

Flood Insurance Assessment and Program for Public Information for Adams County

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Approved By: _____
Chair, Board of County Commissioners

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Introduction

The Adams County Floodplain Management Program is scheduled to go through a verification inspection this year. One element that will enhance the Adams County Floodplain Management Program is having a flood insurance assessment with a flood insurance information improvement plan for the community. Currently, Adams County has not completed a flood insurance assessment, and the consequence of not having this analysis, is that the County has no information to determine if the flood insurance coverage for structures within the flood hazard delineation area is adequate for our community. The purpose of this analysis is twofold, to develop a flood insurance communication improvement plan and to obtain credit under the Community Rating System of the National Flood Insurance Program.

A flood insurance assessment (FIA) is an analysis of a community's level of flood insurance coverage that identifies where increased coverage would be beneficial. It is the first step toward developing a flood insurance coverage improvement plan in the community. In most cases, it is to the community's advantage to conduct the flood insurance assessment and to develop the plan as part of a local program for public information (PPI). There are five steps in the flood insurance assessment process. The first step is to collect the flood insurance information from FEMA and the state of Colorado. The next step involves calculating the level of flood insurance coverage through an extensive analysis of the data. Upon completion of the analysis, the flood insurance assessment and improvement plan shall be completed and submitted to the Adams County Leadership Team and the Board of County Commissioners. The final step involves the annual reassessment of the flood insurance improvement plan.

The Adams County Flood Insurance Assessment is a report that will provide a history of the Adams County Floodplain Management Program. It will give some insight into the National Flood Insurance Program (NFIP) and the Community Rating System. This insurance assessment will provide an analysis of the insurance policies, claims, and total paid losses for insured residential and commercial structures within unincorporated Adams County. More importantly, it will present a plan for public information on how to disseminate the message that need to be conveyed to the Adams County's constituents.

History and Background

Congress established the NFIP in 1968. The NFIP is administered by the Federal Emergency Management Agency (FEMA). The NFIP provides federally backed flood insurance to property owners in participating communities. The federal government became an insurer of flood losses through the NFIP because the private market stopped offering flood insurance. The primary reason why the private market stopped offering flood insurance is because floods violate some of the ideal conditions of insurability. More specifically, flood insurance can be subject to adverse selection, with only the riskiest properties insuring. Losses are also correlated—when a large flood occurs, many properties are all damaged simultaneously—and can be catastrophic. These aspects of flood losses can make it difficult for the private sector to insure against floods, and when private coverage is available, it can be expensive, perhaps more than households are willing or able to pay. At the time when the NFIP was created, some observers argued that the government could overcome many of these challenges, particularly by better pooling risks, setting rates to encourage broader participation, and incentivizing risk reduction measures.

The NFIP created multiple objectives to accomplish the goal of providing affordable insurance. In presentations and outreach materials, FEMA has previously compared the NFIP to a four-legged stool. Provision of flood insurance is only one of the legs. The second is promoting floodplain management, which is achieved through community regulations. The third is mapping of flood hazards on flood insurance rate maps. The final leg is hazard mitigation, promoted through grants and community incentives.

FEMA floodplain maps delineate different flood risk zones. Areas modeled as the 1 percent annual chance floodplain, or 100-year flood zone, are referred to as Special Flood Hazard Areas. FEMA also maps the floodway which is the central portion of a floodplain that carries deep and high velocity flows. The FEMA maps also include the 500-year floodplains. Since the establishment of the NFIP in 1968, communities have had a partnership role in the program. Communities can voluntarily choose to join the program. When communities agree to participate, they implement land-use management actions that can reduce claims over time; in exchange, FEMA makes flood insurance available to residents. Over the years, almost all communities at risk of flooding have joined the program. Nationwide, more than 22,000 communities now participate. The NFIP defines a community as any local jurisdiction with authority to regulate floodplain land use. When a community joins, it must adopt

minimum floodplain management regulations established by the program. The required regulations vary according to the flood zone but include the following features: (1) the community must require that all new development in SFHAs obtain a permit; (2) new development in floodways must not be permitted if it increases flood heights; and (3) all new construction, or substantially improved or damaged properties in SFHAs, must be elevated so that the lowest floor is at or above base flood elevation, which is the estimated height of floodwaters in a 100-year flood. It is also important to note that nonresidential structures can also be dry flood proofed. FEMA regional offices or NFIP State Coordinating Agencies provide model ordinances for adoption. Once communities adopt those regulations, residents are eligible to purchase flood insurance through the program. Single-family homeowners (and two- to four dwelling residences) can purchase up to \$250,000 of building coverage and \$100,000 of contents coverage. Nonresidential policies can insure both structure and contents up to \$500,000 each. Minimum deductibles vary by policy type but are at least \$1,000, with higher ones available.

The NFIP also has a voluntary program called the Community Rating System, which rewards communities that take actions to lower their flood risk. Established in 1990, the CRS awards points to communities for activities in four areas: (1) public information activities; (2) mapping and regulations; (3) flood damage reduction activities; and (4) warning and response. As a community accumulates points, it moves up through levels in the program, from class 10 to class 1. At each new class level, SFHA residents in the community receive another 5 percent discount on NFIP premiums, up to 45 percent. Outside the SFHA, residents of classes 7–9 receive a 5 percent reduction in premiums and those in classes 1–6 receive a 10 percent reduction in premiums. As of spring of 2014, 1,296 communities nationwide participated in the CRS program. Although these are only 5 percent of all communities in the NFIP, they represent more than 67 percent of all policies in force.

Adams County created their floodplain management program and joined the NFIP in 1978. The Adams County Floodplain Management Program was designed to establish reasonable limitations and controls of land uses within the 100-year floodplain. The Adams County Development Standards and Floodplain Regulations were developed to reduce flood hazards, protect the public health, safety, and general welfare, minimize flood losses, promote wise use of the floodplain, and protect the storage capacity and hydraulic character of the floodplain. The Flood Control Overlay Zone District was established with the following specific intentions: 1. Reduce flood-related hazards to life and property by restricting the use of land within flood prone areas. 2. Provide notice to floodplain

occupants of the type and location of hazards by delineating areas subject to flooding and regulating the method in which buildings and utilities are constructed. 3. Protect the public from financial burden by avoiding public expenditures on flood control and minimizing damage to property. 4. Protect the flood storage capacity of floodplains by regulating the filling and modification of the floodplain and watercourses. 5. Protect the natural hydraulic characteristics of watercourses by regulating the modification of watercourses and prohibiting encroachment into watercourses.

In 2015, the Board of County Commissioners of Adams County gave the approval to have an evaluation of the county's floodplain management program by entering the Community Rating System Program. The Adams County Floodplain Administrator was directed to complete the application for the program and submit the required documentation to FEMA showing the various floodplain prevention and mitigation activities that are performed by the County to obtain credit with the Community Rating System.

Adams County floodplain program and activities were reviewed during this verification visit and the program was upgraded to a Class 9. As a result, Adams County residents and businesses are now eligible to receive a five percent discount on flood insurance. Adams County's rating became effective on Oct. 1, 2016 and the five percent discount is now available to all flood insurance policyholders. In addition to individual savings on flood insurance, NFIP offers other benefits to the county, including educational programs for residents, increased public safety, and safeguards to minimize economic losses to private property and public infrastructure. These benefits for the citizens of Adams County can only be maintained if the County continues to complete the annual verification review of the floodplain management program. Adams County must verify that it is continuing to perform the activities that are being credited by the CRS by submitting an annual recertification. In addition, Adams County can continue to improve its Class Rating by undertaking new mitigation and floodplain management activities that earn even more points such as completing this flood insurance assessment.

Flood Insurance Assessment

The Adams County Flood Insurance Assessment was initiated by completing step 1 of the defined process. This step involved collecting insurance data from FEMA and the state of Colorado. FEMA provided information for the number of insurance policies in force by occupancy type and flood zone. The NFIP Community Assistance Program Coordinator with the state of Colorado provided general insurance policy coverage for Adams County and the surrounding area. The total number of residential and commercial structures within Adams County were obtained from the Adams County Assessor's Office. Finally, the actual number of residential and commercial structures located in a flood hazard zone were obtained from the Adams County Business Solutions Department.

The data from the charts and spreadsheets located in the appendix of this report are as follows:

• Total number of residential structures in Adams County	37,718
• Total number of commercial structures in Adams County	5,590
• Total number of residential structures in a floodplain	704
• Total number of commercial structures in a floodplain	222
• Total number of insurance policies in force for residential structures	131
• Total number of insurance policies in force for commercial structures	52
• Total claims since 1978	38
• Total payout since 1978	\$114,092
• Current total premium	\$246,481
• Current total coverage	\$55,897,700

The above data acquired from the various organizations provided the foundation for the flood insurance assessment. The data was used to determine the level of flood insurance coverage and the amount of insurance coverage throughout Adams County. It allowed Adams County staff to calculate averages and percentages that were used to identify trends in terms of the number of policies in force, the cost of premiums, the amount of coverage, the type of structures that are covered and the general location of these structures. This insurance assessment analyzed the insurance coverage of residential, commercial, PRE-FIRM and Post-FIRM structures in and outside of the Special Flood Hazard Areas.

I. Level of Coverage

Adams County

Occupancy	Properties	Policies In Force
Residential	37718	131
Single family		123
2-4 family		1
all other residential		7
Nonresidential	5590	52
Level of residential coverage	0.3473%	
Level of nonresidential coverage	0.9302%	

The determination of flood insurance coverage level within Adams County was obtained from the most recent flood insurance policy data provided by FEMA and the state of Colorado. Information regarding the number, location and type of structures were received from the Adams County's Assessor's Department and Business Solution Department. Based on the above data, the level of insurance coverage for all residential structures within Adams County was determined to be 0.35% and the level of coverage for commercial structures was determined to be 0.93%

Adams County (SFHA)

Occupancy	Number of Units
Residential in Flood Zone (SFHA)	704
With coverage	79
Without Coverage	625
Nonresidential in Flood Zone (SFHA)	222
With coverage	52
Without Coverage	170
level of residential coverage in SFHA	11.22%
level of nonresidential coverage in SFHA	23.42%

The coverage rate for insurance is highest in the Special Flood Hazard Areas (SFHA), where flood insurance requirements are mandatory with a federally backed mortgage. Surprisingly, even though mandatory coverage is required in SFHA Zones, the residential coverage rate in Adams County is only 11.22%. One of the reasons for this low percentage rate of coverage is that many of these homes are older and more than likely no longer carry a mortgage. The level of coverage for commercial structures is over double the rate of residential structures at 23.42%. As expected, the coverage rate for insurance coverage throughout the entire county for residential and commercial structures are much lower than the coverage rate for structures within the SFHA.

II. Average Premium Coverage

Adams County

Occupancy	Policies In Force	Premium	Insurance In Force	Average Coverage
Residential				
Single family	123	\$ 136,837.00	\$ 31,790,900.00	\$ 258,462.60
2-4 family	1	\$ 421.00	\$ 350,000.00	\$ 350,000.00
all other residential	7	\$ 23,145.00	\$ 3,295,000.00	\$ 470,714.29
Nonresidential	52	\$ 83,611.00	\$ 19,749,800.00	\$ 379,803.85

The average coverage for single family homes meet the NFIP requirement of \$250,000 for the structure, but if the content coverage is included, it falls short of the additional \$100,000 requirement. Given the fact that the Adams County housing market continues to grow and the average home cost in Adams County is \$370,000 as determined by Zillow, homeowners and the owners of the other residential units to include apartments and condos may want to evaluate if they have the appropriate amount of coverage to cover their structures. The same message can be sent to owners of commercial units with an average coverage of \$379,802.85 for their structures.

Adams County

Insurance Information	
claims since 1978	38
total payout since 1978	\$ 114,092.00
Current total premium	\$ 246,481.00
Current total coverage	\$ 55,897,700.00
Total payout since 1978 to current coverage	0.2041%
Total payout since 1978 to current premium	46.29%
Average Claim per Year	0.9268

The above chart shows that the total insurance payout since 1978 as compared to the premium that is being paid by current policy holders is at 46.3%, and the total insurance payout since 1978 as compared to current insurance coverage is at 0.20%. It is also important to note, that Adams County has averaged a little less than one claim per year for the past 42 years.

III. Pre-FIRM and Post-FIRM Comparison

	Policies in Force	Premium	Number of Claims	Amount of Paid Losses
Pre- FIRM	81	\$157,750	27	\$84,483.66
In Flood Zone	56	\$140,976	12	\$19,049.91
Outside Flood Zone	25	\$16,774	15	\$65,433.75
Post - FIRM	93	\$80,540	8	\$29,477.63
In Flood Zone	49	\$ 45,686	2	\$0
Outside Flood Zone	44	\$34,854	6	\$29,477.73

Adams County

Pre-FIRM and Post FIRM Analysis	% of Total Claims
Pre-FIRM in Flood Zone	34.3%
Pre-FIRM outside of Flood Zone	42.9%
Post-FIRM in Flood Zone	5.7%
Post-FIRM outside of Flood Zone	17.1%
	% of Total Paid Losses
Pre-FIRM in Flood Zone	16.7%
Pre-FIRM outside Flood Zone	57.4%
Post-FIRM in Flood Zone	0%
Post-FIRM outside Flood Zone	25.9%

The above charts showing insurance coverage for Pre-FIRM and Post FIRM structures inside and outside of flood zones within Adams County are the most intriguing because it shows the majority of insurance claims and the amount of paid losses are coming from owners with structures built before 1978 which are Pre-FIRM structures. The chart also illustrates that 60% of the claims which equates to 83% of paid losses occur to structures outside of the flood zones.

Conclusion

Based on the information collected, it is clear, that many of residents in Adams County do not carry flood insurance on their buildings. Residents are much more likely to purchase insurance if they are in a SFHA Zone, where purchase is mandatory with a federally backed mortgage, but even in these areas, less than a quarter of the properties are covered.

Given that the overall flood insurance coverage is generally low throughout the county, The Adams County Floodplain Management Program is recommending that our public information campaign target a variety of audiences to increase flood insurance coverage for buildings and content. The target audience will include Adams County employees, the general public, residents in the floodplain, developers, builders, real estate companies, lending companies, and insurance companies.

The Adams County Floodplain Management Program will formulate a specific message to promote insurance coverage for structures in the SFHA Zones and throughout Adams County for their target audiences. The message will include the following facts that were determined from this flood insurance assessment:

1. The likelihood of a flood varies from property to property
2. Almost no property is guaranteed to be safe from flooding
3. Properties located in flood zones are at greater risk. These properties have about a 25% chance of flooding during the term of a 30-year mortgage.
4. Properties outside of flood zones will also flood. In Adams County 60% of the claims and 83% of paid losses occur to structures outside of flood zones.
5. Homes and business structures built before 1978 are more likely to flood. In Adams County 77% of the claims and 74% of paid losses occur to Pre-FIRM structures.
6. Everyone with a mortgage on a property in a flood zone must purchase flood insurance
7. It is important to note that only flood insurance cover flood damages
8. If you do not have flood insurance, you may not qualify for post disaster federal aid to cover flood damages.
9. All home and business owners should evaluate their need for flood insurance and go to FEMA's Floodbuddy webpage for a free quote

Program for Public Information

Well-informed people make better decisions and they take steps to protect themselves from flooding by retrofitting their homes, buying flood insurance, and planning the actions they will take during the next flood. They are also more likely to support local floodplain management efforts and measures to protect the natural functions of their community's floodplain. This program for public information (PPI) will be an ongoing local effort to identify, prepare, implement, and monitor a range of public information activities that meet specific local needs.

The Adams County program for public information will focus primarily on outreach projects. This plan will build on what is already being done. This includes current community-based public information efforts as well as initiatives by other organizations or agencies. The plan will provide for a full range of information activities that inform the general public and Adams County staff about flood insurance and ways to address potential flood damage to property, including map information, outreach projects, real estate disclosure, libraries, websites, and providing technical advice and assistance.

The standard tools that will be used to distribute this message are the flood brochures and stormwater flyers that are mailed annually to our citizens from the Mile High Flood District and from the Public Works Stormwater Management Division. A tool that will be used to enhance the program for public information will include having the flood insurance message posted on the Adams County Stormwater and Infrastructure webpage, the Emergency and Operations Management webpage and of course, the Floodplain Management webpage. The message will also be given to the Adams County Emergency Operations Center to be included in the Emergency Management Plan.

A very important method that can be used to enhance the message to the public, is to have the Adams County Board of County Commissioners to proclaim the month of April as the "Stormwater Management and Flood Awareness Month" for the entire County. During this month of every year the Community and Economic Development Department will coordinate with the Adams County Communication Department to incorporate the flood insurance message onto the Adams County intranet and social media platforms to include Twitter, Facebook, and My Adams Newsletter. Recent research has shown that the more often a message is received from different sources, the more likely it is that the desired action or behavior will take place.

In summary, Adams County staff will create a more focus message within the stormwater management division flyers and the Mile High Flood District Brochure. These two methods of communications have been very effective with disseminating the flood insurance message to the general public, metro districts, homeowner associations, and realtor groups. This program for public information also describes methods to broaden the delivery of the flood insurance message by coordinating this effort with the Communications Department, Public Works and Emergency Operations Center. This coordinated effort will involve placing the flood insurance message on the web page of each department. It will also include the placement of the flood insurance message on the Adams County official social media platforms which will expand the reach of the message to the target audience as described in the above paragraphs and it would include all of Adams County employees. Having the Board of County Commissioners to proclaim April as the “Stormwater Management and Flood Awareness Month,” is essentially one more effective tool to elevate the importance of the message. Following the scope as defined in this program for public information will effectively express the importance of flood insurance for every property owner in Adams County and allow them to make better decisions with taking steps to protect themselves from flooding by retrofitting their homes, buying flood insurance, and planning the actions they will take during the next flood.

Reassessment Procedure

The reassessment process for the flood insurance assessment and the program for public information will be initiated annually during the months of February, March, and April. The Adams County Floodplain Manager will be responsible for the reassessment process. This person will request the most current insurance data from the state of Colorado and FEMA. The information will be reviewed and analyzed by the Floodplain Manager. The results of the analysis will be compared to the previous year results to determine a specific message that will be used on the Adams County web pages and social media platforms. The floodplain manager will coordinate with Public Works, the Mile High Flood District, the Communications Department, and the Emergency Operations Center to disseminate the updated message in the brochures, newsletters, social media platforms, and web pages.

The reassessment process will also involve evaluating the public information program strategy. The Adams County Floodplain Manager, Infrastructure and Stormwater Manager, the Stormwater Coordinator, and Construction Manager will meet during this time frame to discuss the effectiveness of the current public information strategy. This evaluation will consist of comparing the changes in the level of insurance coverage from the previous year for residential and commercial structures. We will compare the changes of insurance coverage for pre-FIRM and post-FIRM structures and we will document the number of policies in force for the entire county. The results of this analysis will allow us to understand the effectiveness of the current public information strategy and provide some insight on how we can continue to improve this program.