



TOWN OF SURFSIDE BEACH STORMWATER COMMITTEE MEETING
COUNCIL CHAMBERS, 115 US HIGHWAY 17 NORTH, SURFSIDE BEACH, SC 29575
NOVEMBER 13, 2017 • 1:00 P.M.
www.surfsidebeach.org ☎ (843) 913-6111 📠 (843) 238-5432

A G E N D A

1. **CALL TO ORDER.** Chairman Elliott
2. **PLEDGE OF ALLEGIANCE.** Chairman Elliott
3. **AGENDA APPROVAL**
4. **MINUTES APPROVAL**
 - A. April 18, 2017 Regular Meeting
 - B. July 18, 2017 Workshop
 - C. September 19, 2017 Workshop
5. **PUBLIC COMMENTS** – Agenda Items
6. **COMMUNICATION & EDUCATION**
 - A. CWSEC Coordinator Lisa Swanger
 - B. Dr. Susan Libes, Coastal Carolina University
7. **DIRECTOR’S REPORT,** Director Adair
8. **BUSINESS**
 - A. *Inside Surfside* Article
 - B. Debrief:
 - i. October 7, 2017 Family Festival
 - ii. October 20, 2017 Education Seminar
9. **DISCUSSION.** Any items of Interest or Concern to Committee Members
10. **PUBLIC COMMENTS**
11. **COMMITTEE COMMENTS**
12. **ADJOURNMENT**



STORMWATER COMMITTEE MEETING
April 18, 2017 ♦ 12:00 o'clock noon
Surfside Beach Town Council Chambers

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1. CALL TO ORDER. Chairman Elliott called the meeting to order at 12:00 o'clock noon. Members present: Chairman Elliott, and members Beck, and Crouch were present. Vice Chairman Mull and member Mabry were absent. A quorum was present. Others present: Town Clerk Herrmann, Public Works Director Adair, and Dr. Susan Libes, Coastal Carolina University Director of the Waccamaw Watershed Academy.

2. PLEDGE OF ALLEGIANCE. Chairman Elliott led the Pledge of Allegiance.

3. AGENDA APPROVAL. The agenda was approved by acclamation.

4. MINUTES APPROVAL. Minutes of the January 17, 2017 stormwater meeting were approved by acclamation.

5. PUBLIC COMMENTS – Agenda Items. There were no public comments.

6. COMMUNICATION & EDUCATION. Dr. Libes said it has been almost a year since I last gave what were intended be quarterly reports for the volunteer water quality monitoring program. A PowerPoint with updated information is on file. Pages 2 and 3 bring forward in time the bacteria records. Lake Dogwood readings indicate that the water quality is generally very good. We only had one recent issue that was back on December 6th of 2016 that also was associated with elevation and turbidity. Mr. Adair was able to view trends and identify that the developers at new construction at Mallard Landing development drained a sediment pond. Mr. Adair communicated that information to Horry County, which investigated the site. The developer was asked to install more sediment control devices, which they did, and the levels returned to normal. Page 3 has results from Myrtle Lake. We're continuing to see episodically high values that are above the water quality criteria. Remember, the criteria is only meant to be applied to classified water bodies and Myrtle Lake is not a classified water and we are applying the water quality criteria as a benchmark to understand how this site might play into downstream impairments in the surf zone. We sample at the site, and then sample at the surf zone. The Department of Health and Environmental Control (DHEC) noted some impairments in the past. The field leader of the water monitoring program asked me for advice on explaining to individuals about water sampling. Page 4 is a summary of my response. The main issue is that the advisories means that DHEC advises you not to swim in posted areas. This is especially true for young people, the elderly, and those with compromised immune systems. Advisories do not mean that the beach is closed. Wading, fishing and shell collecting do not pose a risk. Advisories may be issued due to high bacteria counts or because of rainfall runoff. When a long-term advisory is posted, swimming is not advised within 200 feet on either side of the sign. Again, wading, fishing and shell collecting do not present a risk. Health problems typically come from swallowing the water. The good news is that we have no evidence of human source fecal bacteria in Myrtle Lake. The illicit discharge detection manuals I've reviewed state that you need to be over 12,000. There are no septic tanks in town, nor are there homeless people living in the Myrtle Lake area, so there is no human fecal bacteria source. We performed the genotypic assays on the samples collected; everything considered, there was no human source bacteria in Myrtle Lake. There is a risk of fecal contamination from domestic and wild animals, but there's no reason for to take extraordinary measures beyond what DHEC normally advises. I don't imagine many people want to swim in Myrtle Lake. If the storm water committee would like, we can develop an educational handout, card, or brochure for the water monitors to distribute. Mr. Beck said it might be useful to have a handout. We used to have caution signs on the beach when there were swimming advisories. Well, apparently wading is not a problem according to DHEC and so we don't need to advise people not to wade around the outfalls. The likelihood of swimming in one of those outfalls is low, because they are shallow. But you wouldn't want a toddler falling in there and drinking it. Dr. Libes asked how signs are permanently posted. Mr. Adair said we have three beach locations with permanent advisory signs: Dogwood swash on the beach side; Myrtle swash on the beach

56 side, and 13th South on the beach side. DHEC tests six or seven different locations along our beach.
57 Some are discharge points and some are not. They use criteria from the last five years of study; if you
58 have a certain percentage over average readings, then the area is permanently posted. DHEC tests in
59 knee deep water in the ocean where the runoff flows. The signs do not stop people from letting their kids
60 play in the swashes. The signs state that wading is okay. Chairman Elliott said the state does not close
61 beaches, they only issue advisories. Dr. Libes said I attended a water quality communication workshop in
62 Myrtle Beach in early February with the hotel owners who also needed to be able to clearly explain to
63 people what these advisories meant. We all worked very hard at the workshop to develop clear language
64 on how to communicate that life is not a risk free enterprise, and you're probably encountering more risk
65 on your drive to the beach than you are being in the water and coming in contact with bacteria.
66 Challenges to your immune system help fight off bacteria. If you don't let kids play in the dirt, and pet
67 dogs, etc. there seems to be some increased risk of asthma with these kids later in life. DHEC thinks it is
68 because they have been living in a septic life, and not challenging their immune systems. I would say
69 that knowledge on this is evolving. Absent any more information, I think we have to rely on DHEC as it
70 pertains to Myrtle Lake. Mr. Crouch said I'm just incredulous that anyone would think to swim in any of
71 the lakes. Do people go in and immerse their bodies in it? I know they go out in canoes, or boats with
72 electrified motors, and they fish. The only instance I've ever heard in the 7 years I've been here was
73 somebody was swimming in Elizabeth Lake for short period of time when they first moved to Harbor
74 Lights, but that quickly ended. I haven't heard of any other person doing it. Mr. Beck said I don't think
75 the water in Dogwood and Elizabeth is bad for swimming. What we see from the bacteria counts are
76 really low. We tested zero and drinking water lets you have a 5. Mr. Crouch said and that's part of what
77 you know what my memory reminded me of that and I thought but of course I'm sure there's a catch
78 here as long as we don't put up a sign saying, you know, this is a swimming area. You know, then that
79 were not in the position that is controlled, we have to meet controlled. John said we make no
80 representation that these are recreational waters. Crouch replied that's right. And that's not their primary
81 function anyway. There was much more discussion about the town's stormwater retention ponds not
82 being classified water bodies, public education, outreach, and the stormwater monitoring program. Dr.
83 Libes explained page 5 in the PowerPoint discusses sediment entering Dogwood Lake and how the report
84 history was used to enable Mr. Adair to identify the problem and get it resolved. Page 6, addresses
85 dissolves solids in the lakes, which is measured by conductivity that is present in the water. Page 7 cites
86 oxygen levels, which reach their highest numbers during winter. There is a peak every January and
87 sometimes you go above what is called 100% percent saturation, which means something is putting
88 more oxygen in the water than would normally be; ordinarily cold creates a simple exchange in the
89 atmosphere or it could be algae. Extra oxygen is a good thing. This is a seasonal phenomenon. A discuss
90 was held regarding fountains in the lakes and methods used to clean them. Oxygen is lowest is during
91 the summer, and those values look like they have improved since 2013. Page 8 are the ammonia
92 readings, which basically indicate that ammonia has been detected. Mr. Beck explained how ammonia
93 levels are tested and added that Dogwood Lake almost always has zero ammonia levels. Dr. Libes said
94 page 9 addresses conductivity, which is a measure of salt levels in the lake. Myrtle Lake is tidal so there
95 is a lot more salinity, and occasionally has very high numbers. Page 10 is the record from Myrtle Lake.
96 These number range from about 5 to 10. There were high numbers in 2014, but that was immediately
97 after a half inch rain. Page 11 is the oxygen record. There are more cases where the water is over 100%
98 saturated, which are likely caused by algae. Page 12 and 13 were also oxygen related. Dr. Libes said in
99 her opinion the oxygen levels are improving, and reiterated that the numbers were for classified waters
100 that are being used for benchmarks, even though the town's ponds are not classified water. The
101 committee members were invited to attend the annual water monitoring volunteer luncheon being held
102 on April 19th at Coastal Carolina.

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104 **7. DIRECTOR'S REPORT.** Director Adair said the stormwater committee participated in the
105 barbeque festival, which I thought went extraordinarily well. Then we had the education session in
106 Council Chambers that was attended by about 20 people. I commend the committee for their
107 involvement and willingness to share information with the public, which is essentially what we are here
108 for to the extent that people are willing to listen. Public works is in maintenance mode right now and are

109 cleaning out falls to prevent debris staying in the stormwater system; cleaning ditches, and catch basins.
110 These are year-round endeavors. This past winter any ditches that were more than half-full or half-
111 blocked were identified. Blockage prevents water flow and creates flooding. Cleaning them allows flow at
112 the design capacity. That's what we have to do to keep the town resilient against the flooding. We also
113 can't forget quantity. We talk about quality a lot, but quantity is also a problem in the town. We are
114 spraying lakes for algae. We are getting ready for beach renourishment. Renourishment will be managed
115 by the Army Corps of Engineers. Renourishment should raise the beach design height several feet higher.
116 When that portion is completed, new sand fencing and dune grasses will be planted. Chairman Elliott said
117 so, we already deposited \$1.3 million with Horry County. Are the dunes and grasses included? Mr. Adair
118 said yes. Although our stormwater utility fee has not been embraced by the council, we haven't lost any
119 funding and continue ongoing operations, including contracts with the Coastal Carolina University, the
120 work volunteer program, the education program, our operating costs for spraying the lakes. I always
121 budget some extra money for necessary spot engineering work. We won't be doing any major projects
122 this coming fiscal year. Chairman Elliott asked if the public is allowed to speak at the April 27th budget
123 workshop. Ms. Herrmann said not only does the council allow the public to speak, it is relaxed workshop.
124 Council welcomes the public to ask questions and make comments. Chairman Elliott asked if she should
125 bring up the ERU (equivalent residential unit) resolution, because we need a funding source. Mr. Adair
126 replied it couldn't hurt. I've brought it up at the budget visioning meeting, and subsequent workshops,
127 and also given a PowerPoint. I think there is a reluctance on the part of the council to pass any fees
128 along to the public. I attended a conference a couple weeks ago in Atlanta of Southeast Stormwater
129 Association and learned that utility fees are being used throughout the country. We are in a seven state
130 region that uses utility fees to fund all sorts of projects like resiliency, capacity, storage, and
131 infrastructure. If our town decides not to adopt the stormwater utility fee another funding source has to
132 be identified, because this work has to be done. Mr. Crouch said or there's going to be another
133 emergency. Mr. Adair said the goal is to be proactive and less reactive. Mr. Crouch said a big part of the
134 issue is making sure the basis for the fee is equitably divided among the businesses and residents. The
135 second is to put it into a fund that can't be expropriated. Mr. Adair said a stormwater utility fee that's
136 created the right way has everybody contributing to the stormwater equitably. Mr. Crouch said the
137 message was received and I think our resolution was exceptionally well done, especially with the
138 business coming in gradually up to the fair share level. The issue at this stage is we need to convert
139 people. Chairman Elliott said we have not given up as yet. Mr. Adair said most municipalities that have a
140 stormwater utility fee have larger populations and more square miles than Surfside Beach. This
141 discussion will be continued in the future.

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143 **8. BUSINESS.**

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145 **A. October 7 Family Festival.** Members agreed that attending the BBQ festival with the
146 education session right after was a success and planned to attend the fall festival with another education
147 session scheduled concurrently. Details to be determined, but the plans are to use a similar process for
148 distribution of information, magnets, etc.

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150 **B. October Education Presentation and Date.** October 12, 2017 in Council Chambers from
151 6:00 p.m. to 7:30 p.m. Details to be determined.

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153 **C. Stormwater Video on Site with Links.** Mr. Adair is still working on the stormwater video
154 and will try again to get it loaded to the website. Additional education opportunities were discussed
155 including publishing articles in the town's newsletter, and public notices on the town's website. Mr. Beck
156 will submit articles for the newsletter addressing feeding water fowl and swales. The plan is to submit
157 articles for each newsletter.

158
159 **D. Council Tour.** Mr. Adair agreed with the committee that Town Council would benefit from
160 taking the stormwater system tour. However, before that could be scheduled, he needed to determine

Stormwater Committee Meeting
April 18, 2017

161 whether councilmembers had interest in attending. An option would be to video the system components
162 and offer it during a workshop.
163

164 **E. Funding for Stormwater.** As discussed during the director's report, efforts to establish an
165 on-going funding source for stormwater is vital for the maintenance and improvements of the town's
166 stormwater system. Efforts will continue by members to encourage councilmembers and the public to
167 adopt the stormwater utility fee.
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169 **9. DISCUSSION.** Any items of Interest or Concern to Committee Members.
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171 Chairman Elliot said there was a foul odor near the surfing area during the recent tournament,
172 and asked if Mr. Adair knew what caused it. Mr. Adair said no, but the waters flowing through that area
173 were from several sources with the headwaters beginning behind BI-LO. Dr. Libes asked if the odor
174 smelled like sulfur. Chairman Elliott did not know. Dr. Libes explained if it is organic matter that has been
175 sitting under water for a long period of time because of no oxygen the bacteria decay generates
176 hydrogen sulfide gas, which the human nose perceives as smelling like rotten eggs. By churning up that
177 matter debris loosens and there will be a period of time there will be an odor until it completely flushes
178 out.
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180 Note: Mr. Adair left at 1:14 p.m.
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182 Mr. Crouch suggested that the July meeting be a workshop to discuss how the committee would
183 handle the family festival and upcoming education seminar. He also suggested that recognition
184 certificates be prepared for the interns that helped with the last two events. Information would be sent to
185 the town clerk.
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187 **10. PUBLIC COMMENTS.** There were no public comments.
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189 **11. COMMITTEE COMMENTS.** Chairman Elliott said Mr. Beck's and her terms were expiring in
190 July and August, respectively. She was afraid that a quorum would not be possible if appointments were
191 not done quickly. Ms. Herrmann said pursuant to Town Code members may serve up to one year without
192 being reappointed, so that was not a concern.
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194 **12. ADJOURNMENT.** Chairman Elliott declared the meeting adjourned at 1:18 p.m.
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196 Respectfully submitted,
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199 Approved: July 18, 2017

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201 Debra E. Herrmann, CMC, Town Clerk
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204 Sandra Elliott, Chairman
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207 Tabitha Mull, Vice Chairman
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207 Alan Beck, Committee Member
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210 Ron Crouch, Committee Member
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210 P. L. Mabry, Committee Member
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212 *Clerk's Note: This document constitutes summary minutes of the meeting that was digitally recorded, and not intended to be a*
213 *complete transcript. Appointments to hear recordings may be made with the town clerk; a free copy of the audio will be given to*
214 *you provided you bring a flash drive. In accordance with FOIA §30-4-80(A) and (E), meeting notice and the agenda were*
215 *distributed to local media and interested parties via the town's email subscription list. The agenda was posted on the entry door at*
Town Council Chambers. Meeting notice was also posted on the town website at www.surfsidebeach.org and the marquee.



STORMWATER COMMITTEE WORKSHOP
JULY 18, 2017 ♦ 12:00 NOON
Surfside Beach Town Council Chambers

CALL TO ORDER.

Chairman Elliott called the workshop to order at 12:00 noon. Members present: Chairman Elliott, Vice-Chairman Mull, and member Crouch. Members Beck and Mabry were absent. A quorum was present. Others present: Town Clerk Herrmann, Public Works Director Adair, Dr. Susan Libes, Coastal Carolina University Director of the Waccamaw Watershed Academy, and Lisa Swanger, CWSEC Coordinator.

PLEDGE OF ALLEGIANCE.

Chairman Elliott led the Pledge of Allegiance.

WORKSHOP.

The committee discussed various messages to be shared at the annual fall festival, including that beginning in 2018 only paper bags will be accepted at the Horry County Landfill; practices to maintain good water quality; cleaning up after pets; etc.

Other discussions included future lake levels, dredging, and algae growth. Using the dredged soil from the lake was also discussed. Dr. Libes said the soil should be tested for bacteria, etc. prior to using for other purposes.

Ms. Swanger said some equipment and 'gadgets' could be set up to draw the attention of the festival attendees.

Dr. Libes said the water quality testing demonstration kits could be set up with a variety of water samples, which might entice volunteers to step forward. She presented the water monitoring quality report, a copy of which is in file. Volunteers in the water monitoring program would be asked to help staff the booth and to attend the education seminar.

The demonstrations and information at the festival should lead into the education seminar being held on October 12. Ms. Swanger will devise a flyer for the education session to be used for advertising, and her students will be asked to take shifts.

Chairman Elliott set September 19th at 12:00 noon as the next meeting date so the committee could make final plans for the October 7th festival.

Mr. Adair said the bathometric study could be presented at the festival, which would be a great lead in to the monitors do, because it shows everything runs into the sea. Ms. Swanger will moderate the seminar.

An assortment of give-away items would be at the festival, all of which promote good water quality and best management practices.

The committee discussed becoming more involved in supporting the public works department throughout the budgeting process. Town Council has taken no action on the committee's recommendation to adopt an Equivalent Residential Unit (ERU) utility fee to support stormwater maintenance and construction.

The workshop adjourned at 1:16 p.m.

Stormwater Committee Workshop
July 18, 2017

Respectfully submitted,

Debra E. Herrmann, CMC, Town Clerk

Approved: October 17, 2017

Sandra Elliott, Chairman

Tabitha Mull, Vice Chairman

Alan Beck, Committee Member

Ron Crouch, Committee Member

P. L. Mabry, Committee Member

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STORMWATER COMMITTEE WORKSHOP
SEPTEMBER 19, 2017 ♦ 12:00 NOON
SURFSIDE BEACH TOWN COUNCIL CHAMBERS
115 US HIGHWAY 17 NORTH, SURFSIDE BEACH, SC

CALL TO ORDER. Chairman Elliott called the workshop to order at 12:00 o'clock noon. Members present: Chairman Elliott, Vice-Chairman Mull, and members Beck, and Crouch were present. Member Mabry was absent. A quorum was present. Staff present: Town Clerk Herrmann and Public Works Director Adair. Others present: Dr. Susan Libes, Coastal Carolina University Director of the Waccamaw Watershed Academy and Lisa Prendergast Swanger, Coastal Waccamaw Watershed Education Programs Coordinator.

PLEDGE OF ALLEGIANCE. Chairman Elliott led the Pledge.

DISCUSSION. There was a general discussion about the upcoming Family Festival and what would be presented by the committee and then what the focus should be for the public education seminar scheduled on October 20th. Highlights are:

Family Festival, October 7th, 10 a.m. to 4 p.m.

1. Preparing a guidelines about all the tests that might be asked at the festival
2. Have a sheet that could be handed to potential volunteers with contact information
3. Have information in 'lay terms' that the general public could understand
4. Identify about five or six things that could be done in your yard to improve water quality; set up answer board for people to rate as most important
5. Mr. and Mrs. Mask volunteered to work the booth at the Family Festival; times will be assigned
6. Time for manning the booth and accoutrements were discussed

Education Seminar – October 20th, 6:00 p.m. to 7:30 p.m., Ms. Swanger moderator

1. Halloween theme with games and treats for the kids
2. Ms. Swanger and intern will bring and manage the environ-scape model, thumb print activity, and hand out some consortium gifts
3. Exhibit for water quality monitoring for older audience, if possible
4. Promote on town website, calendar, notices, Facebook; contact science teachers, distribute flyers to residents, subscription email list
5. Breaks as appropriate
6. Mr. Crouch will bring Halloween Games
7. Mr. Adair will provide candy; handouts; interactive display on litter, bring a catch basin filled with litter and ask questions about the impacts of leaves, cigarette butts, dental floss picks, etc.; storm drain guide showing how water flows to ocean
8. Two aquariums, one with bubbler and one without to show how water is impacted (if possible for this year, if not for next year)
9. The take home message is what you can do to help keep water clean; provide a list of best management practices
10. History on stormwater testing and how it helps the town identify and resolve problems; have 25 copies for distribution and list for email distribution
11. Doors open around 5:30 for set up

Miscellaneous Discussion

1. Q: How can the town get advertising for its watershed like the ads on Channel 13 WBTW
A: The town is not part of the Pee Dee Watershed nor does it partner with Carolina Clear
2. Identify volunteers for water monitoring and to work with stormwater committee
3. People want to know when an aerator will be placed in the 4th Avenue pond

ADJOURNMENT. Mr. Crouch moved to adjourn the workshop at 1:17 p.m. Mr. Beck second. All voted in favor. **MOTION CARRIED.**

Stormwater Committee Workshop
September 19, 2017

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Respectfully submitted,

Debra E. Herrmann, CMC, Town Clerk

Approved: October 17, 2017

Sandra Elliott, Chairman

Tabitha Mull, Vice Chairman

Alan Beck, Committee Member

Ron Crouch, Committee Member

P. L. Mabry, Committee Member

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