

510 Floodplain Management Planning—Summary

Maximum credit: 762 points

512 Elements

- a. **Floodplain management planning (FMP):** 382 points for a community-wide floodplain management plan that follows a 10-step planning process:
 - Step 1. Organize
 - Step 2. Involve the public
 - Step 3. Coordinate
 - Step 4. Assess the hazard
 - Step 5. Assess the problem
 - Step 6. Set goals
 - Step 7. Review possible activities
 - Step 8. Draft an action plan
 - Step 9. Adopt the plan
 - Step 10. Implement, evaluate, revise.
- b. **Repetitive loss area analysis (RLAA):** 140 points for a detailed mitigation plan for a repetitive loss area.
- c. **Natural floodplain functions plan (NFP):** 100 points for adopting plans that protect one or more natural functions within the community's Special Flood Hazard Area. Within NFP is credit for a floodplain species assessment and for a floodplain species plan.
- d. **Substantial damage management plan (SDP):** Up to 140 points for a community plan to make substantial damage determinations after a flood or other hazard event.

Credit Criteria

Each element has a separate section discussing credit criteria.

Impact Adjustment

The impact adjustments for FMP and RLAA are described in separate sections. There is no impact adjustment for NFP or SDP.

Documentation Provided by the Community

Each element has a separate section describing needed documentation.

510 Floodplain Management Planning

The objective of this activity is to credit the production of an overall strategy of programs, projects, and measures that will reduce the adverse impact of the hazard on the community and help meet other community needs.

511 Background

Too often flood protection decisions are made quickly, with inadequate or outdated information or without considering all possible mitigation alternatives or the consequences of those alternatives. As a result, the community's resources are not allocated most appropriately, flood problems may not be fully addressed, and natural floodplain functions may suffer.

To remedy this situation, a careful, systematic process of planning is recommended, and may be credited by this activity. The Community Rating System does not specify what activities a plan must recommend; rather, it recognizes plans that have been prepared according to the standard planning process explained in this activity.

Benefits: A well-prepared plan will

- Identify existing and future flood-related hazards and their causes;
- Ensure that a comprehensive review of all possible activities and mitigation measures is conducted so that the most appropriate solutions will be implemented to address the hazard;
- Ensure that the recommended activities meet the goals and objectives of the community, are in coordination with land use and comprehensive planning, do not create conflicts with other activities, and are coordinated so that the costs of implementing individual activities are reduced;
- Ensure that the criteria used in community land use and development programs account for the hazards faced by existing and new development;
- Educate residents and property owners about the hazards, loss reduction measures, and the natural and beneficial functions of floodplains;
- Build public and political support for activities and projects that prevent new problems, reduce losses, and protect the natural and beneficial functions of floodplains; and
- Build a constituency that wants to see the plan's recommendations implemented.

Types of plans: This activity credits three kinds of plans:

- Floodplain management planning (FMP): The most credit is for the first element, a community-wide floodplain management plan, but the element can also credit multi-hazard

mitigation plans, multi-jurisdictional floodplain management and hazard mitigation plans, and floodplain management plans prepared for the U.S. Army Corps of Engineers. Only one plan may receive credit under this element, and plans may not be combined as appendices or credited by virtue of internal reference to another plan, because this element credits the process as well as the content of the planning document.

- Repetitive loss area analyses (RLAA): The second element credits more detailed, site-specific plans to reduce flood losses in repetitively flooded areas. It has a narrower scope than a floodplain management plan, and receives fewer credit points.
- Natural floodplain functions plan (NFP): The third element provides credit for plans that address natural floodplain functions in the community.
- Substantial damage management plan (SDP): The fourth element provides credit for a plan to damage estimate damage and to make substantial damage determinations after a hazard event.

A Category C repetitive loss community (defined in Section 502) must prepare either a FMP or RLAA area analysis that covers at least all of its repetitive loss areas.

Implementation: Credit is not provided for simply preparing a plan. Continued credit is dependent upon plan implementation. To maintain the credit for Activity 510, every year the community must evaluate its progress toward implementing the projects and programs in the plan, area analysis, or natural floodplain functions plan, and submit a report of that evaluation with its annual CRS recertification. It must update the background information and the recommendations in its floodplain management plans and repetitive loss area analyses at least every five years and in its natural floodplain functions plan(s) every 10 years.

By their very nature as overall guidance for a community's program, plans should be coordinated with other plans and programs as well as the activities of other agencies or offices that have authority over the same area. It is recommended that communities also contact state and regional offices and agencies to review their plans and planning criteria. For example, state planning agencies have requirements for some kinds of plans and state emergency management agencies may have additional elements they would like to see included in a mitigation plan.

An Ordinance vs. a Floodplain Management Plan

An ordinance is NOT a plan. An ordinance sets standards for land development and other activities. Planning may include a review of land development standards and procedures, but it should also cover a much broader range of activities, as noted in Figure 510-4.

Class 9 Prerequisite:

A Category C repetitive loss community (see Section 502) must receive credit under either Section 512.a, floodplain management planning (FMP), with full credit in planning Step 5(c) or Section 512.b, repetitive loss area analysis (RLAA), with a plan that covers its repetitive loss areas.

512 Elements

512.a. FLOODPLAIN MANAGEMENT PLANNING (FMP)

The maximum credit for this element is 382 points.

FMP credit is provided for a community-wide floodplain management plan that was prepared by following a standard planning process. To receive any credit under this activity, the planning process must receive some credit under each of the 10 steps listed below. If the plan was approved by the Federal Emergency Management Agency (FEMA) as a multi-hazard mitigation plan and one step is missing, the mitigation plan may receive credit, but FMP credit will be limited to 50 points. If two steps are missing, there is no credit for a multi-hazard mitigation plan.

For some steps, such as Step 1, the community may show that it implemented at least one of the listed credit items. For other steps, specific items are required as a minimum. Required items are noted with “(REQUIRED)” after them.

FEMA’s multi-hazard mitigation planning regulations pursuant to the Disaster Mitigation Act of 2000 are explained at www.fema.gov. The 10-step CRS planning process is consistent with those regulations, which identify four phases of hazard mitigation planning. The 10 CRS steps are aligned with the four phases of mitigation planning requirements in Table 510-1.

The CRS-credited planning process must follow the 10 steps. Although the plan document must discuss and document all 10 steps, the written plan does not need to be organized by these 10 steps. To document credit, the community must identify where these steps were covered in its plan, using the planning credit activity checklist (see Figure 510-1).

State, FEMA, and CRS Guidelines

It is recommended that the planner review all state and FEMA planning program guidelines, including the CRS planning credit checklist for Activity 510. Doing so will ensure that the planning effort will meet all state, FEMA, and CRS criteria. It is the community’s option, but with proper planning, one plan document can fulfill the planning criteria of several FEMA and state programs.

Documentation or discussion of all but Steps 3 and 9 must be presented in the plan document. Steps 3 and 9 may be in the plan document or they may be explained in a separate memo from the community or the plan's author as explained in the documentation section at the end of each step. The community must update the plan at least every five years and document the update by October 1, five years after the plan was adopted

Multiple plans: A community may only receive credit for one plan. If it has more than one plan adopted, it may choose the plan for which it wishes to receive credit. The annual progress report must be prepared for the credited plan.

FEMA extension: The FEMA Regional Office has authority to extend the deadline a community has to complete its floodplain management plan. The letter or email granting such an extension must be documented.

New CRS applications: A new application can be reviewed and verified if the floodplain management plan is not yet adopted, but the draft plan must have been submitted to the state and FEMA Regional Office. The final verification report cannot be completed until an acceptable plan has been adopted. However, communities may adopt a plan before receiving state and FEMA approval. If a new application is submitted but the community has no plan, the community may complete a repetitive loss area analysis for RLAA credit, which can be a more expeditious way of meeting the repetitive loss prerequisite for CRS participation.

Class improvements: If a Category C community wants to improve a class, it cannot do so until it meets the current criteria. When it has adopted its new or updated plan (or repetitive loss area analysis), then it can apply for a modification.

Class 4 prerequisite: If a Class 5 community has the points to become a Class 4, but does not meet the planning prerequisite, it cannot do so until it meets the current criteria. The fact that the Class 4 prerequisites changed does not provide a grace period, since the community will not lose its class.

“Coordinator’s Manual” changes: If there is a change in the minimum requirements for Activity 510 and a community has already passed a step, the community can continue under the previous schedule. The community will not be penalized for missing a new requirement provided that it can document that the planning process has started. An example of such documentation would be the minutes of the planning committee meetings. However, the community should check the current schedule before it starts the planning process.

Table 510-1: Planning steps for mitigation and for the CRS

Phase	Multi-hazard Mitigation Planning	CRS	Maximum
Phase I – Planning Process	§201.6(c)(1)	1. Organize	15
	§201.6(b)(1)	2. Involve the public	120
	§201.6(b)(2) & (3)	3. Coordinate	35
Phase II – Risk Assessment	§201.6(c)(2)(i)	4. Assess the hazard	35
	§201.6(c)(2)(ii) & (iii)	5. Assess the problem	52
Phase III – Mitigation Strategy	§201.6(c)(3)(i)	6. Set goals	2
	§201.6(c)(3)(ii)	7. Review possible activities	35
	§201.6(c)(3)(iii)	8. Draft an action plan	60
Phase IV – Plan Maintenance	§201.6(c)(5)	9. Adopt the plan	2
	§201.6(c)(4)	10. Implement, evaluate, revise	26
		Total	382

Figure 510-1. An excerpt from a floodplain management planning credit checklist.

512.a Floodplain Management Planning (FMP)			
Credit Points: Enter the section or page number in the plan where each credited item can be found. Add notes on AW-510-4.			
CRS Step	Section/Page	Item Score	Step Total
1. Organize to prepare the plan. (15 Max)			
a. Involvement of Office Responsible for Community Planning (4)			
b. Planning committee of department staff (9)			
c. Process formally created by the community’s governing board (2)			

Credit Points for FMP

FMP = the total of points credited for Step 1 through Step 10, up to the maximum of 382 points

There are no credit formulae for this activity. The credits for each step are simply added together.

Note that the points listed (Step 1 to Step 10) are maximum possible points. The Technical Reviewer may determine that one or more items do not warrant full credit.

Step 1. Organize to prepare the plan

The credit for this step is based on how the community organizes to prepare its floodplain management plan. Credit is for actually planning how to conduct floodplain management, not just preparing a document. Credit is provided to the community every year, so it is important that the community looks continuously at its flooding situation, evaluates what is being done about it, and ensures that its activities are still pertinent. Therefore, there are requirements for annual evaluations and five-year updates.

Although there is no requirement that the community use a committee for its planning process, committees have proven to be so valuable that a lot of points are provided for using one. If the community drops the committee from its ongoing planning processes and updates, it will lose a lot of points. Without those points, the community may not receive the 50% of the points in that step and therefore, would not meet the prerequisite to be a Class 4 or better. This all relates to the fact that the community has a choice—to meet the minimum criteria for floodplain management planning or to do a better job, get more points, and be eligible for one of the best CRS Classes.

If a committee was involved in the original plan but no committee was involved in the update process, the community loses its committee credit. If there was a committee credited in the original plan, and a new committee was created and used in the update of the plan, it would be scored according to the current credit. If there was no committee in the original plan, but a committee was formed in the update of the plan, it would be scored according to the current credit.

Credit Points for FMP Step 1

Credit for Step 1 is the total of the following points. (Maximum credit: 15 points) If a committee was involved in the development of the original plan but there was no committee involved in the update process, the community loses the credit for using a committee.

- (a) 4 points, if the office responsible for the community's land use and comprehensive planning is actively involved in the floodplain management planning process. The "office" may be the community's planning or community development department, a consulting firm, or a regional planning agency, provided that it performs regular land use or comprehensive planning duties for the community. This office is usually not the floodplain management or mitigation planner or consultant, because the intention of this credit is to incorporate the floodplain management or mitigation plan into the rest of the community's planning activities. "Actively involved" means that staff regularly attend meetings, assist in the coordination (Step 3), and either write or review draft sections of the plan.

- (b) 9 points, if the planning process is conducted through a committee composed of staff from those community departments that implement or have expertise in the activities that will be reviewed in Step 7. One point is provided for each office represented. Divisions of departments can be counted as separate offices. For smaller communities with fewer departments, full credit is provided if the committee has representation from all offices with expertise in all six categories of activities credited in Step 7.

Consider the Step 7 Activities or categories as the planning committee is being assembled.

- Preventive measures (e.g., codes)
- Property protection (e.g., elevation)
- Natural resource protection
- Emergency services
- Structural flood control projects
- Public Information

A planning committee is strongly recommended. By involving those who can contribute and will be most affected when the recommendations are carried out, the community will get a more realistic product that will have a much better chance of being adopted and implemented. Community departments that could be represented on the committee include, but are not limited to

- Building department/code enforcement,
- Engineering,
- Land use planning/zoning,
- Public works,
- Emergency management/public safety,
- Public information,
- Environmental protection/public health,
- Parks/recreation,
- A city manager or council member, and
- Housing/community development.

If the planning committee includes representatives from the public and other stakeholders (with no attachment to local government), additional credit is provided in Step 2. Note that there is extra credit in Step 10 if the committee continues to meet after the plan is adopted in order to evaluate progress and recommend changes.

No credit is provided for the creation of a planning committee if the committee only meets once or twice. It must meet a sufficient number of times to involve the members in the following key steps of the planning process (e.g., at least one meeting on each step):

- Step 4. Assess the hazard,
- Step 5. Assess the problem,
- Step 6. Set goals,
- Step 7. Review possible activities, and
- Step 8. Draft an action plan.

If the community wants credit for participating in a multi-jurisdictional floodplain management or hazard mitigation planning committee,

- The community must send at least two representatives to the planning committee;
- At least half of the community's representatives must attend all the meetings of the planning committee. In effect, there must be a quorum from each community. Remote attendance, e.g., via a webinar that allows for everyone to talk, is permissible; and
- Credit for the multi-jurisdictional planning committee will be based on the representation from offices that implement the activities in Step 7.

(c) 2 points, if the planning process and/or the committee are formally created or recognized by action of the community's governing body.

Two points are provided if the community's governing body (e.g., the city council) formally recognizes the planning process. The preferred method is a formal resolution that designates who is responsible for preparing the plan and specifies a completion deadline. If a committee credited under Step 1(b) or 2(a) is used, the resolution should identify the members and the chair (or how the chair is selected) and how staff support is provided.

If a community participates in a multi-jurisdictional committee, its governing body must act in order for the community to receive this credit. A city will not receive this credit for a county council resolution. Conversely, a city can receive this credit even if there is no county credit.

Step 2. Involve the public

The planning process must include an opportunity for the public to comment on the plan during its development and before its approval. Members of the public may be part of the planning committee created under Step 1 or they may be organized as a separate committee.

For this credit, the term “public” includes residents, businesses, property owners, and tenants in the floodplain and other known hazard areas as well as other stakeholders in the community, such as developers and contractors, civic groups, environmental organizations, academia, non-profit organizations, major employers, and staff from other governmental agencies, such as a levee district, housing authority, Natural Resources Conservation Service, or the National Weather Service.

Members of an advisory body to the community that does not have any regulatory authority, such as a stormwater advisory board, can be counted as representatives of the public. Community employees and members of a regulatory body, such as a zoning board of appeals that makes final decisions, are not considered “public” or stakeholders and are counted as representatives of the community departments credited under Step 1(b).

As with staff, involving the public and stakeholders brings them fully into the planning process, provides input on the viability of options being considered, and helps them to become concerned about the outcome. The largest number of points is provided for Step 2(a) because a planning committee with public membership has the following advantages:

- The committee can be a forum to both educate the public and also provide a means for public input into the plan.
- The participants recognize that they are involved and will be more willing to commit themselves to the process.
- The participants can do some of the work, especially data gathering, thereby reducing the overall cost of preparing the plan.
- A committee can be an effective forum for discussing alternatives, debating goals and objectives, and matching the technical requirements of a program to local situations.
- The committee members will provide information on the plan and process to their respective constituencies.
- The participants gain a feeling of “ownership” of the plan and its recommendations, which helps build public support for it.
- Committee members form a constituency that will have a stake in ensuring that the plan is implemented.

Class 4 Prerequisite

Note that 50% of the maximum credit for this planning step is a prerequisite for Class 4 or better communities.

Credit Points for FMP Step 2

The credit for this step is the total of the following points based on how the community involves the public during the planning process. (Maximum credit: 120 points)

- (a) Up to 60 points, if the planning process is conducted through a planning committee that includes members of the public and meets the following criteria:
 - (1) If the committee includes community staff (e.g., the planning committee credited under Step 1(b)), then at least one-half of the members must be representatives of the public or stakeholders for full credit. The credit is prorated for lower levels of public or stakeholder representation. Note that receiving 50% of the maximum credit for this planning step is a prerequisite for Class 4 or better communities and item (a) is one-half of the credit for Step 2.
 - (2) It must meet a sufficient number of times to involve the members in the key steps of the planning process, i.e., it must meet the same meeting criteria specified in Step 1(b).
 - (3) All meetings must be open to the public and the meeting schedule must be publicly posted (e.g., on a website).
 - (4) If the community wants credit for participating in a multi-jurisdictional floodplain management or hazard mitigation planning committee, it must meet the criteria specified in Step 1(b).
 - (5) The formalities of organizing and naming the committee are not as important as the membership and the ability of all members to participate. For example, a community may augment an existing committee with an advisory body of stakeholders. Such an arrangement would be credited, provided the stakeholders were treated as full committee members during the meetings, i.e., they can speak up, vote, and receive all the materials that regular members do.

Note that this planning committee can be (and it is recommended that it be) the same committee that prepares a Program for Public Information under Activity 330 (Outreach Projects). The floodplain management plan document can also be or include the Program for Public Information document and/or the flood insurance coverage improvement plan credited under Activity 370 (Flood Insurance Promotion).

There is extra credit in Step 10 if the committee continues to meet after the plan is adopted in order to evaluate progress and recommend changes, provided that the

committee continues to meet the above criteria. Such annual evaluations by a committee are required for some of the credits under Activities 330 and 370.

- (b) 15 points, if one or more public information meetings is held in the affected area(s) within the first two months of the planning process to obtain public input on the natural hazards, problems, and possible solutions. The meetings must be held separately from the planning committee meetings credited in item (1).

The intent of the public meeting(s) is to go out to the people to gather input. At a minimum, it must be separate from regular meetings of the planning committee or the community's governing body. It is recommended that at least one of these public meetings be held in the affected neighborhoods.

- (c) 15 points, for holding one or more public meetings to obtain input on the recommended plan. The meeting(s) must be at the end of the planning process, at least two weeks before submittal of the recommended plan to the community's governing body.

Simply discussing the plan at a regular public meeting of the governing body, just before it is voted on, is not sufficient public input for credit. To receive credit for this item, there must be at least one public meeting at the end of the planning process, at which the plan and its findings and recommendations are explained and people can ask questions and submit their comments for review, consideration, and potential modification of the plan. Public hearings are not required for credit. State and local laws take precedence, however. The community's legal counsel should determine if a public hearing is required.

- (d) 5 points, for each additional public information activity implemented to explain the planning process and encourage input to the planner or planning committee, up to a maximum of 30 points. Examples include, but are not limited to
- (1) A website that explains the planning process and posts the time and place for its meetings, meeting agendas, status reports, and the draft plan, when it is ready for review.
 - (2) Conducting a public webcast that explains the planning process and solicits input.
 - (3) Questionnaires asking the public for information on their natural hazards, problems, and possible solutions. A questionnaire or survey that is sent to everyone in the floodplain or everyone in the community will receive double credit (10 points).
 - (4) Outreach projects, such as those credited in Activity 330 (Outreach Projects), which explain the planning effort and seek comments. These could include brochures, mailers, booths at shopping malls, presentations at civic or neighborhood organizations, etc.

Step 3. Coordinate

Most communities' flood problems have been studied already. There are likely to be existing plans, studies, and reports on flooding that need to be reviewed. There also may be flood protection activities being considered or implemented by other agencies.

This planning step credits incorporating other plans and other agencies' efforts into the floodplain management plan. Other agencies and organizations must be contacted to determine if they have studies, plans, or information pertinent to the floodplain management plan; to determine if their programs or initiatives may affect the community's program; and to see if they could support the community's efforts.

Examples of "other agencies and organizations" include neighboring communities; local, regional, state, and federal agencies; and businesses, colleges, and other private and non-profit organizations affected by the hazards or involved in hazard mitigation or floodplain management.

This credit is for coordinating with other agencies and organizations, particularly those that are not represented on the planning committee credited under Step 1(b) or Step 2(a). No special additional coordination measures are needed for the agencies and organizations on the planning committee, but the planners may want to formally contact the directors and others for the record.

Note that community needs and goals typically are developed during comprehensive planning activities. These goals should be identified in this step, reviewed, and considered during the development of the floodplain management plan. They should be taken into account when the goals for the floodplain management plan are developed in Step 6.

Credit Points for FMP Step 3

The credit for this step is the total of the following points. To receive credit for this step, the coordination must include item (a). (Maximum credit: 35 points)

- (a) 5 points, if the planning includes a review of existing studies, reports, and technical information and of the community's needs, goals, and plans for the area. (required) Where the information from the existing studies and reports is used in the plan, the source(s) should be referenced.

This review needs to include a review of community needs and goals, past flood studies, disaster damage reports, natural areas plans, and other documents that will provide information for the planning process.

- (b) 30 points, for coordinating with agencies and organizations outside the community's governmental structure. There is no credit for talking to other departments within the city or county government. For this credit, "coordinate" means to
- Contact the agency or organization and keep a record of the contact (a generic announcement or notice on a website is not sufficient);

- Ask for data or information related to the hazard;
- Ask if the agency or organization is doing anything that might affect flooding or properties in flood-prone areas; and
- Offer the agency or organization an opportunity to be involved in the planning effort, such as by attending a committee meeting or commenting on the draft plan.

One point is provided for each agency or organization that is contacted.

Two points are provided for meeting or having a telephone conversation with the agency or organization. Such a coordination meeting or conversation must be separate from attendance at a planning committee meeting.

Coordination with an agency can only be counted once. For example, if a letter to an agency results in a follow-up meeting or telephone conversation, the community receives two points.

Examples of such agencies and organizations include, but are not limited to

- Neighboring communities;
- Local and regional agencies involved in hazard mitigation activities;
- Stakeholder-type organizations that are not represented on the planning committee;
- Local drainage, levee, sanitary, and soil and water conservation districts;
- Regional and metropolitan planning agencies;
- State National Flood Insurance Program (NFIP) Coordinator;
- State water resources agency;
- State coastal zone management agency;
- State emergency management agency;
- FEMA Regional Office;
- National Weather Service;
- U.S. Army Corps of Engineers;
- Natural Resources Conservation Service;
- U.S. Bureau of Reclamation;

- U.S. Fish and Wildlife Service;
- National Oceanic and Atmospheric Administration;
- Native American tribes;
- American Red Cross;
- Local homebuilders association; and
- Local environmental groups.

A Multi-Hazard Mitigation Plan

If the community wants the plan to qualify as a multi-hazard mitigation plan, the plan must identify all stakeholders that are involved or given an opportunity to be involved in the planning process. At a minimum, stakeholders must include

- 1) Local and regional agencies involved in hazard mitigation activities,
- 2) Agencies that have the authority to regulate development, and
- 3) Neighboring communities.

An “opportunity to be involved in the planning process” means that the stakeholders are engaged or invited as participants and given the chance to provide input to affect the plan’s content.

Source: Local Mitigation Plan Review Guide, FEMA

Step 4. Assess the hazard

At this step in the planning process, the planner or committee reviews, analyzes, and summarizes data collected about the natural hazard(s) that the community faces. This step focuses on the sources, frequency, extent, and causes of flooding while Step 5 will address the impact of flooding on people, property, infrastructure, the local economy, and natural floodplain functions.

Under Step 3(a), the community gathers data about the flood hazard. This step involves reviewing, analyzing, and summarizing the data from existing flood studies, including the Flood Insurance Study, drainage problem studies, historical records, and the knowledge and experiences of the planning committee members.

For credit, the community does not need to conduct studies to develop new flood data. However, if this process determines that new maps or data are needed, they should be described for credit under item (d).

The hazard assessment needs to describe the local flood hazard and not be a broad or generic discussion of flooding in general. It needs to discuss how often it floods, the locations of areas that flood, the depth of flooding, and the source or cause of the flooding. Because the most important

readers are elected officials and flood-prone residents, the descriptions of the hazards should be in lay terms.

Community Credit Points for FMP Step 4

The credit for this step is the total of the following points based on what the community includes in its assessment of the hazard. (Maximum credit: 35 points)

- To receive credit for this step, the plan must include a flood hazard assessment credited under item (1).
 - If the community is a Category B or C repetitive loss community (see Sections 502–503), this step must cover all of its repetitive loss areas.
- (a) 15 points, for including an assessment of the flood hazard in the plan. (required) Flood hazard areas that require assessment include
- The Special Flood Hazard Area (SFHA) shown on the Flood Insurance Rate Map (FIRM),
 - Repetitive loss areas,
 - Areas not mapped on the FIRM that have flooded in the past, and
 - Other surface flooding identified in other studies.
- (1) 5 points, for a map of the flood hazard areas. Area maps are acceptable for multi-jurisdictional plans.
- (2) 5 points, for a description of the known flood hazards, including source of water, depth of flooding, velocities, and warning time.
- (3) 5 points, for a discussion of past floods.
- (b) 10 points, for including an assessment of less-frequent flood hazards in the plan. For this credit, the community must
- (1) Identify the hazard, including
- a. Preparing an inventory of levees that would result in a flood of developed areas if they failed or were overtopped during a flood, and/or
 - b. Preparing an inventory of dams that would result in a flood of developed areas if they failed, and/or
 - c. Identifying any of the flood-related special hazards listed in Section 401 of the “Coordinator’s Manual” that may affect the community, and/or

- d. Identifying the coastal A Zone, i.e., the area where wave heights during the 100-year flood are between 1.5 and 3 feet;
- (2) Map the area(s) affected. (For planning purposes, an approximate affected area is sufficient. No new engineering studies are needed. Area maps are acceptable for multi-jurisdictional plans.) If an engineering study is conducted, it may receive credit under Activity 410; and
- (3) Summarize the hazard(s) in lay terms.

Note that, under Activities 620 (Levees) and 630 (Dams), items (b)(1)a and (b)(1)b are prerequisites for reaching Class 4 or better. Additional guidance on inventorying and mapping the areas affected by levee and dam failures can be found in Section 621.b and Section 631.b, respectively. It is recommended that communities incorporate these inventories into their floodplain management plans.

Item (a) is prorated if part of the “flood hazard” is missing, where applicable. For example, if the community is downstream of a dam, has a levee, and has a coastal A Zone, and the assessment includes only the dam failure hazard, the credit will be less than the full 10 points. If the community does not have a levee, it is reflected in the proration.

Two points are provided if the inventory is conducted and concludes that there are no levees, dams, or special flood-related hazards that threaten the community.

- (c) 5 points, if the assessment identifies areas likely to be flooded and flood problems that are likely to get worse in the future as a result of (1) changes in floodplain development and demographics, (2) development in the watershed, and (3) extreme tides. The credit is prorated if the assessment does not include all three types of changes.
- (d) 5 points, if the plan includes a description of the magnitude or severity, history, and probability of future events for other natural hazards, such as earthquakes, wildfires, or tornadoes. The plan should include all natural hazards that affect the community. At a minimum, it should include hazards identified by the state’s hazard mitigation plan.

A Multi-Hazard Mitigation Plan

To qualify as a multi-hazard mitigation plan, the plan must address ALL of the community’s flood and other natural hazards identified in the hazard assessment. Not only does an all-hazards plan help qualify for mitigation funds, but also it will better prepare the community for hazards other than flooding. It is common for communities to focus only on mitigation of flood problems because they occur more often. However, assessing the other hazards when preparing a flood plan can help address what can be done for all hazards, some of which may occur less frequently, but have a greater impact on the community.

Step 5. Assess the problem

Flooding can be a natural and beneficial occurrence. A floodplain is only a problem area if human development (the built environment) gets in the way of, or exacerbates, the natural flooding process.

The previous step assessed the hazards facing the community. In this step, the community planners or planning committee members collect and summarize data on what is at risk. This step looks at the impact of those hazards on the community.

Note that 50% of the maximum credit for this planning step is a prerequisite for Class 4 or better communities.

Credit Points for FMP Step 5

The credit for this step is the total of the following points, based on what is included in the assessment of the vulnerability of the community to the hazards identified in the previous, hazard assessment, step. (Maximum credit: 52 points)

- To receive credit for this step, the assessment must include items (a) and (c). A plan for a Category B or a Category C repetitive loss community that does not include item (c) may still receive up to 50 points for the plan, provided that no other step is missed.
 - Each credited item must cover all relevant flood-related hazards identified in Step 4.
 - Each credited item must include a description and summary of the problem(s). Simply listing data, such as the names of the critical facilities or the number of flood insurance claims, does not suffice for credit—there must be description of the impact of flooding and what kinds of problems arise, not just raw data.
 - For a multi-jurisdictional plan, each item needs to be described for each community. Tables are acceptable to show the data by community, but there still needs to be a narrative description and summary of the problem(s).
- (a) 2 points, if the plan includes an overall summary of the jurisdiction’s vulnerability to each hazard identified in the hazard assessment (Step 4) and the impact on the community. (required)
- (b) 25 points, if the plan includes a description of the impacts that the hazards identified in the hazard assessment (Step 4) have on the features listed below:
- (1) 10 points, for life safety and public health (e.g., the need for warning and evacuating residents and visitors and considering health hazards to individuals from flood waters and mold).
 - (2) 5 points, for critical facilities and infrastructure.
 - (3) 5 points, for the community’s economy and major employers.

- (4) 5 points, for the number and types of affected buildings (e.g., residential, commercial, industrial, with or without basements, etc.). For this credit, the assessment must include an inventory of all buildings owned by the community that are located in flood-prone areas and that identifies which buildings are insured for flood damage.
- (c) 5 points, if the assessment includes a review of historical damage to buildings, including all repetitive loss properties and all properties that have received flood insurance claims payments, and/or an estimate of the potential damage and dollar losses to vulnerable structures, including damage from mold and other flood-related hazards. Vulnerable structures must include all buildings within the community's defined repetitive loss area(s).

Communities must include repetitive loss areas in their problem assessment. (required of Category B and C repetitive loss communities (see Sections 502–503))

In order to receive the full credit under item (c), the community reviews all the addresses of properties that have received flood insurance claims, not just the repetitive loss properties. Such a list is sent annually to all Category B and C repetitive loss CRS communities. Communities can request more recent lists through their FEMA Regional Office.

Data on building damage usually can be obtained from post-disaster damage assessment reports, flood insurance claims or disaster assistance data, and flood control studies. Particularly in areas that have experienced little or no serious flooding in recent history, a Hazus-MH flood analysis can yield valuable information about the potential for flood damage and loss. For best results, the building/structure inventory data bases in Hazus-MH should be augmented with local input.

Hazus-MH

Hazus-MH is a software program that contains models for estimating potential losses from earthquakes, floods, and hurricane winds. It can be a great help in the Step 5 vulnerability assessment.

Hazus-MH uses geographic information system (GIS) software to map and display hazard data and the results of damage and economic loss estimates for buildings and infrastructure. It also allows users to estimate the impacts of hurricane winds, floods, and earthquakes on populations.

Copies of Hazus-MH are available at no charge from the FEMA Distribution Center. Users can request that a 60-day trial/evaluation copy of ESRI's ArcGIS software be sent with Hazus-MH. Users should be familiar with GIS software. Hazus training is available at FEMA's Emergency Management Institute and elsewhere. Information is at <http://www.fema.gov/hazus/>.

- (d) 5 points, if the assessment describes areas within the floodplain that provide natural functions, such as wetlands, riparian areas, sensitive areas, and habitat for rare or endangered species.

Along with flood protection, comprehensive floodplain management planning should review the unique natural features, natural areas, and other environmental and aesthetic attributes that may be present in the floodplain. Protecting and preserving these natural and beneficial floodplain functions yield flood protection benefits and also help integrate floodplain management efforts with other community goals and objectives. This section should also review existing natural floodplain functions plans, such as those credited under Section 511.c.

- (e) 7 points, if the assessment includes a description of development, redevelopment, and population trends and a discussion of what the future brings for development and redevelopment in the community, the watershed, and natural resource areas.
- (f) 8 points, if the assessment includes a description of the impact of the future flooding conditions described in Step 4(c) on people, property, and natural floodplain functions.

Step 6. Set goals

The goals should set the context for the subsequent review of floodplain management activities and drafting of the action plan. They should incorporate or be consistent with other community goals for the affected areas. A multi-hazard mitigation plan should have goals that address all the major hazards that face the community.

Credit Points for FMP Step 6

The points for this step are provided if the plan includes a statement of the goals of the community's floodplain management or hazard mitigation program. The goals must address all flood-related problems identified in Step 5. (Maximum credit: 2 points)

Step 7. Review possible activities

At this step, the plan reviews different activities that could prevent or reduce the severity of the problems described in Step 5. This is a systematic review of a wide range of activities to ensure that all possible measures are explored, not just the traditional approaches of flood control, acquisition, and regulation of land use. The review, including the pros and cons of each activity, must be included in the plan document. Figure 510-2 lists some of the types of activities that could be reviewed under each of the six credited categories and the six mitigation categories are used in scoring Steps 7 and 8. This list is not meant to be all inclusive: there may be mitigation measures not listed that may be creditable in Steps 7 or 8. However, the six categories do not change.

Steps 7 and 8

This review is separate from Step 8, the selection of projects and activities to pursue. It includes activities that may not be selected and explains why some activities may be appropriate for the community and its flooding conditions and why some may not be appropriate.

The range of activities should be evaluated for each area affected. While some of them may be quickly eliminated as inappropriate, most deserve careful consideration, especially to ensure full understanding of their costs and benefits.

1. **Preventive** activities keep flood problems from getting worse. The use and development of flood-prone areas is limited through planning, land acquisition, or regulation. They are usually administered by building, zoning, planning, and/or code enforcement offices.
 - Floodplain mapping and data
 - Open space preservation
 - Floodplain regulations
 - Erosion setbacks
 - Planning and zoning
 - Stormwater management
 - Drainage system maintenance
 - Building codes

2. **Property protection** activities are usually undertaken by property owners on a building-by-building or parcel basis.
 - Relocation
 - Acquisition
 - Building elevation
 - Retrofitting
 - Sewer backup protection
 - Insurance

3. **Natural resource protection** activities preserve or restore natural areas or the natural functions of floodplain and watershed areas. They are implemented by a variety of agencies, primarily parks, recreation, or conservation agencies or organizations.
 - Wetlands protection
 - Erosion and sediment control
 - Natural area preservation
 - Natural area restoration
 - Water quality improvement
 - Coastal barrier protection
 - Environmental corridors
 - Natural functions protection

4. **Emergency services** measures are taken during an emergency to minimize its impact. These measures are usually the responsibility of city or county emergency management staff and the owners or operators of major or critical facilities.
 - Hazard threat recognition
 - Hazard warning
 - Hazard response operations
 - Critical facilities protection
 - Health and safety maintenance
 - Post-disaster mitigation actions

5. **Structural projects** keep flood waters away from an area with a levee, reservoir, or other flood control measure. They are usually designed by engineers and managed or maintained by public works staff.
 - Reservoirs
 - Levees/floodwalls
 - Diversions
 - Channel modifications
 - Storm drain improvements

6. **Public information** activities advise property owners, potential property owners, and visitors about the hazards, ways to protect people and property from the hazards, and the natural and beneficial functions of local floodplains. They are usually implemented by a public information office.
 - Map information
 - Outreach projects
 - Real estate disclosure
 - Library
 - Technical assistance
 - Environmental education

Figure 510-2. Categories of floodplain management activities.



Gurnee, Illinois, Flood Mitigation Plan Goals

1. **Protect existing properties**

Use the most effective approaches to protect buildings from flooding, including acquisition or relocation where warranted.

Enact and enforce regulatory measures that ensure that new development will not increase flood threats to existing properties.

Use appropriate measures to mitigate against the danger and damage posed by other natural hazards.

2. **Protect health and safety**

Advise everyone of the safety and health precautions to take against flooding and other natural hazards.

Improve traffic circulation, during floods and at other times.

Improve water quality and habitat.

Do something about the mosquitoes.

3. **Improve the quality of life in Gurnee.**

Preserve and improve the downtown core of businesses and services.

Ensure that current owners can maintain and improve their properties.

Use acquisition programs to expand open space and recreational opportunities.

Maintain an attractive riverfront and other public open spaces.

4. **Ensure that public funds are used in the most efficient manner.**

Prioritize mitigation projects, starting with those sites facing the greatest threat to life, health, and property.

Utilize public funding to protect public services and critical facilities.

Utilize public funding for those projects on private property where the benefits exceed the costs.

Maximize the use of outside sources of funding.

Maximize owner participation in mitigation efforts to protect their own properties.

Encourage property-owner self-protection measures.



St. Tammany Parish, Louisiana, Multi-Hazard Mitigation Plan Goals

1. Protect the lives and health of the Parish's residents from the dangers of natural hazards.
2. Ensure that public services and critical facilities operate during and after a disaster.
3. Ensure that adequate evacuation routes, streets, utilities and public and emergency communications are maintained and available during and after a disaster.
4. Protect homes and businesses from damage.
5. Utilize new infrastructure and development planning to mitigate the impact of natural hazards.
6. Give special attention to repetitively flooded areas.

Credit Points for FMP Step 7

The credit for this step is the total of the following points based on which floodplain management or hazard mitigation activities are reviewed in the plan. (Maximum credit: 35 points)

This step must describe those activities that were considered. There is no credit for simply listing the various types of projects under each credited category. For each activity, there must be a discussion of why the activity is or is not appropriate for the community and its flood problems.

For an activity that is determined to be appropriate,

- The discussion must also include community's capability to fund and implement the activity.
- If an activity is currently being implemented, the plan must note if it is achieving expectations and, if not, whether it should be modified.
- If the plan is an update of a previously credited plan, each activity recommended by the previous plan must be discussed, along with the status of implementation.
- The discussion of each activity needs to be detailed enough to be useful to the lay reader.

Section (a) is required for any credit under this step.

- (a) 5 points, if the plan reviews preventive activities, such as zoning, stormwater management regulations, building codes, subdivision ordinances, and preservation of open space, and the effectiveness of current regulatory and preventive standards and programs. (required) For this credit, the review must include a discussion of the community's
- Comprehensive or land use plan,
 - Building code,

- Zoning ordinance,
- Floodplain management regulations,
- Subdivision ordinance, and
- Stormwater management regulations.

The discussion must review

- How these tools can reduce future flood losses,
 - The current standards in the community's plans and regulations, and
 - Whether the community should adopt or revise such plans and regulations in light of the Step 5 problem assessment and the goals set in Step 6.
- (b) 5 points, if the plan reviews whether the community's floodplain management regulatory standards are sufficient for current and fully developed land use, as discussed under Steps 4(c) and 5(f).
- (c) 5 points, if the plan reviews property protection activities, such as acquisition, retrofitting, and flood insurance;
- (d) 5 points, if the plan reviews activities to protect the natural and beneficial functions of the floodplain, such as wetlands protection;
- (e) 5 points, if the plan reviews emergency services activities, such as warning and sandbagging;
- (f) 5 points, if the plan reviews structural projects, such as levees, reservoirs, and channel modifications; and
- 5 points, if the plan reviews public information activities, such as outreach projects and environmental education programs.

Step 8. Draft an action plan

After the review of alternatives during Step 7, an action plan is drafted (Step 8) that selects and specifies those activities appropriate to the community's resources, hazards, and vulnerable properties. The community should strive for a balanced program, selecting measures from more than one category of floodplain management activity. In every case, the community should implement preventive activities both to keep its flood problems from getting worse and also to protect new construction from the effects of natural hazards.

There is no requirement that a floodplain management plan identify expensive or massive structural flood control projects. The plan must include activities that the community can be assured will be implemented through its own resources. If outside funding support is needed for some projects, the funding sources should be identified and researched to ensure that the projects are eligible and the

community has a chance of receiving the funds. Many of the activities could receive CRS credit once they are implemented.

Note that 50% of the maximum credit for this planning step is a prerequisite for Class 4 or better communities.

Credit Points for FMP Step 8

The credit points are based on the range of actions that are recommended in the plan, subject to the criteria listed below. (Maximum credit: 60 points)

- For each recommendation, the action plan must identify
 - Who is responsible for implementing the action,
 - When it will be done, and
 - How it will be funded.

“When it will be done” can be specified in terms of a date, a set period of time after another action is complete, after the next flood, etc. “How it will be funded” could state that funding will be dependent on a grant, provided the project is eligible for the grant program.

- The actions must be prioritized. When prioritizing mitigation actions, the planners need to consider the benefits that would result from the mitigation actions and projects versus the cost of those actions. Note that this is not a requirement for a cost-benefit analysis for every action item. However, an economic evaluation is essential for selecting one or more actions from among many competing ones.
- There must be an action item for each goal in Step 6. An example of this is in Figure 510-3.
- Credit is provided for a recommendation on floodplain regulations, provided it recommends adopting or continuing a regulatory standard that exceeds the minimum requirements of the National Flood Insurance Program (NFIP). Simply continuing to meet the minimum criteria of the NFIP is not credited as an action item to improve the community’s floodplain management program.
- If the plan calls for acquiring properties, there must be a discussion of how the project(s) will be managed and how the land will be used after it is acquired.
- When a multi-jurisdictional plan is prepared, it must have action items from at least two of the six categories that directly benefit each community seeking CRS credit.
- To qualify as a multi-hazard mitigation plan, the plan must include a “process by which local governments incorporate the requirements of the mitigation plan into other planning mechanisms such as comprehensive or capital improvement plans, when appropriate” (44 CFR §201.6(c)(4)(ii)). The action items that relate to preventive activities should clarify how

this is done. For example, an action item could recommend that the next time the zoning ordinance is revised, flood and landslide hazard areas be considered when determining allowable uses.

- (a) 45 points, depending on how many categories are covered by the action items:
- (1) 10 points, if the action plan includes flood-related recommendations for activities from two of the six categories credited in Step 7; or
 - (2) 20 points, if the action plan includes flood-related recommendations for activities from three of the six categories credited in Step 7; or
 - (3) 30 points, if the action plan includes flood-related recommendations for activities from four of the six categories credited in Step 7; or
 - (4) 45 points, if the action plan includes flood-related recommendations for activities from five of the six categories credited in Step 7.
- (b) 10 additional points are provided if the action plan establishes or revises post-disaster redevelopment and mitigation policies and procedures. These policies and procedures should account for the expected damage from a base flood or other disaster. For example, the action plan should identify the areas likely to be worst hit and the policies should determine whether they will be rebuilt if substantially damaged. Post-disaster mitigation procedures should assign responsibilities for public information, code enforcement, planning, and other efforts that encourage, mandate, and/or fund loss reduction activities.

Note that Activity 330 (Outreach Projects) provides credit for public information materials developed for use during and after a flood (Flood Response Preparations (FRP)). Preparation of those materials should be done when the other post-disaster policies and procedures are prepared.

- (c) 5 additional points are provided if the plan includes action items (other than public information activities) to mitigate the effects of the other natural hazards identified in the hazard assessment (Step 4, item (d)).

Step 9. Adopt the plan

The points for this step are provided if the plan and later amendments are officially adopted by the community's governing body. The plan must be an official plan of the community, not an internal staff proposal. "Adopted" means that there is a resolution or other formal document that is voted on by the community's governing body. A note in the minutes or passage via a consent agenda is not credited.

When a multi-jurisdictional plan is prepared, it must be adopted by the governing body of each community seeking CRS or multi-hazard mitigation plan credit.

Step 10. Implement, evaluate, and revise

To be useful, planning must be ongoing and plans must be dynamic. The plan should not sit on a shelf gathering dust once it is completed. Therefore, the community must have an evaluation and update process.

For CRS credit, plans must be implemented. No plan is perfect. As implementation proceeds, flaws will be discovered and changes will be needed. Not only can hazard conditions change but also goals and objectives may change. If a community is hit by a tornado, for example, the short-term action items may be changed to focus attention on the newly damaged areas in the SFHA.

Action Item	Goal 1. Protect critical facilities and utilities	Goal 2. Protect lives and health	Goal 3. Protect homes, businesses, and schools	Goal 4. Minimize the costs to the City and property owners	Goal 5. Ensure that new construction supports these goals	Chapter – Recommendation	Deadline
9.2. Administrative Action Items							
1. <i>Plan</i> adoption	X	X	X	X	X		5/31/07
2. Monitoring and reporting	X	X	X	X	X		9/30 each year
3. Community Rating System	X	X	X	X	X	4-3, 6-5, 7-3, 8-1 - 8-8	CRS visit
9.3. Program Action Items							
4. Levee improvements	X	X	X	X		4-1	Ongoing
5. Drainage improvements	X	X	X	X		4-2	8/31/08
6. Drainage system maintenance	X	X	X			4-3	CRS visit
7. Property protection funding	X	X	X	X		5-2, 5-3	8/31/07
8. Regulatory review	X		X		X	6-5	CRS visit
9. NFIP administration	X	X	X		X	6-2	After CAC
10. CFMs	X	X	X		X	6-2, 6-3	8/31/07
11. BCEGS	X	X	X		X	6-4	5/31/07
12. Flood response plan	X	X	X			7-1 – 7-4	Ongoing
9.4. Public Information Action Items							
13. Annual mailing		X	X		X	8-1, 8-2, 8-7, 8-8	Each Spring
14. Technical references		X	X		X	8-4, 8-5	CRS visit
15. Public information projects		X	X		X	4-4, 5-1, 6-1, 6-6, 7-4, 8-1 – 8-8	Ongoing
16. Public information messages		X	X		X	4-4, 5-1, 6-1, 6-6, 7-4, 8-1 – 8-8	Ongoing

This table relates the 16 action items to the 5 goals of this Plan. The goals are stated in full on pages 3-6 and 9-1. The table also shows the relation between the action items and the recommendations at the end of chapters 4 – 8. For example action item 8, Regulatory Review, implements recommendation 6-5 at the end of chapter 6. The reviews need to be completed in time for the CRS verification visit, which will be in the second half of 2007.

Figure 510-3. An excerpt from the City of Gretna, Louisiana’s Flood Hazard Mitigation Plan.

Changes should be made in the action plan when opportunities arise to add new activities or complete some items ahead of schedule. The plan should also be revised if it is found that some activities cannot be completed on the original timetable. At a minimum, these types of changes must be made at the required 5-year update.

The key to this step is the annual evaluation report on progress in implementing the plan. Not only are annual evaluations required with the community's annual recertification, but also the process of conducting an annual evaluation gives the community a framework for monitoring the plan's effectiveness and the community's progress in implementing it. Failure to submit the evaluation report with the community's annual recertification will result in loss of the planning credit (i.e., FMP = 0). This can cause a Category C repetitive loss community to revert to a Class 10.

Credit Points for FMP Step 10

The credit for this step is the total of the following points, based on how the community monitors and evaluates its plan. (Maximum credit: 26 points)

- The plan document must describe how, when, and by whom the plan will be monitored, evaluated, and revised. It is recommended that these items be included in the adoption resolution as well.
 - An annual evaluation report on progress towards plan implementation must be prepared at least once each year and submitted with the community's annual CRS recertification. The report must be submitted to the governing body, released to the media, and made available to the public.
 - If a community receives credit as a result of participation in a multi-jurisdictional plan that includes action items for each community, the annual evaluation report must cover those action items. This can be done either by a multi-jurisdictional planning committee or through separate submittals by each community. However, a community will not receive credit if it did not participate in the meeting at which the annual report was prepared. Therefore, the submittal needs to show who participated in the preparation of the report.
 - The community must update the plan at least every five years. The update is due by October 1, five years after the plan was adopted (see next section).
 - Step 10(b) provides credit if the planning committee does the evaluation and revision. If the committee does not continue to meet and report or if the committee membership no longer meets the credit criteria in Step 2(a), the community will not keep the committee credits under Steps 1(b) or 2(a).
- (a) 2 points, if the community has procedures for monitoring implementation, reviewing progress, and recommending revisions to the plan in an annual evaluation report. The report must be submitted to the governing body, released to the media, and made available to the public. (required)

(b) 24 points, if the annual evaluation report is prepared by the same planning committee that prepared the plan that is credited in Step 2(a) or by a successor committee with a similar membership that was created to replace the planning committee and charged with monitoring and evaluating implementation of the plan. The points are based on how frequently the committee meets, since more frequent meetings yield more progress toward implementing the plan. The committee must continue to meet the representation, quorum, and other criteria that determined the credit points under Step 2(a).

(1.) 6 points, if the committee meets only once a year.

(2.) 12 points, if the committee meets twice a year.

(3.) 24 points, if the committee meets at least quarterly.

Five-year Update

The community must submit a copy of its plan update at least every five years. The plan update will be reviewed for credit according to the “Coordinator’s Manual” currently in effect, not the version used when the community originally requested this credit. The update must include the following steps:

(a) Steps 1 and 2: If the original planning process included a committee, then in order to keep the credit provided under Step 1(b) or Step 2(a), the update must be conducted by a committee that meets the criteria identified in those steps.

(b) Step 2: If the original planning process received credit for a public meeting credited under Step 2, item (c), then to keep this credit the community must also conduct a public meeting that reviews and receives comments on the draft update.

(c) (Step 3, item (a): The update must include a review of new studies, reports, and technical information and of the community’s needs, goals, and plans for the area that have been published since the plan was prepared.

(d) Steps 4 and 5: The hazard and problem assessments must be reviewed and brought up to date. The assessments must account for

- New floodplain or hazard mapping,
- Annexation of flood-prone areas,
- Additional repetitive loss properties,
- Completed mitigation projects,
- Increased development in the floodplain or watershed,

- New flood control projects,
 - Lack of maintenance of flood control projects,
 - Major floods or other disasters that occurred since the plan was adopted, and
 - Any other change in flooding conditions and/or development exposed to flooding or the other hazards covered in the plan.
- (e) Step 6: The original plan’s goals must be reviewed to determine if they are still appropriate, given the revisions to Steps 4 and 5.
- (f) Step 8: The action plan must be revised to account for projects that have been completed, dropped, or changed and for changes in the hazard and problem assessments, as appropriate.
- (g) Step 9: The update must be adopted by the community’s governing body.

An annual evaluation report that includes these steps may qualify as the five-year update (but may not qualify as an update for a multi-hazard mitigation plan). Plan updates are due five years from either the date of local adoption, the date of final FEMA approval (not FEMA approval contingent upon local adoption), or the date of state approval (in some states).

When a community does its five-year update, its plan is scored under the schedule currently in effect or the schedule in effect when it started its update process. The Technical Reviewer will provide a score for updated plans.

If a community has an acceptable plan, it does not have to revise or update it for five years even if there is a change in the “Coordinator’s Manual”. After five years, however, it will have to do an update and meet the current criteria. The Class 4 prerequisite will not be waived because a community has an old plan, unless that plan had 50% of the points under the previous schedule. At the next cycle, that plan must be brought up to the current standards.

Impact Adjustment for FMP

rFMP is a ratio that reflects how much of the community’s flood hazard areas are covered by the floodplain management plan. Note that for a hazard mitigation plan to qualify, all of the community’s flood hazards must be covered. The Technical Reviewer will adjust the value of rFMP between 0.25 and 1.0 based on the building count, area of the SFHA, or watershed area.

rFMP = Either

1.0, if the plan covers all of the community’s known flood hazard areas. “Known flood hazard areas” means the SFHA shown on the FIRM, repetitive loss areas, areas not mapped on the FIRM that have been flooded in the past, and surface flooding identified in existing studies (see Step 4)

or

0.25, if the planning covers either all of the community's repetitive loss areas or at least 25% of the community's known flood hazard areas.

Documentation for FMP Provided by the Community

- (1) With the submittal of the plan or the five-year update to the plan,
- 2) A copy of the plan or updated plan to be credited. This can be digital, a hard copy, or a link to a website with the full document. Either the plan is marked, or a separate document is provided, to show where each credited step and sub-step appears. There is a checklist that can be used to do this, available at www.CRSresources.org/500.
- 3) [For Step 1(b) credit for a committee of staff from different departments] The plan or a separate document must show which department representatives implement, or have expertise in, which of the six categories of mitigation measures.
- 4) [For Step 1(c) credit] A copy of the resolution or other official action taken by the governing body to create or recognize the planning process as specified in Step 1. For Step 2(a) credit for a planning committee, the resolution or action must identify the committee's membership.
- 5) [For Step 2(a) credit for a planning committee] The names of the committee members, their titles, and their represented organizations must be listed in the plan. The community may submit separate materials, such as meeting minutes and sign-in sheets, to document meeting attendance.
- 6) [For Step 2(b), (c), or (d) credit for public meetings] Copies of the publicity for the public meetings. The notices of the meetings should be in the form of letters to floodplain residents, a notice sent to all residents, or a newspaper article or advertisement. An inconspicuous legal notice appearing in the classified section of the newspaper is not sufficient for CRS credit. If very few residents are affected, as may be the case for a plan that addresses only a repetitive loss area, a written record that the residents were called would be sufficient documentation.
- 7) [For Step 3(a) credit for reviewing existing studies, reports, and technical information] The plan must note where the information from the studies and reports was used, e.g., with quotations or footnotes. The plan also needs to include a list of all the documents reviewed. This is usually done in a reference section or at the end of each chapter.
- 8) [For Step 3(b) credit for coordination with other agencies and organizations] A record of the contacts and meetings. Acceptable records include letters that cover the items needed for coordination, copies of any responses that were received, follow-up memos from the meetings, notes from telephone conversations, and e-mails. These items are usually not included as a part of the plan document.

9) A copy of the resolution or other formal adoption action by the governing body as specified in Step 9. The resolution should identify the implementation responsibilities, describe the evaluation and revision procedures, and call for the five-year update (or adopt by reference such language that may be in the plan document).

(1) With each annual recertification,

10) A copy of the annual evaluation report as specified in Step 10. The report must review each action item, describe what was implemented (or not implemented), and recommend changes to the action plan as appropriate. If not in the evaluation report document, the recertification submittal must also include the minutes of the committee meeting(s) (if getting credit for Step 10(b)) and a description of how the report was submitted to the governing body, released to the media, and made available to the public.

Evaluation Report

Failure to submit the floodplain management plan's evaluation report with the annual recertification or the five-year update will result in loss of the planning credit (i.e., FMP = 0). Loss of credit for this activity may cause a repetitive loss Category C community to revert to a Class 10.

512.b. REPETITIVE LOSS AREA ANALYSIS (RLAA)

The maximum credit for this element is 140 points.

A repetitive loss area analysis is a detailed mitigation plan for a repetitive loss area. It provides more specific guidance on how to reduce damage from repetitive flooding than a community-wide floodplain management or hazard mitigation plan. Before beginning the RLAA process, the community must review its repetitive loss list to determine if any properties have been mitigated or incorrectly assigned to the community. Once the list is reviewed and the necessary updates approved as per Section 502, the remaining unmitigated repetitive loss properties will form the basis for the RLAA. Mapping repetitive loss areas is discussed in Section 503.

As with a floodplain management plan, Credit is dependent upon the community's following an appropriate process. The five steps for an area analysis are less involved than the 10-step floodplain management planning process, but the analysis must evaluate each building in the repetitive loss area(s).

A community may receive credit for both a floodplain management plan and repetitive loss area analyses. Area analyses may be conducted during floodplain management planning or a floodplain management plan may identify areas needing analyses, which are conducted after the plan is adopted. For credit, a separate analysis must be prepared for each repetitive loss area and made available to residents of those areas.