#### B. Local Mitigation Plan Review Crosswalk

#### 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 <u>Regulation Checklist</u> provides a summary of FEMA's evaluation of whether the Plan has addressed all requirements.
- The <u>Plan Assessment</u> 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*.

Jurisdiction: Berkeley and	Title of Plan2017	7	Date of Plan: October 2016	
Morgan County WV	Multijurisdiction	nal Hazard		
	Mitigation Plan	Update for		
	Berkeley and Mo	organ Counties		
Local Point of Contact: Rachel S	inavely	Address:	·	
		400 W Stephen Street #301		
Title: Project Manager		Martinsburg, WV 25401		
Agency: Eastern Panhandle Reg	ional Planning and			
Development Council				
Phone Number: 304/263-1743		E-Mail: rsnavley@	Pregion9wv.com	

State Reviewer:	Title: Mitigation Planner	Date: 11/10/2016
Lirerose Beach		

FEMA Reviewer:	Title: Community Planning Lead	Date: January 21, 2017
Mari Radford	Reservist, HM Community	February 23, 2017
Cathy Mallard	Planner (4273P-WV	
Note: Cathy's comments in blue text.		
Date Received in FEMA Region (insert #)	December 19, 2016	
Plan Not Approved	Some edits required	
Plan Approvable Pending Adoption		
Plan Approved		

## 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.

1. REGULATION CHECKLIST	Location in Plan		Not
Regulation (44 CFR 201.6 Local Mitigation Plans)	(section and/or page number)	Met	Met
ELEMENT A. PLANNING PROCESS			
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))		х	
A2. Does the Plan document an opportunity for <b>neighboring communities</b> , local and <b>regional agencies</b> 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))		х	
A3. Does the Plan document how the public was involved in the planning process during the drafting stage? (Requirement §201.6(b)(1))		Х	
A4. Does the Plan describe the review and incorporation of existing plans, studies, reports, and technical information? (Requirement §201.6(b)(3))		Х	
A5. Is there discussion of how the community(ies) will continue public participation in the plan maintenance process? (Requirement §201.6(c)(4)(iii))		Х	
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))		Х	

#### **ELEMENT A: REQUIRED REVISIONS**

Typos were identified and will be shared on our conference call.

Various typos were corrected as identified on the conference call (pgs. 20, 23, 32, 36, 83, 94, 95, 101, 152, 179, 195, 205) Cathy's comments: was not available for conference call, and could not identify the corrected typos.

4.1 Update Process Summary: Paragraph 2 cites the Commonwealth of Pennsylvania Standard Operating Guide. Why? Is this an editing error or a best practice you are citing? Explain or remove.

The Pennsylvania SOG was consulted because no SOG exists for the State of West Virginia. This SOG helped guide the HMP development process, provided a standard framework, and was approved for use by the local West Virginia client. This explanation was added to all references to the SOG (Section 4.1, pg. 35, (also see pg. 24 (Same explanation, no WV SOG), 191 (same explanation, no WV SOG), 222 (same explanation, no WV SOG). Cathy's comments: Recommended Revision (Section 4.1, pg. 35): The plan states the 2017 HMP re-arranged hazard profiled to be compliant with the Pennsylvania SOG. For future updates, in the absence of a West Virginia SOG, recommend first starting with a review of the recent WV State Plan's local hazards impacting the State. Reviewing the WV State Plan does not limit consulting other resource documents. Further, pg. 191, 2nd paragraph, 2nd bullet states "Goals are general guidelines that explain the Commonwealth would like to achieve". Are the participating jurisdictions considered the Commonwealth?

1. REGULATION CHECKLIST	Location in Plan		NI - A
Regulation (44 CFR 201.6 Local Mitigation Plans)	(section and/or page number)	Met	Not Met
ELEMENT B. HAZARD IDENTIFICATION AND RISK ASSESSM	IENT		
B1. Does the Plan include a description of the type, location, and		Х	
extent of all natural hazards that can affect each jurisdiction(s)?			
(Requirement §201.6(c)(2)(i))			
B2. Does the Plan include information on previous occurrences of			
hazard events and on the probability of future hazard events for each		X	
jurisdiction? (Requirement §201.6(c)(2)(i))			
B3. Is there a description of each identified hazard's impact on the		Χ	
community as well as an overall summary of the community's			
vulnerability for each jurisdiction? (Requirement §201.6(c)(2)(ii))			
B4. Does the Plan address NFIP insured structures within the		Χ	
jurisdiction that have been repetitively damaged by floods?			
(Requirement §201.6(c)(2)(ii))			

#### 1. REGULATION CHECKLIST

Location in Plan (section and/or page number)

Met

Not Met

Regulation (44 CFR 201.6 Local Mitigation Plans)

#### **ELEMENT B: REQUIRED REVISIONS**

4.3.1 Natural Hazards: Drought is identified as an issue for personal wells but no analysis of impact was given. Please expand. How many wells are present in the two counties? Is this number growing or is public water service expanding?

This kind of data was not available from the counties. Therefore, wording was added to data collection mitigation actions regarding a well survey. This would allow the counties to collect information about the status of residential drinking water and drought impact in the future (Section 6.4, pg. 206, (Cathy's comments: pg. 206-mitigation action 2B for Berkeley to conduct survey and evaluate water system), 220 (pg. 220- similar mitigation action 46M for Morgan County).

4.3.1 Natural Hazards: Drought Stage IV. Berkeley County Public Water has a Drought Contingency Plan – does Morgan County also? Please address.

Morgan County does not have such a plan, and this explanation was added in the text (Section 4.3.1.2, pg. 49). <u>Cathy comments</u>: pg. 49, indicates Morgan county does not have a Drought Contingency Plan.

4.3.3 Epidemic: Figure 4.3.3-1: Can the table be updated through 2016 (it stops in April).

A figure with data through 2016 was available and added to the document (Section 4.3.3.2, pg. 60). Cathy's comments: Pg. 60 Table 4.3.3-1 includes "Confirmed Outbreak by month of Report on WV 2012-2106".

4.3.3 Epidemic: Past Occurrence: discusses Zika and Lyme disease but not West Nile. It was mentioned in the last plan so it should be addressed in this update.

A discussion of West Nile was added to the section (Section 4.3.3.3, pg. 62). Cathy's comments: pg. 62-West Niles cases updated.

4.3.3-1: Number of Reported Outbreaks only goes to 2014. Can this be updated?

WV DHHR data regarding reported outbreaks only goes through 2014, a reference to this was added to the text (Section 4.3.3.3, pg. 61). Cathy's comments: text updated to include 2015 WV DHHR data (pg. 61 and pg. 62, WVDHHR 2016a). Also, refer to pg. 61, Table 4.3.3-1.

4.3.4 Extreme Temperatures: Table 4.3.4-1 only goes to 2010. Can this be updated through 2016? Give more analysis on trends; where are you seeing increases/decreases?

Table 4.3.4-2 contains data for 2011-2016 and was added to supplement Table 4.3.4-1. Additional analysis was also added in the text (Section 4.3.4.1, pg. 64, 66). Cathy's comments: Table 4.3.4-2-OK, text added on pg. 64 (last paragraph describing the Tables and additional analysis).

4.3.4-3 and 4.3.4-4 Maps should be updated with data through 2016.

Unfortunately, no more recent geospatial data is available that would allow these maps to be updated. <u>Cathy's comments</u>: Recommend for next plan update to include text when recent geospatial data to update maps is not available.

Figure 4.3.4-5 Record High and Low Monthly Temperatures – what year/s does this table refer to?

The figure covers the years 1930-2016, this information was added to the figure title to clarify (Section 4.3.4.3, pg. 72). Cathy's comments: Figure 4.3.4-2 updated along with figure title.

4.3.5 Flood; Past Occurrence refers to the Community Rating System Program (CRS) – Page 83 but does not give current classifications for participating communities: Martinsburg (Class 8), Morgan County (Class 9) and Berkeley County (Class 7). Please add.

Classifications are now listed in the text (Section 4.3.5.3, pg. 86). <u>Cathy's comments</u>: Pg. 86, 5<sup>th</sup> paragraph text includes current CRS for Martinsburg, Morgan County and Berkeley County.

Table 4.3.5-2 County NFIP Policies and Claim Information should include RL and SRL data (REQUIRED). Include analysis of trends and distribution.

Data and analysis regarding RL and SRL properties was added to the section (Section 4.3.5.3, pg. 86-87). Cathy's comments: pgs. 86-86-text added, Tables 4.3.5-2 and 4.3.5-3 updated.

4.3.5.5 Flood Vulnerability Assessment: top of page 86 mentions crop damage/inferior quality post flooding. Can this be legally sold in WV? Check USDA and state regulations.

Additional information regarding flood damaged crops is included in the text. Typically, these crops cannot be sold if the edible part of the crop was impacted by the flood waters (Section 4.3.5.5, pg. 89). <u>Cathy's comments</u>: text added- and quote from Vermont Extension Service regarding fed regs.

4.3.5-5 Page 86 identifies 39 mitigated properties in Berkeley County but none in Morgan. Although FEMA funds may not have been used – do you know if a structure owner has mitigated on their own? Elevations, removals or even some flood proofing (commercial properties only) qualifies as mitigated.

No additional data was available from the counties, but one specific example of mitigation, the Morgan County Courthouse, is now discussed in the text (Section 4.3.5.5, pg. 90). <u>Cathy's comments</u>: text added and Figure 4.3.5.2 photo of rebuilt Morgan County Courthouse.

4.3.6.5 Hail: Future Occurrence: no mention of crop damage from hail. Please include.

Discussion of crop damage was added to the text (Section 4.3.6.5, pg. 93). Cathy's comments: pg. 93, 1st paragraph.

4.3.10-Radon Exposure- why is Pennsylvania data being included? Relevance? Is there a local example that can be used instead?

Additional information was added to tie this Pennsylvania example to conditions in WV (Section 4.3.10. pg.106). Cathy's comments: pg. 106, text added, 1<sup>st</sup> paragraph and last sentence added to include West Virginia Eastern Panhandle. Reasoning for including Pennsylvania not addressed.

4.3.10.5 Radon Vulnerability Assessment – it was mentioned that radon testing could be included in the local code inspections and in building plan permitting. Is this a possible action that was discussed by the communities?

Additional discussion regarding this idea is provided in text (Section 4.3.10.5, pg. 112). Cathy's comments: text added to last paragraph on pg. 112.

- 4.3.11 Thunderstorm, Lightning Strike; 4.3.11.3 Past Occurrence only cites data from 1959 to 2013. Can this be updated? This data was updated through 2015 (Section 4.3.11.3, pg. 114). Cathy's comments: text updated, 1st paragraph
- 4.3.13 Windstorm, Tornado: 4.3.13.3 Past Occurrence analysis is unclear: Hurricane Ivan occurred in 2016 but was included in the 2013 State HM Plan? Clarify.

This was a typo, Hurricane Ivan occurred in 2004 and this was corrected (Section 4.3.13.3, pg. 122). Cathy's comments: 2016 changed to 2004.

4.3.15.5 Windstorm Vulnerability Assessment: 2012 Dam damage losses are cited with no update to 2016. Can a multiplier be used or is better data available? Discuss to tie current relevance to this section. Also the paragraph mentions dams located outside of Berkeley and Morgan Counties that would impact them – but does identify these dams or their impact. Please discuss further.

Data was updated to 2016, but no more recent analysis is available. Additional information about the dam outside of the counties that concerned residents is now included (Section 4.3.15.5, pg. 141). Cathy's comments: pg. 141, last paragraph, text added.

4.3.16 Hazardous Materials Incident: 4.3.16.1: Location and Extent gives 2012 HMP SARA facility numbers. Update to show status in 2016.

More recent data was acquired from the counties and added to the text (Section 4.3.16.1, pg. 142). Cathy's comments: pg. 142, 2<sup>nd</sup> paragraph, last sentence, and facility counts updated.

4.3.16.2 Range of Magnitude: what is the impact on transportation systems? Please discuss.

Discussion on transportation-related hazardous materials incidents was added to the text (Section 4.3.16.3, pg. 148-149). Cathy's comments: added text starting on bottom of page 148 to 1<sup>st</sup> paragraph on page 149.

Table 4.3.16-2 2012 HMP Vulnerable Structures Inventory needs to be updated to 2016. Include updated discussion in vulnerability analysis.

Analysis was updated for 2016, but no more recent analysis is available. Additional discussion was also added (Section 4.3.16.5, pg. 149-150). Cathy's comments: pg. 149, text added last sentence, and pg. 150 Table 4.3.16-2, loss estimate 2017 dollars updated.

4.3.19 Transportation Accidents: 4.3.19.3 Past Occurrence. Table 4.3.19-1 does not show enough data for trend analysis. Update to 2016 and go back further than 2010 (is possible) to show stronger increase/decrease correlation.

A limited amount of data was available prior to 2010 and was added to the table. Additional analysis was also added (Section 4.3.19.3, pg. 166-167). Cathy's comment: pgs. 166-167, Tables 4.3.19-1 for Berkeley and Morgan Counties data from 2004-2015.

4.3.20 Utility Interruption: 4.3.20.2 Range of Magnitude only discusses impact on cold days – what about high temperature days when loss of air conditioning could be equally dangerous?

A discussion on this issue was added to the text (Section 4.3.20.2, pg. 169). Cathy's comments: Sec. 4.3.20.2, pg. 169 "Range of Magnitude" text added, last 2 sentences of 2<sup>nd</sup> paragraph.

1. REGULATION CHECKLIST	Location in Plan		Nick
Regulation (44 CFR 201.6 Local Mitigation Plans)	(section and/or page number)	Met	Not Met
ELEMENT C. MITIGATION STRATEGY			
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))		Х	

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))	Х	
C3. Does the Plan include goals to reduce/avoid long-term vulnerabilities to the identified hazards? (Requirement §201.6(c)(3)(i))	Х	
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))	Х	
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))	Х	
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))	Х	

#### **ELEMENT C: REQUIRED REVISIONS**

5.2.1 Planning and Regulatory Capability: Table 5.2.1-1 NFIP Claims Information includes Substantial Damage Claims data but analysis does not define this term. Include. Also add to first paragraph on the top of page 179 (same section) ..."Hedgesville residents with fewer flood mitigation resources and no ability to purchase flood insurance through the National Flood Insurance Program."

The term Substantial Damage Claims was defined underneath the table and a reference to Hedgesville residents' inability to buy flood insurance through the NFIP was added (Section 5.1, pg. 183, 184). <u>Cathy's comments</u>: Pg. 183, Substantial Damage definition underneath Table 5.2.1-1.Pg. 184, 1<sup>st</sup> paragraph include Hedgesville info.

# ELEMENT D. PLAN REVIEW, EVALUATION, AND IMPLEMENTATION (applicable to plan updates only) D1. Was the plan revised to reflect changes in development? (Requirement §201.6(d)(3)) D2. Was the plan revised to reflect progress in local mitigation efforts? (Requirement §201.6(d)(3)) D3. Was the plan revised to reflect changes in priorities? (Requirement \$ X \$ \$ 201.6(d)(3))

#### **ELEMENT D: REQUIRED REVISIONS**

7. Plan Maintenance: 7.1 Update Process Summary – remove PEMA SOG reference or add language to explain why it is mentioned.

An explanation was added to all references to the SOG (Section 7.1, pg. 222, also see pg. 24, 35, 191). <u>Cathy's comments</u>: Refer to Cathy's comments in Element A.

7.2 Monitoring, Evaluating and Updating the Plan: please include an annual report out to the state and FEMA (capturing the annual plan review). This will help us identify needs for training or other issues.

Added annual report to state/FEMA to list of annual plan maintenance activities (Section 7.2, pg. 222). Cathy's comments: text added "After annual HMP maintenance meetings, LEPCs will insure that annual reports are submitted to the State of WV and FEMA summarizing the annual plan review".

1. REGULATION CHECKLIST	Location in Plan		Not
Regulation (44 CFR 201.6 Local Mitigation Plans)	(section and/or page number)	Met	Not Met
ELEMENT E. PLAN ADOPTION			
E1. Does the Plan include documentation that the plan has been			Х
formally adopted by the governing body of the jurisdiction requesting approval? (Requirement §201.6(c)(5))			
E2. For multi-jurisdictional plans, has each jurisdiction requesting			Х
approval of the plan documented formal plan adoption?			
(Requirement §201.6(c)(5))			
ELEMENT F. ADDITIONAL STATE REQUIREMENTS (OPTION	AL FOR STATE REV	IEWER:	S
ONLY; NOT TO BE COMPLETED BY FEMA)			
F2. Maryland Local Plan Guidance (Although this is not to be		X	
completed by FEMA, is this a WV State Requirement?)			
ELEMENT F: REQUIRED REVISIONS			

# 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**

How does the Plan go above and beyond minimum requirements to document the planning process with respect to:

1. Page 18 (Table 2.3-1) Berkeley and Morgan County Population Estimates indicate a significant (21.8%) portion of the population as 65 and older. This was mentioned in the plan several times and indicates an opportunity to address this specific population with an outreach campaign (that may or may not include digital media) for their specific issues. In particular; flood insurance rates for this demographic tend to be low because home owners have paid off their mortgages and have dropped NFIP coverage.

Additional discussion was included regarding this issue (pg. 18 (<u>Cathy's comments</u>: text added regarding population 65 and older in Berkeley and Morgan Counties), 184 (Text added regarding older residents less likely to have flood insurance), 188 (Cathy: Types of informative brochures for elderly residents).

- 2. Great diversity of invited stakeholders including: academic institutions, transit companies, utilities and the media!
- Recommend finding diverse methods of participation (meetings, surveys, online, etc.)
  to strengthen this group's involvement. Make annual review of plan a scheduled
  meeting and promote participation to ensure engagement for next update.
- Inclusion of environmental groups, business owners and homeowners will help show an open and inclusive public involvement process.
- 3. Page 32 3.4 Public and Stakeholder Participation; discussed two radio show interviews to promote the plan update. Do you know if there was a correlation between increased survey returns and when these shows were broadcast? Would you recommend doing this again? Did it reach a specific demographic in your communities? 140 resident returns is a very good response rate!

The radio shows tended to reach an older demographic. In the future, Region 9 would not rely upon the radio show to solicit survey responses; it's far more effective to advertise the survey online. However, the radio shows were a great opportunity to invite the public to participate in the draft comment period and keep them apprised as to the status of the plan update.

#### **Element B: Hazard Identification and Risk Assessment**

In addition to the requirements listed in the Regulation Checklist, 44 CFR 201.6 Local Mitigation Plans identifies additional elements that should be included as part of a plan's risk assessment. The plan should describe vulnerability in terms of:

- 1.Page 50 Table 4.3.1.2 Crop Loss Insurance Compensation Due to Drought great table and overall analysis of impact of drought on agriculture in both counties. Very impressive!
- 2.Throughout the use of local photos is great! It adds locally identifiable elements that will help community buy-in and understanding of the analysis. This is a best practice that we will share across the region.
- 3. Table 4.3.15-1 Dam Inventory is clear and detailed. We don't often see this data included found this really helpful in understanding the counties' awareness of their dams and their condition.

4. Page 150 Analysis of chemical spill was thorough and comprehensive. Excellent inclusion as this was a high profile event in the state and region and could easily impact Berkeley and Morgan Counties.

- 1) A general description of land uses and future development trends within the community so that mitigation options can be considered in future land use decisions;
- 2) The types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard areas; and
- 3) A description of potential dollar losses to vulnerable structures, and a description of the methodology used to prepare the estimate.

How does the Plan go above and beyond minimum requirements to document the Hazard Identification and Risk Assessment with respect to:

- Use of best available data (flood maps, HAZUS, flood studies) to describe significant hazards;
- Communication of risk on people, property, and infrastructure to the public (through tables, charts, maps, photos, etc.);
- Incorporation of techniques and methodologies to estimate dollar losses to vulnerable structures;
- Incorporation of Risk MAP products (i.e., depth grids, Flood Risk Report, Changes Since Last FIRM, Areas of Mitigation Interest, etc.); and
- Identification of any data gaps that can be filled as new data became available.

#### **Element C: Mitigation Strategy**

How does the Plan go above and beyond minimum requirements to document the Mitigation Strategy with respect to:

- Key problems identified in, and linkages to, the vulnerability assessment;
- Serving as a blueprint for reducing potential losses identified in the Hazard Identification and Risk Assessment;
- Plan content flow from the risk assessment (problem identification) to goal setting to mitigation action development;
- An understanding of mitigation principles (diversity of actions that include structural projects, preventative measures, outreach activities, property protection measures, postdisaster actions, etc);
- Specific mitigation actions for each participating jurisdictions that reflects their unique risks and capabilities;
- Integration of mitigation actions with existing local authorities, policies, programs, and resources; and
- Discussion of existing programs (including the NFIP), plans, and policies that could be used to implement mitigation, as well as document past projects.

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

How does the Plan go above and beyond minimum requirements to document the 5-year Evaluation and Implementation measures with respect to:

- Status of previously recommended mitigation actions;
- Identification of barriers or obstacles to successful implementation or completion of mitigation actions, along with possible solutions for overcoming risk;
- Documentation of annual reviews and committee involvement;
- Identification of a lead person to take ownership of, and champion the Plan;
- Reducing risks from natural hazards and serving as a guide for decisions makers as they
  commit resources to reducing the effects of natural hazards;
- An approach to evaluating future conditions (i.e. socio-economic, environmental, demographic, change in built environment etc.);
- Discussion of how changing conditions and opportunities could impact community resilience in the long term; and
- Discussion of how the mitigation goals and actions support the long-term community vision for increased resilience.

#### **B.** Resources for Implementing Your Approved Plan

Ideas may be offered on moving the mitigation plan forward and continuing the relationship with key mitigation stakeholders such as the following:

- What FEMA assistance (funding) programs are available (for example, Hazard Mitigation Assistance (HMA)) to the jurisdiction(s) to assist with implementing the mitigation actions?
- What other Federal programs (National Flood Insurance Program (NFIP), Community Rating System (CRS), Risk MAP, etc.) may provide assistance for mitigation activities?
- What publications, technical guidance or other resources are available to the jurisdiction(s) relevant to the identified mitigation actions?
- Are there upcoming trainings/workshops (Benefit-Cost Analysis (BCA), HMA, etc.) to assist the jurisdictions(s)?
- What mitigation actions can be funded by other Federal agencies (for example, U.S.
  Forest Service, National Oceanic and Atmospheric Administration (NOAA),
  Environmental Protection Agency (EPA) Smart Growth, Housing and Urban Development
  (HUD) Sustainable Communities, etc.) and/or state and local agencies?

#### **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).

ļ	MULTI-JURISDICTION SUMMARY SHEET											
#	Jurisdiction Name	Jurisdiction Type (city/borough/ township/ village, etc.)	Plan POC	Mailing Address	Email	Phone	A. Planning Process	B. Hazard Identification & Risk	Requiremen C. Mitigation Strategy	D. Plan Review, Evaluation & Implementation	E. Plan Adoption	F. State Require- ments
1		village, etc.,						Assessment				
2												
3												
4												
5												
6												
7												
8												
9												

					MULTI	-JURISDICTI	ON SUMM/		Dogwinanaa	to Bdot (V/BI)	
#	Jurisdiction Name	Jurisdiction Type (city/borough/ township/ village, etc.)	Plan POC	Mailing Address	Email	Phone	A. Planning Process	B. Hazard Identification & Risk Assessment	C. Mitigation Strategy	ts Met (Y/N)  D.  Plan Review, Evaluation & Implementation	E. Plan Adoption
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

#### B. Local Mitigation Plan Review Crosswalk

#### **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 <u>Regulation Checklist</u> provides a summary of FEMA's evaluation of whether the Plan has addressed all requirements.
- The <u>Plan Assessment</u> 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*.

Jurisdiction: Berkeley and Morgan County, West Virginia	Title of Plan: 2017 Multi-Jurisdictional Hazard Mitigation Plan Update for Berkeley and Morgan County		Date of Plan: October 2016	
Local Point of Contact: Rachel Snavely		Address: 400 W Stephen St #301, Martinsburg, WV 25401		
Title:				
Project Manager				
Agency: Eastern Panhandle Region	al Planning and			
Development Council				
Phone Number:		E-Mail:		
(304) 263-1743		rsnavely@region9	9wv.com	

State Reviewer:	Title:	Date:
Lirerose M. Beach	Mitigation Planner	November 10, 2016
FEMA Reviewer:	Title:	Date:
Cathy Mallard	Reservist, HM Community	November 10, 2016 and
Cathy's comment (s) in blue text.	Planner (4273P-WV)	February 23, 2017
Date Received in FEMA Region (insert #)		
Plan Not Approved		
Plan Approvable Pending Adoption		
Plan Approved		

#### **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.

1. REGULATION CHECKLIST  Regulation (44 CFR 201.6 Local Mitigation Plans)	Location in Plan (section and/or page number)	Met	Not Met							
ELEMENT A. PLANNING PROCESS										
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 3, Planning Process, pgs. 23-34  Appendix C: Meeting, Adoption and other Participation documentation)	٧								
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 3.1, Update Process and Participation Summary, pgs. 23-24  Section 3.2, The Planning Team, pgs. 24- 28  Section 3.3, Meetings and Documentation, pgs. 29-31  Appendix C: Meeting, Adoption and other Participation documentation)	٧								
A3. Does the Plan document how the public was involved in the planning process during the drafting stage? (Requirement §201.6(b)(1))	Section 3.3, Meetings and Documentation, pgs. 29-31 Section 3.4, Public & Stakeholder Participation, pgs. 31-33	٧								

1. REGULATION CHECKLIST Regulation (44 CFR 201.6 Local Mitigation Plans)	Location in Plan (section and/or page number)	Met	Not Met
A4. Does the Plan describe the review and incorporation of existing plans, studies, reports, and technical information? (Requirement §201.6(b)(3))	Section 1.4, Authority & Reference, pgs. 8-9  Section 2.5, Data Resources and Limitations, pg. 22  Section 5.2.1, Planning and Regulatory Capability pgs. 176-179  Section 5.2.5, Plan Integration - pgs. 184-185	V	
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 7, Plan Maintenance, pgs. 217- 219	٧	
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 7, Plan Maintenance, pgs. 217- 219 Certification of Annual Review Meetings, pg. 1 Record of Changes, pg. 2	٧	

#### **ELEMENT A: REQUIRED REVISIONS**

#### **Recommended Revisions**:

- Page 10, incorrect table label; it should be Table 2.1-1.
   This error was corrected (Section 2.1, pg. 10). <u>Cathy's comment</u>: corrected
- Page 20, incorrect figure label: it should be Figure 2.4.1 not Figure 2.4.2. This error was corrected (Section 2.4, pg. 20). Cathy's comment: corrected
- Page 32, first paragraph indicates see Figure 3.3-3.3 and 3.3.4 for public notices. Public notices are labeled as Figure 3.3-3 and 3.3-4.

This error was corrected (Section 3.4, pg. 32). Cathy's comment: corrected

Note: Strengths of plan located in PRT on page A-11.

1. REGULATION CHECKLIST  Regulation (44 CFR 201.6 Local Mitigation Plans)	Location in Plan (section and/or page number)	Met	Not Met						
ELEMENT B. HAZARD IDENTIFICATION AND RISK ASSESSMENT									
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 4.2.2, Summary of Hazards, pgs.37-45 Section 4.3, Hazard Profiles, pgs. 46-166 Each hazard has a section titled Location and Extent. The same process was applied to human-made hazards as well.	٧							
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 4.3, Hazard Profiles, pgs. 46-166  Each hazard has sections titled Past Occurrence and Future Occurrence accompanied by tables and mapping of data.	٧							
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 4.3, Hazard Profiles, pgs. 46-166  Each hazard has a section titled Vulnerability Assessment.	٧							
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 4.3.5, specifically Table 4.3.5-2 on pg. 84	٧							

#### 1. REGULATION CHECKLIST

**Regulation** (44 CFR 201.6 Local Mitigation Plans)

Location in Plan (section and/or page number)

Met

Not Met

#### **ELEMENT B: REQUIRED REVISIONS**

Comments:

#### **Recommended Revisions:**

• Pg. 36 minor typo Table 4.2-1 heading, suggest replacing "Decorations" with "Declarations".

This error was corrected (Section 4.2, pg. 36), <u>Cathy's comment</u>: corrected.

- Pgs. 74-75-Figures 4.3.5-3 & 4.3.5.4-recommend defining legends A, AE, AO.
   Definitions for these terms were added (Section 4.3.5.1, pg. 76). <u>Cathy's comments</u>: definitions added.
- Pg. 90 indicates more detail on tornadoes and windstorms is discussed in Section 4.3.11. The hazards of Tornadoes and Windstorms is discussed in the Hazard profile 4.3.13 on page 115.

This error was corrected (Section 4.3.7.1, pg. 94), <u>Cathy's comment</u>: corrected.

Pg. 91 indicates Table 4.3.5-1 lists Saffir-Simpson Scale categories. However, Saffir-Simpson Scale categories are listed on Table 4.3.7-1, page 92. Also, Table 4.3.5-1
(Flood and Flash Flood Events Impacting Berkley and Morgan County) is located on page 78.

This error was corrected (Section 4.3.7.2, pg. 95). Cathy's comment: corrected.

Pg.174 indicates the full HAZUS results report can be found in Appendix F. Page 226 indicates the HAZUS report results are located in Appendix E (HAZUS Flood Reports for All Participating Region 9 Counties) not Appendix F.

This error was corrected (Section 4.4.3, pg. 179). Cathy's comment: corrected.

# 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 5.2.1, Planning and Regulatory Capability, pgs. 176-179 Section 5.2.2, Administrative and Technical Capability, pgs. 179-183 Section 5.2.5, Plan Integration, pgs. 184-185

1. REGULATION CHECKLIST Regulation (44 CFR 201.6 Local Mitigation Plans)  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))  C3. Does the Plan include goals to reduce/avoid long-term vulnerabilities to the identified hazards? (Requirement	Location in Plan (section and/or page number)  Section 4.3.5.3, Past Occurrence, pgs. 83-84 (Table 4.3.5-2)  Section 5.2.1 Planning and Regulatory Capability-Participation in the NFIP, pg. 178-179  C-16, Berkeley County NFIP Compliance and Capabilities Worksheets  C-17, Morgan County NFIP Compliance and Capabilities Worksheets  Section 6.2, Mitigation Goals and Objectives,	Met  √	Not Met
§201.6(c)(3)(i))  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))	pgs. 194-196 Section 6.4, Mitigation Action Plan, pgs. 199- 216	٧	
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 6.1, Update Process Summary, specifically pg. 186 Section 6.4 Mitigation Action Plan, specifically pg. 199	٧	
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 5.2.5 Plan Integration pgs. 184-185  Section 7.2, Monitoring, Evaluating, and Updating the Plan, pgs. 217-219	٧	

#### 1. REGULATION CHECKLIST

**Regulation** (44 CFR 201.6 Local Mitigation Plans)

Location in Plan (section and/or page number)

Met

Not Met

#### **ELEMENT C: REQUIRED REVISIONS:**

#### **Recommended Revisions:**

#### Element C5:

Page 199 stated the priority was determined based on a cost benefit analysis performed by the submitter and current funding levels. Further explanation is needed as to the cost benefit analysis approach and process the submitter used in evaluating and prioritizing their mitigation actions. This does not mean a full benefit cost analysis, such as the FEMA BCA Module, but a planning level assessment of whether the costs are reasonable compared to the probable benefits. Also, review of the 2012 previously approved plan on pages 146-147 utilized a different mitigation action prioritization method for cost benefit analysis. "Table 6.4.1-2017 Berkeley and Morgan County Mitigation Action Plan" indicates in the "Priority column" High, Medium and Low. However, the plan does not define High, Medium or Low priority.

Refer to Appendix C-12 (Berkeley County Mitigation Progress Report Worksheets, Appendix-C-13 (Morgan County Mitigation Progress Report Worksheets). Although not inclusive of all new mitigation actions, some of the worksheets include benefits, cost estimate, cost effectiveness and priority level information.

Additional information on how action priority was assessed was added to the text (Section 6.4, pg. 204). <u>Cathy's comments</u>: pg. 204, text added to 3<sup>rd</sup> paragraph on how actions were prioritized.

Pg. 200-action Number 2R-the plan stated "... Region VI Planning and Development Council area..." Replace with Region IX.

This error was corrected (Section 6.4, pg. 205). <u>Cathy's comment</u>: corrected.

# ELEMENT D. PLAN REVIEW, EVALUATION, AND IMPLEMENTATION (applicable to plan updates only)

D1. Was the plan revised to reflect changes in development?	Section 3.1, Update
(Requirement §201.6(d)(3))	Process and
	Participation Summary,
	pgs. 23-24
	The following sections
	provide an <i>Update</i>
	Process Summary for
	each step of the HMP: $\sqrt{}$
	Section 4.1, pg. 35;
	Section 5.1, pg. 175;
	Section 6.1, pg. 186-194;
	and
	Section 7.1, pg. 217.
	JECTION 1.1, pg. 211.

1. REGULATION CHECKLIST	Location in Plan		Not
Regulation (44 CFR 201.6 Local Mitigation Plans)	(section and/or page number)	Met	Met
D2. Was the plan revised to reflect progress in local mitigation efforts? (Requirement §201.6(d)(3))	Section 6.1, Update Process Summary, specifically Table 6.1.1, pgs. 186-189 and Table 6.1-2, pgs. 190-194, (includes revising details and updates of each mitigation action".		
	Appendix C-12, Berkeley County Mitigation Progress Report Worksheets,	٧	
	Appendix C-13, Morgan County Mitigation Progress Report Worksheets		
D3. Was the plan revised to reflect changes in priorities? (Requirement §201.6(d)(3))	Section 4.4.2, Ranking Results, pgs. 169-170		
	Section 6.4 Mitigation Action Plan, specifically Table 6.4-1, pgs. 199- 216	٧	
ELEMENT D: REQUIRED REVISIONS  ELEMENT E. PLAN ADOPTION			
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))	Once the Plan is approved by WVDHSEM/FEMA, Berkeley and Morgan County will adopt the Plan by resolution, Section 8, Plan Adoption, pg. 220-225		٧
E2. For multi-jurisdictional plans, has each jurisdiction requesting approval of the plan documented formal plan adoption? (Requirement §201.6(c)(5))	Once Berkeley and Morgan County adopt the Plan by resolution, the municipalities will adopt the plan by resolution, Section 8, <i>Plan Adoption</i> , pg. 220-225		V

#### 1. REGULATION CHECKLIST **Location in Plan** Not (section and/or Regulation (44 CFR 201.6 Local Mitigation Plans) Met Met page number) **ELEMENT E: REQUIRED REVISIONS Required Revisions:** Element 1. The plan must include documentation of plan adoption, usually a resolution by the governing body or other authority. Element 2. 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. Adoption will be pursued after final FEMA approval **ELEMENT F. ADDITIONAL STATE REQUIREMENTS (OPTIONAL FOR STATE REVIEWERS ONLY;** NOT TO BE COMPLETED BY FEMA) F1. F2. **ELEMENT F: REQUIRED REVISIONS**

## 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.

- The planning process was inclusive and well documented with copies of public notices, meeting minutes, agendas, sign-in sheets, listing of planning committee members, e-mail communications to the Hazard Mitigation Planning Committee, Risk Assessment and Mitigation Solutions Workshop materials, and Kick off Meeting materials. Inclusion of the community profile, population and demographics, land use and development was well done.
- The beginning details of each sections was particularly informative of how each section was updated adds to the reader's understanding of the planning committee's review process.
- Kudos on use of the hazard identification document completed by committee members, mitigation action forms, and public survey and results. The public survey results are particularly well done.
- The plan provided an extensive listing of resource documents used in plan development. Good practice of incorporating relevant information from the 2013 West Virginia Statewide Standard Hazard Mitigation Plan Update.
- Really like the "Certification of Annual Review Meetings" and "Record Changes" documents.
- Good practice of including the Saffir-Simpson Scale, Modified Mercalli Intensity Scale, and Richter Scale in the Risk Assessment section.
- Maps showing the location of participating counties, growth management, and those showing flooding threats and other hazard zones are a good practice.
- The inclusion and incorporation of HAZUS data results for Berkeley and Morgan Counties.
- Really fine job of summarizing existing mitigation program and accomplishments, as well as reporting the progress of previously mitigation actions.
- Mitigation Progress Worksheets engaged the planning committee in updating the plan.

#### Improvements:

Discussed in individual Elements.

#### **Identification and Risk Assessment**

In addition to the requirements listed in the Regulation Checklist, 44 CFR 201.6 Local Mitigation Plans identifies additional elements that should be included as part of a plan's risk assessment. The plan should describe vulnerability in terms of:

- 1) A general description of land uses and future development trends within the community so that mitigation options can be considered in future land use decisions;
- The types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard areas; and
- 3) A description of potential dollar losses to vulnerable structures, and a description of the methodology used to prepare the estimate.

How does the Plan go above and beyond minimum requirements to document the Hazard Identification and Risk Assessment with respect to:

- Use of best available data (flood maps, HAZUS, flood studies) to describe significant hazards;
- Communication of risk on people, property, and infrastructure to the public (through tables, charts, maps, photos, etc.);
- Incorporation of techniques and methodologies to estimate dollar losses to vulnerable structures;
- Incorporation of Risk MAP products (i.e., depth grids, Flood Risk Report, Changes Since Last FIRM, Areas of Mitigation Interest, etc.); and
- Identification of any data gaps that can be filled as new data became available.

#### **Element C: Mitigation Strategy**

How does the Plan go above and beyond minimum requirements to document the Mitigation Strategy with respect to:

- Key problems identified in, and linkages to, the vulnerability assessment;
- Serving as a blueprint for reducing potential losses identified in the Hazard Identification and Risk Assessment;
- Plan content flow from the risk assessment (problem identification) to goal setting to mitigation action development;
- An understanding of mitigation principles (diversity of actions that include structural projects, preventative measures, outreach activities, property protection measures, post-disaster actions, etc);
- Specific mitigation actions for each participating jurisdictions that reflects their unique risks and capabilities;
- Integration of mitigation actions with existing local authorities, policies, programs, and resources; and
- Discussion of existing programs (including the NFIP), plans, and policies that could be used to implement mitigation, as well as document past projects.

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

How does the Plan go above and beyond minimum requirements to document the 5-year Evaluation and Implementation measures with respect to:

- Status of previously recommended mitigation actions;
- Identification of barriers or obstacles to successful implementation or completion of mitigation actions, along with possible solutions for overcoming risk;
- Documentation of annual reviews and committee involvement;
- Identification of a lead person to take ownership of, and champion the Plan;
- Reducing risks from natural hazards and serving as a guide for decisions makers as they commit resources to reducing the effects of natural hazards;
- An approach to evaluating future conditions (i.e. socio-economic, environmental, demographic, change in built environment etc.);
- Discussion of how changing conditions and opportunities could impact community resilience in the long term; and
- Discussion of how the mitigation goals and actions support the long-term community vision for increased resilience.

#### **B.** Resources for Implementing Your Approved Plan

Ideas may be offered on moving the mitigation plan forward and continuing the relationship with key mitigation stakeholders such as the following:

- What FEMA assistance (funding) programs are available (for example, Hazard Mitigation Assistance (HMA)) to the jurisdiction(s) to assist with implementing the mitigation actions?
- What other Federal programs (National Flood Insurance Program (NFIP), Community Rating System (CRS), Risk MAP, etc.) may provide assistance for mitigation activities?
- What publications, technical guidance or other resources are available to the jurisdiction(s) relevant to the identified mitigation actions?
- Are there upcoming trainings/workshops (Benefit-Cost Analysis (BCA), HMA, etc.) to assist the jurisdictions(s)?
- What mitigation actions can be funded by other Federal agencies (for example, U.S.
  Forest Service, National Oceanic and Atmospheric Administration (NOAA),
  Environmental Protection Agency (EPA) Smart Growth, Housing and Urban Development
  (HUD) Sustainable Communities, etc.) and/or state and local agencies?

#### **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							Requiremen	ts Met (Y/N)		
#	Jurisdiction Name	Type (city/borough/ township/ village, etc.)	Plan POC	Mailing Address	Email	Phone	A. Planning Process	B. Hazard Identification & Risk Assessment	C. Mitigation Strategy	D. Plan Review, Evaluation & Implementation	E. Plan Adoption	F. State Require- ments
1	Berkeley County	County	Randy Lilly	802 Emmett Rousch Drive Martinsbur g, W. Va. 25401	rlilly@ber keleywv.o rg	(304) 263- 1345						
2	Morgan County	County	Dick Myers	77 Fairfax Street Berkeley Springs, WV 25411	dmyers@ morganco untywv.g ov	(304) 258- 0305						
3	Martinsburg	City	Michael Covell	232 North Queen Street, 2nd Floor Martinsbur g, WV 25401	mcovell@ cityofmar tinsburg.o rg	(304) 264- 2131 ext. 266						
4	Hedgesville	Town	Mary Sue Catlett	105 Potato Hill Street P. O. Box 45 Hedgesville , WV 25427	msccellpa ge@msn. com	(304) 754- 4827						

					MULT	I-JURISDICTI	ON SUMMA	ARY SHEET				
		Jurisdiction							Requirement	ts Met (Y/N)		
#	Jurisdiction Name	Type (city/borough/ township/ village, etc.)	Plan POC	Mailing Address	Email	Phone	A. Planning Process	B. Hazard Identification & Risk Assessment	C. Mitigation Strategy	D. Plan Review, Evaluation & Implementation	E. Plan Adoption	F. State Require- ments
5	Bath	Town	Scott Merki	271 Wilkes Street Berkeley Springs, WV 25411	asst5@ao l.com	(304) 258- 1102						
6	Paw Paw	Town	Alton Wolfe Jr.	122 Winchester St, Paw Paw, WV 25434	altonwolf e1955@g mail.com	(304) 947- 7476						
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	MULTI-JURISDICTION SUMMARY SHEET											
#	Jurisdiction Name	Jurisdiction Type (city/borough/ township/ village, etc.)	Plan POC	Mailing Address	Email	Phone	A. Planning Process	B. Hazard Identification & Risk Assessment	Requiremen C. Mitigation Strategy	ts Met (Y/N)  D. Plan Review, Evaluation & Implementation	E. Plan Adoption	F. State Require- ments
17		37 7						Assessment				
18												
19												
20												