



# NONPOINT SOURCE SUCCESS STORY Update

# South Carolina

## Urban Retrofit Leads to Reopening Shellfish Harvesting Waters in Battery Creek

### Update Overview

The Battery Creek watershed in Beaufort County contains considerable shellfish-growing habitat, much of which has been restricted for harvesting for over a decade due to fecal coliform contamination from stormwater runoff. The City of Beaufort completed the Battery Creek Watershed Management Plan in 2013 and began a subsequent recreational pond rehabilitation and retrofit project in 2014. The project was completed in 2017 and has contributed to water quality improvements that prompted the reopening of six stations in 2020 and two additional stations beginning October 1, 2022.

### Problem

Battery Creek (HUC 030502080501) in South Carolina’s Beaufort County is a tidal estuary that has shown increasing water quality impairments due to stormwater runoff from surrounding urban development. Monthly water quality monitoring by the South Carolina Department of Health and Environmental Control (SCDHEC) Shellfish Program showed that stations located downstream of the project site have not reliably met standards for shellfish harvesting due to elevated fecal coliform, which has resulted in closures for much of Battery Creek for over a decade.

### Story Highlights

In 2014, Beaufort County and the City of Beaufort partnered on the Burton Hill M2 Regional Water Quality Retrofit project, which repaired and improved an existing private recreational pond to serve as a catch basin for stormwater runoff. Runoff from a 470-acre sub-basin of Battery Creek is collected and diverted toward the pond, allowing ultraviolet light to kill off bacteria and sediment to settle out of the water column. This project reduced the fecal coliform load by 9.0E12 colony-forming units.

### Results

Continued monthly data collection shows that fecal coliform concentrations have improved in most areas of the creek. In 2020, six formerly restricted stations achieved fecal coliform standards and have been approved for shellfish harvesting. In 2022, two additional sites were also reclassified and will be open for shellfish harvesting beginning October 1, 2022 (Figure 1).

### Partners and Funding

The successful reduction and treatment of stormwater runoff was achieved by collaboration between the U.S. Environmental Protection Agency, SCDHEC, the City of Beaufort, Beaufort County, and a local property owner. Section 319 funds were awarded in the amount of \$350,000, and the City of Beaufort and Beaufort County provided an additional \$285,686 (funded through a stormwater utility fee).

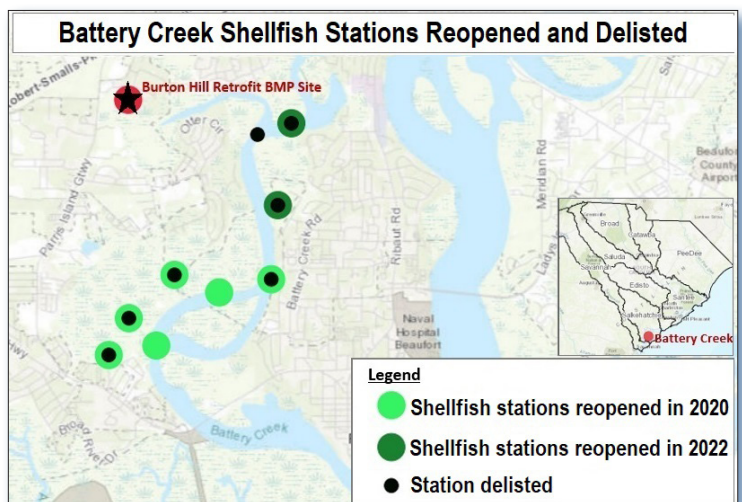


Figure 1. Shellfish stations reopened in 2020 and 2022.

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