u> | <u>Mag</u> | <u>Dth</u> | <u>Inj</u> | <u>PrD</u> | <u>CrD</u> |
|-----------------------------|--------------------|------------|-------------|-------------|-------------|-------------|------------|------------|------------|------------|------------|
| Totals:                     |                    |            |             |             |             |             |            | 0          | 0          | 514.50K    | 0.00K      |
| <a href="#">Statenville</a> | ECHOLS CO.         | GA         | 03/31/1993  | 11:00       | EST         | Tornado     | F1         | 0          | 0          | 500.00K    | 0.00K      |
| <a href="#">TARVER</a>      | ECHOLS CO.         | GA         | 10/26/1997  | 20:45       | EST         | Tornado     | F0         | 0          | 0          | 2.00K      | 0.00K      |
| <a href="#">TARVER</a>      | ECHOLS CO.         | GA         | 11/01/1999  | 20:50       | EST         | Tornado     | F0         | 0          | 0          | 2.50K      | 0.00K      |
| <a href="#">NEEDMORE</a>    | ECHOLS CO.         | GA         | 11/06/2002  | 05:00       | EST         | Tornado     | F0         | 0          | 0          | 10.00K     | 0.00K      |
| Totals:                     |                    |            |             |             |             |             |            | 0          | 0          | 514.50K    | 0.00K      |

### Acres Burned for Echols County for CY 1967 to 2017

| Year | January | February | March | April  | May      | June  | July   | August | September | October | November | December | Total    |
|------|---------|----------|-------|--------|----------|-------|--------|--------|-----------|---------|----------|----------|----------|
| 1967 | 0       | 3.86     | 42.7  | 1      | 31.85    | 10.5  | 1.4    | 0      | 0         | 0.7     | 11.05    | 2.25     | 105.31   |
| 1968 | 7.8     | 161.04   | 33.73 | 0      | 9.6      | 87.41 | 11.72  | 2.01   | 0.39      | 19.3    | 2.59     | 28.36    | 363.95   |
| 1969 | 10.48   | 13.55    | 7.09  | 1.29   | 1.47     | 14.9  | 4      | 0      | 0.45      | 25.3    | 0        | 0        | 78.53    |
| 1970 | 0.27    | 63.78    | 45.65 | 12.82  | 4.19     | 11.5  | 0      | 1.54   | 1.22      | 15.1    | 0.68     | 1.13     | 157.88   |
| 1971 | 60.85   | 5.03     | 54.53 | 196.07 | 1.71     | 6.63  | 32.08  | 0.77   | 0         | 0.76    | 1.75     | 8.19     | 368.37   |
| 1972 | 0.45    | 0        | 23.12 | 45.91  | 10.88    | 25.01 | 32.5   | 3.12   | 1.13      | 17.46   | 0        | 1.6      | 161.18   |
| 1973 | 11.54   | 6.76     | 41.52 | 1.21   | 0.23     | 0.67  | 11.41  | 292.1  | 20.36     | 74.36   | 117.17   | 0.53     | 577.86   |
| 1974 | 31.16   | 28.68    | 56.78 | 564.05 | 71.26    | 25.04 | 33.75  | 31.94  | 1.67      | 0.88    | 17.65    | 1.45     | 864.31   |
| 1975 | 0.01    | 2.43     | 38.4  | 0.33   | 3.59     | 42.54 | 0.02   | 0.01   | 4.51      | 2.89    | 7.1      | 1.76     | 103.59   |
| 1976 | 12.42   | 98.92    | 4.53  | 8.22   | 0        | 4.61  | 0.03   | 8.86   | 0.1       | 0.01    | 7.12     | 0.12     | 144.94   |
| 1977 | 0.01    | 22.23    | 12.15 | 27.95  | 46.68    | 68.48 | 3.98   | 0.02   | 26        | 18.11   | 24.46    | 0        | 250.07   |
| 1978 | 3.85    | 66.31    | 30.49 | 18.53  | 0        | 0.73  | 0      | 0.25   | 33.67     | 82.01   | 80.71    | 17.21    | 333.76   |
| 1979 | 2.26    | 14.85    | 49.87 | 11.42  | 0        | 1.22  | 1.5    | 1.09   | 0         | 0.86    | 1.39     | 0        | 84.46    |
| 1980 | 5.65    | 9.62     | 6.18  | 0.18   | 0        | 40.76 | 38.94  | 10.88  | 30.28     | 9.27    | 46.78    | 12.71    | 211.25   |
| 1981 | 384.13  | 22.02    | 70.57 | 26.2   | 0.64     | 82.41 | 83.29  | 4.24   | 9.68      | 20.14   | 7.62     | 0.94     | 711.88   |
| 1982 | 20.16   | 65.32    | 33.94 | 5.14   | 99.2     | 0.4   | 0.37   | 0.43   | 0         | 0.19    | 6.7      | 1.47     | 233.32   |
| 1983 | 2.25    | 2.43     | 0.26  | 32.16  | 0.23     | 6.72  | 1.44   | 4.72   | 0         | 22.47   | 0.02     | 7.16     | 79.86    |
| 1984 | 23.61   | 7.37     | 6.78  | 0.95   | 0.62     | 41.44 | 6.5    | 4.2    | 1.24      | 3.37    | 2.31     | 7.83     | 106.22   |
| 1985 | 20.58   | 68.57    | 40.69 | 6.75   | 1,724.35 | 31.68 | 21.21  | 0      | 0.48      | 0.58    | 0        | 1.29     | 1,916.18 |
| 1986 | 3.68    | 11.94    | 9.62  | 53.02  | 14.66    | 61.39 | 52.92  | 4.03   | 1.22      | 0       | 0.01     | 0.34     | 212.83   |
| 1987 | 0.3     | 7.34     | 0     | 17.08  | 0        | 0     | 80.5   | 30.44  | 2.68      | 0.89    | 16.46    | 24.02    | 179.71   |
| 1988 | 8.62    | 9.97     | 1.17  | 0.91   | 255.9    | 2.51  | 84.84  | 37.29  | 1.26      | 0       | 0.6      | 2.41     | 405.48   |
| 1989 | 16.49   | 16.34    | 28.97 | 2.54   | 3.35     | 0.02  | 0      | 0      | 0.19      | 0.01    | 22.4     | 5.69     | 96       |
| 1990 | 11.01   | 0        | 27.78 | 29.17  | 0        | 3.81  | 438.81 | 58.68  | 42.99     | 4.98    | 8.21     | 7.83     | 633.27   |
| 1991 | 0       | 11.67    | 13.66 | 11.32  | 3.67     | 0.75  | 0.14   | 3.13   | 2.53      | 8.84    | 0.93     | 10.5     | 67.14    |
| 1992 | 7.79    | 5.76     | 0.2   | 14.9   | 0.72     | 22.25 | 2.97   | 0      | 0.62      | 0.83    | 23.66    | 49.52    | 129.22   |
| 1993 | 94.13   | 3.84     | 42.5  | 33.76  | 36.45    | 49.94 | 7.38   | 1.15   | 8.38      | 24.18   | 6.09     | 1.01     | 308.81   |
| 1994 | 1.16    | 0.55     | 12.95 | 2.54   | 3.72     | 9.96  | 1.34   | 77.78  | 0         | 0.35    | 2.24     | 0.46     | 113.05   |
| 1995 | 0.08    | 36.6     | 48    | 4.54   | 1.51     | 41.67 | 40.73  | 28.2   | 1.84      | 0.1     | 7.17     | 2.88     | 213.32   |
| 1996 | 0.82    | 38.22    | 57.57 | 6.41   | 357.99   | 19.06 | 52.88  | 0.11   | 0.4       | 2.65    | 0.45     | 0.05     | 536.61   |
| 1997 | 1.81    | 4.71     | 0.78  | 8.17   | 3.02     | 0     | 1.08   | 1.7    | 0.3       | 1.6     | 0        | 0        | 23.17    |
| 1998 | 1.04    | 0.02     | 0     | 0      | 20.42    | 28.73 | 3.08   | 1.89   | 4.78      | 0.03    | 33.5     | 0.59     | 94.08    |



|             |       |       |       |       |        |        |        |       |        |        |       |       |        |
|-------------|-------|-------|-------|-------|--------|--------|--------|-------|--------|--------|-------|-------|--------|
| <b>1999</b> | 0.62  | 20.25 | 36.39 | 14.64 | 317.76 | 101.87 | 70.48  | 0.38  | 141.55 | 29.19  | 0     | 17.94 | 751.07 |
| <b>2000</b> | 81.96 | 3.08  | 25.7  | 32.75 | 26.63  | 55.98  | 13.38  | 16.16 | 0.02   | 0.01   | 0     | 2.97  | 258.64 |
| <b>2001</b> | 10.7  | 14.33 | 5.86  | 1.51  | 95.7   | 2.38   | 0      | 19.4  | 0      | 0      | 31.86 | 0.08  | 181.82 |
| <b>2002</b> | 2.02  | 0.76  | 0.16  | 0     | 24.67  | 33.35  | 0      | 5.73  | 10.22  | 0      | 1.7   | 0.31  | 78.92  |
| <b>2003</b> | 20.83 | 17.02 | 33.73 | 1.7   | 0      | 0.04   | 1.9    | 11.2  | 1.08   | 2.28   | 0.01  | 1.05  | 90.84  |
| <b>2004</b> | 28.59 | 0.02  | 45.29 | 15.58 | 85.03  | 3.53   | 213.18 | 0.01  | 0      | 0.03   | 0     | 33.3  | 424.56 |
| <b>2005</b> | 3.61  | 0.15  | 3.63  | 0.11  | 0      | 8.01   | 0      | 0.51  | 3.05   | 0.27   | 2.76  | 0     | 22.1   |
| <b>2006</b> | 0.13  | 16.09 | 6.76  | 10.93 | 1.26   | 12.54  | 4.85   | 1.72  | 0.05   | 148.34 | 0     | 0     | 202.67 |
| <b>2007</b> | 0     | 0.95  | 1.97  | 0.15  | 106.1  | 6.77   | 0.78   | 2.55  | 28.75  | 0      | 19.84 | 0     | 167.86 |
| <b>2008</b> | 0.25  | 16.63 | 3.96  | 0     | 0.05   | 2.88   | 3.13   | 0.17  | 0.54   | 6.01   | 0     | 0.6   | 34.22  |
| <b>2009</b> | 3.85  | 3.36  | 8.97  | 0     | 0      | 0      | 0      | 0     | 0.1    | 0      | 0     | 0     | 16.28  |
| <b>2010</b> | 2.72  | 1.76  | 0.03  | 0.46  | 0      | 2.16   | 0      | 2.5   | 0      | 0.43   | 0.89  | 0.1   | 11.05  |
| <b>2011</b> | 2.7   | 1.7   | 4     | 8.1   | 6.6    | 91.9   | 4.1    | 13    | 0      | 0      | 0     | 0.5   | 132.6  |
| <b>2012</b> | 0     | 0     | 2.26  | 2.3   | 1      | 0      | 0      | 0     | 0      | 0      | 0.1   | 0     | 5.66   |
| <b>2013</b> | 0.1   | 20.48 | 2     | 0     | 0      | 0      | 0      | 0     | 9.5    | 0      | 0     | 0     | 32.08  |
| <b>2014</b> | 0     | 12    | 6.07  | 0     | 0      | 1      | 2      | 3     | 2      | 0      | 3.6   | 0     | 29.67  |
| <b>2015</b> | 4.19  | 128.9 | 8.1   | 0     | 0      | 10.66  | 10.2   | 7.14  | 3.04   | 0      | 0     | 7.4   | 179.63 |
| <b>2016</b> | 2.08  | 12.9  | 52.33 | 0     | 5.32   | 12     | 487.2  | 0     | 0.02   | 0.21   | 6.1   | 0     | 578.16 |
| <b>2017</b> | 4     | 2.5   | 57.7  | 57.9  | 14.67  | 0      | 0      | 0.5   | 3      | 0      | 0     | 0     | 140.27 |

### Number of Fires for Echols County for CY 1967 to 2017

| Year | January | February | March | April | May | June | July | August | September | October | November | December | Total |
|------|---------|----------|-------|-------|-----|------|------|--------|-----------|---------|----------|----------|-------|
| 1967 | 0       | 4        | 8     | 1     | 13  | 3    | 3    | 0      | 0         | 3       | 15       | 2        | 52    |
| 1968 | 4       | 13       | 7     | 0     | 3   | 9    | 9    | 2      | 1         | 1       | 2        | 2        | 53    |
| 1969 | 8       | 7        | 3     | 5     | 2   | 4    | 1    | 0      | 1         | 2       | 0        | 0        | 33    |
| 1970 | 1       | 5        | 7     | 5     | 10  | 3    | 0    | 1      | 1         | 8       | 2        | 3        | 46    |
| 1971 | 9       | 7        | 3     | 5     | 1   | 3    | 5    | 1      | 0         | 2       | 5        | 3        | 44    |
| 1972 | 1       | 0        | 7     | 8     | 3   | 4    | 13   | 3      | 2         | 5       | 1        | 2        | 49    |
| 1973 | 5       | 7        | 14    | 8     | 2   | 2    | 2    | 5      | 5         | 17      | 49       | 4        | 120   |
| 1974 | 8       | 11       | 19    | 31    | 8   | 14   | 7    | 5      | 3         | 4       | 20       | 6        | 136   |
| 1975 | 1       | 5        | 4     | 2     | 5   | 8    | 2    | 1      | 3         | 3       | 4        | 4        | 42    |
| 1976 | 11      | 13       | 2     | 7     | 2   | 6    | 1    | 8      | 2         | 1       | 5        | 5        | 63    |
| 1977 | 4       | 11       | 10    | 8     | 11  | 27   | 7    | 3      | 6         | 5       | 6        | 0        | 98    |
| 1978 | 2       | 18       | 5     | 16    | 0   | 2    | 2    | 2      | 11        | 29      | 23       | 16       | 126   |
| 1979 | 1       | 6        | 13    | 5     | 0   | 1    | 3    | 11     | 0         | 2       | 9        | 0        | 51    |
| 1980 | 9       | 9        | 4     | 1     | 3   | 15   | 6    | 10     | 10        | 7       | 7        | 5        | 86    |
| 1981 | 30      | 12       | 19    | 3     | 2   | 29   | 3    | 1      | 4         | 25      | 7        | 5        | 140   |
| 1982 | 13      | 10       | 14    | 4     | 5   | 4    | 2    | 4      | 1         | 3       | 6        | 3        | 69    |
| 1983 | 1       | 13       | 1     | 4     | 2   | 2    | 3    | 6      | 1         | 7       | 2        | 5        | 47    |
| 1984 | 8       | 6        | 5     | 3     | 4   | 4    | 3    | 5      | 5         | 8       | 9        | 6        | 66    |
| 1985 | 12      | 22       | 20    | 3     | 17  | 5    | 2    | 2      | 1         | 1       | 1        | 8        | 94    |
| 1986 | 9       | 6        | 4     | 12    | 7   | 10   | 15   | 6      | 1         | 1       | 1        | 1        | 73    |
| 1987 | 3       | 4        | 1     | 8     | 0   | 1    | 4    | 7      | 3         | 6       | 1        | 6        | 44    |
| 1988 | 5       | 4        | 2     | 4     | 5   | 6    | 13   | 3      | 2         | 0       | 4        | 2        | 50    |
| 1989 | 7       | 9        | 12    | 4     | 7   | 1    | 0    | 0      | 2         | 1       | 3        | 6        | 52    |
| 1990 | 9       | 0        | 8     | 4     | 0   | 2    | 8    | 9      | 13        | 4       | 6        | 4        | 67    |
| 1991 | 0       | 5        | 7     | 1     | 1   | 2    | 1    | 9      | 15        | 6       | 4        | 6        | 57    |
| 1992 | 10      | 4        | 1     | 6     | 2   | 2    | 1    | 0      | 1         | 4       | 3        | 10       | 44    |
| 1993 | 9       | 6        | 13    | 12    | 17  | 9    | 3    | 3      | 3         | 9       | 3        | 3        | 90    |
| 1994 | 3       | 2        | 6     | 4     | 3   | 4    | 4    | 2      | 0         | 5       | 1        | 2        | 36    |
| 1995 | 3       | 12       | 10    | 3     | 3   | 5    | 9    | 6      | 4         | 1       | 3        | 11       | 70    |
| 1996 | 6       | 14       | 5     | 5     | 6   | 8    | 5    | 1      | 2         | 7       | 3        | 2        | 64    |
| 1997 | 6       | 5        | 5     | 2     | 3   | 1    | 3    | 2      | 2         | 9       | 0        | 0        | 38    |
| 1998 | 5       | 1        | 0     | 0     | 8   | 10   | 3    | 4      | 3         | 1       | 4        | 3        | 42    |

|      |   |   |    |   |    |    |   |   |   |    |    |   |    |
|------|---|---|----|---|----|----|---|---|---|----|----|---|----|
| 1999 | 3 | 9 | 21 | 7 | 9  | 7  | 4 | 4 | 9 | 21 | 0  | 3 | 97 |
| 2000 | 6 | 7 | 4  | 4 | 5  | 11 | 6 | 4 | 1 | 1  | 0  | 4 | 53 |
| 2001 | 7 | 4 | 1  | 3 | 9  | 1  | 0 | 1 | 0 | 0  | 11 | 2 | 39 |
| 2002 | 4 | 3 | 1  | 0 | 13 | 4  | 0 | 6 | 8 | 0  | 1  | 2 | 42 |
| 2003 | 7 | 8 | 3  | 2 | 0  | 1  | 4 | 4 | 4 | 10 | 2  | 3 | 48 |
| 2004 | 7 | 1 | 14 | 6 | 5  | 2  | 1 | 1 | 0 | 1  | 0  | 9 | 47 |
| 2005 | 3 | 2 | 2  | 2 | 0  | 1  | 0 | 1 | 1 | 2  | 4  | 0 | 18 |
| 2006 | 1 | 5 | 3  | 3 | 5  | 5  | 7 | 4 | 1 | 2  | 0  | 0 | 36 |
| 2007 | 0 | 1 | 4  | 1 | 5  | 2  | 4 | 3 | 1 | 0  | 1  | 0 | 22 |
| 2008 | 1 | 6 | 1  | 0 | 1  | 2  | 2 | 1 | 1 | 5  | 0  | 1 | 21 |
| 2009 | 2 | 7 | 4  | 0 | 0  | 0  | 0 | 0 | 1 | 0  | 0  | 0 | 14 |
| 2010 | 1 | 2 | 2  | 2 | 0  | 2  | 0 | 1 | 0 | 2  | 1  | 1 | 14 |
| 2011 | 1 | 3 | 3  | 2 | 1  | 8  | 1 | 4 | 0 | 0  | 0  | 1 | 24 |
| 2012 | 0 | 0 | 3  | 1 | 1  | 0  | 0 | 0 | 0 | 0  | 1  | 0 | 6  |
| 2013 | 1 | 2 | 1  | 0 | 0  | 0  | 0 | 0 | 1 | 0  | 0  | 0 | 5  |
| 2014 | 0 | 2 | 3  | 0 | 0  | 1  | 1 | 2 | 1 | 0  | 3  | 0 | 13 |
| 2015 | 1 | 3 | 1  | 0 | 0  | 8  | 1 | 2 | 2 | 0  | 0  | 6 | 24 |
| 2016 | 2 | 2 | 5  | 0 | 4  | 3  | 3 | 0 | 1 | 2  | 2  | 0 | 24 |
| 2017 | 1 | 2 | 7  | 7 | 4  | 0  | 0 | 1 | 1 | 0  | 0  | 0 | 23 |

## Storm Events Database

Search Results for Echols County, Georgia

Event Types: [Wildfire](#)

Echols county contains the following zones:

['Echols'](#)

0 events were reported between 01/01/1950 and 12/31/2017 (24837 days)

### Summary Info:

|  |   |
|--|---|
| Number of County/Zone areas affected:          | 0 |
| Number of Days with Event:                     | 0 |
| Number of Days with Event and Death:           | 0 |
| Number of Days with Event and Death or Injury: | 0 |
| Number of Days with Event and Property Damage: | 0 |
| Number of Days with Event and Crop Damage:     | 0 |
| Number of Event Types reported:                | 0 |

### Column Definitions:

'Mag': Magnitude, 'Dth': Deaths, 'Inj': Injuries, 'PrD': Property Damage, 'CrD': Crop Damage

Click on Location below to display details.

Available Event Types have changed over time. Please refer to the [Database Details](#) for more information.

Sort By:  ▼

| <u>Location</u> | <u>County/Zone</u> | <u>St.</u> | <u>Date</u> | <u>Time</u> | <u>I.Z.</u> | <u>Type</u> | <u>Mag</u> | <u>Dth</u> | <u>Inj</u> | <u>PrD</u> | <u>CrD</u> |
|-----------------|--------------------|------------|-------------|-------------|-------------|-------------|------------|------------|------------|------------|------------|
| Totals:         |                    |            |             |             |             |             |            | 0          | 0          | 0.00K      | 0.00K      |

## Storm Events Database

Search Results for Echols County, Georgia

Event Types: [Lightning](#), [Thunderstorm Wind](#)

62 events were reported between 01/01/1950 and 12/31/2017 (24837 days)

### Summary Info:

|  |    |
|--|----|
| Number of County/Zone areas affected:          | 1  |
| Number of Days with Event:                     | 54 |
| Number of Days with Event and Death:           | 0  |
| Number of Days with Event and Death or Injury: | 0  |
| Number of Days with Event and Property Damage: | 22 |
| Number of Days with Event and Crop Damage:     | 0  |
| Number of Event Types reported:                | 1  |

### Column Definitions:

'Mag': Magnitude, 'Dth': Deaths, 'Inj': Injuries, 'PrD': Property Damage, 'CrD': Crop Damage

### Wind Magnitude Definitions:

Measured Gust:'MG', Estimated Gust:'EG', Measured Sustained:'MS', Estimated Sustained:'ES'

Click on Location below to display details.

Available Event Types have changed over time. Please refer to the [Database Details](#) for more information.

Select:

Sort By:

| Location                    | County/Zone | St. | Date       | Time  | I.Z. | Type              | Mag        | Dth | Inj | PrD    | CrD   |
|-----------------------------|-------------|-----|------------|-------|------|-------------------|------------|-----|-----|--------|-------|
| Totals:                     |             |     |            |       |      |                   |            | 0   | 0   | 63.20K | 0.00K |
| <a href="#">ECHOLS CO.</a>  | ECHOLS CO.  | GA  | 06/19/1985 | 17:00 | CST  | Thunderstorm Wind | 0 kts.     | 0   | 0   | 0.00K  | 0.00K |
| <a href="#">ECHOLS CO.</a>  | ECHOLS CO.  | GA  | 08/01/1986 | 18:00 | CST  | Thunderstorm Wind | 0 kts.     | 0   | 0   | 0.00K  | 0.00K |
| <a href="#">ECHOLS CO.</a>  | ECHOLS CO.  | GA  | 06/16/1989 | 11:10 | CST  | Thunderstorm Wind | 0 kts.     | 0   | 0   | 0.00K  | 0.00K |
| <a href="#">Needmore</a>    | ECHOLS CO.  | GA  | 03/31/1993 | 11:30 | EST  | Thunderstorm Wind | 0 kts.     | 0   | 0   | 0.00K  | 0.00K |
| <a href="#">Statenville</a> | ECHOLS CO.  | GA  | 06/09/1994 | 18:25 | EST  | Thunderstorm Wind | 0 kts.     | 0   | 0   | 0.50K  | 0.00K |
| <a href="#">Statenville</a> | ECHOLS CO.  | GA  | 06/09/1994 | 18:25 | EST  | Thunderstorm Wind | 0 kts.     | 0   | 0   | 5.00K  | 0.00K |
| <a href="#">Needmore</a>    | ECHOLS CO.  | GA  | 10/28/1995 | 01:30 | EST  | Thunderstorm Wind | 0 kts.     | 0   | 0   | 2.00K  | 0.00K |
| <a href="#">STATENVILLE</a> | ECHOLS CO.  | GA  | 06/01/1997 | 16:00 | EST  | Thunderstorm Wind |            | 0   | 0   | 0.60K  | 0.00K |
| <a href="#">STATENVILLE</a> | ECHOLS CO.  | GA  | 02/22/1998 | 12:18 | EST  | Thunderstorm Wind |            | 0   | 0   | 1.50K  | 0.00K |
| <a href="#">STATENVILLE</a> | ECHOLS CO.  | GA  | 03/08/1998 | 19:30 | EST  | Thunderstorm Wind |            | 0   | 0   | 1.50K  | 0.00K |
| <a href="#">STATENVILLE</a> | ECHOLS CO.  | GA  | 04/09/1998 | 04:30 | EST  | Thunderstorm Wind |            | 0   | 0   | 0.50K  | 0.00K |
| <a href="#">NEEDMORE</a>    | ECHOLS CO.  | GA  | 06/19/1998 | 18:05 | EST  | Thunderstorm Wind |            | 0   | 0   | 2.50K  | 0.00K |
| <a href="#">HAYLOW</a>      | ECHOLS CO.  | GA  | 06/27/1998 | 15:48 | EST  | Thunderstorm Wind |            | 0   | 0   | 2.00K  | 0.00K |
| <a href="#">STATENVILLE</a> | ECHOLS CO.  | GA  | 09/03/1998 | 01:30 | EST  | Thunderstorm Wind |            | 0   | 0   | 15.00K | 0.00K |
| <a href="#">STATENVILLE</a> | ECHOLS CO.  | GA  | 01/24/2000 | 07:55 | EST  | Thunderstorm Wind |            | 0   | 0   | 2.50K  | 0.00K |
| <a href="#">STATENVILLE</a> | ECHOLS CO.  | GA  | 02/14/2000 | 03:56 | EST  | Thunderstorm Wind |            | 0   | 0   | 2.50K  | 0.00K |
| <a href="#">STATENVILLE</a> | ECHOLS CO.  | GA  | 04/24/2000 | 12:05 | EST  | Thunderstorm Wind |            | 0   | 0   | 2.50K  | 0.00K |
| <a href="#">STATENVILLE</a> | ECHOLS CO.  | GA  | 05/22/2000 | 16:30 | EST  | Thunderstorm Wind |            | 0   | 0   | 2.50K  | 0.00K |
| <a href="#">NEEDMORE</a>    | ECHOLS CO.  | GA  | 10/06/2000 | 16:30 | EST  | Thunderstorm Wind |            | 0   | 0   | 2.50K  | 0.00K |
| <a href="#">HAYLOW</a>      | ECHOLS CO.  | GA  | 06/11/2001 | 02:05 | EST  | Thunderstorm Wind |            | 0   | 0   | 2.50K  | 0.00K |
| <a href="#">NEEDMORE</a>    | ECHOLS CO.  | GA  | 06/12/2001 | 06:01 | EST  | Thunderstorm Wind |            | 0   | 0   | 3.50K  | 0.00K |
| <a href="#">NEEDMORE</a>    | ECHOLS CO.  | GA  | 06/30/2001 | 19:00 | EST  | Thunderstorm Wind |            | 0   | 0   | 3.50K  | 0.00K |
| <a href="#">NEEDMORE</a>    | ECHOLS CO.  | GA  | 05/30/2002 | 16:15 | EST  | Thunderstorm Wind |            | 0   | 0   | 0.10K  | 0.00K |
| <a href="#">COUNTYWIDE</a>  | ECHOLS CO.  | GA  | 06/30/2002 | 17:10 | EST  | Thunderstorm Wind |            | 0   | 0   | 2.00K  | 0.00K |
| <a href="#">NEEDMORE</a>    | ECHOLS CO.  | GA  | 12/24/2002 | 10:35 | EST  | Thunderstorm Wind |            | 0   | 0   | 2.00K  | 0.00K |
| <a href="#">MAYDAY</a>      | ECHOLS CO.  | GA  | 03/01/2003 | 13:00 | EST  | Thunderstorm Wind | 60 kts. EG | 0   | 0   | 5.00K  | 0.00K |
| <a href="#">MAYDAY</a>      | ECHOLS CO.  | GA  | 06/16/2003 | 15:55 | EST  | Thunderstorm Wind | 55 kts. EG | 0   | 0   | 0.00K  | 0.00K |

|                             |            |    |            |       |       |                   |            |   |   |        |       |
|-----------------------------|------------|----|------------|-------|-------|-------------------|------------|---|---|--------|-------|
| <a href="#">STATENVILLE</a> | ECHOLS CO. | GA | 01/26/2004 | 15:59 | EST   | Thunderstorm Wind | 50 kts. ES | 0 | 0 | 0.00K  | 0.00K |
| <a href="#">STATENVILLE</a> | ECHOLS CO. | GA | 06/26/2004 | 15:45 | EST   | Thunderstorm Wind | 55 kts. EG | 0 | 0 | 0.00K  | 0.00K |
| <a href="#">STATENVILLE</a> | ECHOLS CO. | GA | 06/26/2004 | 15:47 | EST   | Thunderstorm Wind | 55 kts. EG | 0 | 0 | 0.00K  | 0.00K |
| <a href="#">STATENVILLE</a> | ECHOLS CO. | GA | 03/02/2007 | 03:30 | EST-5 | Thunderstorm Wind | 50 kts. EG | 0 | 0 | 0.00K  | 0.00K |
| <a href="#">STATENVILLE</a> | ECHOLS CO. | GA | 06/04/2007 | 16:00 | EST-5 | Thunderstorm Wind | 50 kts. EG | 0 | 0 | 0.00K  | 0.00K |
| <a href="#">STATENVILLE</a> | ECHOLS CO. | GA | 06/12/2007 | 07:45 | EST-5 | Thunderstorm Wind | 50 kts. EG | 0 | 0 | 0.00K  | 0.00K |
| <a href="#">MAYDAY</a>      | ECHOLS CO. | GA | 07/14/2007 | 14:45 | EST-5 | Thunderstorm Wind | 50 kts. EG | 0 | 0 | 0.00K  | 0.00K |
| <a href="#">STATENVILLE</a> | ECHOLS CO. | GA | 02/26/2008 | 12:30 | EST-5 | Thunderstorm Wind | 52 kts. EG | 0 | 0 | 0.00K  | 0.00K |
| <a href="#">STATENVILLE</a> | ECHOLS CO. | GA | 06/11/2008 | 17:00 | EST-5 | Thunderstorm Wind | 50 kts. EG | 0 | 0 | 0.00K  | 0.00K |
| <a href="#">STATENVILLE</a> | ECHOLS CO. | GA | 10/09/2008 | 08:45 | EST-5 | Thunderstorm Wind | 50 kts. EG | 0 | 0 | 0.00K  | 0.00K |
| <a href="#">STATENVILLE</a> | ECHOLS CO. | GA | 04/08/2010 | 18:55 | EST-5 | Thunderstorm Wind | 50 kts. EG | 0 | 0 | 0.00K  | 0.00K |
| <a href="#">HOWELL</a>      | ECHOLS CO. | GA | 06/13/2010 | 15:25 | EST-5 | Thunderstorm Wind | 50 kts. EG | 0 | 0 | 0.00K  | 0.00K |
| <a href="#">STATENVILLE</a> | ECHOLS CO. | GA | 05/14/2011 | 16:55 | EST-5 | Thunderstorm Wind | 50 kts. EG | 0 | 0 | 0.00K  | 0.00K |
| <a href="#">STATENVILLE</a> | ECHOLS CO. | GA | 06/13/2011 | 17:40 | EST-5 | Thunderstorm Wind | 50 kts. EG | 0 | 0 | 0.00K  | 0.00K |
| <a href="#">FRUITLAND</a>   | ECHOLS CO. | GA | 09/05/2011 | 15:45 | EST-5 | Thunderstorm Wind | 50 kts. EG | 0 | 0 | 0.00K  | 0.00K |
| <a href="#">STATENVILLE</a> | ECHOLS CO. | GA | 09/05/2011 | 19:15 | EST-5 | Thunderstorm Wind | 50 kts. EG | 0 | 0 | 0.00K  | 0.00K |
| <a href="#">STATENVILLE</a> | ECHOLS CO. | GA | 09/25/2011 | 15:20 | EST-5 | Thunderstorm Wind | 50 kts. EG | 0 | 0 | 0.00K  | 0.00K |
| <a href="#">STATENVILLE</a> | ECHOLS CO. | GA | 09/25/2011 | 15:25 | EST-5 | Thunderstorm Wind | 50 kts. EG | 0 | 0 | 0.00K  | 0.00K |
| <a href="#">STATENVILLE</a> | ECHOLS CO. | GA | 09/25/2011 | 15:35 | EST-5 | Thunderstorm Wind | 50 kts. EG | 0 | 0 | 0.00K  | 0.00K |
| <a href="#">STATENVILLE</a> | ECHOLS CO. | GA | 09/25/2011 | 15:45 | EST-5 | Thunderstorm Wind | 50 kts. EG | 0 | 0 | 0.00K  | 0.00K |
| <a href="#">STATENVILLE</a> | ECHOLS CO. | GA | 01/30/2013 | 21:00 | EST-5 | Thunderstorm Wind | 50 kts. EG | 0 | 0 | 0.00K  | 0.00K |
| <a href="#">STATENVILLE</a> | ECHOLS CO. | GA | 07/21/2013 | 14:50 | EST-5 | Thunderstorm Wind | 50 kts. EG | 0 | 0 | 0.00K  | 0.00K |
| <a href="#">STATENVILLE</a> | ECHOLS CO. | GA | 08/17/2013 | 18:13 | EST-5 | Thunderstorm Wind | 50 kts. EG | 0 | 0 | 0.00K  | 0.00K |
| <a href="#">STATENVILLE</a> | ECHOLS CO. | GA | 08/17/2013 | 18:14 | EST-5 | Thunderstorm Wind | 50 kts. EG | 0 | 0 | 0.00K  | 0.00K |
| <a href="#">STATENVILLE</a> | ECHOLS CO. | GA | 02/21/2014 | 09:35 | EST-5 | Thunderstorm Wind | 50 kts. EG | 0 | 0 | 0.00K  | 0.00K |
| <a href="#">PINELAND</a>    | ECHOLS CO. | GA | 03/16/2014 | 14:53 | EST-5 | Thunderstorm Wind | 50 kts. EG | 0 | 0 | 0.00K  | 0.00K |
| <a href="#">HAYLOW</a>      | ECHOLS CO. | GA | 06/22/2014 | 15:00 | EST-5 | Thunderstorm Wind | 50 kts. EG | 0 | 0 | 0.00K  | 0.00K |
| <a href="#">STATENVILLE</a> | ECHOLS CO. | GA | 07/03/2014 | 16:55 | EST-5 | Thunderstorm Wind | 45 kts. EG | 0 | 0 | 1.00K  | 0.00K |
| <a href="#">MAYDAY</a>      | ECHOLS CO. | GA | 06/03/2015 | 19:45 | EST-5 | Thunderstorm Wind | 50 kts. EG | 0 | 0 | 0.00K  | 0.00K |
| <a href="#">TARVER</a>      | ECHOLS CO. | GA | 06/03/2015 | 20:00 | EST-5 | Thunderstorm Wind | 50 kts. EG | 0 | 0 | 0.00K  | 0.00K |
| <a href="#">HOWELL</a>      | ECHOLS CO. | GA | 06/22/2015 | 17:30 | EST-5 | Thunderstorm Wind | 50 kts. EG | 0 | 0 | 0.00K  | 0.00K |
| <a href="#">STATENVILLE</a> | ECHOLS CO. | GA | 07/01/2015 | 18:05 | EST-5 | Thunderstorm Wind | 50 kts. EG | 0 | 0 | 0.00K  | 0.00K |
| <a href="#">STATENVILLE</a> | ECHOLS CO. | GA | 07/05/2015 | 13:24 | EST-5 | Thunderstorm Wind | 50 kts. EG | 0 | 0 | 0.00K  | 0.00K |
| <a href="#">STATENVILLE</a> | ECHOLS CO. | GA | 05/31/2016 | 17:08 | EST-5 | Thunderstorm Wind | 50 kts. EG | 0 | 0 | 0.00K  | 0.00K |
| <a href="#">HOWELL</a>      | ECHOLS CO. | GA | 08/14/2016 | 18:20 | EST-5 | Thunderstorm Wind | 50 kts. EG | 0 | 0 | 0.00K  | 0.00K |
| Totals:                     |            |    |            |       |       |                   |            | 0 | 0 | 63.20K | 0.00K |

## Storm Events Database

Search Results for Echols County, Georgia

Event Types: [Excessive Heat](#)

Echols county contains the following zones:

['Echols'](#)

0 events were reported between 01/01/1950 and 12/31/2017 (24837 days)

### Summary Info:

|  |   |
|--|---|
| Number of County/Zone areas affected:          | 0 |
| Number of Days with Event:                     | 0 |
| Number of Days with Event and Death:           | 0 |
| Number of Days with Event and Death or Injury: | 0 |
| Number of Days with Event and Property Damage: | 0 |
| Number of Days with Event and Crop Damage:     | 0 |
| Number of Event Types reported:                | 0 |

### Column Definitions:

'Mag': Magnitude, 'Dth': Deaths, 'Inj': Injuries, 'PrD': Property Damage, 'CrD': Crop Damage

Click on Location below to display details.

Available Event Types have changed over time. Please refer to the [Database Details](#) for more information.

Sort By:  ▼

| <u>Location</u> | <u>County/Zone</u> | <u>St.</u> | <u>Date</u> | <u>Time</u> | <u>I.Z.</u> | <u>Type</u> | <u>Mag</u> | <u>Dth</u> | <u>Inj</u> | <u>PrD</u> | <u>CrD</u> |
|-----------------|--------------------|------------|-------------|-------------|-------------|-------------|------------|------------|------------|------------|------------|
| Totals:         |                    |            |             |             |             |             |            | 0          | 0          | 0.00K      | 0.00K      |

DROUGHT DATA - ECHOLS COUNTY

Source: US Drought Monitor

| Year        | D0 events | D1 events | D2 events | D3 events | D4 events |
|-------------|-----------|-----------|-----------|-----------|-----------|
| 2000        | 19        | 17        | 29        | 5         | 1         |
| 2001        | 20        | 21        | 10        | 0         | 0         |
| 2002        | 29        | 16        | 10        | 0         | 0         |
| 2003        | 6         | 0         | 0         | 0         | 0         |
| 2004        | 13        | 3         | 0         | 0         | 0         |
| 2005        | 2         | 0         | 0         | 0         | 0         |
| 2006        | 21        | 13        | 0         | 0         | 0         |
| 2007        | 30        | 24        | 14        | 9         | 0         |
| 2008        | 22        | 12        | 0         | 0         | 0         |
| 2009        | 16        | 6         | 0         | 0         | 0         |
| 2010        | 8         | 11        | 9         | 4         | 0         |
| 2011        | 0         | 19        | 43        | 34        | 4         |
| 2012        | 7         | 10        | 13        | 20        | 9         |
| 2013        | 18        | 8         | 5         | 3         | 0         |
| 2014        | 12        | 4         | 1         | 0         | 0         |
| 2015        | 21        | 15        | 6         | 0         | 0         |
| 2016        | 25        | 6         | 5         | 0         | 0         |
| 2017        | 15        | 8         | 8         | 3         | 0         |
| 2018        | 11        | 17        | 6         | 0         | 0         |
| Grand Total | 295       | 210       | 159       | 78        | 14        |



## Storm Events Database

Search Results for Echols County, Georgia

Event Types: [Drought](#)

Echols county contains the following zones:

['Echols'](#)

0 events were reported between 01/01/1950 and 12/31/2017 (24837 days)

### Summary Info:

|  |   |
|--|---|
| Number of County/Zone areas affected:          | 0 |
| Number of Days with Event:                     | 0 |
| Number of Days with Event and Death:           | 0 |
| Number of Days with Event and Death or Injury: | 0 |
| Number of Days with Event and Property Damage: | 0 |
| Number of Days with Event and Crop Damage:     | 0 |
| Number of Event Types reported:                | 0 |

### Column Definitions:

'Mag': Magnitude, 'Dth': Deaths, 'Inj': Injuries, 'PrD': Property Damage, 'CrD': Crop Damage

Click on Location below to display details.

Available Event Types have changed over time. Please refer to the [Database Details](#) for more information.

Sort By:  ▼

| <u>Location</u> | <u>County/Zone</u> | <u>St.</u> | <u>Date</u> | <u>Time</u> | <u>I.Z.</u> | <u>Type</u> | <u>Mag</u> | <u>Dth</u> | <u>Inj</u> | <u>PrD</u> | <u>CrD</u> |
|-----------------|--------------------|------------|-------------|-------------|-------------|-------------|------------|------------|------------|------------|------------|
| Totals:         |                    |            |             |             |             |             |            | 0          | 0          | 0.00K      | 0.00K      |

**PHMSA Office of Hazardous Materials Safety Incident Reports Database Search**

[PHMSA Hazmat Home](#)

Source: Hazmat Intelligence Portal, U.S.Department of Transportation. Data as of 4/26/2018.

**PART II - GENERAL INCIDENT INFORMATION**

3. Date of Incident: From:  To:  (mm/dd/yyyy)

7. Location of Incident: City:  (begins) State:  Zip Code:  (contains)  
 Incident Route:  (contains)

8. Mode of Transportation:  Air  Highway  Rail  Water  Other

9. Transportation Phase:  In Transit  Loading  Unloading  In Transit Storage

10. Carrier/Reporter Name:  (contains) State:  Zip Code:  (contains)

11. Shipper/Offeror Name:  (contains) State:  Zip Code:  (contains)

12. Origin: City:  (contains) State:  Zip Code:  (contains)

14. Proper Shipping Name of Hazardous Material:  (contains)

16. Hazardous Class/Division Code:  (begins) 17. Identification Number:  (contains)

**PART III - PACKAGING INFORMATION**

24. Packaging Type:  Non-Bulk  IBC  Cargo Tank Motor Vehicle (CTMV)  Tank Car  
 Cylinder  RAM  Portable Tank  Other

25. Incident Cause: What Failed:  (contains) How Failed:  (contains)  
 Causes of Failure:  (contains)

**PART IV - CONSEQUENCES**

30.Result of Incident:  Spillage  Fire  Explosion  Material Entered Waterway/Storm Sewer  
 Vapor(Gas) Dispersion  Environmental Damage  No Release

33a. Did the hazardous material cause or contribute to a human fatality?  36. Was a major transportation artery or facility closed?

34. Did the hazardous material cause or contribute to personal injury?  37. Was the material involved in a crash or derailment?

35. Did the hazardous material cause or contribute to an evacuation?

**OTHER**

Report Number:  (contains) Serious Incident:

Container Code Detail:  (contains) Undeclared Shipment:

General Package Type:

DISPLAY OPTIONS: Display  results per page.

\* Since some incidents involve multiple commodities and/or multiple package types, double counting can occur.

\* Use the following links to obtain helpful reference information:

[Serious Incident Definition](#) - PHMSA revised the definition of a serious incident in Fiscal Year 2002. This site uses both definitions

[Data Dictionary](#) - Description of the data fields in the reports on this site

[Units Of Measure](#) - Description of the units of measure used in the reports on this site

1 Record(s) found - Please click on any column header to sort by ascending or descending

EXPORT OPTIONS: Export fields:

<< First < Prev 1 Next > Last >>

| Report Number | Date of Incident | Incident City | Incident State | Mode of Transportation | Carrier/Reporter Name | Shipper Name           | HMIS Serious Incident Ind | Total Hazmat Fatalities | Total Hazmat Injuries | Total Amount of Damages | Packageing T ype                | Identification Number | Cor |
|---------------|------------------|---------------|----------------|------------------------|-----------------------|------------------------|---------------------------|-------------------------|-----------------------|-------------------------|---------------------------------|-----------------------|-----|
| I-1999010479  | 11/02/1998       | STATENVILLE   | GA             | Highway                | KENAN TRANSPORT, LLC  | KENAN TRANSPORT CO INC | No                        | 0                       | 0                     | \$15                    | Cargo Tank Motor Vehicle (CTMV) | NA1993                | FUI |

<< First < Prev 1 Next > Last >>

**ECHOLS COUNTY CRITICAL FACILITIES LIST  
2018 UPDATE**

| <b>Name</b>  | <b>Address</b>             | <b>City</b> | <b>Zip</b> | <b>Facility Types</b>  | <b>Risk</b>   | <b>Building Value</b> | <b>Contents Value</b> |
|--|----------------------------|-------------|------------|--|---|-----------------------|-----------------------|
| Echols Co Health Dept, Tax Comm., EMA, & Nat. Res. | 149 Hwy 94 E               | Statenville | 31648      | Government, Government, Government Offices, Government Offices | Economic Assets, Essential, Important, Lifeline   | 610000                | 120000                |
| Echols County BOE-Transportation                   | 216 Hwy 129 N              | Statenville | 31648      | Education, Education, Transportation, Transportation           | Economic Assets, Essential, Important, Transportation                                     | 310000                | 60000                 |
| Echols County Commission Office                    | 110 General Deloach Street | Statenville | 31648      | Government, Government, Government Offices, Government Offices | Important   | 196200                |                       |
| Echols County Community Center                     | 148 Church of God St       | Statenville | 31648      | Government, Government, Government Offices, Government Offices | Essential, Important, Special Consideration   | 300000                | 20000                 |
| Echols County Courthouse                           | 110 Hwy 94 E               | Statenville | 31648      | Government, Government, Court House, Court House               | Economic Assets, Essential, Historic Consideration, Important                             | 1900000               | 500000                |
| Echols County DFAC                                 | 106 Church of God St       | Statenville | 31648      | Government, Government, Government Offices, Government Offices | Essential, Important  | 740000                | 100000                |
| Echols County Elementary/Middle School             | 229 Hwy 129 S              | Fargo       | 31648      | Education, K - 12, Pre K                                       | Economic Assets, High Potential Loss, Vulnerable Population                               | 24000000              |                       |
| Echols County Elementary/Middle School             | 229 Hwy 129 S              | Fargo       | 31648      | Education, K - 12, Pre K                                       | Economic Assets, High Potential Loss, Vulnerable Population                               | 24000000              |                       |
| Echols County High School                          | 190 Hwy 94 East            | Statenville | 31648      | Education, Education, K - 12, K - 12                           | Potential Loss, Historic Consideration, Important, Special Consideration, Transportation, | 24000000              | 5000000               |
| Echols County Road Department                      | 120 Baptist Church Rd      | Statenville | 31648      | Government, Government, Transportation, Transportation         | Essential, Important, Transportation  | 150000                | 900000                |
| Echols County Senior Citizen Center                | 170 Church of God St       | Statenville | 31648      | Government, Government, Government Offices, Government Offices | Essential, Important, Special Consideration, Vulnerable Population                        | 600000                | 100000                |

**ECHOLS COUNTY CRITICAL FACILITIES LIST  
2018 UPDATE**

| <b>Name</b>                    | <b>Address</b>              | <b>City</b> | <b>Zip</b> | <b>Facility Types</b>  | <b>Risk</b>  | <b>Building Value</b> | <b>Contents Value</b> |
|--------------------------------|-----------------------------|-------------|------------|--|--|-----------------------|-----------------------|
| Echols County Sheriff's Office | 109 General Deloach         | Statenville | 31648      | Law Enforcement, Law Enforcement, Sheriff, Sheriff                   | Essential, Important, Lifeline   | 250000                | 52500                 |
| Echols County Water Authority  | 297 Hwy 129 N               | Statenville | 31648      | Government, Government, Water/Sewer, Water/Sewer                     | Economic Assets, Essential, Important, Lifeline, Special Consideration | 700000                | 120000                |
| Echols FD-Chapel               | 1500 J. Frank Culpepper Rd. | Lake Park   | 31636      | Emergency Services, Emergency Services, Fire Fighters, Fire Fighters | Essential, Important, Lifeline   | 300000                | 10000                 |
| Echols FD-Howell               | 2300 Highway #135 N         | Statenville | 31636      | Emergency Services, Emergency Services, Fire Fighters, Fire Fighters | Essential, Important, Lifeline   | 250000                | 10000                 |
| Echols FD-Statenville          | 229 Highway 94 East         | Statenville | 31648      | Emergency Services, Emergency Services, Fire Fighters, Fire Fighters | Essential, Important, Lifeline   | 275001                | 53000                 |
| Farm Worker Health Clinic      | 2186 J. Frank Culpepper Rd  | Fargo       | 31636      | Medical, Clinics   | Important, Lifeline  | 352800                |                       |
| Farm Worker Health Clinic      | 2186 J. Frank Culpepper Rd  | Fargo       | 31636      | Medical, Clinics   | Important, Lifeline  | 352800                |                       |
| Farm Worker Health Clinic      | 2186 J. Frank Culpepper Rd  | Fargo       | 31636      | Medical, Clinics   | Important, Lifeline  | 352800                |                       |
| GA Power Substation            | 2742 Hwy 94 E               | Statenville | 31648      | NGO, NGO, Private, Private   | Essential, Important, Lifeline   | 3700000               |                       |
| Ga Power Substation            | 181 Hwy 129 N               | Statenville | 31648      | NGO, NGO, Private, Private   | Essential, Important, Lifeline   | 3700000               |                       |
| Georgia Forestry Commission    | 207 Hwy 129 N               | Statenville | 31648      | Government, Government, Government Offices, Government Offices       | Essential  | 339820                | 500000                |

**ECHOLS COUNTY CRITICAL FACILITIES LIST  
2018 UPDATE**

| <b>Name</b>                          | <b>Address</b>       | <b>City</b> | <b>Zip</b> | <b>Facility Types</b>                  | <b>Risk</b>                    | <b>Building Value</b> | <b>Contents Value</b> |
|--------------------------------------|----------------------|-------------|------------|--|--------------------------------|-----------------------|-----------------------|
| Hansford Allen-Echols County Library | 123 Hwy 129 S        | Statenville | 31648      | Education, Education, Library, Library | Important                      | 400000                | 300000                |
| Slash Pine EMC Substation            | 312 Red Oak Rd       | Lake Park   | 31636      | NGO, NGO, Private, Private             | Essential, Important, Lifeline | 2200000               |                       |
| Statenville Church of God            | 129 Church of God St | Statenville | 31648      | NGO, NGO, Private, Private             | Essential                      | 200000                | 50000                 |