



CHARLESTON  
WATERKEEPER®

A close-up photograph of a wet, brown, curly-haired dog, likely a Weimaraner, swimming in water. The dog's fur is dark and matted with water. It is looking towards the left of the frame. In its mouth, it holds a bright orange ball with a blue stripe. The water around the dog is splashing, creating white foam and droplets. The background is a soft-focus view of the water's surface.

**2014**  
**RECREATIONAL**  
**WATER**  
**QUALITY**  
**SCORECARD**



## Recreational Water Quality Monitoring Program

Our tidal creeks and rivers are frequently used by residents and visitors for recreational activities such as swimming, paddle boarding, and kayaking. The goal of the Recreational Water Quality Monitoring Program is to generate accurate, up-to-date data to a) inform the public about whether these waters are safe for swimming, and b) inform the Department of Health and Environmental Control (DHEC) of unhealthy waterways..

The Clean Water Act requires South Carolina to develop a list of impaired (or unhealthy) waterways every two years. An unhealthy waterway is one that does not meet its water quality standards. This list shows that many of our local waterways are unhealthy due to high levels of bacteria.

We monitor enterococci, a type of fecal indicator bacteria. These bacteria are commonly found in human and animal feces. Although enterococci bacteria are generally not harmful, they indicate that disease-causing bacteria, viruses, and protozoans that live in human digestive systems may be present. The presence of enterococci bacteria above certain levels suggests that contact with the water may pose a health risk.

### **TO LEARN MORE ABOUT THE PROGRAM:**

<http://www.charlestonwaterkeeper.org/what-we-do/programs/water-quality-monitoring>





## Collecting Samples

Our 2014 sampling was designed to represent water quality at 15 locations frequently used for recreation in the Charleston Harbor Watershed. The 15 sampling sites were chosen based on two factors: frequency of recreational use and public accessibility. Samples were collected every Wednesday from May through October. Results were reported to the public as soon as they were available via Facebook, Twitter, Instagram, Swim Guide, and [charlestonwaterkeeper.org](http://charlestonwaterkeeper.org).



### CURRENT WATER QUALITY CONDITIONS

## In the Lab

All of our samples are analyzed by our professional staff at the College of Charleston's Environmental Geochemistry Laboratory. The lab follows a strict set of quality control and quality assurance protocols and is certified by South Carolina DHEC to test for fecal indicator bacteria, enterococci. This is an important designation because it means that data we produce can be used by DHEC to make vital decisions about our waterways. It also means that you have easy access to reliable information about the safety of your favorite waterway for swimming, paddle boarding, kayaking, and sailing.



COLLEGE of  
CHARLESTON  
DEPARTMENT OF GEOLOGY  
AND ENVIRONMENTAL  
GEOSCIENCES

# WATER QUALITY DATA FOR 2014

This map shows locations where we monitored water quality weekly in 2014. It identifies whether a site is likely to meet its water quality standard for recreational use, based on our data from 2013-2014.

## Our Data provides a useful tool for all who rely on our waters:

### OUR COMMUNITY

We produce data first and foremost for you—the Charlestonians who love our waterways! Let our weekly updates help you decide where it's safe to get in the water. Use the scorecard to empower yourself and your community to protect local waterways.

### DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

Our data helps DHEC determine which local waterways are healthy and which are unhealthy. This is important because our data helps guide DHEC's efforts to restore unhealthy waterways.

### CHARLESTON WATERKEEPER

We use our data to identify areas of concern. We then work together with community partners to gather support and take action to improve our waters through targeted campaigns and programs.

South Carolina's recreational water quality standards are based on a waterway's classification. The sites we test are classified as Saltwater Class (SA), Saltwater Class (SB), or Shellfish Harvesting (SFH). For enterococci in SA and SFH waters, no more than 10% of samples may exceed a Geometric Mean of 35/100 mL or a Single Sample Maximum of 104/100 mL. In SB waters, no more than 10% of samples may exceed a Geometric Mean of 35/100 mL or a Single Sample Maximum of 501/100 mL.

#### VIEW THE ENTIRE 2014 DATASET AT:

<http://www.charlestonwaterkeeper.org/2014data>

HOBCAW CREEK DOWNSTREAM



HOBCAW CREEK UPSTREAM



BRITTLEBANK PARK

SHEM CREEK UPSTREAM



USS YORKTOWN



SHEM CREEK LANDING



SHEM CREEK PARK

LOWER ASHLEY



BATTERY BEACH



WAPPOO CUT LANDING

FORT MOULTRIE DOCK



MELTON PETER  
DEMETRE PARK

HARBOR VIEW ROAD



FOLLY ROAD



FOLLY RIVER LANDING

### MAP LEGEND



SAFE FOR SWIMMING



PROCEED WITH CAUTION



SWIMMING NOT RECOMMENDED

# Potential Sources of Fecal Pollution in our Tidal Creeks

Stormwater

Wild and domestic animal waste

Illicit discharges to stormwater drains

Sanitary sewer overflows

Malfunctioning sewage treatment plants

Failing septic systems

Boat and vessel discharges

## Ways You Can Help Protect Your Local Waterway

Have your septic system inspected every 1-2 years and pumped every 3-5 years.

Create rain gardens.

Pick up and properly dispose of pet feces: in a toilet, wrapped in plastic in the trash, or buried at least 5 inches deep in your yard.

Collect rain water in barrels.

Use Charleston Waterkeeper's mobile pumpout service.

Divert stormwater into vegetated buffers.

Support water and sewer infrastructure spending.

Minimize the impervious surface on your property.

Report sanitary sewer overflows to treatment authorities.



## Take Action

### Invite Charleston Waterkeeper!

Ask us to come out to talk to your community group about becoming stewards for your local waterway!

### Write to DHEC!

Tell DHEC that you are concerned about the quality of your waterway for swimming, paddle boarding, or whatever your favorite activity is. Let DHEC know that you are ready to take steps to improve local water quality. Specifically, ask for a restoration plan to be developed and implemented for your waterway.

**SC DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL**

Bureau of Water: TMDL & 303(d) Section

c/o Wade Cantrell

2600 Bull St.

Columbia, SC 29201

**PHONE:** (803) 898-3548

**EMAIL:** [cantrewm@dhec.sc.gov](mailto:cantrewm@dhec.sc.gov)

**TIP!** *Make it personal, the more personal the better. Be respectful and courteous and talk about your love for your waterway, knowledge of it, how long you've lived there, etc. Don't forget to include the data for your waterway!*

# WE NEED YOUR SUPPORT!



## About Charleston Waterkeeper

Charleston Waterkeeper is a data-driven nonprofit organization. Our mission is to protect and promote Charleston's waterways. We do this through water quality monitoring, community outreach, and direct intervention aimed at safeguarding the public's right to swimmable, drinkable, fishable water. We rely on your financial support to monitor the quality of our waterways. Please support this work by making a donation to:

**CHARLESTON WATERKEEPER**

P.O. Box 29, Charleston, SC 29402

**PHONE:** (843) 607-3390

**EMAIL:** [info@charlestonwaterkeeper.org](mailto:info@charlestonwaterkeeper.org)

**WEBSITE:** [www.charlestonwaterkeeper.org](http://www.charlestonwaterkeeper.org)

## Thank you to the following folks who helped make this work possible:

The College of Charleston: Dr. Vijay Vulava - Lab Director, Department of Geology and Environmental Geosciences, Dr. Timothy Callahan, Environmental Studies Program, Mary Edna Fraser, Jay Cabaniss, Walker Brock, Diane Gould, Criscuolo Family, City Marina, Jessica Koenig and Charleston Community Sailing, James McGavick, Cobble Hill, Bryan Rabon, South Carolina Ports Authority, Interns - Luke Byington, Emery Tillman, JD Brookbank, Laboratory Analysts - Andrea Sassard, George Hanna, Field Investigators - Casey Rutherford, Michael Rubel, Irene Cheng, Carl Cole, Ashley Short, and all users of Charleston's waters!

**WE APPRECIATE YOUR SUPPORT AND DEDICATION TO THIS PROGRAM!**