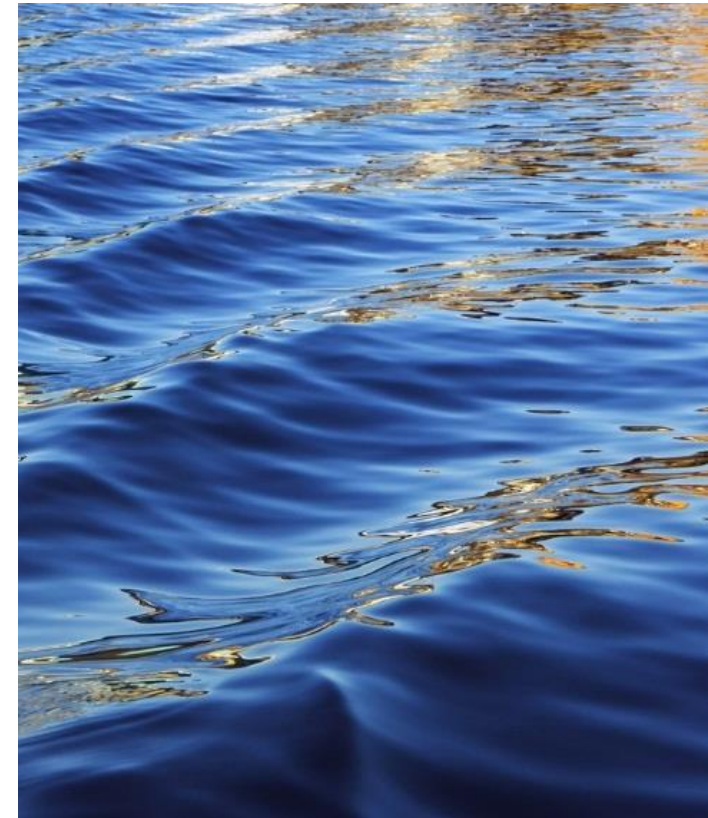


FEMA, The National Flood Insurance Program, and The Community Rating System



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Congressional Act of 1803

The first legislative act of federal disaster relief in U.S. history followed a devastating fire in Portsmouth, New Hampshire in December 1802. The destruction of large areas of the city's seaport threatened commerce in the newly founded nation. **In 1803, U.S. Congress provided relief to affected Portsmouth merchants by suspending bond payments for several months.**

Creation of FEMA

President Carter signed Executive Order 12127, effective **April 1, 1979, establishing FEMA**. Shortly after, in signing Executive Order 12148 on July 20, 1979, President Carter gave the agency the dual mission of **emergency management and civil defense**.



Photo – Billy Hathorn

The Stafford Act

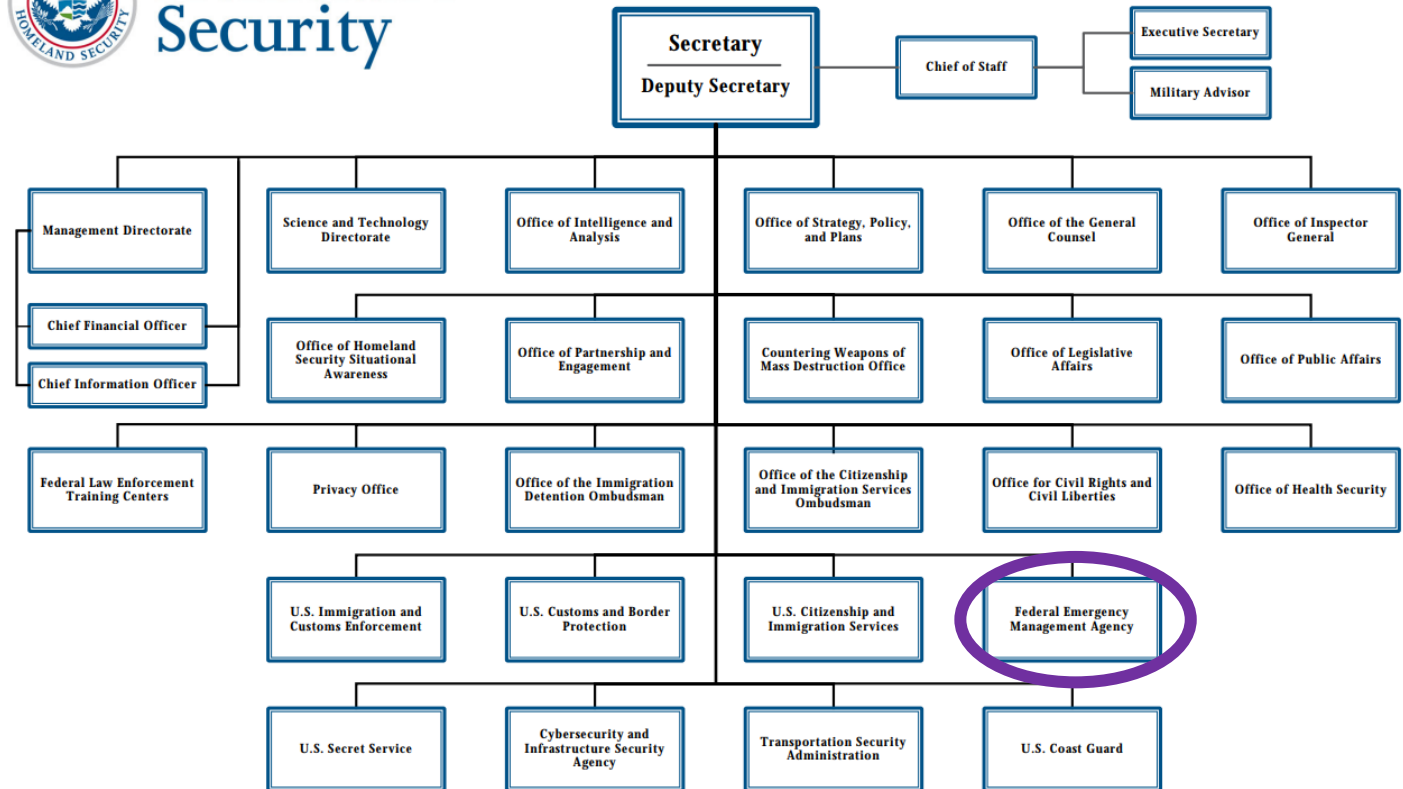
The agency's authorities were further defined and expanded by the Disaster Relief and Emergency Assistance Amendments of 1988, which amended the Disaster Relief Act of 1974 and renamed it the Robert T. Stafford Disaster Relief and Emergency Assistance Act ([Stafford Act](#)). The Stafford Act **provided clear direction for emergency management and established the current statutory framework for disaster response and recovery through presidential disaster declarations.**

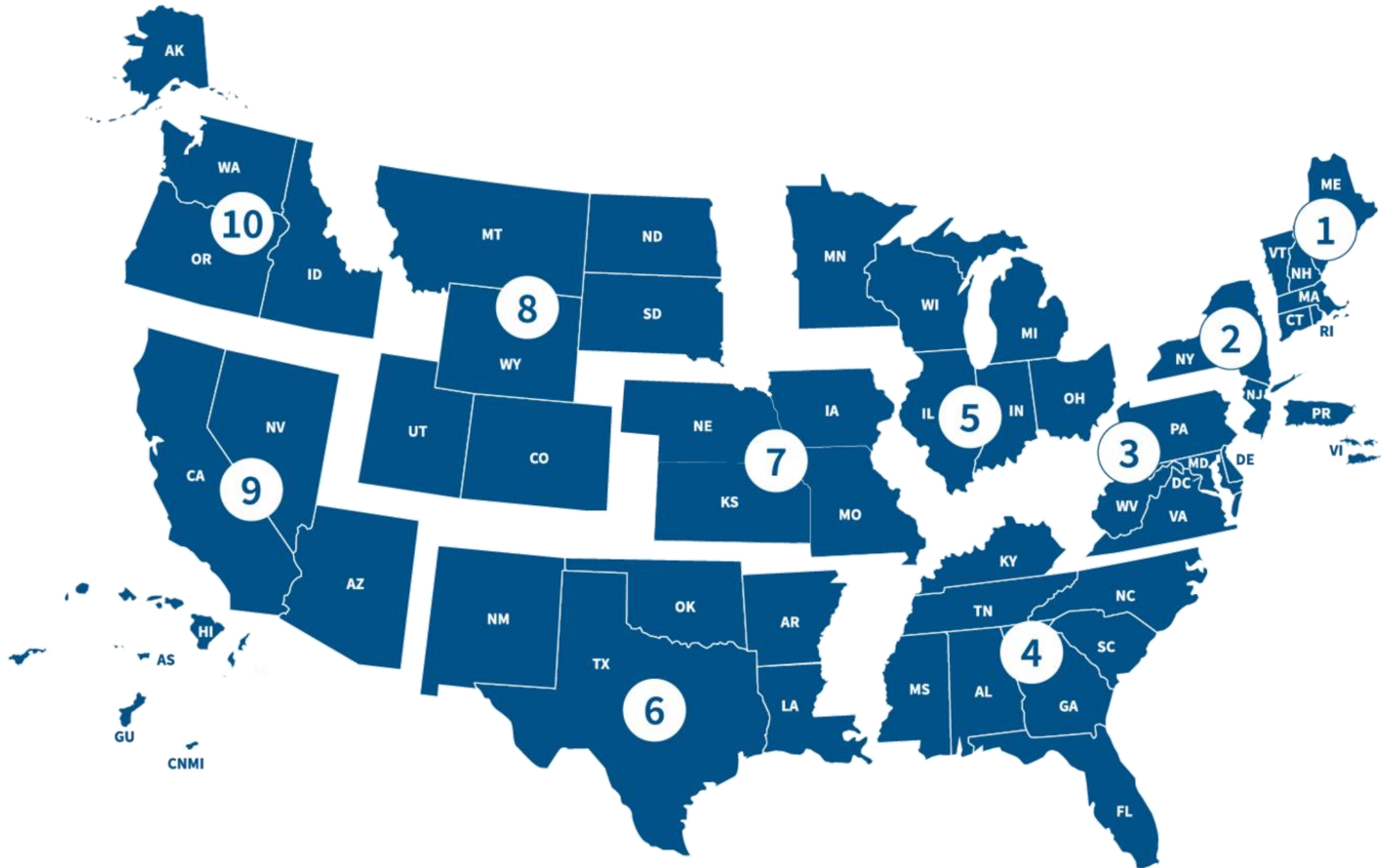
Department of Homeland Security

The terrorist attacks of September 11, 2001 changed the face of homeland security and emergency management and drove major statute and policy changes to reorganize the federal government. In 2002, President W. Bush signed the **Homeland Security Act, leading to the creation of the U.S. Department of Homeland Security (DHS).** The department was created on March 1, 2003 and united FEMA and 21 other organizations.



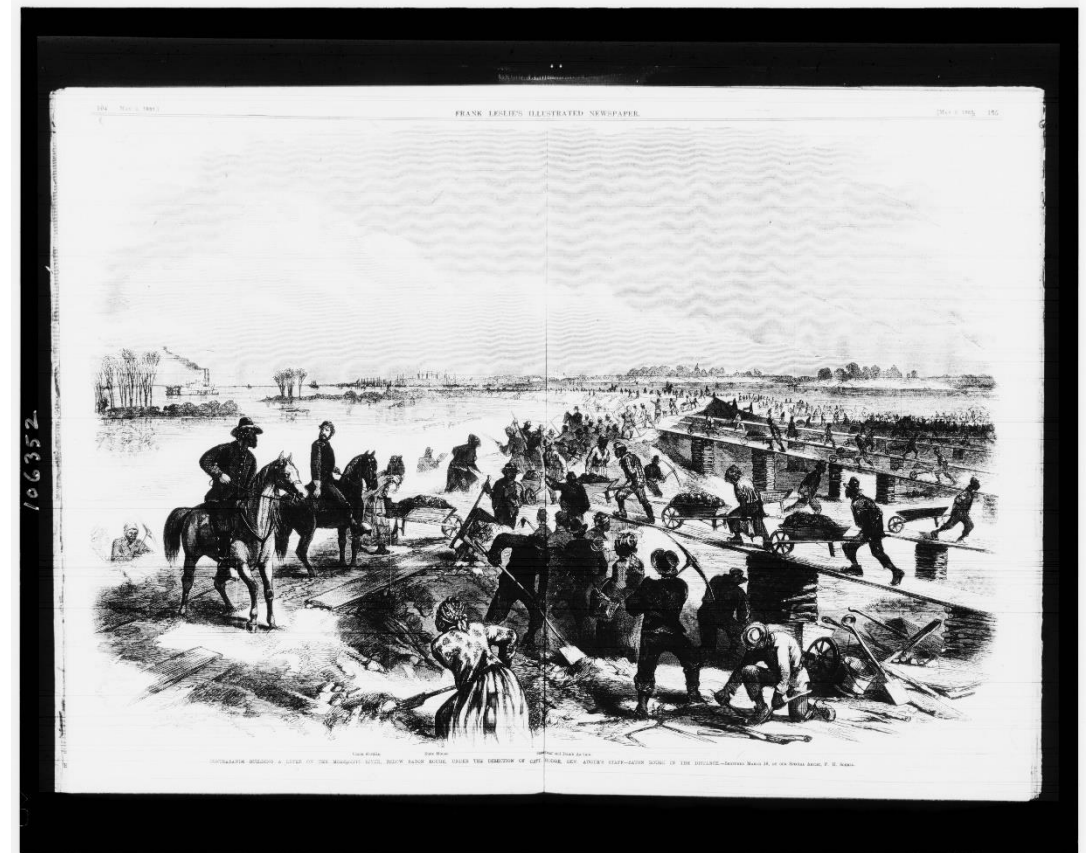
Homeland Security





Early American Floodplain Policy

- **1849 - The Swamp Land Acts of 1849 and 1850 transfer swamp and overflow land from federal control to most state governments along the lower Mississippi River** on the condition that the states use revenue from the land sales to **build levees and drainage channels**. The Acts require no federal funds.
- 1861 - In a Report upon the Physics and Hydraulics of the Mississippi River, Captain Andrew A. Humphreys, Corps of Topographical Engineers, and Lieutenant Henry L. Abbott **support the completion of the existing levee system and exclude alternative flood controls, partly for economic reasons. The emphasis on levees represents the primary focus of U.S. policy on flood control well into the 20th century.**
- **1866 - Captain Humphreys becomes Chief of Engineers of the U.S. Army and labors to quash opposition to the “levees-only” policy he advocates.**



F.H. Schell

Early American Floodplain Policy

- 1927 - The Great Mississippi River Flood shows the limits of Humphreys' "levees only" policy. The **death toll is 246 but may have reached 500**, more than **700,000 people are homeless**, 150 Red Cross camps care for more than **325,000 refugees**, and property **damage exceeds \$236 million**. Nearly **27,000 square miles / 13 million acres of land are flooded**.
- 1929 - The private insurance industry abandons the coverage of flood losses.



Gilbert White – Father of modern floodplain management

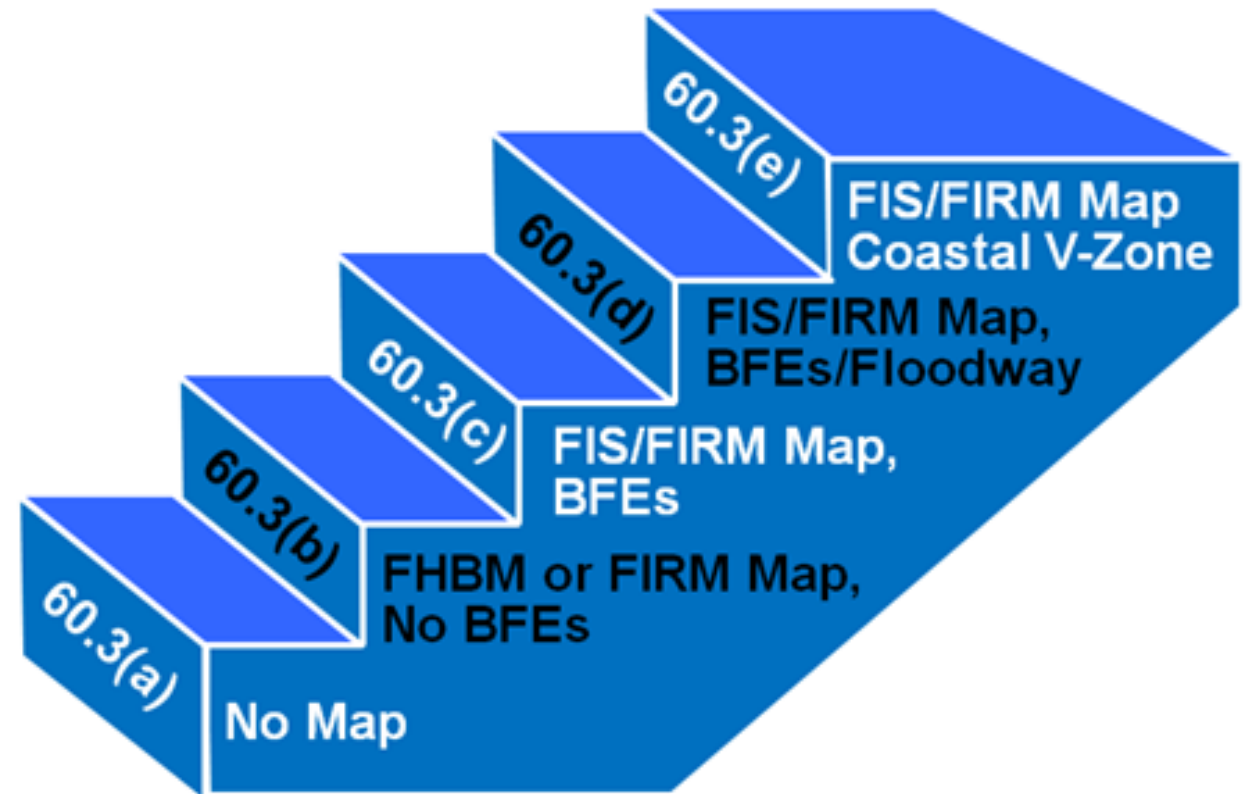
- After another Mississippi flood of 1937, Dr. Gilbert White writes (1942), “Human Adjustments to Floods”
- “[Development should be]...an integration of engineering, geographic, economic, and related techniques.”
- “Floods are an act of God, but flood losses are largely an act of man“
- “The solutions [should include]... a combination of **all eight types of adjustments**, judiciously selected with a view to the most effective use of floodplains.”

“Human Adjustments to Floods”

- The following eight adjustment factors in White’s
- 1. Elevation of land
- 2. Flood Abatement (Watershed management approaches)
- 3. Flood Protection (Structural flood control)
- 4. Emergency Measures
- 5. Structural Adjustments (building and infrastructure)
- 6. Land Use
- 7. Public Relief
- 8. Insurance

The National Flood Insurance Act of 1968 launches the NFIP with two primary goals:

- Reducing future flood damage
- Protecting property owners.



Goals of NFIP

- Emphasize less costly, non-structural flood control methods
- Shift costly burden to landowners in Floodplain rather than all taxpayers
- Provide landowners affordable flood insurance coverage not available in the private market
- Encourage community participation



Hot to achieve goals

- Reduce likelihood of building damage
- Prevent new developments from increasing flood risk
- Maintain and restore natural and beneficial functions of floodplains



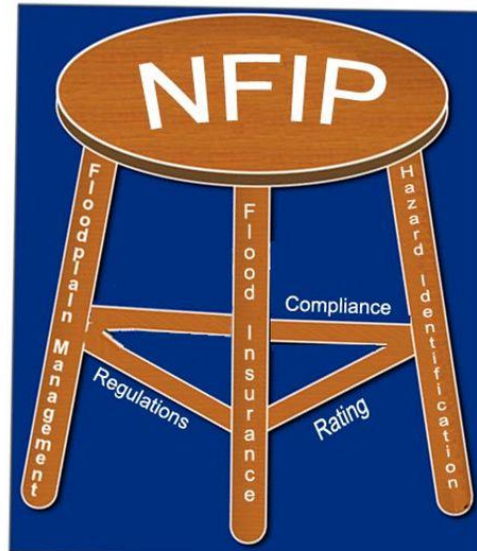
Keys to success

- Effective enforcement of floodplain regulations
- Federally-backed flood insurance
- Accurate floodplain mapping

“The Three-Legged Stool”

▪ The NFIP balances three related program areas

- 1. Flood Hazard Identification**
(Mapping)
- 2. Floodplain Management**
(Regulations such as building codes and zoning)
- 3. Flood Insurance**
(Provision of Flood Insurance for Property owners in participating Communities)



Milestones

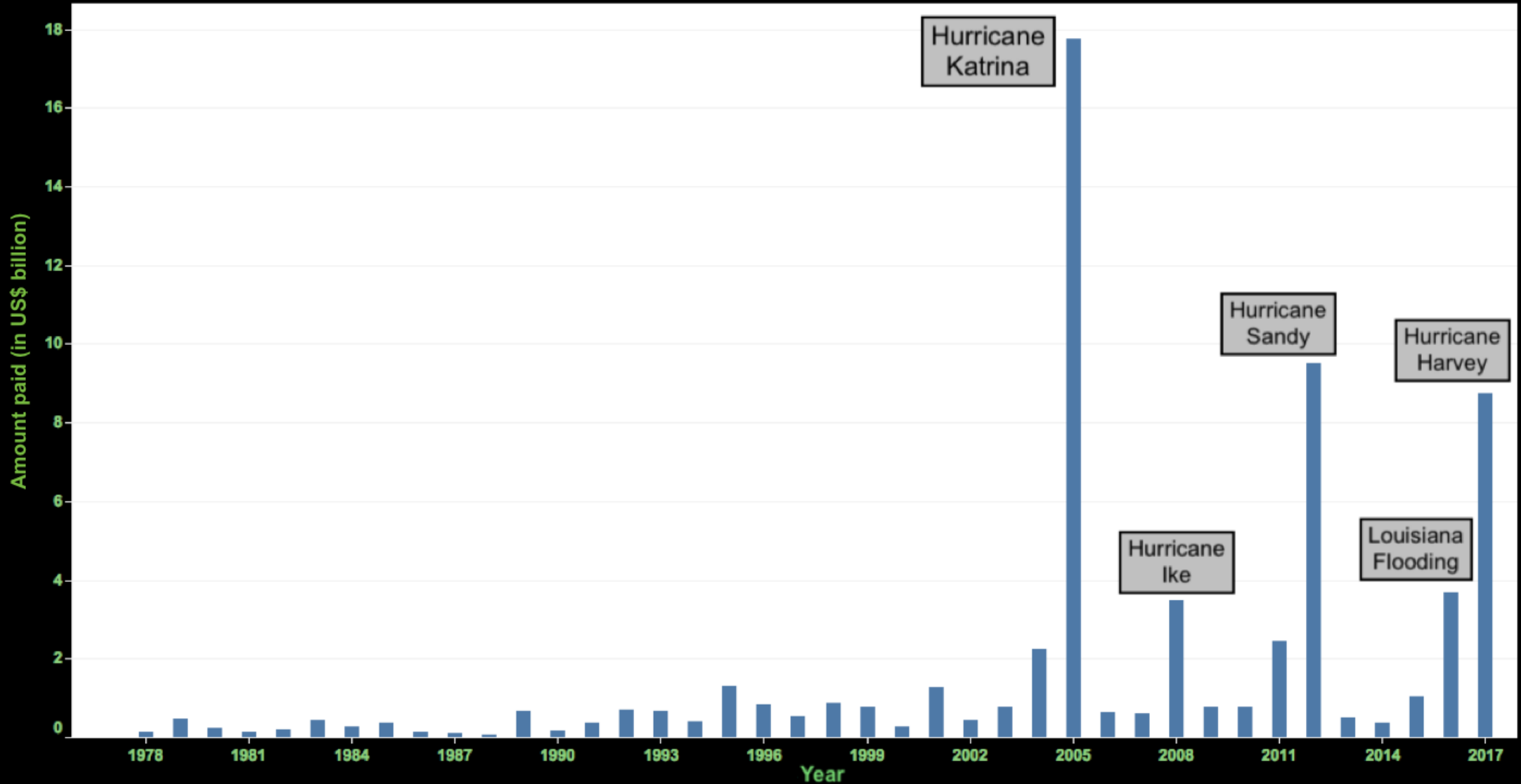
- 1973 – Flood Disaster Protection Act
 - Prohibits Federal Agencies from aiding in construction projects for non-NFIP communities
 - Established the mandatory purchase requirement
 - Dramatic increase in participation
 - 1973 – 2,200 Communities
 - 1977 – 15,000 Communities
 - 2023 – 22,594 Communities
- 1979 – NFIP becomes part of FEMA
- 1994 National Flood Insurance Reform Act
 - Decrease financial burden by increasing participation
 - Increased Maximum amount
 - Fines for lenders that do not require flood insurance
 - Established grant program for mitigation
 - Created **Community Rating System**



Milestones

- 2004 – Flood Insurance Reform Act
 - Eliminates incentives to rebuild on properties that repeatedly flood
 - Establishes flood insurance training for insurance professionals
- 2012 – Biggert-Waters Flood Insurance Reform Act
 - Introduces rate change to “increase the NFIP’s fiscal soundness”
 - Authorizes national mapping program
- 2014 – Homeowner Flood Insurance Affordability Act
 - Restores grandfathering and places limits on rate increase
- 2018 – Disaster Recovery Reform Act
 - Focused efforts to build a culture of preparedness
- 2021 – 2023 – Risk Rating 2.0
 - Insurance premiums based on proximity to flooding source, rather than just in or out.

Loss Dollars Paid by the National Flood Insurance Program (1978-2017)



Note: Labels highlight major flooding events in the year. Payouts are for the entire year, and not just for the highlighted event.
Source: National Flood Insurance Program

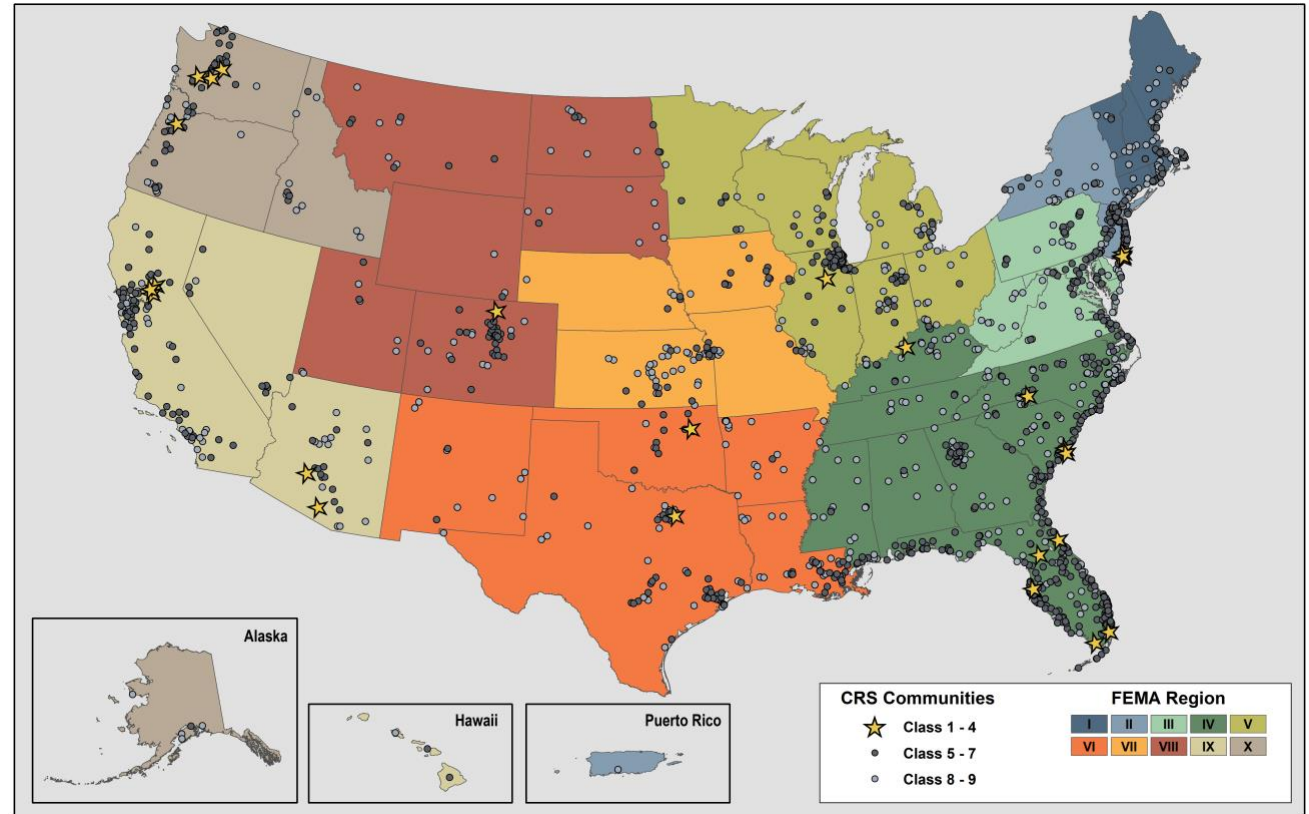
Community Rating System

- The National Flood Insurance Program (NFIP) Community Rating System (CRS) was implemented as a voluntary program for recognizing and encouraging community floodplain management activities that exceed minimum NFIP standards. Any community fully compliant with NFIP floodplain management requirements may apply to join the CRS.



Community Rating System

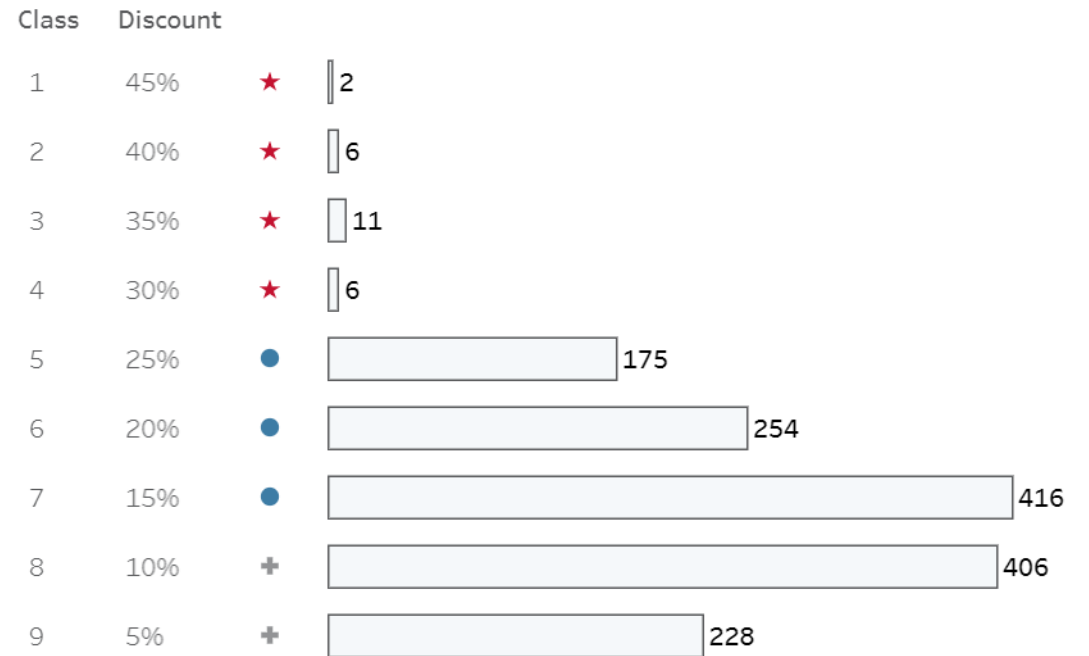
- The CRS has 1,520 communities throughout the United States that participate in the program by implementing local mitigation, floodplain management, and outreach activities that exceed the minimum NFIP requirements. These CRS communities have over 3.6 million policyholders, accounting for more than 70% of all NFIP flood insurance policies.
- Under the CRS, flood insurance premium rates are discounted to reward community actions that meet the three goals of the CRS: (1) reduce flood damage to insurable property; (2) strengthen and support the insurance aspects of the NFIP; and (3) encourage a comprehensive approach to floodplain management.



Community Rating System

- The CRS uses a Class rating system that is similar to fire insurance rating to determine flood insurance premium reductions for residents. CRS Classes are rated from 10 to 1. As a community engages in additional mitigation activities, its residents become eligible for increased NFIP policy premium discounts. Each CRS Class improvement produces a 5% greater discount on flood insurance premiums for properties in the SFHA.

COMMUNITIES BY CLASS



CRS Classes

- CRS Class changes occur on April 1 and October 1 of each year.
- Carroll Joined as a Class 8 in 2007, upgraded to Class 7 in 2018, Class 6 in 2023, Class 5 in 2024
- A community accrues points to improve its CRS Class rating and receive increasingly higher discounts. Points are awarded for engaging in any of 19 creditable activities, organized under four categories: **(1) Public Information, (2) Mapping and Regulations, (3) Flood Damage Reduction, and (4) Warning and Response.**

Public Information

- *Activity 310 (Elevation Certificates)* Maintaining construction certificates and making them available to the public
- *Activity 320 (Map Information Service)* Providing Flood Insurance Rate Maps (FIRMS) and other map information, and publicizing that service.

<u>Date</u>	<u>Type</u>	<u>Property Location or Address</u>	<u>Panel</u>	<u>Zone</u>	<u>Insurance Purchase Requirement? (yes/verbal)</u>	<u>FEMA floodplain?</u>	<u>Depth of Flooding at Structure (ft)</u>	<u>Historic Flooding?</u>	<u>Natural Floodplain Functions/Wetlands</u>	<u>Comments</u>
10/21/2022	T	50 North Main Street	24013C0158D	AE	Y	Y	~6	Y	restoration upstream	Temporary tent to be placed on property
11/14/2022	T	0707015050 - Main Street	24013C0092D	N/A	N	N	N/A	N	Vehicle repair shop proposed	Citizen concern regarding proposed SWM outfall
11/25/2022	T	2097 Misty Meadow Road	24013C0220D	AE	N	Y	~3	N	Cabin placed on grade within floodplain	Cabin must be removed - relocated out of floodplain 3/2/2023

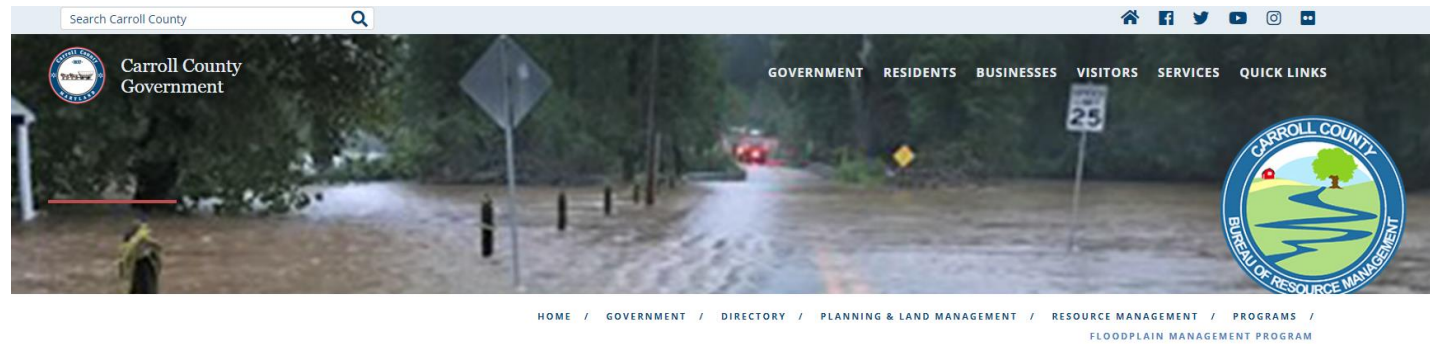
Public Information

- *Activity 330 (Outreach Projects)* Providing information to the public
 - <https://www.youtube.com/watch?v=l7IxNzURkA>
- *Activity 340 (Hazard Disclosure)* Real estate agents' advising potential purchasers of floodprone property about the flood hazard, and local regulations requiring disclosure of the hazard



Public Information

- *Activity 350 (Flood Protection Information)* Maintaining a community public library and/or website that contains flood-related information
- *Activity 360 (Flood Protection Assistance)* Advising property owners and renters about how to protect buildings from flooding and publicizing that service



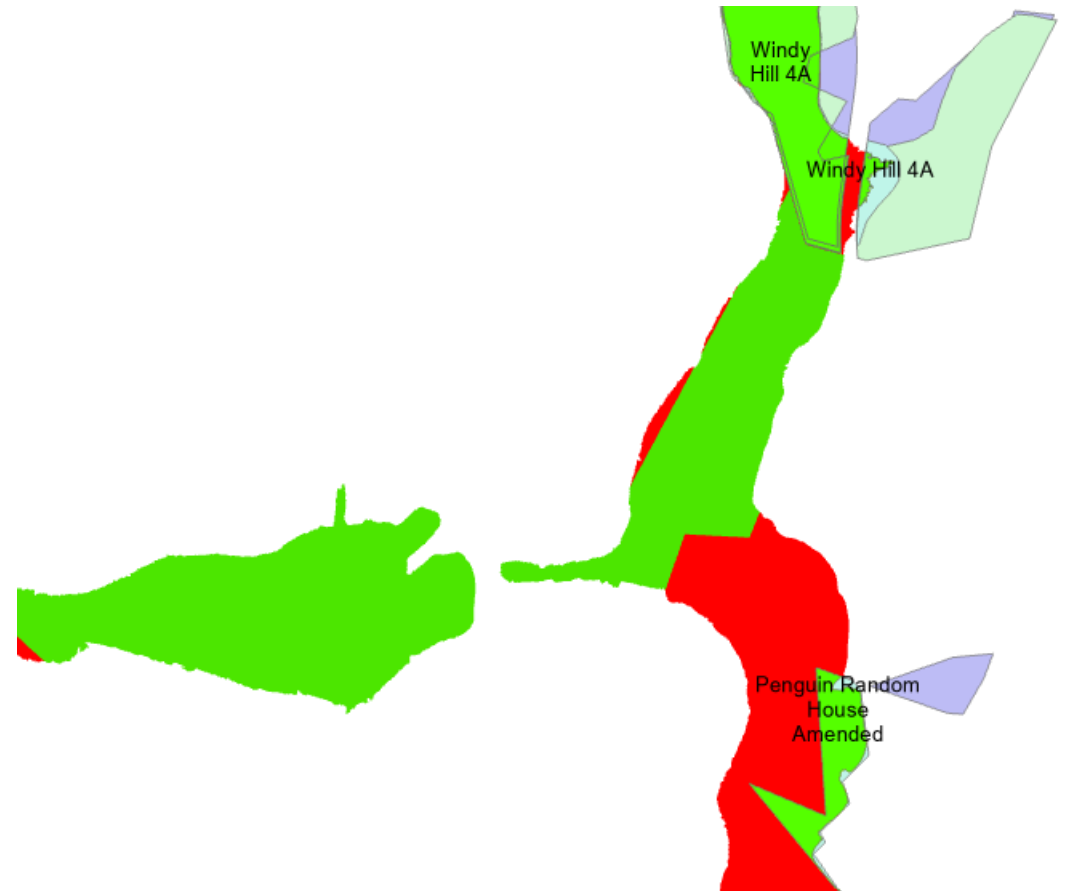
[Link](#)

Public Information

- *Activity 360 (Flood Protection Assistance)* Advising property owners and renters about how to protect buildings from flooding and publicizing that service
- *Activity 370 (Flood Insurance Promotion)* Assessing flood insurance coverage in the community and implementing a plan to promote flood insurance

Mapping and Regulations

- *Activity 410 (Floodplain Mapping)* — Developing regulatory maps for areas not mapped by FEMA or flood mapping based on future conditions, detailed topography, or other standards
- *Activity 420 (Open Space Preservation)* Keeping floodprone land free of development
- *Activity 430 (Higher Regulatory Standards)* Regulations that exceed the NFIP's minimum criteria for floodplain management



Mapping and Regulations

- *Activity 440 (Flood Data Maintenance)* Gathering and/or maintaining more accessible, useful, and/or accurate floodplain data for regulation, insurance rating, hazard disclosure, and property appraisals
- *Activity 450 (Stormwater Management)* Watershed planning and regulations that prevent future development from increasing flood hazards or diminishing water quality

Flood Damage Reduction

- *Activity 510 (Floodplain Management Planning)* Adoption of flood hazard mitigation and/or natural functions plans using the CRS planning process, and/or conducting repetitive loss area analyses
- *Activity 520 (Acquisition and Relocation)* Acquiring insurable buildings and relocating them out of the floodplain, and leaving the property as open space



Flood Damage Reduction

- *Activity 530 (Flood Protection)* Protecting buildings from flood damage by floodproofing, elevation, or minor structural projects
- *Activity 540 (Drainage System Maintenance)* Annual inspections of channels and retention basins, and maintenance of the drainage system's flood-carrying and storage capacity

Flood Warning and Response

- *Activity 610 (Flood Warning and Response)* Timely warning of flood threats and coordinating flood response activities.
- *Activity 620 (Levees)* Annual levee inspection programs and plans to respond to floods caused by levee failure
- *Activity 630 (Dams)* State dam safety programs and plans to respond to flooding caused by dam failure.



	Previous Score		Modified Score		Current Credit		Activity Total
c310	38	c310		c310	38		38
c320	90	c320		c320	90		90
c330	136	c330		c330	136		136
c340	18	c340		c340	18		18
c350	74	c350		c350	74		74
c360		c360		c360			
c370		c370		c370			
c410	16	c410		c410	16	x CGA 1.06	= 17
c420	571	c420		c420	571	x CGA 1.06	= 605
c430	1174	c430		c430	1174	x CGA 1.06	= 1244
c440	136	c440		c440	136	x CGA 1.06	= 144
c450	50	c450		c450	50	x CGA 1.06	= 53
c510		c510	117	c510	117		117
c520	12	c520		c520	12		12
c530		c530		c530			
c540		c540		c540			
c610		c610		c610			
c620		c620		c620			
c630	45	c630		c630	45		45

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CRS Benefits

Lower-cost flood insurance rates are only one of the rewards a community receives from participating in the CRS. Here are some other benefits:

- Citizens and property owners in CRS communities have increased opportunities to learn about risk, evaluate their individual vulnerabilities, and take action to protect themselves, as well as their homes and businesses.
- CRS floodplain management activities provide enhanced public safety, reduced damage to property and public infrastructure, and avoidance of economic disruption and loss.
- Communities can evaluate their flood programs against a nationally recognized benchmark.
- Technical assistance in carrying out some activities is available to community officials at no charge.
- CRS communities have incentives to maintain and improve their flood programs over time.

CRS Training

- CRS Specialists are available to assist community officials in applying to the program and in designing, implementing, and documenting the activities that earn even greater premium discounts. A week-long CRS course for local officials is offered free at FEMA's Emergency Management Institute (EMI) on the National Emergency Training Center campus in Emmitsburg, Maryland, and can be field deployed in interested states. A series of webinars is offered throughout the year.



CRS Verification

- Each year, the community must verify that it is continuing to perform the activities that are being credited by the CRS by submitting an annual recertification. In addition, a community can continue to improve its CRS Class rating by undertaking new mitigation and floodplain management activities that earn even more points.
- A community's activities and performance are reviewed during a verification visit. FEMA establishes the credit to be granted and notifies the community, the State, insurance companies, and other appropriate parties.
- Verifications are every five years, or three years for communities with larger premium totals or larger discounts.

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