

Flood Insurance Coverage Assessment and Coverage Improvement Plan

2017

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I. Introduction and Planning Process Description

The City of Hanahan, SC is located in the southern-most part of Berkeley County, adjacent to the Cooper River and the Goose Creek Reservoir. Turkey Creek and other unnamed small streams are also partially or wholly included within the jurisdictional limits of the City (*City of Hanahan Flood Insurance Rate Maps 45015C0685E, 45015C0695E, 45015C0705E, 45015C0715E, 2016 editions and the Berkeley County Flood Insurance Study, 2016*). The City has experienced multiple flooding events, described in more detail in Section II of this document, with several properties being flooded and damaged on more than one occasion (repetitive flood losses). The City has 11.5 square miles in its jurisdictional limits with 0.81 of these being water bodies (*https://cityofhanahan.com/, accessed 10-20-2016*). According to the U. S. Bureau of the Census internet site (*www.census.qov, accessed 8-11-2016*), the estimated population of the City of Hanahan in 2015 was 21,575, an increase of 3,487 from the 2010 Census, a 19% increase in 5 years.

In 2015, the City of Hanahan determined that it would enter the National Flood Insurance Program's Community Rating System (CRS), an insurance rating schedule that provides discounts in flood insurance premiums to residents within participating communities based upon activities undertaken within the community to reduce flood and other hazard eventrelated losses. One of several activities being undertaken by the City as a part of the Community Rating System (CRS) is an analysis of its flood insurance policies and claims to develop a plan that will include recommended measures to perform to educate residents regarding the importance of having flood insurance on buildings and contents, and thereby striving to improve the flood insurance coverage within the City limits. This analysis is an on-going activity being performed by the City's Hazard Mitigation Plan/Program for Public Information Committee. This committee is comprised of residents of the City of Hanahan and representatives from the insurance, banking, real estate, home construction, and retail sectors in Hanahan, as well as representatives from the City's Building and Codes Department (CRS Coordinator), Police Department, Fire Department, and its Public Information Officer. A list of the members of the committee is provided in Table 1 of this document. The committee had 64% of its membership from the public and 36% from City staff. This committee was formally recognized by the City of Hanahan City Council at its meeting on July 12, 2016.

The committee met two times to develop the Flood Insurance Coverage Assessment and Coverage Improvement Plan. Carolina Flood Solutions, LLC provided consulting services to

the committee and provided the data analysis utilized in this planning process. In addition to an analysis of flood insurance coverage and claim data, this committee also reviewed current activities being implemented within the City to promote Flood Insurance, including those being done by FEMA, FloodSmart, Risk MAP, the State of South Carolina, surrounding counties, and insurance companies as a part of its Program for Public Information. The committee also considered additional public information activities to undertake to promote flood insurance purchase/retention, and set priorities and desired outcomes for these projects. One of these projects includes the City's Mayor encouraging local residents to have flood insurance through a letter to residents. The committee will monitor and evaluate projects and report as to the progress on these projects to City Council as a part of its Program for Public Information annual report. A draft of this plan was sent to FEMA Region IV for their comments during the planning process. This plan was formally adopted by the City Council on March 14, 2017. The City's adopting resolution is included in Section VI of this document. This plan will be updated on a five year cycle or prior to a CRS verification visit, whichever occurs at an earlier date. City Council will readopt the plan on this five-year or earlier cycle. The planning process utilized in development of this plan will be utilized for all future editions of this plan.

Name	Position	Organization
Larry Sturdivant	Building Official and	City of Hanahan
	Floodplain Manager	
David Kornahrens	Public Information Officer	City of Hanahan
Captain Michael Fowler	Police Department	City of Hanahan
Sr. Captain Mike Langan	Fire Department	City of Hanahan
Denise Farmer	Insurance Agent	Blackwell & Sons Insurance
Samantha Kelly	Banker	First Citizens Bank
Marty Chandler	Real Estate Agent	Coldwell Banker Real Estate
Chad Chinners	Owner	Blackwell True Value Store
Jennifer Mitchun	Resident	Hanahan
Chris Crawford	Resident	Hanahan
Daniel Kary	Builder and Member	Charleston Trident
		Homebuilders' Association

 Table 1: Composition of the City of Hanahan, SC Hazard Mitigation Planning/Program for Public Information Committee

Lisa Sharrard, ANFI, CFM and Joni Rennhack, CFM, CBO also provided floodplain management and planning consulting services for this committee.

II. Flood Insurance and Building Count Data for the City of Hanahan

According to the U. S. Bureau of the Census (<u>www.census.gov</u>, accessed 8-11-2016) there are an estimated 5,401 residential buildings valued at \$838,496,450 in the City of Hanahan. According to the Berkeley, Charleston, Dorchester Council of Governments there are 51 commercial buildings valued at \$48,254,416 in the City of Hanahan. National Flood Insurance Program (NFIP) data, obtained from the bsa.nfipstat.fema.gov internet site (as of June 30, 2016) and the City of Hanahan "What If" analysis (provided by Katherine Todd of Verisk on August 11, 2016) indicates that there are 802 buildings with flood insurance policies in force in the City of Hanahan. Of these, 550 are in the Special Flood Hazard Area (*SFHA* – *subject to flooding in a 1% chance storm and requiring the purchase of flood insurance for a Federally-backed mortgage*), 12 are in "X" flood zones (*subject to flooding in a 0.2% chance storm*), and 240 are preferred risk policies (*in X zones and having had no flood insurance claim history*). The dollar amount of flood insurance in these policies is \$203,614,900. These buildings are located on 154 streets in Hanahan. There are 4,581 buildings on these streets, 27.8% of which are in the SFHA.

The City of Hanahan had experienced 151 flood insurance claims through the National Flood Insurance Program between September, 1979 and May, 2016 (NFIP claim, policy, repetitive flood loss, and severe repetitive flood loss property data, provided by the South Carolina NFIP office on 7/23/2016, as excerpted from the NFIP data base). The majority of these claims were from five specific flood events: (1) Hurricane Hugo in 1989 – 32 claims (2) September 21, 1998 (21 storm cells near Hanahan (http://www.ncdc.noaa.gov)) – 8 claims (3) October 24, 2008 (Low pressure from the Gulf of Mexico over the area at the time of high tide) – 13 claims and (4) August 31, 2015 (6.25 inches of rain over 8 hour period resulting in flash flooding per the National Weather Service as reported on https://weather.com by Sean Breslin (2015, August 31)) – 5 claims; (5) October 3-4, 2015 (historic record breaking flood event with 2 feet of rainfall recorded in the area October 2-6, 2015) - 39 claims. The remaining flood insurance claims were primarily isolated incidents effecting only 1 or 2 properties each. Twelve (12) of the properties with claims are classified as repetitive flood loss properties by the National Flood Insurance Program (have flooded 2 or more times with \$1000 or more in damage over a 10 year period) and two (2) of these are severe repetitive flood loss properties (have 4 or more claims at \$5000 or more, or the claims exceed the building value). Maps of the Flood Claim Areas, which were evaluated and discussed by the Hazard Mitigation Plan/Program for Public Information Committee during their meetings, are included in Appendix B of this document. The City of Hanahan also experienced flooding from Hurricane Matthew, which made landfall in South Carolina (in McClellanville, Northeast of Hanahan) on October 8, 2016. Flood claim data was not available for this event at the time of this analysis. Hurricane Matthew claim data will be evaluated as a part future updates to this analysis.

The average dollar amount for all the flood insurance claims (*including those denied*) between September, 1979 and May, 2016 in Hanahan was \$4,655. (*There were 49 flood insurance claims which were denied (\$0 paid) in this time period.*) The average dollar amount per claim of approved claims for this time period was \$6,891. The flood insurance claims ranged from \$0 to \$44,487.

The Hazard Mitigation Plan/Program for Public Information also performed analyses of flood insurance and loss data specifically in the three mapped areas (Area A – near the Goose Creek Reservoir; Area B – near Turkey Creek and other proximal areas; Area C – near the Cooper River). The committee also reviewed maps of repetitive flood loss areas (*not included in this document due to confidentiality issues*). Pie charts indicating how the number and percentage of the flood insurance policies, number and percentage of flood insurance claims, number of buildings in the SFHA, and dollar amount of claims were distributed within these map areas were reviewed by the committee. The committee also reviewed a pie chart providing the average dollar amount of claim per mapped area. The pie charts are included in Appendix C of this document.

III. Level of Flood Insurance Coverage in the City of Hanahan

As indicated in the Flood Insurance and Building Count Data section of this document, there are an estimated total of 5,452 total buildings in the City of Hanahan (5401 residential; 51 commercial). National Flood Insurance Program data (as of August, 2016) indicates that there are 802 flood insurance policies in the City of Hanahan, 550 of which are in the Special Flood Hazard Area (SFHA). The remaining 252 policies are on buildings outside of the SFHA (12 Standard "X" zone, and 240 Preferred Risk Policies). The value insured under these flood insurance policies on these buildings is \$203,614,900. The estimated value of all buildings in the City of Hanahan, per U.S. Bureau of the Census and Berkeley, Charleston Dorchester Council of Government Data, is \$886,700,606. Therefore, **14.7%** of the total number of buildings and **23.0%** of the total building valuation in the City of Hanahan is currently covered by NFIP flood insurance. This data serves as one of the baseline points for this City of Hanahan Flood Insurance Coverage Improvement Plan.

The City of Hanahan Hazard Mitigation Plan/Program for Public Information Committee (*hereafter referred to as the committee*) also considered flood insurance coverage in the flood mapped areas (A, B, C and other areas). The percentage of buildings in the SFHA with flood insurance in these mapped areas was as follows: (1) Area A (*near the Goose Creek Reservoir*) - **57%**, (2) Area B (*near Turkey Creek and other proximal areas*) - **47%**, (3) Area C (*near the Cooper River*) - **97%**, and (4) other areas - **59%**. The percentage of properties in these areas **not** located in the SFHA (*in the "X" and Shaded "X" Flood zones*) with flood insurance was **7.6%**. This data serves as a second baseline point for the City of Hanahan Flood Insurance Coverage Improvement Plan and as a basis for activities recommended in the Action Plan in the following section of this document aimed towards improving the flood insurance coverage in the City of Hanahan.

The committee determined, based on this data, that the City would be well served by focusing some targeted public information activities on flood insurance purchase/retention on flood mapped areas A and B. Since the overall flood insurance coverage in the entire City was below 25%, the committee also recommended that the City educate its entire citizenry regarding the importance of purchasing/retaining flood insurance coverage, whether or not their property is located in the SFHA or has an active mortgage. The committee recommended that at least one activity towards this objective include a message from the City's Mayor encouraging residents to have adequate flood insurance to protect their property.

IV. City of Hanahan Action Plan to Improve Flood Insurance Coverage

The City's entire Action Plan for reducing hazard event related-losses is included in its 2017-2018 update/supplement to the *Berkeley County Hazard Mitigation Plan*. All recommended public information activities, including those aimed at improving flood insurance coverage in the City, are fully detailed in the City's Program for Public Information. Following is an overview/summary of the projects specifically recommended in these documents aimed at improving the flood insurance coverage in the City of Hanahan:

Project 1: City Mayor to promote flood insurance purchase/retention to all Hanahan residents.

Mayor will encourage residents to purchase/retain flood insurance on their property through a letter to all residents.

Project 2: City to target flood insurance purchase/retention information to residents in Flood Map Areas A and B.

The City Building Official/CRS Coordinator will provide information on flood insurance and protecting property from flood-related losses to residents in these areas. Brochures available from FEMA will be distributed.

Project 3: City to perform a Repetitive Flood Loss Area Analysis

City Building Official/CRS Coordinator to notify residents in the mapped Repetitive Flood Loss Areas that he will be coming to these areas to evaluate properties as to causes of flooding and potential measures that could be taken to reduce flood losses, inviting these residents to provide input on the analysis. Results of the analysis will be provided to applicable home owners along with information as to potential sources of funding for improvements, as applicable. All property owners in these areas will be encouraged to purchase/maintain flood insurance as a part of this analysis.

Other projects included in the City's Program for Public Information will similarly include messages aimed at improving flood insurance coverage, as applicable. The committee may also add or revise projects as it deems appropriate based on the actual outcome of the projects identified in this document.

V. Desired Outcomes from the Flood Insurance Coverage Improvement Plan and Project Evaluation

The three projects identified in the Action Plan section of this document are the top priority projects for the improvement of flood insurance coverage in the City of Hanahan. In general, the desired outcome from these projects is to increase the overall percentage of flood insurance coverage in the entire City and specifically increase the percent of flood insurance coverage in the Special Flood Hazard Area in map areas A and B. In addition, these projects are aimed at increasing the overall percentage of insured value of buildings in the City, so that the residents and the City's tax base are more comprehensively protected from flood-related losses. The desired outcomes are more specifically evaluated in the City of Hanahan's Program for Public Information.

The City's Hazard Mitigation Plan/Program for Public Information Committee will evaluate the progress towards and effectiveness of these and other projects aimed at increasing flood insurance coverage in the City as a part of its annual update/review of its Hazard Mitigation Plan and Program for Public Information. Any changes needed to this document and the projects identified herein as a result of this evaluation will be reported to the City's Governing Council on an annual basis as described in the Planning Process Description section of this document.

VI. Adopting Resolution for the Flood Insurance Coverage Improvement Plan

RESOLUTION NO. 2-2017

A RESOLUTION FOR THE ADOPTION OF THE CITY OF HANAHAN, SOUTH CAROLINA PROGRAM FOR PUBLIC INFORMATION; THE CITY OF HANAHAN, SOUTH CAROLINA FLOOD INSURANCE COVERAGE ASSESSMENT AND COVERAGE IMPROVEMENT PLAN; AND THE CITY OF HANAHAN, SOUTH CAROLINA SUPPLEMENTS AND UPDATE TO THE BERKELEY COUNTY HAZARD MITIGATION PLAN FOR 2017-2018 BY THE HANAHAN, SOUTH CAROLINA CITY COUNCIL

- WHEREAS the City of Hanahan has experienced the effects of natural and man-made hazard events; and
- WHEREAS the City of Hanahan intends to join the National Flood Insurance Program's Community Rating System to reduce flood insurance premiums for its residents and to reduce future flood losses in the City; and
- WHEREAS the City of Hanahan City Council established and recognized its Hazard Mitigation Planning/Program for Public Information Committee on July 12, 2016; and
- WHEREAS the City of Hanahan's Hazard Mitigation Planning/Program for Public Information Committee developed a Program for Public Information for the City; and
- WHEREAS the City of Hanahan's Hazard Mitigation Planning/Program for Public Information Committee developed a Flood Insurance Coverage Assessment and Improvement Plan for the City; and
- WHEREAS the City of Hanahan's Hazard Mitigation Planning/Program for Public Information Committee supplemented and updated for 2017-2018, in accordance with National Flood Insurance Program Community Rating System requirements, the City of Hanahan's portions of the 2014 Berkeley County Hazard Mitigation Plan; and

NOW THEREFORE be it resolved that

- The City of Hanahan, South Carolina Program for Public Information is hereby adopted as an official program and document for the City of Hanahan; and
- 2. The City of Hanahan, South Carolina Flood Insurance Coverage Assessment and Coverage Improvement Plan is hereby adopted as an official plan for the City of Hanahan; and
- 3. The City of Hanahan, South Carolina Supplements and Update to the Berkeley County Hazard Mitigation Plan for 2017-2018 is hereby adopted as an official plan update for the City of Hanahan; and

The City of Hanahan Hazard Mitigation Planning/Program for Public 4. Information Committee is recognized as a continuing entity charged with reviewing, maintaining in accordance with Community Rating System requirements, and periodically reporting on the progress towards the City of Hanahan portions of and any revisions and/or supplements for the City of Hanahan to the Berkeley County Hazard Mitigation Plan. This continuing committee is also recognized to review and make updates/reports on the City of Hanahan Program for Public Information and The City of Hanahan Flood Insurance Coverage Assessment and Coverage Improvement Plan and to report to City Council periodically on their progress.

Effective this 4 Day of Marctt , 2017

Neucomon Minnie Newman, Mayor

ATTEST:

Kim Feters Clerk of Council

Resolution No. 2-2017

VII. **Resolution Recognizing the Hazard Mitigation Planning/Program for Public Information Committee**

A RESOLUTION FOR THE RECOGNITION OF THE HAZARD MITIGATION PLANNING/PROGRAM FOR PUBLIC INFORMATION COMMITTEE BY THE HANAHAN, SC CITY COUNCIL

Resolution No. 3-2016

WHEREAS the City of Hanahan has experienced the effects of natural and man-made hazard events; and

- WHEREAS the City of Hanahan participated in the development of the 2014 Berkeley County Hazard Mitigation Plan and adopted said plan on October 14, 2014; and
- WHEREAS the City of Hanahan plans to reduce the flood insurance premiums paid by its residents through its participation in the National Flood Insurance Program's Community Rating System, and
- WHEREAS as a part of the City's participation in the Community Rating System, the City is establishing a committee to review and update its portions of the 2014 Berkeley County Hazard Mitigation Plan to include a Program for Public Information and other updates deemed necessary by the committee for credit under the Community Rating System, and

NOW THEREFORE be it resolved that

- 1. The City of Hanahan Hazard Mitigation Planning/Program for Public Information Committee is recognized as a continuing entity charged with reviewing, maintaining in accordance with Community Rating System requirements, and periodically reporting on the progress towards the City of Hanahan portions of and any revisions and/or supplements for the City of Hanahan to the 2014 Berkeley Hazard Mitigation Plan. This continuing committee is also recognized to review and make updates/reports on the City of Hanahan Program for Public Information and report to City Council periodically on their progress, and
- The Chairperson of the City of Hanahan Hazard Mitigation Planning/Program for Public 2. Information Committee, who is to be appointed by the City Administrator, is hereby authorized to appoint members to the committee as he/she deems necessary for Community Rating System credits.

Effective this 12th Day of July, 2016

for Minnie Newman



Appendix A: Committee Meeting Minutes

Meeting 1: October 13, 2016

Hazard Mitigation Plan/Program for Public Information Committee Meeting Minutes Meeting of October 13, 2016, 6:30 p.m., Hanahan City Hall

Present: Marty Chandler (Real Estate Agent, Coldwell Banker Real Estate and resident of Hanahan); Chad Chinners (Owner, True Value Store in Hanahan); Chris Crawford (City of Hanahan resident); Denise Farmer (Insurance Agent, Blackwell & Sons Insurance); Captain Michael Fowler (City of Hanahan Police Dept.); Daniel Kary (Builder and representative of the Charleston Trident Homebuilders' Association); Samantha Kelly (Banker, First Citizens Bank); David Kornahrens (City of Hanahan Public Information Officer); Jennifer Mitchum (City of Hanahan resident); Larry Sturdivant (City of Hanahan Building Official and CRS Coordinator); Lisa Sharrard (consultant); Joni Rennhack (consultant).

(Italicized names are non-voting attendees offering technical services to the committee.)

Welcome and Introductions: Lisa Sharrard, consultant, welcomed attendees to the meeting and introduced herself and the committee members. She added that both she and Joni Rennhack, a consultant she brought into this project, had served on the Community Rating System Task Force, which is comprised of experts from across the United States on floodplain management.

Overview of the Community Rating System (CRS): Lisa Sharrard provided an overview of the Community Rating System, explaining that the program is similar to the ISO ratings for Fire Departments, but CRS is for flood insurance through the National Flood Insurance Program (NFIP). She explained that many communities in the tri-county area are receiving significant discounts in flood insurance premiums for their residents under the CRS program and the City of Hanahan is going to make application for this program so its residents could likewise receive these discounts. She explained that the CRS utilizes a point-based system to determine the amount of the insurance premium discount (the higher the points, the greater the discount) with these points being based on activities performed by the community. She explained that the discounts are provided because these activities result in a lower risk of flood damage. Larry Sturdivant mentioned that the Building Code Effectiveness Grading Schedule (BCEGS) is similarly an ISO rating system for Building Departments. Lisa added that the BCEGS rating is also a factor in the CRS rating. Lisa added that this committee has a very important role in the planning and public education activities of the CRS program and she greatly appreciates the willingness of the committee members to serve on the committee.

Overview of the CRS Program for Public Information (PPI): Joni Rennhack, consultant, explained that a Program for Public Information is basically an outline for public outreach projects to be undertaken in the City as a part of the CRS program. She indicated that several of the meeting handouts pertained to the PPI and that these would be discussed in more detail later in the meeting.

Review of CRS Flood Insurance Coverage Improvement Plan and Claim Analysis: Joni Rennhack reviewed an analysis of data from the NFIP regarding flood claims and insurance coverage in the City. She provided information on the number of buildings in the City of Hanahan (residential and commercial), the number of properties with flood insurance in the City, the dollar amount of flood insurance coverage in the City, the

percent of flood insurance coverage in the City, significant flooding events in the City with the number of flood insurance claims, summary data on NFIP insurance claims in the City from September 1979 to May, 2016, graphical and numeric information as to the areas of repetitively flooded and flood claim areas in the City of Hanahan, and analyses of the distribution of flood insurance policies, the number and percentage of buildings in the floodplain, the number and percentage of flood claims, and the actual dollar amount and average amount per flood insurance claim in these mapped areas. She also provided the percentage of buildings in the Special Flood Hazard Area that had flood insurance as of May, 2016 as a baseline for a Flood Insurance Coverage Improvement Plan for the City. Lisa Sharrard explained that the information on flood claims and repetitive flood loss areas was confidential and was being provided for the committee's planning efforts but was not to be discussed outside of the committee meetings. She indicated that the fine for violating this Federal Privacy Act provision was \$5000 per violation. She added experiencing a flood loss is a very painful experience for a property owner, and that this confidential data is important to our planning efforts so that we can help these residents to get lower insurance premiums and to reduce their future flood loss potential. Jennifer Mitchum, a resident of Hanahan, asked about why some of the flood insurance claims had been denied. She also asked if flood insurance was separate from homeowner's insurance. Lisa Sharrard responded that a separate policy is required for flood insurance and that most homeowner's policies do not cover flood damages. She said that claims could be denied because an adjuster determined that the damages were not a result of flooding or other reasons. Larry Sturdivant indicated that one of the repetitive flood loss areas was not in the floodplain (SFHA) and questioned why these properties had flooded. Joni Rennhack responded that it looked like there was a large detention pond near that street and the flooding could perhaps be a result of localized drainage problems during the significant rainfall events. Lisa Sharrard added that she was aware of a claim that was denied elsewhere under a homeowner's policy when an above ground swimming pool collapsed and the water damaged the building, because the insurance company deemed it to be a flood. She said not all areas that have flood claims are in the floodplain. She added that property owners often cite their lack of damages associated with previous flood events as a reason not to get flood insurance, particularly if it is not required as a condition of the mortgage. She added that there is a misconception that the "1000 year flood" event that occurred in October, 2015 means that there will not be another flood of that magnitude for another 999 years. She said the area had just experienced Hurricane Matthew, another major flood event, within 1 year of the "1000 year" storm. She said we want people to understand that they live in an area with a real flood risk and that they need to take steps to protect their property, including purchasing flood insurance. She added that significant uninsured losses would have a big impact on the tax base. Jennifer Mitchum asked why map area C had the most insurance. Lisa Sharrard responded that the owners there may be eligible for preferred risk subsidized rates (insurance at ~\$450 per year) or that the residents may be aware of the flood experience and potential so they obtain flood insurance. Joni Rennhack concluded this discussion with recommendations that the City perform a Repetitive Flood Loss Area Analysis to identify potential mitigation measures for the repetitive flood loss areas, target some outreach activities on flood damage protection to these repetitive flood loss areas under the Program for Public Information, and focus targeted flood insurance purchase public information activities on Map Areas A and B where the percentage of flood insurance coverage is lower. She asked the committee if they had any other recommendations or suggestions, and there were none at this point in time.

Discussion of Draft Planning Process Description: Joni Rennhack referred the committee to the Planning Process Description Draft handout. She explained that the CRS program is very specific as to the steps that need to be followed in its planning processes in order to get credit for these activities. She explained that the

document was written in past tense so it could be readily included in the final planning documents, even though some of the planning activities had not yet been performed. She asked the committee members to review the document and let the consultants know if they had any questions or revisions to it.

Discussion of Hanahan Hazard Mitigation Plan Excerpts: Joni Rennhack asked the committee members to look at the handout with the goals and activities that are in the current Berkeley County Hazard Mitigation *Plan*, which is the City's plan also. She explained that the committee is charged with reviewing/updating this plan on an annual basis. With the City making application to the CRS program, some changes to the City's portion of the plan will be needed to get bonus credits under some of the activities. She explained that she had submitted the Berkeley County plan to the CRS reviewers for scoring, and it capped at 50 points because step 7 of the planning process, which is the review of possible activities, was not done in accordance with the CRS requirements. She said if this requirement had been met, the plan would have scored at more than triple this amount of points. Lisa Sharrard asked if we could make changes to the plan to get these additional credit points. Joni responded that this committee would essentially need to start from scratch on the plan and cover all 10 of the planning steps in order to get more than 50 points, and she did not think we had the time to do that at this point. It could be done, but it was probably not feasible at this point given our time constraints. She said that in her opinion it would be better for the COG (the coordinating agency for the Berkeley County Hazard Mitigation Plan) to do this during their next plan update cycle. Lisa asked Larry Sturdivant to ask the COG to do this since this would mean additional credit for the City and other CRS communities in Berkeley County. Joni Rennhack asked if anyone had any suggested changes to the goals on the handout. Larry Sturdivant commented that stopping the flooding is a goal, adding that the City was hit worse last year but had experienced flooding again as a result of Hurricane Matthew. He expressed frustration over the repetitive flooding. Lisa Sharrard explained that there is Hazard Mitigation Grant Program funding available as a result of the hurricane, but that the application period does not close until January, 2018, so there will be no projects funded until after that date. She added that people want to repair now and not wait that long, but if they make the repairs prior to making application for the grants they will not be eligible for grant funding. She said for those properties with flood insurance that are substantially damaged, there is up to \$30,000 available in Increased Cost of Compliance coverage to bring the structure up to current standards. She added that property owners need to be very careful about hiring only licensed and reputable contractors to perform work, and if they are charged too much they will be paying out of pocket for cost over the insurance settlement. Joni Rennhack added that there are unscrupulous contractors who travel around the country following disasters and ultimately rip people off when they are in desperate circumstances. She said this happened after Hurricane Hugo and she has no reason to believe that it would not happen after Hurricane Matthew. She said the committee may want to consider some outreach projects regarding post-damage protections under the City's PPI to help educate the residents about this issue. Joni asked the committee to review the list of Activities, particularly those regarding public Information activities, to see if it included activities that are currently being performed or any others that we may want to add. She said, for example, we may want to add Social Media outreach and the web site. Larry Sturdivant added that the City has a Red, White and Blue Festival each year that should be on the list as an opportunity to reach the public with flood-related information. He said his office also keeps a list of licensed contractors that residents could use to verify if their contractors are appropriately licensed. Joni and Lisa asked the committee members to please let them know of any other suggested changes to the goals or activities.

Discussion of Sample PPI and Messages: Joni Rennhack explained that there was a handout with a sample format for a PPI and with sample messages. She explained that she had reviewed several PPI's from other communities and she liked the format of the Surfside Beach PPI the best, so she was recommending that we use a similar spreadsheet format for the City's PPI. She said the sample message list was the most comprehensive of the PPI's she reviewed, so she was providing this one so the committee could select which messages, target audiences, and types of outreach projects they want to include in their PPI or modify/add to these as they deem appropriate. She asked if anyone had any recommendations for messages or projects from the list or if there were any in which the City would just not be interested in pursuing, for example billboards. Larry Sturdivant replied that the City would probably not be interested in billboards since these were mostly grandfathered. Joni mentioned that if the committee wanted to pursue a social media campaign, they may want to have a mascot (*perhaps "Hana the Hen" who could send out Tweets of the messages to "her" followers and the TV meteorologists, who would in turn most likely retweet these to their expansive follower networks and reach a large number of residents in and out of the City.) She and Lisa asked the committee to go through the list and select which messages, audiences and projects they wanted to pursue (adding any others if they want) and then get this information back to them.*

Determination of Next Committee Meeting Date: Larry Sturdivant said he would check the City's calendar and poll the committee members to select the next meeting date. Joni Rennhack said it would be best if the meeting could be held in mid- to late- November, if possible. . Lisa Sharrard said she would send out a list of follow-up items from the committee meeting to the members so they would know the information we needed back in order to prepare drafts of information for the committee to discuss at our next meeting. She and Joni Rennhack thanked the committee members for their participation and willingness to serve on the committee.

Adjourn: The meeting adjourned at 7:55 p.m.

Respectfully submitted,

Joni Rennhack Consultant

Meeting 2: November 15, 2016

Hazard Mitigation Plan/Program for Public Information Committee Meeting Minutes Meeting of November 15, 2016, 6:30 p.m., Hanahan City Hall

Present: Marty Chandler (Real Estate Agent, Coldwell Banker Real Estate and resident of Hanahan); Chad Chinners (Owner, Blackwell True Value Store in Hanahan); Denise Farmer (Insurance Agent, Blackwell & Sons Insurance); Daniel Kary (Builder and representative of the Charleston Trident Homebuilders' Association); Senior Captain Mike Langer (City of Hanahan Fire Dept.); Jennifer Mitchum (City of Hanahan resident); Larry Sturdivant (City of Hanahan Building Official and CRS Coordinator); Lisa Sharrard (consultant); Joni Rennhack (consultant).

(Italicized names are non-voting attendees offering technical services to the committee.)

Welcome and Introductions: Lisa Sharrard, consultant, welcomed attendees to the meeting. The committee members introduced themselves.

Approval of the Minutes of the Meeting of October 13, 2016: Denise Farmer made a motion seconded by Jennifer Mitchum to approve the minutes as submitted. The motion carried unanimously.

Review/Approval of Draft Hazard Mitigation Plan Supplements/Update: At the request of Lisa Sharrard, Joni Rennhack began discussion of this document by asking if there were any questions/comments on the draft by the committee members. Being none, she asked the committee if there were any parks in the City that were in the floodplain and served natural and beneficial functions of floodplains. Sr. Captain Langer responded that the main recreation complex was greenspace adjacent to the Goose Creek Reservoir, and there was a passive park in Otranto and the City also has a boat landing that would serve these functions. Joni thanked him for the information and said she would include these in the next version of the plan supplements/update. Joni then asked the committee if the section in the draft regarding the goals was what they wanted in the document. She added that we could include the hazard-specific goals that were included in the current action plan and status report if the committee wanted to do this. The committee determined that the goals statement was fine as it is. Larry Sturdivant commented on the status report that the stormwater activities had been merged with Berkeley County during 2015. Joni said she would add this to the status report and change it on the action plan for 2017-2018. Larry said that the funding source for the Structural Projects Action item regarding the drainage system maintenance should be the Berkeley County General Fund and the S.C. Department of Transportation since these entities both perform maintenance on the City's drainage system. Joni said she would make this change to the 2017-2018 Action Plan. She said she would also change the first item on the Action Plan to reflect that the City's new flood ordinance will have a 2 feet freeboard requirement. She asked if there were any other changes to the draft hazard mitigation plan supplements/updates. There were no other changes requested by the committee at this time.

Review/Approval of Draft Flood Insurance Analysis/Coverage Improvement Plan: Joni Rennhack said that this document was based on the flood insurance maps and charts that the committee discussed during their October 13, 2016 meeting. She asked if there were any questions or comments from the committee on the draft. There being none, she referred the committee to the specific projects to improve/maintain flood insurance coverage in the City listed in the draft, and asked if these were the projects the committee wanted

to perform. She added that at least one of the projects needed to be done by the Mayor, and it was her understanding from the City that the Mayor's preference for this was to send a letter to City residents encouraging them to purchase/maintain flood insurance. Larry Sturdivant said that this was correct. He requested a template for the Mayor letter. Lisa Sharrard and Joni responded they would prepare this template and send it to the City. Joni asked if there were any changes to the draft or if there were any other questions. There were none from the committee at this time.

Review/Approval of Draft Program for Public Information (PPI): Joni Rennhack said that this document was the blueprint for the public information activities to educate Hanahan residents about floods and hurricanes. She referred the committee to the Assessment of Public Information needs section of the document and asked if anyone had any revisions to this or comments or questions on it. Larry Sturdivant commented that the City was pushing the social media activities and that whatever was posted on the City's web site was automatically posted to the Facebook page. He said the City also has a reverse 911 system for emergencies and that they were getting away from using trash can fliers (these are now only done quarterly) since these often were not read and were just discarded. Lisa Sharrard asked if the City had a You Tube Channel, commenting that this was a good way to educate the public about steps to take to reduce losses and make post-event repairs, etc. Larry responded that the City has a heavy filter for what they will put on their web site, but he could see where You Tube could be a useful tool for this purpose. Sr. Captain Langer commented that in the Brookside neighborhood when the lights go out due to a hazard event that they like for the residents to have glow sticks for light, and this is something they should get in advance in preparation. He said they also like to see the residents use the reusable seed bags for flood control and information on using these was on the internet. He said the City should have this type of information available for posting on the web site when it is needed. He added that often times people try to drive through flooded roadways and that there could be damaged or non-existent road beneath the water. Lisa commented that there is a video Public Safety Announcement about this. Sr. Captain Langer said that a flood safety checklist should be posted on the web site. Joni Rennhack asked what the committee thought about performing an annual test of the Emergency Alert System and including a couple of simple messages on the flood risk and flood insurance with the test message. Larry Sturdivant responded that he would need to check with others on this. Sr. Captain Langer said that there is a place on the City's web page for residents to register their e-mail to receive notices and alerts and that this "non-emergency" system would be a better method for distributing these types of messages. Lisa asked Sr. Captain Langer if his Department had any special activities for Hurricane or Severe Weather week. He responded that the new Chief was looking into this. He added that this alert system could be used for a number of things including school evacuations. He said educating the residents as to what to do prior to an emergency would be of great help to his Department. Joni said she would change the item as to the Emergency Alert System test to the non-emergency alert system and asked if there were any other comments or suggested revisions to the section of the PPI, and there were none.

Joni referred the committee to the messages section of the PPI and explained that the messages listed were all found in existing publications, web sites, and other outreach activities that were available from FEMA and other sources at no cost to the City. She added that there were 10 categories of messages, with the Flood Response Preparation messages being for post-flood event use only. She asked if anyone had any changes to these messages or any additional messages they would like to see on the list. The committee had no recommended changes to the messages list. Joni then referred the committee to the list of existing (current) activities/initiatives. She said that these are on-going and the City could get credit under the Community Rating System (CRS) for these by including them in the PPI. Larry Sturdivant asked what the message counts listed adjacent to the activity name meant. Joni responded that this indicates the number of messages included in the particular activity. She said that, for example, the FEMA F001 brochure contains 7 of the messages from the list previously discussed. She said that the higher the number of messages, the more CRS credit the City would receive for a specific project. Joni asked if there were any other activities the committee members wanted to add to the list or if there were any changes to the list. There were no activities added or changes made to the list by the committee.

Joni referred the committee to the list of other activities to be implemented and asked the committee if they wanted to pursue all of these. She also referred the committee members to the PPI Worksheet, which details the specific target audiences, messages, and projects proposed for the City to perform/seek credit for under the PPI. She explained that the CRS determines the credit for the projects based on the number of messages conveyed and the type of project. She said more credit is given if the project is performed by a stakeholder, so the stakeholder column is there for this reason. Sr. Captain Langer said that the Police Cadet program could possibly be used to distribute this type of information to the residents, particularly those that are new to the area. He said the Department he worked in previously did this type of outreach to new residents and they found it very helpful. Marty Chandler said his agency would be willing to distribute information to new home buyers. Jennifer Mitchum said she is a teacher and would be willing to send information home with her students, which would then get it to the parents. Chad Chinners said he would be willing to put a display in his True Value store with emergency supplies and brochures from the list for distribution to the public. Denise Farmer said her agency would be willing to distribute information to their insureds. Joni asked if the City wanted to do 52 twitter messages (one per week) or to do this on a less frequent basis? Larry Sturdivant said he would check on this and get back to the consultants with the answer. Joni said she had not included the Spanish language-speaking community as a target audience in this draft, and asked the committee if they thought we should include an activity aimed at this audience. Denise Farmer said she has clients that speak primarily Spanish and she would distribute brochures in Spanish to them if these were made available to her. Joni said that FEMA does have several brochures in Spanish and she would add a project with this target audience to use these brochures for distribution to this group to the additional activities list and the PPI worksheet. She said that based on the previous discussion regarding using the non-emergency alert system in lieu of the emergency system, she would change number 19 on the Additional Outreach Activities/Distribution Points list to the non-emergency alert system. She asked if there were any other changes the committee members wanted to the lists or the PPI worksheet. Larry Sturdivant asked what map areas A & B were on the first item on the PPI worksheet. Lisa responded that these were the areas we discussed at the October 13th meeting. Joni referred the committee to the maps in the Flood Insurance Coverage Assessment and Coverage Improvement Plan to see the target areas for these projects. The committee said these maps were fine and had no further comments or requested changes at this time.

Lisa Sharrard commented that the committee members could still submit changes to any of the draft documents if they determined upon further review that there should be more revisions. She asked that any additional suggested changes by submitted to Larry Sturdivant by **Friday, November 18, 2016**, if possible.

Discussion of website and advertisement for flood zone determinations and technical assistance for flood problems services: Joni Rennhack said that the City could get CRS credit for their web site, as long as it met the criteria established in the CRS manual. She said, for example, the City web site would need to have a

separate page for flood-related information that is accessed from a flood link on the home page or if a search engine is used to find the page that when "flood" is typed in the search engine this flood page link would need to come up first or second on the list. She said that if the web site includes messages from the list in the PPI document that bonus credit would be given for the web site. She said information on warning, safety and evacuations is also creditable, as is real time USGS stream gage information that could be linked to from the City's flood page. She said links could be used to the brochures and PSA's from the PPI list. Lisa Sharrard suggested that these be downloaded and linked to rather than linked to on FEMA's site, since the links on that site change frequently. Joni added that the City's flood page would be required to have one link to the FEMA flood insurance page and should have links to other flood-related agencies web sites, as appropriate. She said the City's flood page would also need to provide information on the City's flood zone determination and technical assistance for flood problems services (*services available, how to request these, etc.*). Larry Sturdivant said that the City had a web page like this that needed to be restored. He said he had a copy of the information it contained for restoring the page. Joni suggested that as many of the PPI messages as possible be included on the web page to maximize the CRS credit for this activity.

Overview of Revised Project Timeline: Lisa Sharrard reviewed the project timeline with the committee, stating that there would be a public hearing on the draft plans and PPI in early to mid-January and that the committee would meet again after that to finalize these documents. She said these would be sent to the City Council for adoption on February 14, 2017. Larry Sturdivant said these documents would be adopted by resolution, so the adoption would take place at this one meeting. He said the revised flood ordinance would take two readings/meetings. Lisa said we were striving to have the CRS reviewer here to make the program application in March, 2017.

Lisa Sharrard and Joni Rennhack thanked the committee for their time and input.

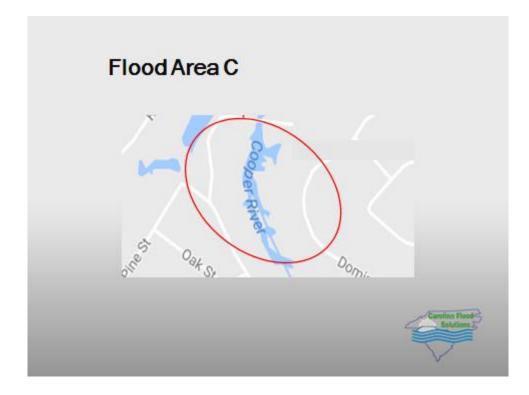
Adjourn: The meeting adjourned at 7:39 p.m.

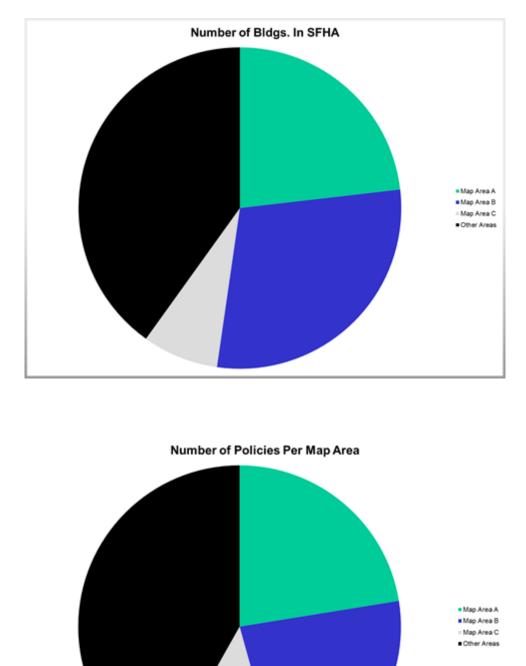
Respectfully submitted,

Joni Rennhack Consultant

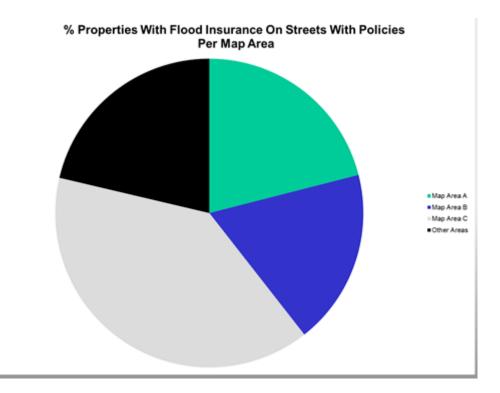
Appendix B: Maps of Flood Areas

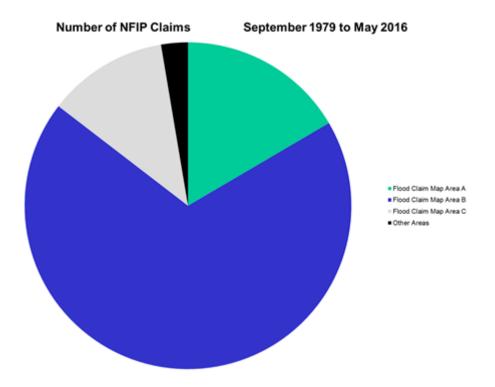


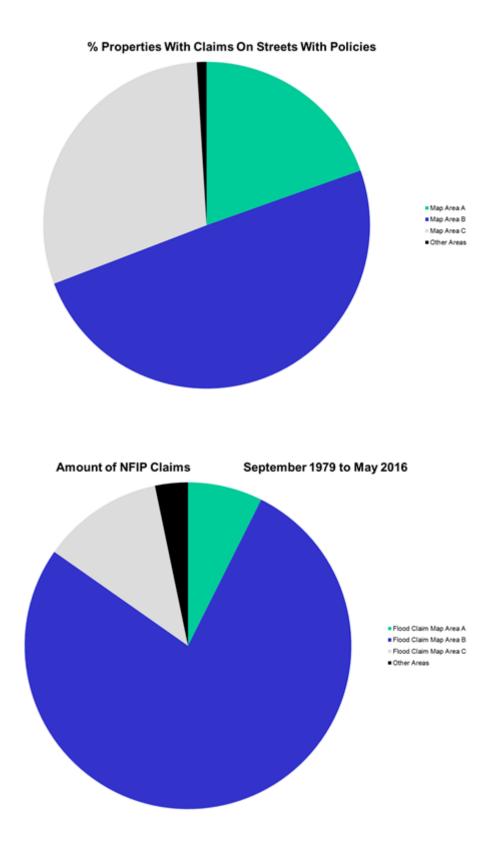




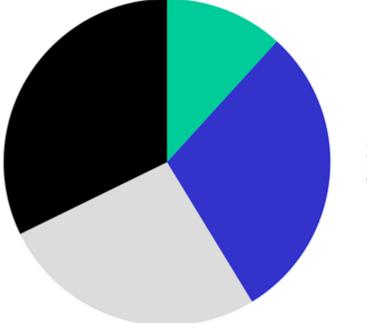
Appendix C – Charts of Flood Insurance and Claim Data







Average Amount of Claim Per Map Area



Flood Claim Map Area A
 Flood Claim Map Area B
 Flood Claim Map Area C
 Other Areas