

Community Incentives *for* Nature-Based Flood Solutions

A GUIDE TO FEMA'S COMMUNITY RATING SYSTEM
FOR CONSERVATION PRACTITIONERS

The Federal Emergency Management Agency (FEMA) uses a Community Rating System (CRS) that can unlock significant flood insurance savings for communities. Nature-based solutions—such as open space protection and wetland restoration—can effectively reduce flood risk and are creditable components of the CRS. The conservation community can and should partner with municipalities to plan and design “nature-based solutions” that restore and protect natural areas, reduce flood risk and earn citizens a discount on their flood insurance rates.

THE COMMUNITY RATING SYSTEM

Nearly 21,000 communities across the United States participate in FEMA's National Flood Insurance Program (NFIP), which aims to reduce the impacts of flooding on American communities. It does so by offering government-backed flood insurance to property owners, renters and businesses and by encouraging communities to adopt and enforce floodplain management regulations. The program helps mitigate the effects of flooding on public and privately owned buildings and reduce the overall socioeconomic impacts of flooding events.

The CRS is NFIP's voluntary program for recognizing and encouraging community floodplain management activities that exceed the minimum NFIP standards. Today, nearly 1,500 communities are enrolled in CRS nationwide.

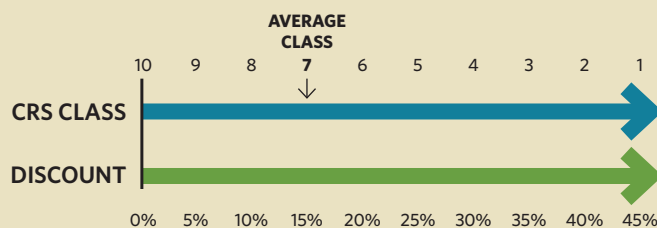
The program is simple and works as follows:

- **Communities engage in risk mitigation actions that exceed the NFIP minimum standards and are rewarded with discounted flood insurance premiums for their residents.**
- **Discounts are calculated via a ranking system. Communities earn points for activities and move up through ranks as they participate in more activities, earning greater discounts for NFIP policy holders.**

THE CRS CLASS SCALE

Most CRS communities are rated Class 9 or 8, designations that provide a 5 or 10 percent discount, respectively, to their residents. The average number of total points awarded to a community is 1,947 out of a possible 12,304. However, a community needs just 4,500 points to qualify as Class 1 and receive the highest possible discount of 45 percent.

Many communities do not apply for or receive credit for as many activities as they could to reduce flood hazards and reduce flood insurance premiums.





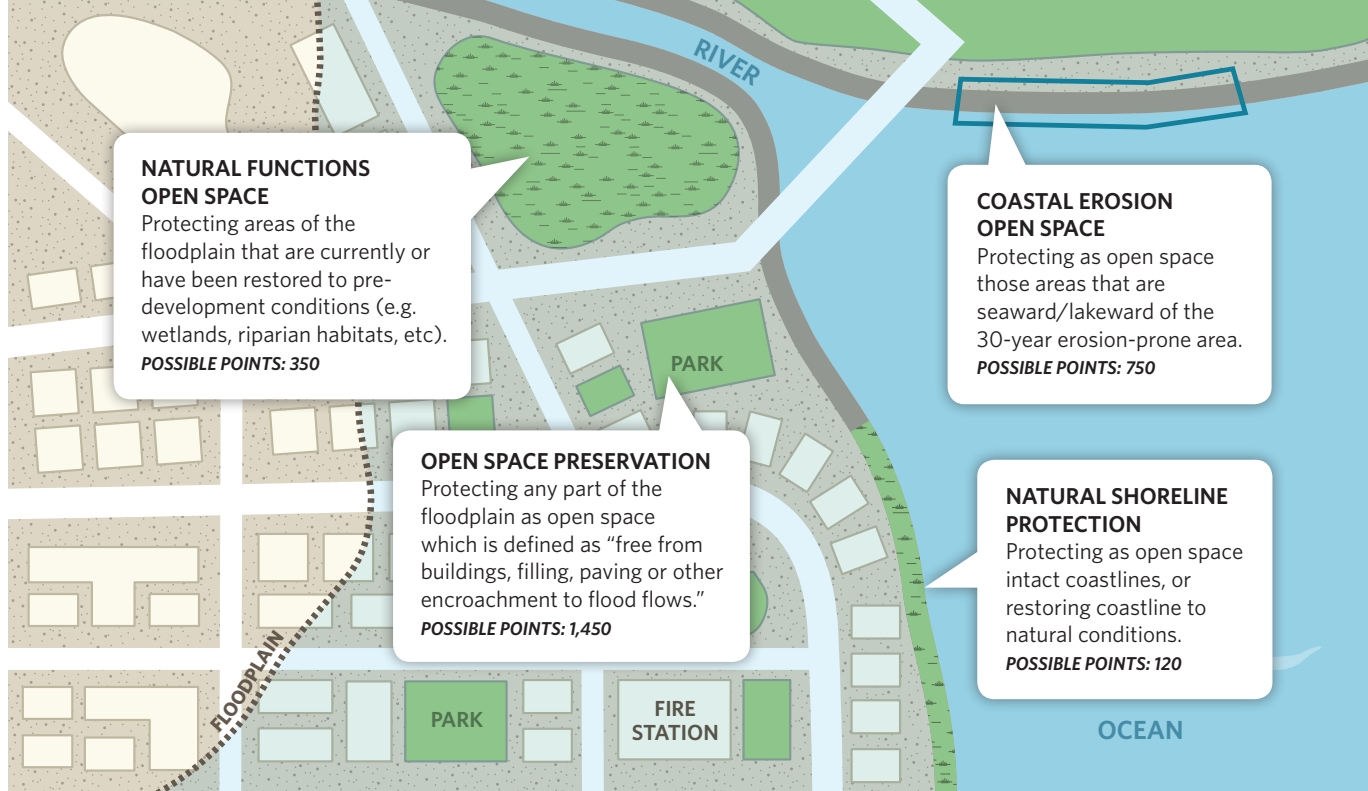
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USING NATURE TO SAVE MONEY

FEMA recently introduced changes to CRS that elevate the value of restoration and conservation of natural features like wetlands and greenspaces, making them worth more points. These changes increase the incentives for communities to combine conservation and restoration with risk reduction by creating projects that use “nature-based solutions” to enhance the natural environment while reducing flood risk. Many traditional conservation activities, such as buying and protecting undeveloped lands and restoring wetlands, are “nature-based solutions” that are creditable under CRS.

Here are some examples of how natural solutions can be used to protect communities and reduce flood insurance premiums:

- **Wetland protection:** Wetland areas that are protected within the floodplain can earn CRS points because they reduce the impacts of floods by slowing down and storing flood waters. These can be existing wetlands or areas that were historically wetlands and have recently been restored.
- **Open space protection:** Open space, such as parks, forests and other types of greenspaces, can earn CRS points if they are protected from development. Open space protection is one of the most effective non-structural approaches to reducing flood risk.
- **Living shorelines:** Living shorelines, where natural habitats such as oyster reefs, mangroves and salt marsh plants are used to hold the shoreline in place, can earn CRS points. Living shorelines are becoming increasingly common across the United States and when properly designed can help stabilize shorelines and reduce risk.



VALUING OPEN SPACE

Open space preservation is an activity within the CRS that is worth up to 2,870 points, offering significant potential savings to a community. Credits are awarded for the percentage of the Special Flood Hazard Area (SFHA) that is preserved as open space. This element of the CRS program is worth up to 1,450 points.

For example:

- A community's SFHA is 600 acres in size.
- It has 150 acres of undeveloped land, or land protected from development by zoning or deed restrictions, within the SFHA.
- $\frac{150 \text{ acres of undeveloped SFHA}}{600 \text{ acres in the SFHA}} = 25\%$ of the 1,450 points available.
- Therefore, preserving this open space would be worth 362 points to the community.

The 362 points earned by the community for preserving 25% of its SFHA floodplain as open space is nearly enough already to move the community up to the next CRS Class, which would provide an additional 5% reduction in the cost of flood insurance.

Communities can accrue additional points or "extra credit" for the Open Space Activity (Activity 420) when their protected open space meets additional criteria, such as having deed restrictions or being restored to a natural state. Points can also be earned for having natural shoreline protection, protecting intact or restored wetland habitats, and protecting coastal erosion areas, as shown in the graphic above.

CREATING PARTNERSHIPS AROUND CRS AND NATURE-BASED SOLUTIONS

The Nature Conservancy (TNC) seeks to foster collaboration among natural resource, floodplain, public works and hazard mitigation managers across the United States to mainstream the use of nature-based solutions to improve FEMA CRS Classifications. We are actively working with communities, particularly along the Gulf Coast and the East Coast in areas recently impacted by coastal storm flooding, to identify conservation and restoration opportunities that will lead to significant community savings.

There are four main ways the conservation community can advance the use of nature-based solutions via the CRS Program:

- **Increasing communities' participation in the CRS**

TNC has partnered with multiple counties and cities to identify opportunities for them to earn CRS points and obtain substantial cost savings. TNC is also leading a project to increase the conservation community's capacity to engage with communities to help support and partner on CRS efforts.

- **Helping communities earn credit for existing projects**

Few communities earn the full CRS credit to which they're entitled for protecting the natural functions and values of floodplains. TNC is working with communities to identify those missed points and receive credit for them.

- **Planning and developing projects that count for CRS points**

The conservation community should pilot and demonstrate "nature-based solutions" and the CRS benefits associated within them.

Many conservation groups are engaging in restoration and conservation projects in America's floodplains. These

projects could, in some cases, be prioritized and informed by potential CRS benefits to provide the best possible savings for communities.

- **Providing science and decision support tools for CRS**

Organizations including the National Oceanic and Atmospheric Administration's (NOAA's) Office of Coastal Management (OCM), TNC, Climate Central, The Association of State Floodplain Managers (ASFPM) and Coastal States Organization (CSO) are investing in the development of tools and guides to support communities in applying for CRS credits. These tools range from project-level guidance to community-wide planning tools.



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COMMUNITY CRS SUCCESS IN PRACTICE



North Carolina

In North Carolina, TNC led the development of the CRS Explorer app for the Coastal Resilience Tool, which helps communities and partners determine which lands provide both ecological and community flood mitigation benefits through the CRS program.



The CRS Explorer app helped verify an average of 300 Open Space Preservation credits across seven communities in Dare County, NC, allowing some to move up to the next class and earn an additional 5% off flood insurance premiums for policy holders in the floodplain. For example, the Town of Manteo moved from Class 8 to Class 7, making residents eligible for a 15% discount in flood hazard areas.

TNC is also supporting Dare County communities in identifying additional open space opportunities through the app’s “Future” Open Space function. This function helps them prioritize unprotected parcels that may be most beneficial to protect for the future.

Connecticut



In partnership with Western Connecticut Council of Governments (WestCOG), TNC is supporting a regional CRS program to help 18 municipalities get enrolled and/or advance their natural hazard mitigation activities across Fairfield County.

The projected annual discount, assuming all 18 municipalities enroll, is \$1 million. The projected target of 500 CRS credits per municipality to secure 5% flood insurance savings includes significant points for open space preservation (145), floodplain management planning (175) and stormwater management (132). These three categories provide opportunities to recognize and integrate natural-based solutions into the future resilience of these municipalities, and more importantly to provide regional resilience to extreme weather and a changing climate.

CRS RESOURCES FOR THE CONSERVATION COMMUNITY

Several resources have recently been developed to identify and plan for nature-based projects that provide social, economic and environmental benefits, including a reduction in flood damages, an insurance premium discount through CRS, water quality improvements and increased coastal habitat for wildlife. These resources are a great starting point for conservation practitioners who are interested in learning more about the CRS.

NAME	DESCRIPTION
Community Rating System Explorer	This application, a product of TNC's Coastal Resilience project, is designed to help planners identify areas in their community that are eligible for open source protection credits through the CRS program.
CRS for Community Resilience Green Guide	This in-depth manual describes "green" activities (which may have environmental benefits beyond flood protection) that are eligible for CRS credit.
How to Map Open Space for Community Rating System Credit	This self-paced, step-by-step tutorial describes how to calculate open space credits for existing preserved lands and areas that may be considered for future protection.
National Flood Insurance Program Community Rating System Coordinator's Manual	This is the official technical guide from FEMA for managing a CRS program within a community. It explains, in detail, all the activities eligible for points within the CRS program and provides general guidance on implementing a CRS program.
The Surging Seas CRS guide	This guide provides step-by-step instructions on how to access information and downloads from the Surging Seas web tool that could be utilized within specific CRS activities.

For additional information please visit coastalresilience.org



The Nature Conservancy



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