



SOMERSET COUNTY

# HAZARD MITIGATION PLAN

## SOMERSET COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

FINAL PLAN UPDATE  
JULY 2019

[www.co.somerset.nj.us/hmp](http://www.co.somerset.nj.us/hmp)

### APPENDIX G

*Prepared by the Somerset County  
Mitigation Planning Committee*



This appendix includes FEMA 386-4 Guidance worksheets to facilitate plan maintenance and review by the Somerset County planning partnership.<sup>1</sup>

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<sup>1</sup> Appendix content from the 2014 HMP was reviewed and has been incorporated into this latest update of the document without revision.

# Worksheet #1

# Progress Report

# step **2**

Progress Report Period: \_\_\_\_\_ to \_\_\_\_\_  
(date) (date)

Project Title: \_\_\_\_\_ Project ID#: \_\_\_\_\_

Responsible Agency: \_\_\_\_\_

Address: \_\_\_\_\_

City/County: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Title: \_\_\_\_\_

Phone #(s): \_\_\_\_\_ email address: \_\_\_\_\_

List Supporting Agencies and Contacts:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total Project Cost: \_\_\_\_\_

Anticipated Cost Overrun/Underrun: \_\_\_\_\_

Date of Project Approval: \_\_\_\_\_ Start date of the project: \_\_\_\_\_

Anticipated completion date: \_\_\_\_\_

Description of the Project (include a description of each phase, if applicable, and the time frame for completing each phase): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Milestones	Complete	Projected Date of Completion

**Plan Goal(s)/Objective(s) Addressed:**

Goal: \_\_\_\_\_

Objective: \_\_\_\_\_

**Indicator of Success** (e.g., losses avoided as a result of the acquisition program):

*In most cases, you will list losses avoided as the indicator. In cases where it is difficult to quantify the benefits in dollar amounts, you will use other indicators, such as the number of people who now know about mitigation or who are taking mitigation actions to reduce their vulnerability to hazards.*

\_\_\_\_\_  
\_\_\_\_\_

**Status** (Please check pertinent information and provide explanations for items with an asterisk. For completed or canceled projects, see Worksheet #2 — to complete a project evaluation):

**Project Status**

Project on schedule

Project completed

Project delayed\*

\*explain: \_\_\_\_\_  
\_\_\_\_\_

Project canceled

**Project Cost Status**

Cost unchanged

Cost overrun\*

\*explain: \_\_\_\_\_  
\_\_\_\_\_

Cost underrun\*

\*explain: \_\_\_\_\_  
\_\_\_\_\_

**Summary of progress on project for this report:**

A. What was accomplished during this reporting period?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

B. What obstacles, problems, or delays did you encounter, if any?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

C. How was each problem resolved?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



<i>When gearing up for the plan evaluation, the planning team should reassess its composition and ask the following questions:</i>	YES	NO
Have there been local staffing changes that would warrant inviting different members to the planning team?		
<b>Comments/Proposed Action:</b>		
Are there organizations that have been invaluable to the planning process or to project implementation that should be represented on the planning team?		
<b>Comments/Proposed Action:</b>		
Are there any representatives of essential organizations who have not fully participated in the planning and implementation of actions? If so, can someone else from this organization commit to the planning team?		
<b>Comments/Proposed Action:</b>		
Are there procedures (e.g., signing of MOAs, commenting on submitted progress reports, distributing meeting minutes, etc.) that can be done more efficiently?		
<b>Comments/Proposed Action:</b>		
Are there ways to gain more diverse and widespread cooperation?		
<b>Comments/Proposed Action:</b>		
Are there different or additional resources (financial, technical, and human) that are now available for mitigation planning?		
<b>Comments/Proposed Action:</b>		

*If the planning team determines the answer to any of these questions is “yes,” some changes may be necessary.*

# Worksheet #3 Evaluate Your Project Results

# step 3

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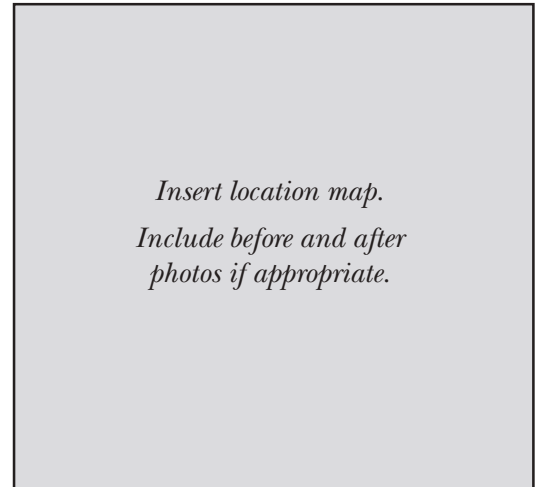
Project Name and Number: \_\_\_\_\_

Project Budget: \_\_\_\_\_

Project Description: \_\_\_\_\_

Associated Goal and Objective(s): \_\_\_\_\_

Indicator of Success (e.g., losses avoided): \_\_\_\_\_



Was the action implemented?  YES  NO



### Why not?

Was there political support for the action?

Were enough funds available?

Were workloads equitably or realistically distributed?

Was new information discovered about the risks or community that made implementation difficult or no longer sensible?

Was the estimated time of implementation reasonable?

Were sufficient resources (for example staff and technical assistance) available?

YES NO



What were the results of the implemented action? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

	YES	NO
Were the outcomes as expected? If No, please explain:		
Did the results achieve the goal and objective(s)? Explain how:		
Was the action cost-effective? Explain how or how not:		
What were the losses avoided after having completed the project?		
If it was a structural project, how did it change the hazard profile?		
Additional comments or other outcomes:		

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Date: \_\_\_\_\_

Prepared by: \_\_\_\_\_



Risk Assessment Steps	Questions	YES	NO	COMMENTS
<b>Identify hazards</b>	Are there new hazards that can affect your community?			
<b>Profile hazard events</b>	Are new historical records available?			
	Are additional maps or new hazard studies available?			
	Have chances of future events (along with their magnitude, extent, etc.) changed?			
	Have recent and future development in the community been checked for their effect on hazard areas?			
<b>Inventory assets</b>	Have inventories of existing structures in hazard areas been updated?			
	Is future land development accounted for in the inventories?			
	Are there any new special high-risk populations?			
<b>Estimate losses</b>	Have loss estimates been updated to account for recent changes?			

*If you answered “Yes” to any of the above questions, review your data and update your risk assessment information accordingly.*

# Worksheet #1

# Progress Report

# step 2

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Progress Report Period: October 1, 2003 to December 31, 2003  
(date) (date)

Project Title: Raging River Views Park Flood Acquisition Project Project ID#: HVMP-2003-01

Responsible Agency: Hazardville Department of Planning

Address: 1909 Burnham Way

City/County: Hazardville, Emergency

Contact Person: Eustoe Eudlid Title: Grants Administrator

Phone #(s): (555) 555-8478 email address: eeudlid@town.hazardville.oh

List Supporting Agencies and Contacts:

Hazardville Department of Housing: Noah Hudson (555) 555-8465

Hazardville Habitat for Humanity: Carter Goodman (555) 555-9432

Total Project Cost: \$360,000

Anticipated Cost Overrun/Underrun: \$N/A

Date of Project Approval: July 21, 2003 Start date of the project: November 15, 2003

Anticipated completion date: Summer 2005

Description of the Project (include a description of each phase, if applicable, and the time frame for completing each phase):

Acquire and demolish 14 structures located at the Raging River Views Park. Work with Habitat for Humanity and the Department of Housing to construct new housing or rehabilitate existing housing for displaced low-income residents. The Department of Housing will also provide funds for temporary housing to displaced residents.

Milestones	Complete	Projected Date of Completion
Conduct surveys of ground and first-floor elevations	✓	
Obtain Notices of Intent by owners	✓	
Conduct structure appraisals	✓	
Send letters of offer to homeowners		1/31/04
Perform title work		3/30/04
Acquire structures		6/30/04
Begin construction of new housing or reconstruction of existing housing for relocated residents		6/30/04
Send payment for relocation to centers		9/30/04
Finalize contract for demolition		1/12/05
Demolish structures		4/26/05
Landscape open parcels		6/30/05

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Plan Goal(s)/Objective(s) Addressed:

Goal: Minimize losses to existing and future structures within hazard areas.

Objective: Reduce potential damages to the manufactured home park in the floodplain.

Indicator of Success (e.g., losses avoided as a result of the acquisition program):

*In most cases, you will list losses avoided as the indicator. In cases where it is difficult to quantify the benefits in dollar amounts, you will use other indicators, such as the number of people who now know about mitigation or who are taking mitigation actions to reduce their vulnerability to hazards.*

Losses Avoided. After a major flood (100-year), the Department of Economic Development will assist the Planning Department in calculating the losses avoided.

Status (Please check pertinent information and provide explanations for items with an asterisk. For completed or canceled projects, see Worksheet #2 — to complete a project evaluation):

Project Status	Project Cost Status
<input checked="" type="checkbox"/> Project on schedule	<input checked="" type="checkbox"/> Cost unchanged
<input type="checkbox"/> Project completed	<input type="checkbox"/> Cost overrun*
<input type="checkbox"/> Project delayed*	*explain: _____
*explain: _____	_____
<input type="checkbox"/> Project canceled	<input type="checkbox"/> Cost underrun*
	*explain: _____
	_____

Summary of progress on project for this report:

A. What was accomplished during this reporting period?

The Department of Planning contacted the owners of the properties vulnerable to floods to determine their willingness to sell their properties. Of the 14 property owners contacted, 10 agreed to have their homes acquired. An appraiser contracted by the Department of Planning estimated the value of the 10 properties.

B. What obstacles, problems, or delays did you encounter, if any?

The owners of four properties refused to sell. There has been some limited neighborhood opposition to various suggestions for the community open space created by the acquisitions.

C. How was each problem resolved?

The Department of Planning has proposed to the residents a design charrette to develop alternatives for the open space that would be created, with the understanding that no permanent structures can be constructed on the open parcels after acquisition and demolition has been completed. Recreational activities will be limited to passive uses such as trails and bike paths.

Next Steps: What is/are the next step(s) to be accomplished over the next reporting period?

1. Send offer letters to homeowners.
  2. Do title work.
  3. Work with the Department of Housing and Habitat for Humanity to identify existing housing for rehabilitation and stable vacant parcels to construct new housing for the displaced residents.
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Other comments:

None

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Adapted from the North Carolina HMGP Progress Report Form at [http://www.dem.dcc.state.nc.us/mlligation/document\\_index.htm](http://www.dem.dcc.state.nc.us/mlligation/document_index.htm).

## Worksheet #2 Evaluate Your Planning Team step **3**

<i>When gearing up for the plan evaluation, the planning team should reassess its composition and ask the following questions:</i>	YES	NO
Have there been local staffing changes that would warrant inviting different members to the planning team?		✓
Comments/Proposed Action: <b>NA</b>		
Are there organizations that have been invaluable to the planning process or to project implementation that should be represented on the planning team?	✓	
Comments/Proposed Action: <b>Hazardville Habitat for Humanity has been invaluable to assisting the relocation of former Ragin River Views Park residents. The organization should be invited to participate in THORR.</b>		
Are there any representatives of essential organizations who have not fully participated in the planning and implementation of actions? If so, can someone else from this organization commit to the planning team?	✓	
Comments/Proposed Action: <b>It is essential that the Department of Public Works be represented at each meeting because so many mitigation actions involve them. However, representatives from the department have been unable to attend meetings consistently since the development of the plan. THORR will work with the department's director to find consistent, active representation.</b>		
Are there procedures (e.g., signing of MOAs, commenting on submitted progress reports, distributing meeting minutes, etc.) that can be done more efficiently?	✓	
Comments/Proposed Action: <b>Again, the Department of Public Works has been unable to provide timely progress reports of its mitigation actions. Administrative duties and paperwork have fallen through the cracks since the department has been assigned numerous new duties to Hazardville's mitigation efforts. Perhaps the department, in partnership with THORR, should approach the Town Council for funding for more department staff.</b>		
Are there ways to gain more diverse and widespread cooperation?	✓	
Comments/Proposed Action: <b>THORR members believe that better publicity about mitigation actions will garner more interest from the public, affected/interested organizations, and state agencies.</b>		
Are there different or additional resources (financial, technical, and human) that are now available for mitigation planning?	✓	
Comments/Proposed Action: <b>THORR has learned about new PDM funding. The state has asked that local jurisdictions submit applications for brick and mortar projects and risk assessments studies.</b>		

*If the planning team determines the answer to any of these questions is "yes," some changes may be necessary.*



# Worksheet #3 Evaluate Your Project Results **step 3**

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Project Name and Number:

**Raging River Views Park Flood Acquisition Project (HVMP-2003-01)**

Project Budget:

**\$360,000**

Project Description:

**Acquisition and demolition of 14 flood-prone structures**

Associated Goal and Objective(s):

**Goal: Minimize losses to existing and future structures within hazard areas**

**Objective: Reduce potential damages to the manufactured home park in the floodplain**

Indicator of Success (e.g., losses avoided):

**Losses avoided by acquisition and demolition of flood-prone structures**



Town of Hazardville Composite Loss Map developed previously during risk assessment (see FEMA 386-2).

Was the action implemented?  YES  NO

**IF NO**

Why not?

Was there political support for the action?

YES NO

Were enough funds available?

Were workloads equitably or realistically distributed?

Was new information discovered about the risks or community that made implementation difficult or no longer sensible?

Was the estimated time of implementation reasonable?

Were sufficient resources (for example staff and technical assistance) available?

**IF YES**

What were the results of the implemented action?

**Of the 14 proposed properties, 10 were acquired. The benefit-cost ratio is 2.19, based on project benefits of \$789,000 and costs of \$360,274. Benefits are based on the net present value of the avoided damages over the project life. Furthermore, about 40 people are no longer in the path of a potential flood, making emergency rescue operations in that area less likely and evacuation easier.**

	YES	NO
Were the outcomes as expected? If No, please explain:		<input checked="" type="checkbox"/>
The project originally set out to acquire 14 properties. Four of the 14 owners did not want to participate in the buyout program.		
Did the results achieve the goal and objective(s)? Explain how:	<input checked="" type="checkbox"/>	
Despite four properties still in harm's way, the objective has been largely met. See additional comments.		
Was the action cost-effective? Explain how or how not:	<input checked="" type="checkbox"/>	
The FEMA Limited Data module was used to perform the benefit-cost analysis. Data for the analysis was collected from historical flood data and used as benchmarks in the before mitigation section of the analysis. The damages after mitigation section was left blank, due to the properties being permanently acquired, and the economic risk removed completely. The analysis resulted in a benefit-cost ratio of 2.19, with benefits totaling \$789,000 for 10 properties.		
What were the losses avoided after having completed the project?		
Total avoided losses are \$789,000 over the lifetime of the project (estimated at 100 years).		
If it was a structural project, how did it change the hazard profile?		
N/A		
Additional comments or other outcomes:		
The Planning Department has agreed to work with the remaining four homeowners in evaluating other flood-proofing options.		

Date: October 12, 2005

Prepared by: Hazardville Department of Economic Development  
Hazardville Department of Planning

**Worksheet #4 Revisit Your Risk Assessment step 4**

Risk Assessment Steps	Questions	YES	NO	COMMENTS
Identify hazards	Are there new hazards that can affect your community?		✓	
Profile hazard events	Are new historical records available?		✓	
	Are additional maps or new hazard studies available?	✓		Recently completed maps and studies showing vulnerability of the new coastal development to erosion and tidal surge are available.
	Have chances of future events (along with their magnitude, extent, etc.) changed?		✓	
	Have recent and future development in the community been checked for their effect on hazard areas?	✓		
Inventory assets	Have inventories of existing structures in hazard areas been updated?	✓		
	Is future land development accounted for in the inventories?	✓		The Planning Department is preparing a coastal development plan to ensure that any future development is set back far enough to be outside the erosion zones and the coastal high hazard areas. Current and future road configurations will also be studied to ensure adequate evacuation routes before hurricane events.
	Are there any new special high-risk populations?	✓		Coastal residents and business owners.
Estimate losses	Have loss estimates been updated to account for recent changes?	✓		

*If you answered "Yes" to any of the above questions, review your data and update your risk assessment information accordingly.*

