



COASTAL CAROLINA
UNIVERSITY®
Waccamaw Watershed Academy



Thanks to Ken,
Carol, Hoke, &
Ron! And Yvette
in MI!


Volunteer Water Quality Monitoring Program

Surfside Beach Stormwater Committee Meeting
November 2, 2022




1


Volunteer Monitoring Results



- Good quarter for Myrtle Lake
 - The Jul-Sept quarter median just BELOW criteria at 300 CFU/100
 - Typically only seen in the winter months
- Great year for Lake Dogwood!
 - No exceedance since 8/10/21
 - Full year+ of samples below the criteria at Lake Dogwood (26 consecutive samples)!
- Hurricane Ian – increase in total dissolved solids especially noticeable in Dogwood
 - Likely to happen more frequently with rising sea levels



COASTAL CAROLINA
UNIVERSITY®
Waccamaw Watershed Academy



2

WATER WE UP TO

The monthly newsletter of the Waccamaw Watershed Academy

October 2022

Happy Halloween!

Don't be scared but there are only three more sampling events in 2022 for our Volunteer Water Quality Monitoring Programs!

Wishing you no tricks and plenty of treats this Halloween!

Boo,
The Waccamaw Watershed Academy

Surfside Beach

While August saw almost 8 inches of rain at the Harth's CoCoRaHS station, it was overall another quiet month for the Surfside Beach lakes. There were some typical contraventions of EPA water quality criteria for E. coli at Myrtle Lake, but these are expected for the site. Heavy rainfall before the second August sampling resulted in relatively low conductivity and pH results at both sites.

September's first sampling captured lake water quality after copious rainfall - low pH and conductivity in both Dogwood and Myrtle Lakes. Turbidity was a bit elevated at Dogwood, but fell to normal levels by the next sampling. The second September sampling followed two weeks of no significant rainfall and saw most parameters at site normal levels.

Other

Expecting a winter lull in algal activity, but we will be ready in the spring for HABs

- Signs to look out for: elevated pH, supersaturated (>100%) or elevated dissolved oxygen, and changes in water color or turbidity

Sign up for our WWA newsletter for Surfside Beach Notes from the Field!

- Talk to Victoria or email wwa@coastal.edu to sign up!

COASTAL CAROLINA UNIVERSITY
Waccamaw Watershed Academy

3

Surfside SC DHEC Enterococcus Bacteria Ocean Monitoring - 2022 Beach Season

Values <10 are represented numerically as "9". "LT adv" means follow-up sampling was not done because the site has long-term advisory status. long-term advisory 2022 DHEC 303(d) list

Date (Follow up)	3-4 prior rain accumulation (in)	WAC-30, 16th Ave N	WAC-31, 11th Ave N	WAC-31A, 4/5th Ave N	WAC-33, 3rd Ave S	WAC-34, 8th Ave S	WAC-35, 13th Ave S	Number > 104
5/3/22	0.0	9	10	9	9	20	20	0
5/11/22	0.0	10	10	10	31	20	20	0
5/17/22	0.2	9	41	41	10	9	20	0
5/24/22	0.2	9	20	9	51	31	9	0
5/31/22	0.0	9	9	10	9	10	201	1
6/7/22	0.0	9	135	10	9	10	10	1
6/14/22	0.0	9	9	9	9	9	9	0
6/21/22	0.0	10	20	96	10	9	63	0
6/28/22	2.0	598	20	84	20	9	155	2
6/29/22	0.7	530					LT adv	1
6/30/22	1.7	10					LT adv	0
7/5/22	3.4	156	6131	241	30	20	20	3
7/6/22	2.4	10	LT adv	LT adv				0
7/12/22	0.7	9	9	63	10	10	75	0
7/19/22	0.3	9	10	10	10	10	9	0
7/26/22	0.3	9	9	10	10	10	9	0
8/2/22	0.2	9	10	9	10	9	10	0
8/9/22	0.2	10	20	20	41	9	63	0
8/16/22	2.3	134	1336	272	171	192	9	5
8/17/22	2.3	52	LT adv	LT adv	10	31		0
8/23/22	0.4	20	63	10	20	9	146	1
8/30/22	1.7	20	131	169	9	10	10	2
9/6/22	0.0	9	10	30	9	20	109	1
9/13/22	3.0	9	31	30	63	9	206	1
9/20/22	0.0	73	10	20	9	9	52	0
9/27/22	0.0	9	20	52	10	9	221	1
%>60		19%	23%	27%	9%	4%	41%	
%>104		15%	18%	14%	4%	4%	27%	
%>501		8%	9%	0%	0%	0%	0%	

WAC-28, Beaver Dam Creek Swash	WAC-29, Ocean Lakes Campground N	WAC-29A, Ocean Lakes Campground S	WAC-36, Garden City Hawes Ave
20	9	9	10
9	9	9	52
9	20	10	41
120	121	105	9
9	9	9	9
52	9	10	9
9	10	9	9
10	10	30	9
146	9	9	9
LT adv			
LT adv			
3282	10	354	9
LT adv			
41	10	10	20
20	20	9	10
9	9	10	10
9	9	9	9
359	248	30	9
19863	341	5012	9
LT adv	LT adv	LT adv	
10	9	9	10
622	10	41	10
181	9	110	9
107	20	75	10
20	107	9	9
189	105	20	20
41%	23%	23%	0%
41%	23%	18%	0%
14%	0%	5%	0%

Notes:

138 samples were collected in 2022.

19 samples had Enterococcus levels that exceeded the water quality criteria (104 MPN/100 mL). 79% of these samples were collected after recent rain.

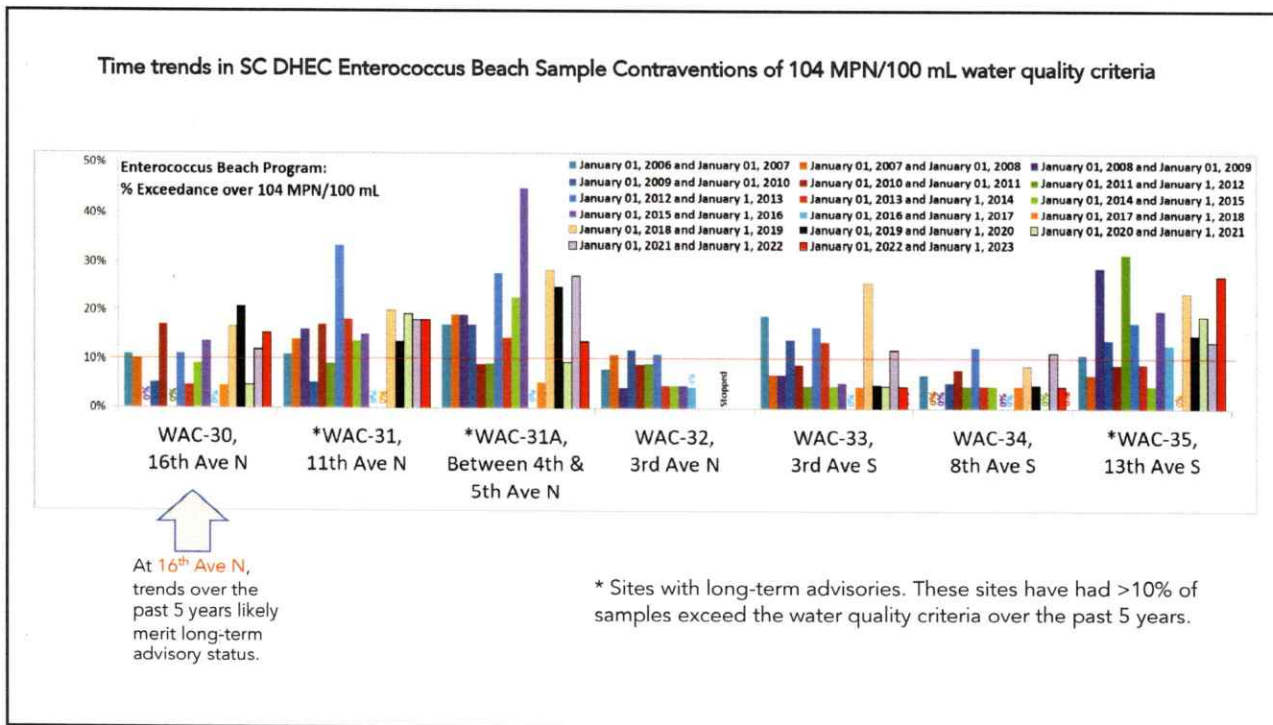
The swash sites have continuing evidence of Enterococcus contamination.

At 16th Ave N, trends over the past 5 years likely merit long-term advisory status.

At 13th Ave S, 50% of the samples that exceeded the water quality criteria were collected during dry weather.

Note the markedly higher frequency of contamination at sites located north of Surfside.

4



5

Contact Us

Susan Libes
susan@coastal.edu
 843-349-4028

Victoria Green
vgreen@coastal.edu
 843-349-6666



COASTAL CAROLINA
 UNIVERSITY®
 Waccamaw Watershed Academy

wwa@coastal.edu
www.coastal.edu/wwa



6