

FEMA Local Hazard Mitigation Plan (LHMP) Review Tool Guide - 2021

1. REGULATION CHECKLIST

Regulation (44 CFR 201.6 Local Mitigation Plans)

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))

- Identify positions (e.g. emergency management director, zoning administrator) of those involved in the planning process, as well as committees (e.g. planning commission, hazard mitigation committee).
- State what activities made up the plan's development (committee development, meetings, outreach, etc.). Include what was addressed at each meeting (e.g. review of the previous plan, development of the risk assessment, mitigation action development, public hearing, etc.). More details provided in A3 on specifying if meetings were open to the public, and how the public was informed.
- Note in the plan whether it is a new plan or a plan update, when the previous plan was approved, and if the plan was previously a multi-jurisdiction plan or a plan covering a single jurisdiction.

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))

- Include the agency, organization and/or municipality's name, and the person's title/position to whom the plan was sent.
- Describe **how** these agencies/organizations/municipalities/individuals were invited to participate (e.g. invited to public meetings, sent a draft plan) and how they were instructed to provide feedback (e.g. comments were requested via email).
- Include whether any feedback was received.
- For example, "Waterbury's Hazard Mitigation Committee sent notices of its public meetings to the planning commissions of its neighboring communities of Bolton, Stowe, Duxbury, Middlesex and Moretown, In addition to these meeting invitations, the draft plan was sent to the town offices of the aforementioned towns, as well as the Agency of Natural Resources Floodplain Manager and the Agency of Transportation's District Technician. Feedback was requested to be submitted via email to the Hazard Mitigation Committee. No feedback was received."

A3. Does the Plan document how the public was involved in the planning process during the drafting stage? (Requirement §201.6(b)(1))

- Public involvement needs to occur during plan development, prior to having a plan draft, and again when a draft plan is complete. Specify when public meetings and surveys are held or posted.
- Like A2, the plan must state **how** the public was invited to participate in the process.
- Include whether any comments from the public were received during meetings, or in response to outreach through newsletters or other notices.
- For example, "Meetings of the Waterbury Hazard Mitigation Committee were warned on the town's website, posted in the town offices, and posted on the town's Front Porch Forum page. Public comments from those meetings were captured in the meeting minutes and incorporated into the plan, where applicable. The draft LHMP was then posted in the town offices and on the town's website, with the Committee's email address located on the town website and a comment drop-box situated in the town offices to encourage feedback/comments. No comments or feedback were received."

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A4. Does the Plan describe the review and incorporation of existing plans, studies, reports, and technical information? (Requirement §201.6(b)(3))

- The plan needs to explain which plans/studies/reports/technical information were reviewed, how they were reviewed, and how that information was incorporated into the plan. Use current/best available data.

A5. Is there discussion of how the community(ies) will continue public participation in the plan maintenance process? (Requirement §201.6(c)(4)(iii))

- Document how the public will be encouraged to participate in the plan maintenance process as well as the next plan update and have the opportunity to provide feedback.

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))

- Describe the process that will be followed to **monitor** and **evaluate** the plan over the next five years and to **update** the mitigation plan prior to expiration.
 - Monitoring: reviewing plan actions that have been accomplished (typically annually).
 - Evaluating: assessing the plan's effectiveness of achieving the identified purpose/goals/actions (typically annually).
 - Updating: include the steps that will be followed to update the plan prior to expiration.
- Including who (title/position/committee) is responsible for monitoring/evaluating the plan and who (title/position/committee) is responsible for updating the plan.
- Include when (e.g. annually during the April Selectboard meeting with the Local Emergency Plan is being developed) the plan is being monitored/evaluated and *how* (using an identified monitoring strategy during meetings of the planning commission).

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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))

- Include an omission rationale for the hazards that are not profiled. The omission rationale needs to include a list of those hazards not identified and an explanation for their omission from the plan. For example, “The Hazard Mitigation Committee identified Drought, Extreme High Temperatures and Ice Jams as low probability and low impact. Accordingly, and due to a lack of resources and capacity at the town, these hazards will not be discussed in detail in this plan. For a detailed description of these hazards, the reader should review the Vermont State Hazard Mitigation Plan.” Please note that all of the natural hazards identified in the SHMP should be addressed in an LHMP, whether by detailed discussion or incorporation into the omission rationale.
- Under each hazard, the plan must clearly describe specifically vulnerable locations within the town that may be impacted during an event.
- There is often confusion between extent (strength/magnitude/quantifiable data) and impact (number of structures impacted, cost of disaster). The plan should address past extent history, as well as the most severe event on record. To meet extent for each hazard, include:
 - Flooding – # inches rain, river gauge data
 - Fluvial Erosion/Landslide - # acres lost, or in feet (e.g. 100’ eroded along the bank, 10’ high)
 - Extreme Temperature – lowest/highest recorded temperature
 - Tornado – Fujita Scale (F0 through F5 and associated wind speeds, include a table with descriptions)
 - Hurricane – Saffir-Simpson scale (same as above – Tropical Storm through Category 5, and associated wind speeds)
 - Earthquake – Richter scale (same as above – 1 through 10)
 - Hail – size of hail in inches
 - Drought – duration of drought (days), amount of rainfall, snowpack and/or by using the Palmer Drought Severity Index
 - Ice Storms – thickness, in inches; power outages, in # of hours
 - Wildfire - # of acres lost
 - High Winds – wind speed in mph/knots
 - *For any identified hazard whose extent data cannot be determined, include a statement addressing why the data is missing/lacking.*
- For multi-jurisdictional plans, please be sure to identify those hazards that are unique to or varied from those affecting the overall multi-jurisdictional plans area. Similarly, include town-specific data for each jurisdiction, avoiding the use of regional data, except where the former is unavailable.

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))

- History of each identified hazard needs to be included in the plan
- For probability (likelihood of future events), if hazards are categorized (low/med/high), an explanation of the categorization process needs to be made clear. A probability needs to be included for each identified hazard in addition to its history.
- Plan updates must identify any hazard events that have occurred since the last plan was developed.

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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))

- Identify town assets that are vulnerable to the impacts of the identified hazards. Town assets are determined by the community and can include infrastructure, facilities, systems, people, structures, capabilities/activities that have value to the community. This can be met by referencing historical disaster impacts and/or future loss estimates. You can also describe scenarios in which certain assets could be impacted by an event. Potential impacts for each identified hazard need to be included.
- A description of the damage/loss susceptibility of each asset needs to be made for each identified hazard. A list of key issues that explicitly describe the town's greatest vulnerabilities, which should then be addressed in the mitigation strategy/action section of the plan.

B4. Does the Plan address NFIP insured structures within the jurisdiction that have been repetitively damaged by floods? (Requirement §201.6(c)(2)(ii))

- Include the number and types of repetitive loss properties (e.g. four residential structures, one commercial building and the town garage). If there are no repetitive loss properties, note that.

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))

- Document the existing authorities, policies, programs and resources, and your ability to expand on or improve them. Is the town *able* to expand on existing authorities, policies, programs and resources? If not, state this. If yes, then does the town need to expand/improve the existing authorities, policies, programs and resources? If not, state this. If yes, explain how the town can improve upon its current authorities, policies, programs and resources.
- Things to consider: does the town have what it needs to function effectively and implement mitigation action (authority, resources, timing, political will, community support)?

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))

- When applicable/available, document the dates of the effective FIRM, FIS; adoption of floodplain zoning ordinance/bylaws; number of insurance policies, etc.
- For those towns that have FIRMs/FHBMs, but are non-participants, please document the reasoning behind non-participation.
- To meet continued compliance, the plan needs to state how the community complies with NFIP: who (position/title) and/or what (board/committee) is enforcing compliance and how. Explain how permitting permits are reviewed for compliance with floodplain zoning/bylaws.

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

- Include mitigation goals – the results you would like to see once the mitigation actions have been implemented. How you write your goals is completely up to the community. Typically, we will see around five goals.
- The hazard mitigation planning goals should inform the planning process and the actions proposed in the action table. Example: If a mitigation **goal** is to "Protect life and property utilizing natural and nature-based solutions for long-term sustainability" then a project in the **action table** may be "Stabilize fluvial erosion-prone areas along Main Street utilizing locally-sourced rip rap covered with native riparian vegetation and strategically placed willow bundles."

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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))

- The community must consider a comprehensive range of mitigation actions, including mitigation actions for all hazards that are addressed with a focus on reducing risk to the identified vulnerabilities. Actions must be considered across the following categories:
 - Structure and Infrastructure Projects (e.g. culvert upsizing, bridge replacement)
 - Natural Systems Protection (e.g. streambank restoration)
 - Local Plans and Regulations (e.g. adoption of River Corridor bylaws, updating your town plan to better integrate with the Local Hazard Mitigation Plan)
 - Education and Awareness Programs (e.g. sending out information flood mitigation opportunities for homeowners with their tax bills, having a discussion at Town Meeting day on town mitigation actions)
- Develop mitigation actions based on the vulnerabilities identified in your plan. For example, if you address the vulnerability of the Fire Department to inundation due to its location in the floodplain, include a mitigation action to address this vulnerability, such as: install of flood vents to relieve hydrostatic pressure during flood inundation and mitigation against potential structural damage.
- Actions should be sustained/long-term solutions. You can include preparedness actions, e.g. sandbagging; however, they will not count towards meeting this requirement. Response, maintenance, and replacement plans lacking improved standards/longevity are also not long-term solutions.
- You can also include actions that the community considered even if they decided they were not feasible for whatever reason (e.g. lack of community support for River Corridor bylaws or property buyouts), which will count towards this requirement.
- The mitigation actions need to use “action” verbs like replace, upsize, develop, adopt. Mitigation actions should be new actions that are not already in place.

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))

- In your action table, for each action identified, include:
 - Who (title/position) is responsible implementing the action
 - The action priority level (include a description of the criteria used for prioritizing the implementation of the identified mitigation actions and describe how benefit-cost was considered during prioritization. Include prioritization based on cost as well as community benefits.
 - Timeframes for completion with a start and end date (e.g. Summer 2021 – Fall 2022, or 2021-2022).
 - Potential funding sources, e.g. FEMA mitigation grants, VTrans grants, Ecosystem Restoration Grant, Town Budget, etc.

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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))

- Explain how this plan will be incorporated into other plans, e.g. “The town will incorporate the mitigation actions outlined in this plan into the town plan during the next plan update process in 2022. The town plan update will be led by the Planning Commission, who will review this plan and determine those mitigation actions/strategies/goals that should be included in the town plan.” Or “The proposed mitigation actions in this plan will be incorporated into the capital improvement plan during its development on Town Meeting Day.” If a new process has been developed/is being developed for incorporation, please describe the process in the plan.
- For plan updates, the explanation for how the integration of the previously approved plan occurred.

D1. Was the plan revised to reflect changes in development? (Requirement §201.6(d)(3))

- Address changes in development that have occurred since the previous plan and how that development has increased, decreased, or had no impact on the town’s vulnerability to the identified hazards.
- Changes in development include recent development (ie. # and type of building permits issued since last approval, new businesses opened, or infrastructure changes), potential development (new zoning bylaws/floodplain ordinances, proposed development) and/or completed mitigation actions may have contributed to an overall reduction in vulnerability. Not all development will necessarily impact vulnerability, and if that is the case, that can be stated.

D2. Was the plan revised to reflect progress in local mitigation efforts? (Requirement §201.6(d)(3))

- Include plan actions from the previous plan and their current status, e.g. completed, not completed, in progress. For those actions that have not been completed, explain whether the action has been included in this updated plan or if/why it is no longer a priority for the town.

D3. Was the plan revised to reflect changes in priorities? (Requirement §201.6(d)(3))

- Address if/how any priorities have changed since the plan was last approved. Why did priorities change? Has the community experienced new or more intense hazard events that changed priorities? Have there been population/demographic changes that resulted in new service demands? (ie. Schools, aging population needs, affordable housing).

Local Hazard Mitigation Plan Review Process:

In 2019, Vermont Emergency Management (VEM) started to participate in a FEMA program called Program Administration by State (PAS), giving VEM the authority to FEMA-approve Local Hazard Mitigation Plans. The modified steps below reflect the new review process under this program.

- The local community, a consultant, or the Regional Planning Commission (RPC) drafts the Local Hazard Mitigation Plan (LHMP). Plan developers are encouraged to contact the State Hazard Mitigation Planner and State Hazard Mitigation Officer (SHMO) during plan development for any technical assistance needs or to review components of the LHMP as it is being developed.

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- Once a draft is completed, the LHMP and FEMA Review Tool are submitted to the State Hazard Mitigation Planner (caroline.massa@vermont.gov) for review. The review tool must have the top section filled in as well as the relevant sections or page numbers where each element is addressed. Plans are required to be reviewed within 45 days of receipt by VEM.
- Plans are typically returned with comments on how to meet the Federal requirements. Notes will be included within the Review Tool with additional guidance on how to meet the requirements. The State Hazard Mitigation Planner is available to answer questions or meet with the plan developer to review comments and assist them in meeting the requirements.
- Once the plan developer has completed any necessary revisions, the plan is submitted back into State review with updated page numbers/sections noted in the review tool. You may also include comments in the review tool below the comments from the State Hazard Mitigation Planner noting updates that were made.
- If all requirements are met, VEM will notify the plan developer and the community that the plan is Approvable Pending Adoption (APA). If all requirements are not met, the Review Tool will be sent back again with updated comments.
- When a plan receives the APA notice, the plan developer should not make any changes to the plan, with the exception of removing any references to the plan being a draft and update any dates (e.g. the APA date) on the cover page. The plan developer then works with the local jurisdiction to adopt the LHMP.
- Following local adoption, the plan developer submits the final plan to VEM. The State Hazard Mitigation Planner will then issue a notice to the plan developer and the community that the plan has been Approved. The approval date will be the date that this approval is issued.
- VEM will then notify FEMA that the LHMP has been approved and FEMA will issue an official approval letter to the SHMO who will send it to the plan developed and the community.
- The community then has five years from the date of approval to implement the LHMP before the plan expires and an updated plan is due for approval.

Multi-Jurisdictional Local Hazard Mitigation Plans:

A Multijurisdictional Local Hazard Mitigation Plan (MJ LHMP) is one that includes more than one jurisdiction or municipality such as a town and village within that town's boundaries when there are separate Selectboard and village trustees, or neighboring towns that wish to share planning resources and coordinate hazard mitigation.

Municipalities have the option to complete plans together or separately. Benefits of planning together include shared financial or other resources and staff or committee member time. For towns and villages with minimal staff capacity that can make even in-kind match difficult, coordinating with neighboring communities can make completing the LHMP possible. Keep in mind that all involved municipalities will be required to adopt the plan for final FEMA approval. If all participating municipalities do not adopt the plan, none of the communities involved will be eligible for FEMA hazard mitigation grants or improved ERAF rate.

Requirements for MJ LHMPs:

- A local contact for each jurisdiction will need to be identified so that each municipality can receive communication on plan review and approval.

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- Each jurisdiction will be required to sign a certificate of adoption for the plan to be FEMA-approved.
- Each element that says “each jurisdiction” must include required information detailed in that element. Please include the following information for each jurisdiction as requested by FEMA.:
 - 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))
 - 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))
 - 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))
 - 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))