

This appendix includes FEMA 386-4 Guidance worksheets to facilitate plan maintenance and review by the Westchester County planning partnership.

# List of Planning Process Worksheets

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## Comparison of Multi-Hazard Mitigation and CRS Planning Requirements

One of the activities that communities can take to improve their Community Rating System (CRS) rating (and subsequently lower National Flood Insurance Program [NFIP] premiums) is to develop a CRS plan. The CRS 10-step planning process is consistent with the multi-hazard planning regulations under 44 CFR Part 201. Use this worksheet to compare how the local mitigation planning requirements at 44 CFR Part 201 relate to the CRS planning steps.

More detailed information on CRS plans can be found in Activity 510 of the CRS Coordinator's Manual at <http://www.fema.gov/national-flood-insurance-program/community-rating-system>.

Check ✓ if You Meet Both CRS & Part 201	Community Rating System (CRS) Planning Steps (Activity 510)	Local Mitigation Planning Handbook Tasks (44 CFR Part 201)
	<b>Step 1.</b> Organize	<b>Task 1:</b> Determine the Planning Area and Resources <b>Task 2:</b> Build the Planning Team 44 CFR 201.6(c)(1)
	<b>Step 2.</b> Involve the public	<b>Task 3:</b> Create an Outreach Strategy 44 CFR 201.6(b)(1)
	<b>Step 3.</b> Coordinate	<b>Task 4:</b> Review Community Capabilities 44 CFR 201.6(b)(2) & (3)
	<b>Step 4.</b> Assess the hazard	<b>Task 5:</b> Conduct a Risk Assessment 44 CFR 201.6(c)(2)(i) 44 CFR 201.6(c)(2)(ii) & (iii)
	<b>Step 5.</b> Assess the problem	
	<b>Step 6.</b> Set goals	<b>Task 6:</b> Develop a Mitigation Strategy 44 CFR 201.6(c)(3)(i) 44 CFR 201.6(c)(3)(ii) 44 CFR 201.6(c)(3)(iii)
	<b>Step 7.</b> Review possible activities	
	<b>Step 8.</b> Draft an action plan	
	<b>Step 9.</b> Adopt the plan	<b>Task 8:</b> Review and Adopt the Plan 44 CFR 201.6(c)(5)
	<b>Step 10.</b> Implement, evaluate, revise	<b>Task 7:</b> Keep the Plan Current
		<b>Task 9:</b> Create a Safe and Resilient Community 44 CFR 201.6(c)(4)

# Worksheet 1.1

Comparison of Multi-Hazard and CRS Planning Requirements

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# Sample Memorandum of Agreement for a Multi-Jurisdictional Planning Team<sup>1</sup>

## I. Purpose

A Memorandum of Agreement (MOA) is hereby executed between the participating jurisdictions in the [Insert Title of Plan]. “Participating jurisdictions” in this MOA are as follows:

- [insert Lead Community name]
- [insert Community A name]
- [insert Community B name]

The purpose of this MOA is to establish commitment from and a cooperative working relationship between all Participating Jurisdictions in the development and implementation of the [Insert Title of Plan]. In addition, the intent of this MOA is to ensure that the multi-jurisdictional hazard mitigation plan is developed in accordance with Title 44 of the Federal Code of Regulations (CFR) Part 201.6; that the planning process is conducted in an open manner involving community stakeholders; that it is consistent with each participating jurisdiction’s policies, programs and authorities; and it is an accurate reflection of the community’s values.

This MOA sets out the responsibilities of all parties. The MOA identifies the work to be performed by each participating jurisdiction. Planning tasks, schedules, and finished products are identified in the Work Program and Schedule. The plan created as a result of this MOA will be presented to the governing body (Planning Commission, City Council and or Board of Commissioners) of each participating jurisdiction for adoption.

## II. Background

Mitigation plans form the foundation for a community’s long-term strategy to reduce disaster losses and break the cycle of disaster damage, reconstruction, and repeated damage. The Participating Jurisdictions in a mitigation planning process would benefit by:

- identifying cost effective actions for risk reduction;
- directing resources on the greatest risks and vulnerabilities;
- building partnerships by involving people, organizations, and businesses;
- increasing education and awareness of hazards and risk;
- aligning risk reduction with other community objectives; and
- providing eligibility to receive federal hazard mitigation grant funding.

The [insert Lead Community name] has received a grant from the Federal Emergency Management Agency to prepare a multi-jurisdictional hazard mitigation plan in accordance with 44 FEMA requirements at 44.C.F.R. 201.6.

## III. Planning Team Responsibilities

[Insert Lead Community name] will act as the Lead Community, and will assign a Chairperson of the Planning Team for the [Insert Title of Plan]. The Participating Jurisdictions authorize the Lead Community to manage and facilitate the planning process in accordance with the Work Program and Schedule.

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<sup>1</sup> The language provided in this Sample Memorandum of Agreement does not impose legally enforceable rights and obligations, but provides information that may be suitable for your community in entering a partnership agreement with other jurisdictions. It is recommended that you consult an attorney prior to executing any legal instruments.

# Worksheet 1.2

Sample Memorandum of Agreement for a Multi-Jurisdictional Planning Team

The Participating Jurisdictions understand that representatives must engage in the following planning process, as more fully described in the *Local Mitigation Planning Handbook* (FEMA, 2012), including, but not limited to:

- Develop the Work Program and Schedule with the Planning Team
- Organize and attend regular meetings of the Planning Team.
- Assist the Planning Team with developing and conducting an outreach strategy to involve other planning team members, stakeholders, and the public, as appropriate to represent their Jurisdiction.
- Identify community resources available to support the planning effort, including meeting spaces, facilitators, and media outlets.
- Provide data and feedback to develop the risk assessment and mitigation strategy, including a specific mitigation action plan for their Jurisdiction.
- Submit the draft plan to their Jurisdiction for review.
- Work with the Planning Team to incorporate all their Jurisdiction's comments into the draft plan.
- Submit the draft plan to their respective governing body for consideration and adoption.
- After adoption, coordinate a process to monitor, evaluate, and work toward plan implementation.

## IV. Planning Team

The following points of contacts and alternatives are authorized on behalf of the governing bodies to participate as members of the Planning Team for the [Insert Title of Plan]:

[Insert Points of Contact for the Lead Jurisdiction and for each Participating Jurisdiction, and any alternative POCs, including, at a minimum:]

Name

Title

Office/Agency

Name of Participating Jurisdiction

Address

Phone number

Email address

## V. MOA Implementation

This MOA will be in effect from the date of signature by all parties, will remain in effect through the duration of the planning process, and will terminate after adoption of the final FEMA-approved mitigation plan by all participating jurisdictions, or 5 years after FEMA approval, whichever is earlier. It may be terminated prior to that time for any Participating Jurisdiction by giving 60 days written notice. This MOA is to be implemented through the attached Work Program and Schedule, and any addendums that describe specific activities, programs, and projects, and if necessary, funding by separate instrument.

[Insert signature block for each Participating Jurisdiction, or attach resolutions]

Signature: \_\_\_\_\_

Name of Authorized Government Official

Title (City Manager, Mayor, County Emergency Management Director, etc.)

Name of Lead Jurisdiction

Office/Agency

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

Signature: \_\_\_\_\_

Name of Authorized Government Official

Title (City Manager, Mayor, County Emergency Management Director, etc.)

Name of Jurisdiction A

Office/Agency

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

## **VI. Attachments**

Plan Work Program and Schedule

# Worksheet 1.2

Sample Memorandum of Agreement for a Multi-Jurisdictional Planning Team

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## Mitigation Planning Team Worksheet

Use this worksheet to identify partner organizations to invite to participate on the planning team. Some organizations do not need to be involved in every decision of the planning process but are stakeholders that require outreach and involvement during the planning process. Revise the list of general partners below to reflect the organizations in your community. Mark which organizations will be invited to participate on the planning team and which will be involved through stakeholder outreach activities.

**Planning Team** – The core group responsible for making decisions, guiding the planning process, and agreeing upon the final contents of the plan

**Stakeholders** – Individuals or groups that affect or can be affected by a mitigation action or policy

Partner Organization	Planning Team	Stakeholder	Notes
<b>Local Agencies</b>			
Building Code Enforcement			
City Management/County Administration			
Emergency Management			
Fire Department/District			
Floodplain Administration			
Geographic Information Systems			
Parks and Recreation			
Planning/Community Development			
Public Works			
Stormwater Management			
Transportation (Roads and Bridges)			
City Council/Board of Commissioners			
Planning Commission			
Planning/Community Development			
Regional/Metropolitan Planning Organization(s)			
City/County Attorney's Office			
Economic Development Agency			
Local Emergency Planning Committee			
Police/Sheriff's Department			
Sanitation Department			
Tax Assessor's Office			
<b>Special Districts and Authorities</b>			
Airport, Seaport Authorities			
Fire Control District			
Flood Control District			
School District(s)			
Transit Authority			
Utility Districts			






















# Worksheet 2.1

Mitigation Planning Team Worksheet

Partner Organization	Planning Team	Stakeholder	Notes
<b>Non-Governmental Organizations</b>			
American Red Cross			
Chamber of Commerce			
Community/Faith-Based Organizations			
Environmental Organizations			
Homeowners Associations			
Neighborhood/Community Organizations			
Utility Companies			
<b>State Agencies</b>			
State Emergency Management Agency			
State Dam Safety			
State Department of Transportation			
State Fire and Forestry Agency			
State Geological Survey			
State Water Resources Agency			
State National Flood Insurance Program Coordinator			
State Planning Office			
<b>Federal Agencies</b>			
Federal Emergency Management Agency			
Land Management Agencies (USFS/NPS/BLM)			
National Weather Service			
US Army Corps of Engineers			
US Department of Housing and Urban Development			
US Department of Transportation			
US Environmental Protection Agency			
US Geological Survey			
<b>Other</b>			
Tribal Officials			
Colleges/Universities			
Land Developers and Real Estate Agencies			
Major Employers and Businesses			
Professional Associations			
Neighboring Jurisdictions			

Note: Multi-jurisdictional planning teams require at least one representative for each participating jurisdiction. This worksheet can be used by each jurisdiction to identify their local sub-team.

### Sample Schedule of Tasks

Project Tasks	September	October	November	December	January	February	March	April	May	June	July
Organize Resources and Convene Planning Team											
Create Outreach Strategy											
Review Community Capabilities											
Conduct Risk Assessment											
Identify Mitigation Goals and Actions											
Develop Action Plan for Implementation											
Identify Plan Maintenance Procedures											
Review Final Draft											
Submit Plan to State and FEMA											
Adopt Plan											
<b>Meetings</b>											
Planning Team											
Jurisdictional Sub-team											
Stakeholder/Public Outreach											

# Worksheet 2.2

Sample Schedule of Tasks

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# Sample Mitigation Public Opinion Survey

## Mid-Columbia Region Natural Hazard Mitigation Public Opinion Survey



Your household has been randomly selected to participate in this survey about public perceptions and opinions regarding natural hazards in your county. In addition, we would like information regarding the methods and techniques you prefer for reducing the risks and losses associated with these hazards. The questionnaire should be completed by an adult, preferably the head of household. The information you provide will be used to help improve public/private coordination, mitigation, and risk reduction efforts in your county. The survey should take less than 30 minutes to complete.

This is a public opinion survey, the results of which will inform local natural hazard mitigation planning in Oregon. Your returned, completed survey indicates your willingness to take part in the study. Participation in this study is voluntary. The survey is not intended to contribute to “generalizable knowledge” and none of the information you provide will be attributed to you directly. If you have questions regarding your rights as a research participant, please contact the Office for Protection of Human Subjects, 1600 Millrace Drive, Suite 105, University of Oregon, Eugene, OR 97403-5219, or call (541) 346-2510.

### NATURAL HAZARD INFORMATION

First we would like to know about your experiences involving natural hazards and your exposure to preparedness information.

- During the past five years in the county you currently reside in, have you or someone in your household directly experienced a natural disaster such as an earthquake, severe windstorm, flood, wildfire, or other type of natural disaster?
  - Yes
  - No (*IF NO Skip to Question 2*)

**If "YES"**, which of these natural disasters have you or someone in your household experienced in the past five years?

*(Please check all that apply)*

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li><input type="checkbox"/> Drought</li> <li><input type="checkbox"/> Dust Storm</li> <li><input type="checkbox"/> Earthquake</li> <li><input type="checkbox"/> Flood</li> <li><input type="checkbox"/> Landslide / Debris Flow</li> <li><input type="checkbox"/> Wildfire</li> </ul> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Windstorm</li> <li><input type="checkbox"/> Volcanic Eruption</li> <li><input type="checkbox"/> Severe Winter Storm</li> <li><input type="checkbox"/> Other (specify): _____</li> </ul> |
|---|---|

- How concerned are you about the following natural disasters affecting your county?  
*(Check the corresponding box for each hazard)*

Natural Disaster	Very Concerned	Somewhat Concerned	Neutral	Not Very Concerned	Not Concerned
Drought	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dust Storm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Earthquake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flood	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Landslide / Debris Flow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wildfire	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Volcanic Eruption	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wind Storm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Severe Winter Storm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# Worksheet 3.1

Sample Mitigation Public Opinion Survey

3. Have you ever received information about how to make members of your household and your home safer from natural disasters?

- Yes  
 No (***IF NO Skip to Question 5***)

**If "YES",** how recently?

- Within the last 6 months  
 Between 6 and 12 months  
 Between 1 and 2 years  
 Between 2 and 5 years  
 5 years or more

4. From whom did you **last** receive information about how to make members of your household and your home safer from natural disasters?

**(Please check only one)**

- |   |  |
|---|--|
| <input type="checkbox"/> News media                         | <input type="checkbox"/> Elected official              |
| <input type="checkbox"/> Government agency                  | <input type="checkbox"/> American Red Cross            |
| <input type="checkbox"/> Insurance agent or company         | <input type="checkbox"/> Other non-profit organization |
| <input type="checkbox"/> Utility company                    | <input type="checkbox"/> Social media (e.g. Facebook)  |
| <input type="checkbox"/> University or research institution | <input type="checkbox"/> Not sure                      |
| <input type="checkbox"/> Neighbor / friend / family member  | <input type="checkbox"/> Other: _____                  |

5. Whom would you most trust to provide you with information about how to make your household and home safer from natural disasters?

**(Please check up to three)**

- |   |  |
|---|--|
| <input type="checkbox"/> News media                         | <input type="checkbox"/> Elected official              |
| <input type="checkbox"/> Government agency                  | <input type="checkbox"/> American Red Cross            |
| <input type="checkbox"/> Insurance agent or company         | <input type="checkbox"/> Other non-profit organization |
| <input type="checkbox"/> Utility company                    | <input type="checkbox"/> Social media (e.g. Facebook)  |
| <input type="checkbox"/> University or research institution | <input type="checkbox"/> Not sure                      |
| <input type="checkbox"/> Neighbor / friend / family member  | <input type="checkbox"/> Other: _____                  |

6. What is the most effective way for you to receive information about how to make your household and home safer from natural disasters?

**(Please check up to three)**

*Newspapers:*

- Newspaper stories  
 Newspaper ads

*Television:*

- Television news  
 Television ads

*Radio:*

- Radio news  
 Radio ads

*Internet:*

- Email newsletters  
 Online news outlets  
 Social media (e.g. Facebook)

*Other methods:*

- Schools  
 Outdoor advertisements (billboards, etc.)  
 Books  
 Mail  
 Fire Department/Rescue  
 Fact sheet/brochure  
 Chamber of Commerce  
 Public workshops/meetings  
 Magazine  
 University or research institution  
 Other: \_\_\_\_\_

7. Prior to receiving this survey, were you aware of your county's Natural Hazard Mitigation Plan (NHMP)?

- Yes  
 No

8. Prior to receiving this survey, were you aware that the Federal Emergency Management Agency (FEMA) requires your county to update the NHMP every five years in order for your county to be eligible for federal pre- and post-disaster hazard mitigation funds?

- Yes  
 No

## COMMUNITY VULNERABILITIES AND HAZARD MITIGATION STRATEGIES

In order to assess community risk, we need to understand which community assets may be vulnerable to natural hazards in the region. Vulnerable assets are those community features, characteristics, or resources that may be impacted by natural hazards (e.g. populations with functional needs, economic components, environmental resources, etc.). The next set of questions will focus on vulnerable assets in your community and your preferred strategies to mitigate risk to those assets.

9. Community assets are features, characteristics, or resources that either make a community unique or allow the community to function. In your opinion, which of the following *categories* are most susceptible to the impacts caused by natural hazards in your county?

**(Please rank the community assets in order of vulnerability, 1 being most vulnerable and 6 being least vulnerable)**

Community Assets	Potential Natural Hazard Impact	Order of Vulnerability
Human	Loss of life and/or injuries	_____
Economic	Business closures and/or job losses	_____
Infrastructure	Damage or loss of bridges, utilities, schools, etc.	_____
Cultural/Historic	Damage or loss of libraries, museums, fairgrounds, etc.	_____
Environmental	Damage or loss of forests, rangeland, waterways, etc.	_____
Governance	Ability to maintain order and/or provide public amenities and services	_____

10. Next we would like to know what specific types of community assets are most important to you.

**(Check the corresponding box for each asset)**

Community Assets	Very Important	Somewhat Important	Neutral	Not Very Important	Not Important
Elder-care facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Schools (K-12)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hospitals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Major bridges	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fire/Police Stations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Museums/Historic buildings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Major employers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Small businesses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
College / University	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
City Hall / Courthouse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Parks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# Worksheet 3.1

Sample Mitigation Public Opinion Survey

11. A number of activities can reduce your community's risk from natural hazards. These activities can be both regulatory and non-regulatory. **Please check the box that best represents your opinion of the following strategies to reduce the risk and loss associated with natural disasters.**

Community-wide Strategies	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Not Sure
I support a regulatory approach to reducing risk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I support a non-regulatory approach to reducing risk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I support a mix of both regulatory and non-regulatory approaches to reducing risk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I support policies to prohibit development in areas subject to natural hazards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I support the use of tax dollars (federal and/or local) to compensate land owners for not developing in areas subject to natural hazards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I support the use of local tax dollars to reduce risks and losses from natural disasters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I support protecting historical and cultural structures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I would be willing to make my home more disaster-resistant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I support steps to safeguard the local economy following a disaster event	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I support improving the disaster preparedness of local schools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I support a local inventory of at-risk buildings and infrastructure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I support the disclosure of natural hazard risks during real estate transactions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12. Natural hazards can have a significant impact on a community, but planning for these events can help lessen the impacts. The following statements will help determine citizen priorities regarding planning for natural hazards in your county. **Please tell us how important each one is to you.**

Statements	Very Important	Somewhat Important	Neutral	Not Very Important	Not Important
Protecting private property	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Protecting critical facilities (e.g. transportation networks, hospitals, fire stations)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Preventing development in hazard areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Enhancing the function of natural features (e.g. streams, wetlands)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Protecting historical and cultural landmarks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Protecting and reducing damage to utilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Strengthening emergency services (e.g.- police, fire, ambulance)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Disclosing natural hazard risks during real estate transactions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Promoting cooperation among public agencies, citizens, non-profit organizations, and businesses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



## MITIGATION AND PREPAREDNESS ACTIVITIES IN YOUR HOUSEHOLD

Households can mitigate and prepare for natural hazards in order to prevent damage to property, injuries, and loss of life. The precautions you take and training you receive can make a big difference in your ability to recover from a natural disaster or emergency. Access to basic services, such as electricity, gas, water, telephones and emergency care may be cut off temporarily, or you may have to evacuate at a moment's notice. The following questions focus on your household's preparedness for disaster events.

13. In the following list, please check those activities that you have done in your household, plan to do in the near future, have not done, or are unable to do.

**(Please check one answer for each preparedness activity)**

In your household, have you or someone in your household:	Have Done	Plan To Do	Not Done	Unable To Do
Attended meetings or received written information on natural disasters or emergency preparedness?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Talked with members in your household about what to do in case of a natural disaster or emergency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Developed a "Household/Family Emergency Plan" in order to decide what everyone would do in the event of a disaster?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Prepared a "Disaster Supply Kit" (stored extra food, water, batteries, or other emergency supplies)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In the last year, has anyone in your household been trained in First Aid or Cardio-Pulmonary Resuscitation (CPR)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Prepared your home by having smoke detectors on each level of the house	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Discussed or created a utility shutoff procedure in the event of a natural disaster?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## GENERAL HOUSEHOLD INFORMATION

Finally, we would appreciate any information you are willing to share with us about you and your household. This information will remain confidential and is for survey comparison purposes only.

14. Please indicate your age: \_\_\_\_\_

15. Gender:  Male  Female

16. Please indicate your level of education:

- High school graduate/GED
- Some college/trade school
- College degree

- Postgraduate degree
- Other (please specify): \_\_\_\_\_

17. What is your total household income?

- Less than \$10,000
- \$10,000 - \$19,999
- \$20,000 - \$29,999
- \$30,000 - \$39,999
- \$40,000 - \$49,999
- \$50,000 - \$59,999
- \$60,000 - \$69,999
- \$70,000 - \$79,999
- \$80,000 - \$89,999
- \$90,000 - \$99,999
- \$100,000 - \$149,999
- More than \$150,000

18. Zip code (optional): \_\_\_\_\_

# Worksheet 3.1

Sample Mitigation Public Opinion Survey

19. County:

- |  |  |
|--|--|
| <input type="checkbox"/> Clackamas County  | <input type="checkbox"/> Sherman County  |
| <input type="checkbox"/> Hood River County | <input type="checkbox"/> Umatilla County |
| <input type="checkbox"/> Gilliam County    | <input type="checkbox"/> Wasco County    |
| <input type="checkbox"/> Morrow County     | <input type="checkbox"/> Wheeler County  |

20. Please specify your race:

- |   |  |
|---|--|
| <input type="checkbox"/> American Indian or Alaska Native | <input type="checkbox"/> Native Hawaiian or Other Pacific Islander |
| <input type="checkbox"/> Asian                            | <input type="checkbox"/> White                                     |
| <input type="checkbox"/> Black or African American        |  |

21. Please specify your ethnicity:

- |   |   |
|---|---|
| <input type="checkbox"/> Hispanic or Latino | <input type="checkbox"/> Not Hispanic or Latino |
|---|---|

22. How long have you lived in Oregon?

- |   |   |
|---|---|
| <input type="checkbox"/> Less than one year | <input type="checkbox"/> 10-19 years      |
| <input type="checkbox"/> 1-5 years          | <input type="checkbox"/> 20 years or more |
| <input type="checkbox"/> 5-9 years          |   |

23. Do you own or rent your home?

- |                              |                               |
|------------------------------|-------------------------------|
| <input type="checkbox"/> Own | <input type="checkbox"/> Rent |
|------------------------------|-------------------------------|

24. Do you own/rent a:

- |   |  |
|---|--|
| <input type="checkbox"/> Single-family home                       | <input type="checkbox"/> Condominium / townhouse |
| <input type="checkbox"/> Duplex                                   | <input type="checkbox"/> Manufactured home       |
| <input type="checkbox"/> Apartment (3-4 units in structure)       | <input type="checkbox"/> Other: _____            |
| <input type="checkbox"/> Apartment (5 or more units in structure) |  |

Please feel free to provide any additional comments in the space provided:

**THANK YOU VERY MUCH FOR PROVIDING THIS INFORMATION**

*The Oregon Partnership for Disaster Resilience at the University of Oregon's Community Service Center prepared this survey. Implementation of this survey has been made possible by funding from the Federal Emergency Management Agency and the Oregon Emergency Management.*

*For more information, please contact the Oregon Partnership for Disaster Resilience at 1209 University of Oregon, Eugene, OR 97403-1209, call (541) 346-3588, or visit <http://csc.uoregon.edu/opdr/>*

## Capability Assessment Worksheet

Jurisdiction: \_\_\_\_\_

Local mitigation capabilities are existing authorities, policies, programs, and resources that reduce hazard impacts or that could be used to implement hazard mitigation activities. Please complete the tables and questions in the worksheet as completely as possible. Complete one worksheet for each jurisdiction.

### Planning and Regulatory

Planning and regulatory capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impacts of hazards. Please indicate which of the following your jurisdiction has in place.

Plans	Yes/No Year	Does the plan address hazards?
		Does the plan identify projects to include in the mitigation strategy?  Can the plan be used to implement mitigation actions?
Comprehensive/Master Plan		
Capital Improvements Plan		
Economic Development Plan		
Local Emergency Operations Plan		
Continuity of Operations Plan		
Transportation Plan		
Stormwater Management Plan		
Community Wildfire Protection Plan		
Other special plans (e.g., brownfields redevelopment, disaster recovery, coastal zone management, climate change adaptation)		

# Worksheet 4.1

## Capability Assessment Worksheet

Building Code, Permitting, and Inspections	Yes/No	Are codes adequately enforced?
Building Code		Version/Year:
Building Code Effectiveness Grading Schedule (BCEGS) Score		Score:
Fire department ISO rating		Rating:
Site plan review requirements		
Land Use Planning and Ordinances	Yes/No	Is the ordinance an effective measure for reducing hazard impacts? Is the ordinance adequately administered and enforced?
Zoning ordinance		
Subdivision ordinance		
Floodplain ordinance		
Natural hazard specific ordinance (stormwater, steep slope, wildfire)		
Flood insurance rate maps		
Acquisition of land for open space and public recreation uses		
Other		
How can these capabilities be expanded and improved to reduce risk?		

## Administrative and Technical

Identify whether your community has the following administrative and technical capabilities. These include staff and their skills and tools that can be used for mitigation planning and to implement specific mitigation actions. For smaller jurisdictions without local staff resources, if there are public resources at the next higher level government that can provide technical assistance, indicate so in your comments.

Administration	Yes/No	Describe capability Is coordination effective?
Planning Commission		
Mitigation Planning Committee		
Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems)		
Mutual aid agreements		
Staff	Yes/No FT/PT <sup>1</sup>	Is staffing adequate to enforce regulations? Is staff trained on hazards and mitigation? Is coordination between agencies and staff effective?
Chief Building Official		
Floodplain Administrator		
Emergency Manager		
Community Planner		
Civil Engineer		
GIS Coordinator		
Other		

1. Full-time (FT) or part-time (PT) position

# Worksheet 4.1

## Capability Assessment Worksheet

<b>Technical</b>	<b>Yes/No</b>	<b>Describe capability</b> <b>Has capability been used to assess/mitigate risk in the past?</b>
Warning systems/services (Reverse 911, outdoor warning signals)		
Hazard data and information		
Grant writing		
Hazus analysis		
Other		
<b>How can these capabilities be expanded and improved to reduce risk?</b>		

## Financial

Identify whether your jurisdiction has access to or is eligible to use the following funding resources for hazard mitigation.

Funding Resource	Access/ Eligibility (Yes/No)	Has the funding resource been used in past and for what type of activities?  Could the resource be used to fund future mitigation actions?
Capital improvements project funding		
Authority to levy taxes for specific purposes		
Fees for water, sewer, gas, or electric services		
Impact fees for new development		
Storm water utility fee		
Incur debt through general obligation bonds and/or special tax bonds		
Incur debt through private activities		
Community Development Block Grant		
Other federal funding programs		
State funding programs		
Other		
<b>How can these capabilities be expanded and improved to reduce risk?</b>		

# Worksheet 4.1

Capability Assessment Worksheet

## Education and Outreach

Identify education and outreach programs and methods already in place that could be used to implement mitigation activities and communicate hazard-related information.

<b>Program/Organization</b>	<b>Yes/No</b>	<b>Describe program/organization and how relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities?</b>
Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc.		
Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)		
Natural disaster or safety related school programs		
StormReady certification		
Firewise Communities certification		
Public-private partnership initiatives addressing disaster-related issues		
Other		
<b>How can these capabilities be expanded and improved to reduce risk?</b>		



## Safe Growth Audit

Use this worksheet to identify gaps in your community's growth guidance instruments and improvements that could be made to reduce vulnerability to future development.

Comprehensive Plan	Yes	No
<b>Land Use</b>		
1. Does the future land-use map clearly identify natural hazard areas?		
2. Do the land-use policies discourage development or redevelopment within natural hazard areas?		
3. Does the plan provide adequate space for expected future growth in areas located outside natural hazard areas?		
<b>Transportation</b>		
1. Does the transportation plan limit access to hazard areas?		
2. Is transportation policy used to guide growth to safe locations?		
3. Are movement systems designed to function under disaster conditions (e.g., evacuation)?		

# Worksheet 4.2

Safe Growth Audit

Comprehensive Plan (continued)	Yes	No
<b>Environmental Management</b>		
1. Are environmental systems that protect development from hazards identified and mapped?		
2. Do environmental policies maintain and restore protective ecosystems?		
3. Do environmental policies provide incentives to development that is located outside protective ecosystems?		
<b>Public Safety</b>		
1. Are the goals and policies of the comprehensive plan related to those of the FEMA Local Hazard Mitigation Plan?		
2. Is safety explicitly included in the plan's growth and development policies?		
3. Does the monitoring and implementation section of the plan cover safe growth objectives?		

Zoning Ordinance	Yes	No
1. Does the zoning ordinance conform to the comprehensive plan in terms of discouraging development or redevelopment within natural hazard areas?		
2. Does the ordinance contain natural hazard overlay zones that set conditions for land use within such zones?		
3. Do rezoning procedures recognize natural hazard areas as limits on zoning changes that allow greater intensity or density of use?		
4. Does the ordinance prohibit development within, or filling of, wetlands, floodways, and floodplains?		
Subdivision Regulations	Yes	No
1. Do the subdivision regulations restrict the subdivision of land within or adjacent to natural hazard areas?		
2. Do the regulations provide for conservation subdivisions or cluster subdivisions in order to conserve environmental resources?		
3. Do the regulations allow density transfers where hazard areas exist?		

# Worksheet 4.2

Safe Growth Audit

<b>Capital Improvement Program and Infrastructure Policies</b>	<b>Yes</b>	<b>No</b>
1. Does the capital improvement program limit expenditures on projects that would encourage development in areas vulnerable to natural hazards?		
2. Do infrastructure policies limit extension of existing facilities and services that would encourage development in areas vulnerable to natural hazards?		
3. Does the capital improvement program provide funding for hazard mitigation projects identified in the FEMA Mitigation Plan?		
<b>Other</b>	<b>Yes</b>	<b>No</b>
1. Do small area or corridor plans recognize the need to avoid or mitigation natural hazards?		
2. Does the building code contain provisions to strengthen or elevate construction to withstand hazard forces?		
3. Do economic development or redevelopment strategies include provisions for mitigation natural hazards?		
4. Is there an adopted evacuation and shelter plan to deal with emergencies from natural hazards?		

Questions adapted from Godschalk, David R. Practice Safe Growth Audits, *Zoning Practice*, Issue Number 10, October 2009, American Planning Association. <http://www.planning.org/zoningpractice/open/pdf/oct09.pdf>.

## National Flood Insurance Program (NFIP) Worksheet

Use this worksheet to collect information on your community’s participation in and continued compliance with the NFIP, as well as identify areas for improvement that could be potential mitigation actions. Indicate the source of information, if different from the one included.

NFIP Topic	Source of Information	Comments
<b>Insurance Summary</b>		
How many NFIP policies are in the community? What is the total premium and coverage?	State NFIP Coordinator or FEMA NFIP Specialist	
How many claims have been paid in the community? What is the total amount of paid claims? How many of the claims were for substantial damage?	FEMA NFIP or Insurance Specialist	
How many structures are exposed to flood risk within the community?	Community Floodplain Administrator (FPA)	
Describe any areas of flood risk with limited NFIP policy coverage	Community FPA and FEMA Insurance Specialist	
<b>Staff Resources</b>		
Is the Community FPA or NFIP Coordinator certified?	Community FPA	
Is floodplain management an auxiliary function?	Community FPA	
Provide an explanation of NFIP administration services (e.g., permit review, GIS, education or outreach, inspections, engineering capability)	Community FPA	
What are the barriers to running an effective NFIP program in the community, if any?	Community FPA	
<b>Compliance History</b>		
Is the community in good standing with the NFIP?	State NFIP Coordinator, FEMA NFIP Specialist, community records	
Are there any outstanding compliance issues (i.e., current violations)?		
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?		
Is a CAV or CAC scheduled or needed?		

# Worksheet 4.3

National Flood Insurance Program (NFIP)

NFIP Topic	Source of Information	Comments
<b>Regulation</b>		
When did the community enter the NFIP?	Community Status Book <a href="http://www.fema.gov/national-flood-insurance-program/national-flood-insurance-program-community-status-book">http://www.fema.gov/national-flood-insurance-program/national-flood-insurance-program-community-status-book</a>	
Are the FIRMs digital or paper?	Community FPA	
Do floodplain development regulations meet or exceed FEMA or State minimum requirements? If so, in what ways?	Community FPA	
Provide an explanation of the permitting process.	Community FPA, State, FEMA NFIP  Flood Insurance Manual <a href="http://www.fema.gov/flood-insurance-manual">http://www.fema.gov/flood-insurance-manual</a>  Community FPA, FEMA CRS Coordinator, ISO representative  CRS manual <a href="http://www.fema.gov/library/viewRecord.do?id=2434">http://www.fema.gov/library/viewRecord.do?id=2434</a>	
<b>Community Rating System (CRS)</b>		
Does the community participate in CRS?	Community FPA, State, FEMA NFIP	
What is the community's CRS Class Ranking?	Flood Insurance Manual <a href="http://www.fema.gov/flood-insurance-manual">http://www.fema.gov/flood-insurance-manual</a>	
What categories and activities provide CRS points and how can the class be improved?		
Does the plan include CRS planning requirements	Community FPA, FEMA CRS Coordinator, ISO representative  CRS manual <a href="http://www.fema.gov/library/viewRecord.do?id=2434">http://www.fema.gov/library/viewRecord.do?id=2434</a>	

## Hazards Summary Worksheet

Use this worksheet to summarize hazard description information and identify which hazards are most significant to the planning area. The definitions provided on the following page can be modified to meet local needs and methods.

Hazard	Location (Geographic Area Affected)	Maximum Probable Extent (Magnitude/Strength)	Probability of Future Events	Overall Significance Ranking
Avalanche				
Dam Failure				
Drought				
Earthquake				
Erosion				
Expansive Soils				
Extreme Cold				
Extreme Heat				
Flood				
Hail				
Hurricane				
Landslide				
Lightning				
Sea Level Rise				
Severe Wind				
Severe Winter Weather				
Storm Surge				
Subsidence				
Tornado				
Tsunami				
Wildfire				

### Definitions for Classifications

#### Location (Geographic Area Affected)

- **Negligible:** Less than 10 percent of planning area or isolated single-point occurrences
- **Limited:** 10 to 25 percent of the planning area or limited single-point occurrences
- **Significant:** 25 to 75 percent of planning area or frequent single-point occurrences
- **Extensive:** 75 to 100 percent of planning area or consistent single-point occurrences

#### Maximum Probable Extent (Magnitude/Strength based on historic events or future probability)

- **Weak:** Limited classification on scientific scale, slow speed of onset or short duration of event, resulting in little to no damage
- **Moderate:** Moderate classification on scientific scale, moderate speed of onset or moderate duration of event, resulting in some damage and loss of services for days
- **Severe:** Severe classification on scientific scale, fast speed of onset or long duration of event, resulting in devastating damage and loss of services for weeks or months
- **Extreme:** Extreme classification on scientific scale, immediate onset or extended duration of event, resulting in catastrophic damage and uninhabitable conditions

Hazard	Scale / Index	Weak	Moderate	Severe	Extreme
Drought	Palmer Drought Severity Index <sup>3</sup>	-1.99 to +1.99	-2.00 to -2.99	-3.00 to -3.99	-4.00 and below
Earthquake	Modified Mercalli Scale <sup>4</sup>	I to IV	V to VII	VII	IX to XII
	Richter Magnitude <sup>5</sup>	2, 3	4, 5	6	7, 8
Hurricane Wind	Saffir-Simpson Hurricane Wind Scale <sup>6</sup>	1	2	3	4, 5
Tornado	Fujita Tornado Damage Scale <sup>7</sup>	F0	F1, F2	F3	F4, F5

#### Probability of Future Events

- **Unlikely:** Less than 1 percent probability of occurrence in the next year or a recurrence interval of greater than every 100 years.
- **Occasional:** 1 to 10 percent probability of occurrence in the next year or a recurrence interval of 11 to 100 years.
- **Likely:** 10 to 90 percent probability of occurrence in the next year or a recurrence interval of 1 to 10 years
- **Highly Likely:** 90 to 100 percent probability of occurrence in the next year or a recurrence interval of less than 1 year.

#### Overall Significance

- **Low:** Two or more criteria fall in lower classifications or the event has a minimal impact on the planning area. This rating is sometimes used for hazards with a minimal or unknown record of occurrences or for hazards with minimal mitigation potential.
- **Medium:** The criteria fall mostly in the middle ranges of classifications and the event's impacts on the planning area are noticeable but not devastating. This rating is sometimes used for hazards with a high extent rating but very low probability rating.
- **High:** The criteria consistently fall in the high classifications and the event is likely/highly likely to occur with severe strength over a significant to extensive portion of the planning area.

3 Cumulative meteorological drought and wet conditions: <http://ncdc.noaa.gov/>

4 Earthquake intensity and effect on population and structures: <http://earthquake.usgs.gov>

5 Earthquake magnitude as a logarithmic scale, measured by a seismograph: <http://earthquake.usgs.gov>

6 Hurricane rating based on sustained wind speed: <http://nhc.noaa.gov>

7 Tornado rating based on wind speed and associated damage: <http://spc.noaa.gov>



## Mitigation Action Evaluation Worksheet

Use this worksheet to help evaluate and prioritize each mitigation action being considered by the planning team. For each action, evaluate the potential benefits and/or likelihood of successful implementation for the criteria defined below.

Rank each of the criteria with a -1, 0 or 1 using the following scale:

- 1 = Highly effective or feasible
- 0 = Neutral
- -1 = Ineffective or not feasible

### Example Evaluation Criteria

**Life Safety** – How effective will the action be at protecting lives and preventing injuries?

**Property Protection** – How significant will the action be at eliminating or reducing damage to structures and infrastructure?

**Technical** – Is the mitigation action technically feasible? Is it a long-term solution? Eliminate actions that, from a technical standpoint, will not meet the goals.

**Political** – Is there overall public support for the mitigation action? Is there the political will to support it?

**Legal** – Does the community have the authority to implement the action?

**Environmental** – What are the potential environmental impacts of the action? Will it comply with environmental regulations?

**Social** – Will the proposed action adversely affect one segment of the population? Will the action disrupt established neighborhoods, break up voting districts, or cause the relocation of lower income people?

**Administrative** – Does the community have the personnel and administrative capabilities to implement the action and maintain it or will outside help be necessary?

**Local Champion** – Is there a strong advocate for the action or project among local departments and agencies that will support the action's implementation?

**Other Community Objectives** – Does the action advance other community objectives, such as capital improvements, economic development, environmental quality, or open space preservation? Does it support the policies of the comprehensive plan?

# Worksheet 6.1

## Mitigation Action Evaluation Worksheet

Mitigation Action	Life Safety	Property Protection	Technical	Political	Legal	Environmental	Social	Administrative	Local Champion	Other Community Objectives	Total Score
Local Plans and Regulations											
Structure and Infrastructure Projects											
Natural Systems Protection											
Education and Awareness Programs											

## Mitigation Action Implementation Worksheet

Complete a mitigation action implementation worksheet for each identified mitigation action.

Jurisdiction:	
Mitigation Action/Project Title:	
Background/Issue:	
Ideas for Integration:	
Responsible Agency:	
Partners:	
Potential Funding:	
Cost Estimate:	
Benefits: (Losses Avoided)	
Timeline:	
Priority:	
Worksheet Completed by:	(Name/Department)

# Worksheet 6.2

Mitigation Action Implementation Worksheet

*This page intentionally left blank.*

## Mitigation Action Progress Report Form

Progress Report Period	From Date:	To Date:
Action/Project Title		
Responsible Agency		
Contact Name		
Contact Phone/Email		
Project Status	<input type="checkbox"/> Project completed <input type="checkbox"/> Project canceled <input type="checkbox"/> Project on schedule <input type="checkbox"/> Anticipated completion date: _____ <input type="checkbox"/> Project delayed Explain _____	

### Summary of Project Progress for this Report Period

1. What was accomplished for this project during this reporting period?

---



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2. What obstacles, problems, or delays did the project encounter?

---



---

3. If uncompleted, is the project still relevant? Should the project be changed or revised?

---



---

4. Other comments

---



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# Worksheet 7.1

Mitigation Action Progress Report Form

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## Plan Update Evaluation Worksheet

Plan Section	Considerations	Explanation
Planning Process	Should new jurisdictions and/or districts be invited to participate in future plan updates?	
	Have any internal or external agencies been invaluable to the mitigation strategy?	
	Can any procedures (e.g., meeting announcements, plan updates) be done differently or more efficiently?	
	Has the Planning Team undertaken any public outreach activities?	
	How can public participation be improved?	
	Have there been any changes in public support and/or decision-maker priorities related to hazard mitigation?	
Capability Assessment	Have jurisdictions adopted new policies, plans, regulations, or reports that could be incorporated into this plan?	
	Are there different or additional administrative, human, technical, and financial resources available for mitigation planning?	
	Are there different or new education and outreach programs and resources available for mitigation activities?	
	Has NFIP participation changed in the participating jurisdictions?	
Risk Assessment	Has a natural and/or technical or human-caused disaster occurred?	
	Should the list of hazards addressed in the plan be modified?	
	Are there new data sources and/or additional maps and studies available? If so, what are they and what have they revealed? Should the information be incorporated into future plan updates?	
	Do any new critical facilities or infrastructure need to be added to the asset lists?	
	Have any changes in development trends occurred that could create additional risks?	
	Are there repetitive losses and/or severe repetitive losses to document?	

# Worksheet 7.2

## Plan Update Evaluation Worksheet

Plan Section	Considerations	Explanation
Mitigation Strategy	Is the mitigation strategy being implemented as anticipated? Were the cost and timeline estimates accurate?	
	Should new mitigation actions be added to the Action Plan? Should existing mitigation actions be revised or eliminated from the plan?	
	Are there new obstacles that were not anticipated in the plan that will need to be considered in the next plan update?	
	Are there new funding sources to consider?	
	Have elements of the plan been incorporated into other planning mechanisms?	
Plan Maintenance Procedures	Was the plan monitored and evaluated as anticipated?	
	What are needed improvements to the procedures?	



## Example Adoption Resolution

(LOCAL COMMUNITY)

(STATE)

RESOLUTION NO. \_\_\_\_\_

A RESOLUTION OF THE (LOCAL COMMUNITY) ADOPTING THE

(TITLE AND DATE OF MITIGATION PLAN)

WHEREAS the (local governing body) recognizes the threat that natural hazards pose to people and property within (local community); and

WHEREAS the (local community) has prepared a multi-hazard mitigation plan, hereby known as (title and date of mitigation plan) in accordance with the Disaster Mitigation Act of 2000; and

WHEREAS (title and date of mitigation plan) identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in (local community) from the impacts of future hazards and disasters; and

WHEREAS adoption by the (local governing body) demonstrates their commitment to the hazard mitigation and achieving the goals outlined in the (title and date of mitigation plan).

NOW THEREFORE, BE IT RESOLVED BY THE (LOCAL COMMUNITY), (STATE), THAT:

Section 1. In accordance with (local rule for adopting resolutions), the (local governing body) adopts the (title and date of mitigation plan).

ADOPTED by a vote of \_\_\_\_ in favor and \_\_\_\_ against, and \_\_\_\_ abstaining, this \_\_\_\_ day of

\_\_\_\_\_, \_\_\_\_\_.

By: \_\_\_\_\_

(print name)

ATTEST:

By: \_\_\_\_\_

(print name)

APPROVED AS TO FORM:

By: \_\_\_\_\_

(print name)

# Worksheet 8.1

Example Adoption Resolution

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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*.

Jurisdiction:	Title of Plan:	Date of Plan:
Local Point of Contact:	Address:	
Title:		
Agency:		
Phone Number:		
		E-Mail:

State Reviewer:	Title:	Date:
-----------------	--------	-------

FEMA Reviewer:	Title:	Date:
Date Received in FEMA Region <i>(insert #)</i>		
Plan Not Approved		
Plan Approvable Pending Adoption		
Plan Approved		

# Appendix B

Local Mitigation Plan Review Tool

## 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 (section and/or page number)		Met	Not Met
Regulation (44 CFR 201.6 Local Mitigation Plans)				
<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))				
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))				
A3. Does the Plan document how the public was involved in the planning process during the drafting stage? (Requirement §201.6(b)(1))				
A4. Does the Plan describe the review and incorporation of existing plans, studies, reports, and technical information? (Requirement §201.6(b)(3))				
A5. Is there discussion of how the community(ies) will continue public participation in the plan maintenance process? (Requirement §201.6(c)(4)(iii))				
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))				
<b><u>ELEMENT A: REQUIRED REVISIONS</u></b>				

1. REGULATION CHECKLIST	Location in Plan (section and/or page number)	Met	Not Met
<b>Regulation (44 CFR 201.6 Local Mitigation Plans)</b>			
<b>ELEMENT B. HAZARD IDENTIFICATION AND RISK ASSESSMENT</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))			
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))			
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))			
B4. Does the Plan address NFIP insured structures within the jurisdiction that have been repetitively damaged by floods? (Requirement §201.6(c)(2)(ii))			
<b><u>ELEMENT B: REQUIRED REVISIONS</u></b>			
<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))			
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 §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))			
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))			
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))			
<b><u>ELEMENT C: REQUIRED REVISIONS</u></b>			

# Appendix B

Local Mitigation Plan Review Tool

<b>1. REGULATION CHECKLIST</b>		<b>Location in Plan</b>		<b>Not</b>
<b>Regulation (44 CFR 201.6 Local Mitigation Plans)</b>		<b>(section and/or</b>	<b>page number)</b>	<b>Met</b>
		<b>Met</b>	<b>Met</b>	<b>Met</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))				
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 §201.6(d)(3))				
<b><u>ELEMENT D: REQUIRED REVISIONS</u></b>				
<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))				
E2. For multi-jurisdictional plans, has each jurisdiction requesting approval of the plan documented formal plan adoption? (Requirement §201.6(c)(5))				
<b><u>ELEMENT E: REQUIRED REVISIONS</u></b>				
<b>ELEMENT F. ADDITIONAL STATE REQUIREMENTS (OPTIONAL FOR STATE REVIEWERS ONLY; NOT TO BE COMPLETED BY FEMA)</b>				
F1.				
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

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

- *Involvement of stakeholders (elected officials/decision makers, plan implementers, business owners, academic institutions, utility companies, water/sanitation districts, etc.);*
- *Involvement of Planning, Emergency Management, Public Works Departments or other planning agencies (i.e., regional planning councils);*
- *Diverse methods of participation (meetings, surveys, online, etc.); and*
- *Reflective of an open and inclusive public involvement process.*

### 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) *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, 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).

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

# Appendix B

Local Mitigation Plan Review Tool

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