

## **APPENDIX A – AMELIA COUNTY**

Hazard Rankings

Status of Mitigation Actions

Building Permit Data

Land Use Cover Map

Future Land Use Map

Critical Facilities Maps

Flood Zone Map

NFIP Survey Results

## Hazard Rankings – Amelia County (From Qualitative Assessment and Local Input)

Hazard	Likelihood	Spatial Extent	Potential Impact	HAZARD RATING
Drought	3	2	2	7
Winter Storms	2	3	2	7
Severe Thunderstorms and Tornadoes	2	2	2	6
Hurricanes and Tropical Storms	2	3	1	6
Flood	2	2	1	5
Earthquakes	1	2	1	4
Wildfire	1	1	1	3
Dam/Levee Failure	1	1	1	3
Erosion	1	1	1	3
Landslides	1	1	1	3
Sinkholes	0	1	1	2

Hazard rankings are based on a qualitative assessment, as described below. The values assigned for each option chosen are added together for each hazard to arrive at a total score.

	Assigned Value	Definition
<b>Likelihood of Occurrence</b>		
Highly Likely	3	Near 100% annual probability
Likely	2	Between 10 and 100% annual probability
Possible	1	Between 1 and 10% annual probability
Unlikely	0	Less than 1% annual probability
<b>Spatial Extent</b>		
Large	3	More than 50% of area affected
Moderate	2	Between 10 and 50% of area affected
Small	1	Less than 10% of area affected
<b>Potential Impact</b>		
Catastrophic	4	High number of deaths/injuries possible. More than 50% of property in affected area damaged or destroyed. Complete shutdown of facilities for 30 days or more.
Critical	3	Multiple deaths/injuries possible. More than 25% of property in affected area damaged or destroyed. Complete shutdown of facilities for more than one week.
Limited	2	Minor injuries only. More than 10% of property in affected area damaged or destroyed. Complete shutdown of facilities for more than one day.
Minor	1	Very few injuries, if any. Only minor property damage and minimal disruption on quality of life. Temporary shutdown of facilities.

**Detailed Information/Status of Local Mitigation Actions**  
(includes detailed data for each action, as requested by FEMA)

<b>Amelia County Mitigation Action 1</b>	<b>Elevate and relocate homes or critical infrastructures out of flood zones.</b>	
<b>Category:</b>	Prevention/Structural Projects	
<b>Hazard(s) Addressed:</b>	Flood	
<b>Priority (High, Moderate, Low):</b>	Medium	
<b>Estimated Cost:</b>	\$200,000	
<b>Potential Funding Sources:</b>	FEMA grant funding, possibly local funds	
<b>Lead Agency/Department Responsible:</b>	County Building Inspector	
<b>Implementation Schedule:</b>	Near term	
<b>Status: No action taken – awaiting funds</b>		

<b>Amelia County Mitigation Action 2</b>	<b>Construct waterproof barriers at the wastewater treatment plant to prevent future flood damages if the future relocation plan does not eliminate the hazard soon enough.</b>	
<b>Category:</b>	Prevention/Structural Projects	
<b>Hazard(s) Addressed:</b>	Flood	
<b>Priority (High, Moderate, Low):</b>	Medium	
<b>Estimated Cost:</b>	\$200,000	
<b>Potential Funding Sources:</b>	FEMA grant funding, possibly local funds	
<b>Lead Agency/Department Responsible:</b>	County Wastewater Plan Manager	
<b>Implementation Schedule:</b>	Near term	
<b>Status: No action taken – awaiting funds</b>		

<b>Amelia County Mitigation Action 3</b>	<b>Install window clips for mounting plywood or install hurricane shutters to protect windows of critical facilities.</b>	
<b>Category:</b>	Prevention/Structural Projects	
<b>Hazard(s) Addressed:</b>	Wind/Tornadoes/Severe Thunderstorms	
<b>Priority (High, Moderate, Low):</b>	Medium	
<b>Estimated Cost:</b>	\$750,000	
<b>Potential Funding Sources:</b>	County, possibly federal grant funding	
<b>Lead Agency/Department Responsible:</b>	County Emergency Management Office, Building Inspector	
<b>Implementation Schedule:</b>	Near term	
<b>Status: No action taken – awaiting funds</b>		

<b>Amelia County Mitigation Action 4</b>	<b>Build redundant communications system components to back-up primary communications.</b>	
<b>Category:</b>	Emergency Services	
<b>Hazard(s) Addressed:</b>	Multiple	
<b>Priority (High, Moderate, Low):</b>	High	
<b>Estimated Cost:</b>	\$500,000	
<b>Potential Funding Sources:</b>	FEMA grant funding, local funds	
<b>Lead Agency/Department Responsible:</b>	County Emergency Management Office	
<b>Implementation Schedule:</b>	Near term	
<b>Status: No action taken – awaiting funds</b>		

<b>Amelia County Mitigation Action 5</b>	<b>When new homes are constructed, provide information to encourage clearing trees, brush, and other flammable natural materials a safe distance from the home creating a “Green Zone” between the forest and the structures.</b>	
<b>Category:</b>	Prevention	
<b>Hazard(s) Addressed:</b>	Fire	
<b>Priority (High, Moderate, Low):</b>	High	
<b>Estimated Cost:</b>	Minimal – Staff time, Virginia Department of Forestry has brochures available	
<b>Potential Funding Sources:</b>	N/A	
<b>Lead Agency/Department Responsible:</b>	County Emergency Management Office, Building Inspector	
<b>Implementation Schedule:</b>	Near term	
<b>Status: No action taken – need to coordinate with VDOT on this.</b>		

<b>Amelia County Mitigation Action 6</b>	<b>Relocate the Emergency Operations facility to the County Administration Building, to deal with the expected growth and expansion of County services and staffing resources, and install hurricane shutters or window clips to protect the new facility.</b>	
<b>Category:</b>	Emergency Services	
<b>Hazard(s) Addressed:</b>	Multiple	
<b>Priority (High, Moderate, Low):</b>	High	
<b>Estimated Cost:</b>	\$10,000	
<b>Potential Funding Sources:</b>	County funding, possible DHS grants	
<b>Lead Agency/Department Responsible:</b>	County Emergency Management Office	
<b>Implementation Schedule:</b>	Near term	
<b>Status: Completed.</b>		

<b>Amelia County Mitigation Action 7</b>	<b>Information from this plan will be provided to residents and businesses through the local newspaper, inserted in tax bills or regular mailings to all addresses, and in public meetings.</b>
<b>Category:</b>	Prevention/Emergency Services
<b>Hazard(s) Addressed:</b>	Multiple
<b>Priority (High, Moderate, Low):</b>	Medium
<b>Estimated Cost:</b>	\$500/year
<b>Potential Funding Sources:</b>	County
<b>Lead Agency/Department Responsible:</b>	County Emergency Management Office, County Administrator's Office
<b>Implementation Schedule:</b>	Near term
<b>Status: No action taken – lack of staff resources</b>	

<b>Amelia County Mitigation Action 8</b>	<b>Provide recommended methods of reducing risk and vulnerability on the County's website. Develop and distribute educational brochures to all school children to be taken home to parents.</b>
<b>Category:</b>	Prevention/Emergency Services
<b>Hazard(s) Addressed:</b>	Multiple
<b>Priority (High, Moderate, Low):</b>	Medium
<b>Estimated Cost:</b>	\$1,000
<b>Potential Funding Sources:</b>	County, possibly VDEM and DHS grants
<b>Lead Agency/Department Responsible:</b>	County Emergency Management Office, County Administrator's Office
<b>Implementation Schedule:</b>	Near term
<b>Status: Completed.</b>	

<b>Amelia County Mitigation Action 9</b>	<b>Contact civic organizations, church organizations, and business groups to develop a Safe Community Committee. The County will facilitate the committee, which will develop recommendations for improving safety in the community and providing recommendations to provide educational information on a County-wide basis.</b>
<b>Category:</b>	Prevention/Emergency Services
<b>Hazard(s) Addressed:</b>	Multiple
<b>Priority (High, Moderate, Low):</b>	Medium
<b>Estimated Cost:</b>	\$100
<b>Potential Funding Sources:</b>	County funds
<b>Lead Agency/Department Responsible:</b>	County Emergency Management Office, County Administrator's Office
<b>Implementation Schedule:</b>	Near term
<b>Status: Completed. Done through other avenues</b>	

<b>Amelia County Mitigation Action 10</b>	<b>Review all permits for new development and substantial improvements for compliance with the County's ordinances as they relate to flood areas.</b>
<b>Category:</b>	Prevention/Property Protection
<b>Hazard(s) Addressed:</b>	Flood
<b>Priority (High, Moderate, Low):</b>	Moderate
<b>Estimated Cost:</b>	None
<b>Potential Funding Sources:</b>	N/A
<b>Lead Agency/Department Responsible:</b>	County Planning Department
<b>Implementation Schedule:</b>	Short/near term
<b>Status: Ongoing – enforced through County Zoning Ordinance (includes a Flood Plain District) and Subdivision Ordinance (restricts development in areas subject to flooding).</b>	

<b>Amelia County Mitigation Action 11</b>	<b>Install storm water drainage system to prevent flooding in buildings in flood prone areas.</b>
<b>Category:</b>	Prevention/Property Protection
<b>Hazard(s) Addressed:</b>	Flood
<b>Priority (High, Moderate, Low):</b>	High
<b>Estimated Cost:</b>	Depending on size of area to be protected, could be anywhere from \$100,000 to \$500,000 or more
<b>Potential Funding Sources:</b>	FEMA grant, with local funding match
<b>Lead Agency/Department Responsible:</b>	County Administration/Planning Department
<b>Implementation Schedule:</b>	Dependant on availability of funding
<b>Status: No action taken, lack of funding</b>	

Amelia County removed two (2) mitigation actions, as noted below:

<b>Amelia County Mitigation Action</b>	<b>Secure mobile homes beyond standard tie-downs to reduce their vulnerability to high winds.</b>
<b>Category:</b>	Prevention/Structural Projects
<b>Hazard(s) Addressed:</b>	Wind/Tornadoes/Severe Thunderstorms
<b>Priority (High, Moderate, Low):</b>	Medium
<b>Estimated Cost:</b>	\$750,000
<b>Potential Funding Sources:</b>	County, local businesses
<b>Lead Agency/Department Responsible:</b>	County Emergency Management Office, Building Inspector
<b>Implementation Schedule:</b>	Near term
<b>Remove – Funding requirements make this action cost-prohibitive.</b>	

<b>Amelia County Mitigation Action</b>	<b>Install safe rooms and develop severe weather shelters to provide safer locations for the public during rapidly developing weather events.</b>
<b>Category:</b>	Prevention/Structural Projects
<b>Hazard(s) Addressed:</b>	Wind/Tornadoes/Severe Thunderstorms
<b>Priority (High, Moderate, Low):</b>	Medium
<b>Estimated Cost:</b>	\$750,000
<b>Potential Funding Sources:</b>	County, possibly federal grant funding
<b>Lead Agency/Department Responsible:</b>	County Emergency Management Office, Building Inspector
<b>Implementation Schedule:</b>	Near term
<b>Remove – Funding requirements make this action cost-prohibitive. Additionally, there are multiple areas of need – which would multiply the cost.</b>	

Mitigation action previously completed per 2012 Plan update:

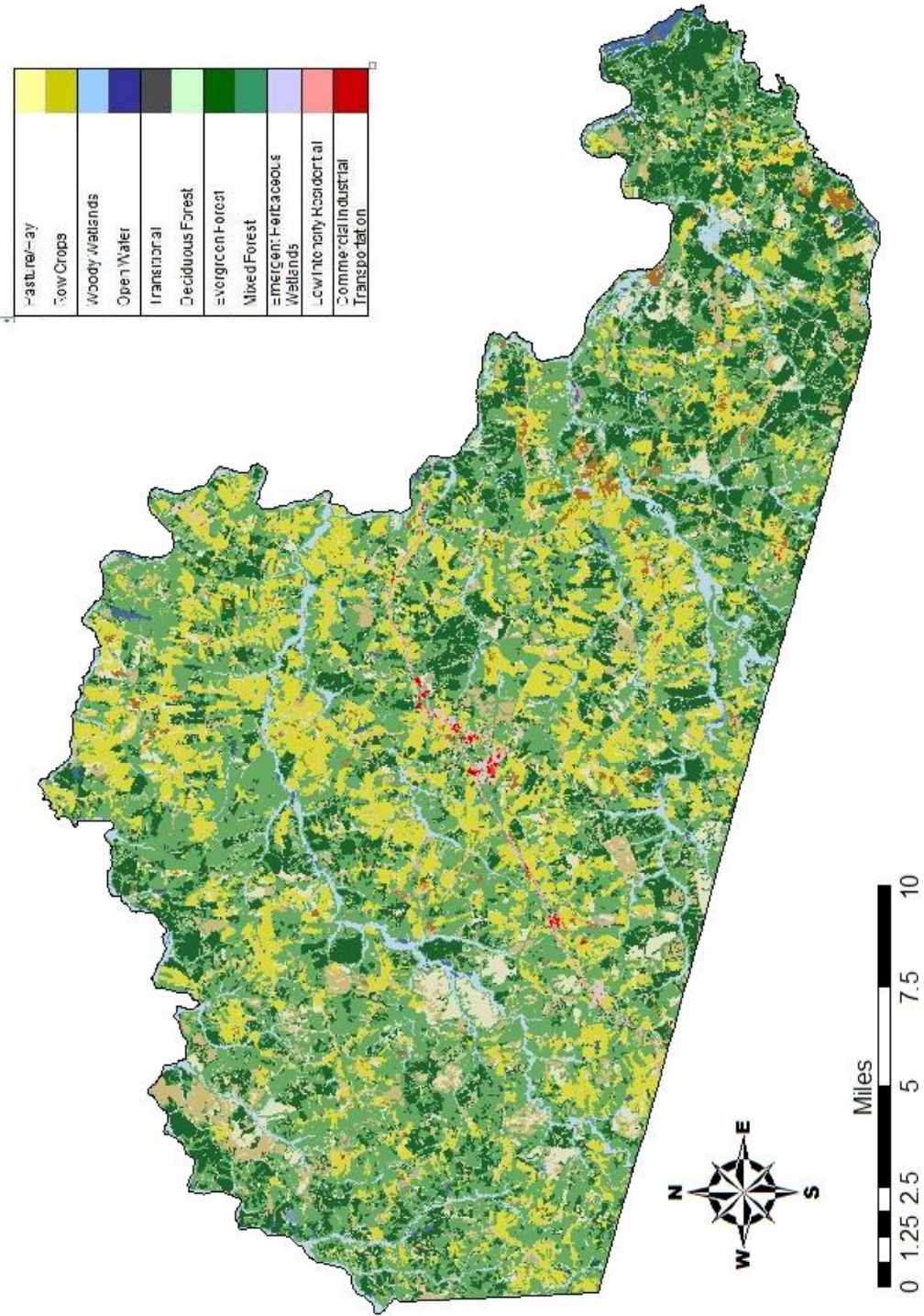
<b>Amelia County Mitigation Action</b>	<b>Evaluate current staff levels to ensure the County has enough trained staff to manage mitigation strategies as well as emergencies on the local level.</b>
<b>Category:</b>	Prevention/Emergency Services
<b>Hazard(s) Addressed:</b>	Multiple
<b>Priority (High, Moderate, Low):</b>	Medium
<b>Estimated Cost:</b>	Minimal
<b>Potential Funding Sources:</b>	County funding, possibly VDEM
<b>Lead Agency/Department Responsible:</b>	County Emergency Management Office
<b>Implementation Schedule:</b>	Short term
<b>Status: <i>Completed</i>. County has hired a full-time emergency manager</b>	

## Building Permit Data – Amelia County

Year	Residential Permits Issued	Commercial Permits Issued
1981	59	6
1982	55	0
1983	77	0
1984	82	0
1985	86	0
1986	85	0
1987	129	8
1988	134	7
1989	158	12
1990	179	4
1991	163	3
1992	109	18
1993	175	23
1994	158	20
1995	174	27
1996	169	31
1997	176	25
1998	179	16
1999	169	17
2000	147	21
2001	137	20
2002	136	15
2003	162	18
2004	161	32
2005	165	17
2006	208	24
2007	122	23
2008	103	18
2009	75	18
2010	69	15
2011	39	11
2012	44	8
2013	61	16
2014	63	8
2015	51	8

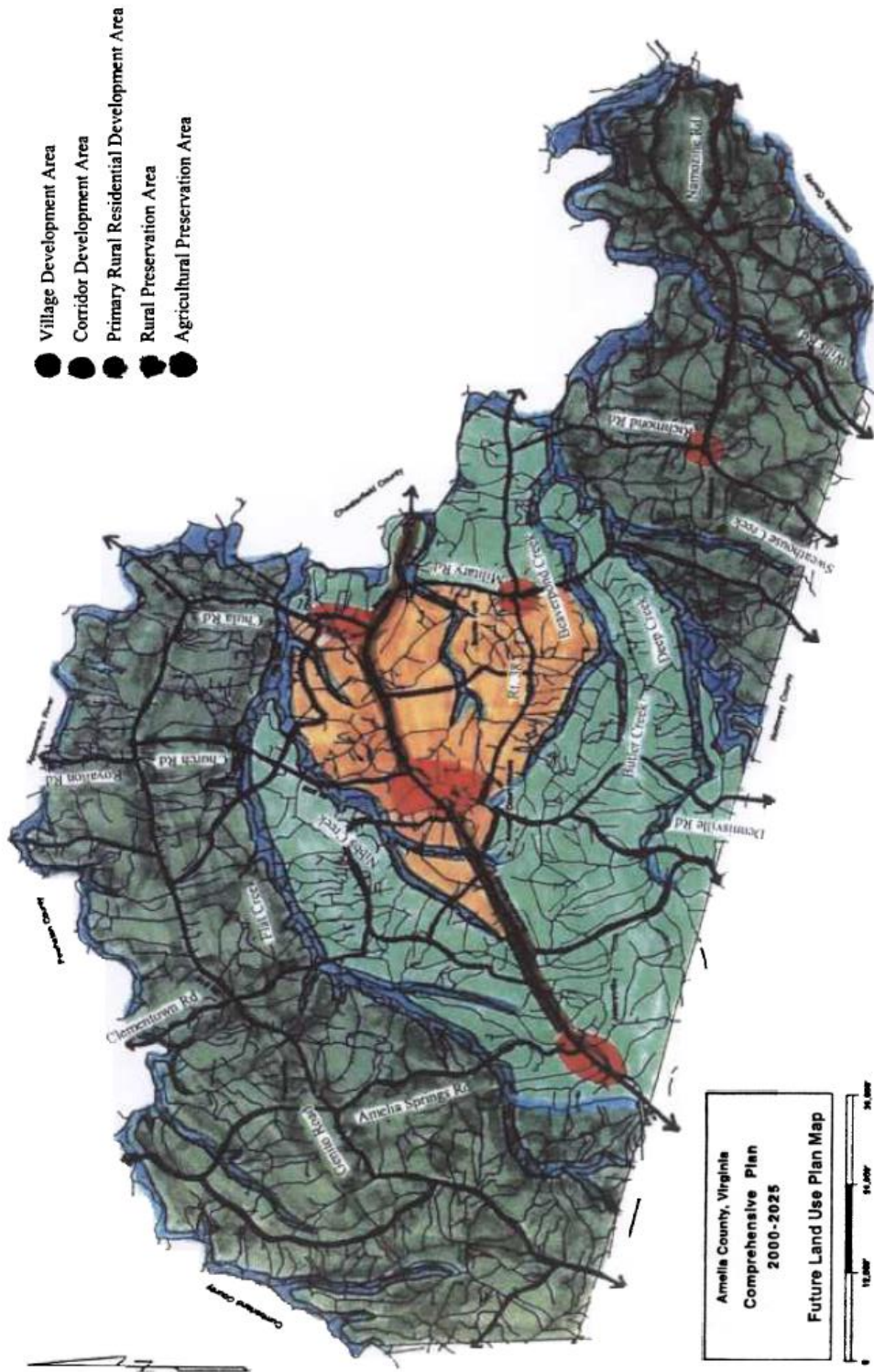


# Amelia County Land Use Cover Map



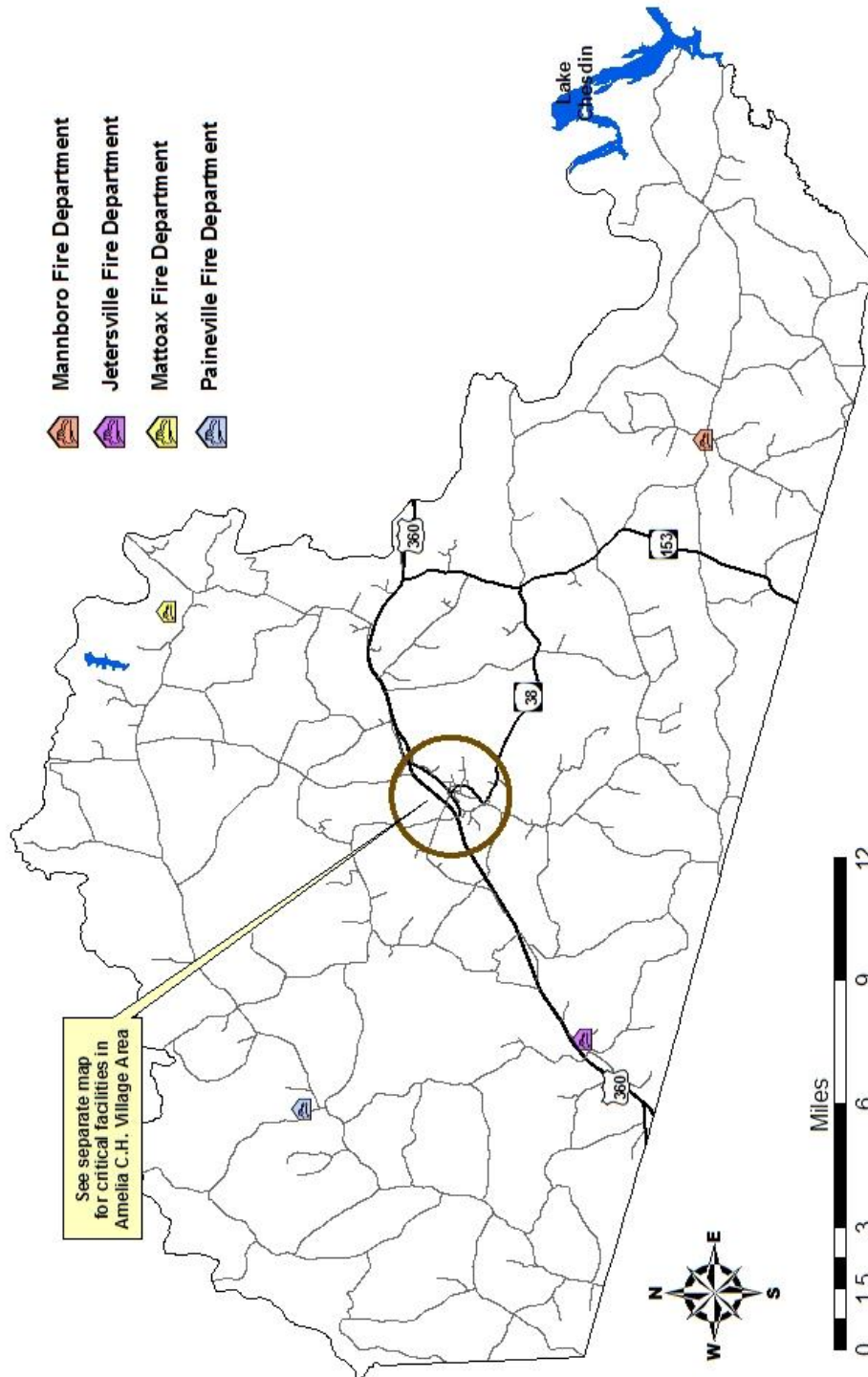
Map created by CRC - October 2015  
Source: 2011 National Land Use Cover Dataset

# Amelia County Future Land Use Map



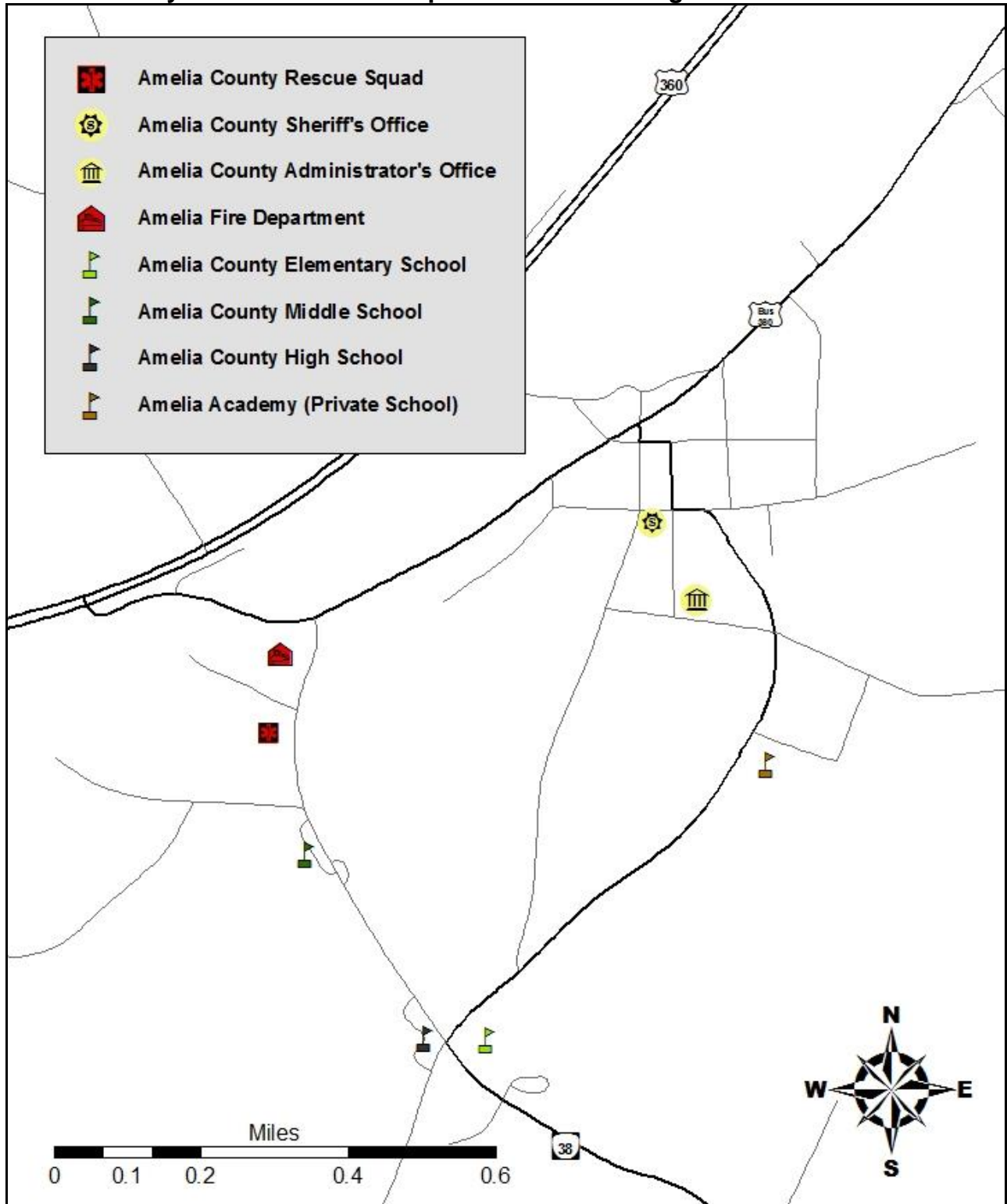
Source: Amelia County Comp Plan

# Amelia County Critical Facilities Map



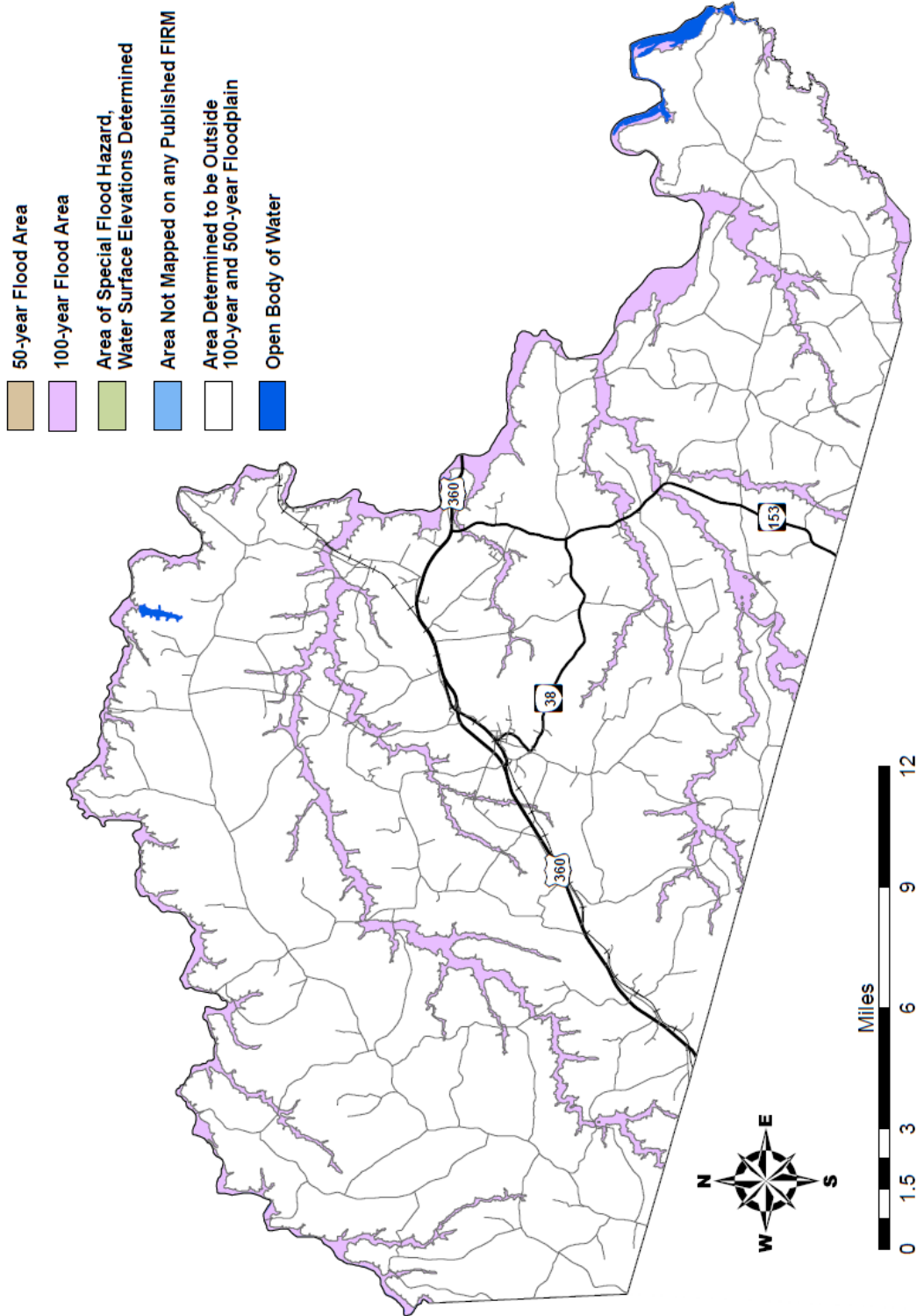
Map created by CRC – February 2011 (updated July 2016)  
Source: Amelia County

# Amelia County Critical Facilities Map – Amelia C.H. Village Area



Map created by CRC – February 2011 (updated July 2016)  
Source: Amelia County

# Amelia County Flood Zone Map



Map created by CRC – February 2011 (source: FEMA)

# NFIP Survey Results

## NATIONAL FLOOD INSURANCE PROGRAM (NFIP) SURVEY

MUNICIPALITY: Amelia

1. FLOODPLAIN IDENTIFICATION AND MAPPING			
Requirement	Recommended Action	Yes/No	Comments
a. Does the municipality maintain accessible copies of an effective Flood Insurance Rate Map (FIRM)/Digital Flood Insurance Rate Map (DFIRM)? Does the municipality maintain accessible copies of the most recent Flood Insurance Study (FIS)?	Place these documents in the local libraries or make available publicly.	Yes No	Not sure we've ever received this info
b. Has the municipality adopted the most current DFIRM/FIRM and FIS?	State the date of adoption, if approved.	Yes	Apr 16, 2009
c. Does the municipality support request for map updates?	If yes, state how.	No	Not sure of this?
d. Does the municipality share with Federal Emergency Management Agency (FEMA) any new technical or scientific data that could result in map revisions within 6 months of creation or identification of new data?	If yes, specify how.	No	We've never had anything that would require this action
e. Does the municipality provide assistance with local floodplain determinations?	If yes, specify how.	Yes	Sit down w/ customers to review data and assist them with correspondence
f. Does the municipality maintain a record of approved Letters of Map Change?	If yes, specify the responsible office.	No	Never had any

2. FLOODPLAIN MANAGEMENT			
Requirement	Recommended Action	Yes/No	Comments
a. Has the municipality adopted a compliant floodplain management ordinance that, at a minimum, regulates the following:	If yes, answer questions (1) through (4) below.	Yes	
(1) Does the municipality issue permits for all proposed development in the Special Flood Hazard Areas (SFHAs)?	If yes, specify the office responsible.	No	No permits issued
(2) Does the municipality obtain, review, and utilize any Base Flood Elevation (BFE) and floodway data, and/or require BFE data for subdivision proposals and other development proposals larger than 50 lots or 5 acres?	If yes, specify the office responsible.	No	No request received
(3) Does the municipality identify measures to keep all new and substantially improved construction reasonably safe from flooding to or above the BFE, including anchoring, using flood-resistant materials, and designing or locating utilities and service facilities to prevent water damage?	If yes, specify the office responsible.	No	No request received
(4) Does the municipality document and maintain records of elevation data that document lowest floor elevation for new or substantially improved structures?	If yes, specify the office responsible.	No	No permits issued
b. If a compliant floodplain ordinance was adopted, does the municipality enforce the ordinance by monitoring compliance and taking remedial action to correct violations?	If yes, specify how.	Yes	

2. FLOODPLAIN MANAGEMENT			
<i>Requirement</i>	<i>Recommended Action</i>	<i>Yes/No</i>	<i>Comments</i>
c. Has the municipality considered adopting activities that extend beyond the minimum requirements? Examples include: <ul style="list-style-type: none"> <li>• Participation in the Community Rating System</li> <li>• Prohibition of production or storage of chemicals in SFHA</li> <li>• Prohibition of certain types of structures, such as hospitals, nursing homes, and jails in SFHA</li> <li>• Prohibition of certain types of residential housing (manufactured homes) in SFHA</li> <li>• Floodplain ordinances that prohibit any new residential or nonresidential structures in SFHA</li> </ul>	If yes, specify activities.	No	

3. FLOOD INSURANCE			
<i>Requirement</i>	<i>Recommended Action</i>	<i>Yes/No</i>	<i>Comments</i>
a. Does the municipality educate community members about the availability and value of flood insurance?	If yes, specify how.	No	
b. Does the municipality inform community property owners about changes to the DFIRM/FIRM that would impact their insurance rates?	If yes, specify how.	No	
c. Does the municipality provide general assistance to community members regarding insurance issues?	If yes, specify how.	No	