

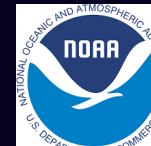


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An Overview of the Community Rating System (CRS)

Knox County
June 15, 2017

Abbie Sherwin, CFM
NOAA Coastal Management Fellow
Maine Coastal Program
Dept. of Agriculture, Conservation and Forestry



Presentation Overview

- CRS overview
- Application process
- Benefits and challenges
- CRS in Maine
- Available resources
- Q&A

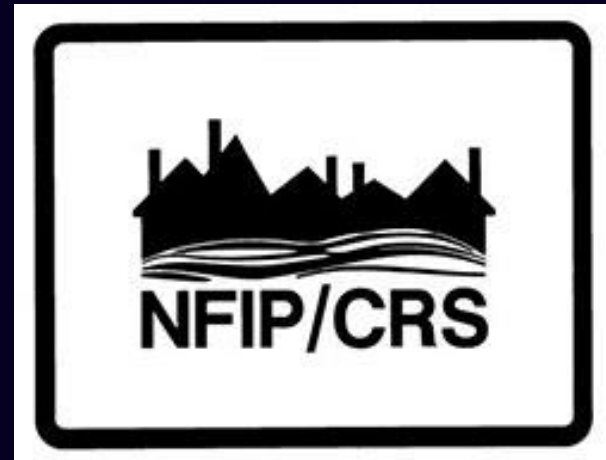


Acronyms

- CRS – Community Rating System
- NFIP – National Flood Insurance Program
- FEMA – Federal Emergency Management Agency
- ISO – Insurance Services Office

What is CRS?

- Voluntary NFIP program implemented in 1990
- Encourages and rewards community actions that exceed minimum floodplain requirements
- Provides discounted flood insurance
- Reduces flood risk
- Incentivizes resilience



3 Goals of CRS

1. Reduce flood damage to insurable property
2. Strengthen and support the insurance aspects of the NFIP
3. Encourage a comprehensive approach to floodplain management

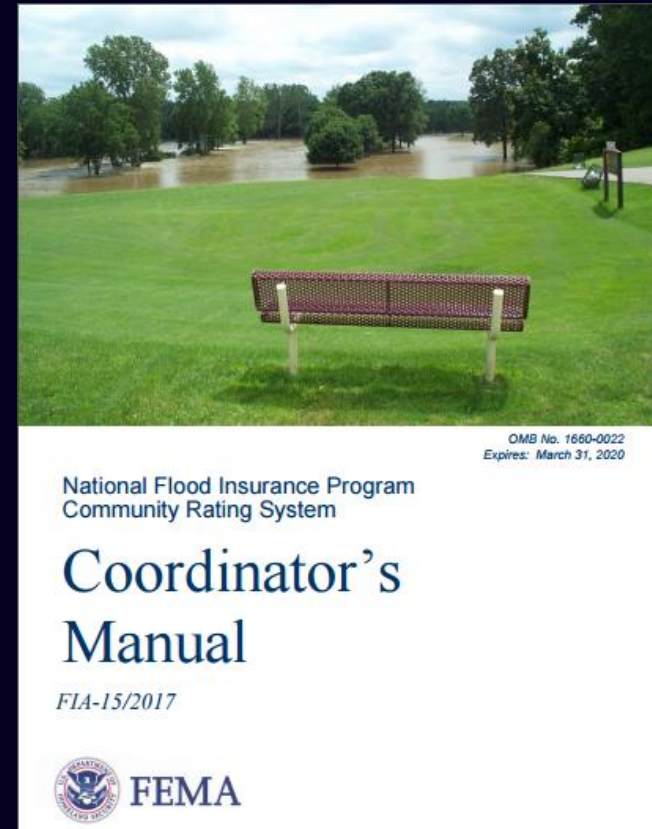
CRS Rating Table

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

- Premium discounts apply to SFHA
- Non-SFHA
 - 10% discount for Classes 1-6
 - 5% discount for Classes 7-9
- Preferred Risk Policies (PRPs) and minus-rated policies are not eligible for discounts

CRS Activities & Elements

- **300: Public Information Activities**
 - Outreach, hazard disclosure, insurance promotion
- **400: Mapping and Regulations**
 - Floodplain mapping, open space preservation, stormwater management
- **500: Flood Damage Reduction**
 - Acquisition/relocation, flood protection of structures, drainage maintenance
- **600: Warning and Response**
 - Flood emergency response and warnings, levee/dam safety



OMB No. 1660-0022
Expires: March 31, 2020

National Flood Insurance Program
Community Rating System

Coordinator's Manual

FIA-15/2017



FEMA



Master List of Community Rating System (CRS) Activities and Elements

300 Series: Public Information Activities

310 (Elevation Certificates)

			<u>Max</u>	<u>Page</u>
a	EC	Elevation Certificates after CRS application	38	310-12
b	ECPO	Elevation Certificate on post-FIRM buildings	48	310-13
c	ECPR	Elevation Certificate on pre-FIRM buildings	30	310-15

320 (Map Information Service)

a	MI1	Providing insurance information from FIRM	30	320-8
b	MI2	LiMWA/floodway info/CBRS area	20	320-10
c	MI3	Other flood problems not shown on FIRM	20	320-11
d	MI4	Flood depth data	20	320-11
e	MI5	Special flood-related hazards	20	320-13
f	MI6	Historical/repetitive flood information	20	320-14
g	MI7	Natural floodplain functions	20	320-15

330 (Outreach Projects)

a	OP	Outreach projects	200	330-6
b	FRP	Flood response preparations	50	330-9
c	PPI	Program for Public Information bonus	N/A	330-14
d	STK	Stakeholder bonus	50	330-20

340 (Hazard Disclosure)

a	DFH	Real estate agent disclosure of SFHA	35	340-3
b	ODR	Other disclosure requirements	25	340-5
c	REB	Real estate brochure	12	340-7
d	DOH	Disclosure of other hazards	8	340-10

350 (Flood Protection Information)

a	LIB	Library	10	350-3
b	LPD	Locally pertinent documents in the library	10	350-5
c	WEB	Website	105	350-7

360 (Flood Protection Assistance)

a	PPA	Property protection advice	40	360-4
b	PPV	Advice after a site visit	45	360-6
c	FAA	Financial assistance advice	15	360-7
d	TNG	Training	10	360-10

370 (Flood Insurance Promotion)

a	FIA	Flood insurance assessment	15	370-3
b	CP	Coverage plan	15	370-6
c	CPI	Plan implementation	60	370-9
d	TA	Technical assistance	20	370-12

400 Series: Mapping and Regulations

410 (Floodplain Mapping)

			<u>Max</u>	<u>Page</u>
a	NS	New study	350	410-8
b	LEV	Leverage	N/A	410-14
c	SR	State review	60	410-16
d	HSS	Higher study standards	200	410-18
e	FWS	Floodway standard	140	410-21
f	MAPSH	Special hazards mapping	100	410-24

420 (Open Space Preservation)

a	OSP	Preserved open space	1,450	420-3
b	DR	Deed restriction	50	420-12
c	NFOS	Natural functions open space	350	420-14
d	SHOS	Special hazards open space	150	420-19
e	CEOS	Coastal erosion open space	750	420-20
f	OSI	Open space incentives	250	420-21
g	LZ	Low density zoning	600	420-28
h	NSP	Natural shoreline protection	120	420-30

430 (Higher Regulatory Standards)

a	DL	Development limitations	1,330	430-6
b	FRB	Freeboard	500	430-11
c	FDN	Foundation protection	80	430-16
d	CSI	Cumulative substantial improvements	90	430-18
e	LSI	Lower substantial improvements	20	430-19
f	PCF	Protection of critical facilities	80	430-21
g	ENL	Enclosure limits	240	430-23
h	BC	Building code	100	430-26
i	LDP	Local drainage protection	120	430-30
j	MHP	Manufactured home park	15	430-31
k	CAZ	Coastal A Zone regulations	500	430-32
l	SHR	Special hazards regulations	100	430-38
m	TSR	Tsunami hazard regulations	50	430-46
n	CER	Coastal erosion regulations	370	430-48
o	OHS	Other higher standards	100	430-52
p	SMS	State-mandated standards	20	430-53
q	RA	Regulations administration	67	430-55

Activity

Elements

Credit
Criteria

Required
Documentation

310 ELEVATION CERTIFICATES—Summary

Maximum credit: 116 points

312 Elements

- a. **Maintaining Elevation Certificates (EC):** Up to 38 points for maintaining Federal Emergency Management Agency (FEMA) Elevation Certificates on all buildings built in the Special Flood Hazard Area (SFHA) after the date of application to the Community Rating System (CRS). All communities applying to the CRS must apply for this element. The community must make copies of the certificates available to all inquirers.
- b. **Maintaining Elevation Certificates for post-FIRM buildings (ECPO):** Up to 48 points for maintaining Elevation Certificates on buildings built before the date of application to the CRS but after the initial date of the Flood Insurance Rate Map (FIRM).
- c. **Maintaining Elevation Certificates for pre-FIRM buildings (ECPR):** Up to 30 points for maintaining Elevation Certificates on buildings built before the initial date of the FIRM.

Credit Criteria

All three elements of this activity have the same credit criteria, described in Section 311.b.

- a. The community must maintain completed Elevation Certificates showing the “finished construction” elevations for all buildings constructed or substantially improved in the SFHA during the period credited.
- b. For floodproofed buildings, a FEMA Floodproofing Certificate is needed instead of an Elevation Certificate. Other certificates may be needed in coastal high hazard areas and for floodproofed residential basements.
- c. The community must ensure that the certificates are complete and the information correct.
- d. The community must make copies of Elevation Certificates readily available to anyone upon request.

Impact Adjustment

There is no impact adjustment for EC. The credit for ECPO and ECPR are adjusted based on the number of post-FIRM and pre-FIRM buildings in the community.

Documentation Provided by the Community

Each element has a separate section describing needed documentation.

Minimum Requirements

- Join & participate in NFIP for 1 year
- Full compliance with minimum NFIP regulations
- Maintain elevation certificates (new construction)
- Meet repetitive loss criteria: info gathering, mapping, outreach, mitigation plan
- Flood insurance for locality-owned property in SFHA (where required)
- Show Limit of Moderate Wave Action (LiMWA) line on new FIRMs

How do Communities participate?

- Municipalities participate
- Any community in full compliance with NFIP may apply
- Can apply at any time
- CRS Class changes occur 2 times each year
 - May 1st and October 1st

Application Process

Designate a CRS Coordinator



Submit a Letter of Interest

- Submit to FEMA Regional Office
- Signed by community official with authority to implement and administer local laws, ordinances, and regulations.



Complete CRS Quick Check

- Show you are implementing activities that would receive at least 500 credit points
- Estimated public reporting burden is 45 hours per response



FEMA approves submittal



Community Assistance Visit (CAV) from FEMA & Verification Visit from ISO Specialist

CRS Quick Check

Community Name		State	<input type="text"/>		
NFIP Number		Initial FIRM Date	<input type="text"/>		
Population		Current FIRM Date	<input type="text"/>		
Date Completed		County	<input type="text"/>		
Chief Executive Officer		CRS Coordinator			
Name		<input type="text"/>			
Title		<input type="text"/>			
Address		<input type="text"/>			
Address		<input type="text"/>			
CRS Coordinator's phone number			Fax		
CRS Coordinator's e-mail address <input type="text"/>					
Section	Prerequisites	Estimate	Yes	Not Yet	
211	a(2) Have you had a Community Assistance Visit that concluded you are in full compliance with the NFIP?	<input type="text"/>	<input type="text"/>	<input type="text"/>	
	a(4) How many repetitive loss properties are there in your community?	<input type="text"/>	<input type="text"/>	<input type="text"/>	
	a(4) What is your repetitive loss category? (A = no rep losses, B = 1 - 49, C = 50 or more)	<input type="text"/>	<input type="text"/>	<input type="text"/>	
	a(5) Have you maintained flood insurance policies on all buildings owned by your community that have been required to have one?	<input type="text"/>	<input type="text"/>	<input type="text"/>	
213	a How many buildings are in your community's Special Flood Hazard Area?	<input type="text"/>	<input type="text"/>	<input type="text"/>	
	a How large is your community's Special Flood Hazard Area (in acres)?	<input type="text"/>	<input type="text"/>	<input type="text"/>	

CRS Activity & Sections		CRS Activities and Elements	Response			Primary documentation that will be needed (other documentation or information will be required for each activity):
			Yes, currently	Will begin providing	Will consider	
310	a	Will you keep FEMA Elevation Certificates on all new buildings and substantial improvements in the SFHA?				
	b	Do you have FEMA Elevation Certificates on buildings built before your CRS application?				<i>Copies of elevation certificates</i>
320	a	Are you willing to publicize that you will read FIRMs for inquirers and keep a record of what you told them?				<i>Copy of publicity</i>
	b	Do you provide inquirers with other non-insurance related information that is shown on your FIRM?				
	c	Do you provide information about flood problems other than those shown on the FIRM?				
	d	Do you provide information about flood depths?				
	e	Do you provide information about special flood-related hazards, such as erosion, subsidence, or tsunamis?				
	f	Do you provide information about past flooding at or near the site in question?				
	g	Do you provide information about areas that should be protected because of their natural floodplain functions?				

- Highlighted items indicate the activities that will likely get your community to the minimum 500 points

After the Application

- Community's activities and performance are reviewed during a verification visit
- FEMA determines credit and notifies the community, state, insurance companies, and other appropriate parties
- Annual Recertification
 - Community must verify it's continuing to perform the activities that are being credited by the CRS by submitting an annual recertification.
- Cycle Visit
 - Every 5 years
- Can improve class rating by undertaking additional activities

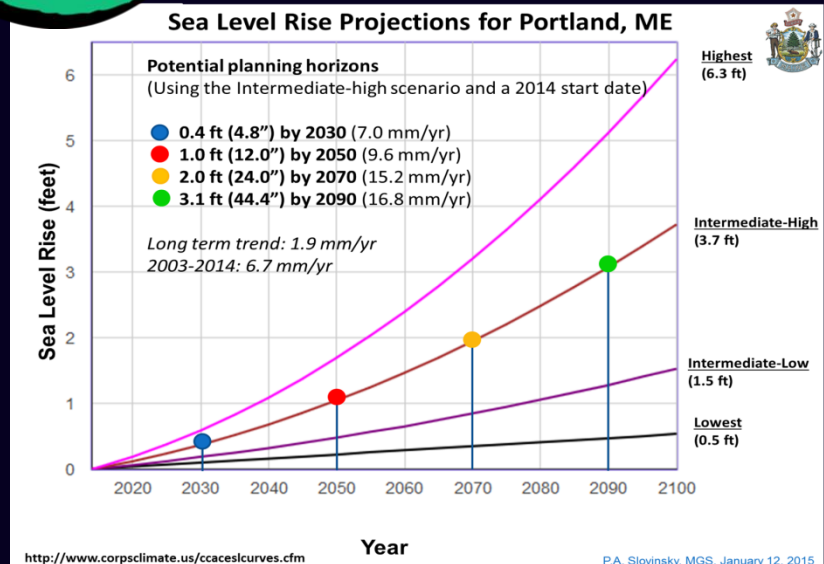
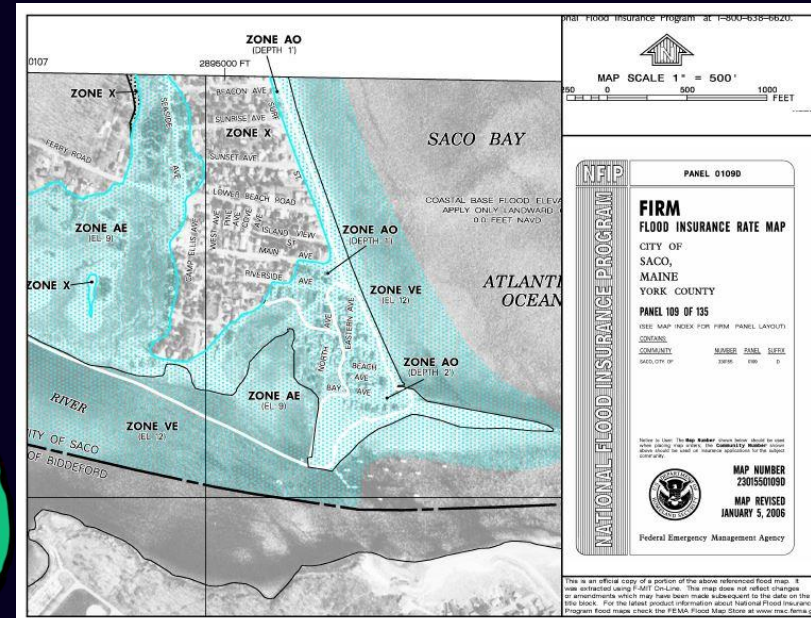
Challenges



- Strained resources
- Lack of capacity
- Arduous requirements
- Incentive disparity
- Insufficient return on investment
- Lack of awareness and knowledge
- Politicized

Why Participate?

- Increasing premiums
 - BW12
 - HFIAA
- New FIRMs
- Changing conditions



- Every time a **CRS rating increases by one class** (reducing premiums by 5%), the average **amount of flood damage in that community decreases by \$303K**
- Actions required to earn one class increase **protect a community against the flooding caused by ≈ 2 inches of rain**

Brody, et. al, *The Rising Cost of Floods*, Journal of the American Planning Association (2007)

Overall, on average, from
1999 – 2009 CRS
communities experienced:

- **~38% less insured flood damage in the SFHA** compared to non-CRS communities
- **~36% less insured flood damage outside the SFHA** compared to non-CRS communities

PRELIMINARY STUDY

*Evaluating the
Effectiveness of the
Community Rating System:
A National Study*

Wesley E. Highfield & Samuel D. Brody

Center for Texas Beaches & Shores

Department of Marine Sciences

Texas A&M University at Galveston

Benefits

- Financial savings
 - Money stays in the community
- Beyond the money...
 - Land use management
 - Hazard mitigation planning
 - Awareness of flood risk
 - Protect natural areas and benefits of natural floodplains
 - Enhance community resilience



There's Good News!

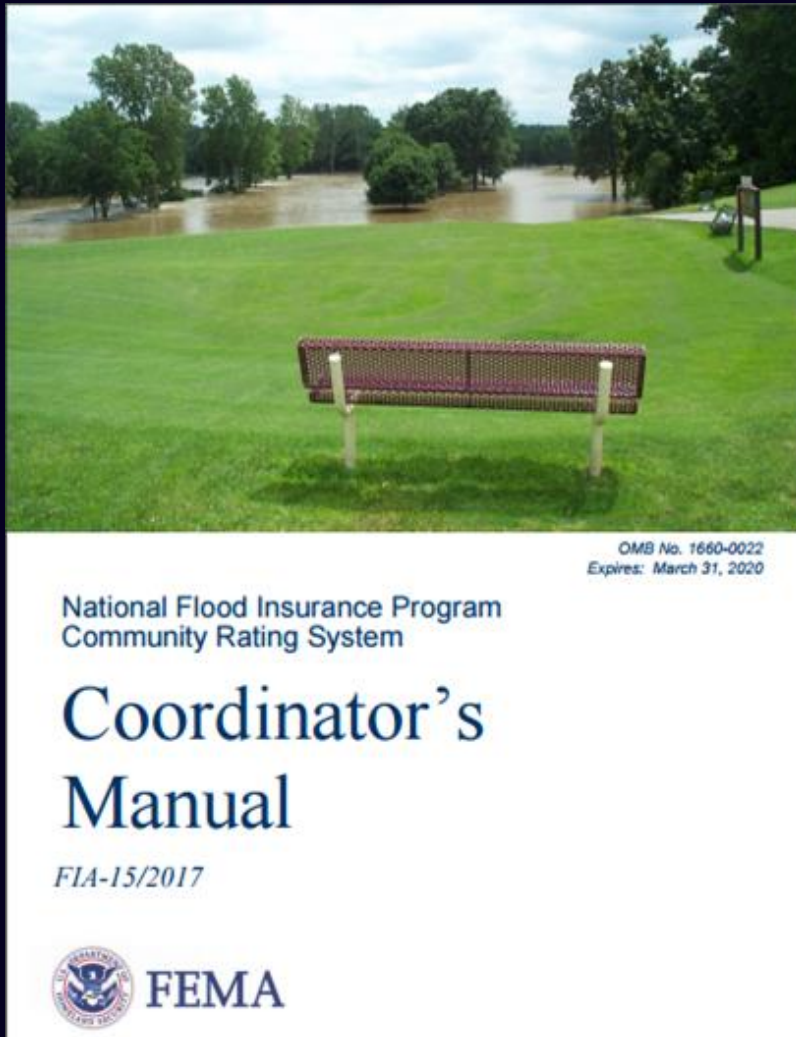
Many communities are *already* doing things that qualify for CRS credit

- Comprehensive planning
- Outreach and education
- Building code
- Freeboard
- Shoreland Zoning





Communities don't have to participate to benefit...



CRS Coordinator's Manual presents a menu of detailed options for increasing flood resilience

CRS in Maine

Participation in the CRS Program

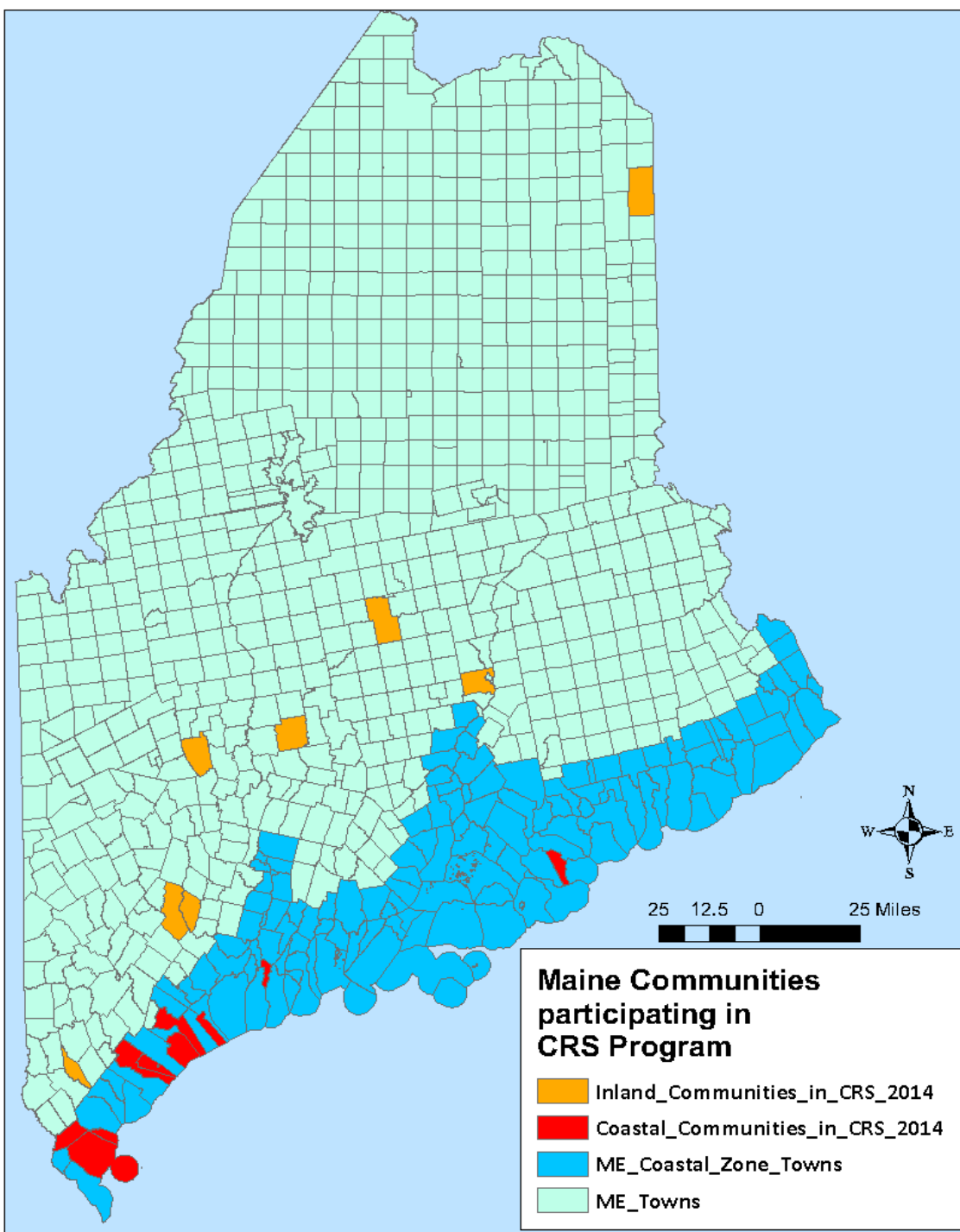
Statewide

17 communities of 889*
(2%)

In the Coastal Zone

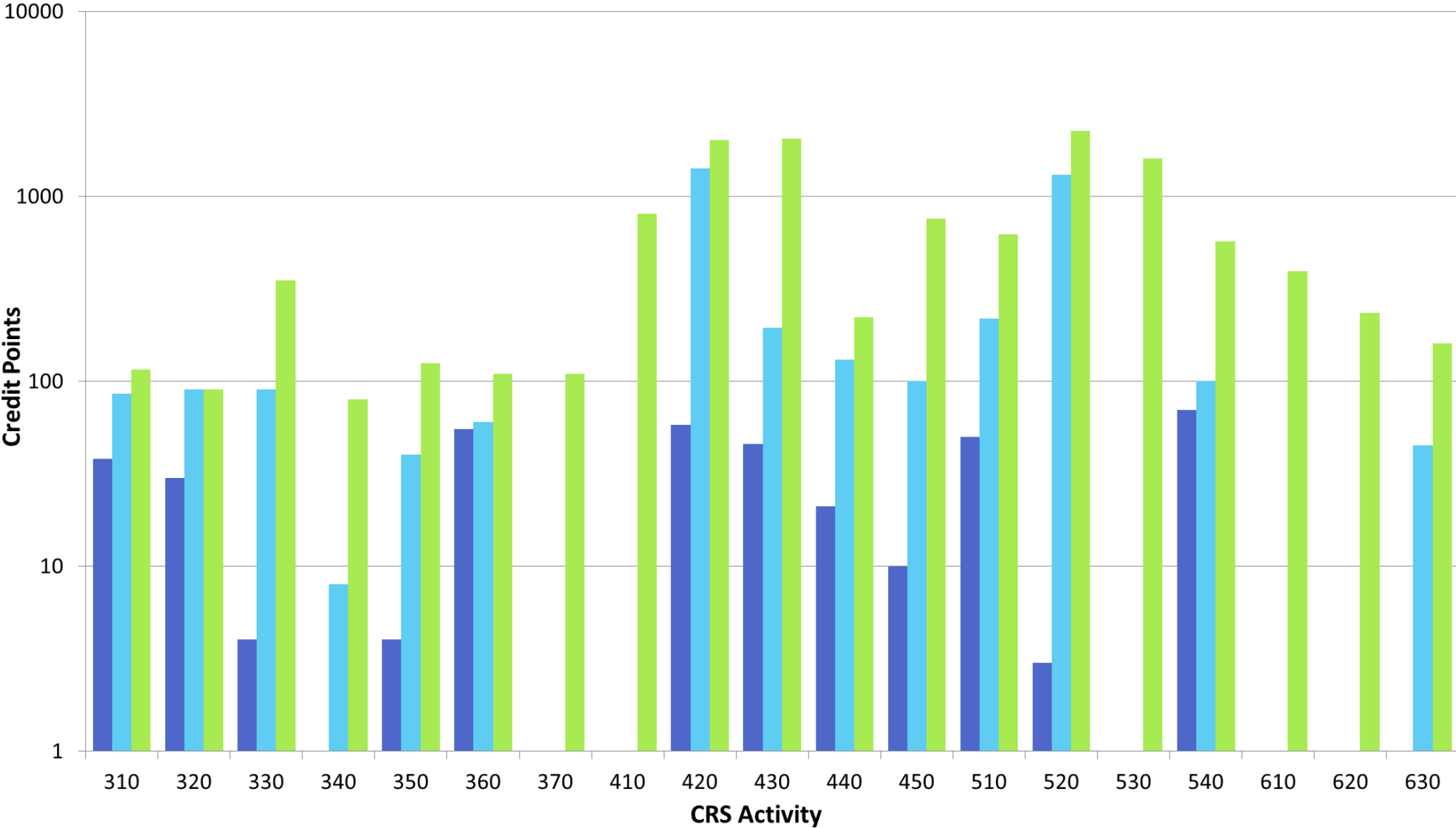
9 coastal communities of
141* (6%)

** includes unorganized and
unincorporated territories that
participate in the NFIP.*



Community	Class
Alfred	8
Arrowsic	9
Auburn	9
Cape Elizabeth	8
Dover-Foxcroft	9
Farmington	8
Fort Fairfield	7
Lewiston	8
Ogunquit	8
Old Orchard Beach	8
Old Town	7
Portland	8
Saco	8
Skowhegan	8
South Berwick	7
Southwest Harbor	9
York	7

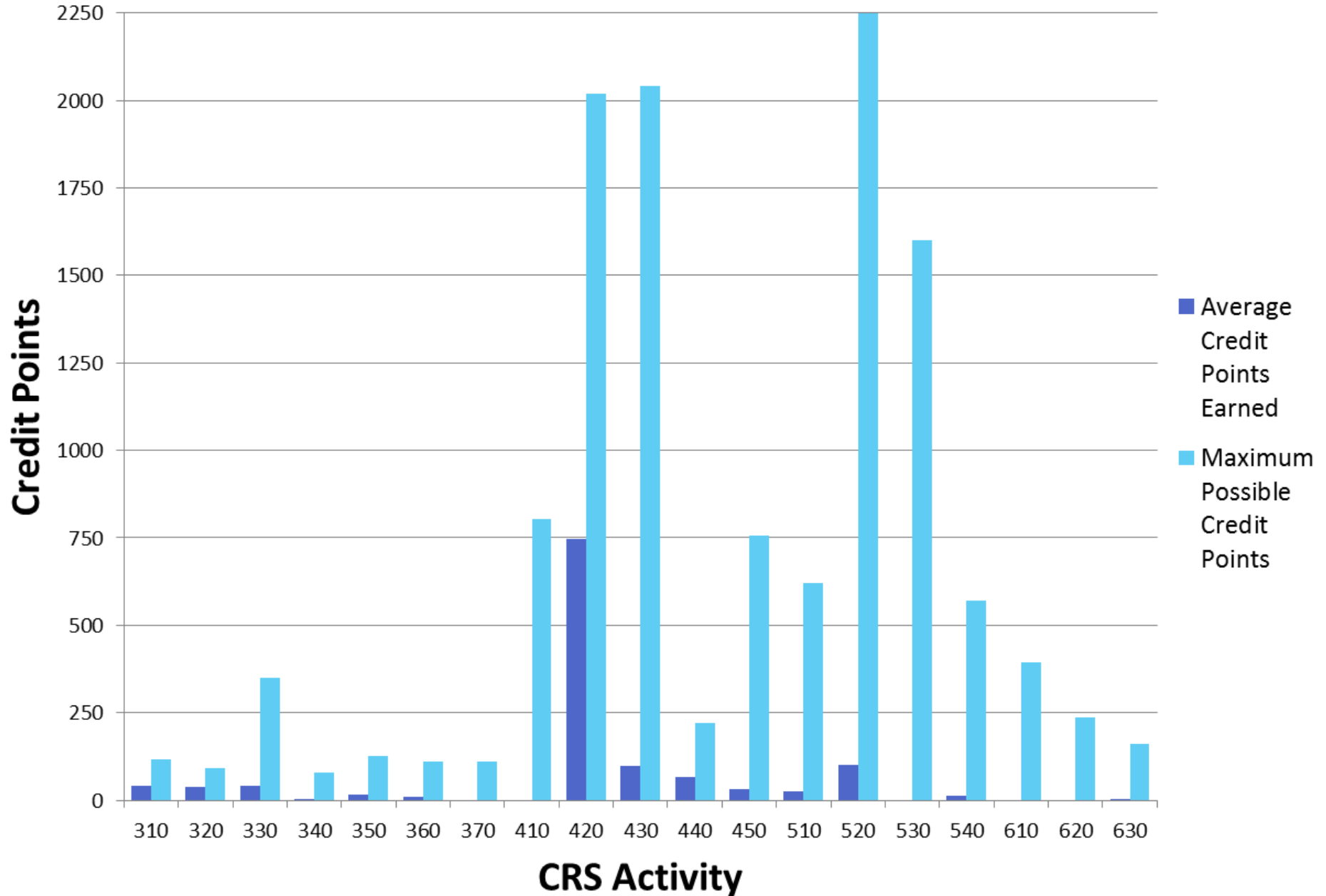
CRS Credit in Maine



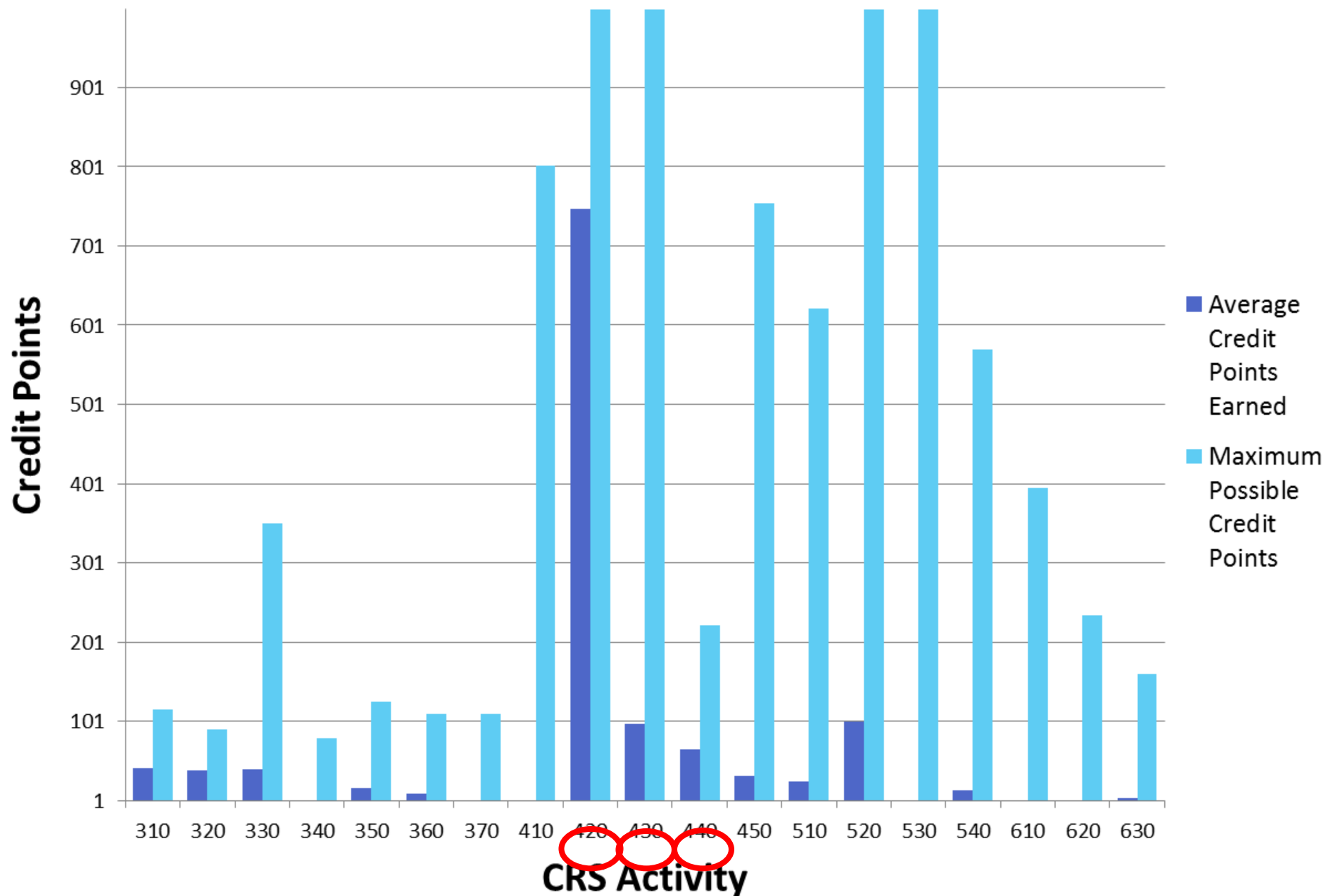
■ Minimum Points Earned (>0) ■ Maximum Points Earned ■ Maximum Possible Points

Note: Horizontal axis converted to log scale, base 10

Average Earned CRS Credit in Maine



Average Earned CRS Credit in Maine



Activities With the Biggest Payoff

Activity Number	Activity Name	Max. Possible	Average Earned	Max. Earned	Min. Earned
420	Open Space Preservation	2020	748	1416	58
430	Higher Regulatory Standards	2042	97	194	46
440	Flood Data Maintenance	222	65	131	21

420: Open Space Preservation

- Objectives
 - Prevent flood damage by keeping flood-prone lands free of development
 - Protect and enhance the natural functions of floodplains
- Credit for development restrictions
 - Deed restrictions, low-density development



$$rOSP = \frac{aOSP}{aSFHA}$$

Town of Alfred, Maine

Area of Special Flood Hazard Area (SFHA)

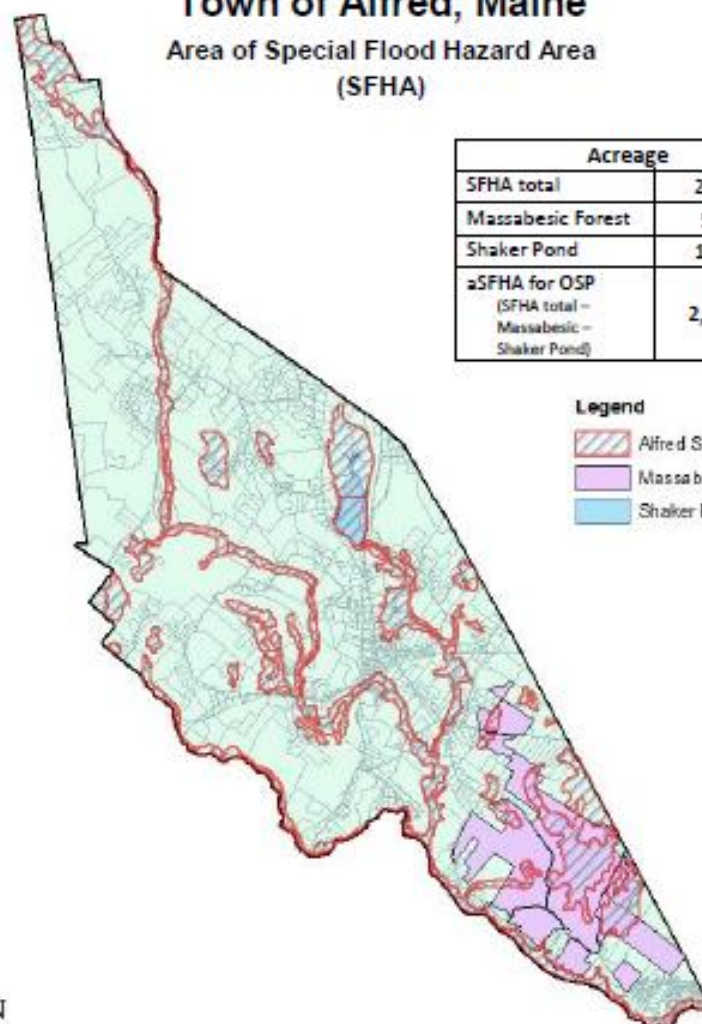
Acreage	
SFHA total	2,939.7
Massabesic Forest	505.9
Shaker Pond	105.91
±SFHA for OSP (SFHA total - Massabesic - Shaker Pond)	2,327.89

Legend

- Alfred SFHA_Q3
- Massabesic Forest_Federal
- Shaker Pond



0 625 1,250 2,500
Meters



Knox County

Federal Emergency Management Agency

NFIP Policy and Claims Report

MAINE

County	Number Policies	Total Coverage	Total Premium	Total Claims Since 1978	Total Paid Since 1978
ANDROSCOGGIN COUNTY	214	\$ 40,956,900	\$ 212,744	124	\$ 777,146
AROOSTOOK COUNTY	181	\$ 28,081,400	\$ 156,663	360	\$ 4,391,231
CUMBERLAND COUNTY	1,428	\$ 374,869,900	\$ 1,450,428	408	\$ 3,122,739
FRANKLIN COUNTY	146	\$ 19,444,400	\$ 125,838	66	\$ 483,054
HANCOCK COUNTY	365	\$ 90,726,500	\$ 375,271	62	\$ 214,757
KENNEBEC COUNTY	394	\$ 73,349,500	\$ 529,003	388	\$ 4,832,520
KNOX COUNTY	344	\$ 95,318,500	\$ 397,680	54	\$ 272,152
LINCOLN COUNTY	392	\$ 102,187,700	\$ 430,499	95	\$ 606,029
OXFORD COUNTY	295	\$ 49,178,700	\$ 352,816	317	\$ 3,204,955
PENOBSCOT COUNTY	413	\$ 63,010,400	\$ 412,069	241	\$ 1,728,917
PISCATAQUIS COUNTY	63	\$ 11,921,800	\$ 105,336	88	\$ 1,877,937
SAGadahoc COUNTY	172	\$ 43,297,400	\$ 183,324	75	\$ 753,596
SOMERSET COUNTY	199	\$ 24,014,900	\$ 162,623	107	\$ 751,198
WALDO COUNTY	147	\$ 35,588,100	\$ 191,810	61	\$ 530,215
WASHINGTON COUNTY	115	\$ 21,701,300	\$ 140,258	20	\$ 32,089
YORK COUNTY	3,587	\$ 914,561,700	\$ 3,635,300	2,116	\$ 19,119,513
State Total :	8,455	\$ 1,988,209,100	\$ 8,861,662	4,582	\$ 42,698,048

NFIP Policies

Community	Total Premium	Total Policies	Total Coverage	Total Claims Since '78	Total Paid Since '78
Camden	\$103,462	93	\$27,351,900	13	\$152,225
Owls Head	\$55,342	41	\$11,057,500	10	\$25,275
Rockland	\$27,175	19	\$5,738,000	6	\$42,221
South Thomaston	\$28,957	24	\$6,335,400	3	\$16,797
St. George	\$60,271	80	\$21,801,000	4	\$545
Vinalhaven	\$38,257	23	\$6,258,600	3	\$11,041

As of 6/5/17

Camden: Potential Cost Savings

CRS Class	Per Policy	Community-Wide
9	\$50	\$4,692
8	\$95	\$8,871
7	\$140	\$13,050
6	\$191	\$17,742
5	\$236	\$21,921
4	\$281	\$26,100
3	\$326	\$30,279
2	\$371	\$34,459
1	\$415	\$38,638

Owls Head: Potential Cost Savings

CRS Class	Per Policy	Community-Wide
9	\$59	\$2,429
8	\$111	\$4,545
7	\$162	\$6,661
6	\$222	\$9,089
5	\$273	\$11,205
4	\$325	\$13,321
3	\$377	\$15,437
2	\$428	\$17,553
1	\$480	\$19,669

Rockland: Potential Cost Savings

CRS Class	Per Policy	Community-Wide
9	\$59	\$1,129
8	\$101	\$1,921
7	\$143	\$2,713
6	\$202	\$3,843
5	\$244	\$4,635
4	\$286	\$5,427
3	\$327	\$6,219
2	\$369	\$7,011
1	\$411	\$7,803

South Thomaston: Potential Cost Savings

CRS Class	Per Policy	Community-Wide
9	\$51	\$1,228
8	\$99	\$2,374
7	\$147	\$3,519
6	\$198	\$4,747
5	\$246	\$5,893
4	\$293	\$7,039
3	\$341	\$8,185
2	\$389	\$9,331
1	\$437	\$10,477

St. George: Potential Cost Savings

CRS Class	Per Policy	Community-Wide
9	\$32	\$2,593
8	\$54	\$4,354
7	\$76	\$6,115
6	\$109	\$8,708
5	\$131	\$10,469
4	\$153	\$12,230
3	\$175	\$13,991
2	\$197	\$15,753
1	\$219	\$17,514

Vinalhaven: Potential Cost Savings

CRS Class	Per Policy	Community-Wide
9	\$82	\$1,894
8	\$151	\$3,473
7	\$220	\$5,051
6	\$302	\$6,945
5	\$371	\$8,523
4	\$439	\$10,102
3	\$508	\$11,680
2	\$576	\$13,259
1	\$645	\$14,837

Where to Start

- Talk with ISO/CRS Specialist
- Review the CRS Coordinator's Manual
- Visit CRSresources.org
 - Helpful resources, including sample letter of interest
- Review CRS 'Quick Check' get a sense of potential credit
- Connect with participating communities
 - Form 'Users Group'
 - Cape Cod, MA

Assistance

- CRS Specialists available to assist communities with applying and designing, implementing, and documenting creditable activities
- CRS course for local officials offered free at FEMA's Emergency Management Institute (EMI)
- Webinars offered throughout the year (CRSresources.org)




Maine Flood Resilience Checklist



A self-assessment tool for Maine's coastal communities to evaluate their vulnerability to flood hazards and increase resilience.



Community Planning		Yes		No		N/A		Comments
16	Are high water mark, storm surge, and/or potential future flood elevation signs posted in your community in publicly visible areas?							
17	Does your community participate in flood hazard reduction programs (e.g., National Flood Insurance Program (NFIP), FEMA's Community Rating System, etc.) and if so, is your community in good standing with those programs?							
18	Is your community designated as StormReady by the National Weather Service?							
19	Has your community adopted the most recent Maine Uniform Building and Energy Code (MUBEC)?							
20	Does your community have a local hazard disclosure policy requiring hazard disclosure by real estate agents, private sellers, and/or by municipal officials for properties located in (a) the FEMA-designated regulatory floodplain and/or (b) other flood hazard areas (e.g., storm surge, sea level rise, etc.)?	<u>a</u>	<u>b</u>	<u>a</u>	<u>b</u>			
21	Does your community have a disaster response and recovery plan that includes short- and long-term actions and policies and identifies personnel responsible for those actions?							
22	Does your community participate in practice drills of emergency response plans?							
23	Does your community have a (a) flood warning plan and (b) system?	<u>a</u>	<u>b</u>	<u>a</u>	<u>b</u>			
24	Does your community have an emergency communication system to use prior to, during, and after a storm event or natural disaster (e.g., reverse 911 call system for landlines, IPAWS for cell phones)?							
25	Does your community have an emergency evacuation plan that identifies populations needing evacuation assistance and mechanisms for providing that assistance?							
	Does the plan account for seasonal population variability?							
26	Does your community have mutual aid agreements with neighboring communities for hazards and disaster preparation, response, and recovery?							

23 	Does your community have a (a) flood warning plan and (b) system?	<u>a</u>	<u>b</u>	<u>a</u>	<u>b</u>		
24 	Does your community have an emergency communication system to use prior to, during, and after a storm event or natural disaster (e.g., reverse 911 call system for landlines, IPAWS for cell phones)?						
25 	Does your community have an emergency evacuation plan that identifies populations needing evacuation assistance and mechanisms for providing that assistance?						

Checklist Section and Question		CRS Credit				
		Activity	Element	Description	Max. Points	
Community Planning	21	610	Flood Warning and Response	610	This activity provides credit for a community that, at a minimum, has adopted a flood warning and response program that includes a flood threat recognition system; methods to warn the public of an impending flood; a plan for response operations; and coordination with critical facility operators.	395
	23					
	24			612.b	Credit is provided for emergency warning alerts and messages that are disseminated to the public when a flood is imminent.	75
	25			612.c	This element credits a flood warning and response plan that identifies specific tasks to reduce or prevent threats to health, safety, and property from flooding.	115

Questions and Discussion

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