



STORMWATER COMMITTEE WORKSHOP
JUNE 6, 2016 ♦ 12:00 p.m.
Surfside Beach Town Council Chambers

CALL TO ORDER.

Chairman Elliott called the workshop to order at 12:00 p.m. Members present: Chairman Elliott, Vice-Chairman Mabry, and members Beck, Crouch, and Mull. A quorum was present. Others present: Mayor Childs, Town Clerk Herrmann, Public Works Director Adair; Dr. Susan Libes, Coastal Carolina University Director of the Waccamaw Watershed Academy, and Lisa Swanger, Coastal Waccamaw Watershed Education Programs Coordinator.

Mr. Adair shared information about the Community Rating System (CRS), because this is the beginning of the hurricane season. Highlights were:

- The town has participated in CRS since 2010
- FEMA (Federal Emergency Management Agency) CRS dovetails with the NFIP (National Flood Insurance Program)
- NFIP provides Federally-backed flood insurance in communities that enact and enforce flood plain regulations
- NFIP was created in 1968; as of October 2013 there were 5.5 million policies in force
- From 1978 to October 2013 over 2 million losses were paid totaling over \$50 billion
- To be covered by a flood policy, the structure must be in a community that participates in NFIP
- To qualify for NFIP, the community adopts and enforces plain management ordinances to regulate development in the flood hazard areas
- Today, over 21,600 communities in 56 states and territories participate in NFIP
- NFIP has been effective in requiring new buildings to be protected from damage by a 1-percent chance flood; also known as the 100-year base flood elevation (BFE)
- All of the town's flood zones have building requirements that are based on the BFE
- Flooding occurs in unmapped areas, and buildings constructed prior to the community joining NFIP
- Houses built before the town's first flood map was created in the late 70s is considered pre-FIRM (pre-Flood Insurance Rate Map)
- The Biggert-Waters Act was adopted that requires the Federal government to stop subsidizing flood insurance premiums so that over the next several years until premiums are at full market rates
- Since the Biggert-Waters Act was adopted, town efforts were intensified to strengthen ordinances and the CRS work began during the past few years
- PBZ Director Morris is the town's CRS coordinator
- Under CRS, communities can be rewarded for doing more than simply regulating building construction to the minimum national standards
- Under CRS, business and residential premiums are discounted to reflect the town's work to reduce flood damage to existing buildings and to manage future development
- CRS has three goals:
 1. **Reduce flood damage to insurable property**
 2. **Address insurance aspects to encourage more insured properties in the town**
 3. **Have a comprehensive flood plain management program at the community level, including protection for buildings, infrastructure, and natural flood plain functions**
- CRS activities and elements are separated into series: 300 Series: Public Information Activities; 400 Series: Mapping and Regulations; 500 Series Flood Damage Reduction Activities, and 600 Series Warning and Response. Each series has multiple categories and sub-categories totaling 94 individual elements. A complete list is on file.

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- For every 500 CRS points that the town achieves, flood insurance premiums will reduce an additional 5-percent
- The town was recently reclassified from a Level 9 with a 5-percent discount to a Level 5 with a 25-percent discount
- These efforts not only create a resilient community but the savings on insurance premiums leave a lot of money here in town to be spent locally that would otherwise be spent on flood insurance policies
- Currently the pre-FIRM structures are being relocated outside of town and new elevated houses are being built that comply with the code. Measures are being taken to protect investments
- CRS activities by staff include posting signs at the larger canal that state "Do not dump debris by this canal. The house you flood may be your own." Adoption of the stormwater ordinance that now requires stormwater plans for residential properties, and permanent maintenance covenants that are recorded at the Horry County Office of Mesne Conveyance.

Mr. Crouch asked if points were received for the street sweeper. Mr. Adair said the street sweeper was a best management practice and was recognized through the NPDES permit. The sweeper keeps debris and pollutants from travelling into the town's water repositories and out to the ocean.

Ms. Mull asked if the town was a Level 5 now. Mr. Adair said the town was just recertified as a Level 5, and that information was not on the FEMA website, yet.

Ms. Elliott asked if it was official. Mr. Adair said that Ms. Morris would have to comment on that at a council meeting. He just wanted the committee to know that the town's level was upgraded significantly.

Mr. Crouch said that was reported at the last stormwater meeting, but it was not official until the paperwork was completed. Mr. Adair said he was sure the newspaper would want to write an article about it, but Ms. Morris should be given all the credit.

Ms. Mull asked what was being done to work towards the next level. Mr. Adair said once a town is past Level 6, normally every five years there is a visit from the FEMA specialist. They go through everything that the town is doing; tables of documentation, some of which are sent to non-government technical specialists that are experts in their field for review and comments. FEMA staff and the specialist will determine the number of points awarded for each activity.

Mr. Crouch said this was the best of insurance and the government working together.

Ms. Elliott asked if points could also be lost. Mr. Adair said absolutely. Members might be thinking how does this affect us? What can we be doing to support this program? The answer is two-fold. You can be educating your neighbors about the value of the town's stormwater program and flood damage prevention ordinance. For instance, if you see someone blowing leaves into the ditch, you might explain why that is not a good idea. Also, encourage your elected officials to not back-peddle on the program. When a program like this is put into place, the people who cry the loudest about it are usually the developers, because more items are on the construction checklist. The town stands to save close to \$400 thousand a year on insurance premiums based on the Level 5 rating versus the Level 9 rating. He thought once the public saw those premium reductions, the program would have more support.

Mr. Mabry said he knew there were many questions the members would like to ask during the presentation, but there are many things they need to understand before we begin conversation. We just never get done, because there is always more to learn on what we are doing.

Ms. Elliott said she was just going to say that.

Mr. Adair said none of the committee members would ever become experts on stormwater. I have almost two weeks of training to earn my Certified Flood Plain Manager certification in 2012, and just completed an advanced class in Savannah, Georgia that was four days. This is not "light reading." He

113 did not expect the members to remember most of this, but he wanted them to hear the basics. All the
114 activities done to reduce flooding, to promote flood insurance, and to keep the community resilient were
115 all things that would save the residents' money, lives, and property. That is the message he wanted to
116 convey today.

117
118 Mr. Adair said the town has to maintain records of its activities and participate in the recertification
119 visits. The number one benefit of the program is that it will save the residents money. Other benefits
120 include that residents are more aware about flood protection and what the town is doing.
121 www.floodsmart.gov is a good website to learn more about flood programs.

122
123 Mr. Adair said because of the town's size and topography, it will never achieve all points in some
124 categories, i.e. marshland in the flood zone. However, staff is working towards every point that is
125 attainable. A chart as of October 1, 2015 was distributed that set out the CRS communities in the
126 country. The only state with a Level 1 rating was in California. That community bought everything in the
127 flood plain and removed all the structures, and implemented very strict laws. The best community in
128 South Carolina is Charleston County, which has a Level 4 rating. The town is definitely in the top 5-
129 percent in the State of South Carolina.

130
131 Mr. Adair distributed copies of the Special Flood Hazard Area map and explained the town has
132 several zones. The VE (Velocity) zone is closest to the ocean where you would expect to have 3-foot
133 waves or greater. There are AE flood zones that vary depending on the required building height. The
134 current ordinance requires a 3-foot freeboard, which is the distance between the bottom of the lowest
135 floor and the ground level. There hasn't been a single house built in the last five years that did not have a
136 3-foot freeboard, so the contractors had no problem with the change.

137
138 Mr. Crouch said insurance agents don't tell anyone that the flood zone doesn't mean that your
139 house floods. [Rising] water is considered flood damage, as well.

140
141 Mr. Mabry said insurance companies were quite apt at denying claims. During Hurricane Hugo,
142 insurance would not pay for wind-driven rain.

143
144 Mr. Adair said that most homeowner insurance policies do not cover floods. The flood insurance
145 policy available through the NFIP insures your house he believed up to \$250,000, and there was an
146 additional policy for contents. Policies premiums were inexpensive for property in the X zone, which is
147 out of the 100 year flood area. In the flood zones, insurance is available and is now discounted
148 substantially due to our efforts through the CRS program. Hurricane season began June 1st. A FEMA
149 flyer was distributed, a copy of which is on file, and discussed. Other brochures about flooding and
150 hurricanes are available at public works, town hall, and on the town's website.

151
152 Ms. Elliott said she knows from attending meetings that Town council wants the CRS committee
153 to reconsider building heights. She asked how the committee could educate council that the current
154 codes are good the way they are. Mr. Adair said it comes down to how much the committee wants to
155 participate in the CRS program. There are some things that could be done that will not lose many points.
156 Anything that is scaled back will be a loss of CRS points. A discussion ensued regarding slab-on-grade
157 construction. Mr. Adair said the only house that flooded during the heavy rain last fall was a slab-on-
158 grade construction that was not located in a flood zone. He reiterated that this was about building a
159 resilient community. The town needs to be able to return to business as usual as quickly as possible after
160 a storm event to sustain the economy.

161
162 Mr. Mabry said some lenders will not finance homes in flood zones below a certain level, because
163 owners could not buy insurance. These were FEMA rules. Mr. Adair said the current codes would not
164 allow a house to be constructed on land below the flood level. You can buy flood insurance on existing
165 houses, but the cost might be high. The NFIP programs does not want high risk structures; they want
166 them elevated or razed. After Hurricanes Sandy and Katrina, FEMA had about \$20 billion in claims;
167 many of those properties had inadequate insurance or had illegal enclosures in the flood zone. If the

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168 town does not enforce the codes, FEMA will suspend flood insurance for the entire town. Communities
169 are put on probation and/or suspension all the time.

170
171 Ms. Elliott asked how the stormwater committee could be more involved with the CRS committee.
172 Mr. Adair said the community outreach portion of this is Programs for Public Information (PPI). A PPI
173 committee was established a few years ago, and is comprised of members from various sectors of the
174 community: realtors; local government; certified flood plain managers; bankers, and others. If an opening
175 occurs on the PPI committee, some of the stormwater committee members might be interested in
176 volunteering.

177
178 Mr. Adair said normal maintenance activities are on-going. This week the pipe beside Twins at
179 5th Avenue North will be opened by staff, which should eliminate the flooding water at that intersection.
180 The Department of Transportation (DOT) has refused to address that pipe, even though they have been
181 asked to ten times. Mr. Beck asked if that water went under Highway 17 and into Lake Elizabeth. Mr.
182 Adair said yes. The water between 2nd & 5th is supposed to drain downhill towards 10th North, but that
183 one place stored water, because the pipe was clogged. A discussion ensued about the county retention
184 pond and the flow of water into Lake Elizabeth. Mr. Crouch assumed the town got CRS points for that
185 drainage correction. Mr. Adair said activity 540 is the drainage maintenance program, and explained that
186 the town's entire drainage system was mapped so an annual maintenance plan could be developed,
187 which is public works' portion of the CRS program.

188
189 Mr. Adair reported that Town Council authorized him to move forward with the study by a
190 consultant so the councilmembers could consider establishing an equivalent residential unit (ERU) for a
191 stormwater utility fee to fund some very large future stormwater capital projects over the next five to ten
192 years. Surfside Beach is probably the only municipality within 100 miles that does not have a stormwater
193 utility fee. Chairman Elliott and Mr. Crouch expressed thanks to Town Council. Chairman Elliott asked
194 how long the study would take. Mr. Adair said it should be a couple of months. Mr. Crouch said it should
195 be ready to add to the next budget cycle, which is not an election year. *(Laughter.)* Mr. Adair said it was
196 a Town Council decision. The town's stormwater capital needs, budget over a time certain, land use
197 data, operating expenses, and other factors would be evaluated so the ERU is equitable.

198
199 Chairman Elliott said the stormwater committee wants to be more active. Meetings were
200 scheduled, but many times were cancelled because there was nothing to discuss. Ms. Swanger has
201 volunteered to provide education at meetings, and Dr. Libes provides the water quality monitoring
202 information. How can the committee be more proactive? The committee membership was cut from
203 seven to five, because people were not willing to serve on such a dry subject or that did not have any say.
204 Mr. Adair said the committee could present resolutions that it supported certain topics or projects. Ms.
205 Herrmann said other committees present recommendations to council by resolution. This committee
206 could do the same, but Mr. Adair was very faithful about delivering your information to Town Council. He
207 always informs them as to whether the committee supports or does not support a particular item. It is up
208 to the committee as to how it is handled. Mr. Adair said Chairman Elliott could speak at the council
209 meetings to give an annual report. Ms. Herrmann said statutory committees could present to council
210 whenever there was an issue that it felt strongly about by calling Ms. Fellner and letting her know you
211 want to address council. The annual report requirement was abolished from the code, because
212 committee minutes are now published on the website. Mr. Adair said he did not have any suggestions at
213 present for more involvement.

214
215 Mr. Crouch wanted to find a way to help educate the public. This has been a problem for him for
216 the past 18 months. There is a certain amount of education to be effective on this committee. In his
217 case, he was brought from zero knowledge to at least plus something. There has to be better use of the
218 town's newsletter. For instance, taking the information presented today and presenting it in the
219 newsletter in an article would be beneficial. However, he understands public works is not staffed for that.
220 Mr. Adair said he was correct. Mr. Crouch said maybe that was a way in which the committee members
221 could assist. Mr. Adair recalled discussion that the newsletter might have fewer publications or be
222 discontinued. Ms. Herrmann said if members wanted to write an article, she could send it to the email
223 subscription list and publish it on the Stormwater page on the town's website, after Mr. Adair approved its

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224 content. Mr. Crouch said perhaps some of the members could work together to write articles for
225 publication. In his opinion, education was an area in which there is lots of room for growth. There are
226 many people, including long-time residents, who do not know what is going on or how things work. Ms.
227 Herrmann suggested that the committee have a booth at the Family Festival; the Bar-b-Que Festival, or
228 other town events, but Ms. Ellis would need to be contacted for additional information. Mr. Adair could
229 get the materials for the committee as long as the members would be there to man the booth to talk to the
230 public. Chairman Elliott said that was a good idea; excellent. She would contact Ms. Ellis.

231
232 Mr. Adair asked Mayor Childs if the council would like to have a tour of the town's stormwater
233 system this fall after the full council is seated. The tour is worthwhile, because it will help members
234 understand the system and its components.

235
236 Mayor Childs said the only way to notify people of what is going on is to knock on every door in
237 town. Chairman Elliott said he was right. Mayor Childs said trying to get people to attend committee
238 meetings is just impossible. Everybody goes ballistic when ordinances are passed, but they don't bother
239 to attend meetings to find out the whys. He suggested that when CRS comes before council that each
240 member of this committee attend the meeting to speak during the 3-minute agenda items comment time,
241 so that council understand there is a lot of community thought. He thought that would be very effective.
242 Chairman Elliott said they would be sure to attend.

243
244 Ms. Swanger reported about recent and upcoming events. She would not be at the July meeting,
245 because she would be out of town. She asked if there were specific topics that the committee would like
246 to have addressed. Chairman Elliott asked Mr. Adair to be involved in the committee's education so it
247 would hear about relevant topics. Mr. Crouch suggested that a discussion be held about the best
248 housekeeping practices that the average citizens can do, then he would write an article for publication.
249 Ms. Swanger said their website had resources that could be used for reference. Chairman Elliott
250 reminded the members that Mr. Adair had to approve any publications.

251
252 Dr. Libes reported that a meeting was held with all water monitors from Surfside Beach, Murrells
253 Inlet, and Waccamaw River, because they thought the differences the groups were getting in the bacteria
254 results were very interesting. They went into great detail on what the counts meant in a regulatory
255 context, which was different from health protection and identifying problem sources. The meeting was
256 very successful with between 40 and 50 people attending. Her presentation is posted on the volunteer
257 monitoring program website. She believed the local water quality program needs to have at least one
258 more member and encouraged the committee to seek a volunteer.

259
260 Ms. Mull asked when the monitors were needed. Dr. Libes said monitoring is done the 2nd and 4th
261 Tuesdays and training is provided. Mr. Beck said they begin calibrating about 8:45 a.m. and try to keep
262 the time around 9:00 a.m. to do the first dipping in Myrtle Lake and then go to Dogwood. Usually it's
263 about 10 or 10:30 a.m. when finished.

264
265 Dr. Libes said during this season, the town has not had a single warning posted for its outfall
266 sites. Mr. Beck asked about the precision of the e-Coli measurements and said the report states 1 to 100
267 instead of the actual number. Dr. Libes said the website includes error bars that show the uncertainty
268 around the actual number; labs are allowed a tolerance of 100 to 200 percent difference, and still be
269 considered acceptable. That was why five years of data was necessary to establish trends. Mr. Beck did
270 not know which number to believe. Dr. Libes said it was always a good practice to articulate the
271 uncertainties of numbers.

272
273 Dr. Libes said the data collected by the water quality volunteer monitors was recently presented
274 at a national conference to show how it can be used. The information was well received, and she plans
275 to make the same presentation at a state conference in October. Dr. Libes thanked the volunteers for
276 their dedication and adding to the data set to build powerful, valuable data.

277

278 Chairman Elliott asked if the members could meet on July 25th at 12 noon. Members
279 **CONCURRED**. Ms. Herrmann asked if the committee wished to change the meeting time to 12 noon for
280 all meetings. Members **CONCURRED** to add the meeting time to the next agenda.
281

282 **PUBLIC COMMENTS.**
283

284 Mr. David Reed, North Myrtle Drive, said I live in an AE15 flood zone that was recently reduced to
285 an AE12. My house is on a slab that is not even eight inches of the ground. If we have a large storm, I'll
286 probably be the first one to call [Mr. Adair]. I don't know how he's gonna get me out of there. I do have a
287 boat that's ready to go, so I might have to use that. *(Laughter.)* On the flip side of it as we speak, I am
288 laying block for a brand new construction on 12th Avenue North that is not in a flood zone. It is in the
289 Zone X. Current rules are I have to build first floor three foot high, and I'm opposed to that because I
290 don't see the necessity of it where I'm not in a flood zone. Maybe about two months ago at the Town
291 Council meeting after the meeting, I was speaking with Councilwoman Mary Beth Mabry and she said
292 that there was gonna be a workshop coming up such as this, and maybe another one with the CRS
293 committee, and she said, 'Well, maybe you don't really need to be three foot high out of the flood zone.
294 FEMA did not make all of Surfside a flood area all the way up to 17 like at one time they had thought.'
295 So, she just, you know, nonchalantly, this is conversation after the meeting. It wasn't during the meeting.
296 She said maybe 18 inches would be good. I mean you're still raised up. It's above the ground, above the
297 road, and I said, you know, I'm all for that. That's fine with me. I don't mind having a couple of steps
298 going into my house, but I'd rather not have to have about five or six, if it's not necessary, especially when
299 my neighbors are only this high. *(Indicated about knee to mid-thigh height with hand.)* So, that's why I
300 wanted to speak about it. First of all, I wanted to see if there was any thought or if there's gonna be any
301 talk about maybe changing that down to 18 inches, because if there is, I'll stop today with the block I have
302 in, which is about 12 inches, and I'll wait, whether it be one month, two months, three months, if there's
303 gonna be more discussion on it. If there isn't gonna be, if it's just gonna be this is what we have, this is
304 what we want, then obviously, I have no choice but to go forward. Yes, sir?
305

306 Mr. Mabry asked if Mr. Reed had talked with the building department. Mr. Reed said he had. Mr.
307 Mabry said the building department would provide the answers to his question. This committee can only
308 give you an opinion. Mr. Reed said correct. Mr. Mabry said the committee's opinions are about as long
309 as their noses. What he was trying to express was that the building department staff could give him some
310 definite answers for him. He knows that Mr. Reed wants to continue whatever he's building, but this
311 committee cannot provide the answers for the building problems. Mr. Reed said the building department
312 can't either. Right now we have Chapter 14 which is 28 pages of it. They have to follow the rules of all
313 those 28 pages. So, they couldn't give me an exception if they wanted to.
314

315 Chairman Elliot reminded Mr. Reed that there is a CRS committee that Town Council has asked
316 to meet and discuss different issues. Speaking from her own experience, you can be as high as you want
317 over the water table. If the water table rises, which you're in X zone, I lived in an X zone for 40 years, and
318 the water table rose. I flooded out, and I did not have flood insurance so I bore the expense of
319 everything. What you're talking is three foot; you're asking maybe 18 inches. They can discuss that.
320 Myself, it's always safe to do it on the safe side.
321

322 Mr. Crouch said the ordinance forcing Mr. Reed to build at three feet was the first thing that he
323 saw as a member of this committee. It had been in the works for a good year and then it took two or
324 three readings. We're talking about 18 months, at least two or three readings. I can tell you, because I
325 have the property just behind yours, while in Joaquin last October, and since 1978, my house has never
326 flooded. But, Joaquin caused the water table to rise enough that the barn that's directly behind your
327 property, which is mine, had standing water on it for the first time that I had ever seen in the four years
328 I've owned it. This is a case where I can offer you some good news in that you will find that you will get
329 the flood preferred rate for that property. So the 25 percent isn't gonna matter. It's the people that are
330 paying \$2 and \$3 thousand. Mr. Reed said most of the people that benefit from that premium are in the
331 flood zone. Mr. Crouch said exactly, but I can tell you that the water table is no more than two to three
332 feet below, so even the saturation of the ground will cause the water table to rise up. As a neighbor, I

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333 suggest to you Mr. Reed that you err on the side of caution. Mr. Reed said everybody has an opinion;
334 they are all good opinions, and there is no right or wrong.
335

336 Mr. Reed said his question was is there going to be any discussion about changing the three foot
337 requirement, which also affects the commercial businesses on Highway 17.
338

339 Mr. Adair did not believe the question was within the stormwater committee's purview. The PPI
340 committee can review and made a recommendation to Town Council.
341

342 Chairman Elliott said it was a special committee formed to review the flood prevention codes and
343 it has already been asked to start the review.
344

345 Mr. Reed said some of the swales being designed on the new construction that do not flow to the
346 street. He asked if that was intentional, because they seemed to be designed to fail since they don't flow
347 to the catch basins and flow to the ocean. Mr. Adair explained that DHEC requires stormwater plans for
348 all construction that ensures that post construction runoff does not exceed the preconstruction amount.
349

350 **ADJOURNMENT.**
351

352 There was no other discussion. Chairman Elliott declared the workshop closed at 1:41 p.m.
353

354 Respectfully submitted,
355

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357
358 _____
Debra E. Herrmann, CMC, Town Clerk

359 Approved: July 25, 2016
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361 _____
362 Sandra Elliott, Chairman
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364 _____
365 P. L. Mabry, Vice Chairman
366

367 _____
368 Alan Beck, Committee Member
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370 _____
371 Ron Crouch, Committee Member
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373 _____
374 Tabitha Mull, Committee Member
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371 Clerk's Note: This document constitutes summary minutes of the workshop and are not intended to be a
372 complete transcript. Appointments may be made with the town clerk to hear recordings or you may
373 provide your own flash drive to obtain a copy. In accordance with FOIA, meeting notice and the agenda
374 were distributed to local media and the email public subscription list. The agenda was posted on the
375 entry door at Town Council Chambers, and meeting notice was also posted on the Town marquee.