

Mitigation Planning and the Community Rating System Key Topics Bulletin

October 2018



Cover Image: Water stands in a former residential area that state and local officials included in floods. This is the western edge of this buyout area. Image: Anita Westervelt/FEMA, Crystal Cit	y, Missouri
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EXECUTIVE SUMMARY

Hazard mitigation is the effort to reduce loss of life and property damage by decreasing the impact of disasters. It is most effective when implemented following a comprehensive, long-term hazard mitigation plan.

FEMA has two major hazard mitigation planning programs: local multi-hazard mitigation planning associated with the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act) hazard mitigation provisions and floodplain management planning under the Community Rating System (CRS). The number of communities with local mitigation plans is growing, as is the number of CRS-participating communities wanting to improve their CRS class and increase their flood insurance discount under the National Flood Insurance Program (NFIP).

Each program helps communities reduce their flood risk, but too often, if a community prepares both, they are done as two separate processes with different planning products. This does not have to be the case. Communities can coordinate these two processes and develop a single plan that meets the goals, intent, and requirements of each program. This Bulletin assumes the perspective of the mitigation planner and identifies ways to make the two processes work together for a single, coordinated plan. It is intended for local governments to use to improve their local mitigation plans and leverage the insurance benefits of the CRS to advance mitigation outcomes. This one-plan approach can save time and add value for local communities, especially because as of May 2018, 99 percent of CRS communities also have a local hazard mitigation plan.

This Bulletin makes it easier to align each program's process and requirements. It is organized around the elements of a local hazard mitigation plan, lining up the CRS Floodplain Management Planning steps with the local planning elements. The document begins with an overview of each planning process and then matches up local mitigation plan requirements with the CRS Program's Activity 510: Floodplain Management Planning steps. It also provides helpful hints and advice about common challenges associated with coordinating these processes. While the Bulletin provides an overview of how the two plans are similar and how element can be combined, it is intended to assist establishing the planning scope and process. The full authority is found in the CRS Coordinator's Manual (2017) and the Local Mitigation Plan Review Guide (2011).

Implementing the recommendations in this Bulletin will have several benefits that would not be seen if a community only prepares a mitigation plan or two separate plans:

- An integrated mitigation planning process with more specific flood mitigation actions and projects;
- · Eligibility for FEMA mitigation grants to help fund actions and projects recommended in the plan;
- · Credits toward a reduction in flood insurance premiums in CRS-participating communities; and
- Familiarizing more communities with the CRS program and its flood insurance benefits.

INTRODUCTION

As used in this Bulletin, "mitigation planning" refers to the process of preparing a plan that identifies and assesses natural hazard risk and sets a strategy to reduce that risk. Mitigation plans are reviewed to ensure they meet the requirements set forth in Code of Federal Regulations, Title 44, Section 201: Mitigation Planning, and they are approved by FEMA. FEMA has also issued guidance for community floodplain management plans that are credited under the NFIP's CRS, a program that recognizes community efforts to prevent and reduce losses from flooding and rewards communities with reduced premiums under the NFIP.

These programs are not mutually exclusive – they were created for different purposes but have the same goal: to help communities reduce the threats and losses caused by floods and other natural hazards.

Given the different regulations and guidance and the fact that these programs are typically administered by different offices at the local level, mitigation planning and CRS floodplain management planning are not always well coordinated. As a result, jurisdictions may miss opportunities to implement their programs more effectively and efficiently. Also, if their

WHO SHOULD USE THIS BULLETIN?

This bulletin is designed for the people who prepare local mitigation plans and who want to design their mitigation planning and CRS floodplain management planning processes to complement each other and gain credit for both programs with a single process.

This bulletin assumes the reader is familiar with FEMA guidance for mitigation planning.

mitigation planning does not incorporate certain elements that receive CRS credit, they may miss opportunities to reduce the cost of flood insurance for their residents.

This bulletin is designed to help community officials integrate mitigation planning and CRS planning to produce more effective local flood mitigation actions and to meet the criteria of both FEMA programs more efficiently. It works from the perspective of the person responsible for preparing a mitigation plan and identifies ways to include elements in the mitigation planning process that receive CRS credit. This Bulletin assumes the reader is familiar with the FEMA mitigation planning regulations and policies, such as the Local Mitigation Plan Review Guide (2011). For more information and links to these resources, see Appendix 1.

There may be other programs where close coordination with mitigation planning would benefit both those programs. As noted in the <u>CRS Coordinator's Manual</u> (2017), "It is recommended that the planner review all state and FEMA planning program guidelines. 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" (page 510-4).

Mitigation Planning

State, tribal, and local governments engage in hazard mitigation planning to identify risks and vulnerabilities associated with natural disasters and to develop long-term strategies for protecting people and property from future hazard events. "Mitigation planning" refers to the process of preparing such plans in accordance with FEMA requirements, as discussed previously.

The mitigation planning regulations were developed pursuant to the Disaster Mitigation Act of 2000, which amended the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act). As a precondition for receiving certain FEMA assistance, such as Hazard Mitigation Assistance (HMA) mitigation project grants, local governments must have a FEMA-approved mitigation plan. The purpose of mitigation planning is for State, local, and Indian tribal governments to identify the natural hazards that impact them, to identify actions and activities to reduce any losses from those hazards, and to establish a coordinated process to implement the plan, taking advantage of a wide range of resources.

The mitigation planning process has multiple benefits that result in not just a plan document, but a stronger local mitigation program to address natural hazards. Following and engaging in the planning process can foster community efforts to:

- Increase education and awareness around threats, hazards, and vulnerabilities;
- Build partnerships for risk reduction involving government, organizations, businesses, and the public;
- Identify long-term, broadly-supported strategies for risk reduction;
- Align risk reduction with other state, tribal, or community objectives;
- Identify implementation approaches that focus resources on the greatest risks and vulnerabilities; and
- Communicate priorities to potential sources of funding.

To maintain their eligibility for mitigation funding, communities must have their mitigation plans reviewed by their state as well as reviewed and approved by FEMA. They must also review and update their plans every five years. As of June 29, 2018, more than 20,700 communities have current local mitigation plans and an additional 172 tribal governments have current tribal mitigation plans. Over 85% of the nation's population lives in communities with current mitigation plans. For a list of approved plans, visit https://www.fema.gov/hazard-mitigation-plan-status.

More information on the mitigation planning process begins on page 7. For more information on mitigation planning, visit www.fema.gov/hazard-mitigation-planning.

FUNDING MITIGATION PLANNING

There are several FEMA HMA grant programs that can help fund mitigation planning. These can be found at https://www.fema.gov/hazard-mitigation-assistance. Communities are encouraged to include the additional CRS elements in the design of their planning process to be included in their HMA planning grant application because the result will be more resilient communities. Incorporating the CRS elements and activities into the mitigation planning grant are eligible grant expenses, provided the additional scope and related costs are explained and documented in the HMA planning grant subapplication.

The Community Rating System

The CRS is a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum NFIP requirements. Under the CRS, flood insurance premiums for properties in a participating community are reduced to reflect the flood protection activities in that community.



It has been shown that CRS incentives have encouraged communities to start new mitigation programs and keep them going during periods of budgetary challenges. As of May 2018, approximately 1,500 cities, counties, and tribes participate in the CRS. While these make up only 7 percent of the communities in the NFIP or communities with local mitigation plans, their residents and businesses carry 70 percent of the flood insurance policies in the country. FEMA regularly encourages communities to join the CRS both for the insurance benefits and for the increased floodplain management it supports.

A community receives a CRS classification based on credit points earned for its activities. It can implement any combination of activities that reduce flood losses through better mapping, regulations, public information, flood damage reduction, and/or flood warning and preparedness programs.

There are ten CRS classifications (see Table 1). Class 1 requires the most credit points and gives the largest premium reduction. Class 10 does not reduce premiums. A community that does not apply for the CRS or that does not obtain the minimum number of credit points is considered a Class 10 community.

To improve its class rating, a community needs to earn 500 points. The CRS has 19 activities, each with from one to 13 elements, that provide credit points. One of those 19 is Activity 510 (Floodplain Management Planning), which has three elements:

- Floodplain management planning: up to 382 points, average 171 points.
- Repetitive loss area analysis: up to 140 points, average 140 points.
- Natural floodplain functions plan: up to 100 points, average 23 points.

Table 1. CRS Premium Reductions			
		Premium Reduction	
Class	Points	In the	Outside the
		Floodplain	Floodplain
1	4,500+	45%	10%
2	4,000-4,499	40%	10%
3	3,500-3,999	35%	10%
4	3,000-3,499	30%	10%
5	2,500-2,999	25%	10%
6	2,000-2,499	20%	10%
7	1,500-1,999	15%	5%
8	1,000-1,499	10%	5%
9	500-999	5%	5%
10	0-499	0	0

The first element, floodplain management planning, is comparable to hazard mitigation planning. It is the CRS element that this bulletin addresses. Approximately 66 percent of the CRS communities receive credit for floodplain management planning, but many are receiving minimal points. One way to improve their classification is to incorporate more of the credits for floodplain management planning when their hazard mitigation plan is next updated.

For more information on the CRS, see www.fema.gov/community-rating-system and https://crsresources.org. For a list of communities in the CRS, see Section 20 of the current Flood Insurance Manual.

Comparing Local Mitigation Planning and CRS Planning

While both mitigation planning and the CRS program have similar objectives, each is administered by a different office in FEMA. This is often true in communities as well.

- Mitigation planning is normally administered through emergency management channels at the state and local levels through the emergency management office.
- CRS activities are most often administered in the floodplain management office, which may be in the planning, building, engineering, public works, community development, or emergency management office, depending on the community's preference. Each local and tribal government works directly with FEMA's CRS contractor, the Insurance Services Office (ISO).

One of the best ways to coordinate the two planning programs is for these local offices to work together to leverage and integrate these processes. This is a good idea anyway, as involving more staff, stakeholders, and the public in a community-driven planning process builds a stronger mitigation program.

Additional comparisons of local mitigation planning and the CRS planning credit are in Table 2.

Table 2. FEMA Planning			
	Local Mitigation Planning	CRS Floodplain Management Planning	
Objective	Identify local policies and actions that can be implemented to reduce long-term risks and future losses from natural hazards	Produce 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	
Authority	The Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended by the Disaster Mitigation Act of 2000	National Flood Insurance Reform Act of 1994, Section 541	
Requirements	44 CFR §201.6. Local Mitigation Plans	CRS Coordinator's Manual, Activity 510 (Floodplain Management Planning)	
Reference	<u>Local Mitigation Plan Review Guide</u> <u>Local Mitigation Planning Handbook (2013)</u>	CRS Coordinator's Manual, Activity 510 (Floodplain Management Planning)	
Hazards Addressed	All natural hazards that can affect the community	Flooding and flood-related hazards, e.g., dam failure, coastal erosion, etc.	
Incentive	Reduce the threat to people and losses to property caused by natural hazards	Reduce the threat to people and losses to property caused by floods	
Extra Incentive	Prerequisite for FEMA mitigation grants	Reduction in flood insurance premiums	
Approval	Review by the State Hazard Mitigation Officer or the state mitigation planning office with final approval by the FEMA Regional office	Approval by the Insurance Services Office, FEMA's contractor for the CRS	
Updates	Required every 5 years	Required every 5 years	
Requirements Checklist	Plan Review Tool in <u>Local Mitigation Plan Review</u> <u>Guide</u>	510 Floodplain Management Planning Checklist (Appendix 2)	
Funding Support	FEMA Hazard Mitigation Assistance (HMA) grants, such as the Hazard Mitigation Grant Program (HMGP), Pre-Disaster Mitigation (PDM) Program, and Flood Mitigation Assistance (FMA)	Same as for mitigation planning, provided the resulting plan meets the FEMA mitigation planning requirements	
Website	https://www.fema.gov/hazard-mitigation-planning	https://crsresources.org/500-2/	

The Planning Process

In both planning programs, **the stress is on "planning"** rather than "the plan" or the final document. Although many federal programs require a plan as a prerequisite for funding or other assistance, no federal program can determine what is best for a community. These requirements are based on the principle that a *good planning process* will produce a good plan for the local situation.

Therefore, both hazard mitigation requirements and CRS criteria emphasize the planning process, rather than the actions that a plan should recommend. Both programs call for a step-by-step planning process. Mitigation planning has four primary elements (five for an update), while CRS has ten required steps.

Table 3 summarizes the two programs' process requirements using the organization of the <u>Local Mitigation Plan Review Guide</u> and its Plan Review Tool. With a few exceptions, such as CRS Step 10, the two programs have the same criteria in the same order. As shown in the table, there are a few steps where the difference between the maximum points available and the national average points is significant, especially in CRS steps 2, 3, and 10. This indicates that communities may want to focus their efforts on those steps.

"Process is as important as the plan itself. In mitigation planning, as with most other planning efforts, the plan is only as good as the process and people involved in its development."

Local Mitigation Planning Handbook, page 1-2.

One major difference between the two processes is that for mitigation planning, elements are either met or not met, while the CRS steps have minimum criteria but provide more points for additional activities.

Table 3. Comparison of the Planning Processes			
Mitigation Planning Elements*	CRS Planning Steps**	Max Points	Average
	1. Organize to prepare the plan	15	10
A Dianning Dropoce	2. Involve the public	120	34
A. Planning Process	3. Coordinate	35	10
	10. Implement, evaluate, revise	26	5
B. Hazard Identification and	4. Assess the hazard	35	25
Risk Assessment	5. Assess the problem	52	29
	6. Set goals	2	2
C. Mitigation Strategy	7. Review possible activities	35	20
	8. Draft an action plan	60	42
D. Plan Update	10. Implement, evaluate, revise 5-year update	See Element A	
E. Plan Adoption	9. Adopt the plan	2	2
		382	171

^{*} The planning elements are per Local Mitigation Plan Review Guide and its Plan Review Tool

The update criteria in mitigation planning Element D are very important because most communities in the country have prepared mitigation plans since the program started in 2000. Therefore, most work on mitigation planning in the future will be plan updates, not new mitigation plans. If communities want to improve their planning process or increase their CRS credits, that can be done during the update process.

^{**} The 10 steps are detailed in Activity 510, Section 512.a, Floodplain Management Planning (FMP) in the CRS Coordinator's Manual

CRS PLANNING CRITERIA

In most cases, doing a thorough job of mitigation planning will result in more credit under Activity 510 (Floodplain Management Planning). However, while there are a lot of similarities between mitigation planning and CRS planning, mitigation planners should be aware of some special criteria for the CRS credits. Omitting one of the following criteria may result in no CRS credit or credit capped at 50 points.

The CRS 10-step Planning Process

The planning process must include all ten steps listed in Table 3. The detailed credits for each step are listed in Activity 510 of the <u>CRS Coordinator's Manual</u> for floodplain management credit. They are also listed, with credit points, in the Floodplain Management Planning Checklist included in Appendix 2.

In theory, a plan could receive as little as one or two points for some steps and still be approved, albeit for relatively little credit. What happens too often is that an entire step is missing (or not documented by the submitting community). If an entire step is missing, there is no CRS credit for the plan. A document that could qualify as a mitigation plan could receive little or no CRS credit.

In 2013, an important adjustment was made to this rule <u>for plans that have been approved by FEMA as hazard mitigation plans</u>:

- If one step is missing, the mitigation plan may receive CRS credit, but it is limited to 50 points.
- If two steps are missing, there is no CRS credit for a mitigation plan.

This type of omission has been found to be the most common issue when submitting hazard mitigation plans for CRS credit. Of those mitigation plans capped at 50 points, 90 percent missed CRS Step 7, which is to review possible activities (see page 20). The other 10 percent had no credit in CRS Steps 1, 2, 3, or 8. Because of this rule, mitigation plans that could have received, for example, 200 points are credited with only 50 points.

A mitigation plan that misses one or more CRS steps can be rectified by following this guidance during the update process.

Activity 510 (Floodplain Management Planning) Scoring

As seen in Table 3, each of the CRS planning steps can provide a different number of points, provided the listed credit criteria are met. For example, there are three opportunities for credit under CRS Step 1: Organize to prepare the plan:

- a. Actively involve the office responsible for the community's land use and comprehensive planning (4 points).
- b. Conduct the planning through a committee of department staff (up to 9 points). One point is provided for each office represented, with full credit for having representatives from the offices that are responsible for all six categories of flood mitigation activities (see Table 4).
- c. Have the planning process formally created by the community's governing board (2 points).

A community can receive from 2 to the full 15 points, depending on how many of these components it includes in the planning process. The most important item, involving the departments that will be most involved in designing and implementing the recommended mitigation actions, is worth the most points.

Except for the average points column in Table 3, all credit points listed in this Bulletin and in the <u>CRS Coordinator's Manual</u> are maximums. In most cases, there are pro-rating guidelines, such as in CRS Step 1(b) above. In all cases, the ISO/CRS Technical Reviewer for the floodplain management plan may determine that one or more items do not warrant full credit.

All but CRS Steps 6 and 9 provide more than one way to earn credit points. A planning process can include one, two, or all of the scoring components. In some steps, specific items are required as a minimum. Required items are noted with "(REQUIRED)" after them. More details on the scoring system are in Activity 510 (Floodplain Management Planning) in the <u>CRS Coordinator's Manual</u>.

Table 4. Categories of Mitigation Actions			
Types of Mitigation Planning Actions CRS Categories of Flood Mitigation Activiti			
· Local plans and regulations	1. Preventive measures (e.g., codes)		
Structure and infrastructure projects	2. Property protection (e.g., elevation)		
Natural systems protection	3. Natural resource protection		
[Not included *]	4. Emergency services		
Structure and infrastructure projects	5. Structural flood control projects		
· Education and awareness programs	6. Public Information		
- See page 6-3 in Local Mitigation Planning Handbook	- See Table 6 for an expanded list		

Both mitigation and CRS planning programs call for a review of a range of mitigation actions and projects. Both programs have lists of such actions or activities. Having representatives of the offices responsible for these activities on the planning committee means the recommendations will be better designed and staff will be more supportive of implementing them.

CRS Class 4 Prerequisite

A community can advance to a better class with 500 more points. However, additional prerequisites must be met for advancement to some classes.

One of these is a Class 4 prerequisite: The community must have a floodplain management (or hazard mitigation) plan that receives **at least 50 percent of the maximum credit** under Activity 510. In other words, the credit for 510 must be at least 191. The plan must also receive at least 50 percent of the maximum credits in CRS Steps 2, 5, and 8. While a community might not be ready to advance to Class 4, it is important to know the prerequisite early and avoid future issues.

As of October 1, 2017, the CRS includes 13 communities at Class 4 or better. All receive CRS floodplain management planning credit, with scores ranging from 204 to 318 points.

While this prerequisite may not sound important, it had an impact on at least one Class 4 community. At plan update time, the community opted to drop its separate floodplain management plan and participate in a local hazard mitigation plan update. The mitigation planning staff did not know of the CRS prerequisite.

Even though the community had enough overall points to be a class 4, the multi-jurisdictional hazard mitigation plan did not receive enough points under Activity 510 to meet this prerequisite. The community was faced with dropping to Class 5. It ended up updating its original floodplain management plan to keep its CRS Class 4 status.

^{*} FEMA mitigation planning guidance calls for actions that "reduce or eliminate long-term risk to people and property from hazards and their impacts." As such, programs like flood warning and response and other emergency operations are not included. See also the discussion on reviewing a range of activities under Step 7.

Multi-jurisdictional Planning

Both mitigation and CRS planning criteria recognize multi-jurisdictional efforts (i.e., several communities participating in a countywide or regional planning process). Such efforts have advantages, such as sharing resources and avoiding duplication of effort. They also have disadvantages, such as making the work more complex.

Because the CRS works at the community level, there is a concern that individual communities' situations and needs are lost in the bigger operation of a multi-jurisdictional plan. Both programs call for an assessment of the impact of the hazards and a list of mitigation actions or projects for each participating community. Both programs call for each community to participate in the planning process.

The CRS participation requirement is more specific. To have individual communities "participate in the planning process," the floodplain management planning credit criteria call for community representatives to attend meetings and participate on a planning committee. The planning committee appears in two places in the <u>CRS Coordinator's Manual</u>: staff representation on the committee is explained under CRS Step 1 and public or stakeholder representation is specified in CRS Step 2.

Most planning processes include all three groups on the same committee, allowing lots of interaction between staff, stakeholders, and the public, as discussed in Step 2. For CRS credit as a participant in a multi-jurisdictional planning process, a community must meet these three requirements:

- 1. Send at least two representatives to the multi-jurisdictional committee. This increases community involvement and input, and it also provides representation if one of the two designees cannot attend a meeting.
- 2. 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 everyone to talk, is permissible.
- 3. The committee must meet enough times to involve the members in the key steps of the planning process. It is recommended that it have at least one meeting about each of CRS Steps 4, 5, 6, 7, and 8.

This Bulletin provides more information on the CRS credit criteria for the multi-jurisdictional committee on pages 11–13.

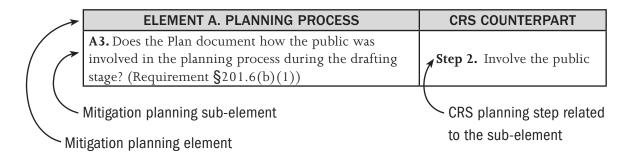


Multi jurisdictional mitigation planning committee meets about their plan. Image: French Wetmore, St. Tammany Parish, LA

INCORPORATING CRS CREDITS IN MITIGATION PLANNING

The following sections are organized according to the Regulation Checklist in the Plan Review Tool in the <u>Local Mitigation Plan Review Guide</u>. The checklist lists the elements and sub-elements needed to meet all FEMA local mitigation planning requirements.

On the following pages, the mitigation planning elements and sub-elements are matched up with their counterpart CRS steps, as shown in the example below. After each sub-element is a discussion on the CRS planning criteria and how they are different from, or in addition to, the standard mitigation planning process. There is no discussion where the CRS planning criteria are the same as the mitigation planning guidance.



It is recommended that you read the rest of this bulletin, especially all of Element A, before beginning the planning process. This helps to understand the full picture. Then, use this bulletin as a reference and review each section when you get to that point in your planning process.

Even better, do this review before the HMA mitigation planning grant scope of work is settled or a contract for planning support is signed. See also <u>Considerations for Local Mitigation Planning Grant Subapplicants</u> for ideas on developing a scope of work for an HMA mitigation planning grant or a contract with a planning consultant.

Appendix 2 has the CRS' checklist for the ten floodplain management planning steps. This can be a handy tool on which to take notes during your review of the rest of this bulletin.

For further details, consult the <u>CRS Coordinator's Manual</u> before taking an action. More information can also be provided by the community's <u>ISO/CRS Specialist</u>.

"You need to know at the very beginning what the requirements are.

The key is for the plan leader to review and maintain the checklist throughout the project."

Rebecca Quinn, Mitigation Planning Consultant

The Florida Division of Emergency management developed a tool in Microsoft® Excel that provides one checklist for both planning programs. Completing sections of the Mitigation Plan Review Tool populates sections of the CRS Planning Checklist.

ELEMENT A. PLANNING PROCESS

1. REGULATION CHECKLIST Regulation (44 CFR §201.6 Local Mitigation Plans)	
ELEMENT A. PLANNING PROCESS	CRS COUNTERPART
A1. Does the Plan document the planning process, including how it was prepared and who was involved in the process for each jurisdiction? (Requirement $\S201.6(c)(1)$)	Step 1. Organize to Prepare the Plan

Sub-element A1 coincides with CRS Step 1: Organize to prepare the plan. There are three ways to get credit under CRS Step 1.

a. Actively **involve staff from multiple departments**, specifically the office responsible for the community's land use and comprehensive planning (max 4 points). Some mitigation plans are prepared entirely by the emergency management office. This credit encourages involving other stakeholders in the planning effort. It will also help with one of the mitigation planning priorities: integrating mitigation with other existing planning efforts.

Remember – the credit is for the planning process. The CRS steps are specific and need to be met. Once the process starts, it may be too late to change it.

b. Conduct the planning through a **committee of department staff** (up to 9 points). One point is provided for each office represented, with full credit for having representatives from the offices that are responsible for all six categories of CRS flood mitigation activities (see Table 4).

The planning committee can be credited under Steps 1(b) or 2(a) or, preferably, both. In any case, coordinators of multi-jurisdictional mitigation plans need to see if their CRS communities (and those interested in joining the CRS) want to participate for CRS credit. If so, they need to be represented on the planning committee. Two key points:

- 1. The committee and participation must meet the three criteria listed at the end of the section on multi-jurisdictional planning, on pages 9 10.
- 2. Unlike for a single-jurisdiction plan, each community does not need to have representation from all six departments, but it does need to send two staff representatives. See the example in Table 5.
- c. Have the **planning process formally** created by the community's governing board (2 points). This could be a resolution of the city or county council creating the planning committee, appointing its members, giving it a deadline, etc.

ELEMENT A. PLANNING PROCESS	CRS COUNTERPART
A3. Does the Plan document how the public was involved in the planning	Step 2. Involve the public
process during the drafting stage? (Requirement §201.6(b)(1))	step 2. Involve the public

Sub-element A3 corresponds to CRS Step 2: Involve the public. Planners consistently mention public involvement as the most important part of a planning process, so this step has more points than any other part of Activity 510 planning (up to 120).

The CRS's definition of public involvement is more structured than what is provided in the local mitigation plan guidance. CRS Step 2 provides four ways to get CRS credits.

a. **Include members of the public on the planning committee**. Full credit (60 points) is provided if at least half the committee members represent the public or are "stakeholders." The points are prorated based on the percentage of public members on the committee.

Public participation on the committee has generated enough questions that a separate handout on the topic has been prepared, CRS Credit for Planning Committees. The handout defines "stakeholders" to basically include anyone other than an employee of the community (note that "stakeholders" as used by the CRS means something different than the term used in mitigation planning).

No more than 20 percent of the public/ stakeholders can be employees of other government agencies—the objective is to get a lot of input from those who "think outside the government box." Table 5 provides a sample committee's membership.

b. Hold one or **more public information meetings** in the affected area(s) within
the first 2 months of the planning process
(15 points). The meetings must be separate



One meeting of the Calumet City, Illinois' mitigation planning committee included a field trip to local flood control structures. It helped educate all the committee members about ongoing mitigation projects. Image: French Wetmore, Calumet City, IL.

- from the planning committee meetings. For example, a multi-jurisdictional plan update could involve one or two meetings in areas that include the floodplains of the main source of flooding for most of the communities.
- c. Hold one or more **public meetings to obtain input on the recommended plan** (15 points). The meeting(s) must occur at least 2 weeks before the recommended plan is submitted to the community's governing body.
- d. Five points are provided for each **additional public information** activity that explains the planning process and encourages input. The maximum credit is 30 points for six such activities. Examples include a website and a questionnaire that asks the public for information on their natural hazards, problems, and potential solutions.

Table 5. Sample Multi-Jurisdictional Planning Committee Membership			
County	Big City	Small Town A	Small Town B
Emergency manager (emergency services)	Comm. development (property protection)	Building official (preventive)	Public works/drainage (flood control projects)
Planning/zoning (preventive)	Park naturalist (nat. resource protection)	Police officer (emergency services)	Volunteer firefighter (emergency services)
Sheriff	Mayor's public info	Stakeholders	Stakeholders
(emergency services)	officer (public info)	Building contractor	Insurance agent
Stakeholders	Stakeholders	School district	Floodplain resident
Forestry/lumber co.	Community activist	Small Town C	Small Town D
Farmers organization	Community college	Town clerk	Public works
Floodplain resident	Banker	Town council member	Town council member
Marina operator	Homeowners' Assoc.	Stakeholders	Stakeholders
		Fire district	Citizen
		Hardware store	Real estate agent

This committee meets the criteria for full credit as a committee of both staff (CRS Step 1(b)) and the public (CRS Step 2(a)). All six communities would receive credit from both steps.

Each community has at least two staff members on the committee. The staff from four of the participating communities have expertise in all six flood mitigation categories (see Table 4). If no stakeholders were on the committee, it would still qualify for credit under CRS Step 1(b). If there were no staff for one or more of the flood mitigation categories, the credit for CRS Step 1(b) would be pro-rated.

If the number of stakeholders was smaller than the number of community employees, that community's credit for CRS Step 2(a) would be pro-rated. Sixteen stakeholders are included, so no more than three (20 percent) government agency staff can be counted. The three are from the community college, school district, and fire district. Others can participate, but they would not be counted toward the number of stakeholders representing a community.

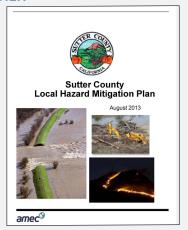
For more information, see CRS Credit for Planning Committees.

THOUGHTS FROM A MULTI-JURISDICTIONAL PLANNER

The mitigation plan with the highest score under Activity 510 FMP (336 points) is the multi-jurisdictional Local Hazard Mitigation Plan update for Sutter County, California. Here are some thoughts from Daniel Peterson, PE, CFM, who was head of the County's Water Resources Division at the time.

"People remember the floods as far back as 1955. Flooding and flood mitigation was a priority for the people and elected officials....

"When it was time for the multi-hazard mitigation plan, the stars aligned. Not only did we have people who were motivated and cared about the future of the County, I had a close working relationship with John DeBeaux, the County's Emergency Operations Manager. We coordinated every step of the planning process.... It worked the way it was supposed to work.



"When we wrote the specifications for a planning consultant, we emphasized CRS and flood mitigation. When we interviewed the short list of consultants, we scored them on their CRS knowledge and experience. We picked the firm with the highest score. That paid off....

"As an engineer, I discovered early on in public work that the most important part of the job was getting out, meeting with the residents, and understanding their needs. We had active public involvement during plan development. We got wholesale buy-in from stakeholders and that made the plan valuable and viable. It is now being implemented due to that public support."

The current plan is at https://www.suttercounty.org/doc/government/depts/cao/em/hazard_mitigation

ELEMENT A. PLANNING PROCESS	CRS COUNTERPART
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))	Step 3. Coordinate (b) Coordinate with agencies and organizations
A3. [Discussed previously]	
A4. Does the Plan describe the review and incorporation of existing plans, studies, reports, and technical information? (Requirement §201.6(b)(3))	Step 3. Coordinate (a) Review existing studies

Sub-elements A2 and A4 coincide with CRS Step 3: Coordinate. The CRS credits are:

- a. **Review existing studies**, reports, and technical information and the community's needs, goals, and plans for the area. (REQUIRED, 5 points). This is essentially the same as sub-element A4, and it is required for any credit under CRS Step 3.b.
- b. Coordinate with agencies and organizations outside the community's governmental structure. This is similar to sub-element A2, but it requires more than providing and documenting an opportunity for involvement. Planning staff must contact the various agencies and organizations and document the contacts and their responses. The credit is up to 30 points, with 1 point for each agency contacted and 2 points if the contact was in the form of a meeting or telephone conversation.

ELEMENT A. PLANNING PROCESS	CRS COUNTERPART
A5. Is there discussion of how the community(ies) will continue public participation in the plan maintenance process? (Requirement §201.6(c)(4)(iii))	Step 10. Implement
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 $\S 201.6(c)(4)(i)$)	Evaluate, and Revise

Sub-elements A5 and A6 correspond to CRS Step 10. Both local mitigation plans and CRS floodplain management plans are living documents. Progress on implementing the plans needs to be monitored, and adjustments need to be made when local conditions change or when parts of the plan are implemented. There are two CRS plan maintenance requirements under CRS Step 10:

- The plan must describe a process to evaluate and report how implementation is progressing. This must be done at least **annually**. An evaluation report must be prepared, distributed to the governing body, the media, and the public, and submitted to ISO with the community's annual recertification package.
- The plan must be updated **every 5 years**. This is essentially the same process used for mitigation plans and can be on the same timetable. It applies to all CRS communities, including those on a 3-year verification visit cycle.

Missing either of these requirements is cause for losing all CRS planning credit. If a community with 50 or more repetitive loss properties loses its planning credit, it will lose all its CRS insurance premium benefits.

The credits for CRS Step 10 stress public involvement in monitoring and evaluating plan implementation (pages 510-25 and -26 of the <u>CRS Coordinator's Manual</u>):

- a. The community (or the multi-jurisdictional committee) must **evaluate progress every year** (REQUIRED, 2 points). The procedures for doing this must be explained in the plan document. The evaluation report must be made available to the media and the public.
- b. To encourage continued public involvement, up to 24 points are provided for having the evaluation report prepared by the CRS Step 2(a) **planning committee**. More points are provided for more frequent committee meetings during the year to review progress.

The CRS Step 10 requirements for the 5-year update (page 510-27 of the <u>CRS Coordinator's Manual</u>) are discussed under Element D, later in this Bulletin.

ELEMENT B. HAZARD IDENTIFICATION AND RISK ASSESSMENT

The hazard identification and risk assessment tasks are very similar for mitigation and CRS planning. Both require attention to repetitive loss properties.

ELEMENT B. HAZARD IDENTIFICATION AND RISK ASSESSMENT	CRS COUNTERPART
B1. Does the Plan include a description of the type, location, and extent of all natural hazards that can affect each jurisdiction(s)? (Requirement $\S 201.6(c)(2)(i)$)	
B2. Does the Plan include information on previous occurrences of hazard events and on the probability of future hazard events for each jurisdiction? (Requirement $\S 201.6(c)(2)(i)$)	Step 4. Assess the Hazard

Up to 35 points are provided for describing the hazards facing the community, based on available studies. CRS Step 4(a) is the **flood hazard assessment** (REQUIRED, up to 15 points). It must include:

- The Special Flood Hazard Area shown on the Flood Insurance Rate Map (FIRM);
- All repetitive loss areas. CRS communities should have already prepared repetitive loss area maps because they are prerequisite to joining the program. See also the guidance on using flood insurance data on page 18;
- · Areas not mapped on the FIRM that have flooded in the past (flood insurance claims can help with this); and
- Other surface flooding identified in other studies.

Most multi-hazard mitigation plans sufficiently cover this minimum requirement for CRS Step 4. To obtain more than 15 points, the assessment needs to provide **more details**, address hazards that are not usually shown on the FIRM, such as levee or dam failure flooding, review future development and flooding conditions, and cover other natural hazards.

Sub-element B2 is also addressed in the creditable parts of CRS Step 4, specifically in 4(a)(3), a discussion of past floods (REQUIRED) and 4(c), identifying areas likely to be flooded and flood problems that are likely to get worse in the future.

ELEMENT B. HAZARD IDENTIFICATION AND RISK ASSESSMENT	CRS COUNTERPART
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 $\S 201.6(c)(2)(ii)$)	Step 5. Assess the Problem
B4. Does the Plan address NFIP insured structures within the jurisdiction that have been repetitively damaged by floods? (Requirement §201.6(c)(2)(ii)))	

While CRS Step 4 focuses on the hazards, CRS Step 5 reviews the impact of the hazards on people and property.

a. Under CRS Step 5, the plan is REQUIRED to include "an **overall summary** of the jurisdiction's vulnerability to each hazard identified in the hazard assessment (CRS Step 4) and the impact on the community" (2 points). These criteria are essentially the same as those for sub-element B3.

Up to 50 more points are provided for providing more details:

b. A description of the **impact of flooding** on various community attributes, such as critical facilities and the local economy (25 points)

- c. A review of **historical damage** to buildings (5 points). Repetitive loss communities are REQUIRED to include their repetitive loss areas. For full credit, communities need to look at all their flood insurance claims.
- d. Describing the area's **natural floodplain functions** (5 points)
- e. Describing what will happen with **future development** and redevelopment (7 points)
- f. Describing the impact of **future flooding conditions** due to climate change (8 points)

Some of these items, such as addressing critical facilities and future conditions, are already required for mitigation plans. This is explained under Task 5 of <u>Local Mitigation Planning Handbook</u>.

As part of the NFIP, CRS floodplain management planning needs to address insurable properties (i.e., buildings). Sub-element B4 and CRS Steps 4(a) and 5(c) credit a review of all flood insurance claims and all repetitive loss property claims (the latter is required of repetitive loss communities).

A repetitive loss property is one that has had two or more flood insurance claims of more than \$1,000 within any 10-year period since 1978. There are approximately 200,000 repetitive loss properties in the United States. While current repetitive loss policies account for less than 1.5 percent of all NFIP policies, they are responsible for nearly 20 percent of all claims.

Because the impact of repetitive loss properties is reported to be the most important factor affecting the stability of the National Flood Insurance Fund, communities with repetitive loss properties must meet certain prerequisites before they can receive insurance premium reductions under the CRS:

- Communities with one or more repetitive loss properties must prepare maps of the areas affected by repetitive flooding and describe the causes of the repetitive flooding. These maps should be used during the risk assessment, CRS Step 5.
- These communities must also send an annual mailer with information on ways to protect properties from the repetitive flooding.



This is a classic photo of a repetitive loss property. After repeated flooding, it was purchased and cleared. Before the community could finish removing the building, the site flooded again. Image: French Wetmore, Rome, IL.

In addition to the above, communities with 50 or more repetitive loss properties must prepare and adopt either Activity 510 repetitive loss area analyses for all repetitive loss areas or an Activity 510 floodplain management plan that includes certain repetitive loss features. Most communities choose the second option, because they can meet the prerequisite with a plan they were already preparing for another purpose.

Flood insurance claims are one of the best sources of data on historical flooding and the impact of that flooding (useful in CRS Steps 4 and 5). All communities in the NFIP can receive data on past claims, repetitive losses, and current flood insurance policies in force from their <u>FEMA Regional Office</u>.

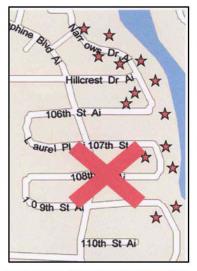
Flood insurance policy information is subject to the Privacy Act of 1974. The box to the right explains this, but many plans still violate this law by including addresses or maps that show repetitive loss properties or properties for which flood insurance claims were made.

Staff should review the data and prepare summary information, such as those in the two good examples below. However, addresses and maps with plots of individual properties or buildings cannot be shown to the public, which includes the planning committee.

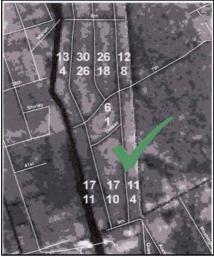
The Privacy Act

Flood insurance information about private property, including repetitive loss properties, is protected under the Privacy Act. Any Personally Identifiable Information, such as the names of owners or addresses of specific properties, whether they are covered by flood insurance, whether they have submitted flood insurance claims, or the amounts of such claims, may not be released outside of local government agencies or to the public or used for solicitation or other purposes. Such information should be marked "For internal use only. Protected by the Privacy Act of 1974."

DISPLAYING AGGREGATED FLOOD INSURANCE DATA FOR PUBLIC VIEW



Maps that allow people to identify (or guess) the addresses of the properties with flood insurance policies cannot be shown to the public or to committee members.



This is an acceptable display on a map. For each block, the total number of buildings and the number of structures with an insurance policy are displayed. This does not work if there is only one building on a block.

Watershed	# of Buildings in SFHA	# of Buildings in SFHA w/ Building Coverage	% of Buildings Covered
Cedar Creek	34	9	26.5%
City/Ohio River	671	220	32.8%
Floyds Fork	196	46	23.5%
Goose Creek	103	+5	43.7%
Harrods Creek	115	55	47.8%
Middle Fork Beargrass Creek	190	75	39.5%
Mill Creek	1,616	676	41.8%

This is an acceptable display in table format. The areas with the lowest levels of policy coverage are identified, without revealing information about the individual properties or policyholders.

- Preparing a Flood Insurance Assessment for Credit under the CRS, FEMA, 2017, page 4

ELEMENT C. MITIGATION STRATEGY

Element C is the culmination of the mitigation planning process. The mitigation strategy covers the activities that the community will implement to reduce the risk to people and property from the hazards reviewed in the hazard identification and risk assessment.

For Element C, unlike Elements A and B, mitigation planning and CRS planning have one very important difference. Both planning processes include the development of goals and result in the development of an action plan, but the CRS first requires a review of a broad spectrum of mitigation activities. This is most visible in CRS Step 7, but it is also the basis for the credit points in CRS Step 8.

ELEMENT C. MITIGATION STRATEGY	CRS COUNTERPART
C3. Does the Plan include goals to reduce/avoid long-term vulnerabilities to the identified hazards? (Requirement $\$201.6(c)(3)(i)$)	Step 6. Set Goals

Setting goals is important for the rest of the strategy. The goals identify where the mitigation program's emphasis needs to be. The criteria for CRS Step 6 are essentially the same as those for mitigation planning's sub-element C3.

This is one area where the planning committee can have very helpful input (see box to the right).

Examples of brief and longer goal statements are on page 510-19 of the <u>CRS Coordinator's Manual</u>.



There are many exercises that a planning committee can conduct to set priorities and goals. These can be very effective in drawing out the quietest members. Image: French Wetmore, Gretna, LA.

ELEMENT C. MITIGATION STRATEGY	CRS COUNTERPART
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))	Step 7. Review Possible
C3. [Discussed previously]	Activities
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 CRS does not require the separate capability analysis in sub-element C1, although the review of the range of mitigation activities should include a discussion of the community's ability to implement them. Therefore, what is in a mitigation plan will be sufficient.

Mitigation planning sub-element C2 calls for a review of the community's participation in the NFIP and its compliance with program requirements. Because a CRS community must already fully comply with NFIP requirements, the NFIP review is not a requirement. Instead, CRS Step 7 calls for a review of additional floodplain management-related activities and regulations:

- a. Up to 5 points are provided for CRS Step 7, 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 its current regulatory and preventive standards and programs. (REQUIRED)
- b. Up to 5 points are provided for reviewing whether the community's **floodplain management regulatory standards** are sufficient for current and future conditions, as discussed under CRS Steps 4 and 5.

Sub-element C4, on the other hand, states that a "comprehensive range of specific mitigation actions and projects" must be reviewed. This is the thrust of CRS Step 7, which should include the community's ability to implement the activities reviewed. This is a central part of a planning process—after the goals are determined, the planners should review and analyze the ways to meet those goals. Many options may not be effective or appropriate, but they all need to be considered, analyzed, and prioritized.

CRS Step 7 credits such a systematic analysis. It is not sufficient to set goals and then list recommended actions. The plan needs to include a discussion of what was looked at and why certain actions were recommended. Many hazard mitigation plans omit this discussion. The planning staff may have conducted such a review, but for CRS credit, the plan document must describe the review.

Considering only what a FEMA mitigation project grant will fund, such as elevating floodprone buildings and hardening critical facilities, is not sufficient for CRS credit. The objective is to review everything that can have an impact on the flood risk, including things that the private sector or a property owner could do as well as actions that can be funded using a wide range of resources, in addition to FEMA funding.

Omitting the review of activities means no credit for CRS Step 7.
Missing CRS Step 7 is the most common reason that FEMA-approved mitigation plans are capped at 50 CRS points.

To encourage a broad range of activities, CRS Step 7 provides more points for reviewing multiple categories of flood mitigation measures. Full credit (35 points) is provided if measures from all six flood mitigation categories are identified and discussed. The list of CRS categories is in Table 4 and expanded on in Table 6.

One side benefit from CRS Step 7 is that it provides a record of what activities were considered and may be worth reconsidering. This can facilitate incorporating new actions when the plan is updated.

Table 6. Categories of Flood Hazard Mitigation Activities

- 1. **Preventive** activities keep flood problems from getting worse. The use and development of floodprone 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
- CRS Coordinator's Manual, Figure 510-4

As shown in Table 4, the CRS list of mitigation activities is slightly different from the mitigation planning list. The <u>Local Mitigation Plan Review Guide</u> notes (page 24), "The mitigation plan may include non-mitigation actions, such as actions that are emergency response or operational preparedness in nature. These will not be accepted as hazard mitigation actions, but neither will FEMA require these to be removed from the plan prior to approval," as long as the plan emphasizes the mitigation actions.

Emergency response activities, such as flood warning, are appropriate floodplain management actions and are encouraged by the CRS scoring system for CRS Steps 7 and 8. As noted earlier, the planning process should look at all possible ways to reduce the hazard to people and losses to property, regardless of the funding source.

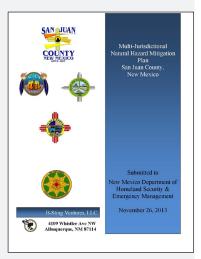
REVIEWING MITIGATION ACTIVITIES IN NEW MEXICO

San Juan County, NM, will be updating its fourth multi-hazard multi-jurisdictional mitigation plan soon. Michele Truby-Tillen is the County's floodplain manager and works in the emergency management office. While the mitigation plan was prepared by a consultant, Michele made sure that earlier mitigation plans included CRS credits because (1) flooding and flash flooding was the top hazard facing the County and (2) it made sense to coordinate the two programs.

The County and three cities have worked well together over the years, sharing the workload. Each of the participating communities had different goals and different action items. Their work provides a good example of the breadth of activities encouraged under CRS Step 7. Here are some examples of the recommended flood mitigation actions for the different communities:

- County: Better coordination of the permit programs of various departments with private utilities and state and federal agencies
- · County: An ordinance on keeping waterways clear of debris
- · County: Bank stabilization projects
- · City of Aztec: "An aggressive Flood Hazard Mitigation education campaign"
- · City of Aztec: A mitigation website
- · City of Aztec: A formal drainage maintenance program
- · City of Bloomfield: Install a local emergency warning system
- · City of Bloomfield: Expand the jurisdiction of the floodplain regulations
- City of Farmington: New detention ponds
- City of Farmington: "Ensure that Farmington's future growth does not expand into areas that expose the community to increased flood risks."

An earlier edition of the mitigation plan called for stronger regulations for flood and shoreline erosion protection. That helped Michele convince the County Commission to adopt an erosion setback ordinance that prohibits development within 60 feet of the channel bank. The ordinance amendments helped the County improve one class in the CRS. The current mitigation plan can be seen at http://www.sjcoem.com/emergency-plans.



	CRS COUNTERPART
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 $\S 201.6(c)(3)(iii)$) C6. Does the Plan describe a process by which local governments will integrate the requirements of the mitigation plan into other planning mechanisms, such as comprehensive or capital improvement plans, when appropriate? (Requirement $\S 201.6(c)(4)(ii)$)	Step 8. Draft an Action Plan

The credit criteria for CRS Step 8(a) were modeled after those of sub-element C5. The point system encourages implementing actions from as many of the six flood mitigation categories as possible (see Tables 4 and 6). Full credit of 45 points is provided for an action plan with actions in five of the six categories. There must be an action item for each goal listed in CRS Step 6.

The overall 10-step process supports sub-element C6. Involving planners and other staff (CRS Step 1) and the public (CRS Step 2) and considering a broad range of mitigation actions (CRS Steps 7 and 8), encourage integrating mitigation into many other community programs and projects.

Additional credit is offered under CRS Step 8(b) for including policies and procedures for post-disaster redevelopment and mitigation in the action plan. CRS Step 8(c) provides CRS credit for action items that mitigate the effects of other natural hazards.

Table 7 is an example of how the 2009 *Natural Hazards Mitigation Plan* for St. Tammany Parish, Louisiana, documented the connection between:

- The mitigation plan's goals in chapter 4,
- The review of mitigation activities in chapters 5 9. This plan has one chapter for each category, and recommendations for each of the activities reviewed,
- The subsequent recommended action items, and
- The CRS credits that could be provided for implementing the action items. This last one is not a CRS credit criterion.

Table 7. St. Tammar	ny Pai	rish's	Plan's	s Acti	on Ite	ms, G	oals, and Recommend	dations
Action Item	Goal 1. Protect lives and health	Goal 2. Public services/critical facilities	Goal 3. Evacuation routes, streets, & utilities	Goal 4. Protect homes and businesses	Goal 5. Use infrastructure and planning	Goal 6. Repetitively flooded areas	Chapter – Recommendation	CRS Activity - Credit Points
10.1. Program Action Items								
1. Property protection projects	Χ			Χ		Χ	5-3, 5-5, 8-1	530 - 84
2. Public property	Х	Х	Х			Х	5-4	
3. Plans and regulations					Χ		6-1, 6-6	430 - 25
4. Building code					Χ		6-5	430 - 95
5. Permit administration					Χ	Х	6-4, 6-9, 6-10, 7-4	430 - 15
6. Floodplain management					Χ	Χ	6-2, 6-8, 6-10, 6-12	420 - 38
7. Tree City	Χ	Х	Χ	Х			6-11	
8. Emergency operations	Х	Х	Х				7-1, 7-3	610 - 150
9. Flood control projects	Χ	Х	Х	Х		Х	8-1	
10. Project scoping	Χ	Х	Х	Х		Х	5-5, 7-4, 8-1	
11. Community Rating System	Х	Х	Х	Х	Χ	Х		
10.2. Public Information Strategy								
12. Hazard mitigation materials	Χ			Χ			8-4, 9-2, 9-3, 9-4	330 - 100
13. Outreach projects	Χ			Χ			9-1, 9-2, 9-3, 9-5	350 - 50
14. Public information topics	Χ		Χ	Χ	Χ	Х	5-1,5-2,8-4,9-1-9-6	
10.3. Administrative Action Items								
15. Plan adoption	Χ	Χ	Χ	Χ	Χ	Х		510 - 200
16. Mitigation Committee	Χ	Χ	Χ	Χ	Χ	Х		
17. Financing			Χ	Χ		Х	8-2	540 - 50

This table relates the 17 action items to the 6 goals of this Plan. The goals are stated in full on pages 4-3 and 10-1. The table also shows the relation between the action items and the recommendations at the end of chapters 5-9. For example, action item 1, Property protection projects, supports goals 1, 4, and 6. It is derived from the 3rd and 5th recommendations at the end of Chapter 5. It is estimated that the Parish would receive 84 points under the CRS for this work. Municipal scores may be different.

ELEMENT D. PLAN REVIEW, EVALUATION, AND IMPLEMENTATION

ELEMENT D. PLAN REVIEW, EVALUATION, AND IMPLEMENTATION (applicable to plan updates only)	CRS COUNTERPART
D1. Was the plan revised to reflect changes in development? (Requirement $\S 201.6(d)(3)$)	
D2. Was the plan revised to reflect progress in local mitigation efforts? (Requirement $\S 201.6(d)(3)$)	Step 10. Implement, Evaluate, and Revise
D3. Was the plan revised to reflect changes in priorities? (Requirement $\S 201.6(d)(3)$)	

The criteria for the 5-year update are listed in CRS Step 10. The details for an update are spelled out on page 510-27 of the <u>CRS Coordinator's Manual</u>. Specific requirements for certain steps dovetail with those of sub-elements D1, D2, and D3:

- 1. Among other things, the CRS Step 4 and 5 assessments must account for "increased development in the floodplain or watershed" and "completed mitigation projects."
- 2. For CRS Step 6, "the original plan's goals must be reviewed to determine if they are still appropriate, given the revisions to CRS Steps 4 and 5."
- 3. The credit criteria for CRS Step 7 (page 510-21) note, "If the plan is an update of a previously credited plan, each action recommended by the previous plan must be discussed, along with the status of implementation."
- 4. CRS 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."

If the community wants certain CRS credits or wants certain past credits to continue, the update needs to include those items in the planning process. For example, if the community wants credit for a CRS Step 1 or Step 2 planning committee, the update needs to be prepared with the same committee or a new one that meets the credit criteria.

ELEMENT E. PLAN ADOPTION

ELEMENT E. PLAN ADOPTION	CRS COUNTERPART
E1. Does the Plan include documentation that the plan has been formally adopted by the governing body of the jurisdiction requesting approval? (Requirement $\S 201.6(c)(5)$)	Step 9. Adopt the Plan
E2. For multi-jurisdictional plans, has each jurisdiction requesting approval of the plan documented formal plan adoption? (Requirement §201.6(c)(5))	1 1

With two exceptions, the credit criteria for CRS Step 9 are the same as those for Element E. The first difference is that CRS Step 9 requires the adoption to be in the form of a resolution or other formal document that is voted on by the community's governing body (e.g., the city council or board of county commissioners). Mitigation plans are often

adopted in the form of a resolution, but can also accept other kinds of adoption documentation that are considered sufficient by local laws.

The other difference in the adoption process is the review before submitting the document to the governing board. Draft mitigation plans go to the state emergency management agency and then to the FEMA Regional Office prior to adoption for Approval-Pending-Adoption status. On the CRS side, communities are encouraged to send the draft floodplain management plans to their ISO/CRS Specialist for a technical review and preliminary scoring before the formal submission. For a plan to meet both programs' criteria, the draft should be sent through both routings.

Communities are also encouraged to send draft sections for courtesy review by ISO. For example, the plan could be reviewed after CRS Steps 5 or 6, before the review of activities in CRS Step 7.

CONCLUSION

Both hazard mitigation planning and floodplain management planning under the CRS help communities understand and act to reduce their risk to flooding. By coordinating these two planning processes using the advice outlined in this Bulletin, communities can maximize their benefits and use one process to meet the goals of both programs. This can, in turn, save time, money, and resources while maintaining a high-quality, coordinated planning process.

APPENDIX 1. REFERENCES AND RESOURCES

CRS References

- CRS Coordinator's Manual, 2017, 640 pages, found at https://crsresources.org/manual/.
- CRS Credit for Planning Committees, 2017, 2 pages, found at https://crsresources.org/500-2/.
- 510 Floodplain Management Planning Checklist, 2017, 2-page Microsoft Excel© spreadsheet or in Adobe PDF, downloadable at https://crsresources.org/500-2/.
- Florida Local Mitigation Plan Review Tool, Florida Division of Emergency Management, Microsoft Excel© spreadsheet, downloadable at http://archive.floridadisaster.org/mitigation/local/documents/Floridas%20LMS%20 Plan%20Review%20Tool.xlsx.
- Association of State Floodplain Managers Green Guide, found at: https://www.floodsciencecenter.org/products/crs-community-resilience/green-guide/.

Mitigation Planning References

- Hazard Mitigation Planning Laws, Regulations, and Policies, found at https://www.fema.gov/hazard-mitigation-planning-laws-regulations-policies.
- Local Mitigation Plan Review Guide, 2011, 50 pages, found at https://www.fema.gov/media-library/assets/documents/23194.
- Local Mitigation Plan Review Tool, 2011, 4 pages. This is Appendix C to the Local Mitigation Plan Review Guide.
- Local Mitigation Planning Handbook, 2013, 160 pages, found at https://www.fema.gov/media-library/assets/documents/31598.
- Considerations for Local Mitigation Planning Grant Subapplicants, 2017, 7 pages, found at https://www.fema.gov/media-library/assets/documents/148768.
- Integrating Hazard Mitigation Planning into Local Planning: Case Studies and Tools for Local Officials, found at https://www.fema.gov/media-library/assets/documents/31372.
- Plan Integration: Linking Local Planning Efforts, found at https://www.fema.gov/media-library/assets/ documents/108893.

Hazard Mitigation Assistance References

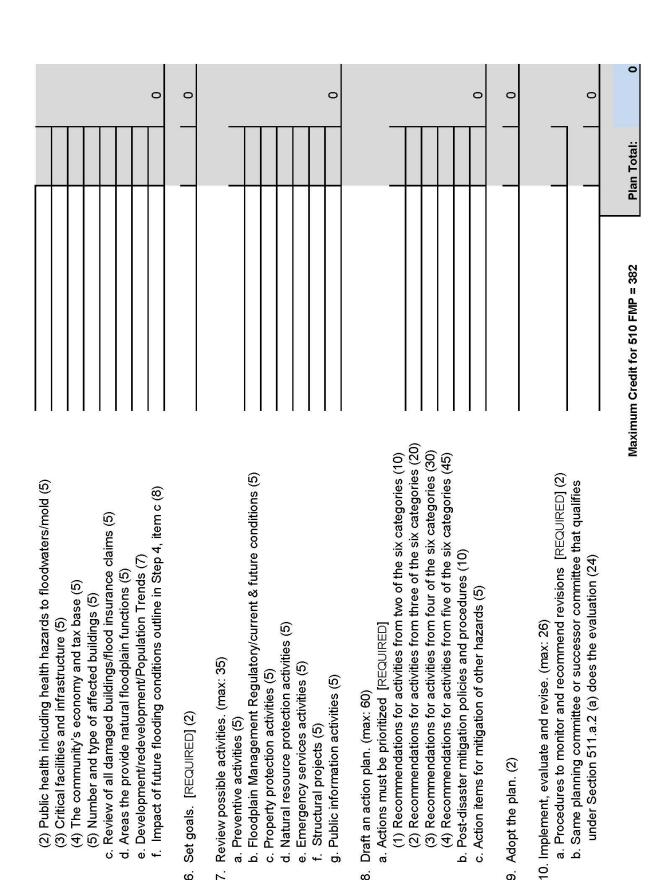
- HMA Resources: https://www.fema.gov/hazard-mitigation-assistance, such as:
 - HMA Guidance, found at https://www.fema.gov/media-library/assets/documents/103279.
 - Flood Mitigation Assistance, found at https://www.fema.gov/flood-mitigation-assistance-grant-program.
- HMA Application Development Resources, found at https://www.fema.gov/application-development-1, such as:
 - Considerations for Local Mitigation Planning Grant Subapplicants Job Aid, found at https://www.fema.gov/media-library/assets/documents/148768.
 - Planning-Related Activities Using Hazard Mitigation Grant Program 7 Percent Funding (May 2018), found at https://www.fema.gov/media-library/assets/documents/163709.

APPENDIX 2. 510 FLOODPLAIN MANAGEMENT PLANNING CHECKLIST

510 FLOODPLAIN MANAGEMENT PLANNING CHECKLIST

Community:

}			
	Enter name of plan here	n here	
511.a Floodplain Management Planning (FMP) Credit Points: Enter the section or page number of the plan where each credited item can be found.	dited item can be found.		
		Item	Step
CRS Step	Section/Page	Score	Total
Organize to prepare the plan. (max:15) a. Involvment 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)			0
 2. Involve the public. (max: 120) a. Planning process conducted through a planning committee (60) b. Public meetings held at the beginning of the planning process (15) c. Public meeting held on draft plan (15) d. Other public information activities to encourage input (Up to 30) 			0
 Coordinate with other agencies. (max: 35) Review of existing studies and plans [REQUIRED] (5) Coordinating with communities and other agencies (Up to 30) 			0
 4. Assess the hazard. (max: 35) a. Plan includes an assessment of the flood hazard [REQUIRED] with: (1) A map of known flood hazards (5) (2) A description of known flood hazard (5) (3) A discussion of past floods (5) b. Plan includes assessment of less frequent floods (10) c. Plan includes assessment of areas likely to flood (5) d. The plan describes other natural hazards [REQUIRED FOR DMA] (5) 			0
 Assess the problem. (max: 52) a. Summary of each hazard identified in the hazard assessment and their community impact [REQUIRED] (2) b. Description of the impact of the hazards on: (max: 25) (1) Life, safety, health, procedures for warning and evacuation (5) 			



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