

# LOCAL MITIGATION PLAN REVIEW TOOL

## Town of Wilmington, VT

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

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

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

<b>Jurisdiction:</b> Town of Wilmington, VT	<b>Title of Plan:</b> Single Jurisdiction Hazard Mitigation Plan Town of Wilmington, Vermont	<b>Date of Plan: Final Plan</b> December 17, 2014 (shown on cover)
<b>Single or Multi-jurisdiction plan:</b> SINGLE		<b>New Plan or Plan Update:</b> UPDATE
<b>Regional Point of Contact:</b> Alyssa Sabetto, Planner Windham Regional Commission 139 Main St., Suite 505 Brattleboro, VT 05301 802-257-4547 ext. 109 <a href="mailto:asabetto@windhamregional.org">asabetto@windhamregional.org</a>		<b>Local Points of Contact:</b> James R. Burke, Chair Wilmington Selectboard PO Box 217 Wilmington, VT 05363 802-464-8591 <a href="mailto:wilmclrk@sover.net">wilmclrk@sover.net</a>  Scott Murphy, Town Manager <a href="mailto:smurphy@wilmingtonvt.us">smurphy@wilmingtonvt.us</a>

<b>State Reviewer:</b> Ray Doherty	<b>Title:</b> State Hazard Mitigation Officer	<b>Date:</b> 5/21/14; 6/28/14; 1/20/2015
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<b>FEMA Reviewer:</b> Barbara Ellis Nan Johnson Caroline Williams Nan Johnson Caroline Williams	<b>Title:</b> JFO HM Community Planner Region I Community Planner HM Community Planner, RSV Region I Community Planner HM Community Planner, RSV	<b>Date:</b> 02/03/2014 02/03/2014, 10/09/2014, 11/14/2014 05/13/2014, 08/28/2014, 10/23/2014 12/04/2014, 1/22/2015 01/15/2015
<b>Date Received in FEMA Region I</b>	3/26/13, 6/30/2014; 11/25/14; 12/18/2014; 1/20/15	
<b>Plan Not Approved</b>	Returned for Required Revisions - 2/3/14, 5/2014, 10/9/14 (Corrected 11/14/14); Final Plan page corrections 1/20/15	
<b>Plan Approvable Pending Adoption</b>	12/5/14	
<b>Plan Approved</b>	YES – Ready for Approval Letter 1/23/2015	

**SECTION 1:  
REGULATION CHECKLIST**

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

<b>1. REGULATION CHECKLIST</b>	<b>Location in Plan (section and/or page number)</b>	<b>Met</b>	<b>Not Met</b>
<b>Regulation (44 CFR 201.6 Local Mitigation Plans)</b>			
<b>ELEMENT A. PLANNING PROCESS</b>			
A1. Does the Plan document the planning process, including how it was prepared and who was involved in the process for each jurisdiction? (Requirement §201.6(c)(1))	pp. 7-10, Appendix A	X	
A2. Does the Plan document an opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, agencies that have the authority to regulate development as well as other interests to be involved in the planning process? (Requirement §201.6(b)(2))	p. 10, Appendix C	X	
A3. Does the Plan document how the public was involved in the planning process during the drafting stage? (Requirement §201.6(b)(1))	pp. 8-9, Appendix B	X	
A4. Does the Plan describe the review and incorporation of existing plans, studies, reports, and technical information? (Requirement §201.6(b)(3))	pp. 37-40, throughout the plan in footnotes and source notations	X	
A5. Is there discussion of how the community(ies) will continue public participation in the plan maintenance process? (Requirement §201.6(c)(4)(iii))	pp. 35-36	X	
A6. Is there a description of the method and schedule for keeping the plan current (monitoring, evaluating and updating the mitigation plan within a 5-year cycle)? (Requirement §201.6(c)(4)(i))	pp. 35-38	X	
<b>ELEMENT A: REQUIRED REVISIONS</b>			

<b>1. REGULATION CHECKLIST</b>		<b>Location in Plan</b> (section and/or page number)	<b>Met</b>	<b>Not Met</b>
<b>Regulation (44 CFR 201.6 Local Mitigation Plans)</b>				
<b>ELEMENT 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))	pp. 11-20	X		
B2. Does the Plan include information on previous occurrences of hazard events and on the probability of future hazard events for each jurisdiction? (Requirement §201.6(c)(2)(i))	pp. 3, 8, 11-20, Appendix D	X		
B3. Is there a description of each identified hazard’s impact on the community as well as an overall summary of the community’s vulnerability for each jurisdiction? (Requirement §201.6(c)(2)(ii))	pp. 3, 8, 11-25, 27	X		
B4. Does the Plan address NFIP insured structures within the jurisdiction that have been repetitively damaged by floods? (Requirement §201.6(c)(2)(ii))	p. 22	X		
<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))	pp. 33, 35, 38-40	X		
C2. Does the Plan address each jurisdiction’s participation in the NFIP and continued compliance with NFIP requirements, as appropriate? (Requirement §201.6(c)(3)(ii))	pp. 22, 32, 39	X		
C3. Does the Plan include goals to reduce/avoid long-term vulnerabilities to the identified hazards? (Requirement §201.6(c)(3)(i))	pp. 29-30	X		
C4. Does the Plan identify and analyze a comprehensive range of specific mitigation actions and projects for each jurisdiction being considered to reduce the effects of hazards, with emphasis on new and existing buildings and infrastructure? (Requirement §201.6(c)(3)(ii))	pp. 33-35	X		
C5. Does the Plan contain an action plan that describes how the actions identified will be prioritized (including cost benefit review), implemented, and administered by each jurisdiction? (Requirement §201.6(c)(3)(iv)); (Requirement §201.6(c)(3)(iii))	pp. 33-35, 37-38	X		
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))	pp. 37-40	X		
<b><u>ELEMENT C: REQUIRED REVISIONS</u></b>				

<b>1. REGULATION CHECKLIST</b>		<b>Location in Plan</b> (section and/or page number)	<b>Met</b>	<b>Not Met</b>
<b>Regulation (44 CFR 201.6 Local Mitigation Plans)</b>				
<b>ELEMENT 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))	pp. 27, 34	X		
D2. Was the plan revised to reflect progress in local mitigation efforts? (Requirement §201.6(d)(3))	pp. 34-35, 38-40	X		
D3. Was the plan revised to reflect changes in priorities? (Requirement §201.6(d)(3))	pp. 33- 35	X		
<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))	p. 6 – signed Certificate of Adoption	X		
E2. For multi-jurisdictional plans, has each jurisdiction requesting approval of the plan documented formal plan adoption? (Requirement §201.6(c)(5))	Not applicable – single jurisdiction plan	N/A		
<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

### 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

##### **Strengths:**

- The plan provides information about contributions from those who participated in the planning process. On page 10 it states, “The town historian attended the meeting and was able to provide numerous newspaper clippings from past flooding events. The road foreman identified areas in town that have reoccurring flooding...”
- The February 26, 2013 meeting is documented with a sign-in sheet in Appendix A.
- Newspaper clippings illustrate past occurrences in Appendix C.

##### **Opportunities for Improvement:**

- During the next plan updates, ensure that neighboring communities have an opportunity to participate during plan development. In the next plan, clearly state how these communities were invited to do so. In the 2014 plan, it appears that neither of these was done. The email (dated 04/09/2013) in Appendix B announces *distribution* of the attached plan *without soliciting comments or other participation* from neighboring communities and their officials. Distributing copies of a document is not the same as asking for input. As a result, statements about this email on page 10 and at the top of page 44 are incorrect.
- Future plans should improve the explanation of the town “stakeholder group”, such that it is clearly stated whether the group is a true meeting of stakeholders, or instead one for invited town officials/employees, or a mix of invited stakeholders and town officials. For example, in the 2014 plan on page 7 a sentence starts with “The people *chosen* as the stakeholders”. This phrasing appears to erroneously equate the term stakeholder with being the same as an invited participant. Stakeholders are not created by a town selecting them, though individual stakeholders may be invited to take part. A Stakeholder is *anybody who can affect or is affected by an organization, strategy or project*. In a hazard mitigation plan, this could be any government, public or private group, organization, agency, business, individual, or another municipality among others – whether or not the town invites their participation.
- Describe in greater detail how the stakeholder group, town officials, and regional planning agency divided responsibilities and reviewed information throughout the plan development. Identify any specific roles undertaken by individuals in the stakeholder group or by town officials.
- In the next plan update, consider including more than one public meeting along with expanded descriptions. The 2014 plan states that “the plan” (a draft or the prior plan?) was made available at a Town Meeting, which is the only public meeting described for the updated plan’s development.
- Provide the complete date including year for the Town Meeting mentioned in the plan. Only the month (March) is given without a day or year for this meeting. In the next plan update, provide documentation, including dates, for each public meeting during that subsequent plan’s development.
- Recommend documenting the dates during which draft plans are available to the public. In the 2014 submitted plan, dates are not shown for posting the plan on the Town website and placing a hard copy at two locations, although it is noted that comments were received.

- The plan would be improved by stating how viewers of the town website were instructed to submit plan comments.
- Consider including dates when plan advertisements/notices are placed in local newspapers, and insert copies of these in the Appendix.
- Recommend posting the final, FEMA-approved HM plan on the town website throughout the next 5-year plan cycle.
- Provide additional footnotes or other citations noting information sources. These should include for example - town demographics, historical hazard information, data layers and originating data sources used to develop maps.

## Element B: Hazard Identification and Risk Assessment

### **Strengths:**

- Numerous past flood and meteorological events (hurricane, tropical storm, thunderstorm, tornado, ice and snow storms) are dated and described.
- The plan states the number of severe occurrences for two hazards of the hazards within a specified period (70 windstorms in the past 46 years, 114 winter storms since March 1960). The plan gives details of the most devastating events with described impacts.
- The effects of Tropical Storm Irene on the community are documented.
- On pages 24-25 and 30, the plan lists the most critical structures in Wilmington, identifying those that are in or very close to the floodplain.
- The plan identifies past flood impacts to town facilities, such as the town hall/town clerk's office, fire and police departments.
- A FIRM panel Firmette was included in the plan showing the Deerfield River confluence with Beaver Brook, which is an area of concern.
- Local sites and circumstances related to ice jams are explained. A map shows locations of past ice jams.

### **Opportunities for Improvement:**

- Strongly recommend describing all natural hazards commonly affecting the town, not just annual hazards. Addressing only natural hazards with annual frequencies (High Likelihood) severely limits community planning and mitigation for serious occurrences with a significant chance of occurring. This annual-event-only approach would exclude many hazards identified by the State of Vermont as affecting the Town (see State of Vermont Hazard Mitigation Plan 2013) as noted in the 2014 plan on page 11. The description of these hazards should include information on the type of hazard, location, extent, occurrence, probability, local vulnerability and impacts. (It is noted on page 19 of the 2014 plan that additional hazards will be considered in future plan updates.)
- Provide a well-explained rationale for omitting any natural hazards commonly recognized as affecting the jurisdiction. In the 2014 plan, the rationale is given that occurrences are "minimal" without describing more specifically what this means.
- Provide at least **basic descriptions/definitions**, which are missing for natural hazards in the plan, such as winter storm (blizzard, northeasters, ice storm), hurricane, tropical storm, tornado, high winds ('wind shear', microbursts, downbursts), landslide, wildfire, earthquake, and drought.

- Structure fire and Wildfire are grouped together as one category in the page 21 table of the 2014 plan. In the next plan update, consider addressing Wildfire separately and explain the risks and vulnerabilities from this natural hazard.
- In the next update, include more in-depth descriptions of risk and impacts to people, property and infrastructure. This may assist in identifying overlooked vulnerabilities and in determining potential long-term actions to reduce risks (i.e. mitigation).
- Explain past “Beaver Mitigation”, and whether this included use of Water Level Control Devices (WLCD) for long-term risk reduction.
- Explain any past engineering input relative to the cause and potential stabilization of the potential landslide locations on Route 100, Route 9, and at the junction of West Main and Shaftner Streets. Explain if fluvial erosion, hillside drainage, vegetation clearing, or other factors are involved.
- Recommend describing local historic preservation and tourism/recreation in relation to hazard vulnerabilities. Consider addressing any potential impacts through well-defined mitigations activities, such as physical projects or municipal regulation.
- Estimate the number of structures in various types of hazard areas (beyond only flood hazard areas), the possible economic losses, and explain the methodology used to arrive at those figures.
- In the next plan, include maps with more recent content. This could provide more currently valid information to assist in assessing and reducing risk. A majority of the maps utilized in the 2014 plan were either undated, or dated 2010 or older.
- When available, include past event data from any local river gauges maintained by federal, state, or municipal agencies, or by private interests.

Note: Within the 2014 plan on page 27 (fourth paragraph), the text says that “Wilmington’s current zoning bylaw update will help to increase community vulnerability”. This may be an inadvertent error, which should read instead as decrease.

### Element C: Mitigation Strategy

#### **Strengths:**

- The plan proposes several important mitigation objectives and actions, such as relocating the town clerk’s office, fire and police departments, replacing incorrectly sized road culverts, flood-proofing, and retrofitting public buildings.
- The 2014 HM plan lists several policies from the Town Plan which relate to mitigation.

#### **Opportunities for Improvement:**

- It is recommended to present mitigation goals separately from preparedness and response goals, so readers can more clearly understand the difference. In the 2014 plan, these are listed together under the section heading “Local Hazard Mitigation Goals”, although the text explains that these are not strictly mitigation goals but emergency planning goals.
- **Preparedness, response, maintenance, and standard operations are frequently confused with mitigation in the 2014 plan. Hazard mitigation is a *sustained* action taken to reduce or eliminate *long-term* risk to human life and property from hazards.**

It is recommended to clearly distinguish non-mitigation activities from mitigation. Otherwise, those

reading the plan may become confused regarding what constitutes a hazard mitigation project. This can be accomplished through various means, such as placing non-mitigation activities in a separate table and/or clearly labeling the maintenance, preparedness, or response items. If this is not understood, local decision making may be hampered in selecting mitigation projects for future grant applications and plan updates.

In the 2014 plan, several activities on the “Mitigation Actions Table” (page 34) are instead maintenance, preparedness, and response, not mitigation.

[Maintenance is making repairs or replacing items without change/improvement, such as bridge replacement in kind, hazardous tree removal, road and embankment repairs, and checking culverts for debris and ice. Preparedness and response items include, for example, radio Communications Interoperability, NIMS/ICS Training, emergency kits, and shelter information.]

Note: While it is acceptable to include non-mitigation activities within a HM plan, these are not considered when meeting plan requirements.

*For guidance refer to Local Mitigation Planning Handbook, FEMA, March 2013 (printed web links are in this review’s Resources section). Within the Handbook, Table 6.1 Types of Mitigation Actions may be particularly useful. Consult with your State Hazard Mitigation Planner for further assistance.*

- Consider additional mitigation activities to reduce risk to new development and redevelopment. Changes to additional town regulations would be a possible area for reducing hazard risks.
- Consider explaining the zoning ordinance update which is under development and what is meant by adding “flood and economic resiliency elements” (pages 34 and 40).
- Analyze and consider mitigation projects to address additional hazard vulnerabilities identified within the plan.  
For example:
  - >Implement town regulation of fuel tanks (oil, propane)and other storage within designated floodplains, since debris/loose objects during flooding is a concern.
  - >Examine the feasibility of alternate ice jam mitigation projects, such as modified bridge design. Explain this analysis in the next updated plan, and propose an appropriate project.
  - >Explain the “Beaver Mitigation” listed in the plan and improve on current method(s). Removal and trapping are ineffective short-term measures. Water Level Control Devices (WLCD) would be true mitigation resulting in long-term risk reduction and are less costly over time.
  - >Analyze the cause of threatening slope failures (landslides) within the town and weigh alternative stabilization methods. Propose projects on town controlled property, right-of-ways and easements for sites identified in the 2014 plan or other sites that may be identified.
- Provide further information on the dry flood proofing projects for North Star Bowl and Pizza.
- Continue to develop the explanation for the evaluation criteria used to prioritize mitigation actions. Provide more details regarding how the costs and benefits were weighed in the prioritization of mitigation actions. For instance, it is unclear if the costs are limited to structural losses/repairs, economic losses to the community from business interruption, and/or non-monetary costs such as disruption of social and cultural activities. Explain what the benefits are for each action, both monetary and social. This will help readers understand why certain actions take priority over others.



- For mitigation actions potentially funded through HMGP, include the funding source for the local match. For example, this might be from town government or from private funds.
- For mitigation actions potentially partially funded through CDBG, identify the other funding sources.
- If a mitigation project is underway, consider stating the percentage completed and/or the date when completion is expected.

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

##### ***Opportunities for Improvement***

- Record and note past issues that occurred while developing the 2014 plan.
- Identify any issues that arise while implementing the plan and specific mitigation actions through the upcoming five-year cycle. Record issues in the biannual reports and in the next plan to prevent reoccurring problems and delays.
- Consider presenting in the next plan how identified mitigation activities may save taxpayer money through proactive measures. This might increase local support for long term risk reduction, rather than citizens relying solely on emergency response and rebuilding.
- Assess in greater detail the current and projected changes in the community and environment in order to identify developing and potential future risks.
- Provide more details on completed projects. This could have improved community understanding of mitigation through the 2014 plan, by describing the type of retrofitting for wind and ice made on specifically identified municipal buildings and infrastructure, and the completed acquisition projects.
- Consider including documentation of annual reviews and monitoring as appendices within the next plan.
- Identify data gaps and propose how to rectify those in the next plan update.

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

Consider what actions can be funded by various governmental agencies (federal and state), especially when meeting multiple community goals. Federal agencies may support integrated planning efforts such as rural development, sustainable communities and smart growth, wildfire mitigation, conservation, etc. FEMA's RiskMAP may bring technical assistance resources rather than direct funding.

Seek out other non-governmental or non-emergency management funding sources such as from private organizations and businesses, federal initiatives (Smart Growth, Sustainable Communities), Federal Highways pilot projects, and historic preservation programs.

##### ***State Technical Assistance***

Refer to the Vermont State Hazard Mitigation Plan for resources available to the local communities in Vermont. Information about applying for grants, available publications and training opportunities can be obtained from the Vermont State Hazard Mitigation Officer.

Vermont Emergency Management, Hazard Mitigation  
HMGP Grant Guidance and Forms  
<http://vem.vermont.gov/programs/mitigation/forms>

Vermont Department of Environmental Conservation, Watershed Mgt. Division  
[http://www.vtwaterquality.org/rivers/htm/rv\\_floodhazard.htm](http://www.vtwaterquality.org/rivers/htm/rv_floodhazard.htm)

VT Department of Forests, Parks & Recreation  
[http://www.vtfpr.org/htm/gen\\_staff.cfm](http://www.vtfpr.org/htm/gen_staff.cfm)

### ***Federal Funds and Technical Assistance***

Federal agencies may support integrated planning efforts such as rural development, sustainable communities and smart growth, wildfire mitigation, conservation, etc.

Federal Grants resource center  
<http://reconnectingamerica.org/resource-center/federal-grant-opportunities/>

FEMA Risk MAP <http://www.fema.gov/rm-main> .

Technical assistance is available through Risk MAP to assist communities in identifying, selecting, and implementing activities to support mitigation planning and risk reduction; Attend any Risk MAP's discovery meetings that may be scheduled in the State (or neighboring communities with shared watersheds boundaries) in the future.

[FEMA Hazard Mitigation Assistance Grant Program](http://www.fema.gov/hazard-mitigation-assistance)  
<http://www.fema.gov/hazard-mitigation-assistance>

This program provides funding for projects under the Hazard Mitigation Grant Program (HMGP), Pre-Disaster Mitigation (PDM), and Flood Mitigation Assistance (FMA).

Hazard Mitigation Grant Program (HMGP)

This program (administered by the State) provides funding for projects including:

- Soil Stabilization
- Infrastructure Retrofit (culverts & bridges)
- Wildfire Mitigation
- Minor Localized Flood Reduction Projects

Individuals and businesses are not eligible to apply for HMA funds; however, an eligible applicant or subapplicant may apply for funding to mitigate private structures.

USDA, Natural Resources Conservation Service (NRCS)  
Conservation Technical Assistance

<http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/technical/cta>

Financial Assistance <http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/>

Conservation Innovation Grant Programs

<http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs>

## HUD

Sustainable Housing and Communities Initiative

[http://portal.hud.gov/portal/page/portal/HUD/program\\_offices/sustainable\\_housing\\_communities](http://portal.hud.gov/portal/page/portal/HUD/program_offices/sustainable_housing_communities)

CDBG Disaster Recovery Assistance

[http://portal.hud.gov/hudportal/HUD?src=/program\\_offices/comm\\_planning/communitydevelopment/programs/drsi](http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/communitydevelopment/programs/drsi)

HUD provides flexible grants to help cities, counties, and States recover from Presidentially declared disasters, especially in low-income areas, subject to availability of supplemental appropriations.

CDBG Disaster Recovery grants primarily benefit low-income residents in and around communities that have experienced a natural disaster. These can be either activities in which all or the majority of people who benefit have low or moderate incomes or activities that benefit an area or service group in which at least 51 percent of the population are of low- and moderate-income.

### **FEMA publications**

[FEMA 2013 Hazard Mitigation Guidance](#), HMA Guidance, FEMA requirements regarding HMGP, PDM, and FMA grants.

<http://www.fema.gov/media-library/assets/documents/33634?id=7851>

[Local Mitigation Planning Handbook](#), FEMA, March 2013

<http://www.fema.gov/media-library/assets/documents/31598?id=7209>

[Local Mitigation Plan Review Guide](#), FEMA, October 1, 2011

<http://www.fema.gov/media-library/assets/documents/23194>

The publications below can be downloaded for free from <http://www.fema.gov/library>. Search in the FEMA library by title/number or use the web links below.

[Managing Floodplain Development through the NFIP](#) provides guidance to municipal officials considering changes to local regulations and zoning. A copy can be downloaded from

<http://www.fema.gov/library/viewRecord.do?id=2108>

FEMA B-797, Hazard Mitigation Field Book – Roadways

<http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=4271>

Flood Hazard Mitigation Handbook for Public Facilities

<http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=3724>

FEMA 386-6, Mitigation Planning How To #6: Integrating Historic Property & Cultural Resource Considerations into Hazard Mitigation Planning

<http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1892>

FEMA P-787 Catalog of FEMA Wind, Flood & Wildfire Publications, Training Courses & Workshops(2012)

<http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=3184>

FEMA P-754, [Wildfire Hazard Mitigation Handbook for Public Facilities](#)  
<http://www.fema.gov/media-library/assets/documents/16568?id=3723>

Building Science for Disaster-Resistant Communities: Flood Haz. Publications (FEMA L-782)  
<http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=4580>

***The following FEMA publications are especially useful in public information/outreach programs and can be downloaded for free, and in some cases ordered at no cost in hard copy for public distribution.***

FEMA P-737, [Home Builder's Guide to Construction in Wildfire Zones](#)  
<http://www.fema.gov/media-library/assets/documents/15962?id=3646>

FEMA 232, [Homebuilders' Guide to Earthquake-Resistant Design and Construction](#) provides seismic design and construction guidance for one- and two-family light frame residential structures that can be utilized by homebuilders, homeowners, and other non-engineers.  
<http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=2103>

FEMA 347, [Above the Flood: Elevating your Flood-prone House](#)  
This large publication (69 pages) could be placed in the reference section of a local public library or at a City or Town Hall for lending.  
<http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1424>

After Disaster Strikes: How to Recover Financially from a Natural Disaster (FEMA 292)  
<http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1647>

After a Flood: The First Steps (FEMA L-198)  
<http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1684>

Anchoring Home Fuel Tanks (FEMA 481)  
<http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=2021>

Best Build II: Building in Riverine Areas (in VHS format)  
This video discusses safe and cost effective way to build in riverine areas. It reviews the importance of knowing your base flood elevation, flood velocity, duration of the flooding, the potential for debris, the warning time, soil conditions, erosion and the general topography of the area you plan to build in.  
<http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=2132>

Best Build III: Floodprone Home (how to reduce flood damage to an existing home - three techniques for elevating a home, case studies, relocation, elevation, berms/floodwalls, sealants/closures, basements and partial protection)  
<http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=2133>

Additional Information continued...

Cheaper Flood Insurance: Five Ways to Lower the Cost of Your Flood Insurance Premium (D-671)  
<http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=3060>

Disaster Mitigation: Publications, Workshops and Planning Tools (FEMA 470). This brochure is a list of FEMA publications and resources that can assist homeowners and mitigation planners in preparing for, and recovering from, disasters. (For all hazards)

<http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1661>

Fact Sheet: Winter Storms (FEMA 558)

<http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=3056>

Flood Insurance 101

<http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=2878>

Homeowner's Guide to Retrofitting (FEMA P-312) A guide specifically for homeowners who want to know how to protect their homes from flooding, and who have little or no experience with flood protection methods or building construction techniques. (230 pages) – can be downloaded by chapter from the website)

<http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1420>

How You Can Benefit from Increased Cost of Compliance (ICC) (F-300)

<http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=3010>

ICC Fact Sheet Increased Cost of Compliance (ICC) coverage is one of several resources for flood insurance policyholders who need additional help rebuilding after a flood. It provides up to \$30,000 to help cover the cost of mitigation measures that will reduce flood risk. ICC coverage is a part of most standard flood insurance policies available under FEMA's National Flood Insurance Program (NFIP).

<http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=1477>

Winter Flooding Factsheet

<http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=2889>

### ***Private non-profit information sources***

National Fire Protection Association (NFPA) Firewise Program

<http://www.firewise.org>

NFPA codes and standards

[www.nfpa.org/freeaccess](http://www.nfpa.org/freeaccess)