

# Appendix A Plan Review Tool

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## LOCAL MITIGATION PLAN REVIEW TOOL

The *Local Mitigation Plan Review Tool* demonstrates how the Local Mitigation Plan meets the regulation in 44 CFR §201.6 and offers States and FEMA Mitigation Planners an opportunity to provide feedback to the community.

- The Regulation Checklist provides a summary of FEMA’s evaluation of whether the Plan has addressed all requirements.
- The Plan Assessment identifies the plan’s strengths as well as documents areas for future improvement.
- The Multi-jurisdiction Summary Sheet is an optional worksheet that can be used to document how each jurisdiction met the requirements of the each Element of the Plan (Planning Process; Hazard Identification and Risk Assessment; Mitigation Strategy; Plan Review, Evaluation, and Implementation; and Plan Adoption).

The FEMA Mitigation Planner must reference this *Local Mitigation Plan Review Guide* when completing the *Local Mitigation Plan Review Tool*.

<b>Jurisdiction:</b> Wake County, NC	<b>Title of Plan:</b> Wake County Multi-Jurisdictional Hazard Mitigation Plan	<b>Date of Plan:</b> July 2019
<b>Local Point of Contact:</b> David Stroud	<b>Address:</b> 4021 Stirrup Creek Drive, Suite 100 Durham, NC 27703	
<b>Title:</b>		
<b>Agency:</b>		
<b>Phone Number:</b> 919-856-6485	<b>E-Mail:</b> David.stroud@woodplc.com	

<b>State Reviewer:</b> John Mello	<b>Title:</b> Hazard Mitigation Planner	<b>Date:</b> 7/15/2019 7/31/2019
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<b>FEMA Reviewer:</b> Edwardine S. Marrone Darlene Booker	<b>Title:</b> HM Program Analyst Hazard Mitigation Program Analyst	August 27, 2019 October 8, 2019
<b>Date Received in FEMA Region IV</b>	August 12, 2019	
<b>Plan Not Approved</b>		
<b>Plan Approvable Pending Adoption</b>	10/16/2019	
<b>Plan Approved</b>	December 3, 2019	

✓ Denotes FEMA Reviewer concurs with State Reviewers notations.

**SECTION 1:  
REGULATION CHECKLIST**

**INSTRUCTIONS:** The Regulation Checklist must be completed by FEMA. The purpose of the Checklist is to identify the location of relevant or applicable content in the Plan by Element/sub-element and to determine if each requirement has been ‘Met’ or ‘Not Met.’ The ‘Required Revisions’ summary at the bottom of each Element must be completed by FEMA to provide a clear explanation of the revisions that are required for plan approval. Required revisions must be explained for each plan sub-element that is ‘Not Met.’ Sub-elements should be referenced in each summary by using the appropriate numbers (A1, B3, etc.), where applicable. Requirements for each Element and sub-element are described in detail in this *Plan Review Guide* in Section 4, Regulation Checklist.

<b>1. REGULATION CHECKLIST</b>		<b>Location in Plan</b> (section and/or page number)	<b>Met</b>	<b>Not Met</b>
<b>Regulation (44 CFR 201.6 Local Mitigation Plans)</b>				
<b>ELEMENT A. PLANNING PROCESS</b>				
A1. Does the Plan document the planning process, including how it was prepared and who was involved in the process for each jurisdiction? (Requirement §201.6(c)(1))	Section 2 (p. 4-23)✓ Section 1, p2	X		
A2. Does the Plan document an opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, agencies that have the authority to regulate development as well as other interests to be involved in the planning process? (Requirement §201.6(b)(2))	Section 2 (p. 7-8, 14); Appendix B (p.B.46-B.47)✓ P10-11	X		
A3. Does the Plan document how the public was involved in the planning process during the drafting stage? (Requirement §201.6(b)(1))	Section 2 (p. 13-14); Appendix B (p.B.24-B.45)✓ Section 2, p10	X		
A4. Does the Plan describe the review and incorporation of existing plans, studies, reports, and technical information? (Requirement §201.6(b)(3))	Section 2 (p. 7-8)✓ P257	X		
A5. Is there discussion of how the community(ies) will continue public participation in the plan maintenance process? (Requirement §201.6(c)(4)(iii))	Section 8 (p. 260)✓	X		
A6. Is there a description of the method and schedule for keeping the plan current (monitoring, evaluating and updating the mitigation plan within a 5-year cycle)? (Requirement §201.6(c)(4)(i))	Section 8 (p. 256-260)✓	X		
<b>ELEMENT A: REQUIRED REVISIONS</b>				
NCEM has reviewed Elements A1, A2, A3, A4, A5, A6 and the plan appears to meet all Planning Process requirements..				
<b>ELEMENT B. HAZARD IDENTIFICATION AND RISK ASSESSMENT</b>				

<b>1. REGULATION CHECKLIST</b>			
<b>Regulation</b> (44 CFR 201.6 Local Mitigation Plans)	<b>Location in Plan</b> (section and/or page number)	<b>Met</b>	<b>Not Met</b>
B1. Does the Plan include a description of the type, location, and extent of all natural hazards that can affect each jurisdiction(s)? (Requirement §201.6(c)(2)(i))	Section 4.5 (p. 61-209; Hazard Description, Location, Extent, Hazard Summary by Jurisdiction), Annex A-M ✓	X	
B2. Does the Plan include information on previous occurrences of hazard events and on the probability of future hazard events for each jurisdiction? (Requirement §201.6(c)(2)(i))	Section 4.5 (p. 61-209; Past Occurrences, Probability of Future Occurrence, Hazard Summary by Jurisdiction), ✓	X	
B3. Is there a description of each identified hazard's impact on the community as well as an overall summary of the community's vulnerability for each jurisdiction? (Requirement §201.6(c)(2)(ii))	Section 4.5 (p. 61-209; Vulnerability Assessment, Hazard Summary by Jurisdiction), Annex A-M ✓ Pp 33-40, overall impact P 48	X	
B4. Does the Plan address NFIP insured structures within the jurisdiction that have been repetitively damaged by floods? (Requirement §201.6(c)(2)(ii))	Section 4.5.5 (p.113) ✓	X	
<b>ELEMENT B: REQUIRED REVISIONS</b>			
NCEM has reviewed Elements B1, B2, B3, B4 and the plan appears to meet all Hazard Identification and Risk Assessment requirements.			
<b>ELEMENT C. MITIGATION STRATEGY</b>			
C1. Does the plan document each jurisdiction's existing authorities, policies, programs and resources and its ability to expand on and improve these existing policies and programs? (Requirement §201.6(c)(3))	Section 5 (p. 210-225) ✓	X	
C2. Does the Plan address each jurisdiction's participation in the NFIP and continued compliance with NFIP requirements, as appropriate? (Requirement §201.6(c)(3)(ii))	Section 5 (p. 216-217) P108, 217	X	
C3. Does the Plan include goals to reduce/avoid long-term vulnerabilities to the identified hazards? (Requirement §201.6(c)(3)(i))	Section 6 (p.226-228) ✓	X	
C4. Does the Plan identify and analyze a comprehensive range of specific mitigation actions and projects for each jurisdiction being considered to reduce the effects of hazards, with emphasis on new and existing buildings and infrastructure? (Requirement §201.6(c)(3)(ii))	Section 6 (p. 229-230), Section 7 (p. 231-255) ✓	X	
C5. Does the Plan contain an action plan that describes how the actions identified will be prioritized (including cost benefit review), implemented, and administered by each jurisdiction? (Requirement §201.6(c)(3)(iv)); (Requirement §201.6(c)(3)(iii))	Section 6 (p. 229-230), Section 7 (p. 231-255) ✓	X	

<b>1. REGULATION CHECKLIST</b>		<b>Location in Plan</b> (section and/or page number)	<b>Met</b>	<b>Not Met</b>
<b>Regulation</b> (44 CFR 201.6 Local Mitigation Plans)				
C6. Does the Plan describe a process by which local governments will integrate the requirements of the mitigation plan into other planning mechanisms, such as comprehensive or capital improvement plans, when appropriate? (Requirement §201.6(c)(4)(ii))	Section 8 (p.256-257)✓	X		
<b>ELEMENT C: REQUIRED REVISIONS</b>				
Element C1-Page 216, This is a simple fix. CRS statement at bottom of page is inconsistent with Table 5.1 checkmarks. <b>Corrected</b>				
Mitigation Action Tables:				
C4- <b>Raleigh-PP-2</b> Status Comments/Explanation-Change "relocation" to "elevation" to match the Description or change description. <b>Corrected</b>				
C4- <b>Raleigh-ES-6</b> should be classified as a Property Protection Action #. This would provide an additional "all hazard" action. ES actions are considered "non-mitigation actions", See page 24 in the "Local Mitigation Plan Review Guide". <b>Corrected</b>				
C4- <b>Holly Springs-ES-1</b> should be classified as a Property Protection Action #. This would provide an additional "all hazard" action. ES actions are considered "non-mitigation actions", See page 24 in the "Local Mitigation Plan Review Guide". <b>Corrected</b>				
C4- <b>Holly Springs-ES-6</b> should be classified as a Prevention Action #. This would provide an additional "all hazard" action. ES actions are considered "non-mitigation actions", See page 24 in the "Local Mitigation Plan Review Guide". <b>Corrected</b>				
C4- <b>Holly Springs-ES-8</b> should be classified as a Property Protection Action #. This would provide an additional "all hazard" action. ES actions are considered "non-mitigation actions", See page 24 in the "Local Mitigation Plan Review Guide". <b>Corrected</b>				
C4- <b>Holly Springs-ES-9</b> should be classified as a Property Protection Action #. This would provide an additional "all hazard" action. ES actions are considered "non-mitigation actions", See page 24 in the "Local Mitigation Plan Review Guide". <b>Corrected</b>				
C4- <b>Wake Forest-ES-1</b> should be classified as a Property Protection Action #. This would provide an additional "all hazard" action. ES actions are considered "non-mitigation actions", See page 24 in the "Local Mitigation Plan Review Guide". <b>Corrected</b>				
C4- <b>Wake Forest-ES-3</b> should be classified as a Property Protection Action #. This would provide an additional "all hazard" action. ES actions are considered "non-mitigation actions", See page 24 in the "Local Mitigation Plan Review Guide". <b>Corrected</b>				
C4- <b>Zebulon</b> -Need to add at least 1 additional "all hazard" action or ensure there are two or more actions for each hazard. <b>Corrected</b>				
<b>ELEMENT D. PLAN REVIEW, EVALUATION, AND IMPLEMENTATION</b> (applicable to plan updates only)				
D1. Was the plan revised to reflect changes in development? (Requirement §201.6(d)(3))	Section 3 (p. 24-45), Section 4 (p. 54-209; Asset Inventory, Vulnerability Assessment), Annex A-M✓	X		
D2. Was the plan revised to reflect progress in local mitigation efforts? (Requirement §201.6(d)(3))	Section 2 (p. 14-23), Section 5 (p.210-225)✓	X		

<b>1. REGULATION CHECKLIST</b>		<b>Location in Plan</b> (section and/or page number)	<b>Met</b>	<b>Not Met</b>
<b>Regulation</b> (44 CFR 201.6 Local Mitigation Plans)				
D3. Was the plan revised to reflect changes in priorities? (Requirement §201.6(d)(3))	Section 6 (p. 229-230), Section 7 (p. 231-255)✓	X		
<b><u>ELEMENT D: REQUIRED REVISIONS</u></b> Good-D1, D2, D3.				
<b>ELEMENT E. PLAN ADOPTION</b>				
E1. Does the Plan include documentation that the plan has been formally adopted by the governing body of the jurisdiction requesting approval? (Requirement §201.6(c)(5))	Plan will be adopted pending APA letter from FEMA; Adoption resolutions will be added to Section 9	X		
E2. For multi-jurisdictional plans, has each jurisdiction requesting approval of the plan documented formal plan adoption? (Requirement §201.6(c)(5))	Plan will be adopted pending APA letter from FEMA; Adoption resolutions will be added to Section 9	X		
<b><u>ELEMENT E: REQUIRED REVISIONS</u></b> <b><u>FEMA REQUIRED REVISIONS:</u></b> Adoption documentation has not been provided by any of the participating jurisdictions.  <b>E1:</b> The plan must include documentation of plan adoption, usually a resolution by the governing body or other authority. <b>E2:</b> Each jurisdiction that is included in the plan must have its governing body adopt the plan prior to FEMA approval, even when a regional agency has the authority to prepare such plans. At least one participating jurisdiction must formally adopt the plan within one calendar year of FEMA’s designation of the plan as “Approvable Pending Adoption.”  FEMA recommends that all participating jurisdictions coordinate the adoption process as soon as the plan has received APA status to ensure that all participants are covered by a plan for the full five years.  <i>For additional information, please see Element E, Plan Adoption, in the “Local Mitigation Plan Review Guide”, October 1, 2011, Pages 28-29 and Task 8 of the Local Mitigation Planning Handbook, March 2013.</i>  12/3/19 Wake County and the Towns of Holly Springs, Knightdale, and Wake Forest provided adoption documentation. 1/17/20 The City of Raleigh, and the Towns of Garner, Fuquay-Varina, Cary, Apex, Zebulon, Wendell, and Rolesville provided adoption documentation. 2/7/20 The Town of Morrisville provided adoption documentation.				
<b>ELEMENT F. ADDITIONAL STATE REQUIREMENTS (OPTIONAL FOR STATE REVIEWERS ONLY; NOT TO BE COMPLETED BY FEMA)</b>				
F1.				

<b>1. REGULATION CHECKLIST</b>		<b>Location in Plan</b> (section and/or page number)	<b>Met</b>	<b>Not Met</b>
<b>Regulation (44 CFR 201.6 Local Mitigation Plans)</b>				
F2.				
<b><u>ELEMENT F: REQUIRED REVISIONS</u></b>				

## SECTION 2: PLAN ASSESSMENT

**INSTRUCTIONS:** The purpose of the Plan Assessment is to offer the local community more comprehensive feedback to the community on the quality and utility of the plan in a narrative format. The audience for the Plan Assessment is not only the plan developer/local community planner, but also elected officials, local departments and agencies, and others involved in implementing the Local Mitigation Plan. The Plan Assessment must be completed by FEMA. The Assessment is an opportunity for FEMA to provide feedback and information to the community on: 1) suggested improvements to the Plan; 2) specific sections in the Plan where the community has gone above and beyond minimum requirements; 3) recommendations for plan implementation; and 4) ongoing partnership(s) and information on other FEMA programs, specifically RiskMAP and Hazard Mitigation Assistance programs. The Plan Assessment is divided into two sections:

1. Plan Strengths and Opportunities for Improvement
2. Resources for Implementing Your Approved Plan

***Plan Strengths and Opportunities for Improvement*** is organized according to the plan Elements listed in the Regulation Checklist. Each Element includes a series of italicized bulleted items that are suggested topics for consideration while evaluating plans, but it is not intended to be a comprehensive list. FEMA Mitigation Planners are not required to answer each bullet item, and should use them as a guide to paraphrase their own written assessment (2-3 sentences) of each Element.

The Plan Assessment must not reiterate the required revisions from the Regulation Checklist or be regulatory in nature, and should be open-ended and to provide the community with suggestions for improvements or recommended revisions. The recommended revisions are suggestions for improvement and are not required to be made for the Plan to meet Federal regulatory requirements. The italicized text should be deleted once FEMA has added comments regarding strengths of the plan and potential improvements for future plan revisions. It is recommended that the Plan Assessment be a short synopsis of the overall strengths and weaknesses of the Plan (no longer than two pages), rather than a complete recap section by section.

***Resources for Implementing Your Approved Plan*** provides a place for FEMA to offer information, data sources and general suggestions on the overall plan implementation and maintenance process. Information on other possible sources of assistance including, but not limited to, existing publications, grant funding or training opportunities, can be provided. States may add state and local resources, if available.

## A. Plan Strengths and Opportunities for Improvement

This section provides a discussion of the strengths of the plan document and identifies areas where these could be improved beyond minimum requirements.

### Element A: Planning Process

#### Plan Strengths

- The documented vision statement is; “Wake County will build upon the success of its past efforts to become more resilient and adaptable to hazards, embrace the need to manage growth with sustainable practices, and make intentional, coordinated decisions that maximize long-term and shared benefits for all.”
- Resilient & Adaptable, Sustainable, Intentional, and Coordinated are the key principles that reinforce the vision.
- Several citizen stakeholders participated representing each jurisdiction in the HMPC along with representatives from city/county government offices, and RDU.
- A Stakeholder List is provided Non-Profit Organizations, Educational Institutions, Surrounding Municipalities, and Business Community participation.
- The participating jurisdictions of this plan are looking to utilize it in various ways to make it a meaningful plan. The planning process includes reviewing local plans and policies to assist with plan development and the advancement of effective mitigation strategies.
- The capability assessment indicates the participating jurisdictions have majority of the plans, ordinances and programs. Several are consistently under the county plan and there are a few that do not have any indication of the status of a plan. For example, there are limited number of Evacuation Plans, Disaster Recovery Plans, Post-Disaster Redevelopment Ordinances, Community Wildfire Protection Plans. No participants in the Community Rating System.

#### Opportunities for Improvement

Page #23 is duplicated; last page of section 2 is page 23 and the first page of section 3 is also page 23.

**The HMP Committee needs to review the document for correctness and completeness prior to submission for formal review by NCEM and FEMA.**

Capability Assessments Ratings of Limited, Moderate, and High on page 223 are not defined. In future updates, provide definitions for all ratings, ranking, scoring or any other method used for assessment purposes. This would provide a clearer picture of the intention of any ratings used in the plan.

### Element B: Hazard Identification and Risk Assessment

#### Plan Strengths

- The plan documents the hazards that are considered high or moderate to focus mitigation efforts. Hazards that are considered low (earthquake and landslides) were evaluated, however, there may not be any mitigation strategies developed. Expressing this provides the reader with an awareness of the intent of the mitigation focus.
- The plan draws from each of the community’s plans to document the community’s sustained efforts to incorporate hazard mitigation principles and practices into routine government activities and functions thus establishing a successful and sustainable hazard mitigation program.

### Element C: Mitigation Strategy

#### Plan Strengths

- The proposed mitigation actions are specific and actionable.
- It is evident that actions, including those carried over from the previous plan, were evaluated and re-prioritized.
- Stakeholder and public input are evident in the list of mitigation actions. Connecting the planning process to the mitigation strategies.

#### **Element D: Plan Update, Evaluation, and Implementation (*Plan Updates Only*)**

##### **Plan Strengths**

- Table 2.9 provides a status for completed and deleted actions from the 2015 Wake County HMP, which includes status comments and/or explanations, as information is available.
- The update, evaluation, and implementation process are documented.

## B. Resources for Implementing Your Approved Plan

- **Local Mitigation Planning Handbook**  
This Handbook provides guidance to local governments on developing or updating hazard mitigation plans to meet the requirements under the Code of Federal Regulations (CFR) Title 44 – Emergency Management and Assistance §201.6.  
Use the Local Plan Guide and Handbook in tandem to understand technical requirements  
<http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=7209>
- **Integrating Mitigation Strategies with Local Planning**  
This resource provides practical guidance on how to incorporate risk reduction strategies into existing local plans, policies, codes, and programs that guide community development or redevelopment patterns.  
<http://www.fema.gov/library/viewRecord.do?id=7130>
- **Mitigation Ideas**  
Communities can use this resource to identify and evaluate a range of potential mitigation actions for reducing risk to natural hazards and disasters.  
<http://www.fema.gov/media-library/assets/documents/30627?id=6938>
- **Mitigation Planning and the Community Rating System Bulletin**  
This Bulletin makes it easier to align each program’s process and requirements. It is organized around the elements of a local hazard mitigation plan, lining up the CRS Floodplain Management Planning steps with the local planning elements.  
[https://www.fema.gov/media-library-data/1539273619453-7486032b976d6862b0af4dd7682a42e8/Mitigation\\_Planning\\_and\\_CRS\\_Final\\_508\\_\(10-9-18\).pdf](https://www.fema.gov/media-library-data/1539273619453-7486032b976d6862b0af4dd7682a42e8/Mitigation_Planning_and_CRS_Final_508_(10-9-18).pdf)

**SECTION 3:  
MULTI-JURISDICTION SUMMARY SHEET (OPTIONAL)**

**INSTRUCTIONS:** For multi-jurisdictional plans, a Multi-jurisdiction Summary Spreadsheet may be completed by listing each participating jurisdiction, which required Elements for each jurisdiction were ‘Met’ or ‘Not Met,’ and when the adoption resolutions were received. This Summary Sheet does not imply that a mini-plan be developed for each jurisdiction; it should be used as an optional worksheet to ensure that each jurisdiction participating in the Plan has been documented and has met the requirements for those Elements (A through E).

MULTI-JURISDICTION SUMMARY SHEET												
#	Jurisdiction Name	Jurisdiction Type (city/borough/ township/ village, etc.)	Plan POC	Mailing Address	Email	Phone	Requirements Met (Y/N)					
							A. Planning Process	B. Hazard Identification & Risk Assessment	C. Mitigation Strategy	D. Plan Review, Evaluation & Implementation	E. Plan Adoption	F. State Requirements
1	Wake County	County					Y	Y	Y	Y	Y	
2	Raleigh	City					Y	Y	Y	Y	Y	
3	Apex	Town					Y	Y	Y	Y	Y	
4	Cary	Town					Y	Y	Y	Y	Y	
5	Fuquay-Varina	Town					Y	Y	Y	Y	Y	
6	Garner	Town					Y	Y	Y	Y	Y	
7	Holly Springs	Town					Y	Y	Y	Y	Y	
8	Knightdale	Town					Y	Y	Y	Y	Y	
9	Morrisville	Town					Y	Y	Y	Y	Y	

**MULTI-JURISDICTION SUMMARY SHEET**

#	Jurisdiction Name	Jurisdiction Type (city/borough/ township/ village, etc.)	Plan POC	Mailing Address	Email	Phone	Requirements Met (Y/N)					
							A. Planning Process	B. Hazard Identification & Risk Assessment	C. Mitigation Strategy	D. Plan Review, Evaluation & Implementation	E. Plan Adoption	F. State Require- ments
10	Rolesville	Town					Y	Y	Y	Y	Y	
11	Wake Forest	Town					Y	Y	Y	Y	Y	
12	Wendell	Town					Y	Y	Y	Y	Y	
13	Zebulon	Town					Y	Y	Y	Y	Y	

