

## Geologic Site of the Month

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# ***Increasing Maine's Resiliency to Flood Hazards through the Community Rating System***



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## Introduction

Every year, flooding results in hundreds of millions of dollars' worth of damage across the country. In Maine, flooding is responsible for millions of dollars of property damage. The National Flood Insurance Program (NFIP) is a federal program administered by the Federal Emergency Management Agency (FEMA) that aims to reduce the damage and cost of flooding to homes, businesses, and municipal structures. Established by the United States Congress in 1968, the NFIP encourages communities to adopt and enforce sound floodplain management and provides affordable flood insurance to property owners. There are over 9,000 flood insurance policies in effect in Maine with coverage totaling over \$2 billion in flood damage protection.



Photo by Cameron Adams

**Figure 1.** Flooding in the Back Cove area of Portland on September 30, 2015 after 4.8 inches of rainfall within six hours and an 11.6 foot tide with 0.5 feet of surge.

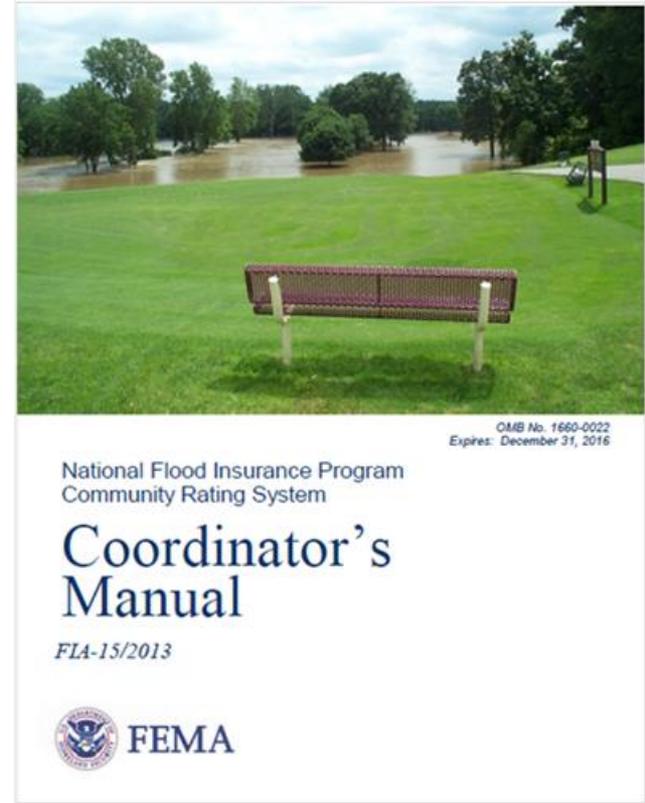
### The Community Rating System

The NFIP's Community Rating System (CRS) is a voluntary program that provides discounted flood insurance to communities undertaking floodplain management activities that go above and beyond the minimum NFIP standards. The CRS helps to reduce impacts and costs associated with flood events, including storm surge and sea level rise. Additionally, it incentivizes actions that build resiliency and can help save lives, livelihoods, and property in the event of a flood.

To participate in CRS, a community must be in full compliance with the NFIP requirements. Community officials must submit an application to FEMA documenting the creditable activities the community undertakes as described in the CRS Coordinator's Manual. FEMA staff then review the application, calculate the community's credit points and corresponding class rating, and arrange for flood insurance premium discounts for all NFIP flood insurance policy holders within the community.

## The Community Rating System

The *CRS Coordinator's Manual* is the guidebook for the CRS and explains how the program operates, the criteria for CRS classification, and how credits are calculated. In addition to being the primary reference for CRS activities and credits, it can help guide communities interested in improving their floodplain management programs and implementing actions to increase community resiliency. Communities receive points by undertaking any or all of the creditable activities identified in the CRS Coordinator's Manual. Creditable activities fall under four categories: public information; mapping and regulations; flood damage reduction; and warning and response. The program offers a wide range of creditable activities that include education and outreach about flooding, land use regulations, and flood damage reduction strategies. Examples include preservation of open space, public information campaigns, and development standards that protect existing and future public and private structures from flood damage.



**Figure 2.** The Community Rating System Coordinator's Manual

The Community Rating System

For communities that participate in CRS, flood insurance premium rates are discounted in increments of 5% and the discounts range from 5% up to 45%. Discounts are based on a point system where specific floodplain management activities receive an assigned number of points. Communities are assigned a CRS class based on the total number of points earned. There are ten classes based on 500 point increments. For every 500 points a community receives, it improves its class rating by one class. The more points a community receives, the better the class rating and greater the discount on flood insurance.

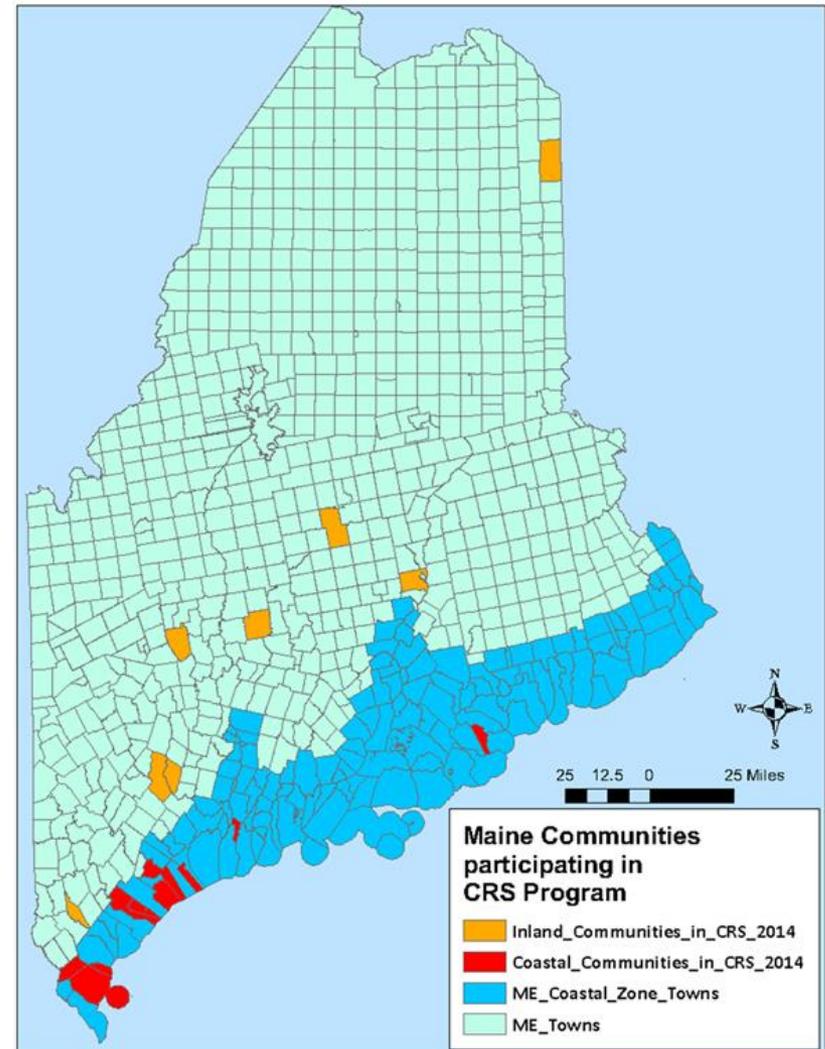
CRS Class Rating	Points	Discount on Flood Insurance for SFHA	Discount on Flood Insurance for Non-SFHA
10	0-499	0%	0%
9	500-999	5%	5%
8	1000-1499	10%	5%
7	1500-1999	15%	5%
6	2000-2499	20%	10%
5	2500-2999	25%	10%
4	3000-3499	30%	10%
3	3500-3999	35%	10%
2	4000-4499	40%	10%
1	4500+	45%	10%

**Figure 3.** Community Rating System classes, corresponding points, and flood insurance discounts on insurance policies for properties located within the Special Flood Hazard Area (SFHA), or the regulatory 100-year floodplain designated by FEMA, and for those located outside of the SFHA.

## The Community Rating System in Maine

One of the most common natural hazards in Maine is flooding. Coastal communities are especially vulnerable to flooding from inundation of coastal waters resulting from storms, surge, waves, and erosion. Maine property owners pay more than \$9 million annually in flood insurance premiums through the NIFP. Seventeen Maine communities participate in CRS. Of those seventeen, only nine, out of 141 coastal communities, are located within the State's Coastal Zone.

**Figure 4.** Maine communities that participate in the NFIP's Community Rating System. Seventeen Maine communities are in the CRS program, nine of which are located within the State's Coastal Zone.



## The Community Rating System in Maine

Many communities in Maine are already undertaking activities that qualify for credit under the CRS program. Additionally, there are statewide policies that communities can get CRS credit for. For example, the state “freeboard” requirement to elevate new and substantially improved structures within the regulatory floodplain one foot above the base flood elevation would provide all of Maine’s communities with CRS credit.

Community	CRS Entry Date	Class Rating	% Discount on Flood Insurance for SFHA
Alfred	10/9/91	8	10
Arrowsic	10/1/93	9	5
Auburn	10/1/92	9	5
Cape Elizabeth	10/1/94	8	10
Dover-Foxcroft	10/1/07	9	5
Farmington	10/1/94	8	10
Fort Fairfield	10/1/02	8	10
Lewiston	10/1/93	8	10
Ogunquit	10/1/92	8	10
Old Orchard Beach	10/1/93	8	10
Old Town	10/1/05	8	10
Portland	10/1/93	8	10
Saco	10/1/92	8	10
Skowhegan	10/1/91	8	10
South Berwick	10/1/94	7	15
Southwest Harbor	10/1/96	9	5
York	10/1/01	8	10

**Figure 5.** Table of Maine communities that participate in CRS, the date they joined, their class rating, and the percent discount provided on NFIP flood insurance for properties within the Special Flood Hazard Area (SFHA), the regulatory 100-year floodplain designated by FEMA.

### Next Steps

The Maine Geological Survey is working in partnership with the Maine Floodplain Management Program, Maine Coastal Program, and Maine Municipal Planning and Assistance Program to increase participation of Maine's communities in CRS. They are investigating ways to facilitate and streamline the CRS application process and assist communities to reduce flood insurance costs for Maine's citizens.



Photo by Peter A. Slovinsky

Maine Geological Survey

**Figure 6.** Example of a residential structure raised on a pile foundation in Saco, ME. The pile foundation elevates the structure above the anticipated flood elevation, allowing water to flow freely under the structure thereby preventing flood damage to the home.

## References and Additional Information

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