



Community Name: \_\_\_\_\_  
Date: \_\_\_\_\_

## 2013 CRS Coordinator's Manual Activity Checklists and Documentation Checklists

Activity	Activity Checklist	Documentation Checklist	Community Certifications*	Other	Notes
213			CC-230		
310	Yes				
320	Yes				
330	Yes			Worksheet	
340	Yes				
350	Yes				
360	Yes				
370	Yes			Worksheet	
410	Yes				
420	Yes				
430	Yes				
440	Yes				
450	Yes				
501	Yes		CC-RL		
510	Yes			510 (Excel file)	
520	Yes		CC-520EHP		
530	Yes		CC-530 & CC-530EHP	Worksheet	
540	Yes		CC-540EHP		
610	--	Yes			
620	--	Yes	CC-620EHP		
630	--	Yes		SDS Scores	
710					
720					

\* Available at [CRSresources.org/200-2](http://CRSresources.org/200-2)

Activity 310 (Elevation Certificates) Max. 116 points	
Credit Criteria	Documentation
(1) The community must maintain completed FEMA Elevation Certificates showing the "finished construction" elevations for all buildings constructed or substantially improved in the SFHA during the period credited.	
(2) If the building was floodproofed, a FEMA Floodproofing Certificate is needed instead of an Elevation Certificate. Other certificates may be needed in coastal high hazard areas (V Zone certificates) and for floodproofed residential basements	
(3) The community must review the certificates to ensure that they are complete and that the information is correct.	
(4) The community must make copies of Elevation Certificates readily available to anyone upon request.	
<b>Maintaining Elevation Certificates (EC) (38 points)</b>	
(1) At least two months before each verification visit,	
(a) A list of all permits issued for new buildings and substantial improvements in the SFHA since the last visit	
(b) Copies of certificates (ECs and/or V Zone, Floodproofing Certificates and other certificates) for all new buildings and substantial improvements in the SFHA that have been collected since the last visit.	
(c) If credit for regulating outside the SFHA, advise whether the list of permits and copies of certificates should include properties in those non-SFHA areas.	
(2) At each verification visit,	
(a) A description of how the community maintains, stores, and provides copies of certificates to inquirers.	
<b>Maintaining Elevation Certificates for post-FIRM buildings (ECPO) (48 points)</b>	
(1) At each verification visit,	
(a) Copies of certificates (ECs and/or V Zone, Floodproofing Certificates and other certificates) for all new buildings and substantial improvements constructed between the date of the community's initial FIRM and the date of application to the CRS <b>[to be sampled]</b> .	
(b) Demonstration that the community still has access to all the credited certificates and provides them to inquirers.	
(c) Documentation showing how bPO was determined.	
Notes:	
<b>Maintaining Elevation Certificates for pre-FIRM buildings (ECPR) (30 points)</b>	
(1) At each verification visit,	
(a) Copies of certificates (ECs and/or V Zone, Floodproofing Certificates and other certificates), as appropriate for all new buildings and substantial improvements constructed before the date of the community's initial FIRM <b>[to be sampled]</b> .	
(b) Demonstration that the community still has access to all the credited certificates and provides them to inquirers.	
(c) Documentation showing how bPR was determined.	
Notes:	

Activity 320 (Map Information Service) Max. 90 points			
Credit Criteria		Documentation	
	(1) MI1, providing information from the FIRM needed to write a flood insurance policy, is a prerequisite to receiving other credit under this activity.		
	(2) The map information service must be able to locate a property based on a street address.		
	(3) The information must be volunteered when there is an inquiry.		
	(4) The service must include an opportunity for personal contact.		
	(5) The inquiry must be responded to within a reasonable amount of time.		
(6) The service must be publicized at least once a year. There are three publicity options:		(1) Documentation that shows how the community publicizes the service each year.	
	(a) An annual notice that reaches everyone in the community, such as an article in a newsletter or a stuffer in a utility bill that goes to all properties.		
	(b) An annual notice directed to the most common users of the service: lenders (banks, credit unions, etc.), insurance agents, and real estate agents. This can be a mailing directly to these offices or articles in the newsletters of professional associations that reach these offices (e.g., the newsletters of the Board of Realtors® or the chamber of commerce); and		
	(c) An annual outreach project developed as part of a Program for Public Information (PPI) credited under Activity 330 (Outreach Projects), provided that the program document identifies the target audience for the service and discusses the best way to reach that audience.		
	(7) The maps used for MI1 and MI2 must be kept updated at least annually to reflect new studies, subdivisions, annexations, flood insurance restudies, map revisions, and map amendments (including LOMAs and LOMRs).	(2) An explanation of how the community keeps the FIRM updated. This may be a verbal explanation at the time of the verification visit.	
	(8) The community must maintain copies of earlier FIRMs that have been in effect since 1999 [or the date the community applied for this credit, whichever is later].	(3) Verify where the community keeps copies of all FIRMs that have been in effect since 1999 or the date the community applied for this credit.	
	(9) Records of the service must be kept and provided for credit documentation	(4) A record, copies of letters, or log of the service..	
(5) Documentation showing how the area of each element (aMI#) was calculated.			
(6) If another agency or organization provides map information, documentation that the agency has agreed to provide the service to all inquirers and will allow the ISO/CRS Specialist to verify its work.			
<b>Basic FIRM information (MI1) (30 points)</b>			
	(2) If requested, the community must provide all of the following FIRM information: (a) Whether the property is in an SFHA, (b) The community number, (c) The panel number and suffix, (d) The date of the FIRM's index (cover panel), (e) The FIRM zone, e.g., A, C, X, V, AE, A2, AO, etc., (f) The base flood elevation (the depth in AO Zones) where shown on the FIRM, and (g) The elevation datum used on the FIRM, if other than NGVD. A copy of the Elevation Certificate for the property, if available, can suffice for the minimum requirements of this element.		
	(3) The community need only supply the insurance rating data requested. If the inquirer only wants to know if a building is in a floodplain, then advising whether it is in an SFHA as shown on the FIRM is sufficient.		

Activity 320 (Map Information Service) - continued	
	(4) If a property is too close to the SFHA boundary to determine the building's FIRM zone, the community may give the inquirer a copy of the FIRM and advise that the FIRM zone cannot be determined based on the map information available.
	(5) The community is not required to provide data that do not appear on the FIRM, such as base flood elevations in unnumbered A Zones, but providing additional information from other maps and sources of flood hazard and flood protection information is encouraged and may be credited under elements MI2 through MI7.
	(6) If the property is in an SFHA, the community must inform the inquirer of the mandatory flood insurance purchase requirement, as appropriate. This may be done by advising the inquirer that flood insurance may be required because of the property's location or by providing a written summary of the requirement (e.g., the example in Figure 320-3).
<b>Additional FIRM information (MI2) (20 points)</b>	
	(2) The additional information must include whether the property is in an "undeveloped coastal barrier" or "otherwise protected area" of the Coastal Barrier Resources System. If so, the community must advise the inquirer that flood insurance, federal disaster assistance, and other types of federal financial assistance are not available for buildings constructed or substantially improved after the effective date of designation, as shown on the FIRM. More information on the Coastal Barrier Resources System can be found at <a href="http://www.fws.gov/CBRA">www.fws.gov/CBRA</a> .
	(3) The additional information must include whether the property is located seaward of the Limit of Moderate Wave Action (LiMWA), if shown on the FIRM. If it is, the inquirer must be advised that waves and velocity from coastal storms and hurricanes can cause significant damage to a structure that is not properly elevated on an open foundation and protected from erosion and scour.
	(4) The additional information must include whether the property is located in a floodway. If it is, the community must explain the regulatory requirements for developing in a floodway.
	If the community's FIRM does not show any Coastal Barrier Resources System areas, LiMWAs, or floodways, there is no credit for MI2.
<b>Problems not shown on the FIRM (MI3) (20 points)</b>	
	(2) The other flood problem information provided must be about a flood hazard not shown on the community's FIRM.
<b>Flood depth data (MI4) (20 points)</b>	
	(2) Depth data must be conveyed to inquirers. There are usually two ways to provide flood depth data. Either one is acceptable for credit. (a) Staff can provide information from a map that shows the depth of flooding at different flood recurrence levels. Staff can provide data on both the flood elevation and the ground or building elevation at a site.
Attach an example of the map or data source.	
<b>Special flood-related hazards (MI5) (20 points)</b>	
	(2) The affected area must be mapped for this credit, but does not have to be regulated. If there are no regulations, the inquirer must be told what precautions should be taken when developing or improving the property.
Attach an example of the map or data source.	

Activity 320 (Map Information Service) - continued	
<b>Historical flood information (MI6)</b> (20 points)	
	Information on historical flooding must be provided.
	Attach an example of the map or data source.
<b>Natural floodplain functions (MI7)</b> (20 points)	
	(2) Information must be provided about any natural floodplain functions the area provides.
	Attach an example of the map or data source.
Notes:	

Activity 330 (Outreach Projects) Max. 350 points			
Credit Criteria		Documentation	
<b>Outreach projects (OP) (200 points)</b>			
	(1) To receive credit, projects must be disseminated at least annually to the audience.	(a) A copy of the flyers, presentations, brochures, etc., that have been produced and disseminated as outreach projects, marked to show where the credited topics appear.	
	(2) At least one project must convey a message on the topic of flood insurance.	At least one of the submittals must be a project that covers the topic of flood insurance.	
	(3) The community will not lose OP credit during the year of a flood if its other OP projects cannot be carried out because implementing the FRP projects diverted needed resources from them.		
A copy of the 330-370 Scoring Spreadsheets file to help score the projects.			
Notes:			
<b>Flood response preparations (FRP) (50 points)</b>			
	(1) OP credit is a prerequisite to receiving FRP credit.		
	(2) To receive FRP credit each year, the community must either use the FRP in response to a flood or (if no flood occurs) review it and update it as needed.		
	(3) The community will not lose OP credit during the year of the flood if implementing the FRP projects diverts resources that would have been used to implement other OP projects. However, the community will lose its FRP credit if it does not implement its FRP projects when there is a flood or if it does not evaluate the FRP projects every year.		
(1) At each verification visit,			
	(a) A copy of the masters for the handouts, news releases, and other projects, etc.		
	(b) Written procedures that explain how the handouts, news releases, and other projects are to be copied and disseminated.		
	(c) Documentation that the FRP materials were reviewed to determine whether they are still current and appropriate. This may be done as part of the annual PPI evaluation report.		
A copy of the 330-370 Scoring Spreadsheets file to help score the projects.			
<b>Program for Public Information (PPI) (80 points)</b>			
	The PPI must be developed according to a seven-step planning and public involvement process.		
(1) At each verification visit <b><i>[collect the following and send it to the technical reviewer]:</i></b>			
	(a) A copy of the PPI document.		
	(b) Minutes of the meetings or other documentation of the committee members' participation.		
	(c) Documentation that the PPI has been adopted by the community.		

Activity 330 (Outreach Projects) - continued	
<b>Stakeholder delivery (STK)</b> (50 points)	
	(1) This credit is only available to communities with a PPI. The stakeholder organization or agency must be named in the PPI document and the associated projects, but the stakeholder does not need to be on the PPI committee.
	(2) <i>[States the criteria for a "stakeholder"]</i> A stakeholder can be any agency, organization, or person (other than the community itself) that supports the message.
	(3) It needs to be clear that the message is coming from someone other than the community or is sponsored by or supported by the stakeholder.
For documentation, ensure that the PPI identifies the stakeholder projects.	
Notes:	

Activity 340 (Hazard Disclosure) Max. 80 points		
Credit criteria	Documentation	
<b>Disclosure of flood hazard (DFH) (35 points)</b>		
(1) The <i>[hazard disclosure]</i> notice must clearly state whether the property is in the floodplain and, if so, that flood insurance is required. If the notice states that a property is in a floodplain or in the SFHA, it must also tell the inquirer that federal law requires the purchase of flood insurance as a condition of acquiring a federally backed mortgage.	(a) Disclosure form from real estate agency #1	
	Disclosure form from agency #2	
	Disclosure form from agency #3	
	Disclosure form from agency #4	
	Disclosure form from agency #5	
(2) A property notice that is difficult to interpret, such as "FP: Y/N," or a general statement on all properties, such as "Flood insurance may be required," or "Flood Zone," is not acceptable. The form must clearly state, "Flood insurance is required." <i>[No acronyms.]</i>		
(3) If the property is in an area designated under the Coastal Barrier Resources Act, the notice must advise that National Flood Insurance Program (NFIP) flood insurance is not available.		
(4) The disclosure must be volunteered by the real estate office. There is no DFH credit if the disclosure is made only in response to someone's inquiry about whether the property is in a floodplain.		
(5) Credit for DFH cannot be based on real estate agents' use of a seller's statement or certificate. The information that is required is notification of whether the property is in an SFHA, not whether the sellers experienced a flood while they owned the property.		
(6) Additional credit is provided if the disclosure program is covered in the community's PPI.		
<b>Other disclosure requirements ODR (25 points)</b>		
Credit can be requested for up to five state or local laws or ordinances that require disclosure of a property's exposure to flooding (1) – (9) A variety of legally required disclosure approaches are credited. The list is not meant to be all-inclusive.	(a) A copy of the law or ordinance language that requires one or more disclosure methods prior to the time of sale or rental of a property. <i>[Up to five.]</i>	
<b>Real estate agents' brochure (REB) (12 points)</b>		
(1) The real estate agents' brochure must advise the reader to check to see if a property is in a floodplain or has a history of flooding.	(a) A copy of the brochure or other document that real estate agents make available to interested parties.	
(2) Additional credit is provided the brochure is recommended by the community's PPI.		
(3) DFH credit not needed.		
<b>Disclosure of other hazards (DOH) (8 points)</b>		
DFH credit is a prerequisite to receiving DOH credit. The disclosure of other hazards must be included in the materials used for DFH credit.	(a) The documentation submitted for credit under Section 342.a (DFH), marked to show how the other flood-related hazards are disclosed.	



**Activity Checklists**

**Community Name:** \_\_\_\_\_

**Date:** \_\_\_\_\_

Notes:

Activity 350 (Flood Protection Information) Max. 125 points			
Credit Criteria		Documentation	
<b>Flood protection library (LIB)</b> (10 points)			
	(1) The publications listed in Figure 350-1 must be cataloged and maintained in the public library that is most accessible and most widely used by residents of the community. <i>[May be 7, 8 or 9 of the 10 publications listed.]</i>		
	(2) The documents must be entered into the library's card catalog or similar system that allows patrons to find publications related to flooding and flood protection.	(a) A list of the publications that have been cataloged in the community's library or library system.	
<b>Locally pertinent documents (LPD)</b> (10 points)			
	(1) The community must receive credit for LIB.		
	(2) The documents must be entered into the library's card catalog or similar system that allows patrons to find publications related to flooding and flood protection.	(a) A list of the publications that have been cataloged in the community's library or library system.	
<b>Flood protection website (WEB)</b> (105 points)			
	(1) There must be a flood information home page that is readily found by either (1) having it listed and linked on the community website's home page, or (2) using the website's search feature.		
	(2) The flood information home page must have a directory of the flood protection information provided, along with links to the appropriate pages.		
	(3) The links to the flood protection information pages may be to pages on the community's own website or on other websites.		
	(4) If a page discusses a topic and the community provides a service related to that topic that is credited by the Community Rating System (CRS), the website must inform the readers about the service the community offers.		
	(5) There must be a link to FloodSmart ( <a href="http://www.floodsmart.gov">www.floodsmart.gov</a> ) or to FEMA's flood insurance page ( <a href="http://www.fema.gov/business/nfip">www.fema.gov/business/nfip</a> ).		
	(6) The community must check the website's links at least monthly, and fix those that are no longer accurate.		
	(7) Additional credit is provided for WEB1 and WEB2 if the website content is covered in the community's PPI		
	(a) A statement that the community has checked the website, fixed any broken links, and confirmed that the content is still current and pertinent.		
	(b) [Required only for the extra PPI credit] The annual report prepared by the PPI committee that evaluates the service.		
Notes:			

Activity 360 (Flood Protection Assistance) Max. 110 points			
Credit Criteria		Documentation	
<b>Property protection advice (PPA) (40 points)</b>			
	(1) The community must identify at least one person to provide the flood protection advice and assistance.	(a) If the person providing the advice is not a community employee, a letter stating that the person and/or agency has agreed to do the work.	
	(2) The person(s) providing the advice and assistance must be familiar with structural and non-structural flood protection and mitigation measures, including flood insurance.	(b) A description of the technical qualifications of all persons who are providing the service.	
	(3) The advice must be provided one-on-one, i.e., by talking directly to the person making the inquiry, either face-to-face or over a telephone.		
	(4) The service must be publicized at least once a year.	(c) Documentation that shows how the community publicizes the service each year.	
	(5) Records of the service must be kept and provided for credit documentation.	(d) Records of the service must be kept and provided	
	(6) Additional credit is provided if the flood protection assistance service is covered in the community's PPI.		
<b>Protection advice provided after a site visit (PPV) (45 points)</b>			
	(1) The community must receive credit for PPA. PPV credit for site visits is an additional credit as part of the community's provision of property protection advice.		
	(2) The publicity for the service must include a note that a community representative will visit the site in question and review the problem with the inquirer.	(a) Names and titles of the people making the site visits	
		(b) Along with the PPA publicity documentation, a note that the community will visit the site if requested.	
	(3) Additional credit is provided if the flood protection assistance service is covered in the community's PPI		
(c) Records of the site visits and the advice provided must be kept			
<b>Financial assistance advice (FAA) (15 points)</b>			
	(1) The community must identify at least one person to provide the financial assistance advice. It need not be local staff if other agencies have agreed to answer inquiries.	(a) If not a community employee, the letter stating that the person and/or agency has agreed to do the work	
	(2) The service must be publicized at least once a year. PPA credit is not a prerequisite, to receive credit for FAA the financial assistance advisory service must be publicized in the same manner.	(b) A copy of how the service is publicized	
	(3) Full credit is dependent upon providing information on all available sources of financial assistance.	(c) Record or memo to the files that reviews the list of sources of assistance	
		(d) Copies of materials used to explain the programs (if any are used)	

Activity 360 (Flood Protection Assistance) - continued		
	(4) The advice must be provided one-on-one, i.e., by talking directly to the person making the inquiry, either face-to-face or over a telephone.	
	(5) Records of the service must be kept and provided for credit documentation.	(e) Records of the service provided
	(6) Additional credit is provided if financial assistance advice is covered in the community's PPI.	
<b>Advisor training (TNG) (10 points)</b>		
	(1) Credit for property protection advice (PPA) and/or financial assistance advice (FAA) are prerequisites	
	(2) This credit is related to classes that are provided by the Emergency Management Institute (EMI). A community may submit an equivalent field-deployed or homestudy course for possible scoring.	(a) Copy of the certificate of course attendance.
Notes:		

Activity 370 (Flood Insurance Promotion) Max. 110 points			
Credit Criteria		Documentation	
<b>Flood insurance coverage assessment (FIA) (15 points)</b>			
	For FIA credit, the flood insurance coverage assessment must follow the 7 step process.		
(1) At each verification visit <b>[collect the following and send it to the technical reviewer]:</b>			
(a) A copy of the assessment document or the updated assessment			
(b) Documentation that the document was submitted to the community's governing body			
<b>Coverage improvement plan (CP) (15 points)</b>			
(1) The community must receive credit for FIA.			
(2) to (7) <i>[The plan must be prepared by a committee, include required items, submitted to governing body, adopted, include an annual evaluation, and be updated at each cycle visit.]</i>			
(1) At each verification visit <b>[collect the following and send it to the technical reviewer]:</b>			
(a) A copy of the coverage improvement plan document or the updated plan.			
(b) Documentation that the document was adopted by the community's governing body.			
<b>Coverage improvement plan implementation (CPI) (60 points)</b>			
(1) The community must receive credit for the FIA and credit for CP.			
(2) The projects implemented for CPI credit must be listed in the CP.			
	(3) The community must implement at least one project that demonstrates that the community's elected leadership encourages people to purchase or increase their flood insurance coverage.	(a) Copies of flyers, presentations, brochures, etc. that have been produced and disseminated as outreach projects.	
		<i>[Identify which project(s) involves elected leadership.]</i>	
<b>Technical assistance (TA) (20 points)</b>			
	(1) The community must identify at least one person, office, or agency to provide flood insurance advice.	(a) If not a community employee, the letter stating that the person and/or agency has agreed to do the work	
	(2) The service must be publicized at least once a year.	(b) A copy of how the service is publicized.	
	(3) Records of the service must be kept and provided	(c) Records of the service provided.	
Notes:			

Activity 410 (Floodplain Mapping) Max. 802 points	
Credit Criteria	Documentation
(1) All studies and data that the community requests for credit must be displayed on a map. This map may be either digital or paper. This criterion does not apply to studies done for a single site at the time of development.	
(2) The community must use the floodplain map or data for which credit is requested in its floodplain development regulations. The community either must have <b>(either)</b>	
(a) Amended its floodplain regulations to adopt the new floodplain map or data, or	
(b) Authorized a local official, such as the community's engineer, to approve new maps or data in unstudied areas. There must be a record showing that the new study has been approved and utilized by the official.	
A study that has no impact on floodplain development is not credited. The CRS does not credit studies conducted for drainage improvements or the design of a flood control project if they are not used for regulatory purposes.	
(3) The study must be based on a FEMA-approved technique or specifically approved by the ISO/CRS Technical Reviewer.	
(4) If the study affects a length of stream or shoreline, it must be SUBMITTED to FEMA to revise the community's FIRM. This criterion can be met even if FEMA does not immediately publish the map revision.  The criterion does not apply to studies done for a single site at the time of development and similar small-scale studies. However, studies that would revise existing base flood elevations, floodways, or FIRM zone boundaries must be submitted for a FIRM revision as required by 44 <i>CFR</i> §65.3.	
Notes:	
<b>New studies (NS) (290 points)</b>	
(2) If the credit is for a small-scale study (such as for a single lot) at the time of development, the study must be based on a FEMA-approved technique or specifically approved by the ISO/CRS Technical Reviewer and it must produce regulatory flood elevations where there are none, or elevations higher than those shown on the FIRM in effect at the time of the study.	
(3) In order to receive NS credit, studies must <b>[either]</b>	
(a) Produce a base flood elevation in a B, C, D, X, or approximate A Zone where there was no elevation shown on the FIRM at the time of the study; or	
(b) In AE and VE Zones and numbered A and V Zones, produce a base flood elevation higher than that shown on the FIRM in effect at the time of the study.	
(a) A copy of the study and the study's floodplain map. The ISO/CRS Specialist should be advised whether these are available online or in a published Flood Insurance Study or FIRM.	
(b) The local law or ordinance that adopts the flood study for regulatory purposes or that requires site-specific flood elevation or floodway studies to be conducted at the time of the permit application.	
(c) Development permit records showing how the new data are used.	
(d) The map showing the area covered by each NS study with the appropriate MAP acronym ("MAP#1," "MAP#2," etc.) marking the area affected by the new study. The impact adjustment map is explained in Section 413. Different areas mapped to the same standards may all be marked with the same acronym.	
(e) [For Credit Points lines 1, 3, and 4] Evidence that the study, if done for a length of stream or shoreline, has been submitted to FEMA or FEMA is aware that the study is available. This may be a copy of the Flood Insurance Study, a LOMR, or a letter from FEMA.	

Activity 410 (Floodplain Mapping) - continued	
(f) [For Credit Points line 2a and 2b, flood elevations and floodway delineation for a site at time of development] A statement that the technique used in the study or the ordinance language is listed as acceptable in <i>Guidelines and Specifications for Flood Hazard Mapping Partners</i> . As an alternative to this statement, the community may submit a description of the technique for the ISO/CRS Technical Reviewer to determine whether it is equivalent to an acceptable technique.	
(g) Documentation showing how the area of the SFHA at the time of adoption of the study (aSFT) and the areas of NS were calculated.	
Notes:	
<b>Leverage (LEV) (multiplier)</b>	
(1) To receive LEV, the community must receive NS credit.	
(a) A copy of the community's determination of how LEV was determined. This may be a CTP agreement and documentation that the agreement has been completed. Note that many flood insurance studies and restudies were conducted by federal agencies and private consulting firms under contract to FEMA. LEV credits only the share of a study that FEMA did not fund.	
Notes:	
<b>State review (SR) (60 points)</b>	
(a) Documentation that the state or other agency reviewed and accepted the study or analysis techniques for which credit is being requested. This will usually be a letter from the responsible agency, stating that the review was done and/or that the data were approved.	
Notes:	
<b>Higher study standards (HSS) (160 points)</b>	
(1) HSS credit is provided for the following higher study standards: <b>[any one]</b>	
(a) Using a factor of safety when calculating the 100-year discharge,	
(b) Using better topographic data,	
(c) Using future-conditions hydrology (including sea level rise), and	
(d) Showing 500-year flood elevations and the boundaries of the 500-year floodplain. The use of unsteady or two-dimensional flow models is not credited because these are commonly used by FEMA when warranted.	
(2) Additional higher study standards may be submitted by the community. The ISO/CRS Technical Reviewer will determine if they warrant credit for HSS.	
(a) EITHER a copy of the relevant text from the community's Flood Insurance Study describing the higher study standard if the information was utilized by FEMA, OR the ordinance adopting the higher standard and examples of the data created by using the higher standard.	
(b) The map showing the area covered by the HSS study with the appropriate MAP acronyms marking the areas affected by the higher study standard. The impact adjustment map is explained in Section 413. Separate areas mapped to the same standards may all be marked with the same acronym.	
Notes:	

Activity 410 (Floodplain Mapping) - continued	
<b>More restrictive floodway standard (FWS) (110 points)</b>	
(a) A copy of the appropriate floodway data table and text from the community's current Flood Insurance Study or other regulatory floodplain study describing the standards used for delineating the floodway. If the study and map used for regulation are not included in the current Flood Insurance Study, the community must provide the map, the standard, the ordinance establishing the standard, and the ordinance adopting the standard.	
Notes:	
<b>Mapping for special flood-related hazards (MAPSH) (50 points)</b>	
The community's special flood-related hazards activities must meet the credit criteria described in the separate publications.	
(a) A map of the special flood-related hazards,	
(b) A copy of the ordinance adopting the map for regulating the special flood-related hazard, and	
(c) An engineer's statement that that the community's special flood-related hazard area maps and related data still reflect current conditions.	
Notes:	
<b>Cooperating Technical Partner (CTP) (132 points)</b>	
(2) EITHER:	
	The community must have signed a Cooperating Technical Partner agreement with FEMA that identifies shared mapping responsibilities and costs, OR
	The community is in a regional agency or state that has signed a Cooperating Technical Partner agreement with FEMA that identifies the community or one of its flood problem areas as being studied.
	(3) CTP1 credit is provided only for Cooperating Technical Partner agreements that relate to new studies or study standards for floodplains in the community. No credit is provided for agreements that only provide information on existing studies and data.
(a) A copy of the Cooperating Technical Partner agreement, if not on the FEMA website.	
Notes:	



Activity 420 (Open Space Preservation) Max. 2,020 points			
Credit Criteria		Documentation	
<b>Open space preservation (OPS) (1,450 points)</b>			
(1) The parcel must be located in the community's regulatory floodplain, which means that the parcel is located in <b>either</b>			
	(a) The SFHA as shown on the community's Flood Insurance Rate Map (FIRM), or		
	(b) A floodplain outside the SFHA where the community enforces development regulations similar to those enforced for new development in the SFHA.	(d) For each parcel that is preserved as open space outside the SFHA, documentation showing that floodplain regulations are in effect in the area.  The community must map the area and document its floodplain management regulations.	
(a) A description of the parcels preserved as open space. This could be a map or list that notes which parcels also qualify for DR, NFOS, or SHOS credit.			
	(2) The parcel must be "open space," meaning there are no buildings, storage, filling, or other encroachment to flood flows. Six types of properties in particular are NOT counted for this activity.		
(3) The parcel must be "preserved" as open space. This criterion may be met in <b>one of three ways</b> :			
	(a) Public land, such as state and local parks and easements, can qualify if the owning agency states in writing that the lands are intended to be kept as open space. As noted in Section 403, there is no open space credit for federal lands.	(b) For each parcel that is preserved as open space because of ownership, documentation that the owner will keep the parcel open.	
	(b) Private wildlife or nature preserves that are maintained for open space purposes can qualify if the owner states in writing that they are intended to be kept as open space.	(b) For each parcel that is preserved as open space because of ownership, documentation that the owner will keep the parcel open.	
	(c) Open space areas subject to land development regulations that prohibit buildings and filling can qualify for OSP. Additional credit criteria on page 420-6.	(c) For each parcel that is preserved as open space because of a regulatory requirement, the ordinance language that prohibits structures and fill in part or all of the regulatory floodplain.	
(e) An impact adjustment map.			
Notes:			

Activity 420 (Open Space Preservation) - continued			
<b>Deed restrictions (DR) (50 points)</b>			
(1) All parcels to be credited for DR must first qualify for OSP credit.			
(2) There must be language attached to the deed for the parcel that prohibits new buildings. The exact language for a legal arrangement or deed restriction will vary from state to state and should be prepared by a local attorney. It <b>should include three features:</b>		(a) For each parcel that has a qualifying deed restriction, a copy of the deed. The language that qualifies must be marked. DR credit can only be documented with a copy of the actual deed restriction. An ordinance requiring deed restrictions or dedication of easements is not adequate.	
(a) No new buildings may be allowed on the property;			
(b) The restriction runs with the land; and			
(c) The restriction cannot be changed by a future owner; rather, it can only be amended by a court for just cause.			
(b) The impact adjustment map used for OSP credit, with "DR" marked on the qualifying areas.			
Notes:			
<b>Natural functions open space (NFOS) (170 points)</b>			
(1) For all NFOS credit:			
(a) All parcels to be credited for NFOS must first qualify for OSP credit;			
(b) Credit for NFOS1 is a prerequisite for the rest of the credits;			
(c) The property must be managed to stay in the natural state or otherwise managed to keep its designation; and			
(d) The areas qualifying for each credit need to be marked on the impact adjustment map prepared for Activity 420 .		(c) The impact adjustment map used for OSP credit, with "NFOS#" marked on the qualifying areas.	
(2) NFOS1: Credit is provided if parcels with OSP credit are in an undeveloped natural state or have been restored to a natural state.		(a) For each parcel, documentation that supports credit under NFOS1 and any additional credit requested. The document must describe the natural floodplain functions of the parcel. The <b>document can be</b>	
		(i) A report or plan prepared by a qualified agency, such as a habitat conservation plan, a natural areas inventory, green infrastructure plan, etc., that includes the property to be credited, or	
		(ii) A memo or letter signed by a professional in a natural science such as botany, biology, forestry, or landscape architecture. The sample natural floodplain functions form shown in Figure 420-2 can also be used.	
		(iii) [For NFOS5] A copy or photograph of the educational material is sufficient.	

Activity 420 (Open Space Preservation) - continued		
	(3) NFOS2: Credit is provided if parcels credited as NFOS1 are also designated in a plan to protect natural functions. The plan must meet the criteria for a natural floodplain functions plan (NFP) credited in Activity 510.	(b) [For NFOS2] A copy of the plan and the resolution or other formal adoption action. This is not needed if the plan is submitted for NFP credit under Activity 510.
	(4) NFOS3: Credit is provided if parcels credited as NFOS1 are designated as critical habitat for threatened or endangered species or if the species is present. "Threatened or endangered species" include those already on a federal or state list and those on an official federal or state list of "species of concern" or "pending listing."	
	(5) NFOS4: Credit is provided if parcels credited as NFOS1 are also in a designated open space corridor or connected network. This credits a designated open space corridor or connected network of wetlands, woodlands, wildlife habitats, wilderness, and other areas that support native species, maintain natural ecological processes, and sustain air and water resources. "Designated open space corridor" means the property has been identified for its corridor or network value in an approved plan. Such a network sometimes is called "green infrastructure."	
	(6) NFOS5: Credit is provided if parcels credited as NFOS1 also provide educational material on the site's natural functions. This credit can be up to 20 points if the information is covered in the community's Program for Public Information, credited under Activity 330.	
Notes:		
<b>Special flood-related hazards open space (SHOS) (50 points)</b>		
	(1) All parcels to be credited for SHOS must first qualify for OSP or LZ credit.	
	(2) The community's special flood-related hazards credits must meet the credit criteria described in the separate publications on those hazards. The special hazard must be mapped and the area must be subject to development regulations that will help protect future development from damage from that hazard, or meet other criteria specified in the separate supplement.	
The documentation needed for crediting open space preservation and low-density zoning in areas subject to the different special flood-related hazards is detailed in the separate publications.		
Notes:		
<b>Open space incentives (OSI) (250 points)</b>		
	(1) OSI1: Credit is provided if the regulations set aside all of the regulatory floodplain in a subdivision as open space (such as drainage or flowage easements or back yards) or otherwise keep them free from development. Regulations that meet OSI1 criteria do not qualify for OSP credit, because building still could take place on unsubdivided floodprone lands could still be built on. However, after a subdivision's final plat is recorded, the areas set aside could qualify for OSP credit.	(a) For each regulatory requirement, the ordinance language.

Activity 420 (Open Space Preservation) - continued			
	(2) OSI2: Credit is provided if the regulations require that each lot in a new subdivision provide a building site that is on natural high ground, out of the regulatory floodplain. This credit is not provided if filling the floodplain (or cutting and filling) is allowed to meet the building site requirement or if a LOMRF is required.	(a) For each regulatory requirement, the ordinance language.	
	(3) OSI3: Credit is provided if the regulations state that TO THE EXTENT POSSIBLE, each lot in a new subdivision must provide a building site that is on natural high ground, out of the regulatory floodplain. If a lot does not have a buildable site out of the regulatory floodplain, all new structures, pavement, and other development must be sited where they have the least impact on habitat.	(a) For each regulatory requirement, the ordinance language.	
	(4) OSI4: Credit is provided if the regulations include transfer of development rights language or a density bonus to encourage staying away from the floodplain. Fewer points are provided for transfer of development rights or a density bonus within the same development.	(a) For each regulatory requirement, the ordinance language.	
	(5) OSI5: Credit is provided for regulations that allow cluster development through a planned unit development (PUD) or otherwise.	(a) For each regulatory requirement, the ordinance language.	
	(6) OSI6: Credit is provided for a program that provides tax incentives to keep land open, such as keeping farmland tax rates low when the owner signs an agreement to not develop it or not to sell it for development. If the program results in permanent preservation of open space, each qualifying parcel should be credited under OSP and, if appropriate, DR.		
	(7) OSI7: Credit is provided if the community's land use plan recommends open space use or low-density development of flood-prone areas.		
	(b) The impact adjustment map used for OSP credit, with "OSI" marked on the qualifying areas. It must show areas that are currently vacant and areas that are credited for open space preservation (OSP).		
	(c) For extra credit for regulating flood-prone areas outside the SFHA, documentation showing that floodplain regulations are in effect in these areas.		
	(d) During the verification visit, the ISO/CRS Specialist will need to see site plans and final plats that will document how the regulation has been applied.		
Notes:			

Activity 420 (Open Space Preservation) - continued			
<b>Low-density zoning (LZ) (600 points)</b>			
	(1) The community must have a zoning ordinance that identifies different development criteria and densities for different areas. Other types of regulations are not credited.	(a) For each LZ value, the zoning ordinance language that explains the density requirement.	
	(2) The lands to be credited for LZ must not qualify for OSP credit.		
	(b) The impact adjustment map used for OSP credit, with "LZ#" marked on the qualifying areas. It must show the areas to be credited for LZ, areas that are credited for open space preservation (OSP), and the SFHA. Only the portion that covers the SFHA is needed.		
	(c) For extra credit for low-density zoning in flood-prone areas outside the SFHA, documentation showing that floodplain regulations are in effect in these areas.		
Notes:			
<b>Natural shoreline protection (NSP) (120 points)</b>			
	(1) The regulation or program to protect natural shorelines must prohibit <ul style="list-style-type: none"> <li>• In channels and channel banks in riverine areas: Rip rap or armoring, channel alterations, dredging, filling, grubbing, and removal of vegetation; and</li> <li>• On shorelines of lakes or oceans: Filling or other alterations to a beach, including beach nourishment projects; alterations to sand dunes; and construction of seawalls, bulkheads, armoring, or other shoreline stabilization structures.</li> </ul>	(a) [For credit for protection of natural shorelines] A copy of the regulations or policy on which the credit is based.	
		(b) [For restoration credit] A description of the restoration program or projects.	
	(2) The regulation or program may allow human alterations that benefit natural floodplain functions, such as removing a levee, restoring habitat, reducing bank erosion with bioengineering techniques, or planting to preserve sand dunes, provided that the projects do not prevent channel or shoreline movement or reduce other natural floodplain functions.	(a) [For credit for protection of natural shorelines] A copy of the regulations or policy on which the credit is based.	
		(b) [For restoration credit] A description of the restoration program or projects.	
	(c) An impact adjustment map (not needed if the community is using the optional minimum impact adjustment value of 0.1).		
Notes:			

Activity 430 (Higher Regulatory Standards) 2,042 points			
Credit Criteria		Documentation	
	(1) Regulations adopted by a county, regional agency, or state that are enforced within the community can be credited. Their implementation is verified in the same manner as a community regulation and it is expected that the community will assist in the verification.	(1) The state or local law or ordinance language that adopts the regulatory standard. See also Sections 231.b and 231.c on documenting regulatory language.	
	(2) Regulations must have the force of law and meet the requirement of Section 231.b.		
	(3) If the legal authority for the regulatory language is not clear, the ISO/CRS Specialist may request a letter from the community's legal counsel that confirms that he/she will defend the regulation in court if it is challenged.		
	(4) For CRS credit, the regulatory language must be adopted and in full force at the time CRS credit is requested, e.g., at the verification visit.		
	(5) Credit for any element is prorated if the sampling done during verification finds instances in which the element is not fully implemented. It does not matter why it is not fully implemented.		
	(2) The impact adjustment map. See Section 431.c.		
	(3) [For credit for regulating flood-prone areas outside the SFHA] Documentation that shows that regulations are in effect outside the SFHA (i.e., the regulatory floodplain).		
	(4) Development plans and/or permit records that document how the regulation has been applied.		
Notes:			
<b>Development limitations (DL) (1,330 points)</b>			
(1) Prohibition of fill (DL1):			
	(a) Prohibition of all fill (DL1a): This credit is for prohibiting all filling in the regulatory floodplain. This includes not approving CLOMR-F or LOMR-F.		
	(b) Compensatory storage (DL1b): This credit is for regulations that require new development to provide compensatory storage at hydraulically equivalent sites up to a ratio of 1.5:1.		
	(2) Prohibition of buildings (DL2): Full credit for DL2 is for prohibiting all new buildings in the SFHA. If the regulations only prohibit certain types of buildings, such as residences, the points will be prorated. If buildings are prohibited in parts of the SFHA, such as the floodway, the impact adjustment will adjust the points. Prohibiting critical facilities is credited in Section 432.f, Protection of critical facilities, not under DL2.		
	(3) Prohibitions on storage of materials (DL3) has no additional criteria.		
Notes:			
<b>Freeboard (FRB) (500 points)</b>			
	(1) Lowest floor, utilities, and garages: For FRB credit, freeboard must be applied to the elevation of the lowest floor of the building or to the elevation to which a nonresidential building is dry floodproofed, and to all components of the building, including all utilities, ductwork, and attached garages. All portions of the building below the freeboard level must be constructed using flood-damage-resistant materials. If the garage floor is below the freeboard level, the garage must meet the opening and wet floodproofing requirements for enclosures.		

Activity 430 (Higher Regulatory Standards) - continued	
(2) The amount of freeboard is measured according to the following criteria:	
	(a) In A Zones, freeboard is measured from the top of the lowest floor. In V Zones, it is measured from the bottom of the lowest horizontal structural member. If the ordinance uses "lowest horizontal structural member" or similar language instead of "lowest floor" in areas outside of the V Zone or coastal A Zones where CAZ credit applies, 1 foot is added to the amount of freeboard credited.
	(b) For the purpose of calculating CRS credit, the 500-year flood elevation is considered to be one foot higher than the base flood elevation, unless the community demonstrates that it is higher.
	(c) In AO Zones, base flood depths are provided instead of base flood elevations. Where depths are not provided, the NFIP regulations require new buildings to be elevated 2 feet above the highest adjacent grade. Some communities misinterpret this requirement as two feet of freeboard.
	(d) "Stem wall" construction involves constructing the foundation walls above grade, filling the interior area, and pouring a slab over the fill. From the outside, the building looks as though it is elevated on a crawlspace, but openings are not required. Such buildings are categorized as Diagram 1.b in the FEMA Elevation Certificate.
	(e) If the ordinance uses the encroached elevation using FEMA's standard allowable maximum rise of one foot, add 0.5 feet to the amount of freeboard. Detailed riverine flood studies that produce a floodway provide a flood elevation based upon the floodway encroachment.
	(f) To receive full credit for this element, electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities (including ductwork) must be elevated or waterproofed to the base flood elevation plus freeboard. The value for freeboard in the table is considered to be 75% of the elevation requirement.  If the community requires that electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities (including ductwork) be elevated or made of flood-resistant materials above the base flood elevation, but does not require these facilities to be elevated or protected to the freeboard level, then the value for freeboard in the table is considered to be 75% of the elevation requirement.
The activity documentation requirement must be met.	
Notes:	
<b>Foundation protection (FDN) (80 points)</b>	
(1) For FDN1 credit, ALL new buildings in the regulatory floodplain (both)	
	(a) Must be constructed on foundations that are designed and sealed by a registered design professional as complying with the requirements of the International Building Code, the International Residential Code, or ASCE 24, <b>and</b>
	(b) Must not be constructed on fill.
(2) For FDN2 credit, ALL new buildings constructed on fill in the regulatory floodplain	
	(a) Must be constructed on properly designed and compacted fill (e.g., fill that meets the criteria of (1) Section 1803.5.8 and Section 1804.4 of the International Building Code, (2) Section 2.4 of ASCE 24, or (3) their equivalent);
	(b) Must be on fill that has appropriate protection from erosion and scour; and
	(c) Must meet a compensatory storage requirement (for the building and fill) that meets the credit criteria of Section 432.a., Development Limitations (DL1a).



<b>Activity 430 (Higher Regulatory Standards) - continued</b>	
(3) For FDN3 credit, all new buildings built on fill in the regulatory floodplain (all)	
	(a) Must be constructed on properly designed and compacted fill (e.g., fill that meets the criteria of (1) Section 1803.5.8 and Section 1804.4 of the International Building Code, (2) Section 2.4 of ASCE 24, or (3) their equivalent), and
	(b) Must be on fill that has appropriate protection from erosion and scour.
Notes:	
<b>Cumulative substantial improvements (CSI) (90 points)</b>	
	(a) A list of all permits for building improvements or repairs in the regulatory floodplain that have been issued since the last visit. The list must include both substantial improvements and permitted projects that were not substantial improvements.
Notes:	
<b>Lower substantial improvements threshold (LSI) (20 points)</b>	
	(a) A list of all permits for building improvements or repairs in the regulatory floodplain that have been issued since the last visit. The list must include both substantial improvements and permitted projects that were not substantial improvements.
Notes:	
<b>Protection of critical facilities (PCF) (80 points)</b>	
	(1) Credit is provided only if there is regulatory language that protects critical facilities. The fact that there are currently no critical facilities in the regulated floodplain may indicate community policy, but adopted regulations are required for PCF credit.
	(2) To receive full credit for this element, the regulations must be enforced in the 500-year floodplain (note that the 500-year floodplain includes the entire SFHA plus other land that is lower than the 500-flood elevation). On newer Flood Insurance Rate Maps (FIRMs) with AE and X Zones, the 500-year floodplain is shown as the SFHA plus the shaded X Zone.
	(3) The impact adjustment is based on the 500-year floodplain rather than aSFHA, the area of the SFHA.
	(a) An impact adjustment map, showing the 500-year floodplain.
	(b) [For extra credit for regulating floodprone areas outside the 500-year floodplain] Documentation that shows that floodplain regulations are in effect in these areas.
Notes:	



Activity 430 (Higher Regulatory Standards) - continued	
<b>Enclosure limits (ENL) (240 points)</b>	
	(1) Breakaway walls are enclosures and must be prohibited in order to receive full credit. Screening and open lattice-work are not considered enclosures. Some communities have language to require that there be "no obstruction" in the lower level of a building. Such language might allow breakaway walls or slanted louvers. This does not qualify for ENL credit. What counts for ENL credit is whether one can SEE THROUGH the lower part of the structure from the street. Lattice-work and insect screening are permitted, as long as the line of sight is not blocked.
	(2) The community may opt to enforce these enclosure limits only where the lowest floor is more than four feet high. Where the lowest floor is less than four feet high, a crawlspace with the proper openings may be more appropriate than an open area elevated on columns or piles. With less than four feet of height, the lower area is not likely to be improved or modified into a livable space, so the enclosure limits are not needed.
	(3) Partial credit is provided for a nonconversion agreement whereby the owner agrees not to modify the enclosed area in a way that would make it more susceptible to flood damage. Because this area is not visible from the street, the full credit of 90 points (under credit points (3), below) is provided only if the agreement allows the community the right to enter the property and inspect the inside of the enclosure periodically.
(a)	Elevation certificates, copies of nonconversion agreements, and other permit records that document how the regulation has been applied.
(b)	[For nonconversion agreements] Copies of inspection records.
Notes:	
<b>Building code (BC) (100 points)</b>	
	(1) The building code must be enforced throughout the community, not just the SFHA.
(2) I-Codes (BC1):	
	(a) To receive full credit, the entire I-Code must be adopted by the community. If the following sections are not adopted or are adopted with amendments, the language will be reviewed to determine the credit: o International Building Code: Chapters 3-7, 14-18, and 21-24. o International Residential Code: Chapters 3-6, 8, and 9.
	(b) The version of the I-Code series must be no more than six years old.
	(c) In some states, communities are required to adopt state codes or state versions of the I-Codes. In those cases, the provisions of the mandated code will be compared to the I-Codes and scored appropriately. The same provisions apply to the National Fire Protection Association (NFPA) codes. If they are adopted with amendments, the language will be reviewed to determine the credit.
	(3) BCEGS (BC2): The credit for BC2 is based on the community's BCEGS classification.
(a) [For BC1 credit]	
	(i) The state or local law or ordinance language that adopts the building code. See also Sections 231.b and c on documenting regulatory language.
	(ii) Permit records that will document that the code is being enforced.
(b)	[For BC2 credit] No documentation is required. The ISO/CRS Specialist will obtain the community's BCEGS classification directly from the ISO BCEGS office.
Notes:	

Activity 430 (Higher Regulatory Standards) - continued	
<b>Local drainage protection (LDP) (120 points)</b>	
	(1) Credit is for regulations that ensure that every new building will be built so that it is protected from local drainage flooding.
	(2) A regulation that only addresses drainage plans in new subdivisions is not credited. The key to this credit is that every building will meet some drainage protection standard at the time of construction.
Notes:	
<b>Manufactured home parks (MHP) (15 points)</b>	
	(1) The community must have regulatory language that is enforced in manufactured home parks or subdivisions.
	(2) The community must have one or more existing manufactured home parks or subdivisions in its regulatory floodplain where the base flood elevation is more than three feet above grade.
(a)	Elevation certificates and anchoring records that document how the regulation has been applied.
(b)	Documentation that shows that at least one manufactured home park has a regulatory flood depth greater than three feet above grade (Section 432.j, credit criterion (2)).
Notes:	
<b>Coastal A Zones (CAZ) (650 points)</b>	
	(1) The community must have a coastal floodplain on the Atlantic Ocean, Gulf of Mexico, Pacific Ocean, Bering Sea, or Great Lakes.
	(2) To receive CAZ1 credit a community must map or otherwise delineate its coastal A Zone. The coastal A Zone is the coastal SFHA that is not mapped as V Zone. A community may declare all of its coastal SFHA inland from the V Zone as coastal A Zone (as may be the case for a barrier island) or it may use some other standard, such as identifying all areas where breaking waves are higher than one foot.
	(3) Credit for CAZ2, prohibiting enclosures, is in addition to credit for enclosure limitations (ENL).
	(4) The credit criteria for CAZ1 are V-Zone requirements. These credits are not available in a V Zone because they are minimum NFIP requirements in V Zones. A community can still receive credit for CAZ2 in a V Zone in addition to credit for enclosure limitations (ENL).
(a)	An impact adjustment map. The map is not needed if the community uses the impact adjustment approach listed under Impact Adjustment items (4) or (5), above. If a community-derived LiMWA is used, the data supporting the delineation must be supplied to the ISO/CRS Technical Reviewer for approval.
Notes:	

Activity 430 (Higher Regulatory Standards) - continued			
<b>Special flood-related hazards regulations (SHR) (100 points)</b>			
	The community's special flood-related hazards activities must meet the credit criteria described in the separate publications. Most require that the special hazard be mapped and the area be subject to development regulations that will help protect future development from damage due to that hazard.		
The documentation needed for crediting higher regulatory standards in areas subject to the different special flood-related hazards is detailed in the separate publications.			
Notes:			
<b>Other higher standards (OHS) (100 points)</b>			
	Each regulation that has a higher standard than the NFIP criteria and that is not credited elsewhere is submitted for review. The actual determination of the credit provided is made by FEMA.		
Notes:			
<b>State-mandated regulatory standards (SMS) (20 points)</b>			
	(1) Credit is added to the community's credit for a regulation credited in the 400 series.		
	(2) The community's credited element is verified locally and the community must receive credit for the element before it gets the SMS bonus points. For example, if there is state-mandated freeboard, but a review of the community's Elevation Certificates shows that the community does not get freeboard credit, then it does not receive the 10% SMS bonus for the state-mandated freeboard.		
	(3) SMS credit for state-mandated erosion and sedimentation control regulations (ESC) or water quality regulations (WQ) under Activity 450 (Stormwater Management) is provided only if the state mandate exceeds the requirements for a NPDES permit.		
Notes:			
<b>Regulations administration (RA) (67 points)</b>			
	(1) Staff training (RA1) provides credit for trained regulatory staff members.	(a) [For RA1 credit for having a graduate from an EMI class] A copy of the certificate of course attendance.	
		(c) [For CFM® and IAS accreditation] No documentation is needed from the community. The status is verified by checking the names on the websites of the Association of State Floodplain Managers and of the IAS.	
	(a) Credit for training is provided for each <ul style="list-style-type: none"> <li>o Certified Floodplain Manager (CFM®);</li> <li>o Graduate of an approved four-day class conducted at, or field deployed by, EMI; and</li> <li>o Graduate of a home study version or other equivalent training.</li> </ul>		
	(b) Regulatory staff members may be employees or contract permit officials who administer the community's floodplain management permits. An exception is that credit for graduating from the CRS class (E278) is provided for any community employee, regardless of the office in which he or she works.		

Activity 430 (Higher Regulatory Standards) - continued			
	(c) The credit for training is based on the number of courses taken. If two people take the "Managing Floodplain Development" course, it is counted two times. The same credit is provided if one person took both the "Managing Floodplain Development" and "Coastal Construction" courses. If a CFM® took the Coastal Construction course, it is counted two times.		
	(d) There is no double credit for being both a CFM® and a graduate from the basic NFIP course (E273). This is counted once.		
	(e) This credit is removed if the staff person leaves the community or does not maintain his or her certification.		
	(2) IAS accreditation (RA2): IAS is the International Accreditation Service, an arm of the International Code Council. It has a program that reviews and accredits building departments.	(c) [For CFM® and IAS accreditation] No documentation is needed from the community. The status is verified by checking the names on the websites of the ASFPD and of the IAS.	
	(3) Detailed inspections (RA3): Credit is for conducting three detailed inspections for each new building in the regulatory floodplain. Figure 430-3 explains what is needed for this credit. There is no partial credit for two inspections or for doing less than what is listed.	(b) [For credit for RA3 or RA4] Inspection records that show how each item was checked. For RA3, the records must include copies of the photographs and elevation surveys.	
	(4) Reinspections (RA4), i.e., inspecting buildings when they are sold or rented to a new tenant or application is made for a home improvement permit. For CRS credit, the regulations must clearly state that the community's inspector has the right to enter the building at the designated occurrences (e.g., sale of the property) and will inspect for compliance with the floodplain management permit that was previously issued. Documentation of the inspections is needed at verification.	(b) [For credit for RA3 or RA4] Inspection records that show how each item was checked. For RA3, the records must include copies of the photographs and elevation surveys.	
	(5) Off-site record storage (RA5): In the past, hurricanes, fires, floods, and other disasters have destroyed local permit offices and their files.		
Notes:			

Activity 440 (Flood Data Maintenance) Max. 222 points	
Credit Criteria	Documentation
<b>Additional map data (AMD) (160 points)</b>	
(1) AMD1 credit is a prerequisite for any other AMD credit.	
(2) The map or data base must be used regularly by the community's regulatory staff. There is no credit for a map system that is used only for planning drainage projects or other non-regulatory purposes. Using the system to provide map determinations for the permit office is considered a regulatory purpose.	
(3) New data, including annexations, new subdivision maps, flood insurance restudies, Letters of Map Revision, Letters of Map Amendment, and studies performed for site-specific analyses must be added at least annually to the data base or overlay map.	
(4) Data from a digitized mapping or parcel system must be made available annually to the Federal Emergency Management Agency (FEMA) at no cost (if requested). A fee may be charged to other requestors based on the actual cost of retrieval or reproduction.	
(a) Copies of the maps or data base that clearly show the items to be credited. For example, printouts of some GIS screens could show all the attributes to be credited.	
(b)[If the community calculates impact adjustment ratios for element AMD] The impact adjustment map discussed in Section 403. Each area listed in Section 442.a for which credit is being requested must be shown on the impact adjustment map	
Notes:	
<b>AMD1</b> For showing the SFHA boundaries, corporate limits, streets, and parcel or lot boundaries (a data base management program must show whether a parcel is in the SFHA)	
<b>AMD2</b> For a layer showing buildings, building outlines or footprints. Must show if the building is in the SFHA and must be kept up to date.	
<b>AMD3</b> For showing floodways or coastal high hazard areas	
<b>AMD4</b> For showing base flood elevations	
<b>AMD5</b> For FIRM zone attributes.	
<b>AMD6</b> For showing the 500-year flood elevations or boundaries	
<b>AMD7</b> For showing areas of the community subject to other natural hazards, such as landslides, subsidence, stream migration, or soils unsuitable for septic fields.	
<b>AMD8</b> (1)If the community's GIS includes contour lines (8 points)	
(2) If the system includes contours at a better resolution than the USGS digital orthophoto quarter quads for the area. (10 points)	
<b>AMD9</b> Updated floodplain data in the tax assessment data base.	
<b>AMD10</b> Overlays or layers of all past FIRMS.	
<b>AMD11</b> Other overlays or data bases used for regulation or mitigation purposes, including HAZUS or the community's repetitive loss areas.	
<b>AMD12</b> Areas with natural floodplain functions (wetlands, riparian habitat, flood storage)	
<b>AMD13</b> Digital building elevation data, not ECs.	
Notes:	

Activity 440 (Flood Data Maintenance) - continued			
<b>Firm maintenance (FM) (15 points)</b>			
	(1) Copies of the maps produced by the NFIP must be maintained. Under this element, credit is provided for maintaining copies of ALL FIRMs, i.e., every FIRM that appears on the list of FIRM revisions in the legend of each FIRM.		
	(2) Additional credit is provided for maintaining copies of the Flood Hazard Boundary Maps, i.e., the FEMA maps published before the community received its first FIRM.		
	(3) The maps and documents can be maintained in paper, microfilm, or electronic format.		
	(a) The indexes from all past FIRMs and Flood Boundary and Floodway Maps, and the cover of each past Flood Insurance Study.		
Notes:			
<b>Benchmark maintenance (BMM) (27 points)</b>			
	(1) There must be a list of the benchmarks and/or CORS and a description of the benchmark and/or CORS locations.	(a) The list of the benchmarks and/or CORS.	
	(2) To receive credit, each benchmark must meet all of the following criteria:	(b) The data for the creditable benchmarks that are in the NSRS or the community's publicly accessible data base. This must include key data, such as the location and description of the benchmarks, ... the elevation and datum, and:.	
	(a) It must be a benchmark that is either in the NSRS data base, or a permanent monument with key data posted in a reference system readily available to local surveyors,		
	(b) There must be a note that the benchmark has been recovered within the last five years.		
	(c) The benchmark must be a first- or second-order vertical control benchmark.		
	(d) It must have a stability rating of A or B.		
	(e) It must be within one mile of some part of the community's SFHA.		
	(3) Credit can be provided for CORS as an alternative or in addition to the benchmarks. There must be at least three CORS within 30 miles of the credited portion of the SFHA.		
	(4) An impact adjustment map is required that shows the community's SFHA, the locations of the listed benchmarks or CORS, and the portion of the SFHA that is within one mile of a qualifying benchmark or within 30 miles of a qualifying CORS.	(c) An impact adjustment map	
Notes:			
<b>Erosion data maintenance (EDM) (20 points)</b>			
	See: "Coastal Erosion Hazards - A Special Flood-related Hazards Supplement to the CRS Coordinator's Manual"		
Notes:			

Activity 450 (Stormwater Management Regulations) Max. 755 points	
Credit Criteria	Documentation
<b>Stormwater management regulations (SMR) (380 points)</b>	
(1) A portion of the watershed must be subject to a regulation that requires the peak runoff from new development to be no greater than the runoff from the site in its pre-development condition.	
(2) A community must have credit for size of development (SZ) and design storm (DS) in order to receive credit for SMR.	
(3) For SZ credit, the community must, at a minimum, regulate parcels of 5 acres or more or increases in impervious area of 20,000 square feet or more.	
(4) For DS credit, the community must require management of at least a 10-year storm. A regulation designed to retain or detain only the "first flush," the first inch of rainfall, or less than a 10-year storm, is not credited under SMR. However, it may qualify as a water quality regulation (WQ) and be credited under Section 452.d.	
(5) For DS credit, the community's regulations must require pre- and post-development hydrology calculations and post-development runoff must be limited to pre-development levels.	
(a) The needed documentation is assembled by the ISO/CRS Specialist and provided to the technical reviewer for this activity	
(b) A copy of the ordinance or legal language that regulates surface water runoff from new development in the watershed. For SMR credit, the language must require that peak runoff from new development be no greater than the runoff from the site in its pre-development condition. <i>The margin next to where this appears in the ordinance must be marked, e.g., "SMR."</i>	
(c) Development and building permit records that demonstrate enforcement of the regulations. Engineering reports showing compliance with the regulation must be included.	
(d) Documentation that watersheds outside the jurisdiction of the community are regulated if the community desires credit for their standards.	
(e) An impact adjustment map showing watershed boundaries and stormwater management jurisdictions.	
<b>[Required] Size of development (SZ)</b>	
(1) A copy of the ordinance demonstrating what types of development and what size of development is required to control the increase in stormwater flow due to development. <i>(Ordinance must be marked, e.g., "SZ.")</i>	
(2) A copy of the ordinance exempting some properties from the requirements.	
(3) If the standard is in a Drainage Manual a copy of the manual.	
(4) If applicable a copy of the ordinance adopting the manual.	
<b>[Required] Design storms used in regulations (DS)</b>	
(1) A copy of the ordinance demonstrating what storm events are used to determine compliance with the ordinance requiring the control of increased stormwater flow due to development. <i>(Ordinance must be marked, e.g., "DS.")</i>	
(2) A copy of the ordinance exempting some properties from the requirements.	
(3) If the standard is in a Drainage Manual a copy of the manual.	
(4) If applicable a copy of the ordinance adopting the manual.	
(5) Copies of five engineering reports showing how developers meet the standard.	
(6) A copy of the community's impact adjustment map.	



Activity 450 (Stormwater Management Regulations) - continued	
<b>Low-impact development (LID)</b>	
(1) A copy of the ordinance requiring that LID techniques be used to manage stormwater quantity prior to utilizing conveyance or detention facilities. ( <i>Ordinance must be marked, e.g., "LID."</i> )	
<b>Public maintenance of required facilities (PUB)</b>	
(1) Provide a copy of the ordinance requiring either <ul style="list-style-type: none"> <li>a) at least once each year, the owners of all stormwater management facilities constructed after the date of adoption of the regulation have the facilities inspected by a licensed professional engineer, perform any maintenance recommended by the engineer and submit an annual inspection report to the community,</li> <li>b) If the community requires the owners of all new facilities to allow the community to inspect their facilities. If problems are found, the owners must perform the necessary maintenance. If the owner fails to perform the required maintenance, the community (or agency) must have the authority to perform the maintenance and bill the owner for the work performed, or</li> <li>c) all facilities are dedicated to the community.</li> </ul> ( <i>Ordinance must be marked, e.g., "PUB."</i> )	
<b>Erosion and sedimentation control regulations (ESC) (40 points)</b>	
(1) To receive ESC credit, the community's regulations must apply to all construction sites within the community. An erosion and sedimentation control regulation that is part of a floodplain ordinance or a building code and does not affect ALL construction sites in the community does not receive credit under this element. "All construction sites" in the subsections below means all sites in the community subject to construction of buildings, roads, etc., regrading, or other non-agricultural land-disturbing activity.	
(b) Development and building permit records that demonstrate enforcement of the regulation. The ISO/CRS Specialist determines how many records are needed to obtain a representative sample.	
(a) A copy of the ordinance demonstrating the types of development and what size of development are required to provide erosion and sediment control during construction. ( <i>Ordinance must be marked, e.g., "ESC."</i> )	
(b) Development and building permit records that demonstrate enforcement of the regulation. The ISO/CRS Specialist determines how many records are needed to obtain a representative sample. <i>Records should demonstrate if site visits were completed.</i>	
<b>Water quality regulations (WQ) (20 points)</b>	
(1) Development and building permit records that demonstrate enforcement of the regulation. The ISO/CRS Specialist determines how many records are needed to obtain a representative sample.	
(a) The ordinance or law language that requires new development to implement appropriate best management activities to improve water quality. ( <i>Ordinance must be marked, e.g., "WQ."</i> ) <i>The ordinance should demonstrate what types of development and what size of development are required to implement permanent best management practices.</i>	
(b) Development and building permit records that demonstrate enforcement of the regulation. The ISO/CRS Specialist determines how many records are needed to obtain a representative sample. <i>Records should demonstrate if site visits were completed.</i>	
Notes:	



Activity 450 (Stormwater Management Regulations) - continued	
<b>Watershed master plan (WMP) (315 points)</b>	
	(1) The community must have adopted a watershed master plan for one or more of the watersheds that drain into the community, and the plan must identify the natural drainage system and constructed channels.
	(2) The community must have adopted regulatory standards that are based on the plan and that receive credit under SMR in Section 452.a.
	(3) The plan's regulatory standards must manage future peak flows so that they do not increase over present values.
	(4) The plan's regulatory standards must require management of runoff from all storms up to and including the 25-year event.
	(5) For any plan that is more than five years old, the community must evaluate the plan to ensure that it remains applicable to current conditions.
	(6) WMP1 credit must be received in order to receive credit for any of the other items.
(a)	The needed documentation is assembled by the ISO/CRS Specialist and provided to the technical reviewer for this activity
(i)	Documentation that the plan has been adopted by the community. "Adopted by the community" means either formal approval by the community's governing body or formal approval by another body or office of the community that has the authority and funding to implement the plan, such as a flood control district.
(ii)	Copies of the pages of the watershed master plan that show it meets the minimum criteria and the items to be credited. This can be an electronic copy of the plan with a description of the items to be credited and where they can be found in the plan.
(iii)	The ordinance pages credited under SMR in Section 452.a, showing the regulatory standards that are based on the plan (Section 452.b, credit criterion (2)).
(iv)	[For WMP8] A copy of the ordinance adopting the dedicated funding source and a budget describing how the money was spent during the past fiscal year.
(v)	A watershed impact adjustment map.
(vi)	If the plan(s) is more than five years old, an evaluation report that addresses whether the plan(s) is still based on appropriate data and effectively manages stormwater runoff. In lieu of a formal report, the community may submit a letter signed by a licensed professional engineer that addresses the following issues: <ol style="list-style-type: none"> <li>(1) The "future conditions" at the time the plan was completed: Do these conditions still reasonably reflect the actual watershed conditions today?</li> <li>(2) The precipitation data used for the plan's hydrology: Does the community or agency still use the same precipitation data that were used in the report?</li> <li>(3) Method used for the plan(s): Is the method used to develop the plan(s) considered appropriate by the agency today?</li> <li>(4) Construction: Has construction of stormwater infrastructure altered actual conditions in ways that make the plan(s) obsolete?</li> <li>(5) Other factors: Are there other aspects of the plan(s) that make it obsolete or otherwise of questionable applicability?</li> </ol>
(vii)	If the community determines the area covered by the watershed master plan (aWMP) to include watershed areas regulated by other communities: Documentation that watersheds outside the jurisdiction of the community are regulated to similar standards or are subject to the same plan as those within the community.

Activity 450 (Stormwater Management Regulations) - continued	
<b>WMP1 (90 points)</b>	
	(1) A copy of the ordinance adopting a watershed management plan affecting the community that identifies the natural drainage system and constructed channels.
	(2) A copy of the ordinance adopting regulatory standards based on the plan
	(3) The regulatory standards must require future peak flows to be no more than current peak flows
	(4) The standards must address at least the 25-year event
	(5) If more than five years old the community must determine if the plan is still current and provide documentation.
	(6) WMP1 credit is required in order to receive credit for any additional items.
<b>WMP2 (30 points)</b>	
	(1) The plan and the community's regulations manage the runoff from all storms up to and including the 100-year event. These must include the 10-year storm, a storm larger than the 10-year, but less than the 100-year and the 100-year storm.
<b>WMP3 (55 points)</b>	
	The plan manages peak flows and volumes to not increase over the existing values.
<b>WMP4 (35 points)</b>	
	(1) The plan manages runoff from all storms up to and including the 5-day event.
<b>WMP5 (30)</b>	
	(1) The plan identifies existing natural open space to be preserved from development so that natural storage of runoff is maintained.
<b>WMP6 (25 points)</b>	
	(1) The plan prohibits development, alteration, or modification of existing natural channels.
<b>WMP7 (25 points)</b>	
	(1) The plan requires channel improvement projects use natural approaches rather than hard techniques.
<b>WMP8 (25 points)</b>	
	(1) If there is dedicated funding source to implement the plan.
Notes:	

501 (The Repetitive Loss List)			
<b>Category A</b>			
	A community that has no repetitive loss properties, or whose repetitive loss properties all have been mitigated.	Signed copy of CC-RL	
		Copies of AW-501s	
Notes:			
<b>Category B</b>			
	A community with at least one, but fewer than 10, repetitive loss properties that have not been mitigated.	Signed copy of CC-RL	
Copies of AW-501s			
(2) (a) Prepare a map of the repetitive loss area(s),			
(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. A copy of the outreach project is submitted with each year's recertification.			
Notes:			
<b>Category C</b>			
	A community with 10 or more repetitive loss properties that have not been mitigated.	Signed copy of CC-RL	
Copies of AW-501s			
(2) (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. A copy of the outreach project is submitted with each year's recertification.			
(3) (b) Prepare a floodplain management plan or area analyses for its repetitive loss area(s).			
Notes:			

Activity 510 (Floodplain Management Planning) Max. 622 points	
Credit Criteria	Documentation
<b>Floodplain management planning (FMP) (382 points)</b>	
To receive any credit under this activity, the planning process must receive some credit under each of the 10 steps. <i>[See Activity 510 FMP Checklist – “2013 Manual 510 scoring.xls”.]</i>	
(1) With the submittal of the plan or the five-year update to the plan <b><i>[collect the following and send it to the technical reviewer]</i></b> ,	
(a) A copy of the plan or updated plan to be credited. This can be a hard copy, digital copy, or link to a website with the full document. Either the plan is marked, or a separate document is provided, to show where each credited step and sub-step appears. There is a checklist that can be used to do this, available at <a href="http://www.CRSresources.org/500">www.CRSresources.org/500</a> .	
(b) [For Step 1(b) credit for a committee of staff from different departments] The plan or a separate document must show which department representatives implement, or have expertise in, which of the six categories of mitigation measures.	
(c) [For Step 1(c) credit] A copy of the resolution or other official action taken by the governing body to create or recognize the planning process as specified in Step 1. For Step 2(a) credit for a planning committee, the resolution or action must identify the committee's membership.	
(d) [For Step 2(a) credit for a planning committee] The names of the committee members, their titles, and their represented organizations must be listed in the plan. The community may submit separate materials, such as meeting minutes and sign-in sheets, to document meeting attendance.	
(e) For Step 2(b), (c), or (d) credit for public meetings] Copies of the publicity for the public meetings. The notices of the meetings should be in the form of letters to floodplain residents, a notice sent to all residents, or a newspaper article or advertisement. An inconspicuous legal notice appearing in the classified section of the newspaper is not sufficient for CRS credit. If very few residents are affected, as may be the case for a plan that addresses only a repetitive loss area, a written record that the residents were called would be sufficient documentation.	
(f) [For Step 3(a) credit for reviewing existing studies, reports, and technical information] The plan must note where the information from the studies and reports was used, e.g., with quotations or footnotes. The plan also needs to include a list of all the documents reviewed. This is usually done in a reference section or at the end of each chapter.	
(g) [For Step 3(b) credit for coordination with other agencies and organizations] A record of the contacts and meetings. Acceptable records include letters that cover the items needed for coordination, copies of any responses that were received, follow-up memos from the meetings, notes from telephone conversations, and emails. These items are usually not included as a part of the plan document.	
(h) A copy of the resolution or other formal adoption action by the governing body as specified in Step 9. The resolution should identify the implementation responsibilities, describe the evaluation and revision procedures, and call for the five-year update (or adopt by reference such language that may be in the plan document).	
Notes:	

Activity 510 (Floodplain Management Planning) - continued			
<b>Repetitive loss area analysis (RLAA) (140 points)</b>			
	(1) Communities with one or more repetitive loss properties on FEMA's list must have at least one repetitive loss area delineated in accordance with the criteria in Section 503. The area(s) must include at least one of the properties on FEMA's repetitive loss list.		
	(2) An area analyses must have been prepared and adopted for each repetitive loss area in the community. The analyses must meet the following criteria:		
	(a) The repetitive loss areas must be mapped as described in Section 503.b.		
	(b) If the community does not conduct an analysis of all the areas, it will be reflected through the impact adjustment. A Category C community must prepare analyses for all of its repetitive loss areas if it wants to use RLAA to meet its repetitive loss planning prerequisite (see Section 502).		
	(c) A five-step process must be followed. Although all five steps must be completed, steps 2–4 do not have to be done in the order listed. For example, the planners may want to contact agencies and organizations to see if they have useful data (Step 2) after the site visit is conducted (Step 3).		
<b>[Collect the following and send it to the technical reviewer:]</b>			
	(a) A copy of each repetitive loss area analysis report or update of an earlier report that the community wants credited (see Step 5).		
	(b) Documentation showing how the owners or residents of the areas were notified (see Step 1).		
	(c) Documentation showing how the analysis was made available to the media and the public.		
	(d) A copy of the resolution or other formal action by the governing body that adopts the area analysis or accepts changes in subsequent updates.		
Notes:			
<b>Natural floodplain functions plan (NFP) (100 points)</b>			
(1) For all plans:			
	(a) The plan may cover more than one community, but it must have an impact on natural floodplain functions within the community seeking credit.		
	(b) The plan must be adopted. If the plan is not a community plan adopted by the community's governing body, it must be adopted by the appropriate regional agency.	(b) A copy of the resolution or other formal adoption action.	
	(c) The plan must be updated at least once every 10 years.		
	(d) The plan must include action items for protecting one or more identified species of interest and natural floodplain functions. The action items must describe who is responsible for implementing the action, how it will be funded, and when it will be done.		
	(e) There is no credit for a plan that addresses water quality issues prepared pursuant to a requirement for an NPDES permit.		
	(2) For NFP1: A plan for NFP1 credit must include a comprehensive inventory of the natural floodplain habitat within the community. It must identify areas that warrant protection or preservation in order to maintain fully functioning habitat for the species of interest. Where threatened or endangered species are present, each species must be addressed and a restoration plan must be included.		
	(3) For NFP2: This sub-element credits other plans that meet the credit criteria listed in (1). These could be single-issue or single-species plans or plans that cover only one area of the community's floodplain.		
<b>[Collect the following and send it to the technical reviewer:]</b>			
	(a) A copy of each NFP or update to a plan that the community wants credited.		
Notes:			

Activity 520 (Acquisition and Relocation) Max. 2,250 points			
Credit Criteria		Documentation	
	(1) It must have been an insurable building. A description of the kinds of buildings that can be counted toward this activity appears in Section 301 and 302. Note that when buildings are counted toward this and other CRS activities, only the primary structure on a lot is counted. There is no credit for removing accessory structures, such as detached garages and storage sheds.		
	(2) It must have been acquired or relocated after the date of the community's initial FIRM.		
	(3) The building site will remain preserved as open space. This is documented in the same way as crediting a property for open space preservation (OSP) in Activity 420. There is, in effect, the potential for duplicate credit for purchasing a property and maintaining it as public open space under Activities 520 and 420. There may also be additional credit if the property is preserved as open space under a deed restriction (DR) or restored to its natural condition (NFOS).		
	(4) If the building was relocated, there is no credit if it was moved to a site in the regulatory floodplain or a mapped repetitive loss area.		
	(5) A building is counted toward only one of the five elements.		
	(6) If a building was acquired or cleared with funding support from FEMA's Flood Mitigation Assistance (FMA) program, then the credit is 25% of the points listed for the element.		
	(7) Acquisition or relocation projects must have been compliant with applicable federal environmental and historic preservation laws and executive orders. A CC-520EHP must be completed for projects that are permitted or initiated after April 1, 2013. Credit is not provided if the project was not in compliance with applicable federal laws and executive orders.	7) Documentation of the implementation date for each project for which new credit is requested. A project is the building or group of buildings acquired or relocated within the same grant award, contract, or scope of work. A completed CC-520EHP is needed for projects implemented after April 1, 2013.	
	(8) There is no credit for a project initiated to meet the minimum criteria of the NFIP. Credit can be provided for buildings that were substantially damaged. Removing them from the floodplain is above and beyond the NFIP requirement that such buildings be brought up to post-FIRM conditions.		
(1) A map showing the location of parcels where buildings have been demolished or relocated since the effective date of the FIRM and the total number of such buildings (bAR, bRL, bSRL, bCF and bVZ). The map must show the community's regulatory floodplain boundaries, which include the SFHA, any LiMWA regulated areas, and any additional floodplain subject to the community's regulations. The SFHA is as shown on the current FIRM or on a published preliminary FIRM, whichever shows the larger floodplain. This map may be the same one used for documentation of open space credit under Section 424.d under Activity 420 (Open Space Preservation). It need only show the part of the community from which buildings have been cleared. It should show lot boundaries. The map will also be used by the ISO/CRS Specialist to check the sites during the verification visit.			
(2) Documentation that shows that each site credited under this activity can also qualify for credit in Activity 420. For properties in the regulatory floodplain, this may be done by applying for open space preservation (OSP) credit. For repetitive loss or Severe Repetitive Loss properties outside the regulatory floodplain, separate documentation is needed.			
(3) Calculations showing the total number of buildings in the SFHA (bSF). The variable bSF represents the number of buildings in the SFHA at the time of verification of this credit. It is discussed in detail in Section 302.			
(8) Identification of which properties if any, were cleared with support from FEMA's Flood Mitigation Assistance (FMA) program.			

Notes:			
<b>Activity 520 (Acquisition and Relocation) - continued</b>			
<b>Buildings acquired or relocated (bAR)</b>			
	(1) For bAR credit, buildings must have been acquired or relocated since the effective date of the FIRM.		
	(2) The building must have been located in the regulatory floodplain as shown on the impact adjustment map prepared in accordance with Section 403.	(4) Documentation showing that floodplain regulations are in effect in the area.	
	(3) A building that lies outside the regulatory floodplain because of remapping, completion of a flood control structure, or other activity is not eligible for this credit. Such a building has already benefited twice: first, it is not subject to the mandatory NFIP insurance purchase requirement; and second, if the owner chooses to purchase NFIP insurance, the premium will be based on the lower X-Zone rate.		
Notes:			
<b>Buildings on the repetitive loss list (bRL)</b>			
	(1) Credited buildings must be on FEMA's updated repetitive loss list for the community (see Section 501). Properties in mapped repetitive loss areas that are not on the list do not qualify for bRL (but may qualify for bAR if they are in the regulatory floodplain).		
	(2) The FEMA repetitive loss data base must be updated to reflect the mitigation project, as explained in Section 501.	(5) [For each parcel that is credited toward bRL or bSRL] Documentation and a marked-up form AW-501 to update the repetitive loss data base, as explained in Section 501.	
	(3) Buildings counted toward bAR, bSRL, bCF or bVZ are not counted toward bRL.		
	(4) To be credited toward bRL, the building may be located anywhere in the community, including outside the regulatory floodplain.		
	(5) A community with no properties on the FEMA repetitive loss list is not eligible for this credit.		
Notes:			
<b>Severe Repetitive Loss properties (bSRL)</b>			
	(1) Credited buildings must be designated as Severe Repetitive Loss properties on FEMA's updated repetitive loss list for the community (see Section 501).		
	(2) The FEMA repetitive loss data base must be updated to reflect the mitigation project (Section 501).	(5) [For each parcel that is credited toward bRL or bSRL] Documentation and a marked-up form AW-501 to update the repetitive loss data base, as explained in Section 501.	
	(3) Buildings counted toward bAR, bRL, bCF or bVZ are not counted toward bSRL.		
	(4) To be credited toward bSRL, the building may be located anywhere in the community, including outside the regulatory floodplain.		
	(5) A community with no Severe Repetitive Loss properties on the FEMA repetitive loss list is not eligible for this credit.		
Notes:			



Activity 520 (Acquisition and Relocation) - continued			
<b>Critical facilities (bCF)</b>			
	(1) For bCF credit, critical facilities must have been acquired or relocated, since the effective date of the FIRM.		
	(2) The critical facility must have been located in either the regulatory floodplain or the 500-year floodplain mapped on the current FIRM or on a published preliminary FIRM, whichever shows the larger 500-year floodplain. Critical facility buildings must have been relocated outside the 500-year floodplain.	(6) A description of the demolished or relocated critical facility to demonstrate that the facility meets the critical facility definition for CRS purposes.  Documentation that demonstrates that it has been relocated outside the 500-year floodplain.	
(4) Documentation showing that floodplain regulations are in effect in the area.			
Notes:			
<b>Buildings located in the V Zone or coastal A Zone (bVZ)</b>			
	(1) For bVZ credit, buildings must have been acquired, relocated, or otherwise cleared from the V Zone as shown on the current FIRM or on a published preliminary FIRM if adopted by the community. bVZ can also include buildings cleared from the area designated as a coastal A Zone or LiMWA, provided the community is receiving credit for regulating that area under CAZ in Activity 430 (Higher Regulatory Standards).		
	(2) Acquired, relocated, or otherwise cleared buildings located in the V Zone or coastal A Zone are counted under bVZ, not under bAR.		
Notes:			



Activity 530 (Flood Protection) Max. 1,600 points			
Credit Criteria		Documentation	
<b>All Projects: Retrofitting and Flood Control</b>			
(1) Each flood protection project (retrofitting technique or structural flood control technique) must meet the following criteria:			
	(a) The protected building(s) must be an insurable building(s) (see Section 301);		
	(b) The project must have been completed after the effective date of the initial FIRM;		
	(c) The project must protect the building(s) from at least the 25-year flood;		
	(d) All required permits must have been issued for the project or the local permit officer must state in writing that the project complies with all federal, state, and local codes and regulations;		
	(e) For critical facilities, to receive the bonus credit the buildings must be protected to at least the 500-year flood level;		
	(f) If the project requires human intervention, there must be at least one hour of flood warning time plus the time it takes to install the measure. "Human intervention" means that a person is needed at the site to close an opening or install or operate a protection device before flood waters reach the building; and		
	(g) Credit is not provided for a retrofitted building or flood control project that is in disrepair or does not appear to be maintained.		
	(4) Environmental compliance: Flood protection projects must adhere to applicable federal environmental and historic preservation laws and executive orders. CC-530EHP must be completed for all projects permitted or implemented after April 1, 2013. Credit is not provided if the project was not in compliance with applicable federal laws and executive orders.	(e) Documentation of the implementation date for each project for which new credit is requested. A project is the building or group of buildings acquired or relocated within the same grant award, contract, or scope of work.  A completed CC-530EHP, Certification of Compliance with Environmental and Historic Preservation for Flood Protection Projects, is needed for projects implemented after April 1, 2013.	
	List addresses or project areas requiring a CC-530-EHP:		
	(6) Regulatory floodplain: Credit is provided for buildings in the Special Flood Hazard Area (SFHA) shown on the current FIRM or preliminary FIRM, whichever is larger.		
	(d) A map showing the location of all protected buildings for which credit is being requested.		
	(f) [If the community is using Option 2 under Section 532.b] Calculations showing the total number of buildings in the SFHA (bSF). NOTE: The variable bSF must have the same value as bSF in Activities 510, 520, and 610.		
	(g) [For credit for protecting non-repetitive loss buildings located outside the SFHA] Documentation that shows that floodplain regulations are in effect in the area outside the SFHA.		

Activity 530 (Flood Protection) - continued	
<b>Retrofitting Projects, Elevation (TUE), dry floodproofing (TUD), wet floodproofing (TUW), sewer backup (TUS), barriers (or single building or property (TUB) (1,600 points)</b>	
(2) Retrofitting projects: In addition to the criteria in Section 531.b(1), the design of retrofitting projects for buildings located in the following high hazard areas must be signed and sealed by a registered design professional:	
	(a) V Zones, coastal A Zones, and areas seaward of the LiMWA;
	(b) Areas with velocities greater than 5 feet per second during the 100-year event; and
	(c) Areas subject to any of the special flood-related hazards listed in Section 401.
(a) [For elevation projects]	Copies of the Elevation Certificate for each elevated building.
(b) [For retrofitting projects other than elevation]	A list of all buildings for which credit is requested and a signed Community Certification for Retrofitted Buildings (CC-530).
<b>[530 credit worksheet.]</b>	
Notes:	
<b>Flood Control Projects: Channel modifications (TUC), storage facilities (TUF) (1,000 points)</b>	
(3) Flood control projects: In addition to the criteria in Section 531.b(1), structural flood control projects must meet the following:	
	(a) The design and construction of the project must have been certified by a licensed professional engineer;
	(b) The responsible agency must be implementing an operations and maintenance plan that was prepared for the project by a licensed professional engineer;
	(c) If the flood control project lowers the base flood elevation shown on the FIRM, a Letter of Map Revision (LOMR) must be submitted to FEMA, as required by the regulations of the National Flood Insurance Program (NFIP) at 44 <i>CFR</i> §65.3;
	(d) The community must ensure that the impact of future development will not adversely affect the project's flood protection level. This can be done by either (i) Enforcing watershed-wide regulations that prevent increases in stormwater runoff. This can be documented by receipt of credit for stormwater management regulations under Activity 450 (Stormwater Management) (i.e., credit for SMR or WMP with an impact adjustment of 1.0 for the watershed upstream of the project). The design storm (DS) must be at least as large as the flood protection level for the project; or (ii) Designing the project so that it will perform to its design protection level based on a watershed that is fully built out or developed in accord with an adopted long-range land use plan. The community must document that the protection level is still valid at each cycle verification; and
	(e) Additional documentation may be required for the review of flood control projects that are unique to a community or region.
(c) [For structural flood control projects]	
	(i) The level of flood protection for each building to be credited, both before and after the project was installed or constructed.
	(ii) [For buildings protected by a reservoir, detention basin, retention pond, or other facility that stores water above ground] A letter from the state dam safety office stating that the structure meets all state dam safety requirements. If there is no state dam safety office, then a registered design professional must certify that the project meets all appropriate dam safety criteria.

Activity 530 (Flood Protection) - continued	
(h) [If the flood control project revised the base flood elevation] A copy of the CLOMR submittal to FEMA.	
<b>[530 credit worksheet.]</b>	
Notes:	
<p><b>(5) Projects not credited:</b> The following projects are NOT credited under this activity:  List of properties considered for 530 credit, but do not qualify:</p>	
(If boxes checked below, then 530 credit is not allowed for those properties.)	
	(a) Projects that protect to less than the 25-year flood level;
	(b) Projects that protect buildings outside of the regulatory floodplain (except repetitive loss buildings);
	(c) Post-FIRM buildings. Credit is not provided for post-FIRM buildings because the NFIP already requires that they be protected. However, if a post-FIRM building was retrofitted to protect it from a flood hazard not covered by the FIRM or NFIP regulations, credit is provided under this activity. For example, a post-FIRM building may have been constructed to the base flood elevation shown on an old FIRM, but the current base flood elevation is higher because of a recent restudy. If the building is elevated again to protect to the new base flood elevation, then the community could receive Activity 530 credit. However, constructing a new building to meet the community's flood protection requirements is not retrofitting;
	<p>(d) Projects implemented due to a requirement of the NFIP, such as elevating a substantially damaged or substantially improved residential building. The following are examples of how this rule is applied:</p> <p>(i) Although elevating a building solely to meet the NFIP rules is not credited, credit is provided for bringing a noncompliant building into compliance if the project was implemented voluntarily or pursuant to a community action, such as providing financial assistance or declaring a dilapidated structure to be unsafe and uninhabitable.</p> <p>(ii) If a noncompliant building is removed, and replaced with a new building constructed to post-FIRM standards, it can be counted toward TU1. Demolishing and replacing a substantially improved or substantially damaged is not an NFIP requirement.</p> <p>(iii) Projects constructed to mitigate the adverse effect of not properly regulating new construction in accordance with a court order or an agreement with FEMA are not credited. Such an action would be considered one taken to meet the minimum requirements of the NFIP;</p>
	(e) If a building is removed but not replaced, and the parcel is preserved as open space, it can be counted toward credit under Activity 520 (Acquisition and Relocation). If a building is removed but not replaced, and the parcel is not preserved as open space, it can be counted toward TU1 because local codes will ensure that if anything is constructed, it will meet post-FIRM standards;
	(f) Coastal structural projects, including seawalls, groins, and beach nourishment;
	(g) Levees or floodwalls that protect more than one property. Levees are covered under Activity 620 (Levees);
	(h) Dams that are not in compliance with the state's dam safety regulations; and
	(i) Structural flood control projects owned AND operated by a federal agency. Credit is not provided for the major flood control works owned and operated by agencies such as the Corps, TVA and the Bureau of Reclamation. However, credit is provided for locally owned and operated projects that were partially funded by a federal agency.

Activity 540 (Drainage System Maintenance) Max. 570 points			
Credit Criteria		Documentation	
	(1) Credit for this activity is dependent upon annual or regular inspection of the conveyance system and/or storage basins. The community (or other non-federal agency) must have a program to inspect its drainage facilities annually, upon receiving a complaint, and after each major storm.		
	(2) The operations and maintenance of the drainage system can be provided by the community, another non-federal agency, or private property owners. Whether the operations and maintenance are performed by the community; a county, regional or state agency; or a private property owner, the CRS community is responsible for providing all the documentation needed to verify credit.		
	(3) No credit is provided for projects that rely on unsecured outside funding, such as a special appropriation from the state legislature or approval of a U.S. Army Corps of Engineers clearing-and-snagging project. Secure outside funding, such as an annual state distribution of gasoline tax receipts, is acceptable.		
	(4) Environmental compliance—The community's program for drainage system maintenance must be compliant with applicable federal environmental and historic preservation laws and executive orders. The community must complete a CC-540EHP. Credit is not provided if local drainage system maintenance procedures are not compliant with applicable federal laws and executive orders.	CDR and SBM (e) A completed Certification of Compliance with Environmental and Historic Preservation Requirements for Drainage System Maintenance (CC-540EHP).	
	(5) There may be special restrictions on drainage system components or facilities, or requirements to obtain a federal or state permit before certain work can proceed. Often, a "general" or "statewide" permit or other permission can be granted in advance for projects that are specifically described in the permit. Such laws and regulations usually do not preclude all maintenance work, but they may place restrictions on activities that disturb natural or protected areas. These restrictions must be included in the community's procedures		
Notes:			
<b>Channel debris removal (CDR) (200 points)</b>			
	(2) The community (or other non-federal agency) must have a program to inspect and maintain its drainage facilities, and inspections must be conducted (a) At least once each year, (b) Upon receiving a complaint, and (c) After each major storm. Action must be taken after an inspection identifies a need for maintenance or cleaning.		
	(3) The community must provide a map of the conveyance system with components (structures and segments) of the drainage system labeled.	(b) The map of the community's drainage maintenance area with the conveyance system delineated and its components (structures and segments) labeled.	
	(4) The community must provide a complete inventory of its conveyance system components.	(c) A complete inventory of the components of the community's conveyance system.	

Activity 540 (Drainage System Maintenance) - continued			
<b>Channel debris removal (CDR) (continued)</b>			
	(5) Procedures for inspection and maintenance must be in the form of written procedures or guidelines. These are explained in "Drainage System Inspection and Maintenance Procedures," below.	(a) A copy of the procedures, instructions, or other documents that explain the community's routine inspection and debris removal program.	
	(6) All the inspection and maintenance activities must be recorded and the records must be maintained until the next verification visit.	(d) Copies of the records that show that inspections were conducted and maintenance was performed when inspections revealed problems.	
Notes:			
<b>Problem site maintenance (PSM) (50 points)</b>			
	(2) The community must also be receiving credit for CDR.		
	(3) The community must have written procedures or guidelines that identify each problem site component, what the issues are, and what special inspection and/or maintenance is needed. These are explained in "Maintenance Procedures for Problem Sites," below.	(a) A copy of the procedures, instructions, or other documents that explain the community's problem site inspection and maintenance. These are likely to be part of the procedures submitted for CDR credit. The special problem site inspection and maintenance procedures need to be identified, e.g., marked in the margin as "PSM."	
	(4) The problem sites are identified on the community conveyance system map developed for CDR credit and noted in the conveyance system component inventory.	(b) The inventory of the components of the community's conveyance system prepared for CDR, annotated to show which components are problem sites.	
	(5) The community's maintenance program must require that (a) An inspection be conducted more than once each year, (b) An inspection of each problem site component be conducted after each major storm, and (c) Action be taken after an inspection identifies a need for maintenance or cleaning.		
	(c) Copies of the records showing that inspections were conducted and that maintenance was performed when inspections revealed problems.		
Notes:			
<b>Capital improvement program (CIP) (70 points)</b>			
	(2) The community must also be receiving credit for CDR.		
	(3) Sites that are improved through the program must be in the community's conveyance system as defined in its procedures to document CDR. Projects to improve road drainage or storm drains can only be credited if those sites are identified in the community's procedures and regularly inspected and maintained.		
	(4) There must be a "master list" of problem sites that are planned for improvement projects. The list can be prepared from master watershed plans, complaints, or reports from maintenance crews. Projects do not have to be prioritized or listed in any order.		

Activity 540 (Drainage System Maintenance) - continued			
	(5) For full credit, an engineering analysis must have been completed that identifies the problem and provides a solution. It must include an estimate of the 1% annual chance (100-year) flood at the problem site and the resulting flood elevations. The design of the "solution" may use a lower design standard, but the community needs to recognize the impact of the 1% flood.		
	(6) The community must spend money on a regular basis on such improvement projects (a one-time-only project would not be credited). This can be documented by a multi-year capital improvements budget or line items in several years' budgets that fund drainage improvement projects.		
	(a) Excerpts from the capital improvement plan or other documentation that shows that the community (or other drainage maintenance agency) has an ongoing program to reduce drainage maintenance problems. The submittal must include		
	(i) A master list of the community's drainage maintenance problem sites that are in need of elimination or correction.		
	(ii) Recommended correction measures for the problem sites.		
	(iii) Documentation that funds are spent on capital improvement projects each year.		
	(iv) If full credit is requested, documentation of the engineering analysis.		
Notes:			
<b>Stream dumping regulations (SDR) (30 points)</b>			
	(2) The community must also be receiving credit for CDR.		
	(3) The regulations that prohibit disposal of debris in the community's drainage system must be enforced throughout the entire community. The ordinance or law must designate an office or official responsible for receiving complaints and monitoring compliance and it also must include enforcement and abatement provisions.	(a) A copy of the stream dumping ordinance or law prohibiting the disposal of debris in the affected drainage system. The acronym SDR must be marked in the margin of the ordinance sections that pertain to this element, including the responsible office or official	
	(4) Additional credit is provided if the community publicizes the regulatory requirements that prohibit stream dumping. This may be done through the following outreach projects:	(b) A copy of the notice, outreach project, or other medium through which the service is publicized.	
	(a) A notice sent to all property owners in the community (which may or may not be credited under OP in Activity 330); or		
	(b) Posting "no dumping in the stream" signs at key locations in the drainage system, such as frequent problem spots, schools, or public park; or		
	(c) An outreach project identified in the community's PPI if the PPI publicizing drainage system maintenance and the regulations that prohibit dumping.		
Notes:			

Activity 540 (Drainage System Maintenance) - continued			
<b>Storage basin maintenance (SBM) (120 points)</b>			
	(2) The community must also be receiving credit for both SZ and PUB within element SMR under Activity 450.		
	(3) The community must have a program to inspect and maintain its storage basins, and inspections must be conducted (a) At least once each year, (b) Upon receiving a complaint, and (c) After each storm that could adversely affect the drainage system. Action must be taken when an inspection reveals a need for maintenance or cleaning. Procedures for inspection and maintenance must be in the form of written procedures or guidelines.	(a) A copy of the procedures, instructions, or other documents that explain the community's storage basin inspection and maintenance program.	
	(4) The location of all public and private storage basins must be mapped.	(b) The map showing the location of all storage basins in the community.	
	(5) The community must have a complete inventory of storage basins within its jurisdiction.	(c) The inventory of all storage basins located in the community.	
	(6) All the maintenance and inspection activities must be recorded and the records must be maintained until the next verification visit.	(d) Copies of the records that show that inspections were conducted and maintenance was performed when the inspections revealed problems.	
(e) A completed Certification of Compliance with Environmental and Historic Preservation Requirements for Drainage System Maintenance (CC-540EHP).			
Notes:			



## Activity 610 (Flood Warning & Response) Documentation Checklist

### Activity Credit Criteria and Documentation

Credit criteria for this activity are described in more detail in Section 611.b of the *CRS Coordinator's Manual*.

- (1) The community must obtain some credit in the first four flood warning and response elements [flood threat recognition system (FTR) , emergency warning dissemination (EWD), flood response operations (FRO) and critical facilities planning (CFP) to receive any credit under this activity.
- (2) The community must have a description of its flood hazard that includes information about
  - ☐ The nature of the community's flood hazard, such as flood depths, velocities, warning times, historical flood problems, and special flood-related hazards.  
[See Attachment \_\_\_\_\_ Pages \_\_\_\_\_.]
  - ☐ 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.  
[See Attachment \_\_\_\_\_ Pages \_\_\_\_\_.]
  - ☐ The expected impacts of flooding on health and safety, community functions, such as police and utility services, and the potential for secondary hazards.  
[See Attachment \_\_\_\_\_ Pages \_\_\_\_\_.]
- (3) The community must have a flood inundation map(s), also known as a flood stage forecast map.
  - ☐ The inundation map must show areas that are inundated by at least three different flood or storm surge levels.  
[See Attachment \_\_\_\_\_ Pages \_\_\_\_\_.]
- (4) The community must have a flood warning and response plan that has been adopted by the community's governing body. The plan must:
  - ☐ Describe the methods and warning devices used to disseminate emergency warnings to the general public that are credited under EWD.  
[See Attachment \_\_\_\_\_ Pages \_\_\_\_\_.]
  - ☐ Include specific flood response actions that are taken at the different flood levels that are credited under FRO. The FTR system must be correlated to the flood inundation map.  
[See Attachment \_\_\_\_\_ Pages \_\_\_\_\_.]



Community : \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_

- ☐ For full credit for flood response operations, the plan needs to
  - (a) Describe the actions to be taken, [Pages \_\_\_\_\_.]
  - (b) Identify the office or official responsible for the action, [Pages \_\_\_\_\_.]
  - (c) Define the time needed to carry out the activity, and [Pages \_\_\_\_\_.]
- ☐ Contain other critical information that designated agencies and organizations will need in order to perform their assigned responsibilities. [Pages \_\_\_\_\_.]
- ☐ Be adopted by the community's governing body or by an office that has been delegated approval authority by the community's governing body. If the plan is prepared at the county/parish level, it must be adopted by the individual community seeking credit.  
[See Attachment \_\_\_\_\_ Pages \_\_\_\_\_.]

(5) The community must implement one or more outreach projects that tells its residents and businesses how they will be warned and the safety measures they should take during a flood. This can be done by using **one or more** of the following approaches (check or highlight approach used):

- \_\_\_\_\_ Sending an outreach project (e.g., a brochure, letter, or newsletter) each year to all residents and businesses in the community.
  - \_\_\_\_\_ Sending an outreach project each year to all residents and businesses in the floodplain where the warning program is in effect.
  - \_\_\_\_\_ Developing an appropriate approach as part of a Program for Public Information (PPI).
  - \_\_\_\_\_ If the community has at least three days of advance flood notification, such as coastal areas subject only to tropical storms and hurricanes or communities on large rivers, it may document that it provides repeated watch, warning, and safety information to all residents and businesses, beginning at least 72 hours in advance of the predicated flooding.
  - \_\_\_\_\_ A community with more than one source of flooding (e.g. coastal and riverine) may need to use different types of projects to reach different audiences.
- ☐ A copy of the outreach material used to tell people how they will be warned and the safety measures they should take.  
[See Attachment \_\_\_\_\_ Pages \_\_\_\_\_.]

If the outreach material is also credited under Activity 330 (Outreach Projects), a separate submittal is not needed, provided that the other document (including a PPI, if used) is annotated to show where the Activity 610 outreach topics are covered.

(6) There must be at least one exercise and evaluation of the flood warning and response plan each year. The exercise can be for a flood, levee failure, dam failure, or hurricane. (Criterion can be met if implemented by an actual flood or threat of failure.)

Community : \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_

- ☐ A description of the flood exercise, drill, or response to an actual emergency or disaster response conducted during the previous year. The description must include a list of who participated, lessons learned, and any recommendations for changes to the system. A copy of the after-action report or any similar report for any actual response is required.

[See Attachment \_\_\_\_\_ Pages \_\_\_\_\_.]

**NOTE:** If the community experienced a flood during the past year, it must submit an evaluation report on the flood warning program's performance.

### **Flood Threat Recognition System (FTR) Credit Criteria and Additional Documentation**

- (1) The activity credit criteria must be met.
- (2) The community must have a Level 1, Level 2, or Level 3 flood threat recognition system that provides early notice of a flood for at least one location within the community. The system must be able to receive or provide flood warnings 24-hours a day, seven days a week. A community may have different levels of service for different sources of flooding, and in different locations in the community.

- a. Provide a description of the flood threat recognition system.

- ☐ **The description must identify** the rivers, streams, and coastal floodplains where flood stage forecasts are prepared and each forecast point.
- ☐ If the community has its own gage system, such as an ALERT system, **the description must include** the locations of the stream and precipitation gages.
- ☐ Include documentation of early notice of a flood at one or more locations within the community. If appropriate, describe show how the community provides flood forecasts for areas other than the above forecast points.

[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

- ☐ Provide documentation that demonstrates that the community is prepared to receive flood warnings on a 24-hour basis from what federal, state, or other agencies.

[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

- ☐ If the community or another local agency uses rainfall and/or runoff data on a real-time basis and makes flood forecasts from these data, provide a description of the system. [*Tell whether the collection system is based on precipitation and/or river gage data that are manually or automatically read and reported, the location gage network density, etc.*]

[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

- ☐ Provide documentation showing the method used to predict downstream arrival time and peak flow or elevations.

[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

Community : \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_

- ☐ If flood warnings are received from another agency, include
  - A description of how the notice is received.  
[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]
  - Identify local agency procedures for monitoring the system. [Include the written instructions available to the person monitoring the warning system.]  
[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]
- ☐ Provide examples of one or more flood forecast notices issued for the community.  
[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]
- ☐ If the community has its own gage system, such as an ALERT system, a copy of the maintenance procedures for the system and records showing that the system is being maintained.
  - Provide documentation of the annual maintenance and testing of the data collection, communications, and data analysis components of the flood threat recognition system.  
[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

(3) The flood threat recognition system must be correlated to the flood inundation map, so that the emergency manager can see what areas will be affected by the predicted flood.

- ☐ An impact adjustment map showing the area(s) affected by each element and documentation showing how the numbers of buildings used in the calculations were determined.  
[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

### **Emergency Warning Dissemination (EWD) Credit Criteria and Additional Documentation**

(1) The activity credit criteria must be met.

(2) The warning must reach people in a timely manner. For example, television or radio announcements are not credited in areas subject to flash flooding during the night.

(3) For those warning systems requiring specialized equipment, such as sirens, the equipment and procedures must be tested at least annually. Equipment that is used routinely throughout the year, such as television notices and message boards, do not need testing records for CRS credit.

- ☐ Copies of any written warning materials, such as handouts or the flood inundation map credited under EWD 10. [See Attachment \_\_\_\_\_.]
- ☐ [For EWD1, 2, 5, 6, or 7] A copy of the pre-scripted messages. [See Attachment \_\_\_\_\_.]
- ☐ [For EWD3] The impact adjustment map, showing the siren locations and their effective coverage areas. [See Attachment \_\_\_\_\_.]

Community : \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_

- ☐ [For EWD6] A copy of the description of a publicly owned call warning system or a copy of the contract with a private provider. *[See Attachment \_\_\_\_\_.]*
- ☐ [For EWD7] A copy of the cable TV agreement and override procedures. *[See Attachment \_\_\_\_\_.]*
- ☐ [For EWD8] A description of the capability and use of other forms of public notification. *[See Attachment \_\_\_\_\_.]*
- (4) Provide documentation that the local government has adopted an emergency response plan which specifies when and how a warning is issued and what messages will be used. Provide a copy of the adopted policy that specifies when and how a warning is issued. *[Include the written procedures that tell warning point personnel when, how, and what messages to issue.] [See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]*
- (5) Describe the community's program for testing warning dissemination equipment and procedures. *[Include the frequency of the tests.] [See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]*
- (6) If the community uses either an outdoor voice-sound system or siren system to disseminate flood warnings, provide a map showing the location of the sirens and the coverage area where they can be heard inside a closed building during storm conditions. *[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]*
- (7) If the community uses door-to-door contact or a mobile public address system for flood warning, provided documentation describing how the tasks are organized and conducted. *[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]*
- (8) If the community's response plan includes flood warning using the Emergency Alert System, provide a copy of the community's activation policies, procedures, and example messages. *[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]*
- (9) If a telephonic system is used to warn all residents in the SFHA, provide documentation describing how and when the system is updated, and its backup system for warning residents when there is no telephone answer provided. *[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]*
- (10) If the community has established local AM radio transmitters used for public warning announcements, provide documentation on the procedures for their use. *[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]*
- (11) If the community has other warning methods not described above, these may be submitted for credit evaluation. *[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]*
- (12) If the flood inundation map is posted online, provide URL. \_\_\_\_\_.

### **Flood Response Operations (FRO) Credit Criteria and Additional Documentation**

- (1) The activity credit criteria must be met.
- (2) For full credit for flood response operations, the plan needs to:
  - (a) \_\_\_\_\_ Describe the actions to be taken;
  - (b) \_\_\_\_\_ Identify the office or official responsible for the action;
  - (c) \_\_\_\_\_ Define the time needed to carry out the activity, and;
  - (d) \_\_\_\_\_ Contain other critical information that designated agencies and organizations will need in order to perform their assigned responsibilities. General statements or an assignment of responsibilities with no specifics about what is to be done are not credited.
- (3) Bonus credit is provided under FRO5 if there is a list of the personnel, equipment, facilities, supplies, and other resources needed to complete each task. For full credit the list must identify what is available within the community and what is needed from private suppliers or other jurisdictions. *[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]*
- (4) FRO6 provides bonus credit for evacuee planning, permit requirements, implementing flood loss mitigation measures on community properties, and promoting flood loss mitigation measures on private properties. This should be coordinated with the public information activities credited under flood response preparations (FRP) under Activity 330 (Outreach Projects), which encourages owners to take mitigation measures during repairs.  
*[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]*
- (5) FRO7 provides bonus credits for identifying response and recovery measures to take that support property protection, such as providing a high-ground site for relocated vehicles, helping move building contents, and distributing sandbags.  
*[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]*
- ☐ Copies of the appropriate documents, for the credited items that are not in the flood warning and response plan.  
*[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]*

### **Critical Facilities Planning (CFP) Credit Criteria and Documentation**

- (1) The activity credit criteria must be met.
- (2) CFP1 is a prerequisite for any CFP credit.
- (3) For CFP1, the community's flood warning and response plan must list the facilities considered critical in a flood. This can be in a separate document or SOP. In general, facilities not subject to flooding do not need to be addressed, although in some cases loss of access can cause a critical situation. There may also be facilities in flood-free sites that are needed to support the flood response effort (e.g., sandbag suppliers and shelters for evacuees). The list must be updated at least annually. The community must also contact the facilities to determine if they need any special warning arrangements. The community does not need to provide a special warning to all critical facilities, only those that need one.

Community : \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_

- ☐ The names and phone numbers of the operators of all public and private critical facilities affected by flooding. [See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]
- ☐ Arrangements for special warnings or early notifications directly to those critical facilities that need advanced warning. [See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]
- (4) For CFP2, credit (based on the percentage of affected critical facilities that have creditable plans) is provided if critical facilities listed under CFP1 have their own flood warning and response plans have been developed, reviewed, or accepted by the community.  
[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

At each verification visit, a list of all public and private critical facilities affected by flooding or needed to be operational during a flood, with the contact information and agreed-upon warning needs must be provided. [For CFP2] The list of critical facilities marked to identify those that have developed their own flood warning and response plans that have been reviewed and accepted by the community. The ISO/CRS Specialist will ask for samples of the plans for review. [See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

#### **StormReady Community (SRC):**

- (1) The activity credit criteria must be met.
- (2) The community must be designated as a StormReady community by the NWS.

For SRC credit, the community is not required to provide documentation. SRC is documented by the list of StormReady communities posted on the National Weather Service website.

#### **TsunamiReady Community (TRC):**

- (1) The activity credit criteria must be met.
- (2) The community must be designated as a TsunamiReady community by the NWS.
- (3) The community must meet the CRS tsunami hazards mapping requirements identified in *CRS Credit for Mitigation of Tsunami Hazards*.

- ☐ Compliance with the mapping requirements for special flood hazards credit, as described in CRS Credit for Management of Tsunami Hazards, sections 410TS and 430TS, and.  
[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

- (4) The community must have adopted a tsunami hazards operations plan that describes the actions the community is to take upon receiving a tsunami warning.

- ☐ A copy of the adopted tsunami hazard operations plan or annex that addresses actions to take after a tsunami warning.  
[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

No documentation is required of communities to demonstrate their TsunamiReady status.

Community : \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_

Credit is confirmed based on the list of TsunamiReady communities posted on the National Weather Service website.

☐ **NEW APPLICATION** ☐ **MODIFICATION** ☐ **CYCLE DOCUMENTATION**

Provide this checklist and the following for each item checked:

- ☐ (1) A CD with the documents. Note the file name and the appropriate pages and section numbers, or
  - ☐ (2) The URL for on-line documents with the appropriate pages and section numbers noted here, or
  - ☐ (3) A paper copy of the documents with the appropriate acronym marked in the margin.
  - ☐ (4) A copy or URL link to the Comprehensive Emergency Management Plan, Emergency Management Plan, or similar plan through which the community is applying for Activity 610 credit.
  - (5) If the community is included in another jurisdiction's plan (which implements a multi-jurisdictional flood warning program), then:
    - ☐ (a) A copy of a resolution or memorandum of agreement that specifies the community's responsibilities must be included, or
    - ☐ (b) A statement from the applicant community's Emergency Manager or a similar community program designee must be submitted which lists those flood warning and response activity elements that are undertaken by the applicant community and those activities that are undertaken by the other jurisdiction on behalf of the applicant community.
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	CRS Coordinator	Emergency Manager
Name		
Title		
Address		
Phone		
E-mail		

Form Completed By: \_\_\_\_\_ Date: \_\_\_\_\_

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Comments: \_\_\_\_\_  
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Community : \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_

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## Activity 620 (Levees) Documentation Checklist

### Levee Failure Recognition (LFR), Levee Failure Warning (LFW), Levee Failure Operations (LFO), and Levee Failure Critical Facilities (LCF) Credit Criteria and Documentation

Credit criteria for this activity are described in more detail in Section 621.b of the *CRS Coordinator's Manual*. The community must receive some LM 1 and LM 2 credit and some credit for LFR, LFW, LFO, and LCF to receive any credit under this activity.

- (1) The levee system(s) for which the community requests credit (or qualification for credit) must have been designed and constructed as a levee (see Section 120 (Glossary)). Structures such as road and railroad embankments that divert flood waters are not considered “levees” for the purposes of this credit unless it can be documented that they were intended to be levees and were designed and constructed accordingly.

- ☐ For an accredited levee: A statement signed by the owner of the community levee(s) or a by a licensed professional engineer that states that the levee(s) meets all the NFIP levee recognition requirements; and the community must provide documentation that verifies the inspection, maintenance, and emergency action plan criteria of the accredited levee(s).

[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

- (2) The levee system(s) for which the community requests credit (or qualification for credit) must be operated and maintained by a public agency. This could be a federal or state agency, a levee district, an office or department of the community, or other public entity.

- ☐ For the levee(s), being requested for credit, documentation that the levee(s) is operated and owned by a public agency and was designed and constructed using sound engineering practices to contain, control, or divert flood waters in accordance with a designated risk reduction level. [Also provide levee name(s) (e.g., “Salt Creek Levee”) and owner name(s).]

[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

- (3) The community must submit a map showing the location of each levee and the areas that would be flooded if the levee were to be overtopped or fail and an inventory of the buildings and critical facilities that would be flooded upon overtopping or failure. For each levee, the following information must be submitted:

- ☐ (a) The approximate protection level of the levee and the expected overtopping elevation, if different.

[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

- ☐ (b) A map of the levee(s) and the area(s) affected should the levee(s) be overtopped or fail. If there are no detailed levee breach maps or levee failure studies, then the map

Community : \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_

would show the area below the expected overtopping elevation. Guidance for this mapping can be found in Section 621.c.

[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

- ☐ (c) 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).  
[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

- ☐ (d) A list of the critical facilities that would be flooded or otherwise affected by a failure or by the overtopping of the levee.  
[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

- (4) The community [or levee owner] must have a **levee maintenance plan** that includes annual inspections and an emergency action plan for the levee system(s), and the plans must meet the credit criteria for LM1 and LM2.

- (5) The community must implement one or more **outreach projects** to the residents and businesses in the area(s) expected to be inundated by a flood that overtops a levee. The project(s) must tell people about their risk of flooding, how they will be warned of a levee failure flood, the safety measures they should take during a flood (e.g., evacuation procedures and routes), and the benefits of purchasing flood insurance. This can be done by using one or more of the following approaches:

\_\_\_\_\_ (a) Sending an outreach project (e.g., a letter, brochure, or newsletter) each year to all properties with insurable buildings in the area(s) subject to a flood that overtops the levee, or

\_\_\_\_\_ (b) Developing an appropriate approach as part of a Program for Public Information credited Activity 330 (Outreach Projects).

- ☐ Documentation of outreach projects to the residents and businesses in the area(s) which will be inundated by a levee overtopping.

[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

- (6) The community must obtain some credit in all four levee failure warning and response elements (LFR, LFW, LFO, and LCF) to receive credit for its local levee failure and response planning.

Community : \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_

- (7) To receive LFR, LFW, LFO, and LCF credit, the community must have a **levee failure flood warning and response plan** [or emergency action plan] that has been adopted by the community's governing body. The plan should be part of, and must meet the same criteria as, the community's flood warning and response plan described in Section 611.b(4).

The plan or related document must be marked to show where the credited items appear and must: [See Attachment \_\_\_\_\_.]

- ☐ Describe the levee failure threat recognition procedures (LFR), [pages \_\_\_\_\_.]
- ☐ Describe the levee failure emergency warning procedures (LFW), [pages \_\_\_\_\_.]
- ☐ Describe the levee failure operations and actions (LFO). For full credit for LFO, the plan needs to
  - ☐ (a) Describe the actions to be taken; [pages \_\_\_\_\_.]
  - ☐ (b) Identify the office or official responsible for the action; [pages \_\_\_\_\_.]
  - ☐ (c) Define the time needed to carry out the activity; and, [pages \_\_\_\_\_.]
  - ☐ (d) Contain other critical information that specified agencies and organizations need in order to perform their assigned responsibilities. [pages \_\_\_\_\_.]

- (8) There must be at least one exercise or drill of the levee failure warning and response plan each year. This can be an exercise for a flood, levee failure, dam failure, or hurricane. This criterion can be met if the plan is implemented in response to an actual flood or threat of a levee failure. In either case, there must be an evaluation of the performance of the plan and recommended changes that may be needed, as is usually done in an After-Action Report.

- ☐ Documentation of the annual levee flood warning and response plan exercise, to include an evaluation of the plan's performance and recommended changes. The exercise must include the procedures for monitoring levee conditions credited under LFW and the procedures for warning people credited under LFW.  
[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

### **Levee Maintenance (LM) Credit Criteria and Additional Documentation:**

- (1) The community must qualify for some LM1 and LM2 credit to receive any LM credit or to qualify for any Activity 620 credit.
- (2) To qualify for LM1 credit, the levee system maintenance must:
- (a) Ensure that the levee system's stability, height, and overall integrity are maintained. Encroachments must be controlled to ensure that they do not compromise the levee's integrity, hinder operations and maintenance, and/or diminish the ability to engage in flood fighting activities. Maintenance programs must correct problems posed by existing encroachments.  
[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

Community : \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_

(b) Provide **written operations and maintenance procedures** that include:

- (1) Annual inspections of the condition of the levee system (i.e., the levee structure, pump stations, closure devices, etc.); *[pages \_\_\_\_\_.]*
- (2) The maintenance activities to be performed; *[pages \_\_\_\_\_.]*
- (3) The frequency of their performance, and; *[pages \_\_\_\_\_.]*
- (4) The person responsible for their performance (by name or title).  
*[pages \_\_\_\_\_.]*

☐ Copy of the community or levee owner written operation and maintenance procedures.  
*[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]*

(c) Perform and document **annual inspections and needed maintenance** of levees and floodwalls, as well as pumps, interior drainage systems, closures, penetrations, and transitions that provide for system integrity.

☐ Documentation that all levees to be credited have been inspected during the previous year and are being maintained in accordance with the procedures and standards of the LM1 plan.

*[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]*

(3) To qualify for LM2 credit, the [levee owner's] emergency action plan must have a written operations plan or manual that describes what must be done by the agency that owns the levee when a flood occurs.

☐ Copy of the levee owner emergency action plan.  
*[See Attachment \_\_\_\_\_.]*

It must include:

(a) A list of all actions that need to be taken at different flood levels, including:

- (1) Procedures to notify the local emergency managers of a potential problem,  
*[pages \_\_\_\_\_.]*
- (2) All openings and closures that need to be closed and the location of the equipment and materials to effect the closure, *[pages \_\_\_\_\_.]*
- (3) Periodic patrols of the levee to detect problems such as erosion and seepage;  
*[pages \_\_\_\_\_.]*

(b) The person or office responsible for their performance (by name or title); *[pages \_\_\_\_\_.]*

(c) [Requirements for] Annual inspections of all equipment and material needed for the plan, such as vehicles and stockpiled sandbags; and *[pages \_\_\_\_\_.]*

Community : \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_

- (d) [Requirements for] Annual tests of all closures, pumps, and other equipment needed to implement the emergency action plan. Any equipment that is used routinely throughout the year, such as vehicles and drainage pumps, do not need testing records for CRS credit. The plan may be in the same document as the LM1 maintenance plan.

[pages \_\_\_\_\_.]

- ☐ Copies of records showing the most recent annual inspection of all equipment and material needed for the LM 2 emergency action plan.

[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

- (4) The levee maintenance program must be compliant with applicable federal environmental and historic preservation laws and executive orders (see Section 507). Credit is not provided if levee maintenance procedures are not compliant with applicable federal laws and executive orders.

- ☐ Completed and signed CC-620EHP, Certification of Compliance with Environmental and Historic Preservation Requirements for Levee Maintenance. CC-620EHP must be signed by each agency that is responsible for the levee maintenance program of each levee.

[Attachment signed copy or copies of the CC-620EHP.]

**Levee Failure Threat Recognition system (LFR) Credit Criteria and Additional Documentation:**

- (1) The threat recognition procedures must be in the levee failure warning and response plan or a related document.

- (2) To receive LFR credit, some credit points must be obtained under both LFR1 and LFR2.

- (3) For monitoring flood conditions and LFR1 credit:

- (a) The community and the levee owner must have a flood threat recognition system that monitors conditions. This would be a system that provides early notification of rising waters that may threaten the levee's integrity. The system must meet the credit criteria of FTR in Activity 610 (Flood Warning and Response). A National Weather Service flood potential outlook or flood watch would also be sufficient.

[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

- (b) Additional credit is provided for redundant or backup monitoring systems along a levee that send a signal to the emergency manager if water is rising on the landward side of the levee. This system could use automated flood alarms or automated flood warning systems, or it could rely on trained spotters.

[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

Community : \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_

- (c) The equipment used for the flood monitoring must be tested at least annually. For CRS credit, testing records are not needed for equipment that is used routinely throughout the year, such as radios and vehicles.

[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

- ☐ Copies of records showing the most recent annual test of all equipment and material needed for the system.

[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

- (4) For LFR2 credit, the community and/or the levee owner must initiate the monitoring of levee conditions when certain, pre-defined flood conditions are present, and

- (a) The monitoring procedures must cover:

- (a) Levee patrol staffing and assigned sections of the levee system;

[pages \_\_\_\_\_.]

- (b) How and when the patrol teams are activated; [pages \_\_\_\_\_.]

- (c) What the patrols are to look for in the different sections;

[pages \_\_\_\_\_.]

- (d) Methods and frequency for reporting; and, [pages \_\_\_\_\_.]

- (e) How the community's emergency managers are kept posted on the situation.

[pages \_\_\_\_\_.]

- (c) The procedures for monitoring levee conditions must be exercised at least once each year.

[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

- ☐ Copy or link to the impact adjustment map showing the area(s) affected by each element and documentation showing how the numbers of buildings used in the calculations were determined.

[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

### **Levee Failure Warning (LFW) Credit Criteria and Additional Documentation:**

- (1) The warning procedures must be included in the levee failure warning and response plan or a related document.

[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

- (2) The warning must reach people in a timely manner, especially because there may not be much lead time between a sudden levee failure and the moment when water reaches homes and businesses. For example, television or radio announcements are not credited if they are the only approach used because the failure may occur during the night.

[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

- (3) For those warning systems requiring specialized equipment, such as sirens, the equipment and procedures must be tested at least annually. Equipment that is used routinely throughout

Community : \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_

the year, such as television notices and message boards, does not need testing records for CRS credit.

- ☐ Records showing the most recent annual test of all equipment and material needed for the system.  
[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

**Levee Failure Operations (LFO) Credit Criteria and Additional Documentation:**

- (1) The levee failure response operations actions must be in the levee failure warning and response plan or a related document. [pages \_\_\_\_\_.]
- (2) Levee protection operations actions must be closely coordinated with the levee emergency action plan credited under Section 622.a (LM2). [pages \_\_\_\_\_.]
- (3) Credit is based on the extent and level of detail that the levee failure warning and response plan provides for the response operations. General statements or an assignment of responsibilities with no specifics about what is done are not credited. For full credit for LFO, the plan needs to:
  - (a) Describe the actions to be taken; [pages \_\_\_\_\_.]
  - (b) Identify the office or official responsible for the action; [pages \_\_\_\_\_.]
  - (c) Define the time needed to carry out the activity; and, [pages \_\_\_\_\_.]
  - (d) Contain other critical information that designated agencies and organizations need in order to perform their assigned responsibilities. [pages \_\_\_\_\_.]
- (4) LFO4 credit is provided if there is a list of the personnel, equipment, facilities, supplies, and other resources needed to complete each task in the levee failure warning and response plan. For full credit, the list must identify what is available within the community and what is needed from private suppliers or other jurisdictions.

☐ Provide a copy of list(s) of the personnel, equipment, facilities, supplies, and other resources needed to complete each task in the levee failure warning and response plan.  
[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

**Levee failure Critical Facilities planning (LCF) Credit Criteria and Additional Documentation:**

- (1) LCF1 is a prerequisite for any LCF credit.
- (2) For LCF1 credit, the community's levee failure response plan must list the facilities considered critical in a levee failure emergency. The community must contact the facilities to determine whether they need any special warning arrangements. The community does not

Community : \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_

need to provide a special warning to all critical facilities, only to those identified in the levee warning and response plan as needing one. There is no impact adjustment for LCF1. The community must include all critical facilities affected by a levee failure on its list.

- ☐ Provide a list of all public and private critical facilities affected by levee failure or needed to be operational during a levee failure flood.

[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

- ☐ Provide a list of the contact personnel and telephone numbers of the above facilities.

[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

- ☐ Provide documentation of any special warnings and notification procedures.

[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

(3) For LCF2 credit, levee failure warning and response plans must have been developed, reviewed, or accepted by the community for individual critical facilities.

- ☐ Copies or list of levee failure warning and response plans accepted by the community for individual critical facilities.

[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

	CRS Coordinator	Emergency Manager
Name		
Title		
Address		
Phone		
E-mail		

Form Completed By: \_\_\_\_\_ Date: \_\_\_\_\_

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## Activity 630 (Dams) Documentation Checklist

### State Dam Safety Credit Criteria and Documentation [If not previously requested]

- (1) The SDS credit earned by the state dam safety office is provided to all communities that would be affected by a flood from the failure of a high-hazard-potential dam.  
  
☐ A map and description of the threat from failure of high-hazard-potential dams.  
[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]
- (2) The community must meet state dam safety standards to receive credit for this element. If the community owns or regulates the construction, operation, or maintenance of any dams, the community's dams and/or its dam safety program must meet the state standards for dam safety.
- (3) If the state's SDS credit changes, the community's credit for SDS will be updated at the next verification visit or modification.

### Dam Failure Recognition (DFR), Dam Failure Warning (DFW), Dam Failure Operations (DFO), and Dam Failure Critical Facilities (DCF) Credit Criteria and Documentation

These activity credit criteria apply to all Activity 630 elements except SDS. Credit criteria for this activity are described in more detail in Section 631.b of the *CRS Coordinator's Manual*.

- (1) There must be at least one insurable building within the community subject to inundation due to the failure of a high-hazard potential dam.  
[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]
- (2) The community must submit a description of the dam failure threat, including the following for each high-hazard potential dam that affects the community. (The first three items should be available from the state's dam safety office. If not, the community may have to develop the information and document it.)  
  
☐ A general description of the dam, including its distance upstream from the community.  
[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]  
  
☐ A dam failure inundation map or evacuation map.  
[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]  
  
☐ Dam failure flood hazard data, including the arrival time of flood waters at different locations and peak elevations of the dam failure flood.  
[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

Community : \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_

- ☐ 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.  
[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

- ☐ The expected impacts of dam failure flooding on health and safety; community functions, such as police and utility services; and the potential for secondary hazards. (Possibly credited under Activity 510 or a CRS Community Self-Assessment.)  
[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

(3) The community must obtain some credit in all four dam failure warning and response elements (DFR, DFW, DFO, and DCF) in order to receive any credit for its local dam failure warning and response plan.

(4) To receive DFR, DFW, DFO, and DCF credit, the community must have a dam failure warning and response plan that has been adopted by the community's governing body.

The plan or related document must be marked to show where the credited items appear and must: [See Attachment \_\_\_\_\_.]

- ☐ Describe the dam failure threat recognition procedures (DFR), [pages \_\_\_\_\_.]
- ☐ Describe the dam failure emergency warning procedures (DFW), [pages \_\_\_\_\_.]
- ☐ Describe the dam failure operations and actions (DFO). For full credit for DFO, the plan needs to:
  - ☐ (a) Describe the actions to be taken; [pages \_\_\_\_\_.]
  - ☐ (b) Identify the office or official responsible for the action; [pages \_\_\_\_\_.]
  - ☐ (c) Define the time needed to carry out the activity; and, [pages \_\_\_\_\_.]
  - ☐ (d) Contain other critical information that specified agencies and organizations need in order to perform their assigned responsibilities. [pages \_\_\_\_\_.]

(5) To receive DFR, DFW, DFO, and DCF credit, the community must implement one or more outreach projects to the residents and businesses in the area(s) expected to be inundated by a dam failure. [Select] one or more of the following approaches.

\_\_\_\_ Sending an outreach project each year to all residents and businesses in the community.  
[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

\_\_\_\_ Sending an outreach project each year to all residents and businesses in the area(s) subject to dam failure flooding.  
[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

\_\_\_\_ Developing an appropriate approach as part of a Program for Public Information credited under Activity 330.  
[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

Community : \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_

(6) To receive DFR, DFW, DFO, and DCF credit, there must be at least one exercise or drill of the dam failure warning and response plan each year. This can be an exercise for a flood, levee failure, dam failure, or hurricane. (Criterion can be met if implemented by an actual flood or threat of failure.) There must be an evaluation of the performance of the plan and recommended changes, usually done in an after-action report.

- ☐ Documentation or description of the annual exercise, drill, or response to an actual emergency conducted the previous year. Dam failure threat recognition procedures must have been included (DFR). The exercise must include the procedures for warning people credited under DFW, and operations and action under DFO.

[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

**Dam Failure Threat Recognition System (DFR) Credit Criteria and Additional Documentation:**

(1) For DFR1 and DFR2:

(a) The threat recognition procedures must be in the dam failure warning and response plan or a related document. [pages \_\_\_\_\_.]

(b) The threat recognition system must be monitored by the operator and/or the local emergency manager (or office on behalf of the emergency manager) 24 hours a day, seven days a week. [pages \_\_\_\_\_.]

(c) The equipment used must be tested at least quarterly. Equipment that is used routinely throughout the year, such as a telephone, does not need testing records for CRS credit.

- ☐ Copy of records of the quarterly test of all equipment and materials needed for the system. [See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

(2) DFR1 credit is a prerequisite for DFR2 credit.

(3) For DFR1 credit, the primary dam failure threat recognition procedures must include:

(a) Procedures and predetermined conditions for when the operator of the dam notifies local emergency managers of a potential or actual dam breach; and [pages \_\_\_\_\_.]

(b) At least quarterly communication checks between the operator of the dam and emergency services officials. [pages \_\_\_\_\_.]

(4) For DFR2 credit, the secondary dam failure threat recognition backup system must be directly available to the emergency manager. [pages \_\_\_\_\_.]

Community : \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_

[DFR Documentation:]

- ☐ Copy or link to the impact adjustment map showing the area(s) affected by each element and documentation showing how the numbers of buildings used in the calculations were determined.

[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

- ☐ A list of the maximum number of buildings that would be flooded or evacuated by/due to a dam failure(s).

[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

**Dam Failure Warning (DFW) Credit Criteria and Additional Documentation:**

- (1) The warning procedures must be included in the dam failure warning and response plan or a related document. [pages \_\_\_\_\_.]
- (2) The warning must reach people in a timely manner, especially because there may not be much time between a sudden dam failure and the point at which the water reaches homes and businesses. For example, television or radio announcements are not credited if they are the only approach used because the failure may occur during the night. The messages should be drafted in coordination with the messages and projects credited under flood response preparations (FRP) in Activity 330 (Outreach Projects). [pages \_\_\_\_\_.]
- (3) For those warning systems requiring specialized equipment, the equipment and procedures must be tested at least annually. Equipment that is used routinely throughout the year, such as television notices and message boards, do not need testing records for CRS credit.

- ☐ Copies of records showing the most recent annual test of all equipment and material needed for the system.

[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

**Dam Failure Operations (DFO) Credit Criteria and Additional Documentation:**

- (1) The dam failure operations actions must be included in the dam failure warning and response plan or a related document. [pages \_\_\_\_\_.]
- (2) Credit is based on the extent and level of detail the dam failure warning and response plan provides for the response operations. General statements or an assignment of responsibilities with no specifics about what is to be done are not credited. For full credit for DFO, the plan needs to:
  - (a) Describe the actions to be taken, [pages \_\_\_\_\_.]
  - (b) Identify the office or official responsible for the action, [pages \_\_\_\_\_.]
  - (c) Define the time needed to carry out the activity, and [pages \_\_\_\_\_.]
  - (d) Contain other critical information that specified agencies and organizations need in order to perform their assigned responsibilities. [pages \_\_\_\_\_.]

Community : \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_

- (3) DFO4 credit is provided if there is a list of the personnel, equipment, facilities, supplies, and other resources needed to complete each task. For full credit, the list must identify what is available within the community and what is needed from private suppliers or other jurisdictions.  
[See Attachment \_\_\_\_\_ Pages \_\_\_\_\_.]

**Dam failure Critical Facilities planning (DCF) Credit Criteria and Additional Documentation:**

- (1) DCF1 is a prerequisite for any DCF credit.
- (2) For DCF1 credit, the community's dam failure response plan must list the facilities considered critical in a dam failure emergency. The community must contact the facilities to determine if they need special warning arrangements. The community does not need to provide a special warning to all critical facilities, only those that need one. There is no impact adjustment for DCF1. The community must include all critical facilities affected by a dam failure on its list.
- ☐ A list of the critical facilities that would be flooded or evacuated by/due to a dam failure(s).  
[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]
- (3) For DCF2 credit, dam failure warning and response plans must have been developed, reviewed, or accepted by the community for individual critical facilities.
- (a) A list of all public and private critical facilities affected by dam failure or needed to be operational during a dam failure flood, with the contact and warning needs information.
- ☐ Provide a list of all public and private critical facilities affected by dam failure or needed to be operational during a dam failure flood, with the contact and warning needs information.  
[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]
- (b) [For DCF2] The above ((1)(a)) list of critical facilities marked to identify those that have developed their own flood warning and response plans that have been reviewed and accepted by the community. The ISO/CRS Specialist will ask for samples of the plans for review.
- ☐ Provide a list (and samples) of the critical facilities with dam failure warning and response plans that have been developed, reviewed, or accepted by the community.  
[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

Community : \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_

- ☐ Provide a page from the latest list of the critical facilities affected by dam failure or needed to be operational during a dam failure flood. This list must be updated at least annually.

[See Attachment \_\_\_\_\_ pages \_\_\_\_\_.]

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	CRS Coordinator	Emergency Manager
Name		
Title		
Address		
Phone		
E-mail		

Form Completed by: \_\_\_\_\_ Date \_\_\_\_\_

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Comments:

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