#### APPENDIX B - BUCKINGHAM COUNTY, TOWN OF DILLWYN

Hazard Rankings

Status of Mitigation Actions

**Building Permit Data** 

Land Use Cover Map

Future Land Use Maps

Critical Facilities Maps

Flood Zone Map

NFIP Survey Results

Hazard Rankings - Buckingham Co. (From Qualitative Assessment and Local Input)

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

#### **Buckingham County**

Buckingham County Mitigation Action 1	Install quick-connect generators for hook-ups for critical facilities.	
Category:		Prevention/Emergency Services
Hazard(s) Addressed:		Multiple
Priority (High, Moderate, Low):		High
Estimated Cost:		Depends on how many
Potential Funding Source	es:	Would likely seek grants from FEMA, other sources
Lead Agency/Department Responsible:		County Emergency Services (E-911 Coordinator)
Implementation Schedule:		Dependant on availability of funding
Status: No action taken – awaiting funds		

Buckingham County Mitigation Action 2	Purchase generators for critical facilities and shelters (for emergency power).	
Category:		Prevention/Emergency Services
Hazard(s) Addressed:		Multiple
Priority (High, Moderate, Low):		High
Estimated Cost:		Depends on size and number
Potential Funding Sources:		Would likely seek grant funding
Lead Agency/Department Responsible:		County Emergency Services (E-911 Coordinator)
Implementation Schedule:		Dependant on availability of funding
Status: No action taken – awaiting funds		

Buckingham County Mitigation Action 3	Routinely inspect functioning of fire hydrants.	
Category:		Property Protection/Emergency Services
Hazard(s) Addressed:		Fire
Priority (High, Moderate, Low):		High/Moderate
Estimated Cost:		Minimal if done by county or local fire departments
Potential Funding Sources:		Could be made part of routine job responsibilities
Lead Agency/Department Responsible:		County Emergency Services (E-911 Coordinator)
Implementation Schedule:		Short term (if little or no cost)
Status: Ongoing. The County does this on a yearly basis.		

Buckingham County Mitigation Action 4	Review all permits for new development and substantial improvements for compliance with the County's floodplain ordinance.	
Category:		Prevention/Property Protection
Hazard(s) Addressed:		Flood
Priority (High, Moderate, Low):		Moderate
Estimated Cost:		None
Potential Funding Sources:		N/A
Lead Agency/Department Responsible:		County Planning Department
Implementation Schedule:		Short/near term
Status: Ongoing – enforced through the County's Floodplain Ordinance.		

Buckingham County has added one (1) mitigation action;

Buckingham County New Mitigation Action	Address flooding issues in Little Georgia Creek Subdivision (located in northern Buckingham County) through modifications to creek to minimize flooding, construction of additional road to provide secondary access route for residents in the area, or other means	
Category:		Prevention/Property Protection
Hazard(s) Addressed:		Flood
Priority (High, Moderate, Low):		Moderate
Estimated Cost:		Depends on project, could be \$500,000 to \$1 million or more
Potential Funding Sources:		VDOT, Army Corps of Engineers, FEMA
Lead Agency/Department Responsible:		County Planning Department
Implementation Schedule:		Dependant on availability of funding
Status: No action taken – awaiting funds		

Mitigation action previously completed per 2012 Plan update:

Buckingham County Mitigation Action	Identify and strengthen facilities to function as public shelters.	
Category:	Prevention/Structural Projects	
Hazard(s) Addressed:	Multiple	
Priority (High, Moderate, Low):	High	
Estimated Cost:	Depends on the number of structures to be strengthened/what construction is needed	
Potential Funding Sources:	If cost-intensive, would likely seek grant funding	
Lead Agency/Department Responsible:	County Building Official/Emergency Services Coordinator	
Implementation Schedule:	Dependant on availability of funding	
Status: Completed. The County's Middle School now serves as a shelter.		

## Town of Dillwyn

Dillwyn Mitigation Action 1	Develop or update water management/emergency response plan.	
Category:		Prevention
Hazard(s) Addressed:		Drought
Priority (High, Moderate, Low):		High/Moderate
Estimated Cost:		Depends on whether the Town has an existing plan
Potential Funding Source	es:	Grant
Lead Agency/Department Responsible:		Buckingham County Utilities Operator/Emergency Coordinator
Implementation Schedule:		Dependant on availability of funding
Status: Completed – Plan developed, needs to be updated periodically.		

Dillwyn Mitigation Action 2	Develop a canned public awareness campaign for use in times of high fire danger.	
Category:		Public Education and Awareness
Hazard(s) Addressed:		Wildfire
Priority (High, Moderate, Low):		High
Estimated Cost:		Minimal cost of brochures/presentations
Potential Funding Sources:		N/A
Lead Agency/Department Responsible:		County Planning Department, possibly in conjunction with VDOF/CRC
Implementation Schedule:		Short/Near term
Status: No action taken – lack of staff resources		

Dillwyn Mitigation Action 3	Routinely clean and repair storm water drains.	
Category:		Prevention
Hazard(s) Addressed:		Flood
Priority (High, Moderate, Low):		High
Estimated Cost:		N/A – Could be added to routine maintenance
Potential Funding Source	es:	N/A
Lead Agency/Department Responsible:		VDOT
Implementation Schedule:		Short term
Status: No action taken – lack of funding/staff resources		

Dillwyn Mitigation Action 4	Encourage homeowners to install backflow valves to prevent reverse-flow floods.		
Category:		Prevention/Public Education	
Hazard(s) Addressed:		Flood	
Priority (High, Moderate, Low):		High/Moderate	
Estimated Cost:		Minimal – Could be amendment to ordinances or public education program	
Potential Funding Source	es:	N/A	
Lead Agency/Department Responsible:		County Building Inspector	
Implementation Schedule:		Short term	
Status: No action taken -	Status: No action taken – lack of staff resources		

Dillwyn Mitigation Action 5	Establish emergency response procedures in coordination with operators of critical facilities.				
Category:		Emergency Services			
Hazard(s) Addressed:		Multiple			
Priority (High, Moderate, Low):		High			
Estimated Cost:		Depends on amount of planning			
Potential Funding Sources:		Depends on cost			
Lead Agency/Department Responsible:		County Emergency Services/operators of critical facilities (with support from town)			
Implementation Schedule:		Short/near term			
Status: No action taken -	lack of staff	resources			

Dillwyn Mitigation Action 6	Install quick-connect emergency generator hook-ups for critical facilities.				
Category:		Emergency Services			
Hazard(s) Addressed:		Multiple			
Priority (High, Moderate,	Low):	High			
Estimated Cost:		Depends on how many needed			
Potential Funding Sources:		Probably will seek grant funding			
Lead Agency/Department Responsible:		County Emergency Services (E-911 Coordinator)			
Implementation Schedule:		Dependant on availability of funding			
Status: No action taken – awaiting fur		nds			

Dillwyn Mitigation Action 7	Install storm water drainage system to prevent flooding in buildings on Main Street				
Category:		Prevention/Property Protection			
Hazard(s) Addressed:		Flood			
Priority (High, Moderate,	Low):	High			
Estimated Cost:		Approx. \$250,000			
Potential Funding Sources:		FEMA grant, with local funding match			
Lead Agency/Department Responsible:		Town staff			
Implementation Schedule:		Dependant on availability of funding			
Status: Pending. Grant application previously submitted, but withdrawn due to lack of matching funds; Town to re-evaluate feasibility.					

Dillwyn Mitigation Action 8	Review all permits for new development and substantial improvements for compliance with the Town's ordinances as they relate to flood areas.					
Category:		Prevention/Property Protection				
Hazard(s) Addressed:		Flood				
Priority (High, Moderate, Low):		Moderate				
Estimated Cost:		None				
Potential Funding Sources:		N/A				
Lead Agency/Department Responsible:		Town staff				
Implementation Schedule:		Short/near term				
Status: Ongoing – Town flooding.	ordinances restr	ict building/development within areas subject to				

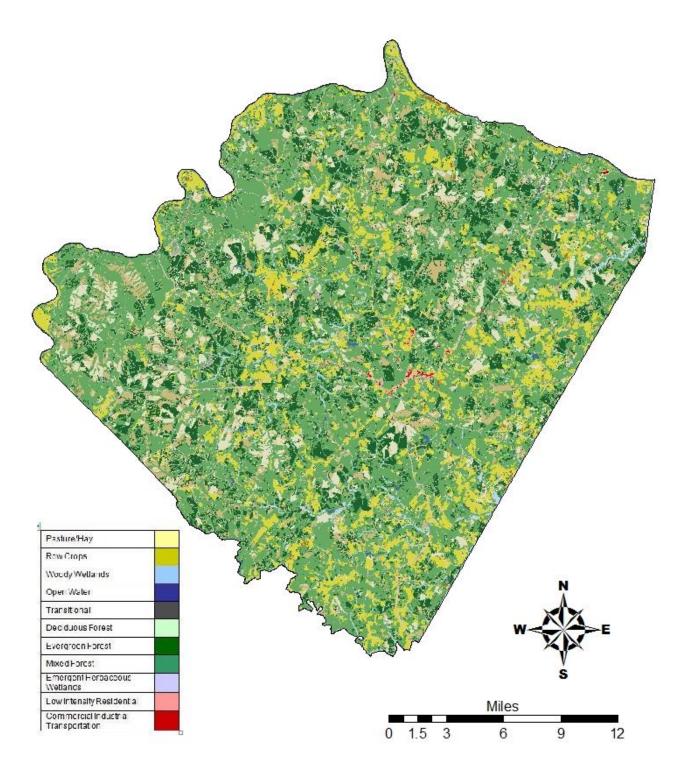
NOTE: Buckingham County and the Town of Dillwyn have determined that acquisition, relocation, elevation, or floodproofing is not a priority for them, due to the lack of flooding issues in those localities. Consequently, they do not have a mitigation strategy addressing this.

**Building Permit Data – Buckingham County/Town of Dillwyn** 

•		•
Year	Residential Permits Issued	Commercial Permits Issued
2001	137	17
2002	158	10
2003	147	12
2004	192	23
2005	202	12
2006	173	11
2007	162	9
2008	146	7
2009	94	3
2010	65	0
2011	59	3
2012	61	11
2013	64	13
2014	60	9
2015	67	14
2015	07	14

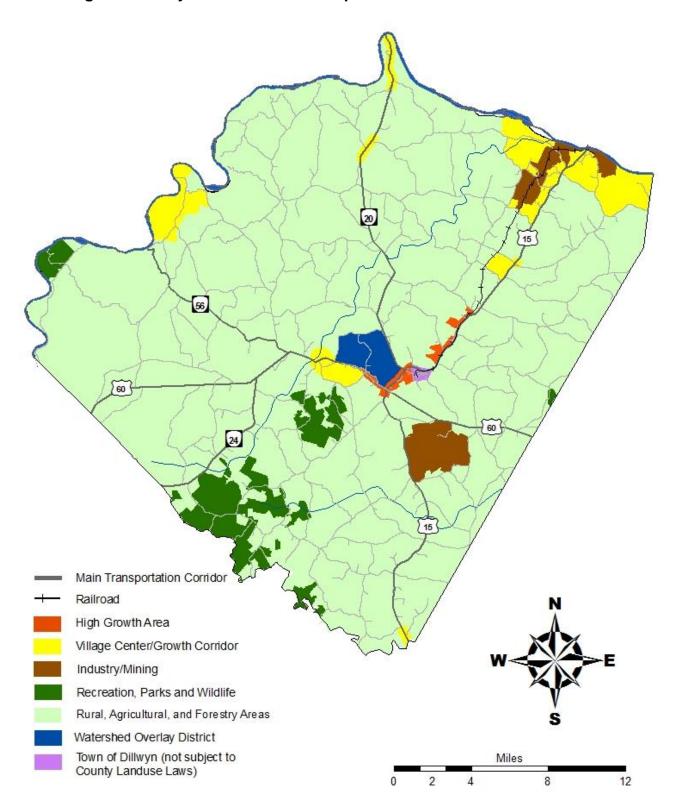
NOTE: Permits for the Town of Dillwyn are handled through the Buckingham County Building Inspector's Office.

### **Buckingham County Land Use Cover Map**



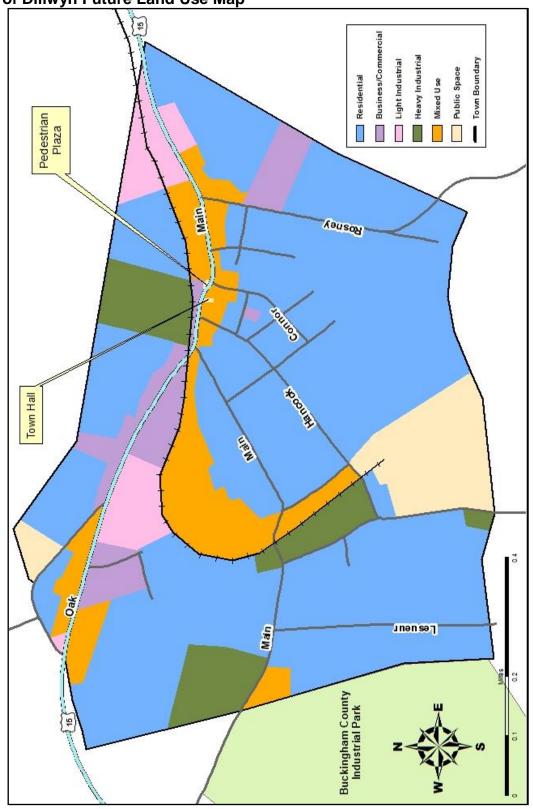
Map created by CRC - October 2015 Source: 2011 National Land Use Cover Dataset

#### **Buckingham County Future Land Use Map**



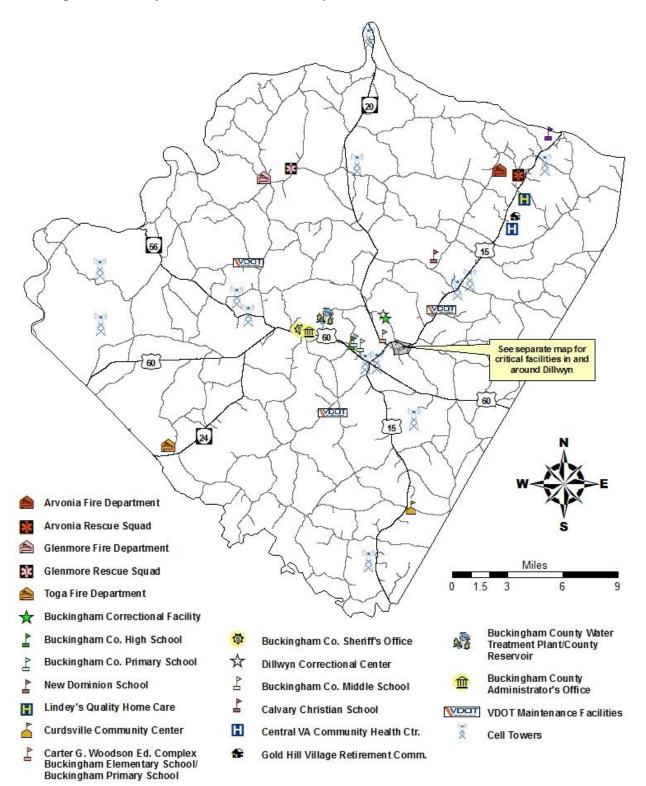
Map created by CRC - March 2015

Town of Dillwyn Future Land Use Map



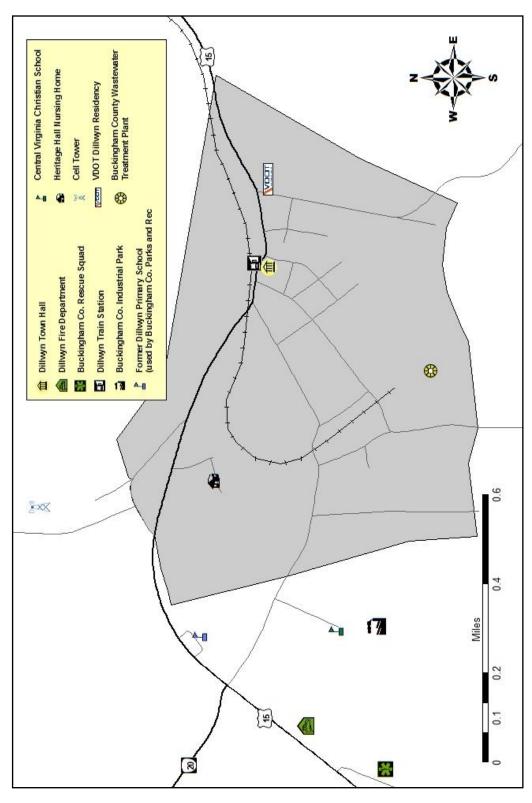
Map created by CRC - August 2016

#### **Buckingham County Critical Facilities Map**



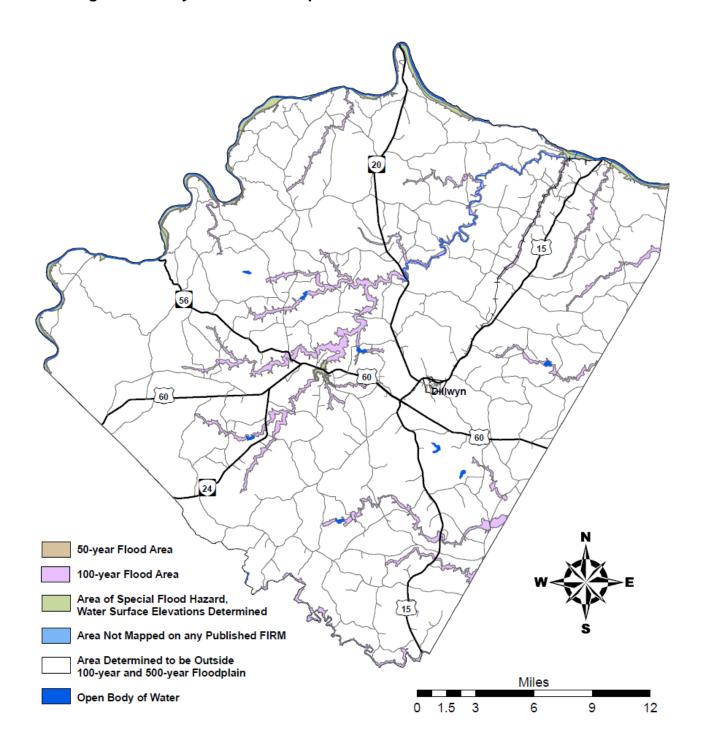
Map created by CRC – June 2016
Source: Buckingham County Emergency Management

Town of Dillwyn (and surround areas) Critical Facilities Map



Map created by CRC – June 2016 Source: Buckingham County Emergency Management, Town of Dillwyn

#### **Buckingham County Flood Zone Map**



Map created by CRC – February 2011 (Source – FEMA)

# NFIP Survey Results – Buckingham County

#### NATIONAL FLOOD INSURANCE PROGRAM (NFIP) SURVEY

#### MUNICIPALITY: BUCKINGHAM COUNTY

1. FLOODPLAIN IDENTIFICATION AND MAP	PING		3. 是 新性量的 2. 14 15 15 15 16 16 15 15 15 16 16 16 16 16 16 16 16 16 16 16 16 16
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	
b. Has the municipality adopted the most current DFIRM/FIRM and FIS?	State the date of adoption, if approved.	yes	March 2008
c. Does the municipality support request for map updates?	If yes, state how,	yes	Answer any questions that are asked for clarification
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	
e. Does the municipality provide assistance with local floodplain determinations?	If yes, specify how.	no	
f. Does the municipality maintain a record of approved Letters of Map Change?	If yes, specify the responsible office.	yes	Zoning/ Planning office

2. FLOODPLAIN MANAGEMENT					
Requirement	Recommended Action	Yes/No	Comments		
<ul> <li>Has the municipality adopted a compliant floodplain management ordinance that, at a minimum, regulates the following:</li> </ul>	If yes, answer questions (1) through (4) below.	yes	March 2008		
(1) Does the municipality issue permits for all proposed development in the Special Flood Hazard Areas (SFHAs)?	If yes, specify the office responsible.	yes	Zoning/Planning		
(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.	yes	Zoning/Planning		
(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.	yes	Building inspector		
(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.	yes	Building Inspector		
<ul> <li>If a compliant floodplain ordinance was adopted, does the municipality enforce the ordinance by monitoring compliance and taking remedial action to correct violations?</li> </ul>	If yes, specify how.	yes	Building inspector		

2. FLOODPLAIN MANAGEMENT					
Requirement	Recommended Action	Yes/No	Comments		
c. Has the municipality considered adopting activities that extend beyond the minimum requirements? Examples include:					
<ul> <li>Participation in the Community Rating System</li> </ul>					
<ul> <li>Prohibition of production or storage of chemicals in SFHA</li> </ul>	If yes, specify activities.				
<ul> <li>Prohibition of certain types of structures, such as hospitals, nursing homes, and jails in SFHA</li> </ul>		no			
<ul> <li>Prohibition of certain types of residential housing (manufactured homes) in SFHA</li> </ul>					
<ul> <li>Floodplain ordinances that prohibit any new residential or nonresidential structures in SFHA</li> </ul>					

3. FLOOD INSURANCE					
Requirement	Recommended Action	Yes/No	Comments		
<ul> <li>Does the municipality educate community members about the availability and value of flood insurance?</li> </ul>	If yes, specify how.	yes	Make them aware that flood insurance is required		
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.	yes	Information store		

## NFIP Survey Results – Dillwyn

#### NATIONAL FLOOD INSURANCE PROGRAM (NFIP) SURVEY

MUNICIPALITY: TOWN OF DILLWYN - BUCKINGHAM COUNTY

1	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.	no	County maintains		
b.	Has the municipality adopted the most current DFIRM/FIRM and FIS?	State the date of adoption, if approved.	yes	March 2008 -		
c.	Does the municipality support request for map updates?	If yes, state how.	yes	Answer any questions that are asked for clarification		
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			
e.	Does the municipality provide assistance with local floodplain determinations?	If yes, specify how.	no			
f.	Does the municipality maintain a record of approved Letters of Map Change?	If yes, specify the responsible office.	yes	County Zoning/ Planning office		

Requirement	Recommended Action	Yes/No	Comments
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	March 2008
(1) Does the municipality issue permits for all proposed development in the Special Flood Hazard Areas (SFHAs)?	If yes, specify the office responsible.	yes	County Zoning/Planning
(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.	yes	County Zoning/Planning
(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.	yes	County Building inspector
(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.	yes	County Building Inspector
<ul> <li>If a compliant floodplain ordinance was adopted, does the municipality enforce the ordinance by monitoring compliance and taking remedial action to correct violations?</li> </ul>	If yes, specify how.	yes	County Building inspector

2. FLOODPLAIN MANAGEMENT					
Requirement	Recommended Action	Yes/No	Comments		
c. Has the municipality considered adopting activities that extend beyond the minimum requirements? Examples include:	If yes, specify activities.				
<ul> <li>Participation in the Community Rating System</li> </ul>		no			
<ul> <li>Prohibition of production or storage of chemicals in SFHA</li> </ul>					
<ul> <li>Prohibition of certain types of structures, such as hospitals, nursing homes, and jails in SFHA</li> </ul>					
<ul> <li>Prohibition of certain types of residential housing (manufactured homes) in SFHA</li> </ul>					
<ul> <li>Floodplain ordinances that prohibit any new residential or nonresidential structures in SFHA</li> </ul>					

3. FLOOD INSURANCE			
Requirement	Recommended Action	Yes/No	Comments
Does the municipality educate community members about the availability and value of flood insurance?	If yes, specify how.	yes	Make them aware that flood insurance is required
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.	yes	Information store