



# **PROPOSED AMENDMENTS TO THE TOWN OF SURFSIDE BEACH FLOOD DAMAGE PREVENTION ORDINANCE**

**AUGUST 15, 2016 5:00PM**

**TOWN HALL COUNCIL CHAMBERS**

# FEMA CRS PROGRAM

THE NATIONAL FLOOD INSURANCE PROGRAM'S (NFIP) COMMUNITY RATING SYSTEM (CRS) IS A VOLUNTARY INCENTIVE PROGRAM THAT RECOGNIZES AND ENCOURAGES COMMUNITY FLOODPLAIN MANAGEMENT ACTIVITIES THAT EXCEED THE MINIMUM NFIP REQUIREMENTS.

AS A RESULT, FLOOD INSURANCE PREMIUM RATES ARE DISCOUNTED TO REFLECT THE REDUCED FLOOD RISK RESULTING FROM THE COMMUNITY ACTIONS MEETING THE THREE GOALS OF THE CRS:

- REDUCE FLOOD DAMAGE TO INSURABLE PROPERTY;
- STRENGTHEN AND SUPPORT THE INSURANCE ASPECTS OF THE NFIP, AND
- ENCOURAGE A COMPREHENSIVE APPROACH TO FLOODPLAIN MANAGEMENT.

# THE CRS CLASSES ARE BASED ON COMPLETION OF 19 CREDITABLE ACTIVITIES ORGANIZED INTO 4 CATEGORIES:

- PUBLIC INFORMATION
- MAPPING AND REGULATIONS
- FLOOD DAMAGE REDUCTION
- WARNING AND RESPONSE

# 19 Creditable Activities – Surfside Beach receives credit in 12

## **Public Information (Series 300)**

**This series credits programs that advise people about the flood hazard, flood insurance, and ways to reduce flood damage.**

Activity 310 Elevation Certificates

Activity 320 Map Information Service

Activity 330 Outreach Projects

Activity 340 Hazard Disclosure

Activity 350 Flood Protection Information

Activity 360 Flood Protection Assistance

Activity 370 Flood Insurance Promotion

## **Mapping and Regulations (Series 400)**

**This series credits programs that provide increased protection to new development.**

Activity 410 Floodplain Mapping

Activity 420 Open Space Preservation

Activity 430 Higher Regulatory Standards

Activity 440 Flood Data Maintenance

Activity 450 Stormwater Management

## **Flood Damage Reduction (Series 500)**

**This series credits programs that reduce flood damage to existing buildings.**

Activity 510 Floodplain Management Planning

Activity 520 Acquisition and Relocation

Activity 530 Flood Protection

Activity 540 Drainage System Maintenance

## **Warning and Response (Series 600)**

**This series credits flood warning and response programs.**

Activity 610 Flood Warning and Response

Activity 620 Levees

Activity 630 Dams

	CRS Class	Credit Points	Premium Reduction	
			Inside SFHA	Outside SFHA
	1	4,500+	45%	10%
	2	4,000-4,499	40%	10%
	3	3,500-3,999	35%	10%
	4	3,000-3,499	30%	10%
<b><u>2015</u></b>	<b>5</b>	<b>2,500-2,999</b>	<b>25%</b>	<b>10%</b>
	6	2,000-2,499	20%	10%
	7	1,500-1,999	15%	5%
	8	1,000-1,499M	10%	5%
<b><u>2010</u></b>	<b>9</b>	<b>500-999</b>	<b>5%</b>	<b>5%</b>
	10	0-499	0	0

SFHA: Zones A, AE, A1-A30, V, V1-V30, AO, and AH

Outside the SFHA: Zones X, B, C, A99, AR, and D

Preferred Risk Policies (PRPs) are not eligible for CRS premium reductions because they already have premiums lower than other policies. PRPs are available only in B, C, and X Zones for properties that are shown to have a moderate- to low-risk of flood damage. Minus-rated policies are not eligible for CRS premium reductions.

Premium reductions are subject to change.

Community: SURFSIDE BEACH, TOWN OF State: SOUTH CAROLINA  
 County: HORRY COUNTY CID: 450111

Current CRS Class = 9

[Printable Version]

		TOTAL	SFHA *	X- STD/AR/A99 **	PRP ***
PIF		2,335	1,608	36	691
PREMIUM		\$1,678,923	\$1,349,740	\$60,636	\$268,547
AVERAGE PREMIUM		\$719	\$839	\$1,684	\$389
CRS Class					
09	Per Policy	\$32	\$44	\$89	\$0
	Per Community	\$74,230	\$71,038	\$3,191	\$0
08	Per Policy	\$62	\$88	\$89	\$0
	Per Community	\$145,269	\$142,078	\$3,191	\$0
07	Per Policy	\$93	\$133	\$89	\$0
	Per Community	\$216,308	\$213,116	\$3,191	\$0
06	Per Policy	\$124	\$177	\$177	\$0
	Per Community	\$290,539	\$284,156	\$6,383	\$0
05	Per Policy	\$155	\$221	\$177	\$0
	Per Community	\$361,577	\$355,194	\$6,383	\$0
04	Per Policy	\$185	\$265	\$177	\$0
	Per Community	\$432,617	\$426,234	\$6,383	\$0
03	Per Policy	\$216	\$309	\$177	\$0
	Per Community	\$503,655	\$497,272	\$6,383	\$0
02	Per Policy	\$246	\$353	\$177	\$0
	Per Community	\$574,693	\$568,311	\$6,383	\$0
01	Per Policy	\$277	\$398	\$177	\$0
	Per Community	\$645,733	\$639,350	\$6,383	\$0

\* SHFA (Zones A, AE, A1-A30, V, V1-V30, AO, and AH): Discount varies depending on class.

\*\* SFHA (Zones A99, AR, AR/A, AR/AE, AR/A1-A30, AR/AH, and AR/AO): 10% discount for Classes 1-6; 5% discount for Classes 7-9.

\*\*\* Preferred Risk Policies are not eligible for CRS Premium Discounts.

**Printout was calculated using 2015 Data....**

2015 the town had **1644** flood insurance policies

2016 the town has **1832** flood Insurance policies

Currently in SC there are only:  
**3** - Class 5 Surfside Beach  
 Hilton Head  
 City of Myrtle Beach  
**1** - Class 4 Charleston County

# **BRIEF BACKGROUND ON THE SC FLOODING IN OCTOBER 2015**

THE EPIC FLOODING IN SOUTH CAROLINA IN OCTOBER OF 2015 WAS INDEED A **1,000-YEAR RAINFALL EVENT**. THOUGH THAT TERM IS BEING MISUSED AND CONFUSED WITH A **1,000-YEAR FLOOD EVENT**. BOTH ARE ENTIRELY DIFFERENT THINGS AND MEASURED DIFFERENTLY.

### **1,000-YEAR RAINFALL EVENT DEFINITION:**

- A 1,000-YEAR RAINFALL EVENT IS MEASURED BY THE AMOUNT OF RAIN OVER A PARTICULAR PERIOD OF TIME. IT DOES NOT MEAN IT HASN'T RAINED THIS MUCH IN 1,000 YEARS, OR THIS IS THE MOST RAIN IN 1,000 YEARS. IT'S A RECURRENCE STATISTIC.

### **SO WHAT IS A 1,000-YEAR FLOOD?**

- MEANS THAT, STATISTICALLY SPEAKING, A FLOOD OF THAT MAGNITUDE (OR GREATER) HAS A 1 IN 1000 CHANCE IN ANY GIVEN YEAR. IN TERMS OF PROBABILITY, THE 1000-YEAR FLOOD HAS A 0.1% CHANCE OF HAPPENING IN ANY GIVEN YEAR. FLOOD RECURRENCE MEASUREMENTS ARE BASED ON THE LEVEL OF WATER WITHIN A CERTAIN CREEK, STREAM OR RIVER BASIN.

SOURCE: UNITED STATES GEOLOGICAL SURVEY (USGS)

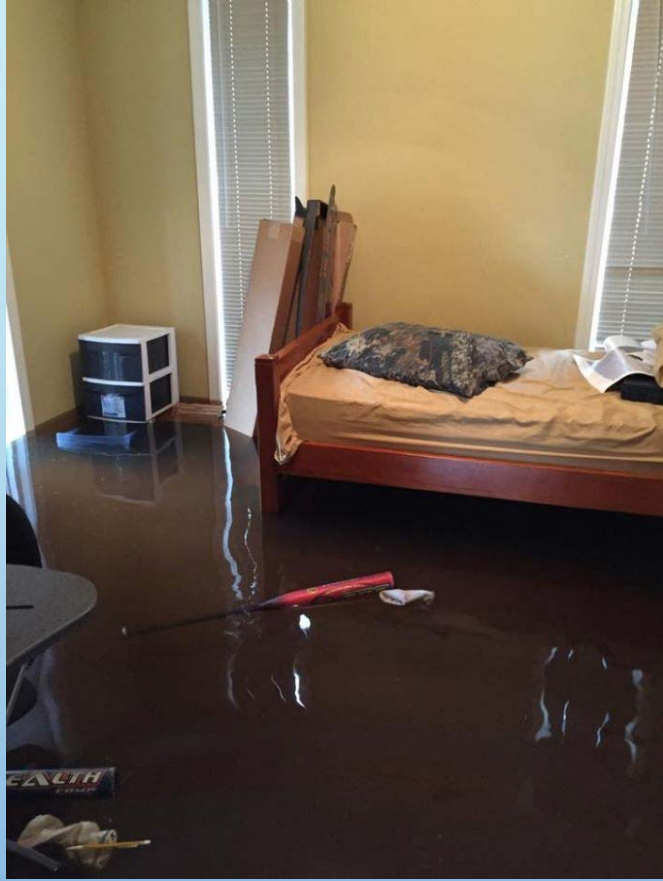
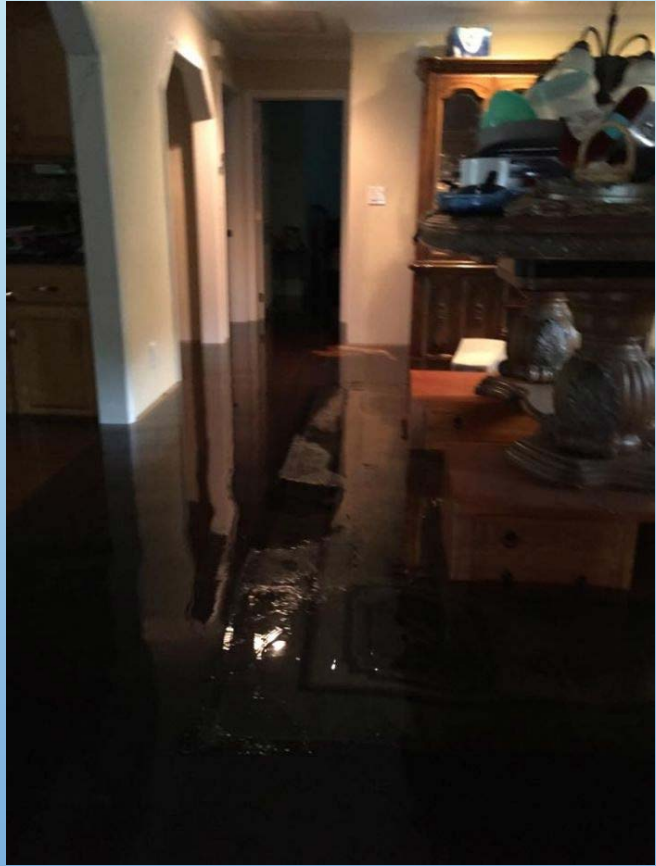


WHILE THIS CERTAINLY WAS A CATASTROPHIC FLOOD WITH LOTS OF DAMAGE AND TRAGIC LOSS OF LIFE, USGS DATA ANALYSIS **SHOW NO INDICATION THAT A 1000-YEAR FLOOD DISCHARGE OCCURRED AT ANY USGS STREAM GAGES.** HOWEVER, BASED ON THAT ANALYSIS, IT DOES APPEAR THAT THE USGS STREAM GAGE ON THE [BLACK RIVER AT KINGSTREE, SC](#) AND THE ONE ON THE [SMITH BRANCH AT COLUMBIA, SC](#) BOTH MEASURED PEAK FLOODS IN THE NEIGHBORHOOD OF A **500-YEAR FLOOD.** THERE APPEARED TO BE A FEW MORE STREAM GAGES EXPERIENCING A **25-YEAR TO 50-YEAR FLOOD, BUT THE MAJORITY OF USGS STREAM GAGES HAD FLOOD PEAKS THAT WERE LESS THAN 10-YEAR FLOODS.**

SOURCE: UNITED STATES GEOLOGICAL SURVEY (USGS)

# OCTOBER 2015 FLOODING – HORRY COUNTY

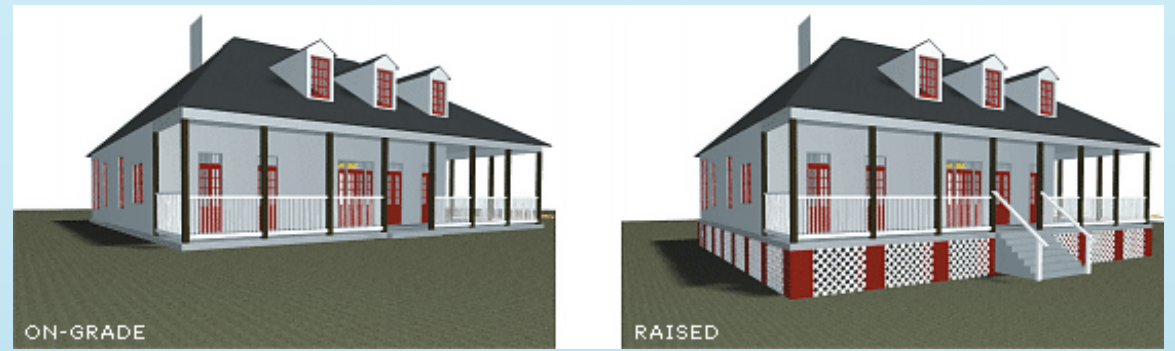




### *Current Ordinance:*

Minimum finished floor elevation. All new structures, not located in a special flood hazard area, shall have the lowest floor and all mechanical or electrical equipment,

such as compressors, air conditioning units, etc., elevated no less than **36" above the highest adjacent grade of the lot.** Final site grading shall insure that ponding of stormwater will not occur beneath the building, nearer than three feet from the building's perimeter or any mechanical or electrical equipment.



### *Proposed Ordinance:*

Minimum finished floor elevation. All **non-commercial** structures, not located in a special flood hazard area, shall have the lowest floor and all mechanical or electrical equipment, such as compressors, air conditioning units, etc., elevated no less than **18" above the highest adjacent grade of the lot.** Final site grading shall insure that ponding of stormwater will not occur beneath the building, nearer than three feet from the building's perimeter or any mechanical or electrical equipment.

**All new commercial structures not located in a special flood hazard area, shall have the lowest floor and all mechanical or electrical equipment, such as compressors, air conditioning units, etc., elevated no less than 18" above the centerline of the centerline of road. Final site grading shall insure that ponding of stormwater will not occur beneath the building, nearer than three feet from the building's perimeter or any mechanical or electrical equipment.**

# WHAT ARE OTHER TOWNS/COUNTIES DOING?

- **HORRY COUNTY** CURRENTLY REQUIRES THE FIRST FLOOR SET AT 12 INCHES ABOVE THE CENTERLINE OF THE ROAD. BECAUSE OF THE FLOODING IN OCTOBER 2015, THEY ARE NOW CONSIDERING A REQUIREMENT OF 18' ABOVE THE CENTERLINE OF THE ROAD.

SOURCE: MYRTLE BEACH HERALD

- **CITY OF MYRTLE BEACH** REQUIRES STRUCTURES NOT LOCATED IN A FLOOD HAZARD AREA, SHALL HAVE THE LOWEST FLOOR AND ALL MECHANICAL OR ELECTRICAL EQUIPMENT, SUCH AS COMPRESSORS, AIR CONDITIONING UNITS, ETC. ELEVATED NO LESS THAN 18" ABOVE THE HIGHEST CROWN OF ANY ABUTTING STREET OR CATCH BASIN, OR AT THE OWNERS OPTION, 24" ABOVE THE AVERAGE GRADE OF THE LOT.

SOURCE: CITY OF MYRTLE BEACH, ORDINANCE

- **CITY OF CHARLESTON** IF NO BFE ESTABLISHED AT LEAST 3 FT. ABOVE THE HIGHEST ADJACENT GRADE

SOURCE: CITY OF CHARLESTON, ORDINANCE

- **CHARLESTON COUNTY** IF NO BFE ESTABLISHED AT LEAST 3 FT. ABOVE THE HIGHEST ADJACENT GRADE

SOURCE: CHARLESTON COUNTY, ORDINANCE

Questions?