Summary of Changes Included in the

June 2016 Draft of the 2017 *CRS Coordinator's Manual*

The changes to the June 2016 draft of the 2017 *CRS Coordinator's Manual* (Manual) were identified and developed with the assistance of the Community Rating System (CRS) Task Force committees. Included in considered changes were comments received from CRS community users groups and other interested stakeholders. Proposed changes were reviewed and approved by the CRS Task Force at the April 2016 meeting.

Section 100 (Introduction)

Section 110 (Program Overview):
This section provides background and introductory information about the CRS. Tables have been updates with available data.

Section 200 (Procedures)

Section 210 (Requesting Credit):
This section include the CRS Class prerequisites, instructions on how to apply to the CRS, application procedures, and recertification procedures.

Proposed Changes:

1. Previous Manuals included a Class 9 prerequisite for communities with repetitive loss properties and communities with 10 or more repetitive loss properties (Category C communities) must also prepare a plan for addressing its repetitive loss problem (Section 211.a).. Section 501 of the draft Manual changes Category C communities to 50 or more repetitive loss properties and the draft 2017 Manual Class 9 prerequisite states that "A community with 50 or more repetitive loss properties (a "Category C" community) must also prepare a repetitive loss area analysis or floodplain management plan that addresses its repetitive flood problem."

2. Class 4 prerequisite for 100 points for FRB to be discussed at September Task Force meeting. [See memorandum to the Task Force .]

   Proposed language: The community must adopt and enforce at least a 1-foot freeboard (including equipment and mechanical items) for all buildings constructed, substantially improved and/or reconstructed due to substantial damage, and buildings allowed to be floodproofed, throughout its SFHA, except those areas that receive OSP credit under Activity 420 (Open Space Preservation) and those areas that receive DL2 credit or receive full credit for DL2 under Activity 430 (Higher Regulatory Standards) for prohibiting all buildings. In unnumbered A and V zones, the community must first determine a base flood elevation consistent with the techniques credited in Activity 410 (Floodplain Mapping).

~~2.~~3. The Class 4 prerequisite for Activity 450 (Stormwater Management) watershed management plan (WMP) credit requires communities to examine future conditions (Section 211.c.). WMP requirements in previous Manuals are suited for riverine watersheds and difficult to apply to coastal municipalities with only coastal flooding issues. The Class 4 prerequisite is not changed, however the description and requirements of WMP credit in Activity 450 have been changed to address watershed management for coastal communities. Coastal communities may evaluate "future conditions, including the impacts of a median projected sea level rise for the year 2100, on the local drainage system during multiple rainfall events, including the 100-year rainfall event" to meet the Class 4 prerequisite.

~~3.~~4. Section 212 (Application Procedures) is not being changed, however the referenced "CRS Quick Check" is being improved to avoid communities having false expectations of their CRS class. The CRS Quick Check is also being simplified.

~~4.~~5. Section 212 requires a CC-230 Verification form at the time of application or at a community cycle visit, and a CC-213 Recertification form at each annual recertification. Both forms include a community acknowledgment of the Class 9 prerequisite for flood insurance policies on community-owned buildings in the SFHA. The 2017 Manual will include acknowledgements of the Class 9 prerequisite for repetitive loss properties (paragraph number 1, above) and the Class 9 prerequisite for NFIP compliance.

> "I hereby certify that, to the best of my knowledge and belief, we are in full compliance with the minimum requirements of the National Flood Insurance Program (NFIP) and we understand that we must remain in full compliance with the minimum requirements of the NFIP. We understand that if at any time we are found to not be in full compliance, we will be retrograded to a CRS Class 10."

Section 220 (Credit Calculation): This section explains how credit is determined for elements and activities in the CRS, how impact adjustments are applied, growth rates, and the CRS class determination. No changes are proposed.

Section 230 (Verification): This section describes the CRS verification process. Section 231 describes the documentation provided by the community, including certification, checklists, maps, ordinances, etc. The section also describes Uniform Minimum Credit, or "UMCs." [The CRS Project Team will provide background on UMCs during the Task Force discussion.]

Proposed Changes:

1. Remove the term Uniform Minimum Credit (UMC) from the CRS Coordinator's Manual and use the new term, "State-based Credit."

> ### 231.d. ~~Uniform Minimum Credit~~ State-based Credit
> A community may receive credit for an activity that is implemented by a state ~~or regional~~ agency. For example, ~~a regional water or flood control district may inspect and maintain certain drainageways in a community or set minimum regulatory standards that all communities in the district must follow~~ a state law may require the disclosure of a flood hazard for real estate.
>
> "~~Uniform minimum credit~~" "State-based credit" can be provided to the affected communities. ~~"Uniform" means that all communities in the affected area receive the same credit. "Minimum"~~ State-based credit is a minimum credit and ~~means that~~ if a community does additional work or

has a higher regulatory standard in all or part of the affected area, the community can document that it deserves higher credit.

A summary of ~~uniform minimum credits~~ state-based credit is published for each state and can be found at www.CRSresources.org/200. The publication may include credits that are automatic for all communities (such as a state-enforced statute on real estate disclosure) or credits that need additional materials to document that the activity is being implemented in the community (such as a state required freeboard—the ISO/CRS Specialist would still need copies of Elevation Certificates to verify that it is being enforced locally).

In some cases, the ISO/CRS Specialist can work with the state ~~or regional~~ agency to collect the needed documentation. In others, it is expected that the community will obtain the additional documentation that may be needed. ~~For example, if a regional agency inspects and maintains some of the community's drainageways, the community would need to provide the ISO/CRS Specialist with the same types of inspection and maintenance records needed to document the community's program. These situations are described in the state summary of uniform minimum credits.~~

2. Include the Program Data Table in CC-230 Verification form.

300 Series (Public Information)

The 300 Series credits local activities that advise people about the flood hazard, flood insurance, and flood protection measures. The activities can be directed toward floodplain residents, property owners, insurance agents, real estate agents, or other segments of the local populace. With the 2013 CRS Coordinator's Manual (Manual), credit for the community development of a Program for Public Information (PPI) was added to Activity 330 (Outreach Projects) and Activity 370 (Flood Insurance Promotion) was added as the 19th CRS Activity.

Activity 310 (Elevation Certificates):
Elevation certificate (EC) in Activity 310 is mandatory for CRS classification. A community can receive 0 to 38 points for EC, as long 90% of all ECs for new and substantial improvements in the SFHA are corrected and/or completed before the verification cycle is closed. There is also credit for ECs collected for pre- and post-FIRM structures.

Proposed Change: Corrections and clarifications to examples and documentation requirements. No policy changes. No changes are required to the EC review checklist from the 2012 to the 2015 form.

Activity 320 (Map Information Service):
This activity provides credit for map inquiry or map reading services provided by the community. Communities are required to keep a log of inquiries and to provide annual publicity of the service offered.

Proposed Changes:

1. Delete the requirement that the map information service publicity include that the community also has elevation certificates available. This is a somewhat redundant requirement. Activity 310 requires that elevation certificates are made available to the public, and credit is provided in Activity 350 (Flood Protection Information) for making elevation certificates available through community websites.

2. Reword the Activity Credit Criteria stating that "Information must be volunteered when there is an inquiry" to "All available information must be provided to the inquirer for each element (MI1-MI7) for which the community is requesting credit."

3. Other corrections and clarifications.

Activity 330 (Outreach Projects):
This activity includes credit for outreach projects (OP), flood response outreach projects (FRP), program for public information (PPI) and stakeholder delivery of projects bonus credit (STK).

Proposed Changes:

1. Better examples for CRS messages in Table 330-1:

Table 330-1. CRS topics and example messages.

Six Priority Topics	Example Messages
1. Know your flood hazard	Your property is subject to flooding by the Roaring River You are in a repetitively flooded area ~~Drive safely: five people died in the 2002 flood~~Call 555-1234 to find out the flood hazard for your property
2. Insure your property for your flood hazard ***NOTE:*** *At least one project must include a message on this topic*	~~You need flood insurance~~Ask your insurance agent if you are covered for flood damage Renters should buy flood insurance for their contents Take advantage of a low-cost Preferred Risk Policy
3. Protect people from the hazard	Turn around, don't drown Know the flood warning signals: one long blast of the siren means a flash flood along Silver Creek Designate a place where your family can rendezvous after an evacuation order is issued
4. Protect your property from the hazard	Replace your flooded furnace with one elevated above the flood level ~~Keep debris and trash out of the streams and ditches~~ Store your valuables and insurance papers upstairs in a waterproof container We can help you get a grant to elevate your home. Call us at _____
5. Build responsibly	Get a permit from . . . before you build ~~Know the substantial damage rules (and the ICC benefits). You can see them at www.….~~ ~~All projects should be at least~~ Don't build or grade within 10 feet of the property line so you don't alter the drainage between homes Use only licensed contractors who know the rules
6. Protect natural floodplain functions	~~No pollutants down the storm drains; they drain to the bay~~ Protect our turtle nesting areas: stay off the beach after sunset Report broken silt fences: they help keep our streams clean Don't trash the river – that's where we get our drinking water.
~~**Examples of additional topics (developed by a community that has a Program for Public Information)**~~	~~**Example Messages**~~
~~7. Hurricane preparedness *~~	~~Know your evacuation route~~
~~8. General preparedness *~~	~~Inventory and photograph your home's contents and put important papers and insurance policies in a safe place~~

~~9. Basement flooding *~~	~~Check your downspout—drain away from the house~~
~~10. Flood education *~~	~~Teach school children about flooding~~

Note: all the messages are examples. Communities should develop messages that are pertinent to their flooding conditions.

* ~~*Example topics 7 and 8 could also be listed under CRS topic 3—Protect people from the hazard. By listing them as separate topics in its PPI, the community can receive credit for covering three different topics in each project. Similarly, example topic 9 could be covered under CRS topic 4. All four additional topics (7 through 10) need to be explained in the Program for Public Information.*~~

2. The deleted bottom section of Table 330-1 (above), allows a community that develops and adopts a PPI to get credit for four additional messages of their choosing. They will no longer have to formulate messages pertaining to the deleted Topics 7 to 10 in Table 330-1. This opens up opportunities for communities to select messages that are most appropriate to their community.

3. Add the special flood-related hazards as a fifth target audience for OP and FRP, and add the people flooded as a sixth target audience for FRP.

4. Specify the number of outreach projects topics credited (OP) and PPI messages credited, and a cap of 5 for the number of times a project is "delivered" each year.

Credit Points for OP

OP = ∑ OP#1 + OP#2 + OP#3 . . . , to the maximum of 200 points

The value for each outreach project (OP#1, OP#2, etc.) is the product of (A) x (B) x (C), where

A = the number of points per topic, which is based on the type of project—informational material (1 point), general outreach (2 points), or targeted outreach (6 points),

B = the number of message topics (see the six topics in Table 330-1) and up to 4 additional PPI messages covered by the project, and

C = the number of times the project is delivered each year. Maximum value for C is 5.

5. Clarifications to the PPI adoption requirement to allow for regional organization development and adoption of PPIs, which include the CRS community requesting PPI credit.

Page 330-~~14~~15: The PPI must be adopted by the community, through either

Formal ~~approval~~ vote by the community's governing body, or

Formal ~~approval~~ vote by another governing body ~~or office of the community~~ that has the authority and funding to implement the plan, such as a flood control district.

6. Expand the language on the annual review and adjustment of the PPI and the required 5-year update of the PPI (also see Activity 370 for five year update procedures). Same 5-year update requirements used for PPI, Activity 370 and floodplain management plans (FMP) in Activity 510 (Floodplain Management Planning).

7. A new Example will be added to the final 2017 Manual describing the credit for high water mark signs.

Activity 340 (Hazard Disclosure):
This activity provides credit for disclosure of a property's potential flood hazard to prospective buyers before the lender notifies them of the need for flood insurance.

Proposed Change: Clarifications to the extra PPI credits for disclosure of the flood hazard (DFH) and real estate agents' brochure (REB).

Activity 350 (Flood Protection Information):
This activity provides credit for the community providing more detail on topics and messages presented in Activity 330 (Outreach Projects), such as FEMA publications being available in public libraries (LIB), locally pertinent documents also being in the library (LPD), and information on community websites (WEB).

Proposed Changes:

1. Delete WEB2 credit for providing information on warning, safety, and evacuation since already credited in WEB1, so the credit isn't duplicated. This results in some small credit changes for WEB:

2013 WEB Element	Description	2013 credit (up to)	2017 WEB Element	2017 credit (up to)
WEB1	More information on messages in community's outreach projects (330)	36	WEB1	47
~~WEB2~~	~~Warning, safety and evacuation~~	~~10~~		
WEB3	Real-time gage data	10	WEB2	10
WEB4	Posting of EC on website	20	WEB3	20
	Total:	**76**	**Total:**	**77**
Additional credit if PPI in place.				

2. Delete the WEB credit criterion that if the website discusses a topic and the community provides a service related to that topic, then the website must inform the readers about the service the community offers. The requirement for publicity for the services that a community offers should only be included with the creditable activity.

3. PPI-related updates to the bonus credit available with WEB1 (28 additional points)and WEB2 (5 additional points) credit.

4. Updates to the LIB publication list.

Activity 360 (Flood Protection Assistance):
This activity offers credit for the one-on-one help that communities provide to people who are interested in protecting their property from flooding.

Proposed Change: Clarifications to the extra PPI credits.

Activity 370 (Flood Insurance Promotion):
Activity 370 includes the credit for the development of a flood insurance assessment (FIA), credit for the development of a coverage improvement plan (CP), and credit for the coverage improvement plan implementation (CPI):

1. New criteria for a five-year update to the flood insurance assessment (FIA) and the coverage improvement plan (CP). Both have the same procedures as for a PPI, with the addition of getting updated insurance policy data. Step 5 of the FIA is shown below:

> (5) **Reassess.** Updated flood insurance data must be obtained five years after the assessment was done. ~~Flood insurance coverage is re-assessed for every verification cycle visit. This means that the flood insurance information used in the assessment is updated with data from the year of the cycle visit.~~ The new information is used to

update the level of coverage and the recommendations. The document is revised accordingly and submitted to the community's governing body…

An updated FIA can be a new document or an addendum to the existing document. The FIA update will be reviewed for CRS credit according to the *Coordinator's Manual* currently in effect, not the version used when the community originally requested this credit. The updated FIA must be developed, reviewed and submitted to the governing body following the same process as approval of the original document.

2. The requirement for having a lender on the committee that prepares a flood insurance coverage improvement plan is dropped. A local insurance agent is still required for the committee.

3. Clarifications to a number of items in a coverage improvement plan (CP), including adoption of the CP (same as for PPI adoption) and annual evaluations.

4. Clarification to other steps and of the Activity's credit examples.

400 Series (Mapping and Regulations)

Section 401 (Special Flood-related Hazard Areas)
Section 401 describes the inland and coastal special flood-related hazards credited in the CRS. Special flood-related credit elements are currently included within three Special Flood-related Hazards Supplements to the *CRS Coordinator's Manual*:

- Inland Hazards
- Coastal Erosion Hazards
- Tsunami Hazards

Proposed Change: The three Supplements will be retired in 2017 and all credit criteria, credit points, impact adjustment, calculations, and documentation requirements are included in Activity 410 (Floodplain Mapping), Activity 420 (Open Space Preservation) and Activity 430 (Higher Regulatory Standards) in the draft 2017 *CRS Coordinator's Manual*.

Section 403 (Impact Adjustment Map)
Section 403 tells communities how to develop their impact adjustment map. "An "impact adjustment map" is needed to document and calculate the numerators and denominators in the community's impact adjustment ratios for certain CRS activities. All appropriate areas for numerators and denominators for impact adjustment ratios must be included with the impact adjustment map.

Proposed Change:

1. In the current Manual (and previous Manuals) communities have had the option to include and exclude certain areas from their impact adjustment map. For national consistency, the draft 2017 Manual is more specific on what is included in the impact adjustment calculations.

403.b. Mapping aSFHA

The impact adjustment map must show the SFHA. If the FIRM or other floodplain map is not used as the base map, the boundaries of the SFHA must be drawn on the map with sufficient accuracy that the area calculations can be verified.

In general, it is to the community's advantage to have a smaller denominator, or aSFHA, for the impact adjustment calculation (the impact adjustment ratio will be bigger if the denominator is smaller). Although the area of a community's SFHA is a specific area (i.e., acres or square miles), some areas ~~may be~~ are not included in ~~excluded from the~~ aSFHA ~~calculation~~.

Three types of areas in the SFHA shown on the FIRM need to been reviewed and adjustments need to be made to the area of the SFHA to calculate aSFHA. ~~may excluded from the mapped and regulated areas, even if they are within the SFHA shown on the FIRM.~~

1. Open waters larger than 10 acres, such as lakes, bays, and large rivers must be subtracted from the area of the SFHA ~~may be excluded~~. To determine the extent of large water bodies, the shoreline shown on the FIRM may be used. For large rivers, reaches where the average bank-to-bank width shown on the FIRM exceeds 500 feet ~~may~~ must be excluded.

2. Lands larger than 10 acres that are either owned by the federal government (e.g., military installations or national parks) or where development is prohibited by the federal government, must be subtracted from the area of the SFHA ~~may be excluded~~. Federal land leased to private property owners with the stipulation that the lessees obtain all required local permits are not excluded.

3. At the community's option, areas beyond the community's regulatory jurisdiction may be excluded. The community may include or exclude non-federal areas it does not have the authority to regulate, including land owned by the state or another community, and Tribal lands. These lands must be treated consistently. If they are included in the SFHA for open space credit, they must be included in the SFHA for all activities. If they are open space, the community usually will receive more credit if they are included.

2. Clarifies throughout the 400 Series ~~is~~ that the maximum impact adjustment for Activity 420 and Activity 430 combined cannot exceed 1.5.

Activity 410 (Floodplain Mapping):
This activity provides credit for developing regulatory maps and flood data for flood hazard management purposes in areas where FEMA did not provide such data, or for mapping to a higher standard than required by FEMA, as well as credit for regulating areas based on flood data not provided with the community's FIRM or for a flood study conducted to a higher standard than FEMA's Flood Insurance Study criteria. Credit is also provided if the community shared in the cost of a Flood Insurance Study.

Proposed Changes:

1. Credit for Cooperating Technical Partners (CTP) is retired. This change is to provide fairness between all CRS communities and to avoid CRS credit for efforts and maps provided through FEMA funds. Credit for CTP1 and CTP2 will be shifted within Activity 410. The current Manual states that CTP credit is not available for community mapping efforts prior to the creation of CTPs in 1999, which affects communities that took initiatives to develop better maps prior to 1999. Additionally, some FEMA Regions are no longer entering into new CTPs and therefore CTP credit not available to all CRS communities.

   FEMA ~~regions~~ Regions have only been signing CTP agreements when the community receives money from FEMA for a project. Communities not receiving money from FEMA, but doing mapping are, therefore, penalized when the FEMA Region will not sign a CTP agreement with them.

413 communities receive 10 points for CTP1. Many of these communities receive credit due to State CTP agreements (FEMA funding being provided to states). Ten communities receive 20 points for CTP1. Of the 423 communities getting CTP1 credit, 89 receive the CTP2 18% bonus credit when new studies are the product of a CTP agreement. The CTP credit is being moved to New Study (NS) credit, credit for higher floodway standards (FWS), and credit for mapping coastal erosion and tsunamis (MARSH). Many communities will not lose credit overall Activity 410 credit, and a number of communities (who could not get CTP credit) will gain credit.

2. Credit for mapping of all riverine special flood-related hazards in Activity 410 (50 points) is retired and transferred to Activity 420 and Activity 430. This simplifies credit documentation and review while maintaining the potential credit for special flood-related hazards. Currently, Activity 410 credit for riverine special flood-related hazards is not provided unless the community uses the map. This means the riverine special flood-related hazards areas must receive Activity 420 (Open Space) credit or be regulated and receive Activity 430 (Higher Regulatory Standards) credit. No communities will lose credit since credit will be shifted or transferred from Activity 410 to Activities 420 and 430.

3. Credit for mapping of coastal special flood-related hazards will remain in Activity 410, and maximum available credit is increased from 50 points to 100 points. The maximum credit for mapping coastal erosion (MCE) is up to 50 points and credit for mapping tsunami-prone areas (MTS) is up to 50 points. Currently, coastal erosion (MCE) and tsunami mapping (MTS) can receive 50 points total.

4. To reflect item 1 (above), the maximum credit for new studies (NS) is increased from a maximum of 290 to 350 points.

NS = as shown in the following table, based on the study scope and the original FIRM zone, not to exceed the maximum of 350 points for this element

Study Scope	Original FIRM Zone		
	B, C, D, or X	A or V	AE, VE, A#
1. Delineation or redelineation of an approximate A or V Zone	70	60	–
2. a. Flood elevations for a site at time of development	~~100~~ 120	~~80~~ 95	~~45~~ 60
b. Flood elevations and floodway for a site at time of development	~~130~~ 160	~~105~~ 125	~~65~~ 80
3. New profile or length of shoreline, base flood elevations/depths in AH and AO Zones.	~~225~~ 260	~~175~~ 205	~~110~~ 130
4. New profile with floodway, length of shoreline with coastal velocity zone delineation, or converting coastal A Zones to V Zones	~~290~~ 350	~~240~~ 270	~~140~~ 175

5. To reflect item 2 (above), the maximum credit for FWS is increased from 110 to 140 points.

FWS = ~~110~~ 140, if the floodway delineation was based on less than 0.11 feet of rise in the base flood elevation, OR

FWS = ~~90~~ 105, if the allowable rise was from 0.11 to 0.25 feet, OR

FWS = ~~50~~ 60, if the allowable rise was from 0.26 to 0.5 feet, OR

FWS = ~~25~~ 30, if the allowable rise was from 0.51 to 0.99 feet

6. Credit changes to higher study standards (HSS):

   a. Better topography is no longer credited as HSS credit. This is due to the current prevalence of LiDAR, and the difficulty in determining if topography used in past studies exceeded FEMA standards, at the time.

   b. Mapping of the 500-year flood zone is no longer credited as HSS credit since FEMA now provides 500-year profiles. Note that credit for 500-year mapping is very rarely credited.

   In place of the above credit, credit is added to HSS for future conditions hydrology (climate related changes both riverine and coastal), and for mapping the area below the elevation created by adding the community's freeboard to the base flood elevation. These additions emphasize the need to include climate change when permitting structures designed to last decades, and to encourage communities to map and regulate areas outside of their SFHA.

HSS = as shown in the following table, based on the study scope and the original FIRM zone. Credit is cumulative for each applicable higher study standard (credit criterion (2)), not to exceed the maximum of 200 points for this element

Study scope	Original FIRM Zone			Max per Study
	B, C, D, or X	A or V	AE, VE, A#, V#	
1. Delineation of an approximate A Zone	~~20~~ 25	15	–	~~60~~ 75
2. Flood elevations for a site at time of development	~~30~~ 40	~~20~~ 25	~~15~~ 20	~~90~~ 110
3. New profile or length of shoreline	~~80~~ 100	~~60~~ 75	~~40~~ 50	~~160~~ 200

7. The above proposals result in the total points for Activity 410 being changed from 802 to 850 points.

Activity 420 (Open Space Preservation):
Credit is given for areas in a regulated floodplain that are permanently preserved as open space. Additional credit is given for parcels of open space that are protected by deed restrictions, that have been preserved in or restored to their natural state or are subject to special flood-related hazards including coastal erosion. Credit is also given for measures that require or encourage less development in floodplains.

Proposed Changes:

1. Clarification of required documentation of Activity 420 credit.

Documentation for OSP Provided by the Community

(1) At each verification visit,

(a) A map (or set of maps) and a list of parcels that notes which parcels qualify for OSP, DR, NFOS, SHOS or CEOS credit. The map(s) and list must correspond to each other. Each parcel or group of parcels must be labeled on the map. The list must at least include; parcel owner, land use designation, acreage of parcel, acreage of the parcel within the SFHA. If a community regulates outside of the SFHA, the acreage of the parcel in the regulatory floodplain and the flood zone of the parcel must also be included. This means parcels located in the X zone should not be included unless your regulatory floodplain is greater than your SFHA. An Excel spreadsheet list is preferred. ~~A description of the parcels preserved as open space. This must consist of both a map and a list that notes which parcels also qualify for DR, NFOS, or SHOS credit.~~

2. Credit for NFOS5, for providing educational materials on the natural functions present at an open space site, is retired. The 20 points that were possible for NFOS5 are added to NFOS1 (naturally functioning open space) which increases the maximum credit for NFOS1 from 170 points to 190 points. Under the current Manual, communities were receiving 1-3 credit points for NFOS5 due to the complexity of the element and current the impact adjustment. Also, educational materials currently credited in NFOS5 are already credited in Activity 330 (Outreach Projects) as part of the community's outreach program.

3. Increase in the maximum credit for special hazards open space (SHOS) from 50 points to 150 points. This change is due to credits being transferred from Activity 410 for the mapping of riverine special flood-related hazards, and to allow SHOS credit to be greater than the potential credit under Activity 430 for special flood-related hazards regulations.

4. The credit criteria for open space incentives (OSI) credit emphasizes that for full OSI credit community regulations must apply to both new development and re-development.

5. Maximum credit is shown as 2,020 points in the 2013 Manual. These include 1,450 for OSP, 50 for DR, 350 for NFOS, 120 for NSP, and 50 for SHOS. Maximum credit in the draft 2017 Manual is shown as 2,870, which includes 100 additional points added to SHOS and up to 750 points available for CEOS.

Activity 430 (Higher Regulatory Standards):

This activity provides credit for the adoption and enforcement of regulations to protect existing and future development and natural floodplain functions that exceed the minimum criteria of the National Flood Insurance Program (NFIP). There are 15 elements in Activity 430 and the maximum credit is 2,042 points. Credit for FRB, FDN, ENL, and CAZ are not counted toward this total because those elements and DL credit are mutually exclusive.

Proposed Changes:

1. Clarification that the maximum impact adjustment for Activity 430 combined cannot exceed 1.5.

2. Development limitations credit for prohibiting buildings in the regulatory floodplain (DL2) is limited to 100 points if a community allows CLOMRs or LOMRs. Full credit of 1,000 points is only credited when LOMR-Fs are prohibited and/or not recognized by a community. Not allowing CLOMRs or LOMRs is an existing credit criteria for development limitations prohibiting fill in the regulatory floodplain (DL1).

3. Modify the credit criteria and scoring for coastal A Zone regulations (CAZ) to restrict the basic credit to what is now commonly called the Coastal A Zone by FEMA, and to include extra credit could be earned for regulating similar areas outside of the mapped LIMWA.

4. Credit for enclosure limits within coastal A Zones (CAZ2) and been retired and incorporated into credit for enclosure limits (ENL). The maximum credit for ENL was 240 points and is changed to 390 points.

5. Maximum credit for Activity 430 is shown as 2,042 points in the 2013 Manual. Maximum credit in the draft 2017 Manual is shown as 2,462, which includes the credit for relating coastal A Zones (ENL and CAZ) that ~~in~~ is currently in the Coastal Erosion Hazards Supplement to the *CRS Coordinator's Manual*.

Activity 440 (Flood Data Maintenance):
This activity provides credit when community floodplain data is more accessible, current, useful, and/or accurate so that the information contributes to the improvement of local regulations, insurance rating, planning, disclosure, and property appraisals. No changes made.

Activity 450 (Stormwater Management):
Activity 450 provides credit to communities that regulate *development* from increasing flood hazards to existing development, protect existing hydrologic functions and maintain and improve water quality through good stormwater management practices. Credit in Activity 450 is a Class 4 prerequisite (Section 211.c.(3)).

Activity 450 ~~has~~ currently has a maximum of ~~745~~ 755 points and credits stormwater management regulations (SMR) (380 points), watershed master plans (WMP) (315 points), erosion and sediment control regulations (ESC) (40 points) and water quality regulations (WQ) (20 points). With the 2013 Manual, credit under SMR for the requirement of low impact design techniques (LID), used to the maximum extent possible, was added (25 points). Note that SMR credit is a credit criteria for receiving WMP credit.

Proposed Changes:

1. Clarification that stormwater management regulations (SMR) credit is for requirements to manage runoff on the site of new development or *redevelopment sites*.

2. Coastal communities without a significant channel system may alternately assess the impacts of sea level rise on their drainage system for WMP credit. The WMP credit criteria is changed to:

   (1) The community must have adopted a watershed master plan that

   (a) Evaluates the impact of future conditions for at least one watershed that drains into the community for multiple storm events, including the 100-year storm. The plan must identify the natural drainage system and constructed channels; or

   (b) Evaluates the future conditions, including the impacts of a median projected sea level rise for the year 2100, on the local drainage system during multiple rainfall events, including the 100-year rainfall event. This option is for coastal communities with no natural or constructed channels.

   This change provides an alternative for coastal communities for meeting the Class 4 Activity 450 prerequisite.

3. Currently, any watershed management plan submitted for WMP credit must include a discussion of and recommendation for onsite stormwater standards to be used by the community (i.e., establish SMR standards). This requirement has been removed, however, for a watershed management plan

to receive WMP credit the community must obtain SMR credit for at least the 2-year and the 10 year event and either the 25-year event or a larger event (credit criteria).

(2) The community must have adopted regulatory standards ~~that are based on the plan~~ that require onsite management of runoff from all storms up to and including the 25-year event that receive credit under SMR in Section 452.a.

500 Series (Flood Damage Reduction Activities)

CRS and Repetitive Loss Properties – Brief Background

It is a Class 9 prerequisite of the CRS that communities examine their repetitive loss problems. The prerequisite was created in 1990 based on the goals of the CRS. Communities with repetitive loss properties are required to identify, describe and map *repetitive loss areas*. Since 1990, communities with 10 or more repetitive loss properties (Category C repetitive loss communities) are also required to assess their repetitive loss areas within a floodplain management plan (FMP). In 2006, credit for a repetitive loss area analysis (RLAA) was developed in Activity 510 and was offered as an alternative to the development of a floodplain management plan to meet the Category C requirements.

The number of Category C communities has grown substantially under the current definition of 10 or more repetitive loss properties for two reasons. First, the CRS definition of repetitive loss that includes "properties for which two or more claims of more than $1,000 have been paid by the NFIP within any 10-year period since 1978" (e.g., two claims during the periods 1978–1987, 1979–1988, etc.) yields a growing repetitive loss list each year, and more Category C communities. Second, as new communities join in the CRS, the list of Category C communities expands.

FEMA-approved hazard mitigation assistance (HMA) plans are frequently submitted by communities for Activity 510 (Floodplain Management Planning) credit and to meet the Category C community requirements. Some HMA plans receive very good CRS credit and other plans are limited to 50 points because they miss one of the ten CRS planning steps. HMA plans are required to "describe vulnerability in terms of the types and numbers of repetitive loss properties located in the identified hazard areas," but for a number of Category C communities (often participating in multi-jurisdictional plans) the HMA plans fall short of the CRS requirement to examine *repetitive loss areas* and to develop mitigation action items to address their repetitive loss problems. Additional work is required by the community and by ISO to ensure that the Class 9 prerequisite is met.

Considering the growth of the CRS program, along with the goals of the CRS, the CRS Strategic Plan (2008) and the recommendations of the Repetitive Loss Committee of the CRS Task Force, it is proposed that the definition of a Category C repetitive loss community be changed and that Activity 510 requirements for Category C repetitive loss communities be made more explicit in the CRS Coordinator's Manual (Manual).

Section 502 (Repetitive Loss Category):
Section 502 (Repetitive Loss Category) describes community requirements for addressing repetitive loss properties. Addressing repetitive loss properties is a CRS Class 9 prerequisite (Section 211.a.(4)). Section 502.a. explains to communities which repetitive loss category they are in and the CRS requirements associated with that category. A community's category can change from cycle visit to cycle visit.

Proposed Changes:

1. The table below shows the repetitive loss (RL) categories for the CRS in the current Manual (and since the program began) and the proposed changes in the draft 2017 Manual.

CRS Repetitive Loss Category	No. of RL Properties 2013 Manual (Current)	No. of RL Properties 2017 Manual (Proposed)
Category A	0	0
Category B	1-9	1-49
Category C	10 or More	50 or More

Section 502.a. is changed to read:

502.a. The Categories

For CRS purposes, there are three categories of repetitive loss communities based on the number of properties on the community's UPDATED repetitive loss list (i.e., <u>after AW-501s have been completed (see Section 501))</u>~~the changes and updates have been reported and accepted by FEMA)~~:

(1) Category A: A community that has no repetitive loss properties, or whose repetitive loss properties all have been mitigated. A Category A community has no special requirements except to submit information to update its repetitive loss list, as needed.

(2) Category B: <u>A community with at least one, but fewer than</u> ~~10~~ <u>50</u>, repetitive loss properties that have not been mitigated. At each verification visit, a Category B community must

(a) Prepare a map of the repetitive loss area(s) (see Section 503),

(b) Review and describe its repetitive loss problem,

(c) Prepare a list of the addresses of all properties with insurable buildings in those areas, and

(d) Undertake an annual outreach project to those addresses (see Section 504). A copy of the outreach project is submitted with each year's recertification.

(3) Category C: <u>A community with</u> ~~10~~ <u>50 or more</u> repetitive loss properties that have not been mitigated. A Category C community must

(a) Do the same things as a Category B community, AND

(b) <u>Prepare and adopt a repetitive loss area analysis for all repetitive loss areas, or prepare and adopt a floodplain management plan that includes full credit for planning step 5(c).</u> Repetitive loss area analyses and floodplain management plans are described in Activity 510 (Floodplain Management Planning).

Activity 510 (Floodplain Management Planning):
This activity provides credit for community development and adoption of overall strategies of programs, projects, and measures that will reduce the adverse impact of the hazard on the community and help meet other community needs. These include:

- Floodplain management plans (FMP)
- Repetitive loss area analyses (RLAA)
- Natural floodplain functions plans (NFP)

Proposed Changes

1. In Section 511 the Class 9 prerequisite commentary/guidance on page 510-3 is revised to read:

   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.

   Note: The Class 9 prerequisite in Section 211.a. is revised and is the same as the above paragraph.

2. Planning Step 5 (Assess the Problem) in Section 512.a. for FMP credit is revised to include the following in the step description:

   - 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 no other step is missed.
   - A Category C repetitive loss community that does not receive full credit for item (c), must prepare a repetitive loss area analysis (RLAA), credited in Section 512.c. for all repetitive loss areas (see Section 502.a.).

   And the following in the credit description:

   (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, ~~(in addition to the repetitive loss properties)~~ 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 ~~defines~~ 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.

   Note: A number of the FMP planning steps have REQUIRED plan elements for all plans that are submitted for credit. All repetitive loss communities (Category B and C communities) are required to include their repetitive loss area(s) map and a description of the repetitive loss area(s).

Activity 520 (Acquisition and Relocation):
This activity provides credit to communities that acquire, relocate, or otherwise clear existing buildings out of the flood hazard area. The maximum credit for Activity 520 is 2,250 points. A community can obtain credit with one or a combination of the five elements, provided that the total credit does not exceed 1,900 points. There are two impact adjustment options. Option 1 allows for 10% of the credit, or 190 points, as is calculated using

a. Buildings acquired in the regulatory floodplain = 3 points
b. Buildings on the repetitive loss list = 6 points
c. Buildings acquired that are Severe Repetitive Loss properties = 9 points
d. Critical facilities = 6 points
e. Buildings located in the V Zone or coastal A Zone = 4.5 points

Impact adjustment Option 2 is essentially for communities that have acquired more than 10% of the buildings within the SFHA and if more that 30% have been acquired, then up to 350 additional points are provided. No changes are proposed in Activity 520.

Activity 530 (Flood Protection):
This activity provides credit for property owner actions or community projects to protect buildings from flood damage by

- Retrofitting the buildings so that they suffer no or minimal damage when flooded, and/or
- Constructing small flood control projects that reduce the risk of flood waters' reaching the buildings.

There is a maximum of 1,600 points available. There are two impact adjustment options. Option 1 allows for 10% of the maximum credit, 160 points, using a simple equation of the number of protected buildings multiplied by 2.4 points. Option 2 incorporated a calculations for "protected buildings," and for each building or group of buildings, based on the flood protection technique used (TU) and the flood protection improvement level (FPI). The table below shows the values of TU_

Table 530-1. Flood protection techniques used.		
Acronym (TU_)	**Technique Used**	**Range**
TUE	Elevation	1.0
TUD	Dry floodproofing	0.2 – 0.6
TUW	Wet floodproofing	0.2 – 0.5
TUS	Sewer backup	0.1 – 0.2
TUB	Barrier, levee, or floodwall	0.4 – 0.8
TUC	Channel modification, storm sewer improvements, diversions	0.7 – 0.8
TUF	Storage facilities	0.8

The flood protection improvement level is the flood protection level post-project (FPP) minus the flood protection before the project (FPB) using the values in Table 530-2 from the Manual. For example, a neighborhood of homes flooded at about the 20-year level before the flood control reservoir was constructed and are not protected to the 100-year level, so FPI = 0.9 – 0.3 = 0.6.

Table 530-2. Values for FPP and FPB	
Flood Protection Level	**FPP or FPB**
Less than the 10-year flood	0.0
10-year flood, but less than the 25-year flood	0.3
25-year flood, but less than the 50-year flood	0.5
50-year flood, but less than the 100-year flood	0.7
100-year flood	0.8
100-year flood plus one foot of freeboard	0.9
100-year flood plus two or more feet of freeboard	1.0
500-year flood	1.0

Proposed Changes:

1. The technique used (TU_) is included in impact adjustment Option 1. This change provides the most credit to elevation projects and the less credit to sewer backup projects. This change in Option 1 reflects the weight given to flood protection techniques, and also assumes that elevation project provide the highest level of flood protection.

533 Credit Calculation

There are two options for calculating the total credit for this activity. Option 1 is simplest but is limited to 160 points. It produces more credit in communities that have protected a small percentage of the buildings in their SFHAs. As long as a project meets the credit criteria, and the lowest-floor elevations of buildings protected before the project (flood protection level before the project (FPB)) were below the community's current effective base flood elevation, then Option 1 can be used.

Option 2 allows for higher credit in communities that have protected a large percentage of the buildings in their SFHAs. Option 2 must be used for projects in which the lowest-floor elevations of buildings protected before the project (flood protection level before the project (FPB)) were at or above the community's current effective base flood elevation.

A checklist is available at www.CRSresources.org/500 that can help when there are multipliers that increase the credit for certain buildings and with the impact adjustment calculations.

A community may use whichever option provides the larger credit, provided that the flood protection level before the project (FPB) is below the community's current effective base flood elevation. The maximum credit for Activity 530 using Option 1 is 160 and using Option 2 is 1,600.

~~There are two options for calculating the total value for this activity. The first, Option 1, is easier to use, but its total is limited to 160 points. As long as the projects meet the credit criteria, the values for the technique used (TU_) and flood protection improvement (FPI_) do~~ does ~~not need~~

~~to be calculated for each building. A checklist is available at www.CRSresources.org/500 that can help when there are multipliers that increase the credit for certain buildings.~~

~~Option 2 allows for higher credit, but it favors communities that have protected a large percentage of the buildings in their SFHA. Option 1 produces more credit for large communities or communities that have protected a small number of properties. Option 2 calculations can be facilitated by using the checklist found at www.CRSresources.org/500.~~
~~A community may use whichever option provides the larger credit. The maximum credit for Activity 530 using Option 1 is 160 and using Option 2 is 1,600.~~

533.a. Option 1

c530 = the sum of 2.4 x the number of buildings that qualify for Activity 530 credit
x the TU for the flood protection implemented for those buildings (Section 532.a.))

~~c530 = 2.4 x the number of buildings that qualify for Activity 530 credit~~

The maximum credit under Option 1 is 160 points.

2. Included in Section 533 is the consideration of projects where buildings were already protected to the BFE or higher before the project (FPB), and protected to a high water mark (HWM) or "predicted" flood elevation after the project (FPP) that is above the community's regulatory standards.

   Option 2 must be used for projects in which the lowest-floor elevations of buildings protected before the project (flood protection level before the project (FPB)) were at or above the community's current effective base flood elevation.

Activity 540 (Drainage System Maintenance):
This activity provides credit to the community keeping its streams, natural channels, and storage basins clear of debris so that their flood carrying and storage capacity are maintained.

Proposed Changes:

1. Clarification that channel debris removal (CDR) credit is for the inspection and maintenance of *natural channels* within the community. The constructed or underground portion of the community's drainage system is no longer be eligible for CDR credit.

2. Clarification that the community must have an inventory of their system, a map of the system, and written inspection records correlated to their inventory in order to qualify for any credit for either CDR or storage basin maintenance (SBM) credit.

3. CDR credit is impact adjusted based on the proportion of the system that is verified to be inspected annually and appropriately maintained. This may be calculated as a percent of the length of the total system that is verified via a random sample of inspection records, or by the percent of segments with appropriate records.

4. CDR credit is no longer a prerequisite for receiving problem site maintenance (PSM) when a community has portions of their drainage system that requires a higher level of inspections and maintenance to ensure it's functioning during a storm event. Also, the impact adjustment for PSM has been eliminated.

5. CDR credit is no longer a prerequisite for receiving credit for capital improvement programs (CIP), however the community must be receiving credit for problem site maintenance (PSM). Also, there is a new impact adjustment for CIP based on the area of the communities included in the CIP divided by the area of the community.

6. Within credit for capital improvement plans (CIP), two subelements are created: CIP1 (30 points) for a basic CIP and CIP2 (40 points) for a CIP based on a watershed analysis. Credit is determined as follows.

   cCIP = cCIP1 + cCIP2, where
   cCIP1 = 30 (no impact adjustment)
   cCIP2 = rCIP2 x 40

   rCIP2 = aCIP2/aC, where
   aCIP2 is the area of the community included in a qualifying watershed analysis, and
   aC is the area of the community

7. CDR credit is no longer a prerequisite for receiving credit for stream dumping regulations (SDR).

8. The credit for erosion protection maintenance (EPM) is retired. This credit has been available since the inception of the program but at the moment only one community is receiving credit. A separate paper has been prepared with more detail on the recommendation.

600 Series (Warning and Response)

The activities in this series focus on emergency warnings and response, because adequate notification combined with a plan for how to respond can save lives and prevent and/or minimize property damage. The activities emphasize coordinating emergency management functions with a community's other floodplain management efforts, such as providing public information and implementing a regulatory program. Separate, parallel activities are included for levees (Activity 620) and dams (Activity 630). Credit points are based on threat recognition, planning for a subsequent emergency response, and ongoing testing and maintenance.

600 Series Class 4 Prerequisites (page 210-6) – 2013 Manual language:

(5) Document the following life safety measures:

(a) Obtain some credit under Activity 610 (Flood Warning and Response).

(b) Have a map of all levees and all areas protected by levees, and an inventory of the buildings and critical facilities that would be flooded if the levees were overtopped. This is the same as activity credit criterion (3) under Activity 620 (Levees), Section 621.b.

(c) Have a description of the dam failure threat, including a map of all areas that would be flooded by the failure of each high-hazard-potential dam that affects the community, and an

inventory of the buildings and critical facilities that would be flooded. This is the same as activity credit criteria (2) under Activity 630 (Dams), Section 631.b.

600 Series Class 1 Prerequisite (page 210-8) – 2013 Manual language:

(7) Have a program to address the threat to life safety that flooding poses to the residents of the community. This is demonstrated by receiving the following credits:

(a) The community must obtain some credit under all the elements in Activity 620 (Levees) for all levees mapped and identified in the inventory prepared for the Class 4 prerequisite in Section 211.c(5)(b).

(b) The community must obtain some credit under all the local elements in Activity 630 (Dams) for all areas mapped and identified as subject to dam failure flooding in the inventory prepared for the Class 4 prerequisite in Section 211.c(5)(c). The credit for the state's program (SDS) is not counted toward this prerequisite.

Activity 610 (Flood Warning and Response):

This activity is to encourage communities to ensure timely identification of impending flood threats, disseminate warnings to appropriate floodplain occupants, and coordinate flood response activities to reduce the threat to life and property. This activity is focuses on the community's emergency management actions and plans, and efforts coordinated through the community's emergency manager.

Proposed Changes:

1. More emphasis is placed on the role of the emergency manager; connections to the preparedness cycle.

2. Clarification of credit criteria (2) under Section 611.b.

(b) An inventory of the types of buildings (residential, commercial, etc.) exposed to flooding, and an inventory of the land use (residential, agricultural, open space, etc.) of developed and undeveloped areas in the area(s) affected; ~~The development exposed to flooding, such as the number and types of buildings; land use (residential, agricultural, open space, etc.); critical facilities; and historic flood problem areas;~~ and

(c) An inventory of critical facilities and the expected impacts of flooding on health and safety, community functions, such as police and utility services, and the potential for secondary hazards.

3. Clarification of the inundation map requirements (types of maps, levels). Add provisions for areas of the country that experience flash floods. For flash flooding, flood threat recognition is sometimes done by monitoring rainfall amounts within a watershed, rather than (or in addition to) flood levels at the stream.

(3) The community must have a flood inundation map(s), also known as a flood stage forecast map. The map must show areas that are inundated by at least three different flood levels in riverine areas and/or two storm surge levels in coastal areas. If a community is only inundated by flash flooding, impact area maps based on cubic feet per second (CFS) alert levels, rainstorm thresholds or flow depths are acceptable. Such maps are must be used in planning the community's flood response when different flood levels or rainfall amounts are predicted. Example riverine and coastal maps are shown in Figure 610-1. A community may show that only one flood level is appropriate for some areas of the community, such as for an area subject to shallow flooding. In large counties, there may not be detailed mapping and flood warning planning for the entire floodplain. In such cases, some counties designate the entire 1% chance flood level as the initial area to be notified by EAS and other flood alerts and have detailed

multilayered flood levels only in the populated areas. If the flood threat recognition system and flood response plan utilizes such a scenario, it can be considered as a creditable flood warning and response system.

4. Consideration for borough, county or parish plans that include municipalities.

   If the borough/county/parish plan has been reviewed and the signatory community applies for credit under that previously credited flood warning program, then the following information is required.

   a. If the "parent plan" has provided the required inundation mapping that covers the community's jurisdiction adequately, no map is needed.

   b. Provide the number of structures used in providing the sums in bSFHA, bFTR, bEWD and bFRO.

   c. Provide a list of all public and private critical facilities affected by flooding or needed to be operational during a flood, to include contact names and current information including phone numbers (must be updated annually).

   d. Provide the adopted definition of critical facilities.

   e. Provide verification that the community participated in a drill/exercise or an actual activation of the plan within the past 12 months.

   f. If credit was assigned in EWD for a warning system or systems then provide verification that the community tested those systems within the past 12 months.

5. Flood threat warning (FTR) examples are added:

   "Devices such as ALERT and ALERT 2 precipitation gages, river gages and tidal gages are used to provide data that can range from flash flood warnings, the timing of potential flood level crests, area impacts and storm surge heights. From this data, maps can be developed and response actions. The data allows the flood threat recognition system, credited in FTR, to be linked to the flood response operations, credited in FRO."

6. Expanded descriptions of emergency warning dissemination (EWD) subelements to help identify measures that can receive credit. For example:

EWD7 = 10 points, if ~~cable~~ television ~~override systems are used~~ broadcast or message scroll notifications are implemented by the community

EWD8 = 15 ~~10~~ points, if the community uses other forms of public notification for emergency warnings such as geocoded alert notification products and social media coordination of emergency related topics

EWD9 = 10 points, if ~~all~~ tone alert radios or NOAA Weather radios either provide a system of notification to or are physically located within the schools, hospitals, nursing homes, prisons, and similar facilities that need flood warning

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7. EWD credit is revised as follows:

Subelement	Short Description	2013	2017
EWD1	Pre-scripted messages	10	10
EWD2	Messages w/ instructions	10	10
EWD3	Outdoor systems	10	10
EWD4(a)	Who disseminates	5	5
EWD4(b)	Who with routes, equipment, etc.	5	10
EWD5	EAS	10	10
EWD6	Telephone	15	15
EWD7	Television	10	10
EWD8	Other: Geocode, social	10	15
EWD9	Alert radios	10	10
EWD10	Maps posted online	10	10
	EWD Credits Offered	105	115
	Maximum Credit:	**75**	**75**

8. FRO5 credit, "if the plan includes a summary of estimated staff, equipment, supplies, and time required for each response task and the sources of necessary resources," is combined with FRO2 , credit, "if the plan identifies flood response tasks and responsible community staff and other public and private organizations with responsibilities related to the flood tasks in the plan."

   Credit is adjusted as follows:

Subelement	If the Response & Operations Plan Includes:	2013	2017	
FRO1	Flood scenarios	15	FRO1	15
FRO2	Tasks for staff and organizations	2	FRO2*	Up to 35
FRO3	Actions tied to flood levels	28	FRO3	25
FRO4	Special needs database	10	FRO4	10
FRO5	Needed resources	Up to 30		
FRO6	Instructions for recovery steps	15	FRO5	15
FRO7	Property protection measures	20	FRO6	20
	FRO Credits Offered	120		120
	Maximum Credit:	**115**		**115**
* FRO2 and 2013 FRO 5 combined				

9. New section included in critical facilities planning (CFP) for instances when communities don't have critical facilities in the SFHA or their regulatory floodplain.

10. Updates to StormReady credit (SRC) and TsunamiReady credit (TRC) for changes to the NWS program that document community participation.

Activity 620 (Levees):
This activity is to encourage communities to properly inspect and maintain levees and to identify impending levee failures in a timely manner, disseminate warnings to appropriate floodplain occupants, and coordinate emergency response activities to reduce the threat to life and property.

Proposed Changes:

1. Same as Activity 610, more emphasis is placed on the role of the emergency manager.

2. References to levels of protection are removed. Breach or overtopping elevations are what CRS requires. Communities can associate warning with flow rates that are associated with a potential failure are available.

3. Clarification of credit criteria (2) under Section 621.b. so Class 4 prerequisite is better explained.

   (c) An inventory of the types of buildings (residential, commercial, etc.) exposed to flooding should the levee(s) be overtopped or fail, and an inventory of the land use (residential, agricultural, open space, etc.) of developed and undeveloped areas in the area(s) affected should the levee(s) be overtopped or fail ~~A list of the addresses of all properties with insurable buildings in the inundated areas. This list is needed for the required outreach project and the impact adjustment (bLF)~~;

4. Clarification that levee maintenance credit can be provided without credit for LFR, LFW, LFO and LCF.

5. Additional guidance on warning and protective action messaging for LFW credit is included.

Activity 630 (Dams):
This activity focuses on public safety and encourages states to provide dam safety information to communities and to encourage communities, in turn, to provide timely identification of an impending dam failure, disseminate warnings to those who may be affected, and coordinate emergency response activities to reduce the threat to life and property.

Proposed Changes:

1. Same as Activity 610, more emphasis is placed on the role of the emergency manager.

2. Clarification of credit criteria (2) under Section 631.b. so Class 4 prerequisite is better explained.

   (d) An inventory of the types of buildings (residential, commercial, etc.) exposed to dam failure flooding with an approximate count of the number of buildings, and an inventory of the land use (residential, agricultural, open space, etc.) of developed and undeveloped area within the dam failure inundation or evacuation area; ~~The development exposed to dam failure flooding, such as the number and types of buildings; land use (residential, agricultural, open space, etc.); and critical facilities; and~~

   (e) A list of the critical facilities that would be flooded or otherwise affected by a failure of the dam; and

3. Additional information added on the federal definition of a high-hazard-potential dam and varying state definitions. (http://www.damsafety.org/media/Documents/Surveys/HazardPotentialClassifications_2010sept.pdf)