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IMPROVING THE COMMUNITY RATING SYSTEM (CRS) PROGRAM

Recommendations from Coastal CRS
Communities & Stakeholders



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Thank you to the list of interviewed CRS stakeholders included on page 19. Special thanks to Wetlands Watch staff, Ross Weaver, Skip Stiles, and Shereen Hughes and Wetlands Watch Intern, Jennifer Seay.

ABOUT WETLANDS WATCH

Wetlands Watch, an environmental non-profit located in Norfolk, Virginia, operates statewide to conserve and protect wetlands through education and advocacy. Sea level rise is the biggest threat to our tidal wetlands; we work with local governments to encourage nature based adaptation solutions to sea level rise adaptation.

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In an effort to broaden public engagement in sea level rise adaptation, Wetlands Watch developed an app to track flooding. The logo above is from the "Sea Level Rise" app, downloadable on all app stores.

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CRS PROGRAM RECOMMENDATIONS TO BENEFIT COASTAL COMMUNITIES

CRS Program: A Resilience Building Tool

Growing interest in the National Flood Insurance Program's Community Rating System (CRS) Program in Virginia, particularly from coastal communities, will bring economic relief to high-risk policyholders in the form of discounted flood insurance premiums and less flood damage. This relief will hopefully offer some support to uncertain coastal real estate economies, while most importantly, encouraging higher floodplain management standards to protect against future flood losses in vulnerable communities. Many organizations, such as Wetlands Watch and the funder of this project, the Virginia Coastal Zone Management Program, promote the CRS Program as a tool to build communities resilient to both physical and economic risks of sea level rise and flooding events.

Although an imperfect policy vehicle, the CRS Program incentivizes many planning and implementation strategies congruent with

those encouraged for sea level rise adaptation. In coastal Virginia, where land elevations loom near sea level, the flood zone lines of today mirror the coastline of the future. Decisions made for sea level rise planning purposes are made in our floodplains. The CRS Program's highest credit-earning activities, Open Space Preservation (420), Acquisition & Relocation (520), Higher Regulatory Standards (430), and Flood Protection (530), are among many of the strongest sea level rise adaptation tools. The CRS Program prioritizes these activities by awarding a large amount of CRS credit points for their completion, which will result in a higher CRS class rating and a higher flood insurance premium discount for communities. Encouraging participation and success in the CRS Program opens the door to prioritize these credit-earning activities in communities resistant to adaptation planning.

US Coastal CRS Coordinators Survey

Wetlands Watch interviewed coastal CRS communities in Virginia and throughout the country seeking to identify CRS Program recommendations to assist coastal communities' success in the CRS. In coastal Virginia, many CRS communities expressed concern regarding the CRS Program. Comments referenced administrative burdens of the CRS as a major barrier to success and participation. These concerns are not singular to Virginia's coastal communities, but shared by many US coastal CRS communities interviewed, as the recommendations included in this document will validate. Other comments were activity specific, several noting that the CRS favors riverine and undeveloped communities, making it difficult for coastal communities, particularly urban coastal communities, to advance into higher CRS rating classes. Earning credits in

the highest-earning CRS activities, such as 420, 430, 520, and 530, is difficult for coastal and urban communities because the credit calculations include various forms of impact adjustments that penalize communities with large percentages of their land area in the floodplain (coastal), built out floodplains (urban), or a large number of structures in the floodplain (both coastal and urban). Why is this significant? Many would argue that coastal and urban CRS communities can earn points in other activities - the 2017 CRS Manual includes a total of 17,052 available points. Communities can earn points in the other activities, however, the highest-earning activities account for 54% of the total available points in the CRS Program (see chart). This point structure puts coastal communities at a disadvantage.

CRS Activity	Available Points (Pre-Impact Adjustment)
Open Space Preservation, Activity 420	2,870
Higher Regulatory Standards, Activity 430	2,462
Acquisition & Relocation, Activity 520	2,250
Flood Protection, Activity 530	1,600
TOTAL POINTS	9,182
TOTAL POINTS	17,052

The CRS is a national program, standardized to meet the needs of vastly different communities from across the country with varied flood risks and can never be individualized to a level that accommodates all community differences. However, when over half the points in a program come from only 4 of the 19 CRS point earning activities, adjustments may be helpful to remedy this weighted discrepancy. The nuances of this issue extend beyond the scope of this project; however, it is important to note that the highest credit-earning activities are those that offer undeniable protection against flood damage. Coastal and urban communities present a greater risk to the NFIP than rural non-coastal communities because coastal/urban communities have more insured structures in high-risk zones. Wetlands Watch does not suggest the CRS should reward communities that are more at-risk with higher CRS scores simply because they are at a disadvantage, but perhaps reevaluate how coastal or urban communities can prove they are successfully protecting their communities from flood risks and reward them with alternative CRS points commensurate to the protection values achieved. In other words, rather than rating all types of communities (rural, urban, coastal, riverine) with the same scoring system, develop and utilize alternative systems for coastal and urban communities that better reflect their challenges and obstacles and that accurately and fairly rate their communities.

CRS Recommendations Scope: United States Coastal CRS Communities

While several concerns noted above refer to Virginia coastal communities, the project scope extends to any coastal CRS community in the United States. Wetlands Watch staff interviewed CRS Coordinators and other stakeholders engaged in CRS work on the east, gulf, and west coasts, as well as the Great Lakes region, Alaska, and Hawaii to determine if other coastal communities shared similar obstacles to success in the CRS Program as those identified by CRS stakeholders in Virginia. During these interviews, CRS Coordinators and stakeholders were asked to share recommendations for how the CRS Program could be modified to help coastal communities better prepare for current and future flooding and improve their class ratings in the CRS Program. The recommendations and related discussion included in this document capture the feedback received from these interviews.

Document Format

The following recommendations are organized based on the CRS activity series for which they currently receive credit or could potentially receive credit. Those recommendations that do not clearly fit within the current CRS activities are included in a separate section at the end of the series list. Many of the recommendations are not specifically coastal, however, they were included. A list of interviewees is included on page 19.

300 Series: Public Information Activities

Elevation Certificate (EC) (310) Recommendations

- A. Improve consistency regarding EC requirements: FEMA and ISO require conflicting EC documentation leaving floodplain administrators stuck in the middle. The FEMA form was approved by Congress, but ISO has a different set of standards.
- B. Offer electronic EC files to communities that provide paper ECs to ISO for CRS credit: Digitalization helps communities and stakeholders improve data collection for planning.
- C. Update the FEMA document “Surveyors Guide to the Elevation Certificate:” Communities reportedly directed surveyors to the document for information on how to complete the Elevation Certificate forms. Communities reported errors made on Elevation Certificates and feel an updated guide, including frequently made errors, would be helpful. Additionally, a guide with clearer instructions would also be of assistance.

Outreach Projects (330) Recommendations

- A. Increase points for communication and outreach.
- B. Increase points for bigger communities: Outreach for larger communities is a greater investment as it may require more time to reach everyone and may require more monetary resources if outreach is in the form of flyers, letters, personal phone calls, etc.
- C. Expand outreach projects messages to include community specific risks: A coastal community should receive points for hurricane outreach – these additional topics are currently limited to a community that employs a Program for Public Information (PPI).
- D. Modify points that assume staff have ready access to politicians: Larger communities cannot easily communicate with local politicians, putting these communities at a disadvantage.
- E. De-emphasize educational components of the CRS at the lower levels of the program: This allows communities to join the CRS without doing too much to warrant reduced premiums for NFIP policyholders. Localities can check a box rather than ensuring a real effort is made to get communities to better understand the need to act.
- F. Clarify credits for electronic communications: Communities are communicating more electronically with residents via television, Twitter, Facebook, social media, etc. The CRS should clarify exactly how electronic outreach is credited under Activity 330 to reflect current ways of communicating.
- G. Simplify the explanation and documentation requirements for Programs for Public Information (PPI): Communities find it very difficult to follow all the required steps even with strong PPI organization.

400 Series: Mapping and Regulations

Floodplain Mapping (410) and Mapping and Regulations (440) Recommendations

- A. Offer community GIS assistance or training: CRS documentation is mapping and GIS intensive, requiring the creation of countless maps. The assumption that communities have GIS capacity is wrong and limits CRS participation - some communities lack websites or email addresses. Communities that are understaffed may not have personnel with GIS capabilities, and those that lack sufficient funding cannot afford to outsource GIS work. For example, one community dropped out of the CRS due to a \$10,000 GIS contract to complete CRS documentation. Therefore, if the CRS Program offered free or reduced fee GIS assistance or training, more communities may participate and others may not drop out of the CRS.
- B. Award more credit for enhanced mapping: Other activities that are not as substantial get more credit. Additional credit would incentivize more communities to perform enhanced mapping.
- C. Offer more credit for independent mapping: Outdated FEMA mapping restricts localities' ability to adopt higher standards. Provide credit for including SLR and precipitation in predictive flood mapping. Communities should be rewarded for taking additional measures to protect their citizens.
- D. Clarify Floodplain Mapping Special Hazards Mapping (MAPSH) credit: Communities do not understand how to get the layers and whether or not they can adopt pre-made layers.
- E. Help push for better FEMA mapping: There is a disconnect between FEMA mapping and actual flood risk in communities, where some properties that experience flooding are not located in FEMA's regulatory floodplains. However, there is no political will to challenge FEMA's maps to map additional properties in FIRMs, not to mention include future conditions, such as sea level rise and current & projected precipitation rates. Maps that take these factors into account would likely place more properties in high-risk zones, leading to more property-owners purchasing flood insurance policies. Improved maps may also lead to communities performing mitigation activities to better protect these properties, thereby reducing flood insurance claims and subsequent NFIP payouts. (Not a CRS Program specific recommendation)

Open Space Preservation (420) Recommendations

- A. Award more credit for open space in urban communities: Credits weighted highly in 420 are only reasonably appropriate in the rural communities due to the political difficulty of preserving land in urban communities with limited or no undeveloped land. Weighting credits differently, rather than awarding more credits is also an option.
- B. Award more credit for open space in coastal communities: Floodplains typically encompass a larger percentage of land area in coastal communities – earning credit with a large denominator is difficult. Weighting credits differently, rather than

awarding more credits is also an option.

C. Alter the way credit is awarded for Natural Shoreline Protection (NSP): Instead of measuring the shoreline length, communities recommend crediting based on parcel land area. Localities report the calculation is complicated and the impact adjustment significantly reduces the number of points.

D. Simplify the Coastal Erosion Open Space (CEOS) credit: This section is too confusing to comprehend. Requiring credit in multiple other sections with specific caveats both intimidates and frustrates CRS Coordinators. The time required to understand the activity is not worth the points earned. Additionally, communities that have coastal erosion protections in place for the purpose of water quality cannot earn credits because the program does not fit into the CRS box perfectly.

E. Provide open space credit for non-regulated land outside of the floodplain: Higher elevation areas are best for recharge and runoff from those areas is a source of downstream rain/flood water.

F. Increase the credits available for Natural Functions Open Space (NFOS): A limited 350 extra credit points are currently available. Furthermore, the point calculation is based on an impact adjustment factor that, in larger communities particularly, undercuts the points significantly.

G. Expand credits for low-density zoning (LZ) to reflect development stresses in urban communities: Include credit for variable lot sizes in dense communities, not just credit for 5 acres or more.

Higher Regulatory Standards (430) Recommendations

A. Increase credits for Higher Study Standards (HSS): Currently, a community can receive more credit for freeboard than for adopting and regulating to aggressive sea level rise estimates through incorporating sea level rise in HSS.

B. Offer credit for imposing alternative standards in height restrictions: Communities can measure height from the first floor of a structure, as opposed to the ground.

C. Freeboard (FRB) Recommendations

a. Increase credits for freeboard: Freeboard could be its own credit activity because of the significant benefit it offers in terms of flood damage reduction.

b. Award credit for incentivizing and encouraging builders to increase freeboard.

D. Increase credits for additional regulations pertaining to the LiMWA.

E. Increase credits for sea level rise & other coastal resilience planning and regulations: Many coastal communities are adopting extensive sea level rise studies that currently do not receive credit in the CRS Program, and it's unclear whether these studies can meet watershed master plan credits or floodplain management planning credit.

F. Offer more credits for creative local zoning that offers flood resilience: One

example includes the creation of zoning regulations for areas where specific higher standards go into effect at a specific trigger event or future date in time (“rolling regulations”).

G. Allow more flexibility in Coastal Erosion Hazard Regulations (CER): Many communities enforce shoreline buffers for the purpose of water quality that may also overlay with a high erosion rate, but because the principal purpose is water quality and not erosion, it does not qualify for credit.

H. Credit actions that help citizens: Localities have noted that the current way the CRS Program credits activities for 430 doesn’t show emphasis for actions that really protect against flood damage.

I. Accommodate issues related to Building Code Effectiveness Classifications Grading Schedule: BCEGS ratings limit advancement into higher classes. Many localities located in Dillon Rule states cannot control whether the state adopts building code standards strict enough to earn a higher rating, yet these localities are penalized by preventing their advancement beyond specific class ratings. Also, communities struggling financially are cutting back on building inspectors, which impacts BCEGS rating.

J. Increase the credits for higher regulatory standards adoption/implementation: The cost of implementing regulations and higher standards are significant.

K. Allow Coastal A Zone Regulations (CAZ) credit for coastal communities without LiMWA lines: Topographic conditions in coastal communities in the US vary tremendously. Many communities work to mitigate erosion from bluffs and cliffs along their communities’ coasts. These communities do not have LiMWA lines due to higher elevations from cliffs, but they still have coastal zones where efforts to mitigate erosion are underway. The types of mitigation are not currently credited in the CRS Program.

Stormwater Management (450) Recommendations

A. Make Stormwater Management Regulations credits less complicated and less prescriptive: Provide a better description of what is required in the elements and as documentation.

B. Provide credit for tree planting, tree canopy requirements, etc.: Trees serve a tremendous stormwater function, especially in urban communities.

C. Offer alternatives for Watershed Management Plans (WMP) requirements: WMPs are a class 4 prerequisite, but they are difficult to conduct on barrier islands or small communities with limited resources, and this precludes them from conducting advanced hydrologic modeling required in the plans. Allow the towns to develop a “watershed management plan” for lands and water bodies within their jurisdictional boundary, and then apply the impact adjustment based on the size (%) of the overall watershed in which the community is located or allow alternative risk management plans to earn WMP credits. An additional complicating factor - the EPA has 9 elements for a WMP that do not match the CRS elements – this disparity impacts grant applications.

D. Offer prorated points for varying levels of storm protection, instead of crediting according to a range of protection levels: A community receives the same number of points for adopting protection to a 11-year storm as they would a 25-year storm. Offering more points for the stronger storm levels incentivizes stricter standards.

E. Adjust stormwater credit for coastal communities: Stormwater CRS credit is based on water moving fast as opposed to slow, but this is not helpful to coastal communities that have slower moving water. Recommendation: base the discharge at a historic rate, not at a predevelopment rate.

500 Series: Flood Damage Reduction Activities

Floodplain Management Planning (510) Recommendations

A. Provide credits for plans that evaluate risk at the watershed and sub-watershed levels.

B. Offer credit for communities that do not have repetitive loss properties.

C. Offer credit for repetitive loss analysis: Currently repetitive loss analyses are required for CRS participation, but some communities invest in advanced analyses, which should be awarded credit.

D. Incorporate affordable housing and economically vulnerable populations into floodplain planning.

E. Award credit to communities that adopt an integrated approach to floodplain management: Programs that link capital improvement plan expenditures with codes and enforcement should be rewarded.

F. Award more credit for comprehensive vulnerability assessments: Plans that clearly outline the consequences of not meeting higher regulatory standards, identify the losses, and plan for managing them are comprehensive in nature and should be rewarded with more credit points. The assessment should also identify vulnerable populations in the community and plan for protection.

G. Recommendations for incorporating sea level rise in floodplain planning

a. Strengthen credits and incentives for future condition planning: Credit stormwater, precipitation, and sea level rise studies that are forward-facing with long-term benefits.

b. Offer more sea level rise credits in general.

c. Reduce the complexity of the SLR multiplier, which is designed to help coastal communities: The NOAA/USACE calculator is too complicated to explain to a local CRS Coordinator. There should be someone in house, clearly listed, that local government staff can call to ask for their localized SLR curve to reduce confusion.

d. Clarify how to get SLR credit: Communities reported that there is SLR credit available, but they are not going to attempt to earn this credit because it is not clear what activities will earn or how to get credit.

H. Reward communities for making difficult decisions that impact their tax base: Coastal communities cannot relocate their entire risk because of the economic impacts. For example, if a community acquires properties and relocates the residents, their tax base may change, and they may suffer losses in tax revenue. For coastal communities, many more properties are at-risk than there are in non-coastal communities, so relocating the same number of properties as a non-coastal community will earn them less credit points because their denominator will be much larger. If these coastal areas were to relocate a large number of their at-risk properties to earn a substantial amount of credit points, they would suffer a large decrease in tax revenue, which will likely not be worth the credit points earned. Therefore, coastal communities should be awarded points differently, by using a formula that considers the feasibility of relocating all at-risk properties.

Acquisition and Relocation (520) Recommendations

A. Award more credit for acquisition in urban communities: Credits weighted highly in 520 are only reasonably appropriate in the rural communities due to the political difficulty to acquire land in urban communities where neighborhoods contribute greatly to the tax base. Urban communities are not engaged in large scale acquisition, because (1) they are built out and (2) repetitively flooded structures don't line up perfectly in a row on a street – a repetitively flooded structure may be located next to a structure that's never flooded before. The credit calculation methodology is severely limited: option 1 will mostly likely be the credit calculation selected, which is capped at 190 points, but option 2 earns up to 2,250 credits. An option in the middle would be helpful. Weighting credits differently, rather than awarding more credits is also an option.

B. Award more credit for acquisition in coastal communities: Low-lying coastal communities may have a larger percentage of their land included in the floodplain, making it extremely difficult to earn points in acquisition and relocation. Reliance on structures in the community generating a strong tax base is a limiting factor and because of the large number of structures located in the floodplain, accumulating credit is difficult. The credit calculation methodology is severely limited: option 1 will mostly likely be the credit calculation selected, which is capped at 190 points, but option 2 earns up to 2,250 credits. An option in the middle would be helpful. More credit should be awarded to reflect the political difficulty of accomplishing acquisition in these types of communities as well. Weighting credits differently, rather than awarding more credits is also an option.

C. Modify acquisition and relocation credit: (1) Award more credits for larger scale acquisition projects to incentivize neighborhood or street-scale flood reduction projects; (2) Increase points in acquisition and mitigation - newer manuals have cut back points on these areas while increasing points available for open space, which is difficult for communities that are built out; (3) Adjust the reward for acquisition and relocation so that the CRS benefit outweighs the loss in property tax revenue; (4) Alter the bonus points requirements - they disincentivize the group it should be seeking to incentivize, those communities with a significant number of properties in the floodplain; (5) Remove the impact adjustment component of the credit calculation options for activities 520 and 530 – it puts communities

with more floodplain policies at a disadvantage – if two communities both acquire 20 properties, but one has 100 SFHA properties and the other has 1,000, the community with a lower number of SFHA properties, and perhaps the less at risk community, receives more credit.

D. Weight credit to reflect the difficulty of mitigation projections: Public information activities receive more credit than one acquisition project, which does not accurately reflect the risk-reduction achieved.

E. Suggest and credit alternative retrofitting strategies for communities unable to acquire at-risk properties.

F. Provide credit for restoration and stormwater management planning and installations on FEMA acquired open space parcels: Encourage communities to use open space parcels for additional flood reduction benefits and promote contiguous acquisition and restoration projects.

Flood Protection (530) Recommendations

A. Credit calculations for flood protection are too narrow and restrict coastal and urban communities' success: Offering only two options for calculating credit is limiting. Option 1 is capped at 160 points, while Option 2 is capped at 1,600 points. Offering a middle course of credits would help communities.

B. Increase credit points for Activity 530.

C. Recommendations related to natural shoreline protection

- a. Provide credit for voluntary flood control practices, specifically Natural and Nature Based Features (NNBF), such as living shorelines, wetlands restoration, oyster reef installations, etc.: These practices are often used in coastal areas for both flood reduction and stormwater management. These practices reduce localized flooding and protect insurable buildings from small scale floods. Currently, credits are not awarded for individual features because FEMA requires communities to provide metrics proving NNBF will reduce risk, which is difficult to measure because features vary on a case-by-case basis. Communities cannot afford to perform hydrologic studies for each installation. Recommendation: award credit points based on the length and/or width of protection.
- b. Award credits for dune creation and modification: Communities create dunes along the coastline to provide a similar protection as a flood wall or levee. Given that dunes offer protection and their function is similar to that of flood walls and levees, which are awarded credit, they should also receive credit.
- c. Award credits for beach nourishment: Communities use beach nourishment as a flood mitigation strategy to protect against structural flood damage.
- d. Provide explicit credit for stream restoration, stream daylighting, etc. to encourage nature-based solutions to flooding and water management.
- e. Award credit for voluntary shoreline protection projects along higher elevation coastlines to protect against erosion along bluffs.

- D. Clarify how policyholders benefit from huge tide gate projects and other large investments in flood mitigation and adaptation.
- E. The CRS Program should require prohibition of fill in the floodplain as a higher-class prerequisite.
- F. Modify fill restrictions to reflect coastal risk: Filling in coastal floodplains is vastly different than filling in riverine floodplains. Discussions about development in the floodplain displacing risk in the floodplain is not helpful in coastal communities – it was reported that filling an entire coastal community floodplain will not displace water from coastal inundation. A shed located in the floodplain will not displace coastal flooding water. These issues are not reflected in the CRS Program. Recommendation: involve more coastal people in the CRS Task Force.
- G. Do not reduce credit awarded for FEMA financed projects: These projects may not be possible without FEMA funding. Although FEMA is helping finance these projects, they will benefit in that the projects may reduce flood insurance claims and future payouts by an amount larger than the cost of financing the project.
- H. Offer credit for alternative measures that offer flood protection: A community reported they installed flood gates at a stormwater outfall, but received no CRS credit. Another community mentioned one backflow preventer valve protects several houses during storm events, but this activity received no CRS credit. Another community reported elevating roads for flooding mitigation, which does not receive CRS credit. Additionally, a community cannot afford to conduct hydrologic studies for each installed valve or small scale installation - this requirement should be removed.
- I. Offer case studies for retrofitting older structures without proper flood openings or vents.

Drainage System Maintenance (540) Recommendations

- A. Improve credits to reflect the realities of urban and larger communities: (1) Provide credit for inspecting the drainage system before storms, not just after storms; (2) Provide credit for underground storm drain maintenance and inspections; (3) Award credit for maintaining made-made canals - urban communities rely on stormwater conveyance systems that extend beyond natural channels/ditches.
- B. Revise points awarded for stormwater management: Localities with large systems will never get as many points because it is impossible to inspect 2,000+ miles of stormwater system – they only receive the minimum amount of points for inspecting half of the system, which would be 1,000 miles. Recommendation: if you have a certain number of miles, you only have to inspect every other year instead of every year.

600 Series: Warning and Response

Flood Warning and Response (610) Recommendations

- A. Allow prorated credit in Flood Warning and Response (FWR): The all or nothing approach may discourage a community from adopting a few new policies where they have none in place - they will not receive credit for the few they do adopt.
- B. Award Storm Ready 610 credit: It was once an automatic 25 points, but is only credited if a community receives points in other 610 activities, which does not reflect the burdensome process to receive Storm Ready status.
- C. Strengthen points for pre-disaster planning.
- D. Require stronger post-disaster planning: Require communities to analyze damage assessment rates and the cost of disasters. Offer extra points for an abandonment plan that identifies zones that will not be rebuilt if destroyed in a storm.
- E. Award points for improving the damage assessment processes: This will help communities justify the investment.

Recommendations Related to Administration of the CRS Program

Local Administration of the CRS Program Recommendations

- A. Make the program less complicated and clearer: The more complicated the program, the fewer communities will want to participate. Provide clearer information about what the program is and how communities can join, such as informational videos, documents, guides, etc., that provide step-by-step instructions and information on how to successfully join. These resources are available on crsresources.org; however, the resources are not always clear enough. Streamline the process to join the program. Reduce the amount of work and paperwork associated with the CRS – many communities are considering dropping out because they cannot keep up with the paperwork.
- B. CRS Coordinator staff burden underrealized: Coordinator reportedly spends 1 day each week (416 hours a year) administering the CRS Program, which is far more than the 24 hours a year staff burden referenced in the CRS Manual.
- C. Need to educate communities and convince them that they could do better in the CRS Program: Provide a “How to Optimize Your CRS Score” guide.
- D. Regionalize CRS Programs
 - a. Encourage Regional Coordinators: This position makes a lot of sense to help overcome the documentation and time burden. A Regional Coordinator would be a “hub” of CRS knowledge for the region and would reduce the need for each individual locality to have staff highly knowledgeable about the CRS, making it

easier and more feasible for more localities to join.

b. Allow the CRS program to be adopted regionally or at a larger geographic level: Smaller communities that are unable to participate on their own could ride on the coattails of larger communities.

E. Market the CRS Program as a way to decrease flood risk and mitigate damages from flooding, not just as a way to save policyholders money: Currently, localities see little benefit to them, given the way the program is marketed. The locality invests in the projects, allocates staff time and resources to administer of the program, yet it seems that the benefit goes all to the policyholders. Localities bear a large cost burden, but do not receive a direct benefit. If the program was marketed as a way to decrease flood risk and mitigate damages, the locality may see the benefit to the entire community and may be more likely to participate.

F. Emphasize the benefit of centralized knowledge: Require communities to establish an inter-departmental CRS team to ensure responsibilities of the CRS Program are shared among staff. This will also help with institutional knowledge gaps during staff transitions, as multiple staff members will be knowledgeable about the CRS, rather than just one person.

ISO/FEMA Administration of the CRS Program Recommendations

A. Improve consistency in ISO credit approvals across reviewer: One reviewer should not award credit differently than another reviewer.

B. Improve transparency between ISO and CRS Coordinators: (1) Provide localities with a post-verification feedback report with a breakdown of elements and points, explaining why they earned some points and why they did not earn others and include whether there was a retention or loss of points under manual updates; (2) Allow CRS Coordinators access to the ISO CRS Manual to better understand how their CRS points are really being awarded; (3) Create one manual, not two, to clarify discrepancies.

C. Increase ISO staff: Reviews take too much time and do not match the timing delineated in the CRS Manual. When reviews take too long, localities do not receive the class increase they earned, meaning policyholders do not receive an increased discount. This delay may result in hesitation from localities to work to increase their class if the benefits are not realized quickly.

D. Increase coordination and communication between NFIP, ISO, CRS Coordinator, Insurance Agents, etc.: It is difficult for communities to know where to look for certain information.

E. Allow access to CRS Program data: Historic CRS data is privacy protected, making research and analysis of the CRS program difficult. Researchers attempting to analyze which factors in a community impact CRS score lack the important data to understand community participation and determine what could be done to help increase CRS participation.

F. CRS Manual Recommendations

- a. Make less frequent changes to the CRS Manual: Communities reported that every time they go through a cycle visit, they are two manuals behind. Frequent updates place a burden on Coordinators to keep up with changes. The constant learning curve and need to remain updated may deter participation.
- b. Offer flex credits: The CRS Manual indicates credits are available for activities that do not fit in the Manual, but ISO agents reportedly push back on submittals for these credits. Additionally, it may help to establish more guidelines for both communities and ISO agents regarding these flex credits.
- c. Provide communities with more examples of documentation and best practices: Communities new to the CRS and/or lacking staff experienced in the CRS would greatly benefit from examples of proper documentation. The availability of examples would likely entice communities to participate that are hesitant to join due to the overwhelming documentation requirements.
- d. Simplify CRS credit calculations: Many calculations are time consuming and intimidating - if you have to do multiple calculations to determine which credit scenario will apply, CRS Coordinators may not pursue the credit.
- e. Maintain state-based credits to help save CRS Coordinators time.
- f. Do not require communities to cycle under CRS Manuals directly after the new Manual is released: CRS Coordinators need more time to learn the changes.

E. CRS Activity Ratings Calculation Recommendations

- a. Allow communities to earn discounts beyond those provided in five percentage point discount intervals: Localities noted they developed ideas for actions that would earn points, but because of the need to earn 500 points to move up a class, they decided that the cost of the activity was not worth it. Recommendation: Restructure the point system to make it a linear incentive system. Currently, it is a non-linear incentive structure that, in some cases, performing more activities increases the discount, but in other cases, it does not. Instead of increasing the discount at every class, base the discount off of the number of points a community earns. One way would be to divide the total number of points by 100, and add a percentage sign. For example, if a community has 800 points, rather than still getting only a 5% discount, give an 8% discount. It is unfair that a locality that has amassed more points than the minimum required for a Class 9 community, but not enough to earn a Class 8 designation, is not rewarded at all for improving. This restructuring of the point system would incentivize more activities that will earn a locality credit.
- b. Offer larger marginal increases in the discount received: It is much easier to improve from a Class 9 to an 8, but much harder to improve from a Class 5 to a 4, for example, because the “low-hanging fruit” activities, those that are cheaper and require less resources and time, have likely already been performed by the time a community earns a Class 5. Therefore, the locality will have to perform more expensive, time-consuming activities to improve classes, costing a community more to improve to a Class 4 than a Class 8. Therefore, the marginal benefit of improving classes, the increased flood insurance premium

discount, such as going from a 5% discount to a 10% discount, (as demonstrated in the left-hand side of the tables below), should be increasing as class ratings increase to reflect the cost of improving classes. Recommendation: Rather than consistently offering only a 5% increase in the discount, offer a marginal increase in each class percentage. For example, as a community jumps from a 7 to a 6, rather than only increasing the discount from 15% to 20%, increase the discount from 15% to 21% or 22%. The tables below illustrate examples of how this could be structured. Additionally, the increases do not have to be by 1%, it could be more moderate, such as by offering half percentage increases instead of full percentages. This would encourage localities to improve their ratings more than the current system does because the increased discount would be higher than it was at a previous class.

Scenario 1

CRS Class	Current Discount	Marginal Increase	Revised Discount	New Marginal Increase
1	45%	5%	54%	7%
2	40%	5%	47%	7%
3	35%	5%	40%	7%
4	30%	5%	33%	6%
5	25%	5%	27%	6%
6	20%	5%	21%	6%
7	15%	5%	15%	5%
8	10%	5%	10%	5%
9	5%	5%	5%	5%
10	0%	-	-	-

Scenario 2

CRS Class	Current Discount	Marginal Increase	Revised Discount	New Marginal Increase
1	45%	5%	51%	6.5%
2	40%	5%	44.5%	6.5%
3	35%	5%	38%	6%
4	30%	5%	32%	6%
5	25%	5%	26%	5.5%
6	20%	5%	20.5%	5.5%
7	15%	5%	15%	5%
8	10%	5%	10%	5%
9	5%	5%	5%	5%
10	0%	-	-	-

Scenario 1

CRS Class	Current Discount	Marginal Increase	Revised Discount	New Marginal Increase
1	45%	5%	52%	7%
2	40%	5%	45%	7%
3	35%	5%	38%	7%
4	30%	5%	32%	6%
5	25%	5%	26%	6%
6	20%	5%	20%	5%
7	15%	5%	15%	5%
8	10%	5%	10%	5%
9	5%	5%	5%	5%
10	0%	-	-	-

c. Increase the discount for lower class ratings: As it stands, a Class 9 community only receives a 5% discount, meaning the discount policyholders receive is minimal and likely not even noticeable.

d. Provide mitigation money to communities at higher class levels: Example 1: Policy premium discounts could be capped for the property owner at a class 5 or class 6 (25%-20%), but communities that achieve class 4 status would receive the remaining 5% to be used for mitigation. Example 2: A portion of the funds (up to 10%) could be used for administration costs and the remaining 90% used for mitigation. If CRS communities could be rewarded with funding, there might be an extra incentive to improve class ratings.

F. Help the CRS Program recognize how local governments actually work: Much of the program is structured in a way that is not practical given the way local governments function. A better understanding of local government operations could lead to changes in the program that make it more feasible for localities to join and succeed, thereby increasing participation.

G. Provide a CRS snapshot from specific types of areas or communities: Provide snapshots from coastal communities, urban communities, rural communities, etc., to help localities that similarly identify better understand how to participate and succeed in the CRS.

H. Rethink class pre-requisites: Encourage working smarter, not harder. If a community can't advance a class due to pre-requisites, they do not see the needle moving, so they may put less effort in to improve programs they can improve.

I. Increase the program's flexibility

a. Offer a coastal and riverine set of standards because a one size fits all approach is limiting: Ex: "If you're a coastal community, you get credit this way..."

b. Offer a set of standards based on size of the community: Give more points for larger populations when their size limits point availability in other sections, while also rewarding more points in sections critical to larger communities, such as in floodplain management planning, drainage system maintenance,

flood protection, and flood warning and response. Larger communities have a difficult time earning points in categories that offer large points such as Acquisition and Relocation (if they are 100% built out, there is nowhere to relocate to), Open Space Preservation (too built out), etc. Credit caveats for unique community character, such as high percentage of mobile homes and other low-income housing, in a community would be helpful – these types of structures are extremely difficult and expensive to mitigate.

c. Tailor the program to a community's capabilities and goals for resilience: One-size fits all national programs like the CRS are very difficult, especially for localities that do not have regulatory power. For such localities, because they do not have more power to adopt regulations that can earn credit, it is challenging to meet even the minimum requirements of the NFIP. Need flexibility for resilience points: expand the CRS Program's understanding of what builds resilience in coastal communities. Currently, communities are performing activities that improve resiliency, yet are not receiving credit for them - increased flexibility would help communities deservedly improve their CRS Class Rating and would likely encourage innovation. Credit the use/ collection of data most related to a community's specific risk: Coastal flooding risk relies upon storm surge and rainfall data, which is not a perfect match with the CRS Manual. Possession of this data will help a coastal community improve their resiliency, and the use and collection of such data should be encouraged by awarding credit.

d. Pro-rate more activity credits: The CRS needs to recognize that some communities cannot perform the activity in its entirety and get all the points for that activity. Recommendation: give a percentage of total points possible for each activity - need a good compromise between CRS being too flexible and not flexible enough. Example: award some points for drainage system maintenance, where it is not possible for some localities to inspect their entire system.

J. Create low-earning attaboy credits for actions that support comprehensive floodplain management, but may not fit within the CRS Program existing activities: Examples include beach nourishment, green infrastructure, voluntary BMPs, and other specific actions, such as relocating a parking lot away from a beach and building a man-made dune in front to protect the access.

K. Alter the benefits/incentives: (1) Award sufficient points for activities and projects – one community notes that the CRS is the only incentive for some activities and projects (i.e., the community only performs activities because they will receive CRS points) – having fewer points allocated to certain activities disincentivizes performance of such activities and makes it difficult to join and participate in the CRS; (2) Increase credit for activities that are very time intensive – one community reported that the credits applied may not justify the time required to complete the task; (3) Tie credits scoring with incentives - flood damage reduction in a flood-planned community is different than a flood-reactive community

L. Award more minimum credits in activities.

M. Strengthen pre-requisites for community classes: Require freeboard for classes

lower than Class 6. Require all communities with 5 or more severe repetitive loss properties to develop a plan to address repetitive loss.

N. Provide points for communities that have rainy day funding for unforeseen flooding issues.

Expanding the Flood Insurance Discounts Outside SFHA

A. Provide benefits to preferred risk policies (PRP): (1) New FIRMs map structures out of the floodplain, reducing the CRS benefit to communities, which can cause localities to leave the CRS Program because the benefit is reduced, leaving policyholders that relied on the benefit without a discount and with the same level of risk; (2) The benefits of the CRS go to the most vulnerable properties, who are at times the wealthiest due to the properties' locations, such as being on the waterfront (note: not all vulnerable properties are owned by wealthy). These people are likely not the policyholders who need a discount; (3) Providing a better discount to more people would increase the overall benefits of program participation, which would likely lead to more CRS participation; (4) Encourage the purchase of flood insurance policies in the lower risk zones (because the discount would reduce the price of the premium) that still experience risk in coastal communities due to rainfall or inaccurate FIRMs, while helping FEMA achieve the Moonshot goal; (5) PRP policies could be the high-risk policies of the future.

B. Provide a financial benefit for local governments administering the CRS: The lack of financial benefit to local governments can act as a disincentive to participation in the program, as they are bearing the burden of participation (cost of staff, time, CRS projects, etc.). Recommendation: (1) Offer a 10% allotment of the total value of the discounts awarded to a CRS Community, which could help fund the CRS Coordinator salary; (2) Offer funding or grants for achieving a certain class, which could fund the CRS Coordinator salary.

Is the CRS Program a Tool for Building Resilience in Coastal Communities?

There is disagreement among some coastal stakeholders as to whether the CRS Program is a strong tool to promote resilience in coastal communities. Most stakeholders regard the CRS as a tool that promotes strategies to increase community resilience; however, some stakeholders reported a waning interest in encouraging participation in the CRS Program. The criticism: the most financial benefits go to communities most at-risk because they have the most policies, not to those communities that are doing their best to remove people from risk (if people are removed, there are less policies to receive a discount, and therefore less monetary benefit). Communities that fall into the latter category may actually do more to mitigate flood damage, yet may receive less financial benefit, which could disincentivize participation. Others noted that the CRS should not be used as a resilience tool because it is an insurance tool first and foremost that works to reduce flood damages to insured structures, but does not work to reduce damages to people with low-risk policies. Additionally, the CRS, like the NFIP, incentivizes development in the SFHA, offering discounts to policyholders exclusively in these areas.

Support for using the CRS Program as a tool to build resilience in coastal communities included comments that the CRS is encouraging communities to adopt adaptation programs and policies and strengthening a community's bargaining power to enforce such policies. Another comment in support of CRS participation noted that if your community does not participate in the CRS Program, the community is leaving money on the table that another could use to reduce costs to their residents and businesses – participating is the smart choice.

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Resources

The following resources informed the research for this project, although may not directly inform specific recommendations included.

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