Appendix A

GEMA Worksheet #3a Inventory of Assets

Jurisdiction: Atkinson County and the Cities of Pearson and Willacoochee
Hazard: Thunderstorm/Wind

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.

	Number of Structures			Value of Structures			Number of People		
Type of Structure (Occupancy Class)	# 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	2,602	2,602	100.000%	$ 94,243,673	$ 94,243,673	100.000%	9,039	9,039	100.000%
Commercial	216	216	100.000%	$ 15,734,871	$ 15,734,871	100.000%	0	0	0%
Industrial	23	23	100.000%	$ 13,989,044	$ 13,989,044	100.000%	0	0	0%
Agricultural	1,988	1,988	100.000%	$ 441,624,432	$ 441,624,432	100.000%	0	0	0%
Religious/ Non-profit	141	141	100.000%	$ 3,855,124	$ 3,855,124	100.000%	0	0	0%
Government	34	34	100.000%	$ 10,267,102	$ 10,267,102	100.000%	0	0	0%
Education	3	3	100.000%	$ 3,247,486	$ 3,247,486	100.000%	0	0	0%
Utilities	0	0		$ -	$ -		0	0	0%
Total	5,007	5,007		$ 582,961,732	$ 582,961,732		9,039	9,039	

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

	Y	N
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 Inventory of Assets

Jurisdiction: Atkinson County and the Cities of Pearson and Willacoochee
Hazard: Hail

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.

	Number of Structures			Value of Structures			Number of People		
Type of Structure (Occupancy Class)	# 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	2,602	2,602	100.000%	$ 94,243,673	$ 94,243,673	100.000%	9,039	9,039	100.000%
Commercial	216	216	100.000%	$ 15,734,871	$ 15,734,871	100.000%	0	0	0%
Industrial	23	23	100.000%	$ 13,989,044	$ 13,989,044	100.000%	0	0	0%
Agricultural	1,988	1,988	100.000%	$ 441,624,432	$ 441,624,432	100.000%	0	0	0%
Religious/ Non-profit	141	141	100.000%	$ 3,855,124	$ 3,855,124	100.000%	0	0	0%
Government	34	34	100.000%	$ 10,267,102	$ 10,267,102	100.000%	0	0	0%
Education	3	3	100.000%	$ 3,247,486	$ 3,247,486	100.000%	0	0	0%
Utilities	0	0		$ -	$ -		0	0	0%
Total	5,007	5,007		$ 582,961,732	$ 582,961,732		9,039	9,039	

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

	Y	N
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 Inventory of Assets

Jurisdiction: Atkinson County and the Cities of Pearson and Willacoochee
Hazard: Wildfires

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.

	Number of Structures			Value of Structures			Number of People		
Type of Structure (Occupancy Class)	# 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	2,602	2,602	100.000%	$ 94,243,673	$ 94,243,673	100.000%	9,039	9,039	100.000%
Commercial	216	216	100.000%	$ 15,734,871	$ 15,734,871	100.000%	0	0	0%
Industrial	23	23	100.000%	$ 13,989,044	$ 13,989,044	100.000%	0	0	0%
Agricultural	1,988	1,988	100.000%	$ 441,624,432	$ 441,624,432	100.000%	0	0	0%
Religious/ Non-profit	141	141	100.000%	$ 3,855,124	$ 3,855,124	100.000%	0	0	0%
Government	34	34	100.000%	$ 10,267,102	$ 10,267,102	100.000%	0	0	0%
Education	3	3	100.000%	$ 3,247,486	$ 3,247,486	100.000%	0	0	0%
Utilities	0	0		$ -	$ -		0	0	0%
Total	5,007	5,007		$ 582,961,732	$ 582,961,732		9,039	9,039	

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

	Y	N
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 Inventory of Assets

Jurisdiction: Atkinson County and the Cities of Pearson and Willacoochee
Hazard: Flood

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.

	Number of Structures			Value of Structures			Number of People		
Type of Structure (Occupancy Class)	# 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	2,602	158	6.072%	$ 94,243,673	$ 5,780,864	6.134%	9,039	549	6.072%
Commercial	216	10	4.630%	$ 15,734,871	$ 1,141,983	7.258%	0	0	0%
Industrial	23	1	4.348%	$ 13,989,044	$ 230,000	1.644%	0	0	0%
Agricultural	1,988	528	26.559%	$ 441,624,432	$ 108,817,371	24.640%	0	0	0%
Religious/ Non-profit	141	14	9.929%	$ 3,855,124	$ 657,398	17.053%	0	0	0%
Government	34	11	32.353%	$ 10,267,102	$ 2,249,585	21.911%	0	0	0%
Education	3	1	33.333%	$ 3,247,486	$ 3,154,804	97.146%	0	0	0%
Utilities	0	0		$ -	$ -		0	0	0%
Total	5,007	723		$ 582,961,732	$ 122,032,005		9,039	549	

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

	Y	N
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 Inventory of Assets

Jurisdiction: Atkinson County and the Cities of Pearson and Willacoochee
Hazard: Drought

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.

	Number of Structures			Value of Structures			Number of People		
Type of Structure (Occupancy Class)	# 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	2,602	2,602	100.000%	$ 94,243,673	$ 94,243,673	100.000%	9,039	9,039	100.000%
Commercial	216	216	100.000%	$ 15,734,871	$ 15,734,871	100.000%	0	0	0%
Industrial	23	23	100.000%	$ 13,989,044	$ 13,989,044	100.000%	0	0	0%
Agricultural	1,988	1,988	100.000%	$ 441,624,432	$ 441,624,432	100.000%	0	0	0%
Religious/ Non-profit	141	141	100.000%	$ 3,855,124	$ 3,855,124	100.000%	0	0	0%
Government	34	34	100.000%	$ 10,267,102	$ 10,267,102	100.000%	0	0	0%
Education	3	3	100.000%	$ 3,247,486	$ 3,247,486	100.000%	0	0	0%
Utilities	0	0		$ -	$ -		0	0	0%
Total	5,007	5,007		$ 582,961,732	$ 582,961,732		9,039	9,039	

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

	Y	N
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 Inventory of Assets

Jurisdiction: Atkinson County and the Cities of Pearson and Willacoochee
Hazard: Hurricanes/Tropical Storms

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.

	Number of Structures			Value of Structures			Number of People		
Type of Structure (Occupancy Class)	# 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	2,602	2,602	100.000%	$ 94,243,673	$ 94,243,673	100.000%	9,039	9,039	100.000%
Commercial	216	216	100.000%	$ 15,734,871	$ 15,734,871	100.000%	0	0	0%
Industrial	23	23	100.000%	$ 13,989,044	$ 13,989,044	100.000%	0	0	0%
Agricultural	1,988	1,988	100.000%	$ 441,624,432	$ 441,624,432	100.000%	0	0	0%
Religious/ Non-profit	141	141	100.000%	$ 3,855,124	$ 3,855,124	100.000%	0	0	0%
Government	34	34	100.000%	$ 10,267,102	$ 10,267,102	100.000%	0	0	0%
Education	3	3	100.000%	$ 3,247,486	$ 3,247,486	100.000%	0	0	0%
Utilities	0	0		$ -	$ -		0	0	0%
Total	5,007	5,007		$ 582,961,732	$ 582,961,732		9,039	9,039	

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

	Y	N
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 Inventory of Assets

Jurisdiction: Atkinson County and the Cities of Pearson and Willacoochee
Hazard: Tornadoes

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.

	Number of Structures			Value of Structures			Number of People		
Type of Structure (Occupancy Class)	# 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	2,602	2,602	100.000%	$ 94,243,673	$ 94,243,673	100.000%	9,039	9,039	100.000%
Commercial	216	216	100.000%	$ 15,734,871	$ 15,734,871	100.000%	0	0	0%
Industrial	23	23	100.000%	$ 13,989,044	$ 13,989,044	100.000%	0	0	0%
Agricultural	1,988	1,988	100.000%	$ 441,624,432	$ 441,624,432	100.000%	0	0	0%
Religious/ Non-profit	141	141	100.000%	$ 3,855,124	$ 3,855,124	100.000%	0	0	0%
Government	34	34	100.000%	$ 10,267,102	$ 10,267,102	100.000%	0	0	0%
Education	3	3	100.000%	$ 3,247,486	$ 3,247,486	100.000%	0	0	0%
Utilities	0	0		$ -	$ -		0	0	0%
Total	5,007	5,007		$ 582,961,732	$ 582,961,732		9,039	9,039	

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

	Y	N
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?	Y	
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?	N	

GEMA Worksheet #3a Inventory of Assets

Jurisdiction: Atkinson County and the Cities of Pearson and Willacoochee
Hazard: Severe Winter Storms

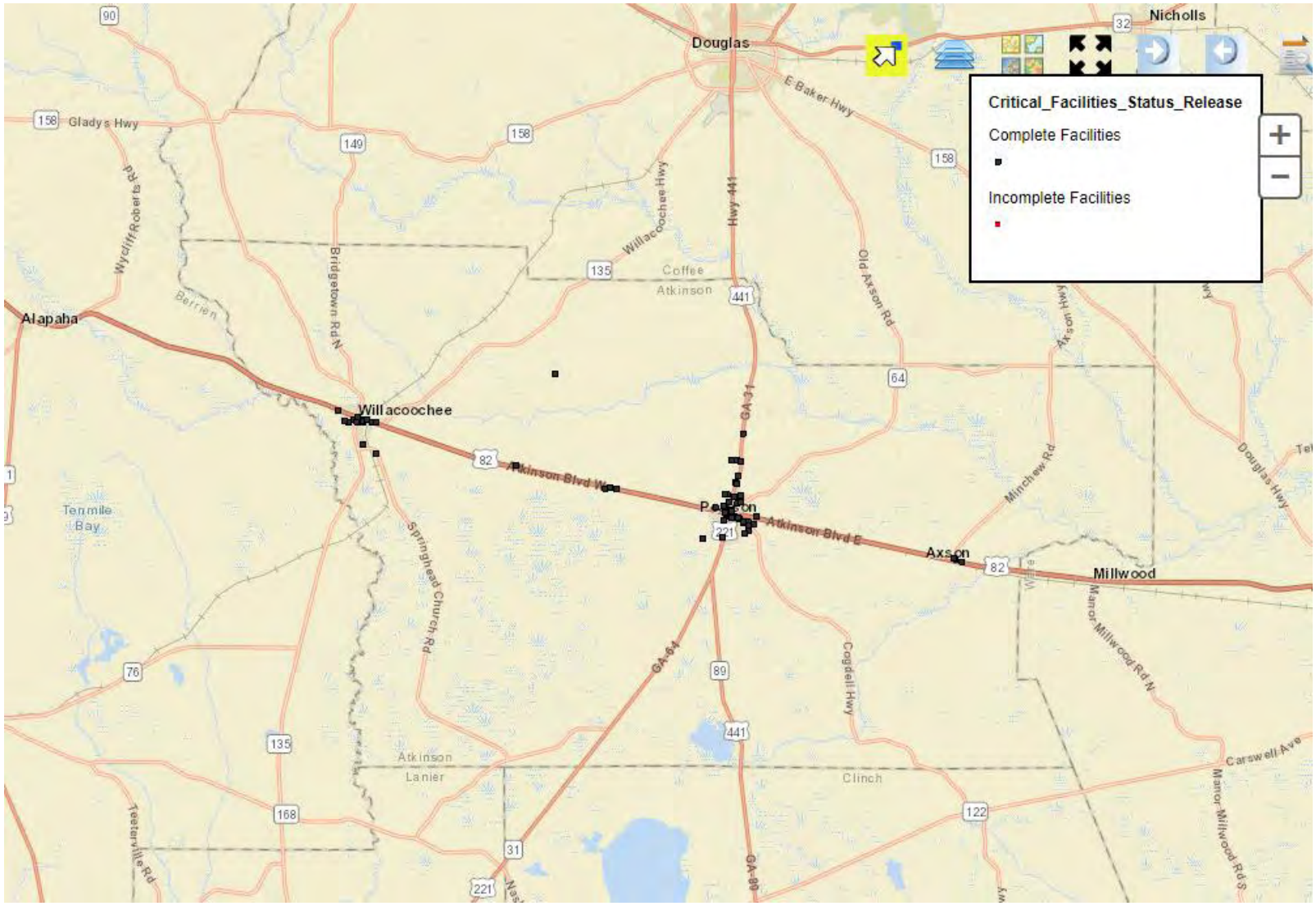
Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.

	Number of Structures			Value of Structures			Number of People		
Type of Structure (Occupancy Class)	# 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	2,602	2,602	100.000%	$ 94,243,673	$ 94,243,673	100.000%	9,039	9,039	100.000%
Commercial	216	216	100.000%	$ 15,734,871	$ 15,734,871	100.000%	0	0	0%
Industrial	23	23	100.000%	$ 13,989,044	$ 13,989,044	100.000%	0	0	0%
Agricultural	1,988	1,988	100.000%	$ 441,624,432	$ 441,624,432	100.000%	0	0	0%
Religious/ Non-profit	141	141	100.000%	$ 3,855,124	$ 3,855,124	100.000%	0	0	0%
Government	34	34	100.000%	$ 10,267,102	$ 10,267,102	100.000%	0	0	0%
Education	3	3	100.000%	$ 3,247,486	$ 3,247,486	100.000%	0	0	0%
Utilities	0	0		$ -	$ -		0	0	0%
Total	5,007	5,007		$ 582,961,732	$ 582,961,732		9,039	9,039	

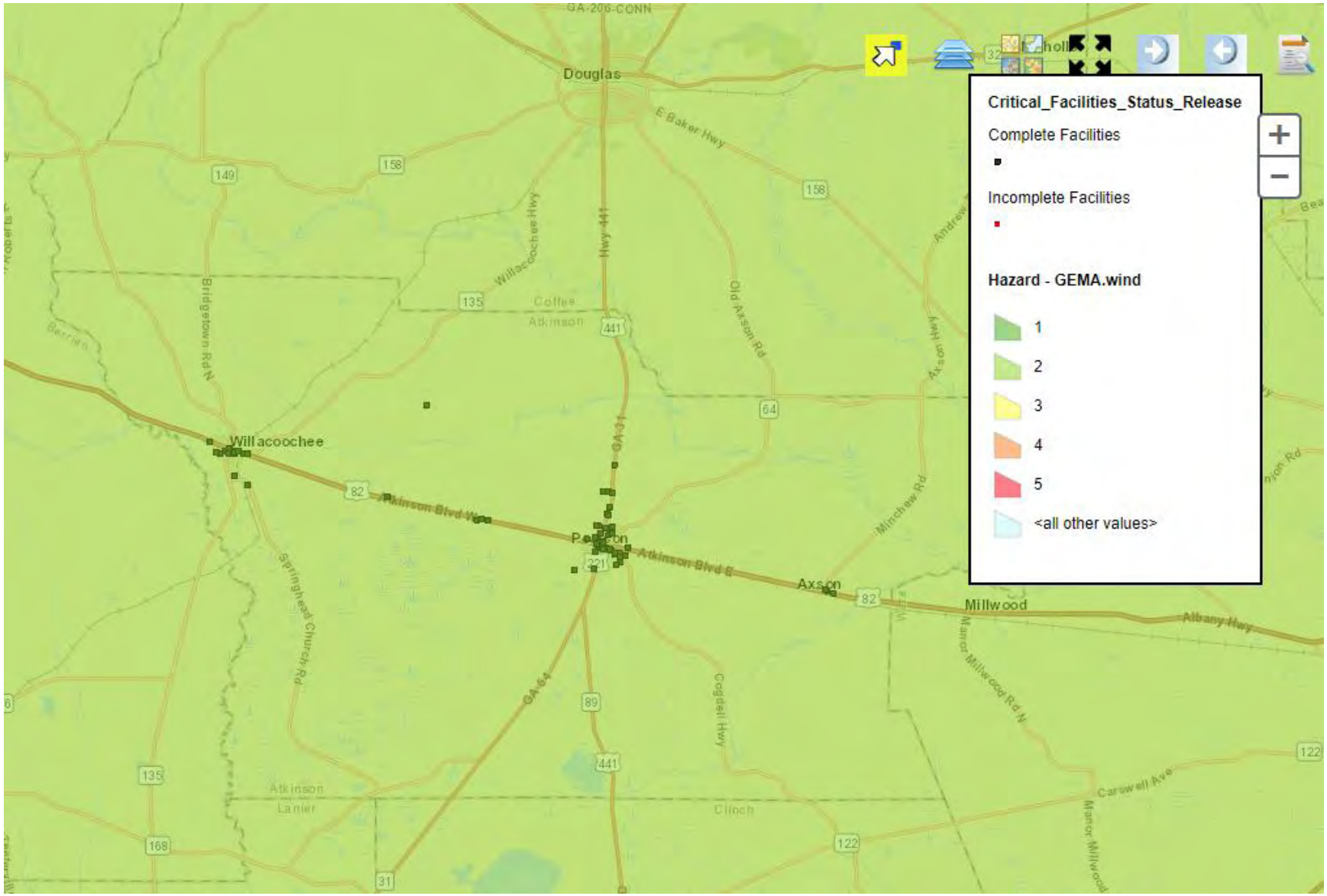
Task B. Determine whether (and where) you want to collect additional inventory data.

	Y	N
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	

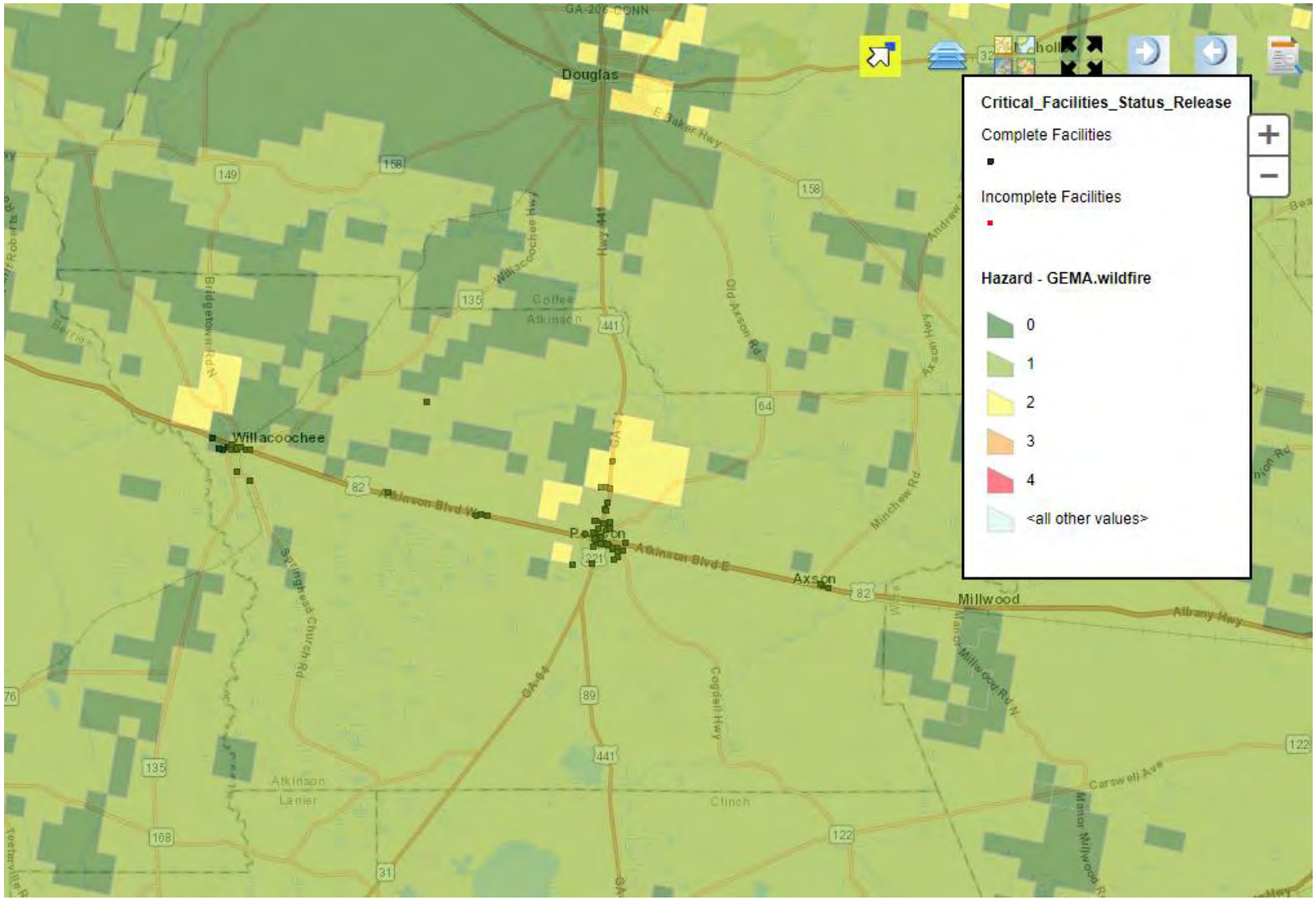
Critical Facilities and Hazard Potential for Hazards Affecting the Entire Community (Hurricanes/Tropical Storms, Tornadoes, Lightning, Extreme Heat, and Drought)



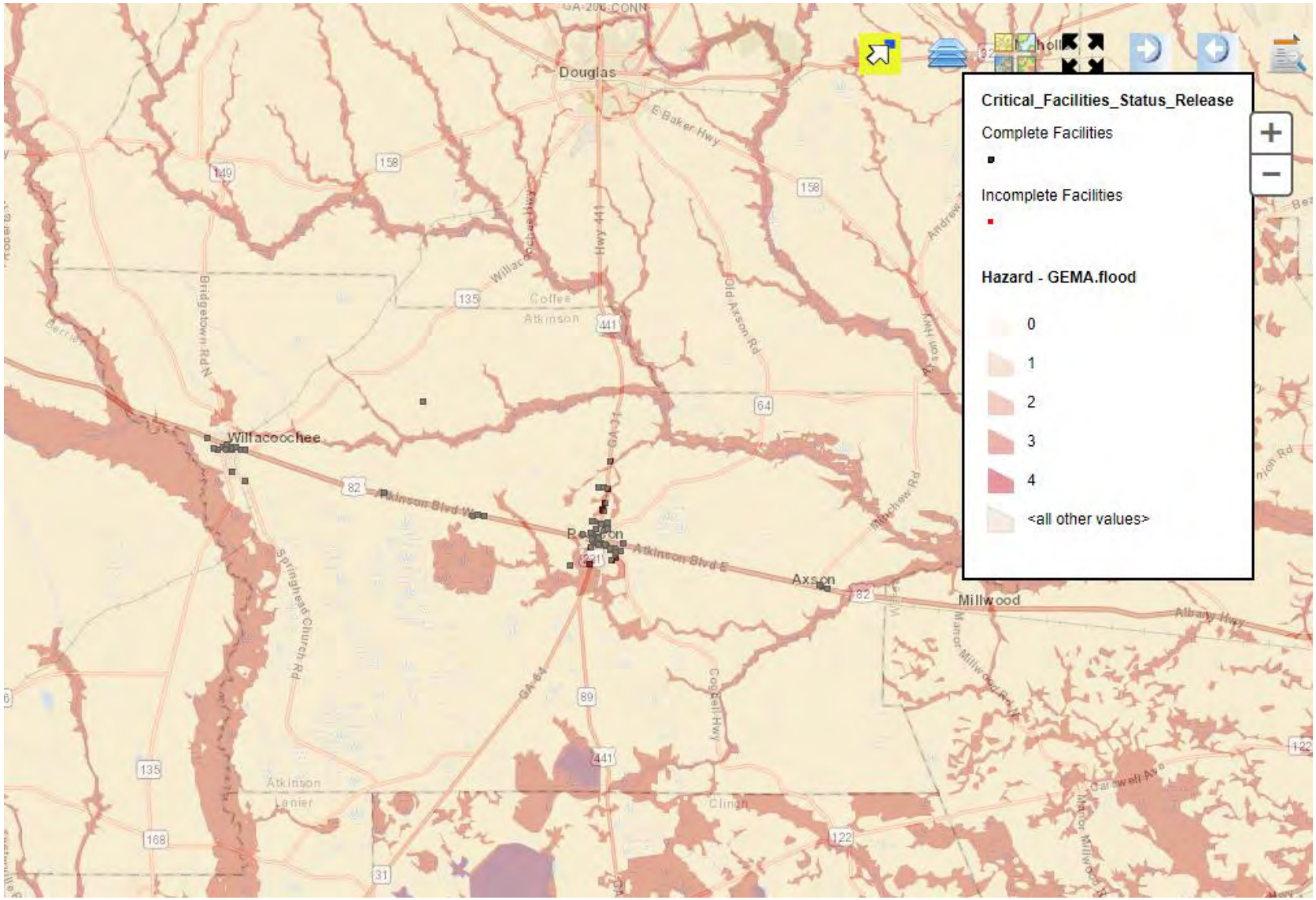
Critical Facilities and Wind Zones



Critical Facilities and Wildfire Hazard Areas (GMIS data)



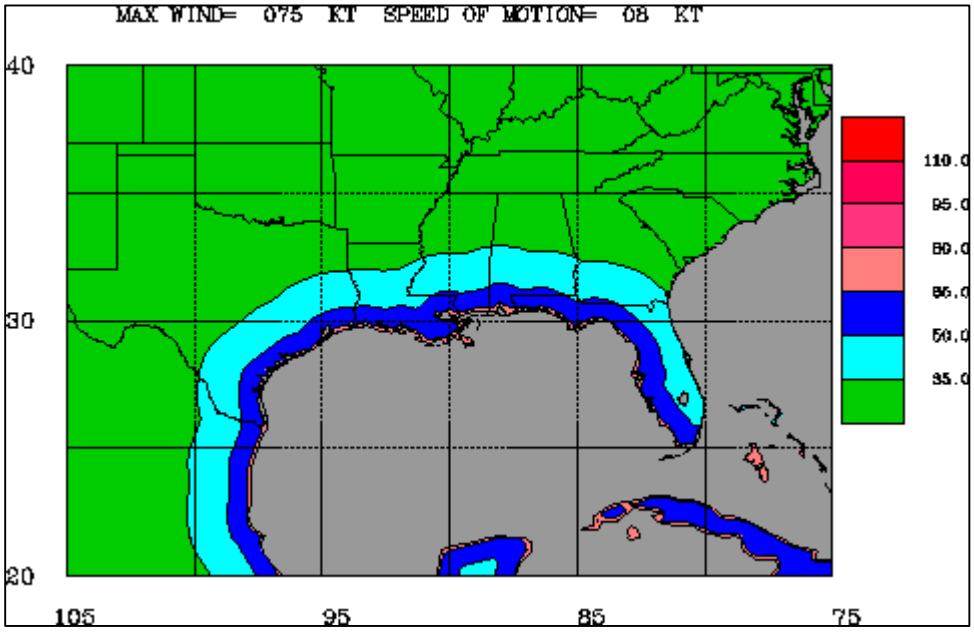
Critical Facilities and Flood Zones



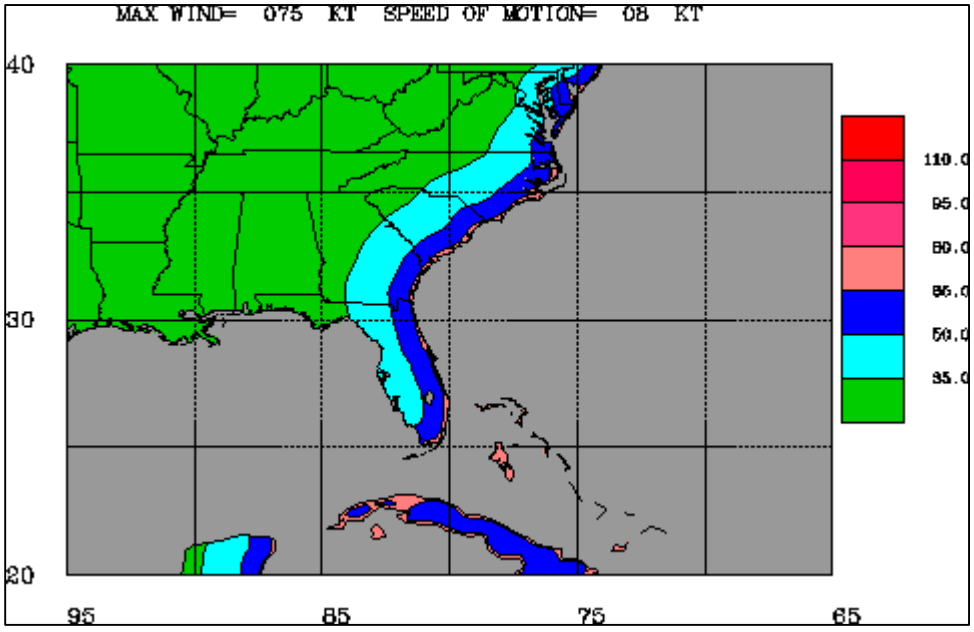
Examples of the Maximum Envelope of Wind
(Source: NOAA. http://www.nhc.noaa.gov/aboutmeow.shtml)

Mild case (Category 1, 8 knots forward motion)

Gulf Coast Region



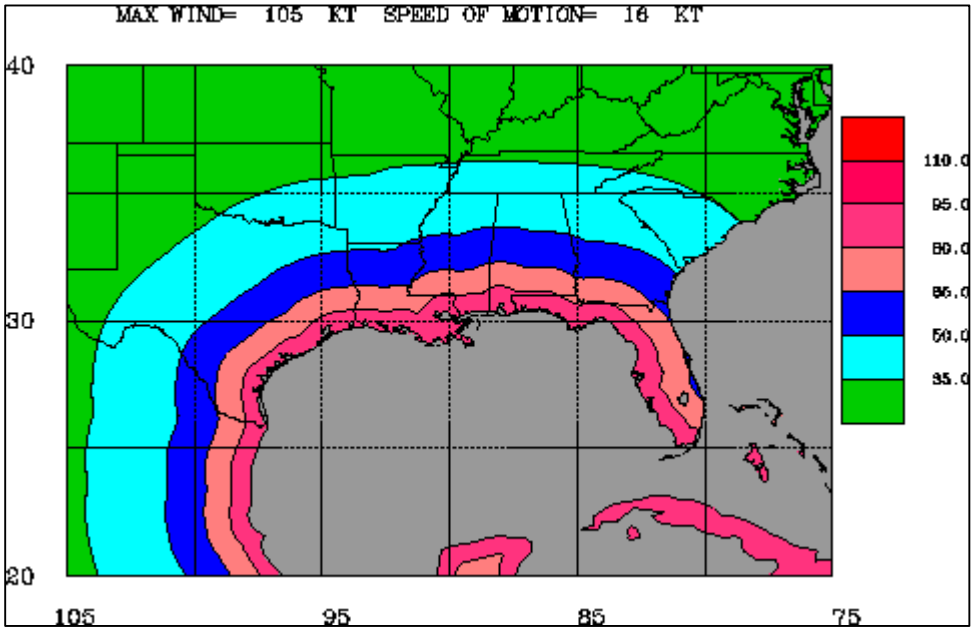
East Coast Region



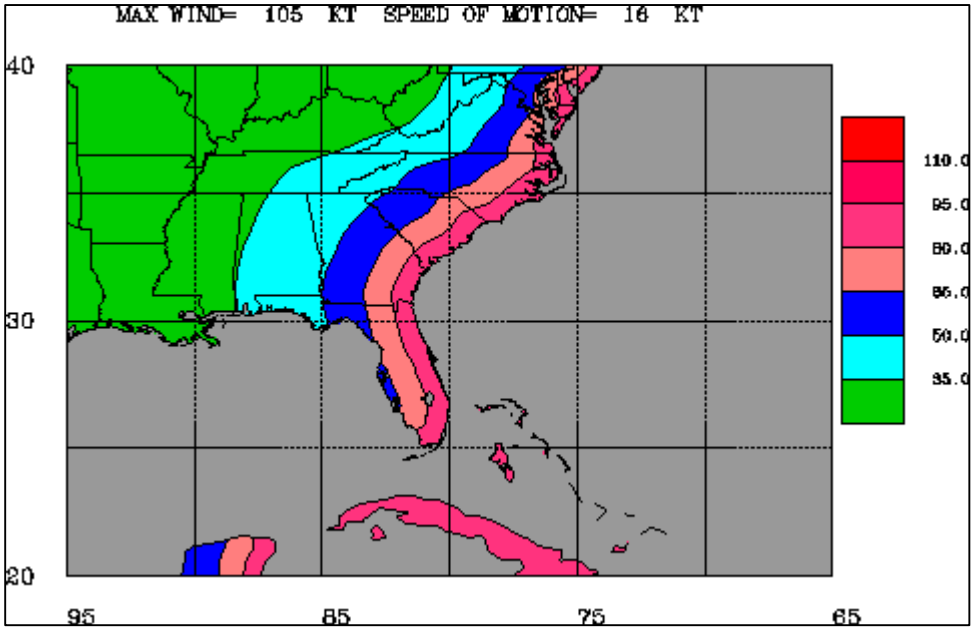
Examples of the Maximum Envelope of Wind
(Source: NOAA. http://www.nhc.noaa.gov/aboutmeow.shtml)

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

Gulf Coast Region



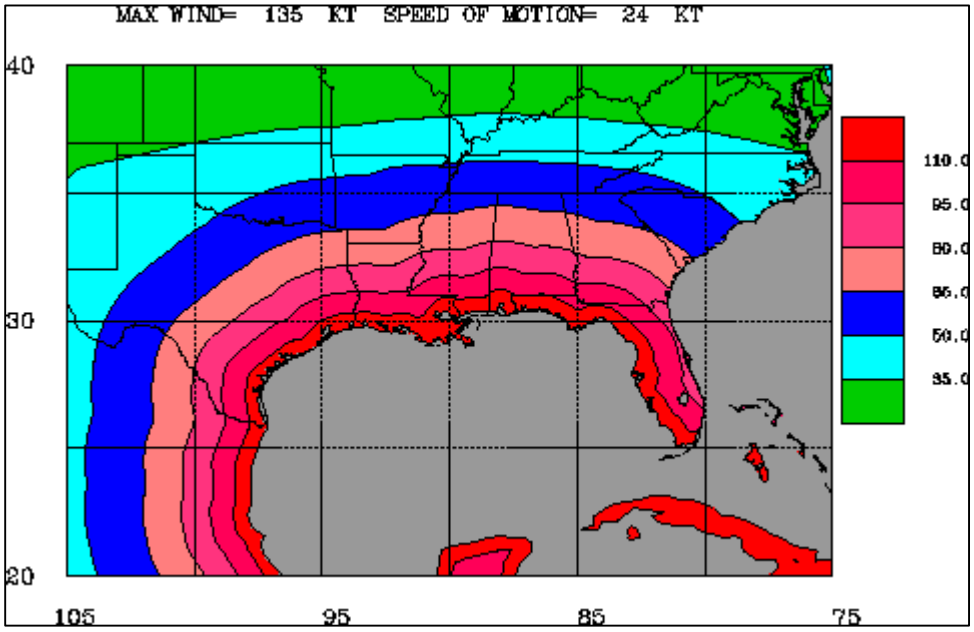
East Coast Region



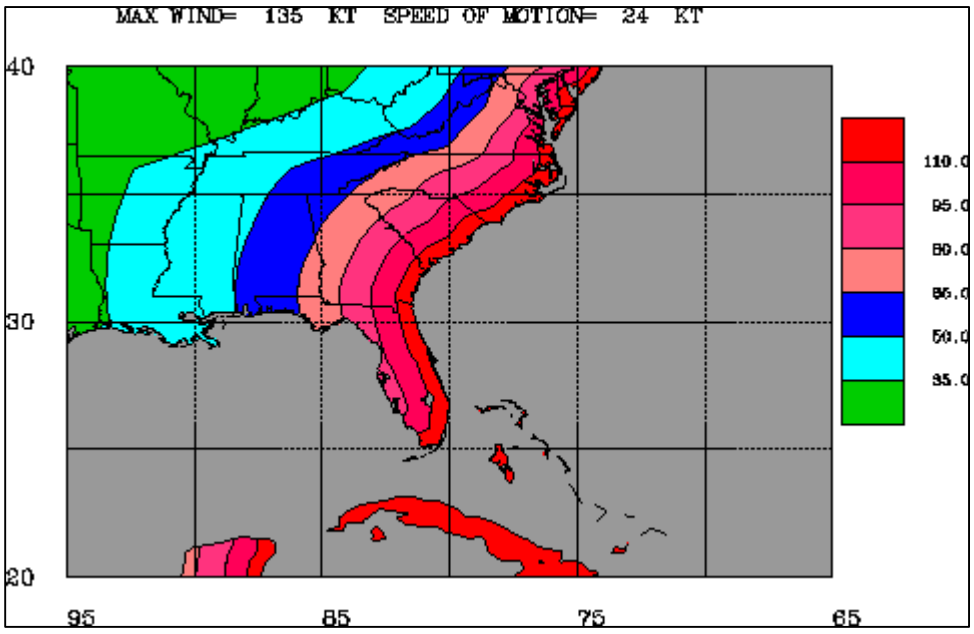
Examples of the Maximum Envelope of Wind
(Source: NOAA. http://www.nhc.noaa.gov/aboutmeow.shtml)

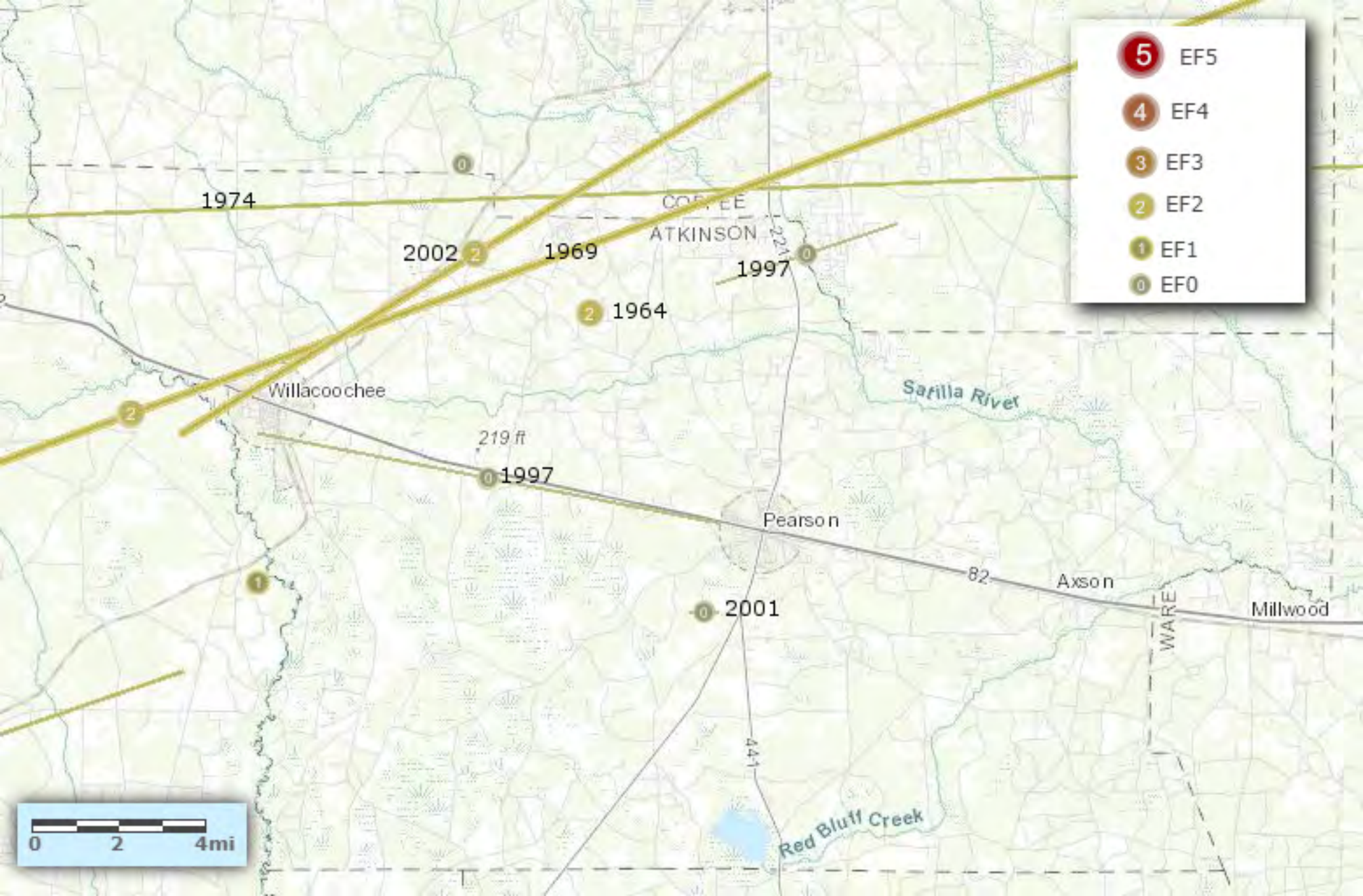
Worst case (Category 5, 24 knots forward motion)

Gulf Coast Region

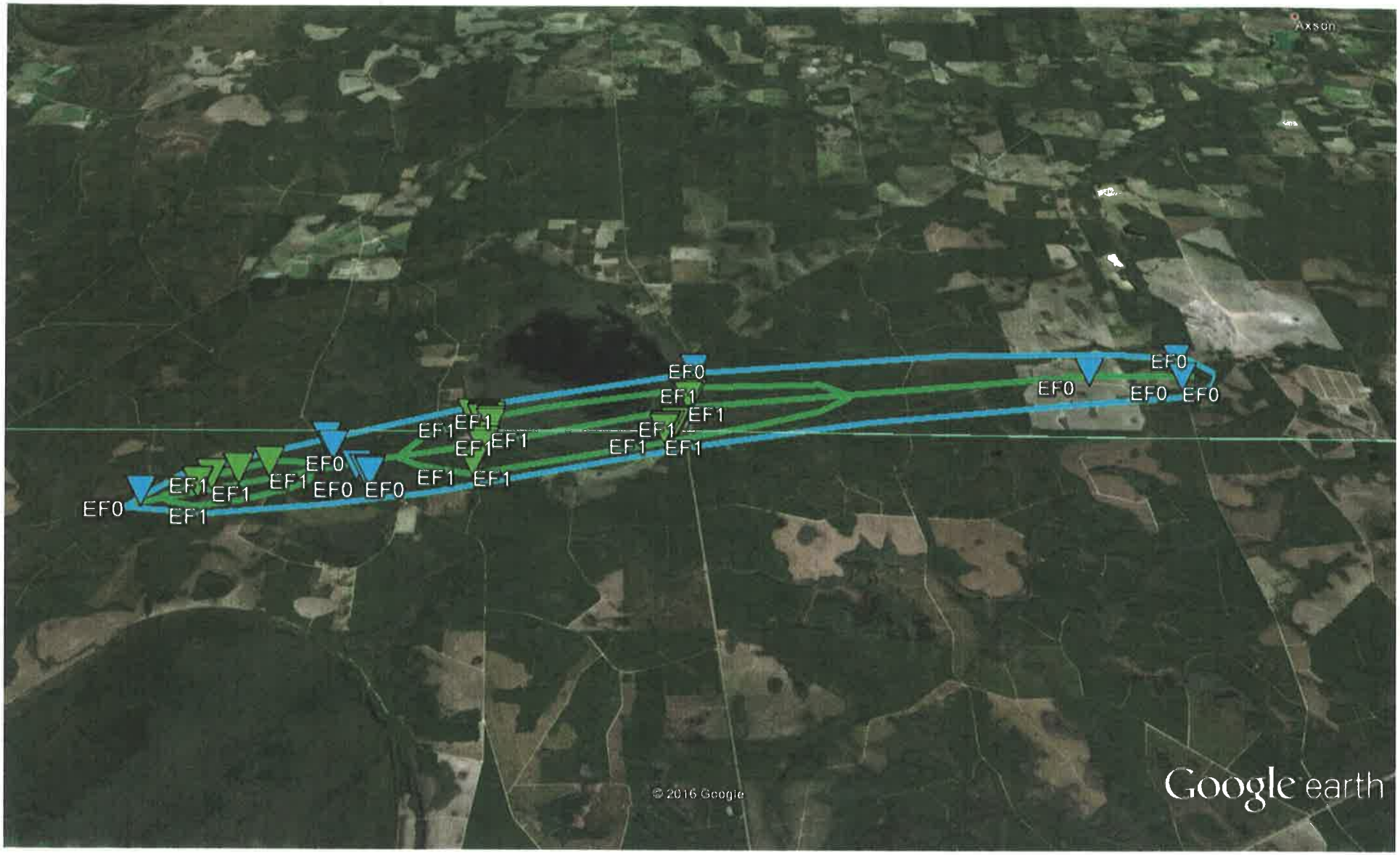


East Coast Region




5 EF5
4 EF4
3 EF3
2 EF2
1 EF1
0 EF0
1974
2002
1969
1997
1964
1997
2001
COFFEE
ATKINSON
221
Willacoochee
219 ft
Pearson
82
Axson
Millwood
WARE
441
Sarilla River
Red Bluff Creek
0
2
4mi

TORNADO PATH - ATKINSON COUNTY - APRIL 1, 2016



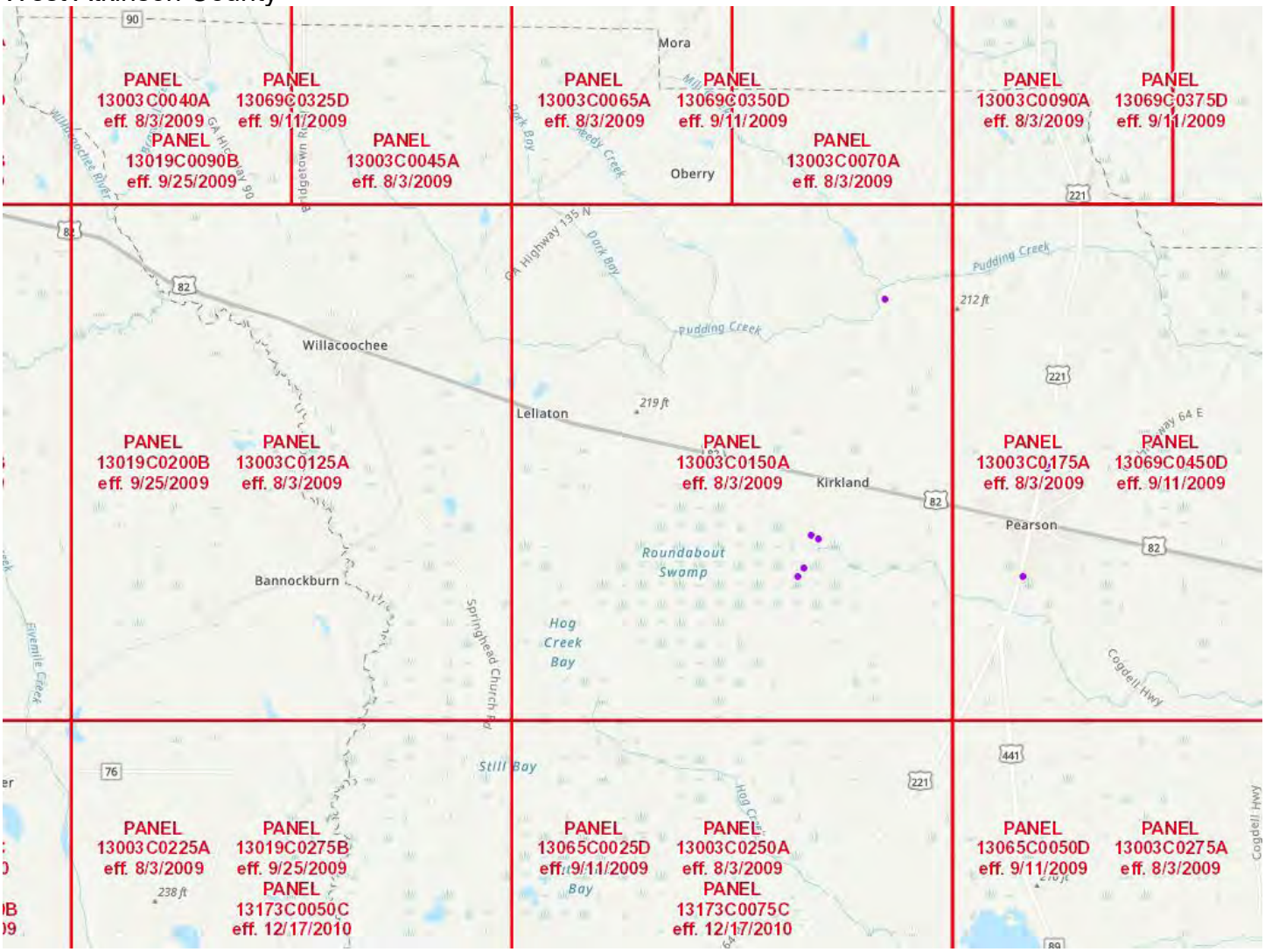
Google earth

miles 4
km 7

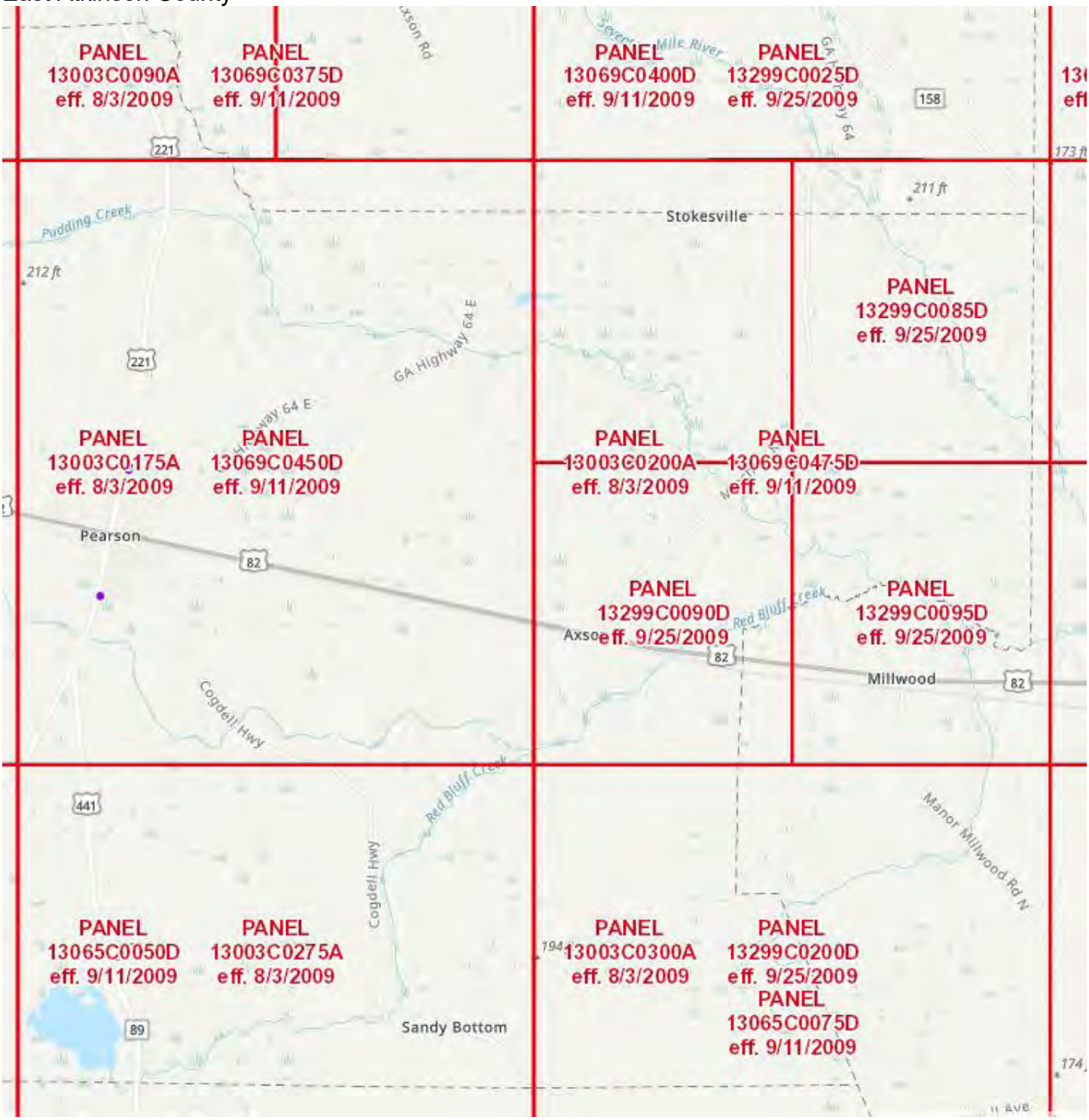
April, 2016 — Atkinson Co.

FEMA Flood Maps
Source: ArcGIS Online (FEMA data)
https://fema.maps.arcgis.com/home/webmap/viewer.html?webmap=cbe088e7c8704464aa0fc34eb99e7f30

West Atkinson County



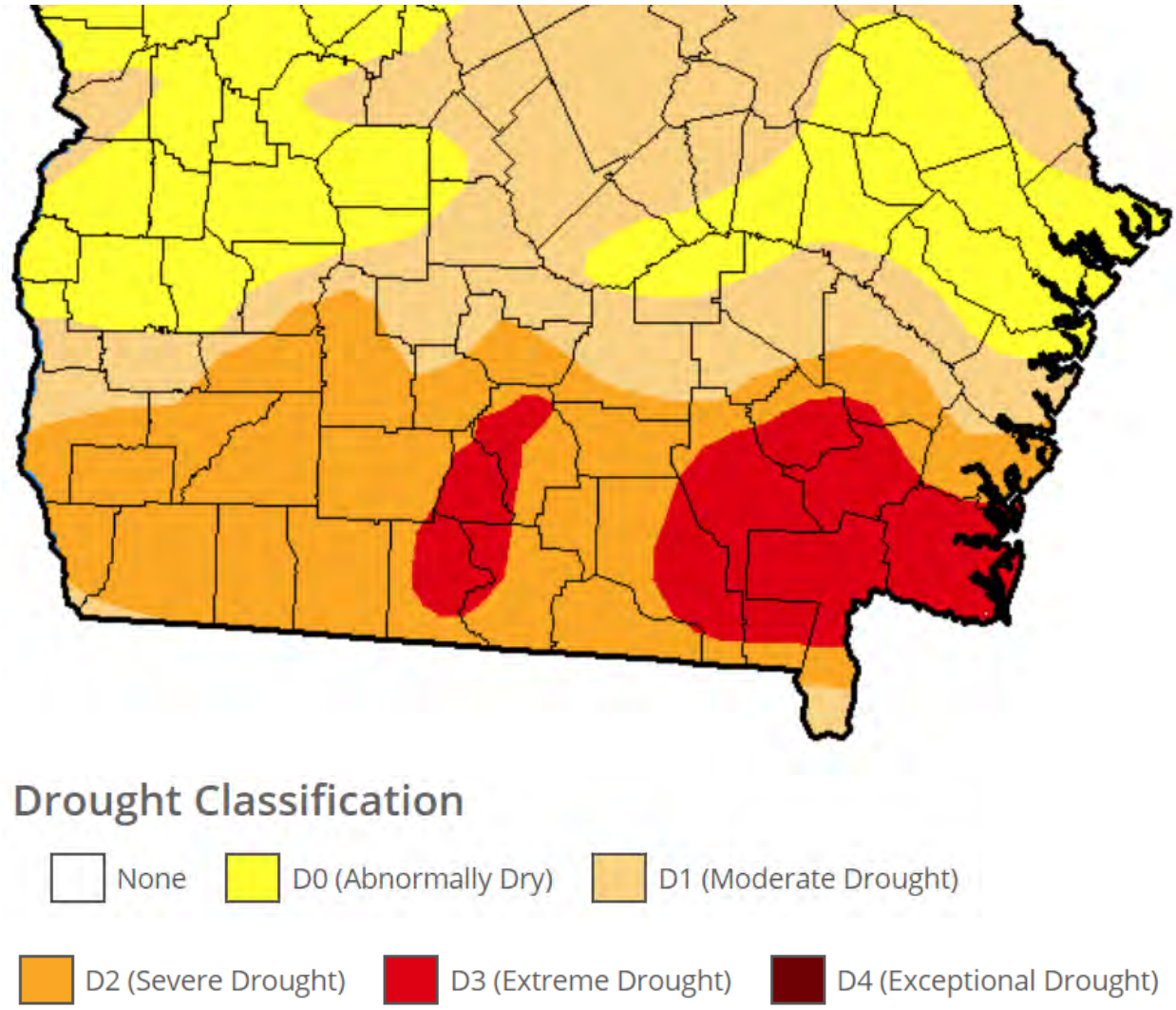
East Atkinson County



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)



Appendix B

QuickFacts

Atkinson 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	Atkinson County, Georgia
Population estimates, July 1, 2016, (V2016)	**8,273**
PEOPLE	
Population	
Population estimates, July 1, 2016, (V2016)	**8,273**
Population estimates base, April 1, 2010, (V2016)	8,382
Population, percent change - April 1, 2010 (estimates base) to July 1, 2016, (V2016)	-1.3%
Population, Census, April 1, 2010	8,375
Age and Sex	
Persons under 5 years, percent, July 1, 2016, (V2016)	8.0%
Persons under 5 years, percent, April 1, 2010	8.5%
Persons under 18 years, percent, July 1, 2016, (V2016)	28.2%
Persons under 18 years, percent, April 1, 2010	29.0%
Persons 65 years and over, percent, July 1, 2016, (V2016)	12.5%
Persons 65 years and over, percent, April 1, 2010	10.6%
Female persons, percent, July 1, 2016, (V2016)	49.9%
Female persons, percent, April 1, 2010	49.4%
Race and Hispanic Origin	
White alone, percent, July 1, 2016, (V2016) (a)	77.0%
Black or African American alone, percent, July 1, 2016, (V2016) (a)	17.5%
American Indian and Alaska Native alone, percent, July 1, 2016, (V2016) (a)	1.4%
Asian alone, percent, July 1, 2016, (V2016) (a)	0.9%
Native Hawaiian and Other Pacific Islander alone, percent, July 1, 2016, (V2016) (a)	1.1%
Two or More Races, percent, July 1, 2016, (V2016)	2.1%
Hispanic or Latino, percent, July 1, 2016, (V2016) (b)	25.2%
White alone, not Hispanic or Latino, percent, July 1, 2016, (V2016)	56.2%
Population Characteristics	
Veterans, 2012-2016	366
Foreign born persons, percent, 2012-2016	13.1%
Housing	
Housing units, July 1, 2016, (V2016)	3,429
Housing units, April 1, 2010	3,522
Owner-occupied housing unit rate, 2012-2016	72.0%
Median value of owner-occupied housing units, 2012-2016	$62,900
Median selected monthly owner costs -with a mortgage, 2012-2016	$883
Median selected monthly owner costs -without a mortgage, 2012-2016	$313
Median gross rent, 2012-2016	$480
Building permits, 2016	0
Families & Living Arrangements	
Households, 2012-2016	2,717
Persons per household, 2012-2016	3.03
Living in same house 1 year ago, percent of persons age 1 year+, 2012-2016	91.7%
Language other than English spoken at home, percent of persons age 5 years+, 2012-2016	22.3%
Education	
High school graduate or higher, percent of persons age 25 years+, 2012-2016	67.9%
Bachelor's degree or higher, percent of persons age 25 years+, 2012-2016	6.7%
Health	
With a disability, under age 65 years, percent, 2012-2016	10.5%
Persons without health insurance, under age 65 years, percent	▲ 25.6%
Economy	
In civilian labor force, total, percent of population age 16 years+, 2012-2016	59.1%

In civilian labor force, female, percent of population age 16 years+, 2012-2016	52.2%
Total accommodation and food services sales, 2012 ($1,000) (c)	2,387
Total health care and social assistance receipts/revenue, 2012 ($1,000) (c)	D
Total manufacturers shipments, 2012 ($1,000) (c)	144,824
Total merchant wholesaler sales, 2012 ($1,000) (c)	46,490
Total retail sales, 2012 ($1,000) (c)	43,844
Total retail sales per capita, 2012 (c)	$5,293
Transportation	
Mean travel time to work (minutes), workers age 16 years+, 2012-2016	23.3
Income & Poverty	
Median household income (in 2016 dollars), 2012-2016	$31,296
Per capita income in past 12 months (in 2016 dollars), 2012-2016	$19,002
Persons in poverty, percent	⚠ 26.4%

BUSINESSES

Businesses	
Total employer establishments, 2015	88
Total employment, 2015	1,373
Total annual payroll, 2015 ($1,000)	46,251
Total employment, percent change, 2014-2015	15.5%
Total nonemployer establishments, 2015	534
All firms, 2012	479
Men-owned firms, 2012	307
Women-owned firms, 2012	163
Minority-owned firms, 2012	102
Nonminority-owned firms, 2012	368
Veteran-owned firms, 2012	63
Nonveteran-owned firms, 2012	405

GEOGRAPHY

Geography	
Population per square mile, 2010	24.7
Land area in square miles, 2010	339.38
FIPS Code	13003

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 lowes 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 I 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 Local Government Services Division County Digest Section	2016 TAX DIGEST CONSOLIDATED SUMMARY

County:ATKINSON County #:002 Tax District:ATKINSON COUNTY

Dist #: 00 Assessment %: 040 Tot Parcels:4547

RESIDENTIAL

Code	Count	Acres	40% Value
R1	4,046		29,458,666
R3	952	148.47	1,739,851
R4	1,716	4,939.94	7,593,431
R5	4	10.9	31,152
R6	1,425		933,665
R7			
R9			
RA			
RB	271		237,780
RF			
RI			
RZ			

RESIDENTIAL TRANSITIONAL

Code	Count	Acres	40% Value
T1			
T3			
T4			

HISTORIC

Code	Count	Acres	40% Value
H1			
H3			

AGRICULTURAL

Code	Count	Acres	40% Value
A1	1,155		9,842,384
A3	1	0	1,399
A4	71	660.36	558,547
A5	394	59,918.79	12,398,320
A6	1,713		4,542,745
A7			
A9			
AA			
AB	99		41,102
AF	2		287,994
AI			
AZ			

PREFERENTIAL

Code	Count	Acres	40% Value

UTILITY

Code	Count	Acres	40% Value
U1			
U2	16	0	6,963,771
U3	2	0	24,780
U4			
U5			
U7			
U9			
UA			
UB			
UF			
UZ			

EXEMPT PROPERTY

Code	Count	40% Value
E0		
E1	72	983,099
E2	102	529,983
E3	53	440,572
E4	10	69,351
E5		
E6	3	1,280,458
E7		
E8		
E9	11	3,270,488
TOTAL	251	6,573,951

HOMESTEAD AND PROPERTY EXEMPTIONS

Code	Count	M&O	Bond
S1	1,160	2,320,000	
SC	60	120,000	
S2	0	0	
S3	6	12,000	
S4	94	373,497	
S5	15	449,376	
SD	0	0	
SS	0	0	
SE	0	0	
SG	0	0	

P3			
P4	4	42.82	41,345
P5	45	18,292.48	3,976,462
P6	71		234,548
P7			
P9			

CONSERVATION USE

Code	Count	Acres	40% Value
V3			
V4	192	3,624.25	3,136,989
V5	757	100,207.25	29,344,041
V6			

BROWNFIELD PROPERTY

Code	Count	Acres	40% Value
B1			
B3			
B4			
B5			
B6			

FOREST LAND CONSERVATION USE

Code	Count	Acres	40% Value
J3			
J4			
J5	22	26,909.09	4,682,765
J9			

FLPA FAIR MARKET ASSMT

Code	Count	Acres	40% Value
F3			
F4			
F5	22	26,909.09	5,719,503
F9			
Total	22	26,909.09	5,719,503

ENVIRONMENTALLY SENSITIVE

Code	Count	Acres	40% Value
W3			
W4			
W5			

COMMERCIAL

Code	Count	Acres	40% Value
C1	428		5,017,872
C3	164	32.51	912,523
C4	52	190.78	379,562
C5	3	178.83	76,446
C7			
C9			
CA	1		70,000
CB	1		400
CF	296		3,534,320
CI	101		1,427,962
CP			
CZ	9		10,738

INDUSTRIAL

Code	Count	Acres	40% Value
I1	94		5,049,154
I3	4	10	32,114
I4	15	111.61	175,403
I5			
S6			
S7			
S8			
S9			
SF	10	6,649,223	
SA	49	1,063,096	
SB	0	0	
SP	491	376,648	
SH	0	0	
ST	0	0	
SV	949	12,972,042	
SJ	22	1,079,407	
SW	0	0	
SX			
SN	80	0	

DO NOT USE CODES L1-L9 ON STATE SHEET

L1			
L2			
L3			
L4			
L5			
L6			
L7			
L8			
L9			
TOTAL	2,936	25,415,289	0

SUMMARY

Code	Count	Acres	40% Value
Residential	8,414	5,099.31	39,994,545
Residential Transitional			
Historical			
Agricultural	3,435	60,579.15	27,672,491
Preferential	120	18,335.3	4,252,355
Conservation Use	949	103,831.5	32,481,030
Brownfield Property			
Forest Land Cons Use	22	26,909.09	4,682,765
Environmentally Sensitive			
Commercial	1,055	402.12	11,429,823
Industrial	152	121.61	18,277,195
Utility	18	0	6,988,551
Motor Vehicle	5,072		7,524,420
Mobile Home	1,247		4,753,290
Timber 100%	160	61,428	9,921,200
Heavy Equipment	0		0
Gross Digest	20,644	276,706.08	167,977,665
Exemptions Bond			
Net Bond Digest			167,977,665
Gross Digest	20,644	276,706.08	167,977,665
Exemptions-M&O			25,415,289
Net M&O Digest			142,562,376

I7		
I9		
IA		
IB		
IF	15	5,480,200
II	14	891,101
IP	10	6,649,223
IZ		

TAX LEVIED

TYPE	ASSESSED VALUE	MILLAGE	TAX
M & O	142,562,376	.000	0.00
BOND	167,977,665	.000	0.00

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Department of Revenue

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GEORGIA DEPARTMENT OF REVENUE Local Government Services Division County Digest Section	2016 TAX DIGEST CONSOLIDATED SUMMARY

County:ATKINSON County #:002 Tax District:PEARSON

Dist #: 05 Assessment %: 040 Tot Parcels:780

RESIDENTIAL

Code	Count	Acres	40% Value
R1	629		4,901,120
R3	486	75.77	879,771
R4	123	188.78	450,305
R5			
R6	259		78,359
R7			
R9			
RA			
RB	22		14,370
RF			
RI			
RZ			

RESIDENTIAL TRANSITIONAL

Code	Count	Acres	40% Value
T1			
T3			
T4			

HISTORIC

Code	Count	Acres	40% Value
H1			
H3			

AGRICULTURAL

Code	Count	Acres	40% Value
A1	3		13,004
A3	1	0	1,399
A4			
A5	5	586.82	206,144
A6	7		1,010
A7			
A9			
AA			
AB	10		3,240
AF			

UTILITY

Code	Count	Acres	40% Value
U1			
U2	4	0	986,802
U3			
U4			
U5			
U7			
U9			
UA			
UB			
UF			
UZ			

EXEMPT PROPERTY

Code	Count	40% Value
E0		
E1	48	700,464
E2	34	217,669
E3	23	148,391
E4	1	15,442
E5		
E6		
E7		
E8		
E9		
TOTAL	106	1,081,966

HOMESTEAD AND PROPERTY EXEMPTIONS

Code	Count	M&O	Bond
S1			
SC			
S2			
S3			
S4			
S5	3	49,872	
SD	0	0	
SS	0	0	
SE	0	0	

AI	
AZ	

PREFERENTIAL

Code	Count	Acres	40% Value
P3			
P4			
P5			
P6			
P7			
P9			

CONSERVATION USE

Code	Count	Acres	40% Value
V3			
V4	2	41.65	60,140
V5	5	332.34	103,382
V6			

BROWNFIELD PROPERTY

Code	Count	Acres	40% Value
B1			
B3			
B4			
B5			
B6			

FOREST LAND CONSERVATION USE

Code	Count	Acres	40% Value
J3			
J4			
J5			
J9			

FLPA FAIR MARKET ASSMT

Code	Count	Acres	40% Value
F3			
F4			
F5			
F9			
Total			

ENVIRONMENTALLY SENSITIVE

Code	Count	Acres	40% Value
W3			
W4			
W5			

COMMERCIAL

Code	Count	Acres	40% Value
C1	218		2,986,652
C3	99	27.34	676,640
C4	14	55.75	135,188
C5			
C7			
C9			

SG	0	0	
S6			
S7			
S8			
S9			
SF	2	0	
SA	0	0	
SB	0	0	
SP	88	69,231	
SH	0	0	
ST	0	0	
SV	7	88,218	
SJ	0	0	
SW	0	0	
SX			
SN	38	0	

DO NOT USE CODES L1-L9 ON STATE SHEET

L1			
L2			
L3			
L4			
L5			
L6			
L7			
L8			
L9			
TOTAL	138	207,321	0

SUMMARY

Code	Count	Acres	40% Value
Residential	1,519	264.55	6,323,925
Residential Transitional			
Historical			
Agricultural	26	586.82	224,797
Preferential			
Conservation Use	7	373.99	163,522
Brownfield Property			
Forest Land Cons Use			
Environmentally Sensitive			
Commercial	505	83.09	5,696,971
Industrial	88	52.36	4,206,928
Utility	4	0	986,802
Motor Vehicle	669		932,290
Mobile Home	344		1,037,005
Timber 100%	0	0	0
Heavy Equipment	0		0
Gross Digest	3,162	1,360.81	19,572,240
Exemptions Bond			
Net Bond Digest			19,572,240
Gross Digest	3,162	1,360.81	19,572,240
Exemptions-M&O			207,321

CA			
CB			
CF	122		1,013,824
CI	52		884,667
CP			
CZ			

INDUSTRIAL

Code	Count	Acres	40% Value
I1	67		1,585,610
I3	2	0	17,596
I4	9	52.36	112,987
I5			
I7			
I9			
IA			
IB			
IF	4		547,798
II	4		205,533
IP	2		1,737,404
IZ			

Net M&O Digest 19,364,919

TAX LEVIED

TYPE	ASSESSED VALUE	MILLAGE	TAX
M & O	19,364,919	11.550	223,664.82
BOND	19,572,240	.000	0.00

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Department of Revenue

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GEORGIA DEPARTMENT OF REVENUE Local Government Services Division County Digest Section	2016 TAX DIGEST CONSOLIDATED SUMMARY

County:ATKINSON County #:002 Tax District:WILLACOOCHEE

Dist #: 10 Assessment %: 040 Tot Parcels:667

RESIDENTIAL			
Code	Count	Acres	40% Value
R1	476		4,227,087
R3	436	40.37	753,187
R4	110	206.21	361,193
R5	1	0	13,986
R6	277		104,617
R7			
R9			
RA			
RB	14		15,722
RF			
RI			
RZ			

RESIDENTIAL TRANSITIONAL			
Code	Count	Acres	40% Value
T1			
T3			
T4			

HISTORIC			
Code	Count	Acres	40% Value
H1			
H3			

AGRICULTURAL			
Code	Count	Acres	40% Value
A1	7		16,805
A3			
A4	1	12	13,258
A5	5	209.76	86,187
A6	2		2,040
A7			
A9			
AA			
AB	9		3,320
AF			

UTILITY			
Code	Count	Acres	40% Value
U1			
U2	4	0	1,400,009
U3	1	0	1,968
U4			
U5			
U7			
U9			
UA			
UB			
UF			
UZ			

EXEMPT PROPERTY		
Code	Count	40% Value
E0		
E1	9	84,316
E2	27	92,512
E3	14	164,039
E4		
E5		
E6		
E7		
E8		
E9	2	71,148
TOTAL	52	412,015

HOMESTEAD AND PROPERTY EXEMPTIONS			
Code	Count	M&O	Bond
S1			
SC			
S2			
S3			
S4			
S5	1	22,418	
SD	0	0	
SS	0	0	
SE	0	0	

AI	
AZ	

PREFERENTIAL

Code	Count	Acres	40% Value
P3			
P4			
P5	1	240.73	42,338
P6			
P7			
P9			

CONSERVATION USE

Code	Count	Acres	40% Value
V3			
V4	6	68.88	49,286
V5	7	544.18	179,474
V6			

BROWNFIELD PROPERTY

Code	Count	Acres	40% Value
B1			
B3			
B4			
B5			
B6			

FOREST LAND CONSERVATION USE

Code	Count	Acres	40% Value
J3			
J4			
J5			
J9			

FLPA FAIR MARKET ASSMT

Code	Count	Acres	40% Value
F3			
F4			
F5			
F9			
Total			

ENVIRONMENTALLY SENSITIVE

Code	Count	Acres	40% Value
W3			
W4			
W5			

COMMERCIAL

Code	Count	Acres	40% Value
C1	126		1,422,710
C3	63	3.98	230,436
C4	15	71.07	115,659
C5	1	38.31	6,130
C7			
C9			

SG	0	0	
S6			
S7			
S8			
S9			
SF	5	0	
SA	1	10,585	
SB	0	0	
SP	36	37,319	
SH	0	0	
ST	0	0	
SV	13	110,297	
SJ	0	0	
SW	0	0	
SX			
SN	25	0	

DO NOT USE CODES L1-L9 ON STATE SHEET

L1			
L2			
L3			
L4			
L5			
L6			
L7			
L8			
L9			
TOTAL	81	180,619	0

SUMMARY

Code	Count	Acres	40% Value
Residential	1,314	246.58	5,475,792
Residential Transitional			
Historical			
Agricultural	24	221.76	121,610
Preferential	1	240.73	42,338
Conservation Use	13	613.06	228,760
Brownfield Property			
Forest Land Cons Use			
Environmentally Sensitive			
Commercial	278	113.36	2,822,995
Industrial	51	69.25	3,989,182
Utility	5	0	1,401,977
Motor Vehicle	582		732,560
Mobile Home	217		792,824
Timber 100%	0	0	0
Heavy Equipment	0		0
Gross Digest	2,485	1,504.74	15,608,038
Exemptions Bond			
Net Bond Digest			15,608,038
Gross Digest	2,485	1,504.74	15,608,038
Exemptions-M&O			180,619

CA			
CB			
CF	52		698,606
CI	21		349,454
CP			
CZ			

INDUSTRIAL

Code	Count	Acres	40% Value
I1	23		1,798,239
I3	2	10	14,518
I4	6	59.25	62,416
I5			
I7			
I9			
IA			
IB			
IF	8		681,110
II	7		311,217
IP	5		1,121,682
IZ			

Net M&O Digest 15,427,419

TAX LEVIED

TYPE	ASSESSED VALUE	MILLAGE	TAX
M & O	15,427,419	13.000	200,556.45
BOND	15,608,038	.000	0.00

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Appendix C

6. Community Work Program

Atkinson County 5-Year Community Work Program Update
(2018 - 2022)

PROJECTS	ESTIMATED COST	RESPONSIBLE PARTY	FUNDING SOURCE	FY 18	FY 19	FY 20	FY 21	FY 22
PLANNING								
Update the County website on a quarterly schedule	$500	County	General Fund	X	X	X	X	X
Develop a master resource guide	$1,500	County Staff	General Fund			X	X	
ECONOMIC DEVELOPMENT								
Develop county wide tourism plan	$2,500	County/Region 11 Department of Tourism and Trade	General Fund					X
Work with City of Pearson and City of Willacoochee to form a county-wide Chamber of Commerce and find an appropriate Chairman for Chamber	Staff Time	County and Cities	General Fund	X	X	X	X	X
Develop a new board to reestablish the Industrial Authority	Staff Time	County	General Fund	X	X	X	X	X
HOUSING								
Establish a housing rehabilitation program for dilapidated areas throughout the County utilizing CHIP grants, CDBG, Opportunity Zones, etc.	$2,500	County, SGRC	General Fund			X	X	X
Revitalize single family housing that can be used for affordable housing	$7,500	County	CHIP, CDBG	X	X	X	X	X
Encourage the availability of credit counseling available for all potential home buyers	$25,000	County	General Fund USDA	X	X	X	X	X
Enhance code enforcement efforts to make sure regulations are not being violated	Staff Time	County	General Fund	X	X	X	X	X
NATURAL RESOURCES								

PROJECTS	ESTIMATED COST	RESPONSIBLE PARTY	FUNDING SOURCE	FY 18	FY 19	FY 20	FY 21	FY 22
Continue to promote the development of regulations through coordination with the state to protect wetlands	$1,500/Staff Time	County	General Fund	X	X	X	X	X
Preserve and protect the ecological value and diversity of natural resources in Atkinson County	Staff Time	County	General Fund	X	X	X	X	X
LAND USE								
Facilitate GIS Training county-wide	$750 annual	County/SGRC	General Fund			X	X	X
Develop a county zoning ordinance	$500	County/SGRC	General Fund			X	X	
COMMUNITY FACILITIES & SERVICES								
Continue with consolidation of Fire Departments so that the ISO number can decrease	$25,000	County/Cities	General Fund	X	X	X	X	X
Design and build new jail	$35,000	County	EDA	X	X	X		
Widen and resurface Cogdell road from Clinch County line to Union Hill Church Road	$1,322,905.40	County/GDOT	TSPLOST		X	X	X	
Widen and resurface Springhead Road from SR64 to Live Oak Church Road	$675,870.50	County/GDOT	TSPLOST		X	X	X	
Widen and resurface Springhead Road from 3.565 miles south of Willacoochee City limits to Willacoochee City limits	$746.277.18	County/GDOT	TSPLOST		X	X	X	
Widen and resurface Springhead Road from Live Oak Church Road to 4.356 miles south of Willacoochee city limits	$466,277.18	County/GDOT	TSPLOST		X	X	X	
Upgrade fire equipment as needed	$15,000	County	Fire Grants, General Fund	X	X	X	X	X
Purchase new police cars every two years	$25,000 Each	County	General Fund	X		X		X
Implement a training plan for Sheriff/Fire/EMS	Staff Time	County	General Fund		X	X	X	
Evaluate financing methods for new infrastructure	Staff Time	County	General Fund		X	X	X	

PROJECTS	ESTIMATED COST	RESPONSIBLE PARTY	FUNDING SOURCE	FY 18	FY 19	FY 20	FY 21	FY 22
Build new courthouse using old courthouse for an annex.	$350,000	County	CDBG Grant	X	X	X		
Continue to apply for CDBG grants to enhance infrastructure, road and street projects, redevelopment as needed.	$5,000	County/SGRC	General Fund	X	X	X	X	X
INTERGOVERNMENTAL COORDINATION								
Create and/or participate in a leadership program for residents, community leaders, and government officials	$1,500	County/Cities	General Fund	X	X	X		
Plan a retreat for City, County and BOE members to discuss and implement major improvements countywide.	Staff Time	County/Cities/BOE	General Fund	X	X	X	X	X
CULTURAL/HISTORICAL RESOURCES								
Work to save Old Malone Hotel which is 100 years old the one historical site that can be used as a great landmark for the County and Cities	Staff Time	County/Cities	General Fund/Grants	X	X	X	X	X
Participate in the identification and documentation of historic resources in the County	Staff Time	County	General Fund		X	X	X	

City of Pearson 5-Year Community Work Program Update
(2018 – 2022)

PROJECTS	ESTIMATED COST	RESPONSIBLE PARTY	FUNDING SOURCE	FY 18	FY 19	FY 20	FY 21	FY 22
PLANNING								
Update the Pearson website on a quarterly schedule	$1,500 annual	City of Pearson	General Fund	X	X	X	X	X
ECONOMIC DEVELOPMENT								
Continue to enhance the Industrial Park so that it can attract more industry and develop plans for expansion of the existing industrial park	$500,000/enhance $2,500/expansion	City of Pearson	General Fund, CDBG, EDA			X	X	X
Establish and utilize a downtown revitalization program and board	$500,000	City of Pearson	DCA sown town RLF, EDA	X	X	X	X	X
Develop a strategic plan to make Pearson a candidate for the location of a Federal Prison System	$2,000	City of Pearson	GED, DCA			X	X	X
Promote retention and expansion of existing businesses and industries	Staff Time	City of Pearson	General Fund	X	X	X	X	X
Establish and Enterprise or Opportunity Zone to encourage redevelopment and infill	$5,000	City of Pearson/SGRC	General Fund				X	X
Work with County and City of Willacoochee to form a county-wide Chamber of Commerce and find an appropriate Chairman for Chamber	Staff Time	Cities and County	General Fund	X	X	X	X	X
Identify procedures to encourage successful small businesses to expand and reinvest in community.	$1,500	City of Pearson	General Fund		X	X		
HOUSING								
Develop a program for the rehabilitation of housing in the City of Pearson	$350,000	City of Pearson	CDBG, DCA USDA		X	X	X	X
Rehab/construct better housing for all income levels to ensure that all who work in the community live in decent housing.	$500,000	City of Pearson	CDBG, CHIP USDA, EDA	X	X	X	X	X
Encourage and foster the provision of housing for low and moderate-income families	Staff Time	City of Pearson	General Fund	X	X	X	X	X

PROJECTS	ESTIMATED COST	RESPONSIBLE PARTY	FUNDING SOURCE	FY 18	FY 19	FY 20	FY 21	FY 22
Operate the State of Georgia weatherization program	Staff Time	City of Pearson	General Fund, Grants	X	X	X	X	X
Participate in GICH (Georgia Initiative for Community Housing)	Staff Time/$2,500	City of Pearson/SGRC	General Fund		X	X	X	
Establish a redevelopment strategy for identifying declining areas in City	$7,500	City of Pearson/SGRC	General Fund			X	X	
NATURAL RESOURCES								
Protect and maintain the quality and quantity of wetlands	Staff Time	City of Pearson	General Fund	X	X	X	X	X
Preserve and protect the ecological value and diversity of natural resources in City of Pearson	Staff Time	City of Pearson	General Fund	X	X	X	X	X
Develop a plan to preserve/market resources for eco-toursim	Staff Time	City of Pearson	General Fund	X	X	X	X	X
Monitor protect and maintain the quality and quantity of the City of Pearson water	$2,500 annual	City of Pearson/EPA	General Fund	X	X	X	X	X
LAND USE								
Work with SGRC to update zoning/ Land Development Code Regulations.	$5,000	City of Pearson/SGRC	General Fund				X	X
Make vacant store improvements and alleviate blighted property	$300,000	City of Pearson	CDBG, USDA, DCA, CHIP	X	X	X	X	X
COMMUNITY FACILITIES & SERVICES								
Put waste baskets and lighting in the center of town to make the area safer and cleaner	$7,500	City of Pearson	CDBG. General Fund, TGRANT			X	X	X
Continue and maintain youth programs	$5,000	City of Pearson	General Fund	X	X	X	X	X
Redevelopment of downtown areas. 1- Develop Better Hometown grant 2- Plan ornamental streetlight project 3- Purchase ornamental garbage cans and benches 4- Purchase street flags 5- Develop tree-planting project 6- Refinish sidewalks in downtown area	$75,000	City of Pearson	CDBG, General Fund, TGRANT				X	X
Repave/surface streets as prioritized by need	$120,000	City of Pearson	LMIG	X	X	X	X	X

PROJECTS	ESTIMATED COST	RESPONSIBLE PARTY	FUNDING SOURCE	FY 18	FY 19	FY 20	FY 21	FY 22
Pave city streets as prioritized by need	$200,000	City of Pearson	LMIG	X	X	X	X	X
New fire department building	$500,000	City of Pearson	General Fund. Fire Grants			X	X	X
Renovate the Civic and sports complex	$700,000	City of Pearson	General Funds, CDBG				X	X
Implement a training plan for Sheriff/Fire/EMS	$15,000	City of Pearson	General Funds		X	X	X	X
Upgrade and/or purchase a new police car every 2 years	$25,000 each	City of Pearson	General Fund, Grants	X		X		X
INTERGOVERNMENTAL COORDINATION								
Continue with consolidation of Fire Departments to reduce ISO rating	Staff Time	County/City	General Fund	X	X	X	X	X
Plan a retreat for City, County and BOE members to discuss and implement major improvements countywide.	Staff Time	County, Cities, BOE	General Fund			X	X	X
Create a leadership program for residents, community leaders, and government officials	$1,500	County, Cities	General Fund			X	X	X
Define roles and partnerships between City and County for citizens	Staff Time	City of Pearson	General Fund	X	X	X	X	X
CULTURAL/HISTORIC RESOURCES								
Identify locations for more parks and open space locations within the city	Staff Time	City of Pearson	General Fund	X	X	X	X	X
Participate in the identification and documentation of historic resources in the City of Pearson	$3,000	City of Pearson	General Fund	X	X	X	X	X
Work to save Old Malone Hotel which is 100 years old the one historical site that can be used as a great landmark for the City	$350,000	Pearson, Willacoochee. Atkinson County	General Fund, Grants, RLF	X	X	X	X	X

City of Willacoochee 5-Year Community Work Program Update
(2018 - 2022)

PROJECTS	ESTIMATED COST	RESPONSIBLE PARTY	FUNDING SOURCE	FY 18	FY 19	FY 20	FY 21	FY 22
PLANNING								
Complete and distribute a new updated city-county tri-fold street map	$2,500	City of Willacoochee, SGRC	General Fund	X	X	X		
Update the City of Willacoochee website on a quarterly schedule	$1,500 annual	City of Willacoochee	General Fund	X	X	X	X	X
ECONOMIC DEVELOPMENT								
Maintain and improve Industrial Park	$500,000	City of Willacoochee	General Fund, EDA, CDBG	X	X	X	X	X
Water tank maintenance	$500,000	City of Willacoochee	General Fund, EDA, CDBG	X	X	X	X	X
Work with County and City of Pearson to form a county-wide Chamber of Commerce and find an appropriate Chairman for Chamber	Staff Time	City of Willacoochee	General Fund	X	X	X	X	X
Construct a Civic Center	$750,000	City of Willacoochee	General Fund, EDA, CDBG				X	X
Establish an Enterprise or Opportunity Zone to encourage redevelopment and infill	$5,000	City of Willacoochee SGRC	General Fund			X	X	X
Identify procedures to encourage successful small businesses to expand and reinvest in community.	Staff Time	City of Willacoochee	General Fund	X	X	X	X	X
HOUSING								
Rehabilitate existing and provide additional housing stock for all income levels	$500,000	City of Willacoochee	General Fund, EDA, CDBG, CHIP			X	X	X
Participate in GICH (Georgia Initiative for Community Housing)	Staff Time/$2,5000	City of Willacoochee SGRC	General Fund			X	X	X
Establish a redevelopment strategy for identifying declining areas in City	$7,500	City of Willacoochee	General Fund	X	X	X	X	X

PROJECTS	ESTIMATED COST	RESPONSIBLE PARTY	FUNDING SOURCE	FY 18	FY 19	FY 20	FY 21	FY 22
Develop a program for the rehabilitation of housing in the City of Willacoochee	Staff Time	City of Willacoochee	General Fund CDBG, EDA, CHIP	X	X	X	X	X
Operate the State of Georgia weatherization program	Staff time	City of Willacoochee	General Fund	X	X	X	X	X
NATURAL RESOURCES								
Gain access to land to establish a boat ramp on the north side of the City of Willacoochee allowing for closer access to the river.	$75,000	City of Willacoochee	General Fund, DNR	X	X	X	X	X
Research opportunities to develop and utilize check dams on the Alapaha River	$10,000	City of Willacoochee	General Fund, DNR			X	X	X
LAND USE								
Bypass from highway 82 to Springhead Road to industrial park	$750,000	City of Willacoochee	SPLOST			X	X	X
Work with SGRC to incorporate zoning/ Land Development Code Regulations.	$5,000	City of Willacoochee SGRC	General Fund	X	X	X	X	X
COMMUNITY FACILITIES & SERVICES								
Develop a city irrigation system to improve landscaping on government property.	$50,000	City of Willacoochee	General Fund, EDA	X	X	X	X	X
Improve main street with TEA Grant funding	$25,000	City of Willacoochee	TGrant			X	X	X
Keep police car fleet up to date	$50,000	City of Willacoochee	COPS Grant	X		X		X
Provide improvements to local streets, water lines and sewer lines with CDBG grants	$500,000	City of Willacoochee SGRC	General Fund, CDBG	X	X	X	X	X
Develop city-wide CDBG applications for housing rehabilitation and infrastructure improvements	$500,000	City of Willacoochee SGRC	General Fund, CDBG	X	X	X	X	X
Continue to expand beautification efforts around town and at city entrances	$50,000	City of Willacoochee	General Fund	X	X	X	X	X
Repave/surface streets as prioritized by need	$250,000	City of Willacoochee	LMIG	X	X	X	X	X
Pave city streets as prioritized by need	$350,000	City of Willacoochee	LMIG	X	X	X	X	X
Update tennis courts, netting, stripping, concrete repair	$50,000	City of Willacoochee	General Fund, Grants			X	X	X

PROJECTS	ESTIMATED COST	RESPONSIBLE PARTY	FUNDING SOURCE	FY 18	FY 19	FY 20	FY 21	FY 22
Upgrade Recreation Department ball fields	$75,000	City of Willacoochee	General Fund, Grants			X	X	X
Implement First Responder through Fire Department	$5,000	City of Willacoochee	General Fund, Grants		X	X	X	
Construct a helicopter pad for emergency landings	$150,000	City of Willacoochee	General Fund, Grants				X	X
Implement Drug Prevention Program	Staff Time	City of Willacoochee	General Fund			X	X	X
INTERGOVERNMENTAL COORDINATION								
Continue with consolidation of Fire Departments to reduce ISO rating	$10,000	County/Cities	General Fund	X	X	X	X	X
Create a leadership program for residents, community leaders, and government officials	$1,500	County/Cities	General Fund			X	X	X
Plan a retreat for City, County and BOE members to discuss and implement major improvements countywide.	Staff Time	County/Cities, BOE	General Fund			X	X	X
CULTURA/HISTORICAL RESOURCES								
Participate in the identification and documentation of historic resources in the City of Willacoochee	Staff Time	City of Willacoochee	General Fund	X	X	X	X	X
Development a historical preservation ordinance the City of Willacoochee	Staff Time	City of Willacoochee	General Fund	X	X	X	X	X
Inventory Survey of West End Cemetery	$5,000	Willacoochee, SGRC	General Fund	X	X	X	X	X

GEORGIA FORESTRY
COMMISSION

Community Wildfire Protection Plan

An Action Plan for Wildfire Mitigation and Conservation of Natural Resources

Atkinson County, Georgia

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

MAY 10, 2011

Prepared by;
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The following report is a collaborative effort among various entities; the representatives listed below comprise the core decision-making team responsible for this report and mutually agree on the plan's contents:

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PLAN CONTENTS

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 though 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 form 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 Atkinson 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 January 18th, 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:

Atkinson County Government
County Fire Department
Emergency Management
City of Pearson
City Fire Dept
City Of Willacoochee
City Fire Department
Georgia Forestry Commission

It was decided to conduct community assessments on high hazard areas by the individual fire districts in the county. The chiefs of the fire departments in the county assessed their districts and reconvened on February 22nd, 2011 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

Atkinson County, Georgia's 153rd county, covers an area of 338 square miles and was carved from portions of Clinch and Coffee counties by the state legislature in 1917. The south central Georgia county was named for William Y. Atkinson, speaker of the state House of Representatives and Georgia's governor in the late 1890s.

The region was originally inhabited by Creek Indians, who forged a trail through the southern part of the area that was later used by traders between the Flint River and the coastal town of St. Marys. This trail was known as the "Kinnaird Trail" for a trading post managed by Jack Kinnair at its western limit. It was along the Kinnaird Trail that the first white settlers traveled from middle Georgia, Tennessee, North Carolina, and South Carolina, arriving after the Revolutionary War (1775-83). The Brunswick and Albany Railroad laid its track along portions of the trail after the Civil War (1861-65), and the rail reached Pearson, the county seat, by the 1870s.

Pearson was incorporated in December 1890, and the county courthouse was built there in 1920. The courthouse was placed on the National Register of Historic Places in 1980. Other towns in the county are Axson, Kirkland, and Willacoochee. Axson, called McDonald's Mill before the creation of Atkinson County, was renamed in honor of U.S. president Woodrow Wilson's first wife, Ellen Axson Wilson (of Rome) when the new county was created. Willacoochee, founded in 1889, was the first chartered town in the county. The town has one building, McCranie's Turpentine Still, listed on the National Register of Historic Places. The still was active in Willacoochee from 1925 to 1949.

Early industry in Atkinson County depended on the pine forests covering much of the land. Logging operations used the Satilla River to float timber to the coast. Later, farming (tobacco, corn, and poultry) displaced logging as the central economic activity. Poultry continues to be an important industry, and the main agricultural crops are peanuts, cotton, corn, and tobacco.

According to the 2000 U.S. census, the county population was 7,609 (66.8 percent white, 19.6 percent black, and 17 percent Hispanic). The population showed a 22.5 percent increase between 1990 and 2000, largely because of the number of Hispanics who moved into the county to work in the mobile-home industry and in agriculture.

Among the points of interest are the Columbus Salt Road, the Kinnaird Trail, and the Minnie F. Corbitt Memorial Museum, established in 1955 and located in the first house in Pearson, built in 1873.

Elizabeth B. Cooksey, Savannah, Courtesy New Georgia Encyclopedia

Existing Situation

Atkinson County located in south central Georgia, despite a considerable agricultural presence, is still almost 78% forested. Perhaps with the exception of a few large blocks of woodlands in the flatwoods through across the southern half of the county, there are homes and communities scattered throughout the county. The risks and hazards from the wildland urban interface are fairly general and substantial throughout the county even on the edges of the incorporated towns.

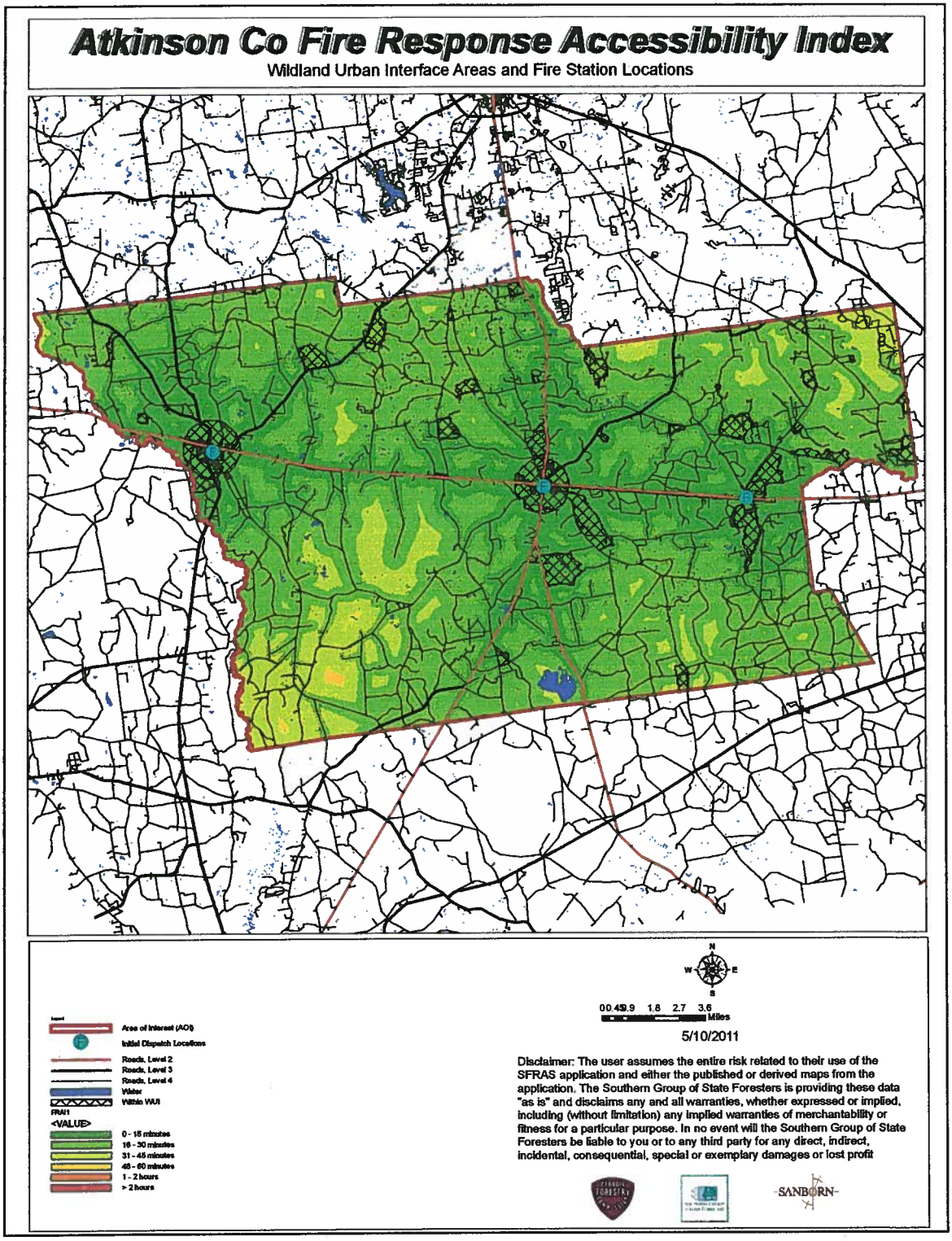
Atkinson County is protected by organized fire departments within the towns of Pearson, Willacoochee and Axson. The Georgia Forestry Commission maintains a county protection unit located three miles west of Pearson on Hwy 82 to respond to wildfires throughout the county. The cities of Pearson and Willacooche are serviced by pressurized water systems with hydrants available.

Over the past forty five years, Atkinson County has averaged 56 reported wildland fires per year, burning an average of 527 acres per year. Using more recent figures over the past 20 years, this number has increased somewhat to an average of 61 fires per year burning on average 559 acres annually. Over both the 45 and 20 years periods the fires are fairly well spread out over the months with no pronounced fire season.

Over the past 20 years, the leading causes of these fires, was debris burning and machine use causing 56% and 16% respectively of the fires. Over the past six years records show that over 33% of the debris fires originated from residential burning.

Georgia Forestry Commission Wildfire Records show that in the past seven years, 12 homes have been lost or damaged by wildfire in Atkinson County resulting in estimated losses of $223,075 along with 19 outbuildings valued at $106,005. According to reports during this period 243 homes have been directly or indirectly threatened by these fires. Additionally four vehicles valued at $41,000 and 46 other pieces of mechanized equipment valued at $431,500 were lost. This is a substantial loss of non timber property attributed to wildfires in Atkinson 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 form 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 2011 by the Atkinson County Fire Departments returned a number of communities in the very high to extreme range. The risk assessment instrument used to evaluate wildfire hazards to Atkinson 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 Atkinson County:

- Unpaved roads and private driveways
- Narrow roads without drivable shoulders
- Limited Access One way in/out
- Inadequate driveway access
- Minimal defensible space around structures
- Homes with wooden siding
- Lack of non flammable skirting in MHP's
- Unmarked septic tanks in yards
- Lack of pressurized or non-pressurized water systems available
- Lack of uniform address display standards
- Large, adjacent areas of forest or wildlands
- Heavy fuel buildup in adjacent wildlands
- Undeveloped lots comprising half the total lots in many rural communities.
- High occurrence of wildfires in the several locations
- Lack of homeowner or community organizations

Summary of Atkinson County Assessments

Area/Community	Fire District	Community Access	Surrounding Vegetation	Bldg Construction	Fire Protection	Utilities	Add. Factors	Score	Hazard Rating
Pearson	Pearson	11	45	25	5	9	33	128	Extreme
Willacoochee	Willacoochee	14	20	25	14	7	18	98	High
Axson	Axson	10	10	20	12	5	17	74	Moderate
Heritage Hills Pearl Estates Carrington Hills	Willacoochee	20	15	25	27	7	14	108	Very High
Guthrie Heights	Pearson	15	20	25	25	7	12	104	Very High
The Oaks	Pearson	9	15	15	18	5	9	71	Moderate
Harvey Taft Rd Flight Pen Ln	Pearson	16	30	20	22	7	18	113	Very High

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.

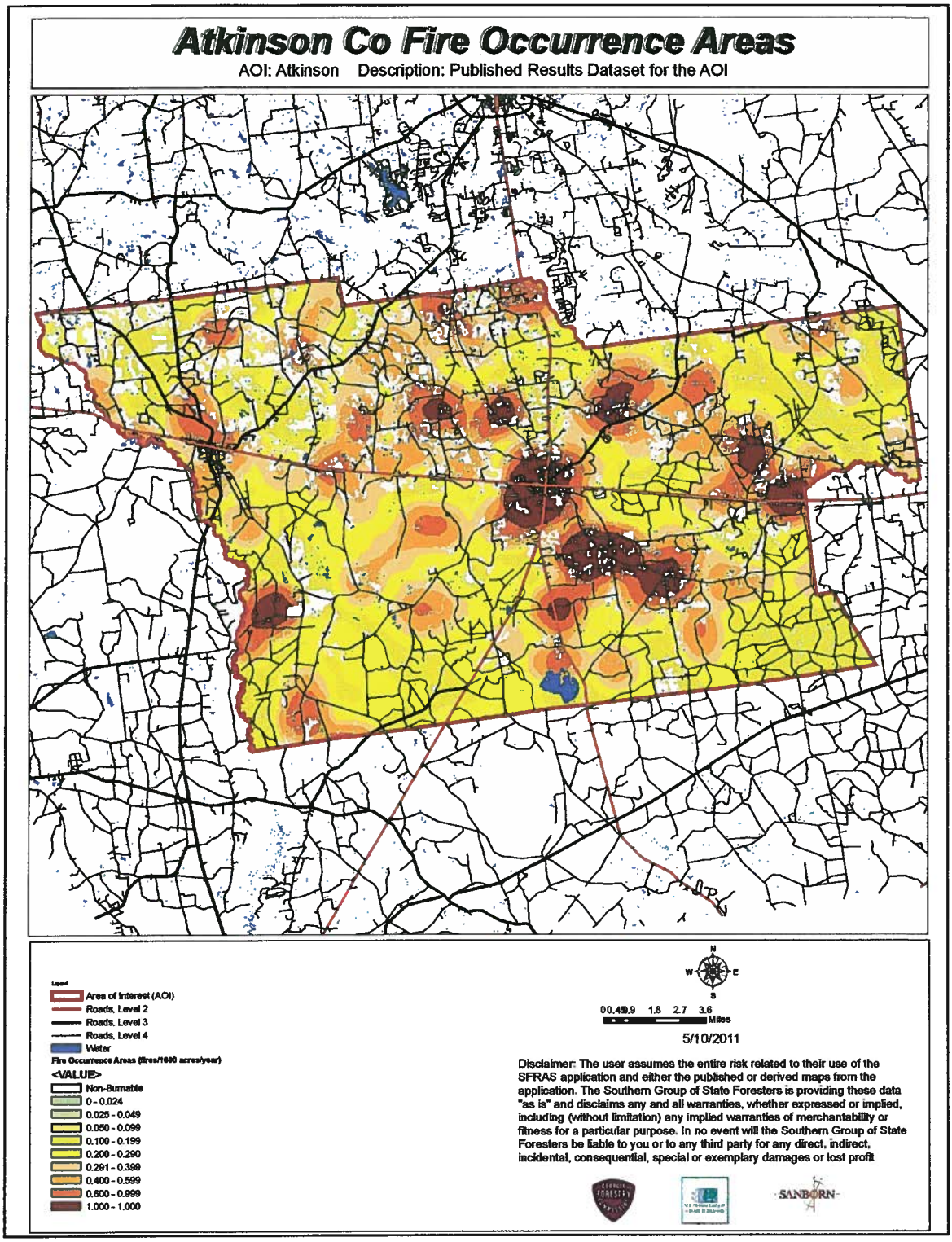
Fire Response Accessibility Index is a relative measure of how long it would take initial attack resources to drive from their station to various areas of the county. This index is derived from assigning average speeds to the various road classes in the county. For the purpose of this analysis the following 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.

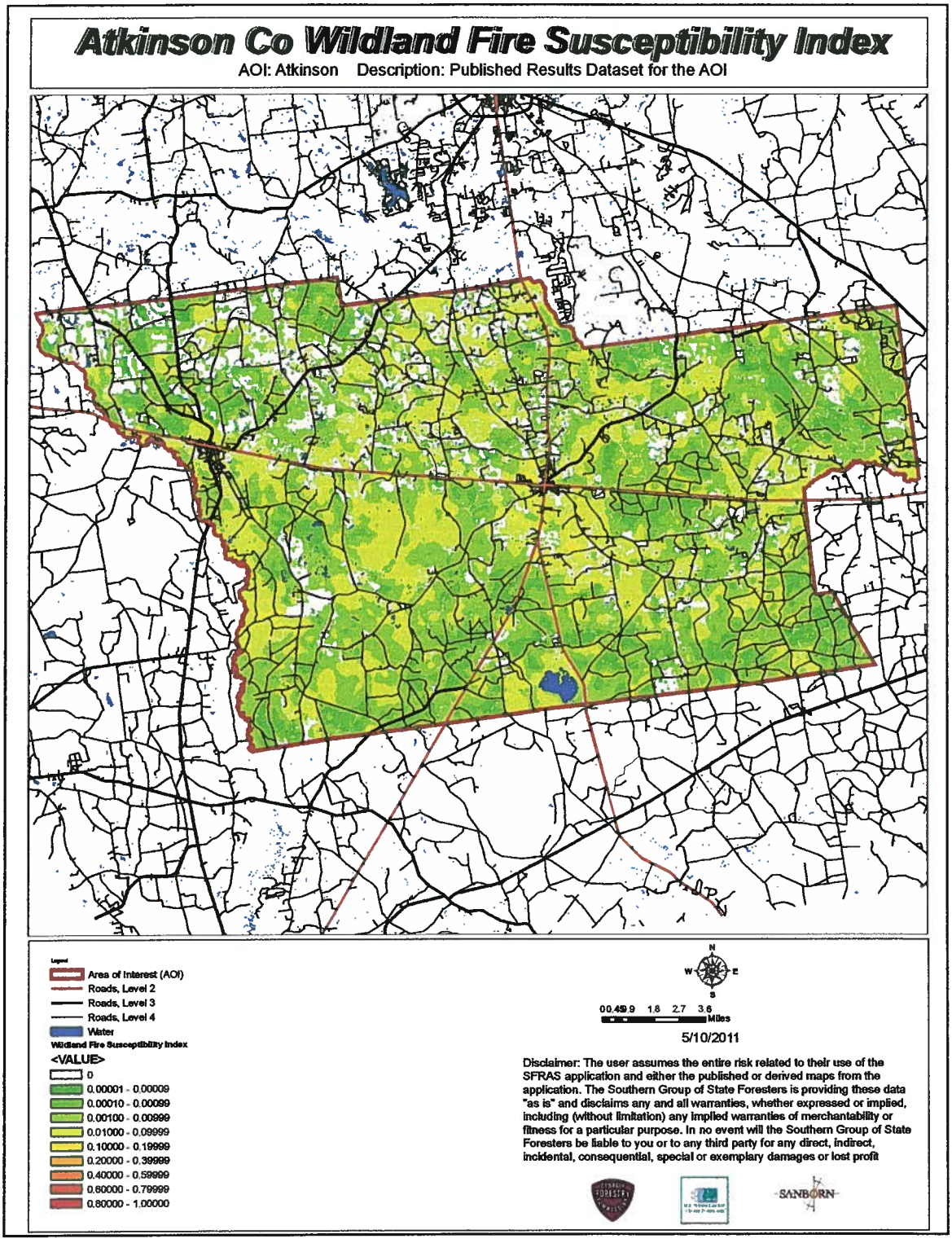
Fire Occurrence Areas maps use data from wildfire reports over the period from 1997-2002. The fire occurrence rates mapped are the probability of the number of fires occurring per 1000 acres per year base on this historic information.

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




Atkinson Co Wildland Fire Susceptibility Index
AOI: Atkinson Description: Published Results Dataset for the AOI
Legend
Area of Interest (AOI)
Roads, Level 2
Roads, Level 3
Roads, Level 4
Water
Wildland Fire Susceptibility Index
<VALUE>
0
0.00001 - 0.00009
0.00010 - 0.00099
0.00100 - 0.00999
0.01000 - 0.09999
0.10000 - 0.19999
0.20000 - 0.39999
0.40000 - 0.59999
0.60000 - 0.79999
0.80000 - 1.00000
N
W
E
S
0 0.45 0.9 1.8 2.7 3.6
Miles
5/10/2011
Disclaimer: The user assumes the entire risk related to their use of the SFRAS application and either the published or derived maps from the application. The Southern Group of State Foresters is providing these data "as is" and disclaims any and all warranties, whether expressed or implied, including (without limitation) any implied warranties of merchantability or fitness for a particular purpose. In no event will the Southern Group of State Foresters be liable to you or to any third party for any direct, indirect, incidental, consequential, special or exemplary damages or lost profit
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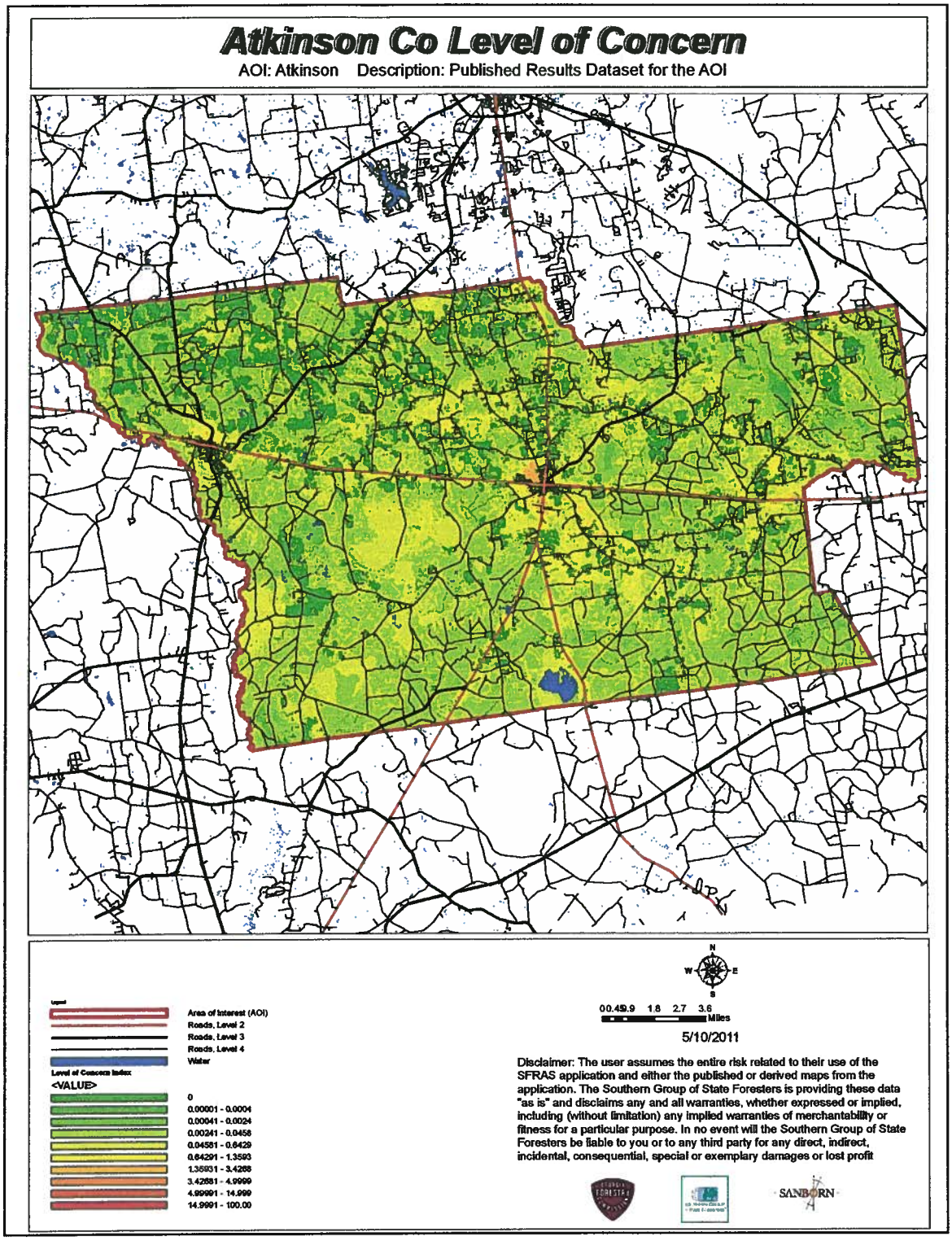
Atkinson Co Level of Concern
AOI: Atkinson Description: Published Results Dataset for the AOI
Area of Interest (AOI)
Roads, Level 2
Roads, Level 3
Roads, Level 4
Water
Level of Concern Index
<VALUE>
0
0.00001 - 0.0004
0.00041 - 0.0024
0.00241 - 0.0458
0.04581 - 0.6429
0.64291 - 1.3593
1.35931 - 3.4288
3.42881 - 4.9999
4.99991 - 14.999
14.9991 - 100.00
N
W
E
S
0 0.45 0.9 1.8 2.7 3.6
Miles
5/10/2011
Disclaimer: The user assumes the entire risk related to their use of the SFRAS application and either the published or derived maps from the application. The Southern Group of State Foresters is providing these data "as is" and disclaims any and all warranties, whether expressed or implied, including (without limitation) any implied warranties of merchantability or fitness for a particular purpose. In no event will the Southern Group of State Foresters be liable to you or to any third party for any direct, indirect, incidental, consequential, special or exemplary damages or lost profit
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VII. PRIORITIZED MITIGATION RECOMMENDATIONS

Executive Summary

As South Georgia continues to see increased growth from other areas seeking less crowded and warmer climes, new development will occur more frequently on forest and wildland areas. Atkinson 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 Atkinson County CWPP Core team as a result of surveying and assessing fuels and structures and by conducting meetings and interviews with county and city 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-feet 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 Clean-up Day	Cutting, mowing, pruning**	Cut, prune, and mow vegetation in shared community spaces.
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), and other relevant concerns Review Subdivision and development ordinances for public safety concerns. Enact and enforce uniform addressing ordinance.
7. Burn Permits	Education and Enforcement	Greater Burn Permit enforcement and education from the Georgia Forestry Commission. Make information available in Spanish.

Proposed Community Wildland Fuel Reduction Priorities		
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. Seek grant for mowing or prescribed burning in WUI areas.
2. Wildland Fuel Reduction	Reduce hazardous fuels	Make training available for prescribed burning techniques and liability issues.
3. Existing Fire Lines	Reduce hazardous fuels	Clean and re-harrow existing lines.
Proposed Improved Community Wildland Fire Response Priorities		
1. Water Sources	Dry Hydrants	Inspect, maintain and improve access to existing dry hydrants. Add signage along road to mark the hydrants. Locate additional dry hydrants as needed. Locate and pre-clear helicopter dip sites
2. Fire Stations	Equipment	Wildland hand tools. Lightweight Wildland PPE Gear. Improved tanker capacity and turbo drafting pumps.
3. Mapping	GIS	Up to date mapping of roads, buildings and water sources.
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

1. Conduct "How to Have a Firewise Home" Workshop for Atkinson County Residents
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. Distribute materials promoting firewise practices and planning through local community and governmental meetings.
2. Conduct "Firewise" Workshop for Community Leaders
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.
3. Spring Clean-up Event
Conduct clean-up event every spring involving the Georgia Forestry Commission, Atkinson County Fire Departments 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: • Clean flammable vegetative material from roofs and gutters • Trim shrubs and vines to 30 feet away from structures • Trim overhanging limbs • Clean hazardous or flammable debris from adjacent properties Celebrate the work with a community cookout, with Community officials, GFC and Atkinson County Fire Departments discussing and commending the work accomplished.
4. Informational Packets
Develop and distribute informational packets to be distributed by code enforcement, realtors and insurance agents. Included in the packets are the following: • Be Firewise Around Your Home • Firewise Guide to Landscape and Construction • Firewise Communities USA Bookmarks

5. Wildfire Protection Display
Create and exhibit a display for the general public at local events. 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 Atkinson 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	
Atkinson County WUI Fire Council	Create this informal team or council comprised of residents, GFC officials, Atkinson County, Pearson, Willacoochee and Axson Fire Department personnel, a representative from the city and county governments and the EMA Director for Atkinson 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	1 Defensible Space and Firewise Landscaping 2 Debris Burning Safety 3 Firewise information for homeowners 4 Prescribed burning benefits
Communications objectives	1 Create public awareness for fire danger and defensible space issues 2 Identify most significant human cause fire issues 3 Enlist public support to help prevent these causes 4 Encourage people to employ fire prevention and defensible spaces in their communities.
Target Audiences	1 Homeowners 2 Forest Landowners and users 3 Civic Groups 4 School Groups
Methods	1 News Releases 2 Radio and TV PSA's for area stations and cable access channels 3 Personal Contacts 4 Key messages and prevention tips 5 Visuals such as signs, brochures and posters

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, Atkinson County Fire Departments and Emergency Management Agency. Procure needed equipment and supplies. In cooperation with local city and 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 city and county governments.
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.
- Another source of mitigation information can be found at 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 Atkinson 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 Atkinson 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 Atkinson 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

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Appendix D

ATKINSON 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
Thunderstorm/Wind	86	68	40	75	86	0.79	126.47	4	3.75	1.72
Hail	26	68	4	20	26	2.62	38.24	0.4	1	0.52
Wildfire	2673	50	305	983	2673	0.02	5346.00	30.5	49.15	53.46
Flood	6	68	1	6	6	11.33	8.82	0.1	0.3	0.12
Drought	365	18	197	365	365	0.05	2027.78	19.7	18.25	7.3
Hurricane/Tropical Storm	4	68	2	4	4	17.00	5.88	0.2	0.2	0.08
Tornado	10	68	3	5	10	6.80	14.71	0.3	0.25	0.2
Severe Winter Storm	1	68	1	1	1	68.00	1.47	0.1	0.05	0.02

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 accuarcy 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 #1 Identify the Hazard Step 1

Date: What kinds of natural hazards can affect you?

Task A. List the hazards that may occur.

1. *Research newspapers and other historical records*
2. *Review existing plans and reports.*
3. *Talk to the experts in your community, state, or region.*
4. *Gather information on Internet Websites.*
5. *Next to the hazard list below, put a check mark in the Task A boxes beside all hazards that may occur in your community or state.*

Task B. Focus on the most prevalent hazard in your community or state.

1. *Go to hazard Websites.*
2. *Locate your community or state on the Website map.*
3. *Determine whether you are in a high-risk area. Get more localized information if necessary.*
4. *Next to the hazard list below, put a check mark in the Task B boxes beside all hazards that post a significant threat.*

	Task A	**Task B**
Avalanche	___	___
Coastal Erosion	**___**	**___**
Coastal Storm	___	___
Dam Failure	**___**	**___**
Drought	_X	_X_
Earthquake	**___**	**___**
Expansive Soils	___	___
Extreme Heat	___	___
Flood	**_X_**	**_X_**
Hailstorm	_X_	_X_
Hurricane	**_X_**	**_X_**
Land Slide	___	___
Severe Winter Storm	_X_	_X_
Tornado	**_X_**	**_X_**
Tsunami	**___**	**___**
Volcano	___	___
Wildfire	**_X_**	**_X_**
Windstorm	___	___
Hazard Material	___	___
Radiological	___	___
Other: Thunderstorm/Wind	X	X
Other_____	___	___
Other_____	___	___

*Note: **Bolded** hazards are addressed in this How-to Guide.*

Use this space to record information you find for each of the hazards you will be researching. Attach additional pages as necessary.

Hazard or Event Description (Type of hazard, date of event, number of injuries, cost and types of damage, etc.)	**Source of Information**	**Map Available for this Hazard?**	**Scale of Map**

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 1. Get a copy of your FIRM. _____ 2. Verify that the FIRM is up-to-date and complete. _____ 3. Determine the annual rate of coastal erosion. _____ 4. Find your design wind speed. _____	1. Transfer the boundaries of your coastal storm hazard areas onto your base map. 2. Transfer the BFEs onto your base map. 3. Record the erosion rates on your base map: _____ 4. Record the design wind speed here and on your base map: _____
Dam Failure	
Drought	
Earthquake 1. Go to the http://geohazards.cr.usgs.gov Website. 2. Locate your planning area on the map. 3. Determine your PGA.	1. Record your PGA: _____ 2. If you have more than one PGA print, download or order your PGA map.
Expansive Soils	
Extreme Heat	
Flood 1. Get a copy of your FIRM. _____ 2. Verify the FIRM is up-to-date and complete. _____	1. Transfer the boundaries from your firm onto your base map (floodway, 100-yr flood, 500-yr flood). 2. Transfer the BFEs onto your base map.
Hailstorm	
Hurricane	
Land Subsidence	
Landslide 1. Map location of previous landslides. _____ 2. Map the topography. _____ 3. Map the geology. _____ 4. Identify thee high-hazard areas on your map. _____	1. Mark the areas susceptible to landslides onto your base map.
Severe Winter Storm	
Tornado 1. Find your design wind speed. _____	1. Record your design wind speed: _____ 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.
Tsunami	
Wildfire 1. Map the fuel models located within the urban-wildland interface areas. _____ 2. Map the topography. _____ 3. Determine your critical fire weather frequency. _____ 4. Determine your fire hazard severity. _____	1. Draw the boundaries of your wildfire hazard areas onto your base map.
Other 1. Map the hazard. _____	1. Record hazard event info on your base map.

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: Prevent or reduce damage caused by Thunderstorms and Winds in Atkinson County, the City of Pearson and the City of Willacoochee.

Objective #1: Minimize losses to existing and future structures, especially Critical Facilities and Infrastructure, due to Thunderstorms and Winds.

STAPLEE Criteria	S		T			A			P			L			E				E				
	(Social)		(Technical)			(Administrative)			(Political)			(Legal)			(Economic)				(Environmental)				
Considerations → for Alternative Actions ↓	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 #2: Disseminate information to the public concerning wind ratings and champion new construction being built to those minimum wind standards and champion the wind retrofitting of Critical Facilities and existing buildings in Atkinson County, the City of Pearson and the City of Willacoochee.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	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 #1: Prevent or reduce damage caused by Hail in Atkinson County, the City of Pearson and the City of Willacoochee.

Objective #1: Minimize losses to existing and future structures, especially Critical Facilities and Infrastructure, due to Hail in Atkinson County, the City of Pearson, and the City of Willacoochee.

STAPLEE Criteria	S		T			A			P			L			E				E				
	(Social)		(Technical)			(Administrative)			(Political)			(Legal)			(Economic)				(Environmental)				
Considerations → for Alternative Actions ↓	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 #2: Encourage public to include hail damage under insurance coverage and store equipment & vehicles under shelters in Atkinson County, the City of Pearson and the City of Willacoochee.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	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: Prevent or reduce damage caused by Wildfire in Atkinson County, the City of Pearson and the City of Willacoochee.

Objective #1: Minimize losses to existing and future structures, especially Critical Facilities and Infrastructure, and woodlands due to wildfire.

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	(Social)		(Technical)			(Administrative)			(Political)			(Legal)			(Economic)				(Environmental)				
Considerations → for Alternative Actions ↓	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: Provide Class A Pumper & Fire Knocker trucks, PPEs, a cooling/rehab unit, turbo drafts, thermal imaging cameras and other equipment to all Fire Departments for wildfire use.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #2: Plan to acquire property for new Fire Stations and/or new additions to those existing stations.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

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Action Step #4: In the City of Pearson and the City of Willacoochee, replace the four-inch (4") (and smaller) water lines with six-inch (6") water lines and hydrants.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #5: Provide Firefighter 1 Training and Firefighter 2 Training To All Firefighters.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #8: Construct a new fire department building.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	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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Goal #1: Prevent or reduce damage caused by Wildfire in Atkinson County, the City of Pearson and the City of Willacoochee.

Objective #2: Obtain a FireWise Community Status by educating the Atkinson County, City of Pearson and City of Willacoochee Fire Department personnel and the public on the hazards of Wildfire and the pre-disaster mitigation thereof.

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Action Step #1: Maintain good public relations between the citizens of Atkinson County, the City of Pearson, the City of Willacoochee and the County/City Fire Departments and plan to increase levels of awareness and resources during peak hazard conditions through the use of education sessions, community meetings, a Fire Safety House, etc.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

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Action Step #2: Partner with the Georgia Forestry Commission to provide education to Atkinson County, the City of Pearson and the City of Willacoochee communities and citizens on the pre-disaster mitigation of wildfire and use & develop grade school based programs to educate children.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #3: Plan RFD meetings and hold joint mock fire drills for the Fire Department.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

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Goal #1: Prevent or reduce damage caused by Wildfire in Atkinson County, the City of Pearson and the City of Willacoochee.

Objective #3: Implement priorities, projects and recommendations contained in GA Forestry Commission's "Community Wildfire Protection Plan".

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Action Step #1: 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

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Action Step #2: 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 #3: Initiate Community Clean Up Day and cut, prune and mow vegetation in shared community spaces.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #4: Ensure Driveway Access/Right-Of-Way Clearance by maintaining vertical and horizontal clearance for emergency equipment and seeing that adequate lengths of culverts are installed to allow emergency vehicle access.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

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Action Step #5: Ensure Road Access by identifying needed road improvements and as roads are upgraded, widen to minimum standards with at least 50 foot diameter cul-de-sacs or turn arounds.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #7: Initiate greater Burn Permit enforcement and use education opportunities from the GA Forestry Commission; Make information available in Spanish.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	+	N/A
Action Step #8: 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

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Action Step #9: Pursue wildland fuel reduction through reduction of hazardous fuels and make training available for prescribed burning techniques and liability issues.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	+	N/A
Action Step #10: 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 #15: Ensure that all personnel are trained in Wildfire Suppression.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #16: Conduct “How to Have a Firewise Home” Workshop for Atkinson County Residents.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #18: Conduct a Spring Clean-up Event Every Spring.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	+	N/A
Action Step #19: Develop and distribute Firewise informational packets to code enforcement, realtors & insurance agents.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

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Action Step #20: Create and Exhibit a Wildfire Protection Display at Local Events and Hold Open Houses At Fire Stations to Develop Community Support and Understanding of Local Fire Departments and Current Issues.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #21: Invite the Local News Media to Community "Firewise" Functions for News Coverage and Regularly Submit Press Releases Documenting Wildfire Risk Improvements.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #22: Create an Atkinson County WUI Fire Council to Accurately Assess Community Wildfire Protection Plan Progress and Effectiveness and Implement Programs & Projects.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

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Goal #1: Prevent or reduce damage caused by Floods in Atkinson County, the City of Pearson, and the City of Willacoochee.

Objective #1: Minimize losses to existing and future structures, especially Critical Facilities and Infrastructure, due to Floods.

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Action Step #2: Conduct storm-water drainage replacement, repair & cleaning and maintain canals in Atkinson County, the City of Pearson and the City of Willacoochee.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	+	N/A
Action Step #3: Plan flood and drainage projects in Atkinson County in Jimmy Grantham area, New Harmony Grove to Old Douglas Highway, Bent Pine Road off U.S. #441 to Coffee County Line, in high risk areas and in areas lacking curb & gutter.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	+	N/A
Action Step #4: Plan flood and drainage projects in the City of Pearson behind Cady Bag, on Austin Avenue from Water Tower to four lane, on U.S. #441 north of SR #82, in high risk areas and in areas lacking curb & gutter.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	+	N/A
Action Step #5: Plan flood and drainage projects in the City of Willacoochee in high risk areas and in areas lacking curb & gutter.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	+	N/A

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Action Step #7: The City of Willacoochee will join the National Flood Insurance Program as soon as possible.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	+	N/A
Action Step #9: Work to preserve wetland areas in Atkinson County, the City of Pearson and the City of Willacoochee to assure that excess water can be captured.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	+	N/A
Action Step #10: After flood events, or other hazard events in Atkinson County, the City of Pearson and the City of Willacoochee, attempt to perform analysis on properties effected to determine if events have occurred in the past and attempt to mitigate or purchase, if necessary.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	+	N/A
Action Step #11: Work towards database to record depth of flooding to determine extent of potential damage.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	+	N/A

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Goal #1: Prevent or reduce damage caused by Drought in Atkinson County, the City of Pearson and the City of Willacoochee.

Objective #1: Minimize losses to existing and future structures, especially Critical Facilities and Infrastructure, due to Drought.

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Action Step #2: Replace antiquated water & sewer lines and equipment prone to failure in the City of Pearson and the City of Willacoochee through CDBG grant funds and other funds when available.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	+	N/A
Action Step #3: Work with the County Extension Agent to distribute literature related to best management practices in Atkinson County, the City of Pearson and the City of Willacoochee.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	+	N/A
Action Step #4: Promote increased usage of surface water and surface artesian flow for irrigation instead of well systems in Atkinson County, the City of Pearson and the City of Willacoochee.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	+	N/A

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Goal #1: Prevent or reduce damage caused by Hurricanes/Tropical Storms in Atkinson County, the City of Pearson and the City of Willacoochee. (Formerly Goal #6)

Objective #1: Minimize losses to existing and future structures, especially Critical Facilities and Infrastructure, and the public, due to Hurricanes/Tropical Storms.

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Action Step #1: Develop C.E.R.Ts (Community Emergency Response Teams) in Atkinson County and the Cities of Pearson and Willacoochee.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #3: Work with GDOT to improve unsafe roads in Atkinson County, the City of Pearson and the City of Willacoochee that already are, or could be, evacuation routes.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

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Action Step #5: Apply for a Red Cross storage trailer and construct a storage building for storage of emergency materials needed for shelters, etc., relocate materials from Brunswick, secure additional cots and materials, medications and dehydrated foods for shelters.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #7: Order a new Ambulance in order to serve the county in emergency situations.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #8: Purchase one new police patrol car in the City of Willacoochee.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

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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 #1: Prevent or reduce damage caused by Hurricanes/Tropical Storms in Atkinson County, the City of Pearson and the City of Willacoochee. (Formerly Goal #6)

Objective #2: Advise the public of health & safety precautions and procedures necessary during Hurricanes/Tropical Storms and other events and on pre-disaster mitigation, in general, in Atkinson County, the City of Pearson and the City of Willacoochee.

STAPLEE Criteria	S		T			A			P			L			E				E				
	(Social)		(Technical)			(Administrative)			(Political)			(Legal)			(Economic)				(Environmental)				
Considerations → for Alternative Actions ↓	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: Acquire and distribute literature from state agencies regarding disaster health & safety issues in Atkinson County, the City of Pearson and the City of Willacoochee.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #2: Distribute information concerning pre-disaster mitigation to area news markets and by speaking at schools and civic clubs in Atkinson County, the City of Pearson and the City of Willacoochee.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	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 #1: Prevent or reduce damage caused by Hurricanes/Tropical Storms in Atkinson County, the City of Pearson and the City of Willacoochee. (Formerly Goal #6)

Objective #3: Ensure reliable electrical power and communications efficiency at Critical Facilities and among agencies during Hurricanes/Tropical Storms and other events in Atkinson County, the City of Pearson and the City of Willacoochee.

STAPLEE Criteria	S		T			A			P			L			E				E				
	(Social)		(Technical)			(Administrative)			(Political)			(Legal)			(Economic)				(Environmental)				
Considerations → for Alternative Actions ↓	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: Obtain mobile and fixed generators (including transfer switches) to provide back-up power where needed, and pre-wire Critical Facilities & gas pumps for generator use in Atkinson County, the City of Pearson, and the City of Willacoochee.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #2: Install GPS location systems in Emergency Vehicles.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	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 #1: Prevent or reduce damage caused by Tornadoes in Atkinson County, the City of Pearson and the City of Willacoochee.

Objective #1: Minimize losses to existing and future structures, especially Critical Facilities and Infrastructure, due to Tornadoes.

STAPLEE Criteria	S		T			A			P			L			E				E				
	(Social)		(Technical)			(Administrative)			(Political)			(Legal)			(Economic)				(Environmental)				
Considerations → for Alternative Actions ↓	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: Use building inspection program to inspect for adequate tie-downs on manufactured housing in Atkinson County, the City of Pearson and the City of Willacoochee.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #2: Plan for pre-disaster mitigation in Tornado & other hazard seasons by preparing public service announcements, brochures and solicit business participation in distributing information.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #3: Promote safe shelter rooms in areas of Atkinson County, the City of Pearson and the Cities of Willacoochee where Tornadoes and other disasters frequent.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #5: Develop grid pattern/address based system to physically notify and check on high risk residents both before and after natural disaster events in the City of Pearson, the City of Willacoochee and in populated areas of Atkinson County.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	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 #1: Prevent or reduce damage caused by Severe Winter Storms in Atkinson County, the City of Pearson and the City of Willacoochee.

Objective #1: Minimize losses to existing and future structures, especially Critical Facilities and Infrastructure, due to Severe Winter Storms.

STAPLEE Criteria	S		T			A			P			L			E				E				
	(Social)		(Technical)			(Administrative)			(Political)			(Legal)			(Economic)				(Environmental)				
Considerations → for Alternative Actions ↓	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: Continue the policy of wrapping exposed piping with insulation and installing new insulation layers at critical facilities in Atkinson County, the City of Pearson and the City of Willacoochee.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #2: Maintain temperatures above 32 degrees to prevent freezing in government owned occupied and unoccupied structures in Atkinson County, the City of Pearson and the City of Willacoochee.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A
Action Step #3: Disseminate information to the public concerning Severe Winter Storms, champion new construction being built to appropriate low temperature ratings and existing buildings being retrofitted in Atkinson County, the City of Pearson and the City of Willacoochee.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	N/A	N/A	N/A	N/A	N/A

Appendix E

ways are home to several species of catfish, including channel, white, blue, flathead and bullheads (consisting of several similar species - yellow, brown, snail, spotted and flat). The larger species, blue catfish and flathead catfish, can sometimes grow to exceed 100 pounds.

As summertime gets closer to its peak, WRD highlights some warm weather hot spots and offers tips on techniques and equipment for anglers of all skill levels:

• Lake Lanier - supports good numbers of small channel catfish (1-2 lb) lake wide and fewer flathead catfish (10-40 lb), which can be found up the Chattahoochee and Chestatee arms of the lake.

• Lake Oconee, near Madison - Supports high numbers of channel, blue, flathead, white and bullhead species of catfish.

• Flint River - Great location for catching five to 30-pound flathead catfish or channel catfish, though most channel cats will weigh between two

near Cordele - Excellent channel catfish spot. Best places are the main lake and below Warwick Dam.

• Lake Walter F. George, near Columbus - Excellent fishing for channel catfish in the main lake and in the upper end (above Florence Marina) for both channel and blue catfish. The state record blue catfish (80 pounds, 4 ounces) was caught in the tailrace of this lake by Ernest Timpson in February 2010.

• Altamaha River - Great location for several species of catfish, including flathead, channel and an expanding population of blue catfish. The Altamaha boasts two state record fish: an 83 pound flathead and a 44 lb, 12 oz channel cat. In June 2017, a 101-pound flathead was caught on a limb line on the lower river.

• Satilla River - Excellent fishing available for channel catfish, white catfish and several species of bullheads. Some of the best white catfishing in the state is on the lower Satilla, near Woodbine

to 14-pound test line and medium-sized hooks (size 2 to 1/0) under a bobber or fished on the bottom.

For anglers trying to land a large flathead, heavy tackle is a must - large spinning or casting tackle with at least 20 to 50-pound test line, large hooks (3/0 to 7/0), and heavy weights to keep bait on the bottom.

Best baits for channel, bullheads and white catfish are worms, liver, live minnows, cut bait and stink bait. Recommended flathead baits are live bream and shiners.

In general, anglers should target rocky shorelines, rip-rap areas and points. Catfish love holding near cover. When fishing rivers during the day, anglers should look to deep holes containing rocky or woody cover. During dusk, dawn and at night, anglers should concentrate on shallow sandbars and shoals nearby the deep holes fished during the day, as catfish frequently move shallow to feed during low light conditions.

The Atkinson 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, City of Pearson, City of Willacoochee, Fire/EMS, Sheriff's Department, Police Department, Health Department, Code Enforcement, Public Works, Forestry, School Board, and hopefully you. The meeting will be for one hour on Wednesday, August 23,2017 at 1:00 p.m. at 664 Austin Avenue East, Pearson, Ga.

Southern Georgia Regional Commission
Atkinson County and the Cities of Pearson and Willacoochee
Hazard Mitigation Plan Update – Kick-off meeting
Date: August 23, 2017, 1:00 p.m.

Name	Organization	Title	Email
Ariel Godwin	SGRC	Planner	agodwin@sgrc.us
Jennifer Brown	Atkinson Co. Family Conn.	Coordinator	atkinsonfc@gmail.com
Robbie Stone	Atkinson County Fire	Chief	r.stone@atkinson-ga.org
Shelby Meyers	GEMA/HS	Planner	Shelby.meyers@gema.ga.gov
Nina Lott	Atkinson Co. BOC	County Clerk	n.lott@atkinson-ga.org
Mark Rusler	Atkinson EMA	EMA Director	atcoema@atkinson-ga.org
LACE FUTCH	ATCO CO COMM	CHAIRMAN	

Southern Georgia Regional Commission
Atkinson County and the Cities Pearson and Willacoochee
Hazard Mitigation Plan Update – Workshop #1
Date: September 21, 2017

Name	Organization	Title	Email
Ariel Godwin	SGRC	Planner	agodwin@sgrc.us
Mark Ausley	Atkinson EMA	EMA Director	atcoema@atkinson-ga.org
David Moore	Atkinson S.O.	Sheriff	sheriff@atkinsonsheriff.org
Gloria Farrell	~~Atkinson~~ Atkinson	Commission	gloria farrell 1947@yahoo.com
Daniel Knapik	Atkinson County S.O.	Chief Deputy	invknapik@atkinsonsheriff.org
Bettye D. Williams	City of Pearson	Mayor	Mayor@cityofpearson.com
Nell Ford	" "	City Clerk	cityclerk@cityofpearson.com
Jennifer Brown	Atkinson Family Connection	Coordinator	atkinsonfc@gmail.com
Nina Lott	Atkinson Co. BOC	Finance Officer	n.lott@atkinson-ga.org
Shane Busbee	Atkinson Co Fire	Fire-Fighter	busbee17@gmail.com
Barry Kelly	Atkinson Co Fire		
Robbie D. Stone	Atkinson County Fire	Chief	r.stone@atkinson-ga.org
Bob Brown	Atkinson Co. BOE	Superintendent	bbrown@atkinson.k12ga.us

Southern Georgia Regional Commission
Atkinson County and the Cities of Pearson and Willacoochee
Hazard Mitigation Plan Update – 2nd meeting
Date: Nov. 9, 2017, 1:30 p.m.

Name	Organization	Title	Email
Ariel Godwin	SGRC	planner	agodwin@sgrc.us
MARK Ausley	Atkinson EMA	Director	atcoema@atkinson-ga.org
Daniel Lavender	USDA / NRCS	Soil Cons. Tech.	daniel.lavender@ga.usda.gov
William Gilliard	Willacoochee Police Dpt.	Chief	jrwgilliard@yahoo.com
Bob Brown	Atkinson BOE	Superintendent	bbrown@atkinson.k12ga.us
Nell Ford	City of Pearson	City Clerk	cityclerk@cityofpearson.com
Nina Lott	Atkinson BOC	County Clerk/Finance	n.lott@atkinson-ga.org
Darquita Williams	Atkinson BOC	County Clerk	d.williams@atkinson-ga.org
Robbie Stone	Atkinson Fire Chief	Fire Chief	r.stone@atkinson-ga.org

Southern Georgia Regional Commission
Atkinson County and the Cities of Pearson and Willacoochee
Hazard Mitigation Plan Update – 3rd meeting
Date: Dec. 6, 2017, 1:30 p.m.

Name	Organization	Title	Email
Daniel Lavender	USDA/NRCS	Soil Cons. Tech.	daniel.lavender@ga.usda.gov
Mark Ausley	Atkinson County EMA	Director	atcoema@atkinson-ga.org
William Gilliard	Willacoochee Police Dpt.	Chief	invgilliard@yahoo.com
Ariel Godwin	SGRC	planner	agodwin@sgrcms
Nell Ford	Pearson	City Clerk	
Robbie D. Stone	Atkinson Fire Dept	Chief	r.stone@atkinson-ga.org
Benny Relifford	Atkinson Fire Dept	Firefighter	
Gatlin Davis	Atkinson Fire Dept	Volunteer	
Nina Lott	Atk. Co. BOC	Finance Officer	n.lott@atkinson-ga.org

Southern Georgia Regional Commission
Atkinson County and the Cities of Pearson and Willacoochee
Hazard Mitigation Plan Update
Date: Feb. 7, 2018, 1:30 p.m.

Name	Organization	Title	Email
Nell Ford	City of Pearson	Clerk	cityclerk@cityofpearson.com
Ariel Godwin	SGRC	Planner	agodwin@sgrc.us
Mark Ausley	Atkinson EMA	EMA Director	atcoema@atkinson-ga.org
Darquita Williams	Atco Board of Commissioners	Co. Clerk	d.williams@atkinson-ga.org
Robbie D. Stone	Atkinson County Fire	Chief	r.stone@atkinson-ga.org

RESOLUTION FOR ADOPTION OF
ATKINSON COUNTY MULTI-JURISDICTIONAL
HAZARD MITIGATION PLAN UPDATE

WHEREAS, to be eligible for federal disaster assistance in the event of a presidentially declared disaster and mitigation assistance under the Hazard Mitigation Grant programs, local governments must have adopted or be actively developing a Hazard Mitigation Plan prepared in accordance with federal regulations promulgated pursuant to the Disaster Mitigation Act of 2000 ("the Act"); and

WHEREAS, Atkinson County and the Cities of Pearson and Willacoochee adopted the previous Atkinson County Hazard Mitigation Plan Update in 2014; and

WHEREAS, in accordance with the requirements of the Act, an updated plan is required to be submitted to FEMA through GEMA every five years; and

WHEREAS, the 2014 Plan Update will expire on April 16, 2019 and the new Hazard Mitigation Plan Update will become effective on April 16, 2019; and

WHEREAS, the Atkinson County Emergency Management Agency, with the assistance of representatives from various other departments within Atkinson County and the Cities of Pearson and Willacoochee, as well as volunteer and other non-governmental agencies, has developed an updated plan to meet these requirements; and

WHEREAS, the updated plan is titled the "Atkinson County and the Cities of Pearson and Willacoochee 2018-2023 Hazard Mitigation Plan Update" (referred to hereafter as "the Plan"); and

WHEREAS, the Plan applies to unincorporated Atkinson County and the Cities of Pearson and Willacoochee; and

WHEREAS, GEMA has notified the Atkinson County Emergency Management Agency that the Plan satisfies the requirements of the Act;

BE IT THEREFORE RESOLVED that Atkinson County, meeting in regular session, hereby adopts the Plan.

SO RESOLVED this 13th day of September, 2018.

By _____
County Commission Chair

Attest Nina Y. Lott

A RESOLUTION OF THE CITY OF PEARSON CITY COUNCIL PURSUANT TO THE DISASTER MITIGATION ACT OF 2000 AUTHORIZING ADOPTION OF THE SYCAMORE COUNTY PRE-DISASTER HAZARD MITIGATION PLAN

WHEREAS, Atkinson County and its municipal governments are required to complete a Pre-Disaster Hazard Mitigation Plan by the Disaster Mitigation Act of 2000; and

WHEREAS, under the provisions of the Disaster Mitigation Act of 2000, local governments that complete Pre-Disaster Hazard Mitigation Plans will remain eligible for Federal mitigation funding; and

WHEREAS, Atkinson County and its municipal governments have completed a Pre-Disaster Hazard Mitigation Plan that fulfills the Federal requirements of the Disaster Mitigation Act of 2000.

NOW THEREFORE LET IT BE RESOLVED THAT THE CITY OF PEARSON COUNCIL FORMALLY ADOPTS THIS PRE-DISASTER HAZARD MITIGATION PLAN.

RESOLVED THIS 9th DAY OF Oct, 2018

Signed: Robert Johnson, Mayor

Attest: Pat Ballard/ City Clerk

(City Seal)

CITY OF PEARSON
CORPORATE
SEAL
GEORGIA

A RESOLUTION OF THE CITY OF WILLACOOCHEE CITY COUNCIL PURSUANT TO THE DISASTER MITIGATION ACT OF 2000 AUTHORIZING ADOPTION OF THE ATKINSON COUNTY PRE-DISASTER HAZARD MITIGATION PLAN

WHEREAS, Atkinson County and its municipal governments are required to complete a Pre-Disaster Hazard Mitigation Plan by the Disaster Mitigation Act of 2000; and

WHEREAS, under the provisions of the Disaster Mitigation Act of 2000, local governments that complete Pre-Disaster Hazard Mitigation Plans will remain eligible for Federal mitigation funding; and

WHEREAS, Atkinson County and its municipal governments have completed a Pre-Disaster Hazard Mitigation Plan that fulfills the Federal requirements of the Disaster Mitigation Act of 2000.

NOW THEREFORE LET IT BE RESOLVED THAT THE CITY OF WILLACOOCHEE COUNCIL FORMALLY ADOPTS THIS PRE-DISASTER HAZARD MITIGATION PLAN.

RESOLVED THIS 1 DAY OF Oct, 2018

(City Seal)

Signed: Samuel Lee Newson, Mayor

Attest: Peggy McClelland, City Clerk

Appendix F

Storm Events Database

Search Results for Atkinson County, Georgia

Event Types: Thunderstorm Wind

86 events were reported between 08/01/1950 and 12/31/2017 (24625 days)

Summary Info:

Number of County/Zone areas affected:	1
Number of Days with Event:	73
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: All Wind Speeds ▼ Sort By: Date/Time (Oldest) ▼

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	0	128.00K	0.00K
ATKINSON CO.	ATKINSON CO.	GA	07/25/1961	18:00	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
ATKINSON CO.	ATKINSON CO.	GA	08/25/1968	15:00	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
ATKINSON CO.	ATKINSON CO.	GA	02/06/1986	08:40	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
ATKINSON CO.	ATKINSON CO.	GA	07/21/1986	17:15	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
ATKINSON CO.	ATKINSON CO.	GA	08/23/1990	13:30	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
ATKINSON CO.	ATKINSON CO.	GA	03/29/1991	17:30	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
Pearson	ATKINSON CO.	GA	07/25/1995	16:45	EST	Thunderstorm Wind	0 kts.	0	0	40.00K	0.00K
ATKINSON CO.	ATKINSON CO.	GA	11/07/1995	17:30	EST	Thunderstorm Wind	0 kts.	0	0	15.00K	0.00K
PEARSON	ATKINSON CO.	GA	05/03/1997	13:31	EST	Thunderstorm Wind		0	0	0.50K	0.00K
AXSON	ATKINSON CO.	GA	10/25/1997	23:45	EST	Thunderstorm Wind		0	0	2.00K	0.00K
PEARSON	ATKINSON CO.	GA	10/26/1997	16:00	EST	Thunderstorm Wind		0	0	1.50K	0.00K
PEARSON	ATKINSON CO.	GA	03/08/1998	19:25	EST	Thunderstorm Wind		0	0	1.50K	0.00K
WILLACOOCHEE	ATKINSON CO.	GA	04/08/1998	15:00	EST	Thunderstorm Wind		0	0	1.50K	0.00K
PEARSON	ATKINSON CO.	GA	06/05/1998	19:30	EST	Thunderstorm Wind		0	0	2.50K	0.00K
PEARSON	ATKINSON CO.	GA	07/28/1998	18:15	EST	Thunderstorm Wind		0	0	2.50K	0.00K
WILLACOOCHEE	ATKINSON CO.	GA	07/29/1998	18:48	EST	Thunderstorm Wind		0	0	1.50K	0.00K
PEARSON	ATKINSON CO.	GA	07/31/1998	17:55	EST	Thunderstorm Wind		0	0	1.50K	0.00K
WILLACOOCHEE	ATKINSON CO.	GA	07/06/1999	19:30	EST	Thunderstorm Wind		0	0	1.50K	0.00K
PEARSON	ATKINSON CO.	GA	01/24/2000	07:45	EST	Thunderstorm Wind		0	0	1.50K	0.00K
WILLACOOCHEE	ATKINSON CO.	GA	06/23/2000	16:40	EST	Thunderstorm Wind		0	0	3.50K	0.00K
WILLACOOCHEE	ATKINSON CO.	GA	08/09/2000	17:30	EST	Thunderstorm Wind		0	0	15.00K	0.00K
PEARSON	ATKINSON CO.	GA	08/09/2000	18:00	EST	Thunderstorm Wind		0	0	2.50K	0.00K
KIRKLAND	ATKINSON CO.	GA	05/29/2001	17:26	EST	Thunderstorm Wind		0	0	1.50K	0.00K
KIRKLAND	ATKINSON CO.	GA	06/14/2001	16:00	EST	Thunderstorm Wind		0	0	2.50K	0.00K
WILLACOOCHEE	ATKINSON CO.	GA	03/12/2002	19:30	EST	Thunderstorm Wind		0	0	0.00K	0.00K
WILLACOOCHEE	ATKINSON CO.	GA	07/04/2002	19:30	EST	Thunderstorm Wind		0	0	2.00K	0.00K
PEARSON	ATKINSON CO.	GA	12/24/2002	10:30	EST	Thunderstorm Wind		0	0	2.00K	0.00K

WILLACOOCHEE	ATKINSON CO.	GA	12/24/2002	10:35	EST	Thunderstorm Wind		0	0	5.00K	0.00K
PEARSON	ATKINSON CO.	GA	02/22/2003	11:15	EST	Thunderstorm Wind		0	0	15.00K	0.00K
KIRKLAND	ATKINSON CO.	GA	03/20/2003	14:20	EST	Thunderstorm Wind	60 kts. EG	0	0	0.00K	0.00K
PEARSON	ATKINSON CO.	GA	05/02/2003	23:15	EST	Thunderstorm Wind	55 kts. EG	0	0	0.00K	0.00K
PEARSON	ATKINSON CO.	GA	07/21/2003	16:00	EST	Thunderstorm Wind	55 kts. EG	0	0	0.00K	0.00K
WILLACOOCHEE	ATKINSON CO.	GA	07/12/2004	18:10	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
WILLACOOCHEE	ATKINSON CO.	GA	07/23/2004	21:00	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
PEARSON	ATKINSON CO.	GA	03/14/2006	10:26	EST	Thunderstorm Wind	55 kts. EG	0	0	0.00K	0.00K
PEARSON	ATKINSON CO.	GA	03/14/2006	10:35	EST	Thunderstorm Wind	55 kts. EG	0	0	0.00K	0.00K
AXSON	ATKINSON CO.	GA	04/22/2006	19:00	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
PEARSON	ATKINSON CO.	GA	05/08/2006	14:27	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
PEARSON	ATKINSON CO.	GA	05/10/2006	19:30	EST	Thunderstorm Wind	55 kts. EG	0	0	0.00K	0.00K
COUNTYWIDE	ATKINSON CO.	GA	05/10/2006	20:15	EST	Thunderstorm Wind	55 kts. EG	0	0	0.00K	0.00K
LELIATON	ATKINSON CO.	GA	02/13/2007	16:20	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
PEARSON	ATKINSON CO.	GA	03/02/2007	02:25	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
PEARSON	ATKINSON CO.	GA	07/01/2007	15:15	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
PEARSON	ATKINSON CO.	GA	07/21/2007	20:30	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
SAYE	ATKINSON CO.	GA	08/11/2007	18:30	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
PEARSON	ATKINSON CO.	GA	08/18/2007	17:10	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
PEARSON	ATKINSON CO.	GA	02/06/2008	19:15	EST-5	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
PEARSON	ATKINSON CO.	GA	02/26/2008	12:15	EST-5	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
KIRKLAND	ATKINSON CO.	GA	02/26/2008	13:15	EST-5	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
LELIATON	ATKINSON CO.	GA	07/22/2008	17:20	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
GASTONS STILL	ATKINSON CO.	GA	02/28/2009	16:35	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
AXSON	ATKINSON CO.	GA	03/28/2009	17:00	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
WILLACOOCHEE	ATKINSON CO.	GA	04/13/2009	13:35	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
PEARSON	ATKINSON CO.	GA	07/02/2009	15:25	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
WILLACOOCHEE	ATKINSON CO.	GA	07/22/2010	15:47	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
KIRKLAND	ATKINSON CO.	GA	07/22/2010	15:50	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
PEARSON	ATKINSON CO.	GA	07/28/2010	15:10	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
PEARSON	ATKINSON CO.	GA	04/05/2011	03:00	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
KIRKLAND	ATKINSON CO.	GA	08/11/2011	17:30	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
KIRKLAND	ATKINSON CO.	GA	08/11/2011	17:45	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
KIRKLAND	ATKINSON CO.	GA	08/11/2011	17:45	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
PEARSON	ATKINSON CO.	GA	08/22/2011	14:25	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
PEARSON	ATKINSON CO.	GA	02/18/2012	23:00	EST-5	Thunderstorm Wind	60 kts. EG	0	0	0.00K	0.00K
PEARSON	ATKINSON CO.	GA	02/18/2012	23:00	EST-5	Thunderstorm Wind	60 kts. EG	0	0	0.00K	0.00K
PEARSON	ATKINSON CO.	GA	02/18/2012	23:05	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
PEARSON	ATKINSON CO.	GA	03/24/2012	10:30	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
WILLACOOCHEE	ATKINSON CO.	GA	05/22/2012	18:30	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
AXSON	ATKINSON CO.	GA	07/03/2012	19:08	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
WILLACOOCHEE	ATKINSON CO.	GA	07/03/2012	19:55	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
PEARSON	ATKINSON CO.	GA	08/07/2012	14:40	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
WILLACOOCHEE	ATKINSON CO.	GA	05/21/2013	18:45	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
OBERRY	ATKINSON CO.	GA	06/20/2014	15:45	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
MORA	ATKINSON CO.	GA	07/28/2014	17:35	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
AXSON	ATKINSON CO.	GA	12/24/2014	11:34	EST-5	Thunderstorm Wind	56 kts. EG	0	0	0.00K	0.00K
MORA	ATKINSON CO.	GA	04/25/2015	19:30	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
WILLACOOCHEE	ATKINSON CO.	GA	05/26/2015	16:44	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
PEARSON	ATKINSON CO.	GA	06/17/2015	15:45	EST-5	Thunderstorm Wind	45 kts. EG	0	0	5.00K	0.00K
WILLACOOCHEE	ATKINSON CO.	GA	06/17/2015	16:00	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
PEARSON	ATKINSON CO.	GA	07/02/2015	15:55	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
MORA	ATKINSON CO.	GA	07/15/2015	17:05	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
PEARSON	ATKINSON CO.	GA	02/16/2016	00:25	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
AXSON	ATKINSON CO.	GA	04/01/2016	16:20	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
AXSON	ATKINSON CO.	GA	04/01/2016	16:24	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
GASTONS STILL	ATKINSON CO.	GA	07/17/2016	17:16	EST-5	Thunderstorm Wind	45 kts. EG	0	0	1.00K	0.00K
OBERRY	ATKINSON CO.	GA	05/04/2017	12:16	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K

OBERRY	ATKINSON CO.	GA	08/30/2017	16:45	EST-5	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Totals:								0	0	128.00K	0.00K

Storm Events Database

Search Results for Atkinson County, Georgia

Event Types: Hail

26 events were reported between 08/01/1950 and 12/31/2017 (24625 days)

Summary Info:

Number of County/Zone areas affected:	1
Number of Days with Event:	22
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.

Select: All Hail ▼ Sort By: Date/Time (Oldest) ▼

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	0	0.00K	0.00K
ATKINSON CO.	ATKINSON CO.	GA	08/25/1968	15:00	CST	Hail	0.75 in.	0	0	0.00K	0.00K
ATKINSON CO.	ATKINSON CO.	GA	07/05/1975	16:00	CST	Hail	0.75 in.	0	0	0.00K	0.00K
ATKINSON CO.	ATKINSON CO.	GA	03/30/1992	15:30	CST	Hail	1.00 in.	0	0	0.00K	0.00K
WILLACOOCHEE	ATKINSON CO.	GA	06/01/1997	16:30	EST	Hail	2.00 in.	0	0	0.00K	0.00K
PEARSON	ATKINSON CO.	GA	10/25/1997	18:00	EST	Hail	1.50 in.	0	0	0.00K	0.00K
PEARSON	ATKINSON CO.	GA	10/26/1997	16:30	EST	Hail	0.75 in.	0	0	0.00K	0.00K
PEARSON	ATKINSON CO.	GA	06/23/2000	16:26	EST	Hail	0.88 in.	0	0	0.00K	0.00K
KIRKLAND	ATKINSON CO.	GA	06/18/2001	13:14	EST	Hail	0.75 in.	0	0	0.00K	0.00K
PEARSON	ATKINSON CO.	GA	03/20/2003	09:42	EST	Hail	0.75 in.	0	0	0.00K	0.00K
WILLACOOCHEE	ATKINSON CO.	GA	03/20/2003	12:40	EST	Hail	0.88 in.	0	0	0.00K	0.00K
WILLACOOCHEE	ATKINSON CO.	GA	03/20/2003	14:00	EST	Hail	0.75 in.	0	0	0.00K	0.00K
PEARSON	ATKINSON CO.	GA	04/08/2004	14:00	EST	Hail	1.75 in.	0	0	0.00K	0.00K
WILLACOOCHEE	ATKINSON CO.	GA	07/12/2004	18:10	EST	Hail	0.88 in.	0	0	0.00K	0.00K
PEARSON	ATKINSON CO.	GA	03/22/2005	16:58	EST	Hail	1.00 in.	0	0	0.00K	0.00K
WILLACOOCHEE	ATKINSON CO.	GA	03/25/2005	05:40	EST	Hail	1.75 in.	0	0	0.00K	0.00K
WILLACOOCHEE	ATKINSON CO.	GA	03/25/2005	06:00	EST	Hail	1.75 in.	0	0	0.00K	0.00K
KIRKLAND	ATKINSON CO.	GA	01/02/2006	07:30	EST	Hail	1.00 in.	0	0	0.00K	0.00K
PEARSON	ATKINSON CO.	GA	05/08/2006	14:27	EST	Hail	0.75 in.	0	0	0.00K	0.00K
PEARSON	ATKINSON CO.	GA	05/14/2006	18:45	EST	Hail	0.88 in.	0	0	0.00K	0.00K
AXSON	ATKINSON CO.	GA	05/14/2006	18:46	EST	Hail	0.75 in.	0	0	0.00K	0.00K
PEARSON	ATKINSON CO.	GA	03/02/2007	02:20	EST-5	Hail	0.75 in.	0	0	0.00K	0.00K
WILLACOOCHEE	ATKINSON CO.	GA	06/05/2007	20:30	EST-5	Hail	1.75 in.	0	0	0.00K	0.00K
PEARSON	ATKINSON CO.	GA	06/02/2008	22:20	EST-5	Hail	0.75 in.	0	0	0.00K	0.00K
KIRKLAND	ATKINSON CO.	GA	06/18/2009	20:28	EST-5	Hail	0.75 in.	0	0	0.00K	0.00K
AXSON	ATKINSON CO.	GA	07/03/2012	19:05	EST-5	Hail	1.00 in.	0	0	0.00K	0.00K
WILLACOOCHEE	ATKINSON CO.	GA	03/23/2013	10:30	EST-5	Hail	1.75 in.	0	0	0.00K	0.00K
Totals:								0	0	0.00K	0.00K

Number of Fires for Atkinson County for FY 1967 to 2018

Year	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr	May	June	Total
1967	1	0	1	1	3	5	2	5	8	8	4	7	45
1968	1	2	3	6	9	8	3	7	19	5	2	6	71
1969	4	2	1	1	6	4	2	2	5	3	2	3	35
1970	3	0	0	1	3	2	0	11	5	5	1	3	34
1971	2	1	2	5	2	9	12	23	9	10	6	8	89
1972	4	0	1	3	6	1	3	5	8	5	3	1	40
1973	5	5	7	11	4	11	3	9	6	0	7	2	70
1974	0	1	0	22	23	11	3	18	26	2	2	0	108
1975	4	0	0	2	7	2	3	4	11	3	0	4	40
1976	1	1	7	0	4	10	9	22	4	11	2	0	71
1977	2	0	0	1	4	4	3	17	7	5	13	11	67
1978	6	4	1	1	1	1	0	5	7	5	4	5	40
1979	2	0	9	8	9	5	1	3	14	2	0	7	60
1980	0	2	0	2	1	0	0	6	0	0	2	5	18
1981	6	7	9	10	3	7	18	18	18	3	6	7	112
1982	5	1	3	0	2	5	1	0	2	2	2	5	28
1983	0	1	2	1	0	2	4	2	14	0	0	0	26
1984	1	3	1	1	0	1	1	5	1	1	1	1	17
1985	1	1	0	2	2	1	4	12	8	5	2	5	43
1986	3	0	1	0	0	0	2	1	3	6	2	3	21
1987	8	0	0	0	0	0	0	0	4	3	3	1	19
1988	6	8	8	8	6	5	4	8	11	2	2	16	84
1989	7	2	1	1	5	12	8	11	5	5	4	9	70
1990	2	1	1	0	2	3	5	2	9	8	8	10	51
1991	8	15	13	2	10	18	0	6	1	0	0	0	73
1992	1	0	1	3	15	12	8	3	6	3	9	0	61
1993	2	2	0	2	1	2	0	3	1	5	7	14	39
1994	10	5	8	5	4	0	8	4	7	1	5	1	58
1995	1	0	1	1	0	3	0	0	5	3	2	4	20
1996	11	5	8	9	3	32	9	15	2	8	12	9	123
1997	6	20	10	1	3	3	3	1	4	2	2	2	57
1998	4	3	8	11	1	7	0	5	4	2	6	26	77
1999	12	3	3	6	7	2	4	8	15	13	6	6	85
2000	3	13	5	5	5	15	2	20	6	1	5	7	87
2001	8	7	3	4	2	8	9	13	3	3	7	2	69
2002	2	6	1	7	3	7	9	17	18	8	11	4	93
2003	6	2	1	1	2	2	8	9	0	4	3	0	38
2004	0	1	4	4	4	1	8	3	5	5	9	0	44
2005	3	5	0	1	3	6	4	4	4	0	0	2	32
2006	1	0	6	3	8	5	2	5	8	7	9	5	59
2007	17	7	6	8	4	4	3	12	7	10	13	3	94
2008	4	6	0	1	1	0	1	3	3	2	1	3	25
2009	3	3	3	3	3	0	2	6	4	1	2	0	30
2010	2	0	3	3	0	0	0	3	4	2	2	1	20

Year	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr	May	June	Total
2011	4	0	4	1	3	8	3	13	6	1	3	4	50
2012	0	8	1	1	0	1	4	5	1	6	5	2	34
2013	5	1	0	5	3	2	4	0	4	1	5	0	30
2014	0	0	5	5	5	0	1	0	2	1	0	2	21
2015	5	6	2	0	2	3	0	2	1	2	5	3	31
2016	3	0	1	4	1	1	0	4	2	1	1	2	20
2017	6	3	3	2	4	1	6	2	9	6	2	0	44

Storm Events Database

Search Results for Atkinson County, Georgia

Event Types: Wildfire

Atkinson county contains the following zones:
'Atkinson'

2 events were reported between 08/01/1950 and 12/31/2017 (24625 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: Date/Time (Oldest)

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	0	0.00K	0.00K
ATKINSON (ZONE)	ATKINSON (ZONE)	GA	04/27/2007	12:00	EST-5	Wildfire		0	0	0.00K	0.00K
ATKINSON (ZONE)	ATKINSON (ZONE)	GA	05/01/2007	00:00	EST-5	Wildfire		0	0	0.00K	0.00K
Totals:								0	0	0.00K	0.00K

Storm Events Database

Search Results for Atkinson County, Georgia

Event Types: **Flash Flood, Flood**

Atkinson county contains the following zones:
'Atkinson'

6 events were reported between 08/01/1950 and 12/31/2017 (24625 days)

Summary Info:

Number of County/Zone areas affected:	2
Number of Days with Event:	6
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:	3
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: Date/Time (Oldest)

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	0	130.00K	0.00K
ATKINSON (ZONE)	ATKINSON (ZONE)	GA	03/01/1998	00:01	EST	Flood		0	0	100.00K	0.00K
COUNTYWIDE	ATKINSON CO.	GA	03/08/1998	22:00	EST	Flash Flood		0	0	15.00K	0.00K
COUNTYWIDE	ATKINSON CO.	GA	09/29/1998	23:00	EST	Flash Flood		0	0	15.00K	0.00K
COUNTYWIDE	ATKINSON CO.	GA	03/07/2003	10:15	EST	Flash Flood		0	0	0.00K	0.00K
ATKINSON (ZONE)	ATKINSON (ZONE)	GA	06/27/2005	07:45	EST	Flood		0	0	0.00K	0.00K
GASTONS STILL	ATKINSON CO.	GA	04/02/2009	18:00	EST-5	Flood		0	0	0.00K	0.00K
Totals:								0	0	130.00K	0.00K

Storm Events Database

Search Results for Atkinson County, Georgia

Event Types: Drought

Atkinson county contains the following zones:
'Atkinson'

0 events were reported between 08/01/1950 and 12/31/2017 (24625 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: Date/Time (Oldest)

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	0	0.00K	0.00K

DROUGHT DATA - ATKINSON COUNTY

Source: US Drought Monitor

Row Labels	Sum of CountD4	Sum of CountD3-D4	Sum of CountD2-D4	Sum of CountD1-D4	Sum of CountD0-D4
2000	3	10	31	45	48
2001	0	0	4	25	36
2002	0	0	18	39	53
2003	0	0	0	0	9
2004	0	0	4	8	16
2005	0	0	0	0	2
2006	0	0	0	15	32
2007	0	14	24	36	46
2008	0	0	5	21	42
2009	0	0	0	6	9
2010	0	0	14	16	21
2011	4	35	52	52	52
2012	12	23	25	33	41
2013	0	0	4	8	22
2014	0	0	6	17	26
2015	0	0	6	24	38
2016	0	0	5	6	16
2017	0	3	7	14	20
Grand Total	**19**	**85**	**205**	**365**	**529**

Storm Events Database

Search Results for Atkinson County, Georgia

Event Types: Hurricane (Typhoon), Tropical Depression, Tropical Storm

Atkinson county contains the following zones:
'Atkinson'

3 events were reported between 08/01/1950 and 12/31/2017 (24625 days)

Summary Info:

Number of County/Zone areas affected:	1
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:	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: Date/Time (Oldest)

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	0	0.00K	0.00K
ATKINSON (ZONE)	ATKINSON (ZONE)	GA	09/05/2004	00:01	EST	Tropical Storm		0	0	0.00K	0.00K
ATKINSON (ZONE)	ATKINSON (ZONE)	GA	09/25/2004	12:00	EST	Tropical Storm		0	0	0.00K	0.00K
ATKINSON (ZONE)	ATKINSON (ZONE)	GA	09/01/2016	07:00	EST-5	Tropical Storm		0	0	0.00K	0.00K
Totals:								0	0	0.00K	0.00K

Storm Events Database

Search Results for Atkinson County, Georgia

Event Types: Tornado

9 events were reported between 08/01/1950 and 12/31/2017 (24625 days)

Summary Info:

Number of County/Zone areas affected:	1
Number of Days with Event:	9
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:	6
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: All Tornadoes ▼ Sort By: Date/Time (Oldest) ▼

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	0	298.50K	0.00K
ATKINSON CO.	ATKINSON CO.	GA	04/08/1964	14:00	CST	Tornado	F2	0	0	25.00K	0.00K
ATKINSON CO.	ATKINSON CO.	GA	04/08/1974	18:45	CST	Tornado	F1	0	0	250.00K	0.00K
PEARSON	ATKINSON CO.	GA	10/25/1997	17:59	EST	Tornado	F0	0	0	5.00K	0.00K
WILLACOOCHEE	ATKINSON CO.	GA	10/26/1997	16:30	EST	Tornado	F0	0	0	5.00K	0.00K
PEARSON	ATKINSON CO.	GA	06/11/2001	20:00	EST	Tornado	F0	0	0	3.50K	0.00K
WILLACOOCHEE	ATKINSON CO.	GA	11/12/2002	07:45	EST	Tornado	F0	0	0	10.00K	0.00K
MORA	ATKINSON CO.	GA	03/20/2003	14:15	EST	Tornado	F0	0	0	0.00K	0.00K
OBERRY	ATKINSON CO.	GA	01/22/2017	16:47	EST-5	Tornado	EF1	0	0	0.00K	0.00K
OBERRY	ATKINSON CO.	GA	05/04/2017	12:25	EST-5	Tornado	EF0	0	0	0.00K	0.00K
Totals:								0	0	298.50K	0.00K

Storm Events Database

Search Results for Atkinson County, Georgia

Event Types: Blizzard, Cold/Wind Chill, Extreme Cold/Wind Chill, Freezing Fog, Frost/Freeze, Heavy Snow, Ice Storm, Lake-Effect Snow, Sleet, Winter Storm, Winter Weather

Atkinson county contains the following zones:
'Atkinson'

1 events were reported between 08/01/1950 and 12/31/2017 (24625 days)

Summary Info:

Number of County/Zone areas affected:	1
Number of Days with Event:	1
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: Date/Time (Oldest)

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	0	0.00K	0.00K
ATKINSON (ZONE)	ATKINSON (ZONE)	GA	02/12/2010	18:17	EST-5	Winter Storm		0	0	0.00K	0.00K
Totals:								0	0	0.00K	0.00K

Atkinson County Critical Facilities
Updated 2017

Id	Name	Jurisdiction	Address	Zip	Facility Types	Risk	Occupancy	Building Value	Contents Value
11174	Atkinson BOE Maintenance	Atkinson County	162 Roberts Ave. E	31642	Education, Government Offices	Transportation	Grade Schools and Admin. Offices	$415,300	$165,000
11176	Atkinson Co BOE Willacoochee Elementary	Atkinson County	430 Vickers St. S	31650	Education, K - 12	Essential, Vulnerable Population	Grade Schools and Admin. Offices	$4,860,617	$438,400
11175	Atkinson Co. BOE- Pearson Elementary	Atkinson County	563 King Street	31642	Education, K - 12	Essential, Vulnerable Population	Grade Schools and Admin. Offices	$12,911,561	$884,600
22105	Atkinson County BOE Old Pearson Elementary	Atkinson County	136 E. Roberts Avenue	31642	Education, K - 12	Historic Consideration	Grade Schools and Admin. Offices	$135,660	
22102	Atkinson County BOE Pearson Alternative School	Atkinson County	160 Roberts Ave.	31642	Education, K - 12	Vulnerable Population	Grade Schools and Admin. Offices	$1,198,400	$120,000
22104	Atkinson County BOE Tech Building/PLC	Atkinson County	116 E. Roberts Avenue	31642	Education, K - 12	Important	Grade Schools and Admin. Offices	$1,154,400	$35,000
14563	Atkinson County BOE	Atkinson County	98 Roberts Ave. E	31642	Education, K - 12	Important, Vulnerable Population	Grade Schools and Admin. Offices	$1,034,718	$98,500
14565	Atkinson County BOE-Willacoochee Gym	Atkinson County	260 School Rd.	31650	Education, K - 12	Important	Grade Schools and Admin. Offices	$911,100	$20,000
11170	Atkinson County High School	Atkinson County	145 Rebel Lane	31642	Education, K - 12	Essential, Vulnerable Population	Grade Schools and Admin. Offices	$15,570,300	$1,394,000
11169	Willacoochee Head Start	Willacoochee town	245 School Road	31650	Education, Pre-K	Important, Vulnerable Population	Grade Schools and Admin. Offices	$750,000	
22004	Atkinson County BOE Fire Storage & Pumphouse	Atkinson County	145 Rebel Lane	31642	Education, Water/Sewer	Essential	Grade Schools and Admin. Offices	$83,600	
3649	Pearson Public Library	Pearson city	56 Bullard Ave. E	31641	Education, Library	Important, Historic Consideration	Government - General Services	$752,700	$122,117
3656	Willacoochee Public Library	Willacoochee town	165 Fleetwood Ave. W	31650	Education, Library	Important, Historic Consideration	Government - General Services	$312,000	$50,000

Atkinson County Critical Facilities
Updated 2017

14599	ECTC Learning Center	Pearson city	201 N. Court Street	31642	Education, VoTech		Colleges and Universities	$882,000	
11178	Atkinson County Ambulance Service	Atkinson County	24 Austin Ave. W	31642	Emergency Services, EMS	Essential	Government - Emergency Response	$405,844	$18,800
3569	Axson Volunteer Fire Department	Atkinson County	US #82/7191 Atkinson Blvd. E	31642	Emergency Services, Fire Fighters	Essential	Government - Emergency Response	$127,179	$1,500
22097	New Willacoochee Fire Dept.	Willacoochee town	U.S. #82	31650	Emergency Services, Fire Fighters	Essential	Government - Emergency Response	$360,000	
14573	Pearson FD Office & Training	Pearson city	19 Austin Ave. E #2	31642	Emergency Services, Fire Fighters	Essential	Government - Emergency Response	$1,555,200	$20,000
11204	Pearson FD	Pearson city	54 Church St. S	31642	Emergency Services, Fire Fighters	Essential	Government - Emergency Response	$630,000	$25,200
3571	Old Willacoochee Fire Department	Willacoochee town	110 Florida Rd./Post Office Box 508	31560	Emergency Services, Fire Fighters	Essential	Government - Emergency Response	$450,000	
14586	Pearson Senior Center	Pearson city	25 Relihan St.	31642	Government, ALF	Important, Vulnerable Population	Government - General Services	$480,000	$23,395
14594	Willacoochee Senior Center	Willacoochee town	68 Boone St.	31650	Government, ALF	Important, Vulnerable Population	Government - General Services	$235,200	$50,000
22006	Atkinson County Radio Repeater	Atkinson County	U.S. Highway #82 W	31642	Government, Communications	Essential	Government - Emergency Response	$70,000	
14591	Plant Telephone-Axson	Atkinson County	12 Minschew Rd.	31624	Government, Communications	Essential	Government - General Services	$1,000,000	
14589	Plant Telephone	Pearson city	79 Roberts Ave. E	31642	Government, Communications	Essential	Government - General Services	$1,000,000	
14590	Plant Telephone-Willacoochee	Willacoochee town	26 Florida Rd.	31650	Government, Communications	Essential	Government - General Services	$1,000,000	
3633	Atkinson County Courthouse	Atkinson County	305 Main St/19 Roberts Ave. W	31642	Government, Court House	Essential, Historic Consideration	Government - General Services	$3,534,454	$198,300
14562	Atkinson County Agricultural Building	Atkinson County	664 Austin Ave. E	31642	Government, Government Offices	Important	Government - General Services	$59,976	$6,500

Atkinson County Critical Facilities
Updated 2017

14564	Atkinson County Commission Office	Atkinson County	86 Main St.	31642	Government, Government Offices	Essential	Government - General Services	$259,422	$45,000
14566	Atkinson County Concerted Services	Atkinson County	636 Austin Ave. E #3	31642	Government, Government Offices	Essential, Vulnerable Population	Government - General Services	$29,974	
22005	Atkinson County Health Department #2	Atkinson County	461 E Albany Ave	31642	Government, Government Offices	Essential	Government - General Services	$648,644	
11190	GA Forestry Commission	Atkinson County	39 Dan Spikes Rd.	31642	Government, Government Offices	Essential	Government - General Services	$600,000	
11226	USDA NRCS Service	Atkinson County	686 Austin Ave. E	31642	Government, Government Offices	Essential	Government - General Services	$319,500	
11235	USPO Axson	Atkinson County	7400 Atkinson Blvd. E/U.S. Hwy. #82	31624	Government, Government Offices	Important	Government - General Services	$252,000	
14572	Old Pearson Community Center	Pearson city	75 Relihan St. S	31642	Government, Government Offices	Historic Consideration, Important	Government - General Services	$720,000	$26,300
3641	Pearson City Hall	Pearson city	202 Main St. S	31642	Government, Government Offices	Essential	Government - General Services	$750,000	$112,476
22101	Pearson Community Center	Pearson city	786 Austin Ave.	31642	Government, Government Offices		Government - General Services	$247,318	$5,570
22103	Pearson Farmers Market	Pearson city	U.S. #82	31642	Government, Government Offices		Government - General Services	$62,000	
11237	USPO Pearson	Pearson city	27 Church St. S	31642	Government, Government Offices	Important	Government - General Services	$744,000	
11242	Willacoochee City Hall	Willacoochee town	33 Fleetwood Ave. W	31650	Government, Government Offices	Essential	Government - General Services	$550,800	$50,000
22100	Willacoochee Farmers Market	Willacoochee town	U.S. #82	31650	Government, Government Offices		Government - General Services	$15,000	
22099	Willacoochee Post Office	Willacoochee town	U.S. #82	31650	Government, Government Offices	Important	Government - General Services	$150,000	

Atkinson County Critical Facilities
Updated 2017

2013	ATKINSON CO-SR 50 MSWL	Atkinson County	64 Arthur Davis Dr. /6miles #82W of Pearson	31642	Government, Landfill	Important	Government - General Services	$261,900	$66,000
14592	Oglethorpe Power Substation	Atkinson County	3051 Antioch Church Rd.	31642	Government, Private	Essential	Government - General Services	$10,000,000	
14569	Atkinson County Road & Maintenance Dept.	Atkinson County	265 Dan Spikes Rd.	31642	Government, Transportation	Transportation	Government - General Services	$340,269	$16,500
11192	GA DOT Maintenance HQ	Pearson city	245 Lott Ave. E	31642	Government, Transportation	Important, Transportation	Government - General Services	$900,000	
14588	Pearson Water Tank #1	Pearson city	610 Austin Ave. E	31642	Government, Water/Sewer	Essential, Lifeline	Government - General Services	$750,000	
14587	Pearson Water Well # & Tank #4	Pearson city	262 Court St. N	31642	Government, Water/Sewer	Essential, Lifeline	Government - General Services	$1,500,000	$233,150
11222	Pearson Water Well #3	Pearson city	215 King St. N	31642	Government, Water/Sewer	Essential, Lifeline	Government - General Services	$1,000,000	$21,000
11220	Pearson Water Well & Tank #2	Pearson city	136 Lott St. W	31642	Government, Water/Sewer	Essential, Lifeline	Government - General Services	$1,000,000	$19,800
11218	Pearson Waterline System	Pearson city	602 West Elizabeth Street	31642	Government, Water/Sewer	Essential, Lifeline	Government - General Services	$10,000,000	
14595	Willacoochee Water Dept. Office	Willacoochee town	180 Peterson St. S	31650	Government, Water/Sewer	Essential, Lifeline	Government - General Services	$71,820	$10,000
11255	Willacoochee Water Lines	Willacoochee town	715 Fleetwood Ave. W	31650	Government, Water/Sewer	Essential, Lifeline	Government - General Services	$10,000,000	
14596	Willacoochee Water Well #1 & Tank	Willacoochee town	715 Fleetwood Ave. W	31650	Government, Water/Sewer	Essential, Lifeline	Government - General Services	$1,500,000	
14597	Willacoochee Water Well #2 & Tank	Willacoochee town	166 Peterson St. S	31650	Government, Water/Sewer	Essential, Lifeline	Government - General Services	$1,500,000	
14574	Pearson Lift Station #1	Pearson city	252 Douglas St. S	31642	Government, Water/Sewer	Lifeline	Government - General Services	$500,000	
14583	Pearson Lift Station #10	Pearson city	780 Main St. S	31642	Government, Water/Sewer	Lifeline	Government - General Services	$50,000	
14584	Pearson Lift Station #11	Pearson city	241 Relihan St. S	31642	Government, Water/Sewer	Lifeline	Government - General Services	$50,000	
14585	Pearson Lift Station #12	Pearson city	560 King St. N	31642	Government, Water/Sewer	Lifeline	Government - General Services	$50,000	
14575	Pearson Lift Station #2	Pearson city	297 Main St. N	31642	Government, Water/Sewer	Lifeline	Government - General Services	$75,000	
14576	Pearson Lift Station #3	Pearson city	935 Main St. N	31642	Government, Water/Sewer	Lifeline	Government - General Services	$50,000	

Atkinson County Critical Facilities
Updated 2017

14577	Pearson Lift Station #4	Pearson city	1641 Hwy. #441 N	31642	Government, Water/Sewer	Lifeline	Government - General Services	$50,000	
14578	Pearson Lift Station #5	Pearson city	21 Felicia Ave. E	31642	Government, Water/Sewer	Lifeline	Government - General Services	$50,000	
14579	Pearson Lift Station #6	Pearson city	21 Sears Ave.	31642	Government, Water/Sewer	Lifeline	Government - General Services	$50,000	
14580	Pearson Lift Station #7	Pearson city	408 Albany Ave. W	31642	Government, Water/Sewer	Lifeline	Government - General Services	$50,000	
14581	Pearson Lift Station #8	Pearson city	322 Austin Ave. E	31642	Government, Water/Sewer	Lifeline	Government - General Services	$50,000	
14582	Pearson Lift Station #9	Pearson city	180 Austin Ave. Extention E	31642	Government, Water/Sewer	Lifeline	Government - General Services	$50,000	
11212	Pearson Wastewater Lines	Pearson city	482 Wastewater Lane	31642	Government, Water/Sewer	Lifeline	Government - General Services	$10,000,000	
11214	Pearson Wastewater Treat.	Pearson city	482 Wastewater Lane	31642	Government, Water/Sewer	Lifeline	Government - General Services	$5,000,000	
14593	Willacoochee Maintenance Building	Willacoochee town	88 Florida Rd.	31650	Government, Water/Sewer	Transportation, Important	Government - General Services	$272,000	$25,000
11250	Willacoochee Wastewater Lines	Willacoochee town	736 Springhead Church Rd.	31650	Government, Water/Sewer	Lifeline	Government - General Services	$10,000,000	
11252	Willacoochee Wastewater Treatment	Willacoochee town	736 Springhead Church Rd.	31650	Government, Water/Sewer	Lifeline	Government - General Services	$5,000,000	
3545	Atkinson County Jail	Atkinson County	20 Smith Ave. W/305 Main St. S	31537	Law Enforcement, Jails	Essential, Vulnerable Population	Institutional Dormitories	$525,892	$27,900
3554	Pearson Police Department	Pearson city	89 Main St. S	31642	Law Enforcement, Police	Essential	Government - Emergency Response	$101,470	
11247	Willacoochee Police Dept. & City Jail	Willacoochee town	33 Fleetwood Ave. W	31650	Law Enforcement, Police	Essential	Government - Emergency Response	$127,751	
3624	Atkinson County Sheriff's Office	Atkinson County	20 Smith Ave. W/305 Main St. S	31537	Law Enforcement, Sheriff	Essential	Government - Emergency Response	$200,000	
11257	Visiting Nurses	Pearson city	380 Roberts St. E	31542	Medical, Medical Offices	Essential, Vulnerable Population	Medical Office and Clinic	$583,200	
11202	Peachtree Place Personal Care Home	Pearson city	33 Austin Ave. W	31642	NGO, ALF	Important, Vulnerable Population	Nursing Homes	$186,700	$2,000

Atkinson County Critical Facilities
Updated 2017

14600	Southern Linc Tower	Pearson city	343 Relihan Street	31642	NGO, Communications	Essential	High Technology	$350,000	
11188	Church of Latter Day Saints	Pearson city	379 Pearson St./Highway #64 East	31642	NGO, Private	Essential, Vulnerable Population	Churches and Non-Profit Organizations	$2,280,000	
11189	First Baptist Church	Pearson city	203 Austin Ave. E	31642	NGO, Private	Essential, Vulnerable Population	Churches and Non-Profit Organizations	$1,200,000	
14571	GA Power Substation	Pearson city	667 Austin Ave. E	31642	NGO, Private	Essential, Lifeline	High Technology	$5,000,000	
11195	Goodwill Assembly of God	Pearson city	1173 Hwy #441 N.	31642	NGO, Private	Essential, Vulnerable Population	Churches and Non-Profit Organizations	$3,600,000	
11199	Ozias Freewill Baptist Church	Pearson city	2477 Highway #441 N.	31642	NGO, Private	Essential, Vulnerable Population	Churches and Non-Profit Organizations	$1,440,000	
14604	GA Power Substation	Willacoochee town	299 Old Florida Road	31650	NGO, Private	Essential, Lifeline	High Technology	$5,000,000	

Appendix G

Hazard Risk Analyses
Supplement to the Atkinson County Joint Hazard Mitigation Plan

Southern Georgia Regional Commission

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Introduction

The Federal Disaster Mitigation Act of 2000 (DMA2K) requires state, local, and tribal governments to develop and maintain a mitigation plan to be eligible for certain federal disaster assistance and hazard mitigation funding programs.

Mitigation seeks to reduce a hazard's impacts, which may include loss of life, property damage, disruption to local and regional economies, and the expenditure of public and private funds for recovery. Sound mitigation must be based on a sound risk assessment that quantifies the potential losses of a disaster by assessing the vulnerability of buildings, infrastructure, and people.

In recognition of the importance of planning in mitigation activities, FEMA Hazus-MH, a powerful disaster risk assessment tool based on geographic information systems (GIS). This tool enables communities of all sizes to predict estimated losses from floods, hurricanes, earthquakes, and other related phenomena and to measure the impact of various mitigation practices that might help reduce those losses.

In 2018, the Georgia Department of Emergency Management partnered with The Southern Georgia Regional Commission (SGRC) to develop a detailed risk assessment focused on defining hurricane, riverine flood and tornado impacts for Georgia. This assessment identifies the characteristics and potential consequences of the disaster, how much of the community could be affected by the disaster, and the impact on community assets. In the following years, the Georgia Association of Regional Commissions (GARC) are utilizing this workflow to define impacts in other counties in Georgia. This document provides the results for Atkinson County.

Risk Assessment Process Overview

Hazus-MH Version 2.2 SP1 was used to perform the analyses for Atkinson County. The Hazus-MH application includes default data for every county in the US. This Hazus-MH data was derived from a variety of national sources and in some cases the data are also several years old. Whenever possible, using local provided data is preferred. Atkinson County provided building inventory information from the county's property tax assessment system. This section describes the changes made to the default Hazus-MH inventory and the modeling parameters used for each scenario.

County Inventory Changes

The default Hazus-MH site-specific point inventory was updated using data compiled from the Georgia Emergency Management Agency (GEMA). The default Hazus-MH aggregate inventory (General Building Stock) was also updated prior to running the scenarios. Reported losses reflect the updated data sets.

General Building Stock Updates

General Building Stock (GBS) is an inventory category that consists of aggregated data (grouped by census geography — tract or block). Hazus-MH generates a combination of site-specific and aggregated loss estimates based on the given analysis and user input.

The GBS records for Atkinson County were replaced with data derived from parcel and property assessment data obtained from Atkinson County. The county provided property assessment data was current as of June 2018 and the parcel data current as of June 2018. Records without improvements were deleted. The parcel boundaries were converted to parcel points located in the centroids of each parcel boundary; then, each parcel point was linked to an assessor record based upon matching parcel numbers. The parcel assessor match-rate for Atkinson County is 97.6%. The generated building inventory represents the approximate locations (within a parcel) of structures. The building inventory was aggregated by census block. Both the tract and block tables were updated. Table 1 shows the results of the changes to the GBS tables by occupancy class.

Table 1: GBS Building Exposure Updates by Occupancy Class*

Occupancy Classification	Default Count	Updated Count	Default Exposure	Updated Exposure
Agricultural	7	0	$ 2,076,000	$ -
Commercial	75	218	$ 45,800,000	$ 124,716,000
Education	10	6	$ 6,093,000	$ 6,329,000
Government	10	4	$ 3,831,000	$ 974,000
Industrial	36	25	$ 58,809,000	$ 90,389,000
Religious	8	3	$ 4,323,000	$ 2,702,000
Residential	3352	1829	$ 371,862,000	$ 241,183,000
Total	**3498**	**2085**	**$ 492,794,000**	**$ 466,293,000**

*The exposure values represent the total number and replacement cost for all Atkinson County Buildings

For Atkinson County, the updated GBS was used to calculate hurricane wind losses. The flood losses and tornado losses were calculated from building inventory modeled in Hazus-MH as User-Defined Facility (UDF)[1], or site-specific points. Figure 1 shows the distribution of buildings as points based on the county provided data.

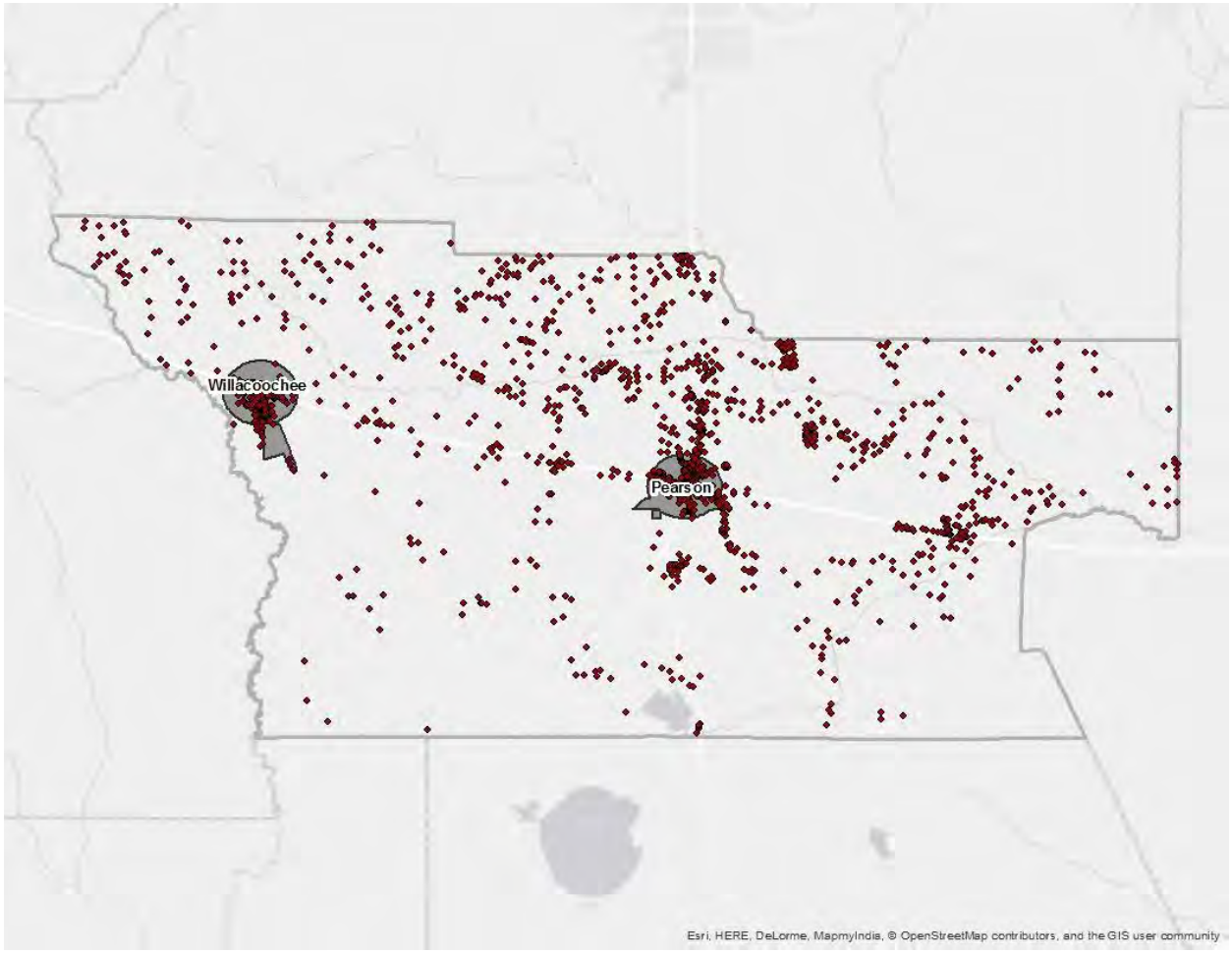

Figure 1: Atkinson County Overview

[1] The UDF inventory category in Hazus-MH allows the user to enter site-specific data in place of GBS data.

Essential Facility Updates

The default Hazus-MH essential facility data was updated to reflect improved information available in the Georgia Mitigation Information System (GMIS). For these risk analyses, only GMIS data for buildings that Hazus-MH classified as Essential Facilities was integrated into Hazus-MH because the application provides specialized reports for these five types of facilities. Essential Facility inventory was updated for the analysis conducted for this report. The following table summarizes the counts and exposures, where available, by Essential Facility classification of the updated data for the county.

Essential facilities include:

- Care facilities
- EOCs
- Fire stations
- Police stations
- Schools

Table 2: Updated Essential Facilities

Classification	Updated Count	Updated Exposure
Atkinson County		
EOC	1	$ 880,000
Care	1	$ 186,000
Fire	5	$ 3,364,000
Police	3	$ 7,683,000
School	9	$ 33,545,000
Total	**19**	**$ 45,658,000**

Classification	Updated Count	Updated Exposure
Pearson		
EOC	1	$ 880,000
Care	1	$ 186,000
Fire	2	$ 2,185,000
Police	2	$ 5,122,000
School	6	$ 16,314,000
Total	**12**	**$ 24,687,000**

Classification	Updated Count	Updated Exposure
Willacoochee		
EOC	0	$ -
Care	0	$ -
Fire	1	$ 450,000
Police	1	$ 2,561,000
School	2	$ 1,661,000
Total	**4**	**$ 4,672,000**

Assumptions and Exceptions

Hazus-MH loss estimates may be impacted by certain assumptions and process variances made in this risk assessment.

- The Atkinson County analysis used Hazus-MH Version 2.2 SP1, which was released by FEMA in May 2015.
- County provided parcel and property assessment data may not fully reflect all buildings in the county. For example, some counties do not report not-for-profit buildings such as government buildings, schools and churches in their property assessment data. This data was used to update the General Building Stock as well as the User Defined Facilities applied in this risk assessment.
- GBS updates from assessor data will skew loss calculations. The following attributes were defaulted or calculated:
    - Foundation Type was set from Occupancy Class
    - First Floor Height was set from Foundation Type
    - Content Cost was calculated from Replacement Cost
- It is assumed that the buildings are located at the centroid of the parcel unless building footprints are used. For this analysis of Atkinson County, parcel centroids were used.
- The essential facilities extracted from the GMIS were only used in the portion of the analysis designated as essential facility damage. They were not used in the update of the General Building Stock or the User Defined Facility inventory.

The hazard models included in this risk assessment included:

- Hurricane assessment which was comprised of a wind only damage assessment
- Flood assessment based on the 1% annual chance event that includes riverine assessments
- Tornado assessment based on GIS modeling

Hurricane Risk Assessment

Hazard Definition

The National Hurricane Center describes a hurricane as a tropical cyclone in which the maximum sustained wind is, at minimum, 74 miles per hour (mph)[2]. The term hurricane is used for Northern Hemisphere tropical cyclones east of the International Dateline to the Greenwich Meridian. The term typhoon is used for Pacific tropical cyclones north of the Equator west of the International Dateline. Hurricanes in the Atlantic Ocean, Gulf of Mexico, and Caribbean form between June and November with the peak of hurricane season occurring in the middle of September. Figure 2 shows that many hurricanes have impacted the Atlantic and Gulf coasts of the United States.

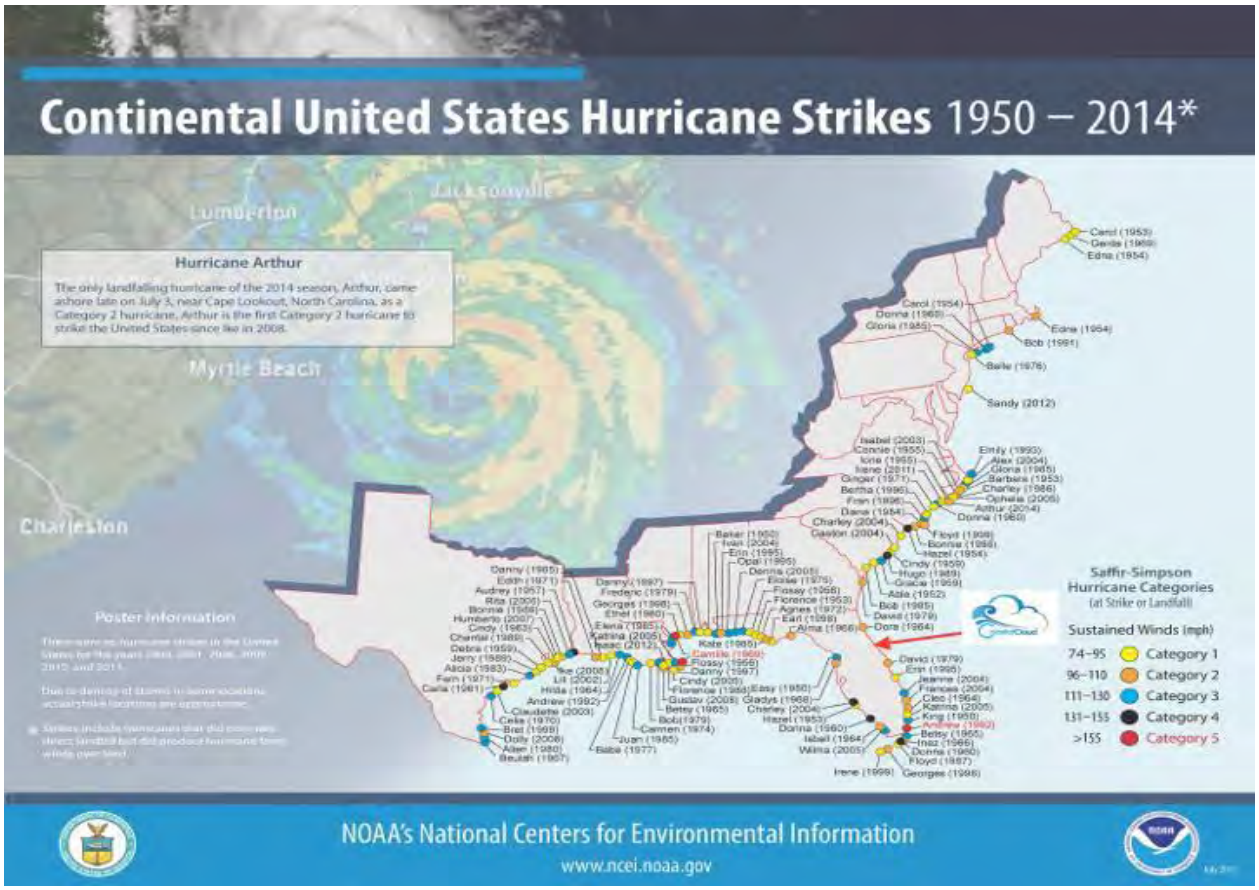

Figure 2: Continental United States Hurricane Strikes: 1950 to 2014[3]

Hurricane intensities are measured using the Saffir-Simpson Hurricane Wind Scale (Table 3). This scale is a 1 to 5 categorization based on the hurricane's intensity at the indicated time.

[2] National Hurricane Center (2011). "Glossary of NHC Terms." National Oceanic and Atmospheric Administration. http://www.nhc.noaa.gov/aboutgloss.shtml#h. Retrieved 2-23-2012.

[3] Source: NOAA National Climatic Data Center

Table 3: Saffir-Simpson Hurricane Wind Scale

Category	Wind Speed (mph)	Damage
1	74 – 95	Very dangerous winds will produce some damage
2	96 – 110	Extremely dangerous winds will cause extensive damage
3	111 - 130	Devastating damage will occur
4	131 -155	Catastrophic damage will occur
5	> 155	Catastrophic damage will occur

Hurricanes bring a complex set of impacts. The winds from a hurricane produce a rise in the water level at landfall called storm surge. Storm surges produce coastal flooding effects that can be as damaging as the hurricane's winds. Hurricanes bring very intense inland riverine flooding. Hurricanes can also produce tornadoes that can add to the wind damages inland. In this risk assessment, only hurricane winds, and coastal storm surge are considered.

The National Oceanic and Atmospheric Administration's National Hurricane Center created the HURDAT database, which contains all of the tracks of tropical systems since the mid-1800s. This database was used to document the number of tropical systems that have affected Atkinson County by creating a 20-mile buffer around the county to include storms that didn't make direct landfall in Atkinson County but impacted the county. Since 1851, Atkinson County has had 60 tropical systems within 20 miles of its county borders (Table 4).

Table 4: Tropical Systems affecting Atkinson County

Year	Month	Day	Name	Wind (Knots)	Category
1852	October	10	NOTNAMED	80	H1
1871	August	23	NOTNAMED	60	TS
1871	August	23	NOTNAMED	50	TS
1871	October	6	NOTNAMED	40	TS
1871	October	6	NOTNAMED	40	TS
1873	June	2	NOTNAMED	40	TS
1873	September	19	NOTNAMED	60	TS
1877	September	20	NOTNAMED	40	TS
1877	September	20	NOTNAMED	40	TS
1878	October	11	NOTNAMED	40	TS
1885	August	31	NOTNAMED	40	TS
1885	October	12	NOTNAMED	50	TS
1885	October	12	NOTNAMED	50	TS
1886	July	1	NOTNAMED	70	H1
1894	October	9	NOTNAMED	85	H2
1894	October	9	NOTNAMED	70	H1
1898	October	2	NOTNAMED	90	H2
1902	June	15	NOTNAMED	45	TS
1902	June	15	NOTNAMED	40	TS
1907	June	29	NOTNAMED	45	TS
1907	September	29	NOTNAMED	40	TS
1911	August	5	NOTNAMED	20	TD
1911	August	5	NOTNAMED	20	TD
1912	July	15	NOTNAMED	40	TS
1912	July	16	NOTNAMED	40	TS
1912	September	6	NOTNAMED	30	TD
1912	September	6	NOTNAMED	25	TD
1914	September	17	NOTNAMED	60	TS
1914	September	17	NOTNAMED	40	TS
1916	October	4	NOTNAMED	50	TS
1919	October	1	NOTNAMED	35	TS
1924	September	16	NOTNAMED	45	TS
1924	September	16	NOTNAMED	40	TS
1924	September	29	NOTNAMED	55	TS
1924	September	30	NOTNAMED	55	E
1933	September	6	NOTNAMED	40	TS
1933	September	6	NOTNAMED	35	TS
1935	September	5	NOTNAMED	60	TS
1947	October	7	NOTNAMED	40	TS
1947	October	7	NOTNAMED	35	TS
1947	October	8	NOTNAMED	25	TD
1949	August	28	NOTNAMED	50	TS
1949	August	28	NOTNAMED	45	TS
1950	September	7	EASY	40	TS
1950	September	7	EASY	35	TS
1953	September	27	FLORENCE	50	E
1957	June	9	NOTNAMED	35	TS
1964	October	5	HILDA	35	E
1966	June	10	ALMA	60	TS
1966	June	10	ALMA	55	TS
1985	September	22	KATE	65	H1
1987	August	16	NOTNAMED	10	TD
1987	August	17	NOTNAMED	10	TD
1990	October	12	MARCO	20	TD
1995	June	5	ALLISON	45	TS
2004	August	12	BONNIE	30	TD
2005	October	6	TAMMY	45	TS
2005	October	6	TAMMY	35	TS
2006	June	13	ALBERTO	35	TS
2006	June	14	ALBERTO	35	TS

Category Definitions:
TS – Tropical storm
TD – Tropical depression
CAT_1 – Category 1 (same format for 2, 3, 4 and 5)
E – Extra-tropical cyclone

Probabilistic Hurricane Scenario

The following probabilistic wind damage risk assessment modeled a Category 1 storm with maximum winds of 79 mph.

Wind Damage Assessment

Wind losses were determined from probabilistic models run for the Category 1 storm which equates to the 1% chance storm event. Figure 3 shows wind speeds for the modeled hurricane.

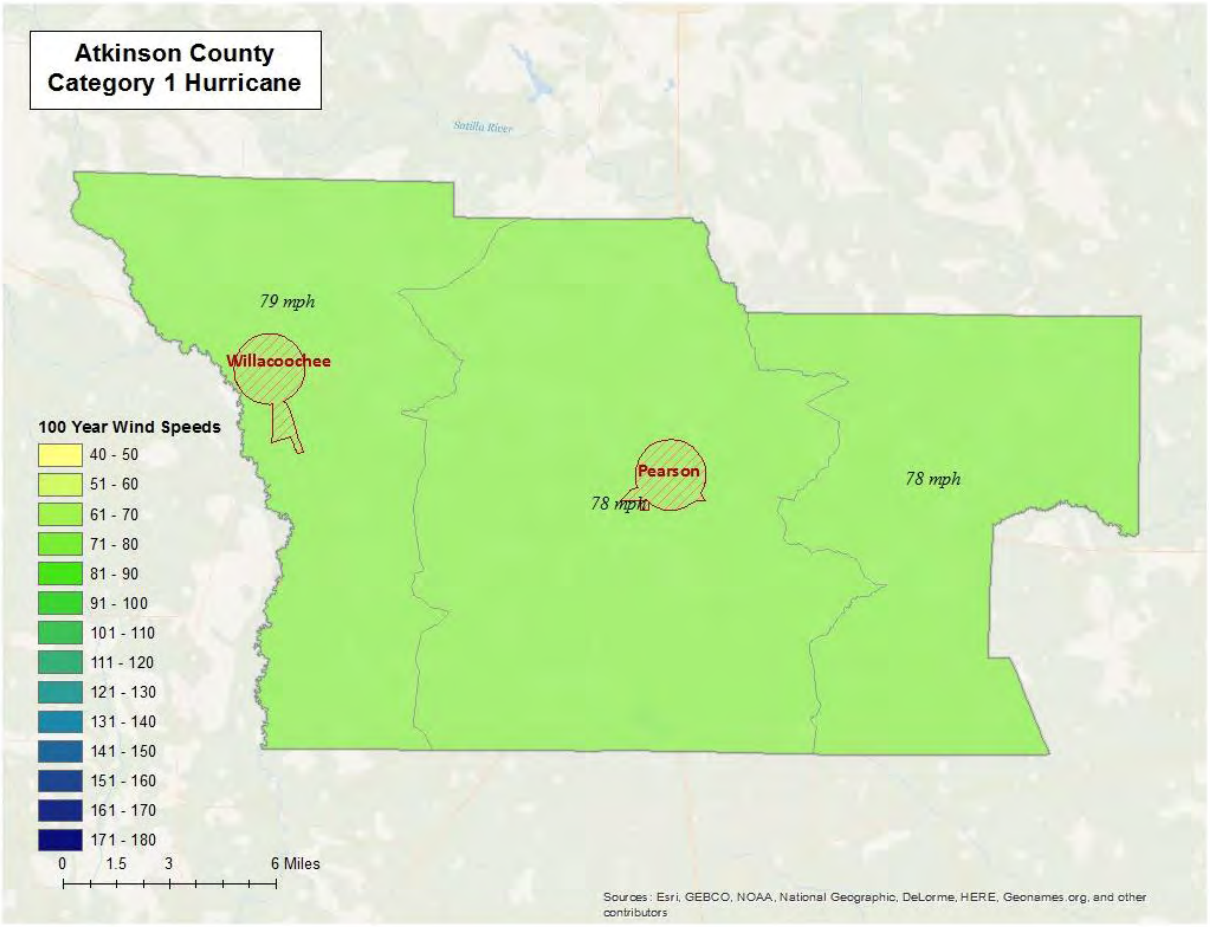

Figure 3: Wind Speeds by Storm Category

Wind-Related Building Damages

Buildings in Atkinson County are vulnerable to storm events, and the cost to rebuild may have significant consequences to the community. The following table shows a summary of the results of wind-related building damage in Atkinson County for the Category 1 (100 Year Event) storm. The loss ratio expresses building losses as a percentage of total building replacement cost in the county. Figure 4 illustrates the building loss ratios of the modeled Category 1 storm.

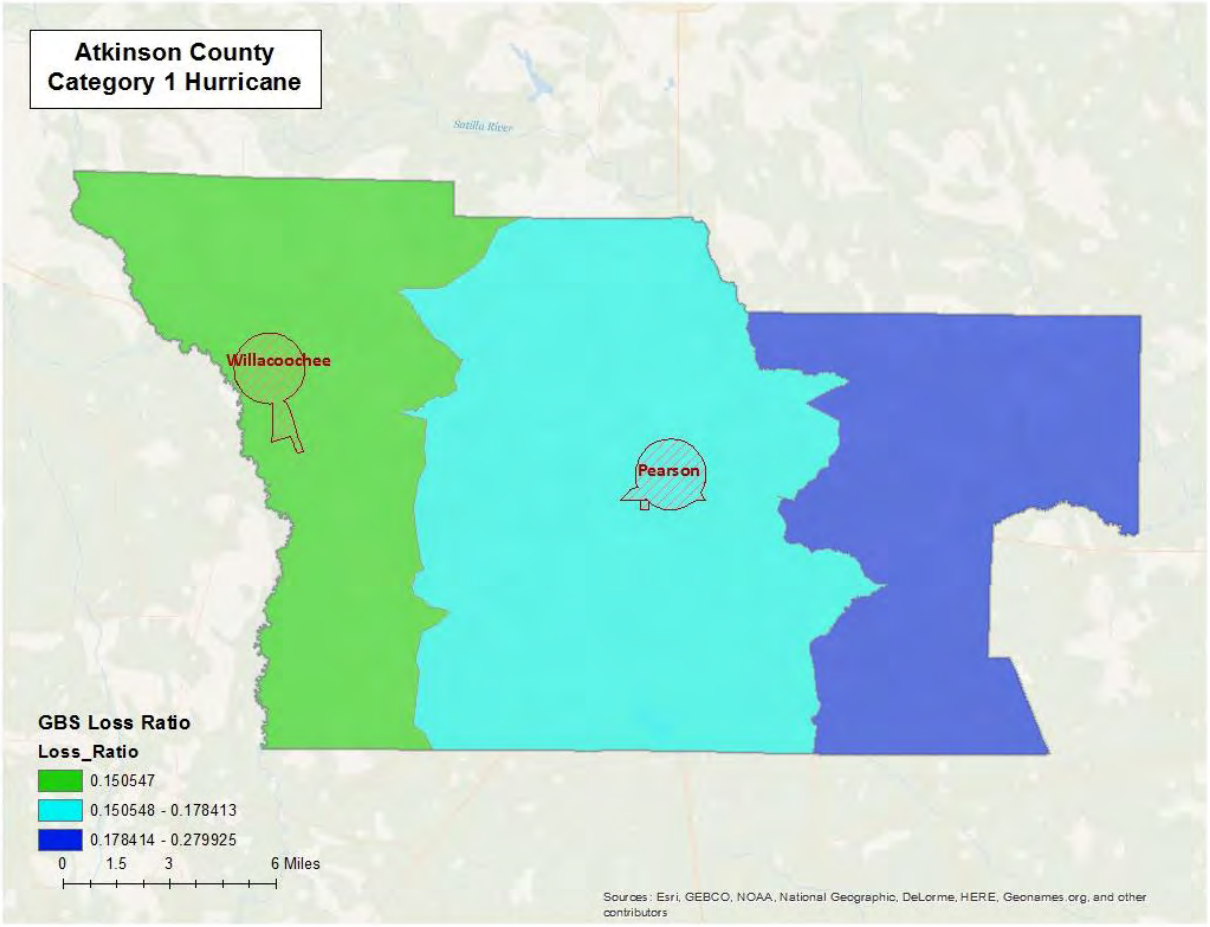

Figure 4: Hurricane Wind GBS Loss Ratios

Table 5 shows the Hurricane Wind Building Damage results including the number of buildings damaged, total building damage, and economic loss.

Table 5: Hurricane Wind Building Damage

Storm Classification	Number of Damaged Buildings	Building Damages	Total Economic Loss	Loss Ratio
Category 1	23	$ 826,250	$ 1,227,250	0.18

Essential Facility Losses

Essential facilities are also vulnerable to storm events, and the potential loss of functionality may have significant consequences to the community. Hazus-MH identified the essential facilities that may be moderately or severely damaged by winds. The results are compiled in Table 6.

There are 19 essential facilities in Atkinson County.

Classification	Number
EOC	1
Care	1
Fire	5
Police	3
School	9
Total	**19**

Table 6: Wind-Damaged Essential Facility Losses

Storm Classification	Facilities Moderately Damaged (>50%)	Facilities Completely Damaged (>50%)	Facilities with expected loss (<1day)
Category 1	0	0	19

Shelter Requirements

Hazus-MH estimates the number of households evacuated from buildings with severe damage from high velocity winds as well as the number of people who will require short-term sheltering. The results are listed in Table 7 and mapped in Figure 5.

Table 7: Displaced Households and People

Storm Classification	# of Displaced Households	# of People Needing Short-Term Shelter
Category 1	0	0

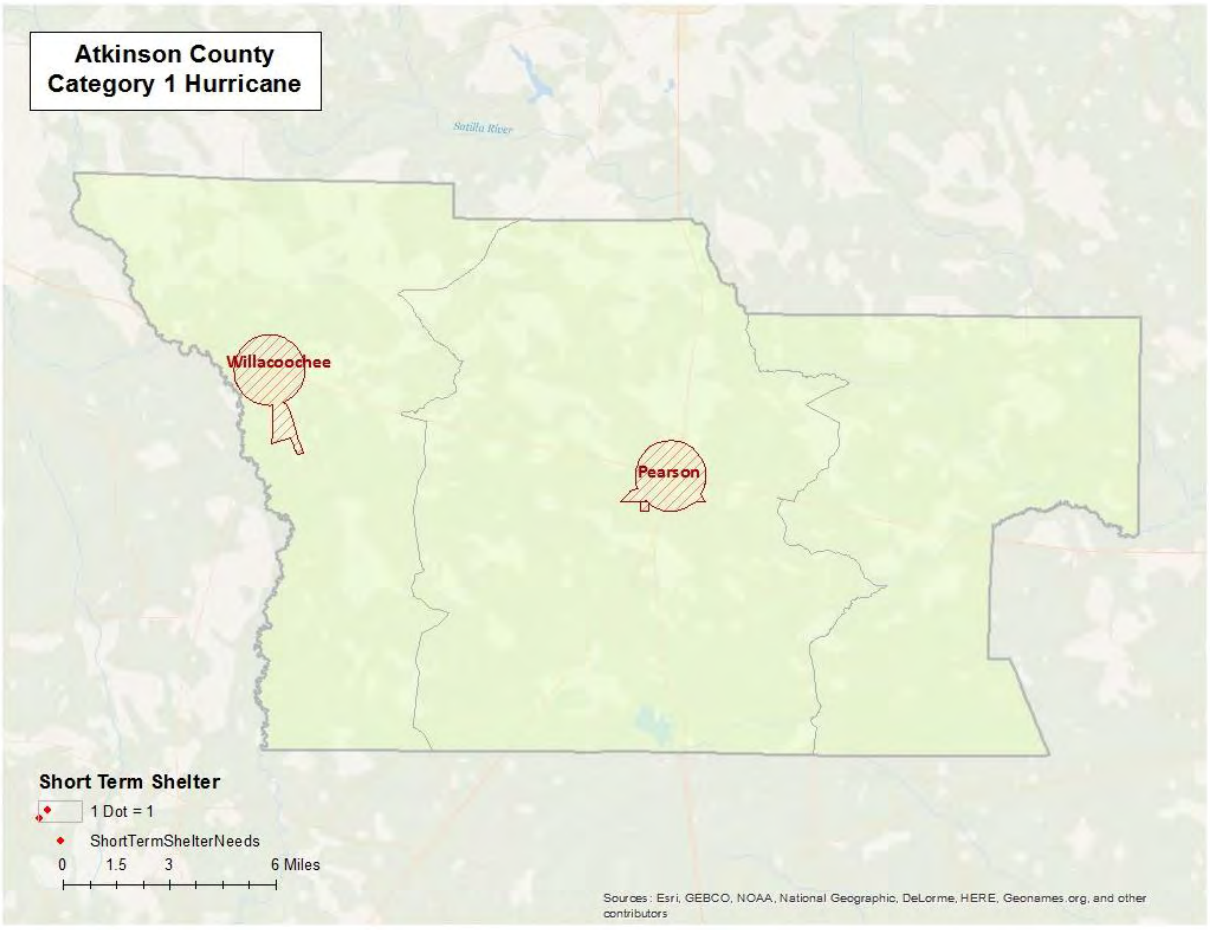

Figure 5: Hurricane Wind Shelter Requirements

Debris Generated from Hurricane Wind

Hazus-MH estimates the amount of debris that will be generated by high velocity hurricane winds and quantifies it into three broad categories to determine the material handling equipment needed:

- Reinforced Concrete and Steel Debris
- Brick and Wood and Other Building Debris
- Tree Debris

Different material handling equipment is required for each category of debris. The estimates of debris for this scenario are listed in Table 8. The amount of hurricane wind related tree debris that is estimated to require pick up at the public's expense is listed in the eligible tree debris column.

Table 8: Wind-Related Debris Weight (Tons)

Storm Classification	Brick, Wood, and Other	Reinforced Concrete/Steel	Tree Debris	Other Tree Debris	Total
Category 1	87	-	1,460	45,798	47,345

Figure 6 shows the distribution of all wind related debris resulting from a Category 1 hurricane. Each dot represents 20 tons of debris within the census tract in which it is located. The dots are randomly distributed within each census tract and therefore do not represent the specific location of debris sites.

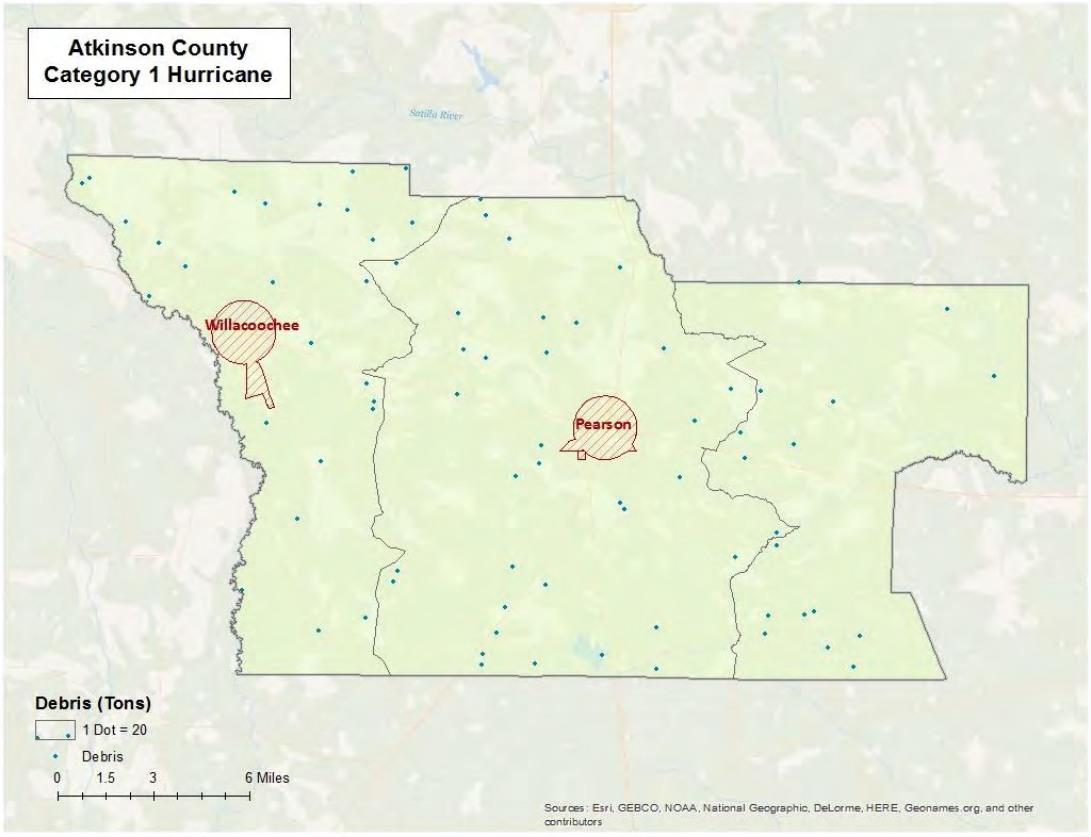

Figure 6: Wind-Related Debris Weight (Tons)

Flood Risk Assessment

Hazard Definition

Flooding is a significant natural hazard throughout the United States. The type, magnitude, and severity of flooding are functions of the amount and distribution of precipitation over a given area, the rate at which precipitation infiltrates the ground, the geometry and hydrology of the catchment, and flow dynamics and conditions in and along the river channel. Floods can be classified as one of three types: upstream floods, downstream floods, or coastal floods.

Upstream floods, also called flash floods, occur in the upper parts of drainage basins and are generally characterized by periods of intense rainfall over a short duration. These floods arise with very little warning and often result in locally intense damage, and sometimes loss of life, due to the high energy of the flowing water. Flood waters can snap trees, topple buildings, and easily move large boulders or other structures. Six inches of rushing water can upend a person; another 18 inches might carry off a car. Generally, upstream floods cause damage over relatively localized areas, but they can be quite severe in the local areas in which they occur. Urban flooding is a type of upstream flood. Urban flooding involves the overflow of storm drain systems and can be the result of inadequate drainage combined with heavy rainfall or rapid snowmelt. Upstream or flash floods can occur at any time of the year in Georgia, but they are most common in the spring and summer months.

Downstream floods, also called riverine floods, refer to floods on large rivers at locations with large upstream catchments. Downstream floods are typically associated with precipitation events that are of relatively long duration and occur over large areas. Flooding on small tributary streams may be limited, but the contribution of increased runoff may result in a large flood downstream. The lag time between precipitation and time of the flood peak is much longer for downstream floods than for upstream floods, generally providing ample warning for people to move to safe locations and, to some extent, secure some property against damage.

Coastal floods occurring on the Atlantic and Gulf coasts may be related to hurricanes or other combined offshore, nearshore, and shoreline processes. The effects of these complex interrelationships vary significantly across coastal settings, leading to challenges in the determination of the base (1-percent-annual-chance) flood for hazard mapping purposes. Land area covered by floodwaters of the base flood is identified as a Special Flood Hazard Area (SFHA). The Atkinson County flood risk assessment analyzed at risk structures in the SFHA.

The SFHA is the area where the National Flood Insurance Program's (NFIP) floodplain management regulations must be enforced and the area where the mandatory purchase of flood insurance applies. The owner of a structure in a high-risk area must carry flood insurance, if the owner carries a mortgage from a federally regulated or insured lender or servicer.

The following probabilistic risk assessment involves an analysis of a 1% annual chance riverine flood event.

Riverine 1% Flood Scenario

Riverine losses were determined from the 1% flood boundaries downloaded from the FEMA Flood Map Service Center in June 2018. The flood boundaries were overlaid with the USGS 10 meter DEM using the Hazus-MH Enhanced Quick Look tool to generate riverine depth grids. The riverine flood depth grid was then imported into Hazus-MH to calculate the riverine flood loss estimates. Figure 7 illustrates the riverine inundation boundary associated with the 1% annual chance. Please note that the riverine flooding may not take into account elevated housing or raised Base Flood Elevation.

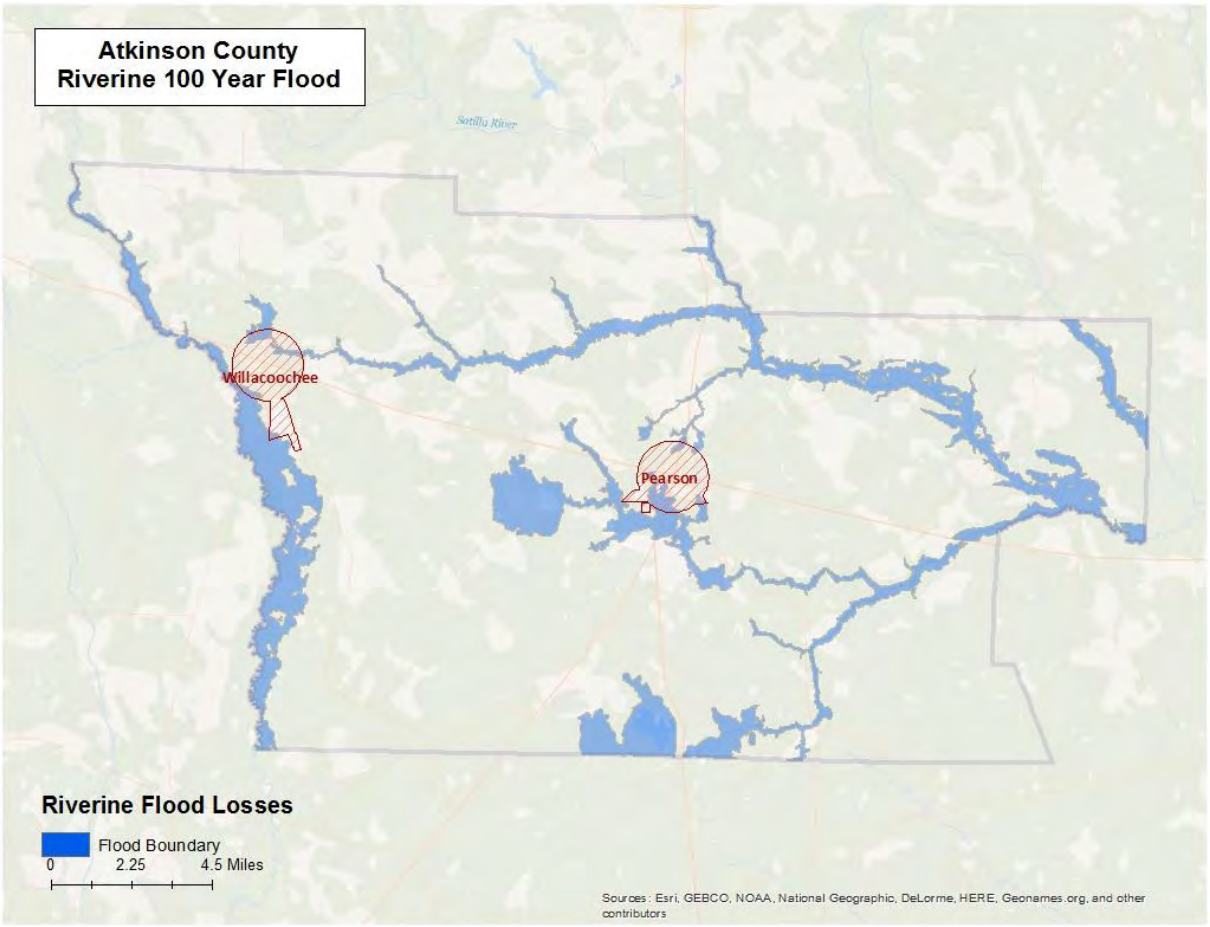

Figure 7: Riverine 1% Flood Inundation

Riverine 1% Flood Building Damages

Buildings in Atkinson County are vulnerable to flooding from events equivalent to the 1% riverine flood. The economic and social impacts from a flood of this magnitude can be significant. Table 9 provides a summary of the potential flood-related building damage in Atkinson County by jurisdiction that might be experienced from the 1% flood. Figure 8 maps the potential loss ratios of total building exposure to losses sustained to buildings from the 1% flood by 2010 census block and Figure 9 illustrates the relationship of building locations to the 1% flood inundation boundary.

Table 9: Atkinson County Riverine 1% Building Losses

Occupancy Classification	Total Buildings	Total Buildings Damaged	Total Building Exposure	Total Losses to Buildings	Loss Ratio of Exposed to Damaged
Pearson					
Industrial	15	2	$ 42,118,105	$ 161,926	0.38%
Commercial	104	3	$ 49,942,742	$ 9,264	0.02%
Unincorporated					
Residential	1,146	16	$ 151,533,231	$ 279,353	0.18%
Commercial	45	2	$ 21,572,616	$ 66,956	0.31%
County Total					
Total	1,310	23	$ 265,166,694	$ 517,499	

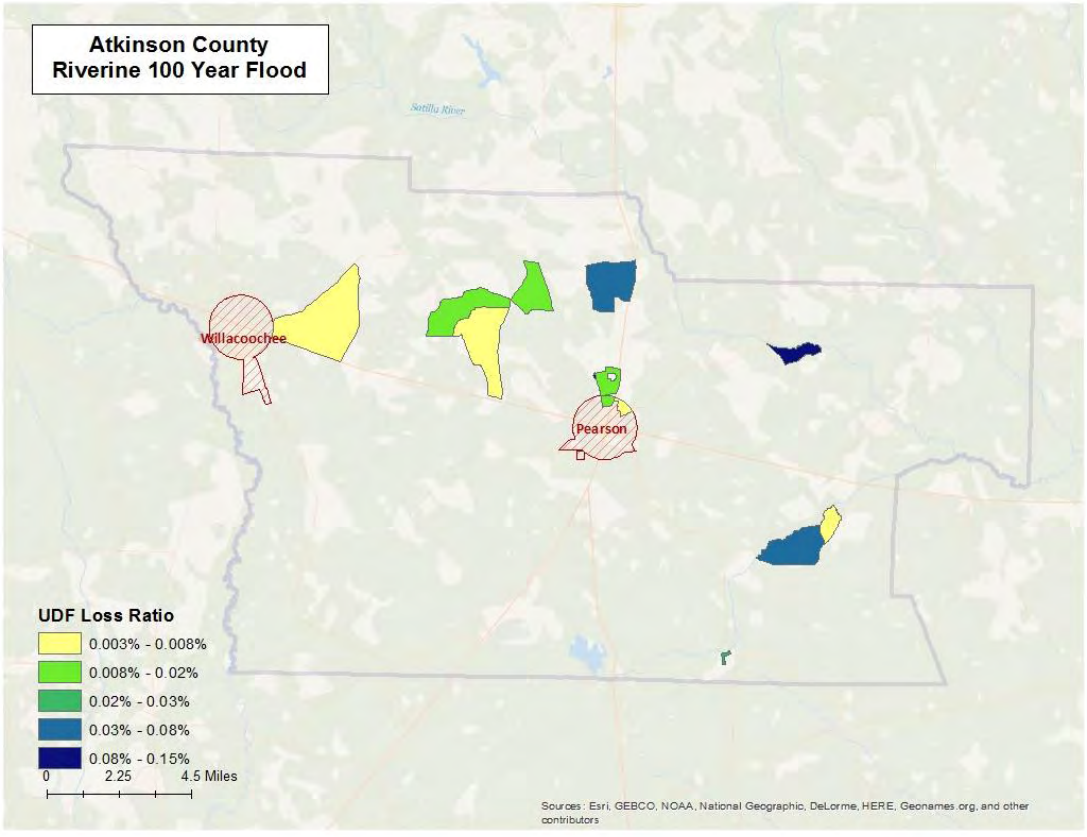

Figure 8: Potential UDF Loss Ratios from the 1% Riverine Flood

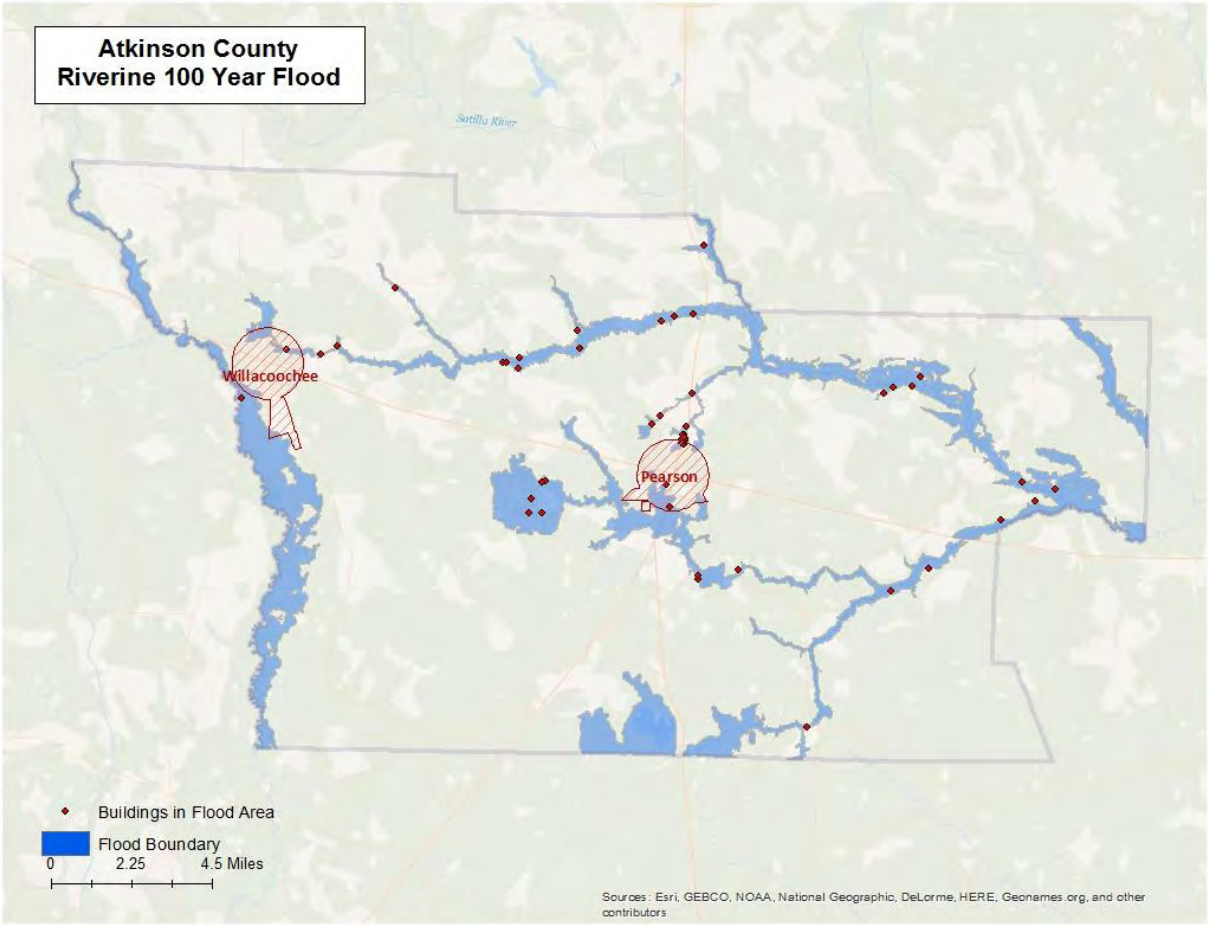

Figure 9: Damaged Buildings in 1% Riverine Flood

Riverine 1% Flood Essential Facility Losses

An essential facility may encounter many of the same impacts as other buildings within the flood boundary. These impacts can include structural failure, extensive water damage to the facility and loss of facility functionality (e.g. a damaged police station will no longer be able to serve the community). The analysis has identified that were 0 Essential Facilities subject to damage in the Atkinson County riverine 1% probability floodplain.

Table 10: Expected Damage to Essential Facilities in 1% Riverine Flood

Classification	Total	Moderate	Substantial	Loss of Use
Fire Station	5	0	0	0
Hospitals	1	0	0	0
Police Stations	3	0	0	0
Schools	9	0	0	0
EOCs	1	0	0	0

Riverine 1% Flood Shelter Requirements

Hazus-MH estimates that the number of households that are expected to be displaced from their homes due to riverine flooding and the associated potential evacuation. The model estimates 231 households might be displaced due to the flood. Displacement includes households evacuated within or very near to the inundated area. Displaced households represent 694 individuals, of which 251 may require short term publicly provided shelter. The results are mapped in Figure 10. These numbers may be overestimated for two reasons: elevated housing not taken into account and parcel centroids (not aligned exactly with actual structures).

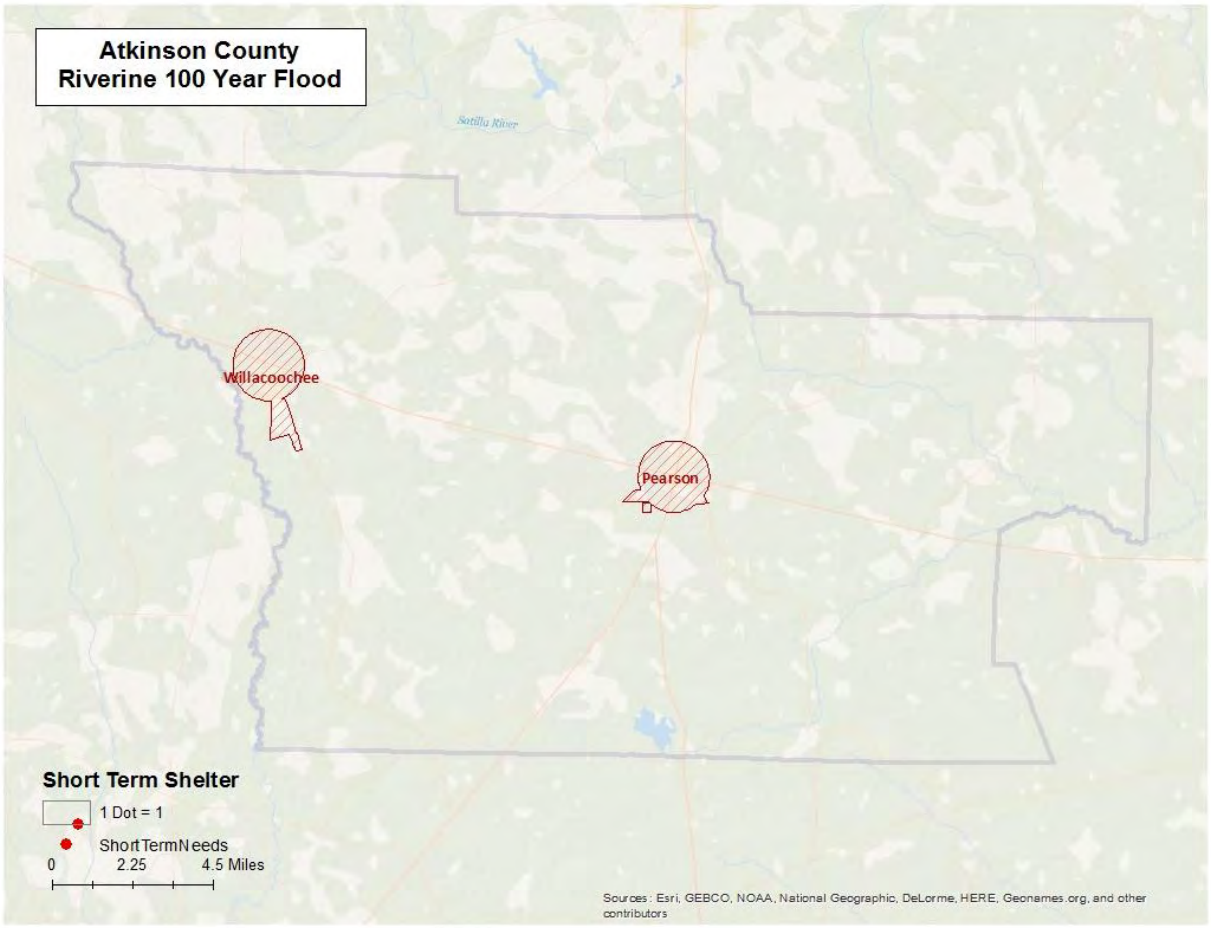

Figure 10: Estimated Flood Shelter Requirements in 1% Riverine Flood

Riverine 1% Flood Debris

Hazus-MH estimates the amount of debris that will be generated by the flood. The model breaks debris into three general categories:

- Finishes (dry wall, insulation, etc.)
- Structural (wood, brick, etc.)
- Foundations (concrete slab, concrete block, rebar, etc.)

Different types of material handling equipment will be required for each category. Debris definitions applied in Hazus-MH are unique to the Hazus-MH model and so do not necessarily conform to other definitions that may be employed in other models or guidelines.

The analysis estimates that an approximate total of 666 tons of debris might be generated: 1) Finishes – 406 tons; 2) Structural - 104 tons; and 3) Foundations - 156 tons. The results are mapped in Figure 11.

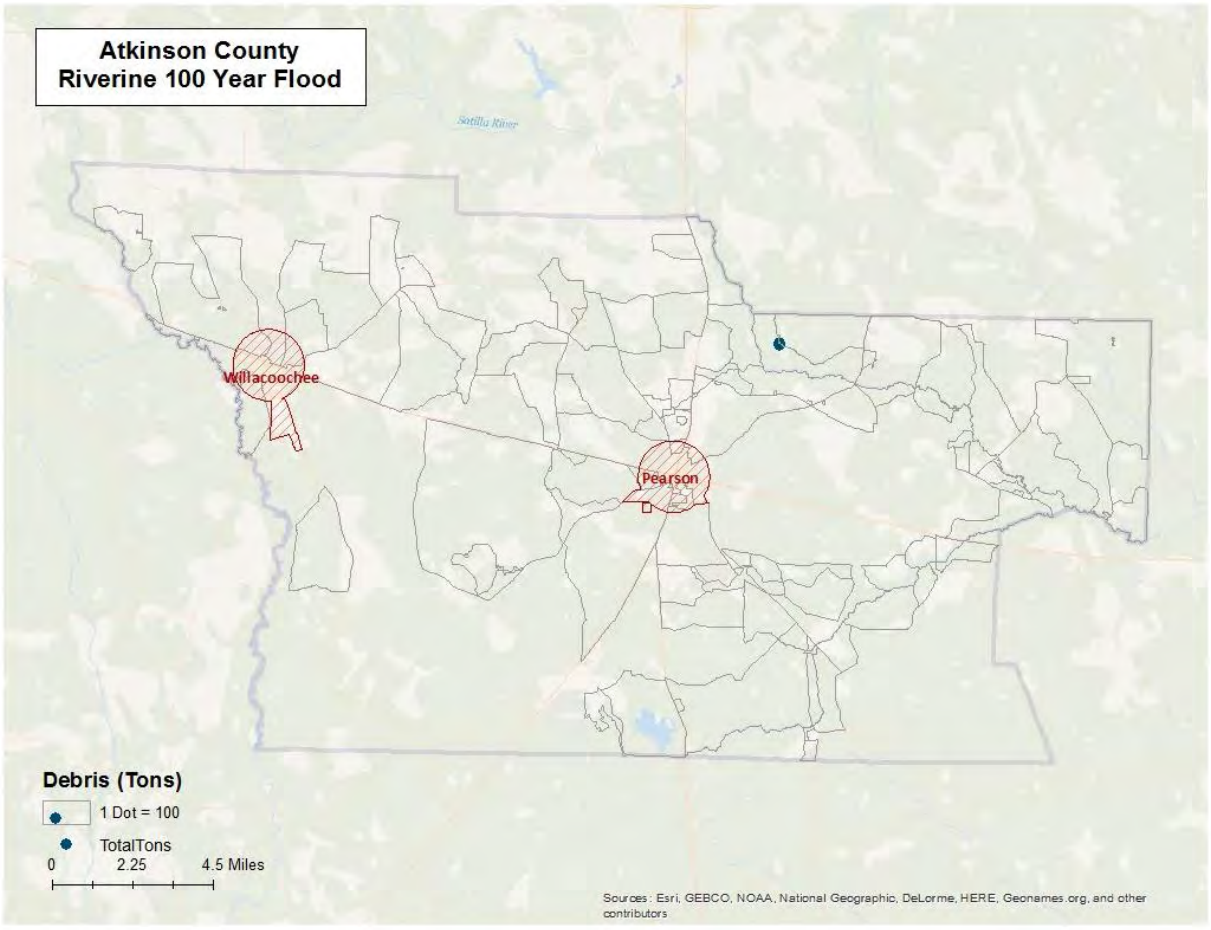

Figure 11: Flood Debris Weight (Tons) in 1% Riverine Flood

Tornado Risk Assessment

Hazard Definition

Tornadoes pose a great risk to the state of Georgia and its citizens. Tornadoes can occur at any time during the day or night. They can also happen during any month of the year. The unpredictability of tornadoes makes them one of Georgia's most dangerous hazards. Their extreme winds are violently destructive when they touch down in the region's developed and populated areas. Current estimates place the maximum velocity at about 300 miles per hour, but higher and lower values can occur. A wind velocity of 200 miles per hour will result in a wind pressure of 102.4 pounds per square foot of surface area—a load that exceeds the tolerance limits of most buildings. Considering these factors, it is easy to understand why tornadoes can be so devastating for the communities they hit.

Tornadoes are defined as violently-rotating columns of air extending from thunderstorms and cyclonic events. Funnel clouds are rotating columns of air not in contact with the ground; however, the violently-rotating column of air can reach the ground very quickly and become a tornado. If the funnel cloud picks up and blows debris, it has reached the ground and is a tornado.

Tornadoes are classified according to the Fujita tornado intensity scale. Originally introduced in 1971, the scale was modified in 2006 to better define the damage and estimated wind scale. The Enhanced Fujita Scale ranges from low intensity EF0 with effective wind speeds of 65 to 85 miles per hour, to EF5 tornadoes with effective wind speeds of over 200 miles per hour. The Enhanced Fujita intensity scale is included in Table 11.

Table 11: Enhanced Fujita Tornado Rating

Fujita Number	Estimated Wind Speed	Path Width	Path Length	Description of Destruction
EF0 *Gale*	65-85 mph	6-17 yards	0.3-0.9 miles	Light damage, some damage to chimneys, branches broken, sign boards damaged, shallow-rooted trees blown over.
EF1 *Moderate*	86-110 mph	18-55 yards	1.0-3.1 miles	Moderate damage, roof surfaces peeled off, mobile homes pushed off foundations, attached garages damaged.
EF2 *Significant*	111-135 mph	56-175 yards	3.2-9.9 miles	Considerable damage, entire roofs torn from frame houses, mobile homes demolished, boxcars pushed over, large trees snapped or uprooted.
EF3 *Severe*	136-165 mph	176-566 yards	10-31 miles	Severe damage, walls torn from well-constructed houses, trains overturned, most trees in forests uprooted, heavy cars thrown about.
EF4 *Devastating*	166-200 mph	0.3-0.9 miles	32-99 miles	Complete damage, well-constructed houses leveled, structures with weak foundations blown off for some distance, large missiles generated.
EF5 *ncredible*	Over 200 mph	1.0-3.1 miles	100-315 miles	Foundations swept clean, automobiles become missiles and thrown for 100 yards or more, steel-reinforced concrete structures badly damaged.

Source: http://www.srh.noaa.gov

Hypothetical Tornado Scenario

For this report, an EF3 tornado was modeled to illustrate the potential impacts of tornadoes of this magnitude in the county. The analysis used a hypothetical path based upon an EF3 tornado event running along the predominant direction of historical tornados (southeast to northwest). The tornado path was placed to travel through Pearson. The selected widths were modeled after a re-creation of the Fujita-Scale guidelines based on conceptual wind speeds, path widths, and path lengths. There is no guarantee that every tornado will fit exactly into one of these categories. Table 12 depicts tornado path widths and expected damage.

Table 12: Tornado Path Widths and Damage Curves

Enhanced Fujita Scale	Path Width (feet)	Maximum Expected Damage
EF5	2,400	100%
EF4	1,800	100%
EF3	1,200	80%
EF2	600	50%
EF1	300	10%

Within any given tornado path there are degrees of damage. The most intense damage occurs within the center of the damage path, with decreasing amounts of damage away from the center. After the hypothetical path is digitized on a map, the process is modeled in GIS by adding buffers (damage zones) around the tornado path. Figure 12 describes the zone analysis.

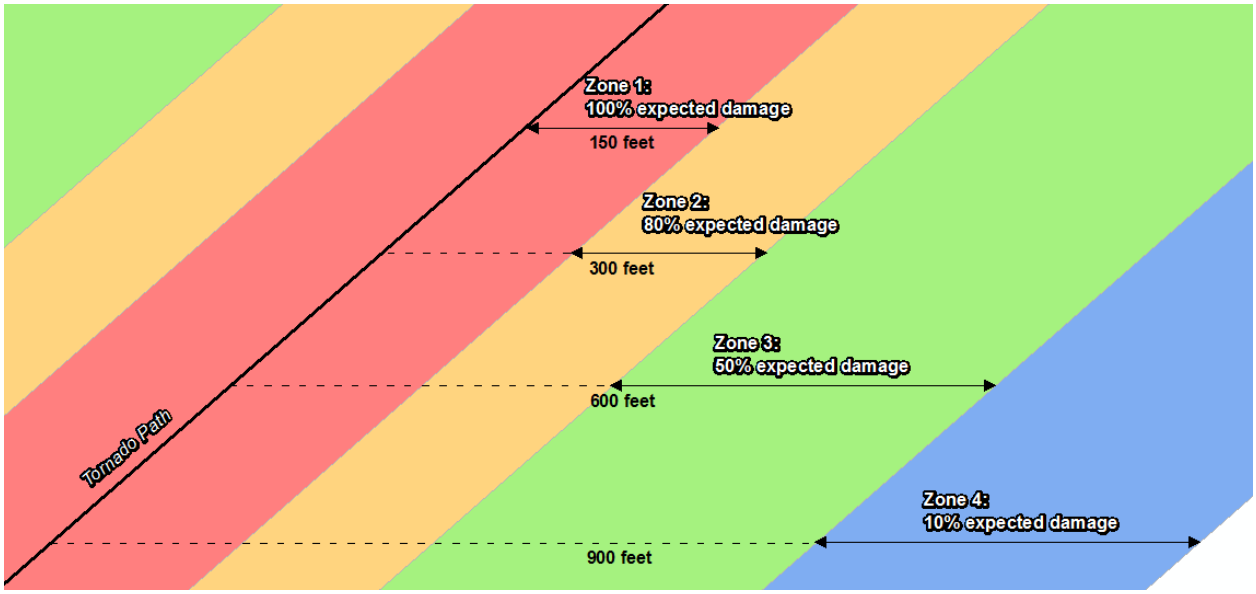

Figure 12: EF Scale Tornado Zones

An EF3 tornado has four damage zones, depicted in Table 13. Major damage is estimated within 150 feet of the tornado path. The outer buffer is 900 feet from the tornado path, within which buildings will not experience any damage. The selected hypothetical tornado path is depicted in Figure 13 and the damage curve buffer zones are shown in Figure 14.

Table 13: EF3 Tornado Zones and Damage Curves

Zone	Buffer (feet)	Damage Curve
1	0-150	80%
2	150-300	50%
3	300-600	10%
4	600-900	0%

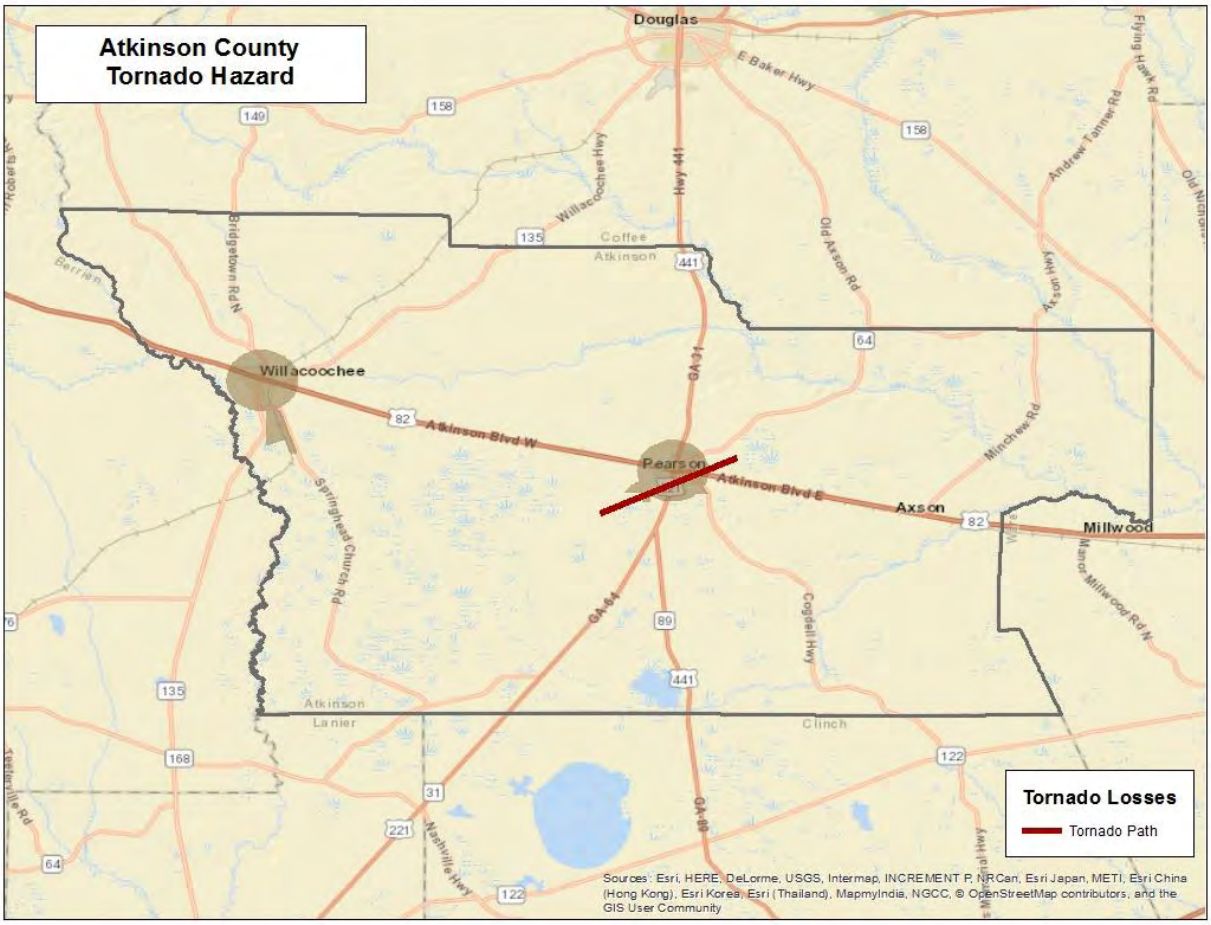

Figure 13: Hypothetical EF3 Tornado Path

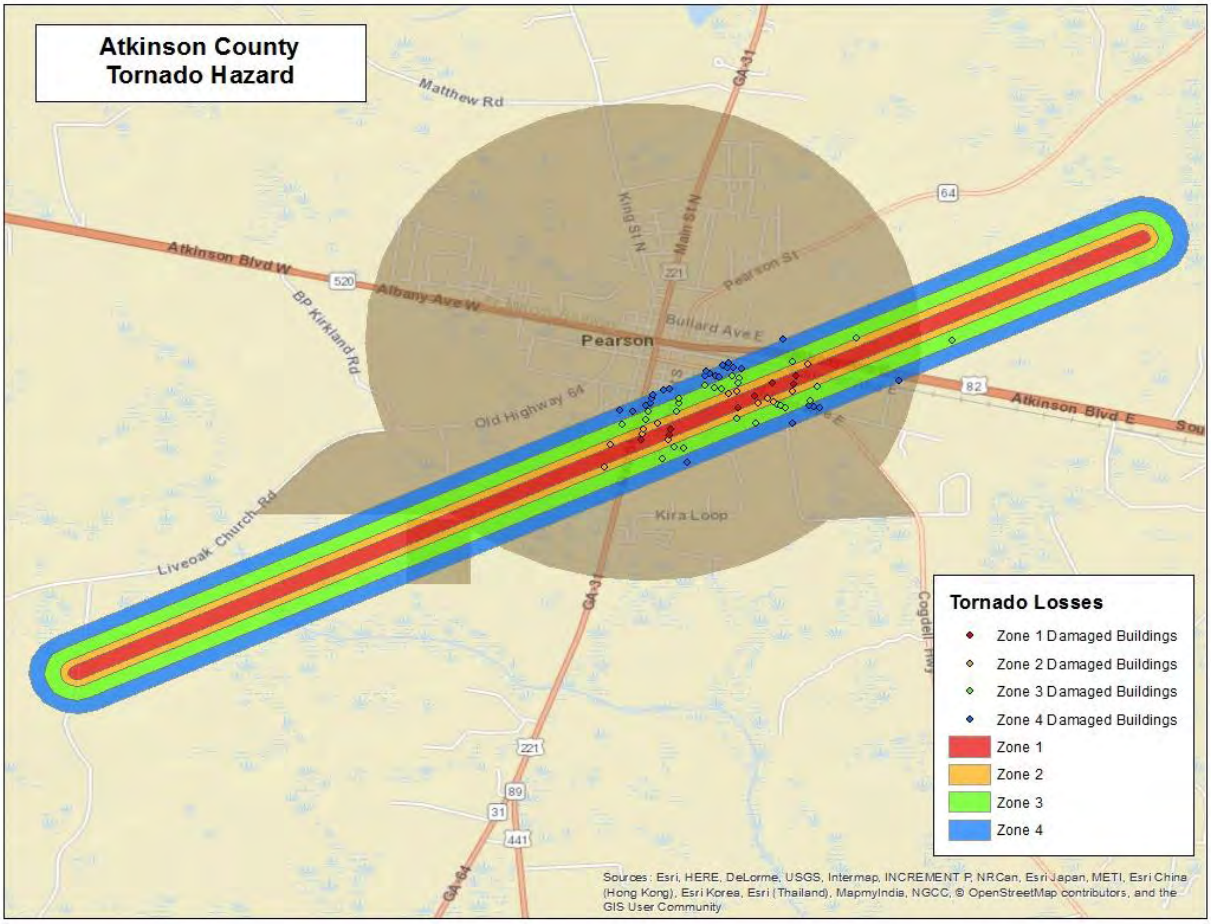

Figure 14: Modeled EF3 Tornado Damage Buffers

EF3 Tornado Building Damages

The analysis estimated that approximately 85 buildings could be damaged, with estimated building losses of approximately $9.8 million. The building losses are an estimate of building replacement costs multiplied by the percentages of damage. The overlay was performed against parcels provided by Atkinson County that were joined with Assessor records showing estimated property replacement costs. The Assessor records often do not distinguish parcels by occupancy class if the parcels are not taxable and thus the number of buildings and replacement costs may be underestimated. The results of the analysis are depicted in Table 14.

Table 14: Estimated Building Losses by Occupancy Type

Occupancy Classification	Buildings Damaged	Building Losses	
Commerical	8	$	542,299
Industrial	3	$	7,285,519
Residential	74	$	1,979,908
Total	**85**	**$**	**9,807,726**

EF3 Tornado Essential Facility Damage

There were 3 essential facilities located in the tornado path according to the modeling, these 3 facilities would suffer moderate to major damage should such a tornado strike occur.

The location of the damaged Essential Facilities is mapped in Figure 15.

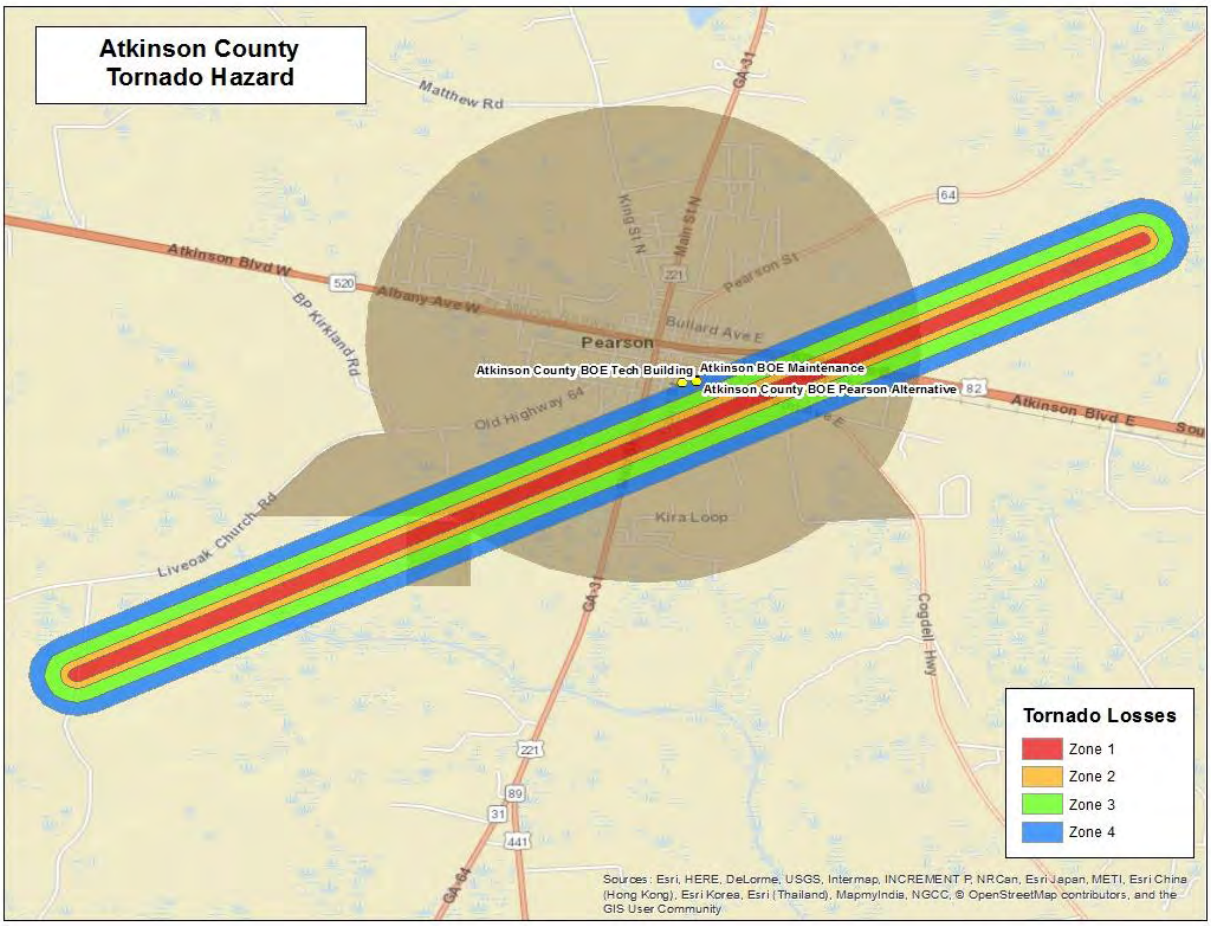

Figure 15: Modeled Essential Facility Damage in Atkinson County

Exceptions Report

Hazus Version 2.2 SP1 was used to perform the loss estimates for Atkinson County, Georgia. Changes made to the default Hazus-MH inventory and the modeling parameters used to setup the hazard scenarios are described within this document.

Reported losses reflect the updated data sets. Steps, algorithms and assumptions used during the data update process are documented in the project workflow developed by the Polis Center.

Statewide Inventory Changes

The default Hazus-MH Essential Facility inventory was updated for the entire state prior to running the hazard scenarios for Atkinson County.

Statewide facility data were supplied by GEMA through the GMIS in June 2015. The Regional Commission updated the essential facilities in 2016. The updated data was used for this analysis. Table 15 summarizes the difference between the original Hazus-MH default data and the updated data for Atkinson County.

Table 15: Essential Facility Updates

Occupancy Classification	Default Replacement Cost	Default Count	Updated Replacement Cost	Updated Count
Care	$ 186,000	1	$ 186,000	1
EOC	$ 880,000	1	$ 880,000	1
Fire	$ 9,200,000	8	$ 3,364,000	5
Police	$ 34,881,000	16	$ 7,683,000	3
School	$ 5,199,000	8	$ 33,545,000	9

County Inventory Changes

The GBS records for Atkinson County were replaced with data derived from parcel and property assessment data obtained from Atkinson County. The county provided property assessment data was current as of June 2018 and the parcel data current as of June 2018.

General Building Stock Updates

The parcel boundaries and assessor records were obtained from Atkinson County. Records without improvements were deleted. The parcel boundaries were converted to parcel points located in the centroids of each parcel boundary unless there were building footprints. Each parcel point was linked to an assessor record based upon matching parcel numbers. The generated Building Inventory represents the approximate locations (within a parcel) of building exposure. The Building Inventory was aggregated by Census Block and imported into Hazus-MH using the Hazus-MH Comprehensive Data Management System (CDMS). Both the 2010 Census Tract and Census Block tables were updated.

The match between parcel records and assessor records was based upon a common Parcel ID. For this type of project, unless the hit rate is better than 85%, the records are not used to update the default aggregate inventory in Hazus-MH. The Parcel-Assessor hit rate for Atkinson County was 97.6%.

Adjustments were made to records when primary fields did not have a value. In these cases, default values were applied to the fields. Table 16 outlines the adjustments made to Atkinson County records.

Table 16: Building Inventory Default Adjustment Rates

Type of Adjustment	Building Count	Percentage
Area Unknown	45	2%
Construction Unknown	198	9%
Condition Unknown	32	2%
Foundation Unknown	137	7%
Year Built Unknown	17	1%

Portions of the CAMA values were either missing (<Null> or '0'), did not match CAMA domains or were unusable ('Unknown', 'Other', 'Pending'). These were replaced with 'best available' values. Missing YearBuilt values were populated from average values per Census Block. Missing Condition, Construction and Foundation values were populated with the highest-frequency CAMA values per Occupancy Class. Missing Area values were populated with the average CAMA values per Occupancy Class.

The resulting Building Inventory was used to populate the Hazus-MH General Building Stock and User Defined Facility tables. The updated General Building Stock was used to calculate flood and tornado losses. Changes to the building counts and exposure that were modeled in Atkinson County are sorted by General Occupancy in Table 1 at the beginning of this report. If replacements cost or building value were not present for a given record in the Assessor data, replacement costs were calculated from the Building Area (sqft) multiplied by the Hazus-MH RS Means ($/sqft) values for each Occupancy Class.

Differences between the default and updated data are due to various factors. The Assessor records often do not distinguish parcels by occupancy class when the parcels are not taxable; therefore, the total number of buildings and the building replacement costs for government, religious/non-profit, and education may be underestimated.

User Defined Facilities

Local parcel and CAMA data were used to develop points representing the locations of buildings in the county, referred to as User Defined Facilities (UDF) in the Hazus model. For the flood model, this includes only buildings located in the 1% Annual Chance Riverine Flood Area. Table 17 identifies the total building count & exposure for the county and the total building count & exposure for buildings located in the 1% Annual Chance Riverine Flood Area.

Table 17: Building Count and Exposure for County and Riverine Flood Area

Feature	Counts	Exposure
Total buildings in the County	2,085	$466,313,025
Total buildings inside the 1% Annual Chance Riverine Flood Area	60	$14,563,665

It should be noted that UDFs are only used in the flood modeling process, due to the fact that it is important to identify if individual buildings are located within the flood area to obtain the depth of flood.

Assumptions

- Flood analysis was performed on UDF. The point locations are parcel centroid accuracy.
- The analysis is restricted to the county boundary within the flood area. Events that occur near the county boundary do not contain loss estimates from adjacent counties.
- The following attributes were defaulted or calculated:
  First Floor Height was set from Foundation Type
  Content Cost was calculated from Building Cost