APPENDIX E - LUNENBURG COUNTY, TOWNS OF KENBRIDGE AND VICTORIA

Locality Map

Status of Mitigation Actions

Building Permit Data

Land Use Cover Map

Zoning/Land Use Maps

Critical Facilities Maps

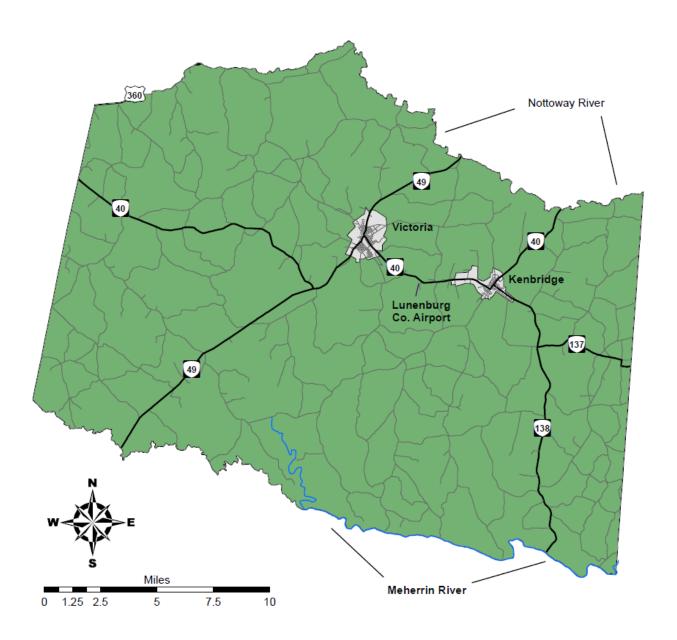
NFIP Survey Results

Flood Zone Maps

NOTES:

- 1) For this update, the methodology for ranking hazards was changed. Localities were not actually tasked with scoring/ranking covered hazards directly. Table 6.17 in Section 6 of the Plan shows the risk ratings for the region based on quantitative and qualitative analysis as well as anecdotal input from the Project Management Team, but is not based on a locality ranking system. As a result, the "Hazard Ranking" table that appeared in the local appendices for the previous Plan updates has been supplanted by the "Hazard Risk Ratings" table (Table 6.17) in Section 6.
- 2) For the status of mitigation actions, any actions that were removed per previous Plan updates are not shown in this update. This section was also amended to list actions completed per prior Plan updates separately.

Lunenburg County



Map created by CRC - May 2010

Detailed Information/Status of Local Mitigation Actions

(includes detailed data for each action, as requested by FEMA)

Lunenburg County

Lunenburg County Mitigation Action 1	Conduct a cumulative impact analysis/study for flood-prone property and roads within the watershed.	
Category:		Prevention
Hazard(s) Addressed:		Flood
Priority (High, Moderate, Low):		Moderate
Estimated Cost:		\$30,000
Potential Funding Sources:		DEQ and/or DCR grant funding; HMGP or BRIC (with local matching funds)
Lead Agency/Department Responsible:		County Administration, possibly with help from County Planning Department/CRC/VDOT
Implementation Schedule:		Dependant on availability of funding
Status: No action taken – lack of funding/staff resources		

Lunenburg County Mitigation Action 2	Designate and prepare safety shelter in several locations in the County.	
Category:		Prevention
Hazard(s) Addressed:		Multiple
Priority (High, Moderate, Low):		High/Moderate
Estimated Cost:		\$100,000
Potential Funding Sources:		BRIC or HMGP (with local matching funds) USDA RD Community Facilities program, VDEM grant funding when available
Lead Agency/Department Responsible:		County Administration, possibly in conjunction with local fire departments and rescue squads
Implementation Schedule:		Dependant on availability of funding

Status: Ongoing. One shelter ready in Kenbridge (Emergency Squad – generator installed with the help of a USDA grant). Meherrin Fire Department and Victoria Fire Department also designated as shelters. The County has Lunenburg Middle School as an overnight-ready shelter and Kenbridge Fire Department as a cooling/charging shelter.

Lunenburg County Mitigation Action 3	Encourage or require burial of electrical, phone and cable lines.	
Category:		Prevention, Structural Project
Hazard(s) Addressed:		Multiple
Priority (High, Moderate, Low):		Moderate
Estimated Cost:		Depends on extent of work - could be minimal if only changing codes, offering incentives. For infrastructure project,
Potential Funding Sources:		FEMA mitigation funding, other sources as applicable
Lead Agency/Department Responsible:		County Administration/Planning Department/Board of Supervisors, Southside Electric Cooperative (SEC)
Implementation Schedule:		Short term (if little or no cost)
Status: No action taken – lack of staff resources. The County may investigate zoning or building co		

Status: No action taken – lack of staff resources. The County may investigate zoning or building code changes to address this. SEC pursuing grant funding for burial of electrical lines.

Lunenburg County Mitigation Action 4	Require construction of "safe rooms" in new schools, day care and rest homes.	
Category:		Prevention, Structural Projects
Hazard(s) Addressed:		Tornado
Priority (High, Moderate, Low):		High/Moderate
Estimated Cost:		Minimal or none – change to codes
Potential Funding Sources:		N/A
Lead Agency/Department Responsible:		County Planning Commission, Board of Supervisors, Planning Department, Building Inspector's Office
Implementation Schedule:		Short term
Status: No action taken – lack of staff resources. The County may investigate zoning or building code changes to address this.		

Lunenburg County Mitigation Action 5	Identify and clear fuel loads evented by downed trees.	
Category:		Property Protection
Hazard(s) Addressed:		Multiple
Priority (High, Moderate, Low):		Moderate
Estimated Cost:		If done by fire departments, minimal or none
Potential Funding Sources:		N/A if done by fire departments
Lead Agency/Department Responsible:		County Administration, possibly with local fire departments/ Virginia Department of Forestry
Implementation Schedule:		Dependant on availability of funding
Status: No action taken – lack of staff resources. The County may investigate working with the Virginia Department of Forestry to address this.		

Lunenburg County Mitigation Action 6	Develop/update water management/emergency response plan.	
Category:		Emergency Services, Prevention
Hazard(s) Addressed:		Drought
Priority (High, Moderate, Low):		High/Moderate
Estimated Cost:		Cost of planning
Potential Funding Sources:		If any significant cost, DEQ planning funds with local match (as required)
Lead Agency/Department Responsible:		County Administration/Planning Department
Implementation Schedule:		Dependant on availability of funding
Status: Underway, as par	rt of regional Plan (v	vith help from CRC)

Lunenburg County Mitigation Action 7	Establish a "hazard awareness week" in coordination with the media to promote hazard awareness (seasonal).	
Category:		Public Education and Outreach
Hazard(s) Addressed:		Multiple
Priority (High, Moderate, Low):		Moderate
Estimated Cost:		None
Potential Funding Sources:		N/A
Lead Agency/Department Responsible:		County Administration/Planning Department, local VDEM office
Implementation Schedule:		Short term
Status: Ongoing. The County participates in Tornado Preparedness Day each March and an earthquake drill each October.		

Lunenburg County Mitigation Action 8	Review all permits for new development and substantial improvements for compliance with the County'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:		County Planning Department/Building Inspector's Office
Implementation Schedule:		Short/near term

Status: Ongoing – enforced through the County's Zoning Ordinance (has a section on flood hazard areas). Additionally, the County is participating in a Community Coordination and Outreach webinar with FEMA June 26, 2023 to discuss the new preliminary Flood Insurance Study and Flood Insurance Rate Maps.

Town of Kenbridge

Kenbridge Mitigation Action 1	Develop plan to better control storm water drainage and inflow into sewer lines that constantly cause flooding problems to the Town's wastewater treatment plant.	
Category:		Prevention
Hazard(s) Addressed:		Flood
Priority (High, Moderate, Low):		High
Estimated Cost:		Planning plus any required construction
Potential Funding Sources:		BRIC, HMGP (with local matching funds), USDA RD Community Facilities program
Lead Agency/Department Responsible:		Town staff
Implementation Schedule:		Dependant on availability of funding
Status: No action taken – lack of funding/staff resources		

Kenbridge Mitigation Action 2	Continue to track and identify impacts from severe weather events to determine if storm water flooding occurs and, if so, assist appropriate agencies in determining appropriate actions including possible FIRM development.	
Category:		Prevention/Property Protection
Hazard(s) Addressed:		Flood
Priority (High, Moderate, Low):		High
Estimated Cost:		Minimal – work done by Town staff
Potential Funding Sources:		N/A
Lead Agency/Department Responsible:		Town staff
Implementation Schedule:		Short term
Status: Ongoing		

Town of Victoria

Victoria Mitigation Action 1	Install/replace storm water drainage system to prevent flooding of houses/buildings	
Category:		Prevention/Property Protection
Hazard(s) Addressed:		Flood
Priority (High, Moderate, Low):		High
Estimated Cost:		Depends on size of project and areas to be served – could range from Approx. \$100,000 to \$500,000
Potential Funding Sources:		BRIC, HMGP (with local matching funds)
Lead Agency/Department Responsible:		Town staff
Implementation Schedule:		Dependant on availability of funding
Status: No action taken – awaiting funding		g

Victoria Mitigation Action 2	Continue to track and identify impacts from severe weather events to determine if storm water flooding occurs and, if so, assist appropriate agencies in determining appropriate actions including possible FIRM development.	
Category:		Prevention/Property Protection
Hazard(s) Addressed:		Flood
Priority (High, Moderate, Low):		High
Estimated Cost:		Minimal – work done by Town staff
Potential Funding Sources:		N/A
Lead Agency/Department Responsible:		Town staff
Implementation Schedule:		Short term
Status: Ongoing		

Victoria Mitigation Action 3	Develop plan to better control storm water drainage and inflow into sewer lines that constantly cause flooding problems to the Town's wastewater treatment plant.			
Category:		Prevention		
Hazard(s) Addressed:		Flood		
Priority (High, Moderate, Low):		High		
Estimated Cost:		Planning plus any required construction		
Potential Funding Sources:		BRIC, HMGP (with local matching funds), USDA RD Community Facilities program		
Lead Agency/Department Responsible:		Town staff		
Implementation Schedule:		Dependent on availability of funding		
Status: No action taken – seeking funding to implement				

Mitigation actions completed per previous Plan updates:

- Purchase generators for critical facilities and shelter to provide emergency power during a blackout (i.e. medical centers) – Completed per 2018 Plan Update.
- Implement community early warning systems designed to notify the general public during weather related emergencies – Completed per the 2018 Plan Update.

NOTE: The Town of Victoria has two mitigation actions to address flooding. Lunenburg County and the Town of Kenbridge 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.

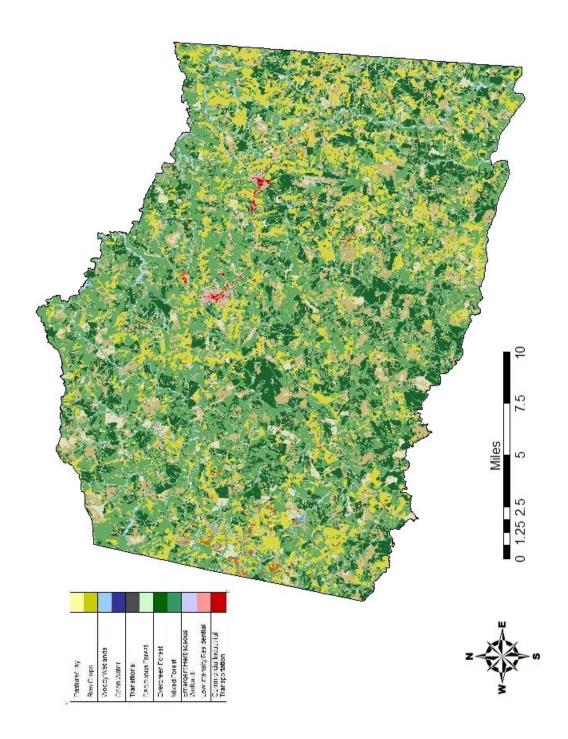
Building Permit Data – Lunenburg County

Year	Residential Permits Issued	Commercial Permits Issued
2004	105	4
2005	112	4
2006	108	5
2007	93	3
2008	75	4
2009	64	3
2010	189	16
2011	151	7
2012	131	17
2013	124	11
2014	121	14
2015	138	12
2016	165	13
2017	121	14
2018	116	6
2019	154	11
2020	153	3
2021	140	11

NOTE: Building permits for the Towns of Kenbridge and Victoria are handled through the Lunenburg County Building Inspector's Office.

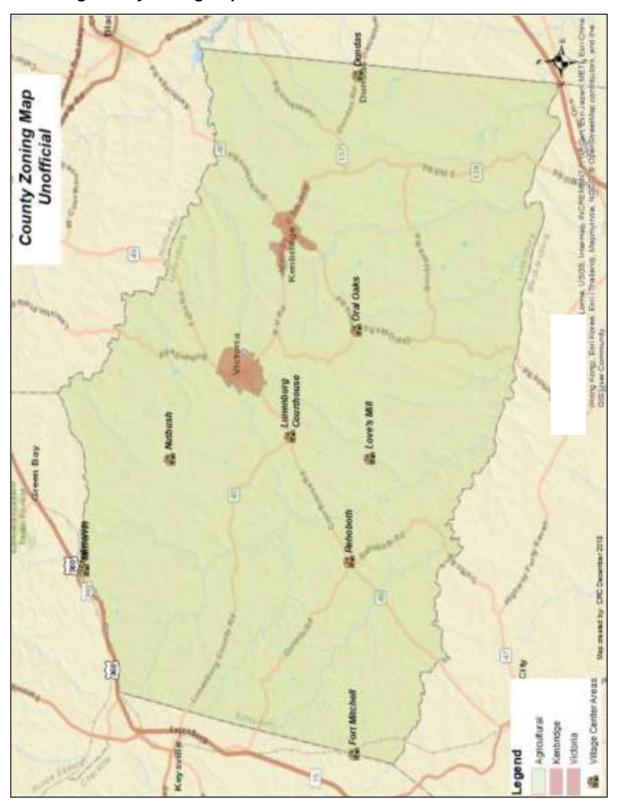
Lunenburg County does not prohibit building construction in flood hazard areas; however, the County does have strict requirements regarding paperwork submission for anyone wishing to obtain a building permit in such areas. The Lunenburg County Building Inspector, Jamie Tuck, has advised that among the documents they require are engineered plans for any proposed building. Mr. Tuck further advised that his office receives one request approximately every 2-3 years for a permit to build in a flood hazard area. However, he also advised that in every case, the applicant has opted to build outside the flood area once they learned what was required to obtain a building permit. County staff have not issued any building permits for construction in flood prone areas since 2013, indicating no increase in development for these areas.

Lunenburg County Land Use Cover Map



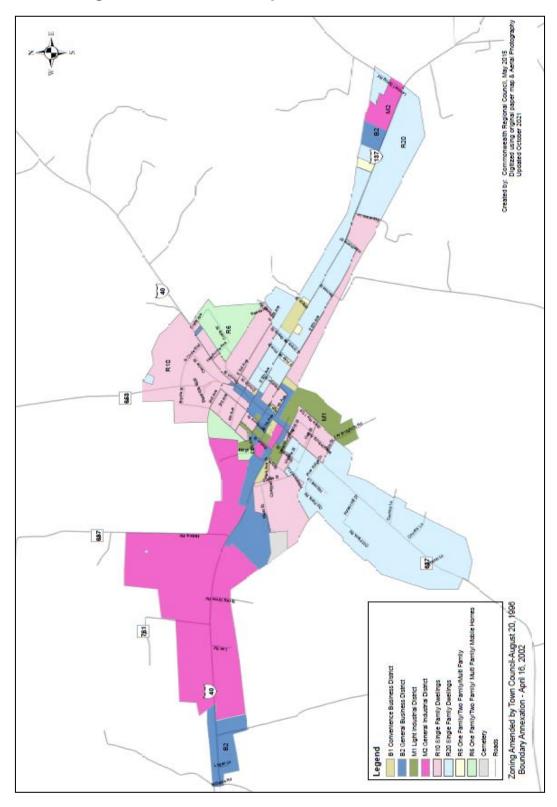
Map created by CRC - October 2015 Source: 2011 National Land Use Cover Dataset

Lunenburg County Zoning Map



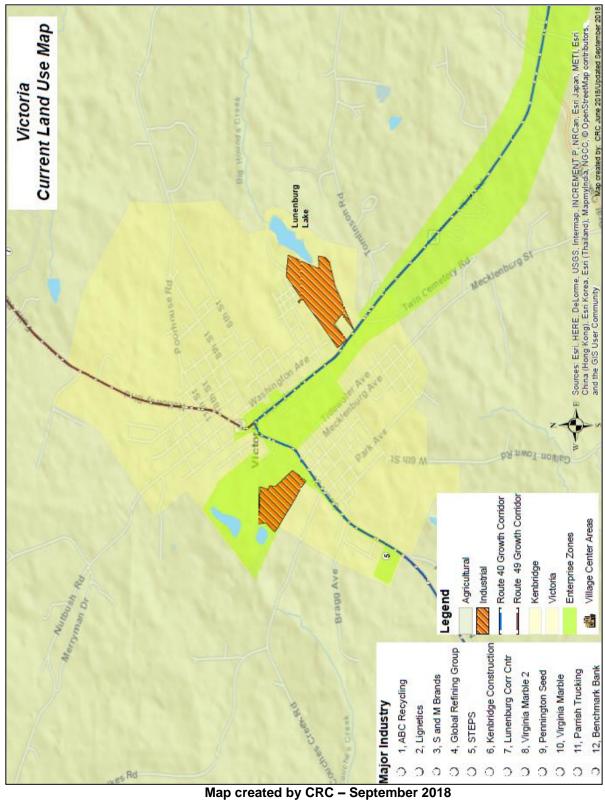
Source: Lunenburg-Kenbridge-Victoria Joint Comprehensive Plan, 2019-2024

Town of Kenbridge Future Land Use Map

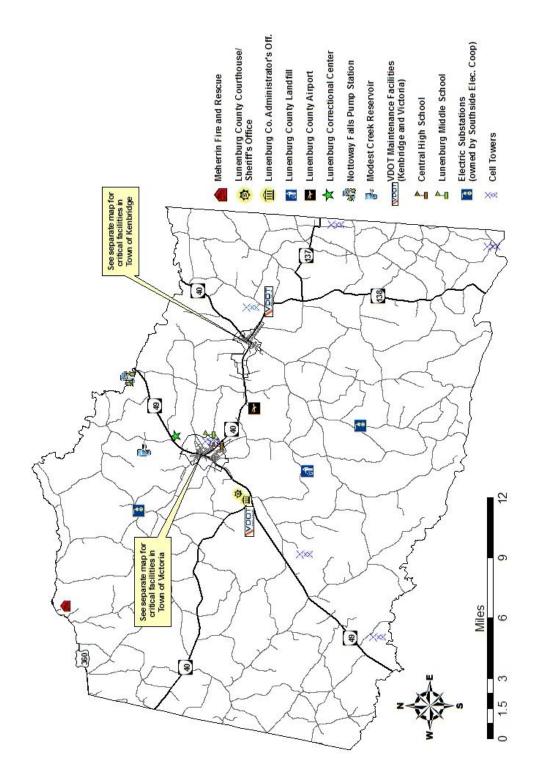


Map created by CRC - October 2021

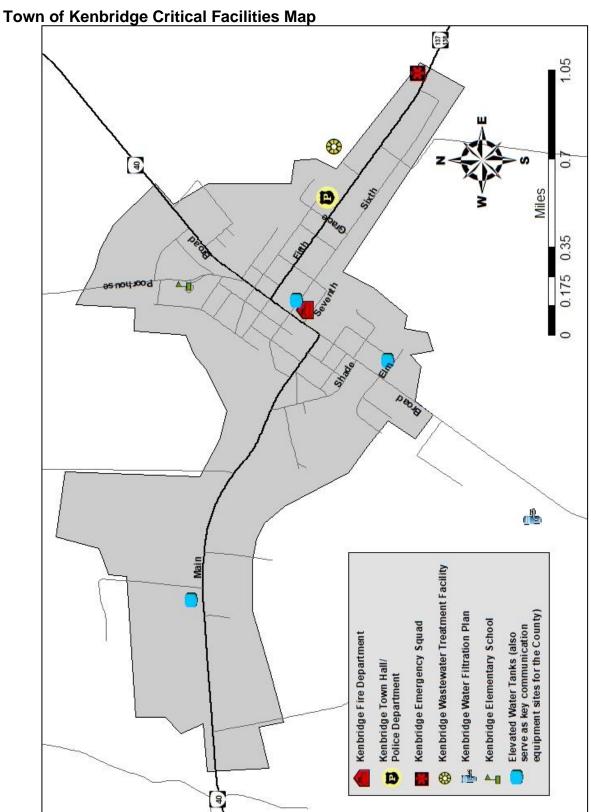
Town of Victoria Land Use Map



Lunenburg County Critical Facilities Map



Map created by CRC – February 2011 (updated June 2016)
Source: Lunenburg County



Map created by CRC – June 2016 (updated September 2022)
Source: Town of Kenbridge

Town of Victoria Critical Facilities Map Victoria Fire and Rescue Victoria Police Department Lunenburg Lake Reservoir Victoria Water Filtration Plant Victoria Wastewater Treatment Facilities (East/West) Victoria Elementary School Electric Substation (owned by Dominion Virginia Power) Elevated Water Tanks (also serve as key communication equipment sites for the County) Eighth B Miles 0.3 0.9 0.6

Map created by CRC – February 2011 (updated June 2016) Source: Town of Victoria

NFIP Survey Results

The County and its Towns were asked to review their previous responses to this survey as part of the Plan update process. Staff and officials from the County and both towns advised that there are no changes.

NATIONAL FLOOD INSURANCE PROGRAM (NFIP) SURVEY

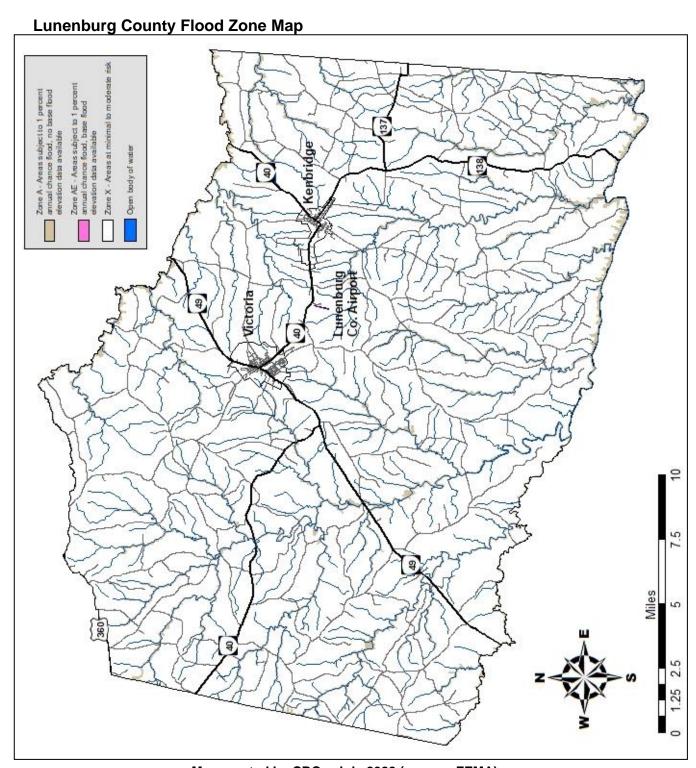
MUNICIPALITY: <u>LUNENBURG COUNTY, TOWNS OF KENBRIDGE AND VICTORIA</u>

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	Available at County and Town Government Offices
b. Has the municipality adopted the most current DFIRM/FIRM and FIS?	State the date of adoption, if approved.	no	
c. Does the municipality support request for map updates?	If yes, state how.	no	
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	No revisions have been necessary.
e. Does the municipality provide assistance with local floodplain determinations?	If yes, specify how.	yes	Case by case basis as very little of our county is in the flood plai
f. Does the municipality maintain a record of approved Letters of Map Change?	If yes, specify the responsible office.	no	To my knowledge we have not received revisions

. Floodplain management			
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	
(1) Does the municipality issue permits for all proposed development in the Special Flood Hazard Areas (SFHAs)?	If yes, specify the office responsible.	no	
(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	Requesting and confirming all data for compliance.
(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	Requesting and confirming all data for compliance.
(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	Information is obtained on case by case basis. To date we have no construction in Flood Plain.
 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	If necessary, permit holder would be required to pay for third party testing to ensure compliance.

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

3. FLOOD INSURANCE			
Requirement	Recommended Action	Yes/No	Соттенну
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	



Map created by CRC – July 2022 (source: FEMA)

