

Town of Bluffton Water Quality and Education Program Update

Beth Lewis

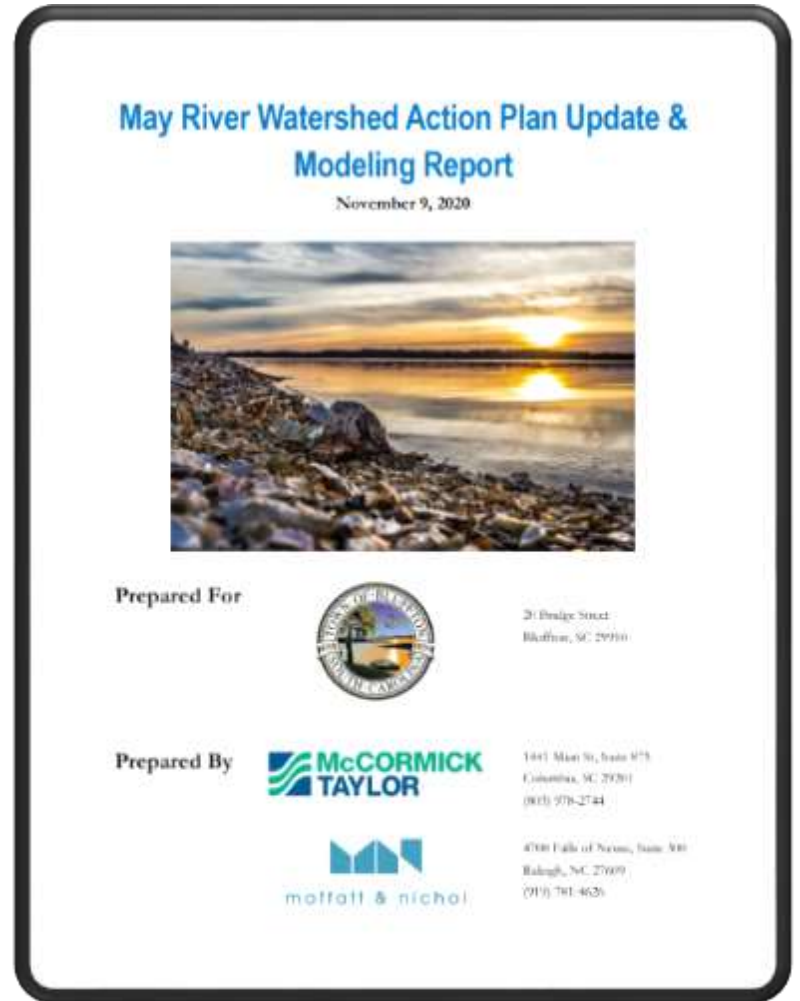
Water Quality Program Manager

May River Watershed Action Plan Stormwater Model

Background



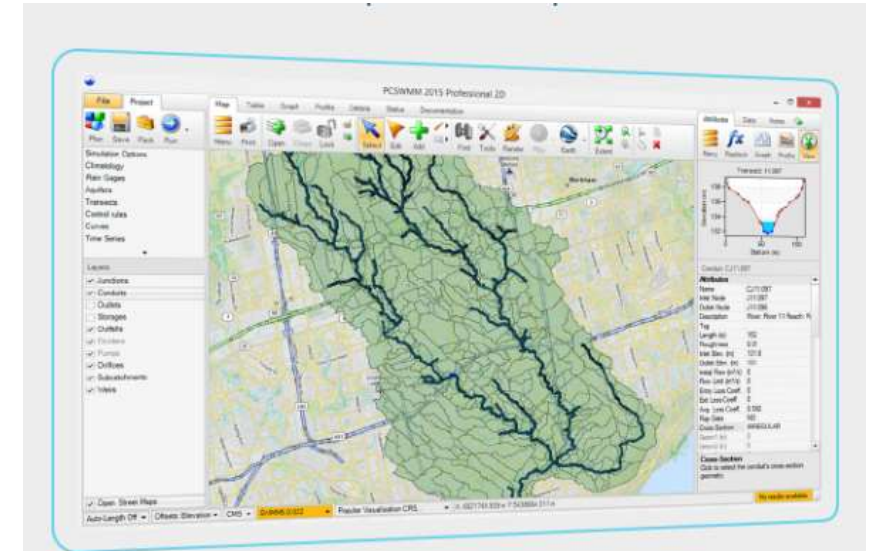
- The 2020 May River Watershed Action Plan Update and Modeling Report included recommendations for the Water Quality Program.
- Staff completed bacteria and flow monitoring data collection for Sections 5.1.2 and 5.13 of the Action Plan Model Report.
- Town Council approved fiscal year funding for calibration of the Town's stormwater model, using updated data collected by the Water Quality Program.





Stormwater Modeling Update

- An RFQ was distributed, and McCormick Taylor, Inc. was selected to complete the work. The contract was executed in August 2025.
- All Water Quality Program data has been provided to the consultant team.
- This work will result in the development of a new 2025 stormwater model for the May River headwater sub-basins. The Town is moving from XPSWMM to PCSWMM modeling software.
- Phase 2 of this project will involve comparing 2025 results with the 2021 and 2002 stormwater models.



Example of PCSWMM

Microbial Source Tracking (MST) Sampling Program Update

Crooked Cove MST Sampling Results

- Staff have completed all 5 dry and 5 wet (<0.5 inches of rain in 24 hours) sampling events for this sub-basin.

Targeted MST Cove	Human Genetic Marker Detected	Dog Genetic Marker Detected	Bird Genetic Marker Detected	Deer Genetic Marker Detected	Horse Genetic Marker Detected
Crooked	13/85	37/85	4/85	31/85	1/85



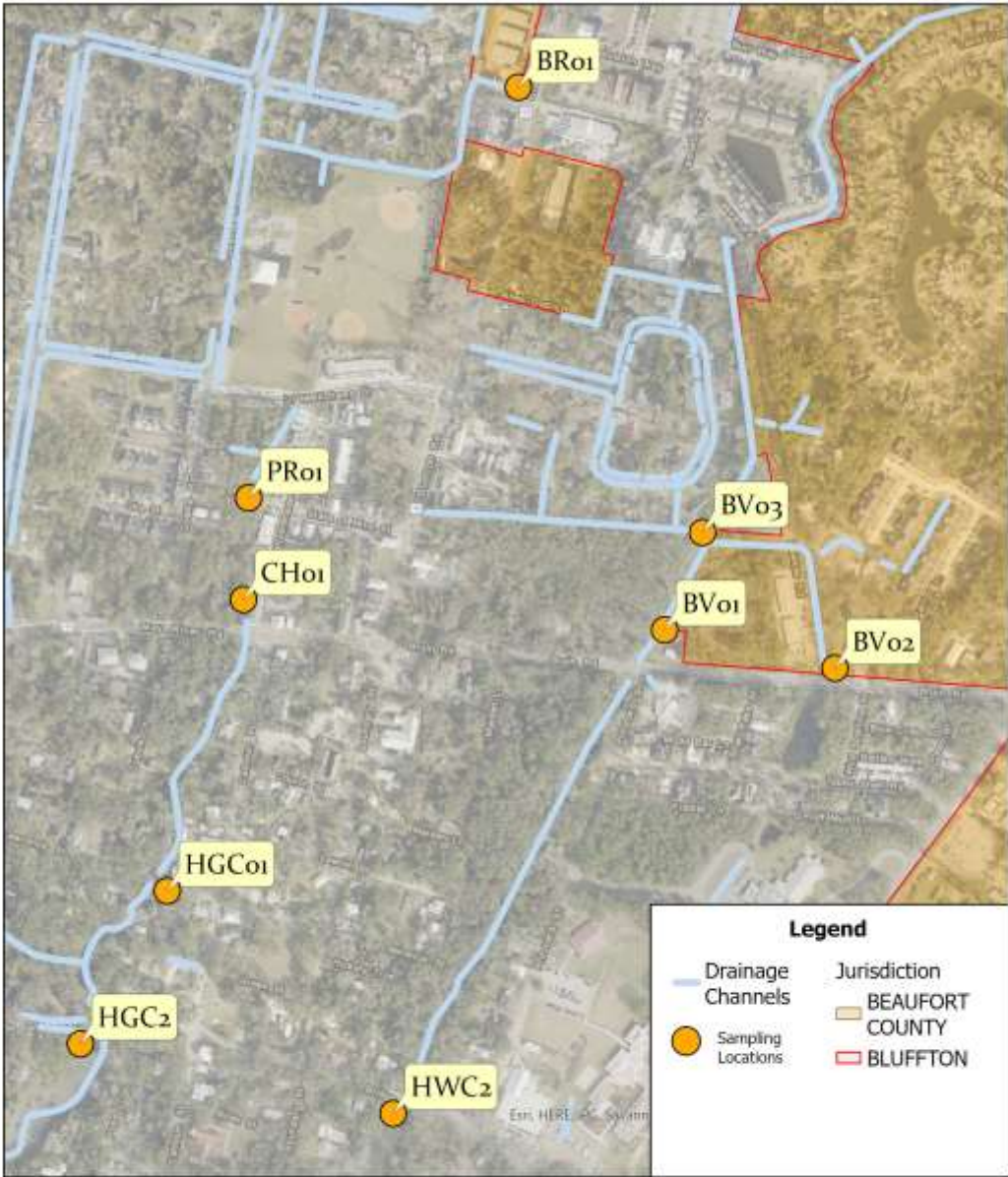
Town of Bluffton Crooked Cove
Targeted MST Sampling



Heyward and Huger Cove MST Sampling Results

- Staff have completed 5 dry and 4 wet (<0.5 inches of rain in 24 hours) sampling events for this sub-basin.

Targeted MST Cove	Human Genetic Marker Detected	Dog Genetic Marker Detected	Bird Genetic Marker Detected	Deer Genetic Marker Detected	Horse Genetic Marker Detected
Heyward and Huger	15/58	33/58	2/58	3/58	0/58



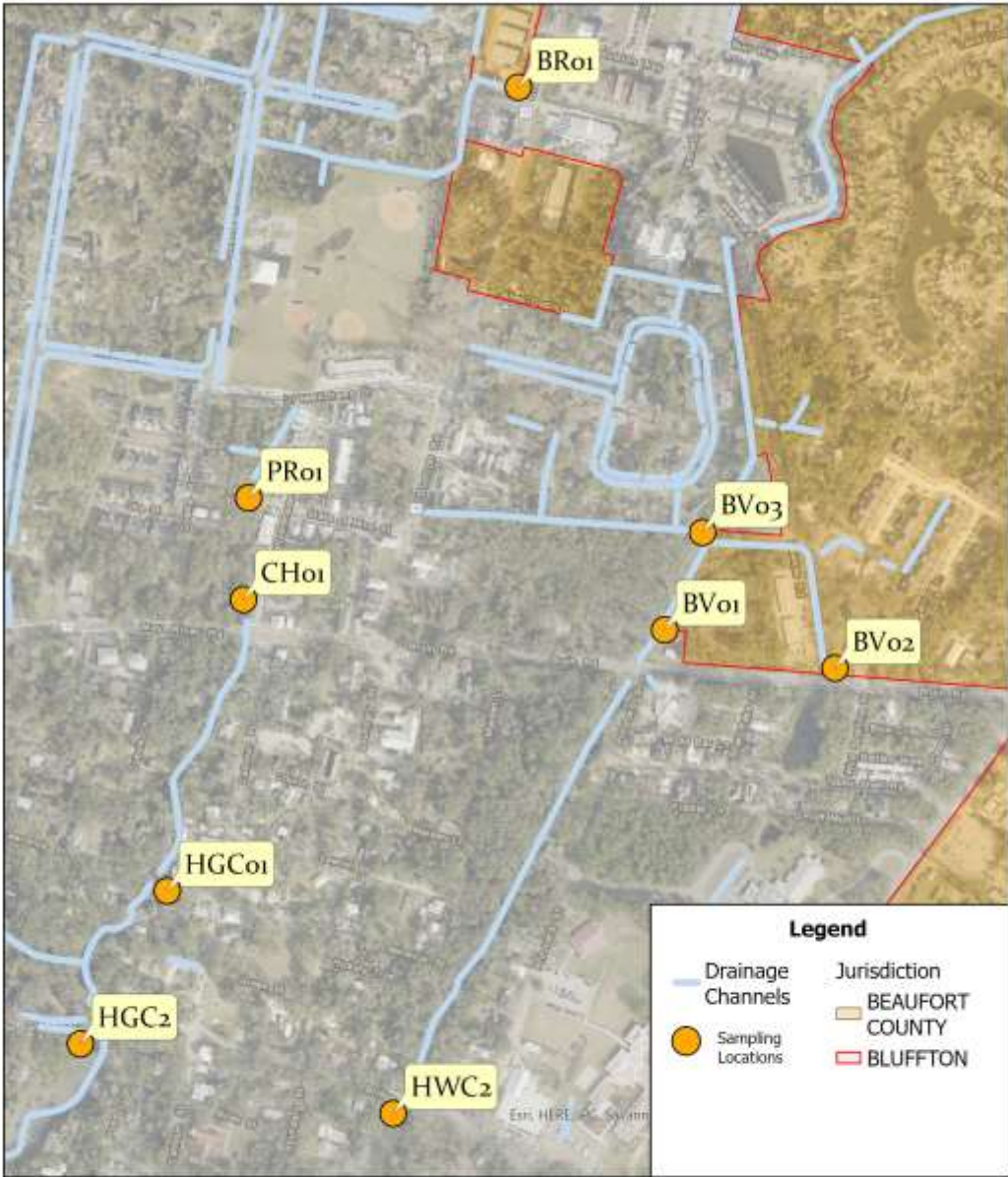
Heyward Cove
Targeted MST Sampling



Verdier Cove MST Sampling Results

- Staff have completed 5 dry and 3 wet (<0.5 inches of rain in 24 hours) sampling events for this sub-basin.

Targeted MST Cove	Human Genetic Marker Detected	Dog Genetic Marker Detected	Bird Genetic Marker Detected	Deer Genetic Marker Detected	Horse Genetic Marker Detected
Verdier	7/45	9/45	4/45	6/45	0/45



Heyward Cove
Targeted MST Sampling



Targeted Dog Waste Education

- Door Hangers:
 - Staff designed a door hanger campaign aimed at raising awareness about dog waste bacteria and its impact on community health.
 - The door hangers were distributed to homes in the Crooked, Huger, and Heyward Cove sub-basins where the presence of the dog genetic marker had been detected.

English

Recent water quality testing conducted by the Town of Bluffton found **dog waste bacteria** in a waterbody near you. This bacteria has the potential to reach the May River and cause illness in people who come into contact with it. This waste also contains nutrients that can cause harmful algal blooms and decrease water quality.

To prevent the spread of this dog waste bacteria and to protect the May River please:

- 🐾 Clean up after your dog every single time, on walks and in the yard.
- 🐾 Dispose of dog waste properly in the trash.
- 🐾 Tell friends and neighbors about the harmful effects of dog waste on the environment and encourage them to clean up after their pets as well.

For more information: Visit the Clemson Clear Pet Waste Webpage: <https://www.clemson.edu/extension/carolinaclear/what-you-can-do/pet-owners.html>



Spanish

En análisis recientes de calidad del agua realizados por el municipio de Bluffton, se detectaron **bacterias de excrementos de perro** en un cuerpo de agua cercano a tu domicilio. Estas bacterias podrían llegar al río May y enfermar a aquellos que entren en contacto con ellas. Estos desechos también contienen nutrientes que pueden causar la proliferación de algas nocivas y disminuir la calidad del agua.

Para evitar la propagación de esta bacteria de los excrementos de perro y proteger al río May:

- 🐾 Recoge siempre las heces de tu perro, tanto al salir a pasear como en el patio.
- 🐾 Deposita los excrementos de tu perro correctamente en la basura.
- 🐾 Informa a tus amigos y vecinos sobre los efectos nocivos de las heces de perro en el medio ambiente y animales a que también recojan los excrementos de sus mascotas.

Para más detalles, visita la página web de Clemson Clear Pet Waste: <https://www.clemson.edu/extension/carolinaclear/what-you-can-do/pet-owners.html>



Targeted Dog Waste Education



- Staff have collaborated with the Communications Office and Mayor Toomer to raise awareness about the importance of cleaning up after pets.
 - Mayor Toomer's article in CH2 Magazine emphasized the critical role of pet waste cleanup in protecting the May River.
 - Social media campaigns have been launched on the Town's Facebook and Instagram pages to engage the community and promote responsible pet ownership.



A Note from Bluffton Mayor Larry Toomer



PHOTOGRAPHY BY
W. HART

Scoop the Poop, Save the River

COURTESY: BLOOMING



Town of Bluffton Government

August 20 · 🌐

We need you — and Fido — to help keep the May River clean! 🐾

Visit the Town's Welcome Center at 111 Calhoun Street, where staff will give you a free dog waste bag holder for your leash. These leash-mounted holders are available while supplies last.

Town leaders are calling on Bluffton's dog lovers to help protect the May River—by scooping the poop, every time, no matter where it lands. It's not just about being a good neighbor. The Town's Water Quality Program has detected dog waste bacteria more than 75 times so far in 2025. When dog waste is left behind—whether on sidewalks, trails, or even in backyards—rain can wash it into storm drains and creeks that flow directly into the May River.

Dog waste isn't harmless and doesn't just go away. It's loaded with bacteria that can make people sick and nutrients that fuel algal blooms, hurting water quality and the river's delicate ecosystem.

So let's scoop the poop, Bluffton! 🐾

View full news release here: <https://bit.ly/4Nb8vf>



Targeted Dog Waste Education



3 BENEFITS OF PICKING UP AFTER YOUR PETS



Disease Prevention

Pet waste can harbor harmful bacteria, viruses, and parasites that can be transmitted to humans and other animals.

Protect Water Quality

Pet waste contains excess nitrogen and harmful bacteria that can pollute water ways. It can lead to harmful algal blooms and damage our ecosystems.

Responsible Pet Ownership

Picking up after your pet demonstrates responsible pet ownership and helps set a positive example for others.

PROTECT WATER QUALITY, PICK UP AFTER YOUR PETS!

The Town of Bluffton's water quality sampling has identified dog waste bacteria **over 75 times** in 2025.

Pet waste is full of bacteria and excess nutrients that can decrease water quality and potentially cause illness in people who come into contact with it.

To prevent the spread of dog waste bacteria and to protect the May River, pick up after your pet **every time** on walks and in your yard.



Social Media Campaign – 4 promoted posts

LISTEN TO THE EXPERTS

To prevent the spread of dog waste bacteria and to protect the May River, pick up after your pets **every time** on walks and in the yard.

Pet waste is full of bacteria and excess nutrients that can decrease water quality and potentially cause illness in people who come into contact with it.



Town of Bluffton Watershed Management Division

THE MAY RIVER STARTS IN ALL OUR BACKYARDS.

Pet waste is full of harmful bacteria that can wash into nearby waterbodies, decrease water quality, and potentially cause illness in people who come into contact with it.

Pick up after your pet and dispose of it properly **every time, even in your own backyard**, to protect the May River and other waterways.



Targeted Dog Waste Education



Pet Waste Station Program



The Town of Bluffton's Pet Waste Station Program is designed to maintain clean, safe, and sanitary spaces by promoting proper pet waste disposal and reducing fecal contamination in local waterways. The program's primary goals are to protect public health, preserve water quality in our local watersheds, and enhance the communities' overall quality of life. Pet waste can spread diseases directly to humans and other pets that come in contact with it. So not only is it gross to step in, it can be harmful to humans and animals. It is recommended that home owners pick up and toss waste into the trash from their yards once per week. However, anytime dogs poop in public areas, waste must be picked up and properly disposed, and if you do not, you can be fined.

The Town of Bluffton is dedicated to keeping our waterways free of fecal coliform bacteria and supporting the community in maintaining a clean, pet waste-free neighborhood by providing pet waste station stations. To participate in the program, your organization or group must complete and return a [Pet Waste Application and Agreement Form](#), and meet at least one or more of the Town of Bluffton's criteria listed below:

- Proximity to Waterbodies: Within 250 feet of streams, rivers, ponds, wetlands, storm drains, or other drainage pathways.
- Sub-basins where water quality sampling indicates elevated levels of bacteria or where the dog genetic marker has been detected.
- Pet Activity Hotspots: High pet usage areas such as dog parks, recreational or trail areas, high-traffic pet walking routes, or near commercial centers with pet-friendly stores or restaurants.
- Town jurisdiction that contributes stormwater runoff to the May, New, Okatie/Colleston Rivers.

Citizens or residents with questions about the Town of Bluffton's Pet Waste Station Program may contact the Water Quality Program Manager at (843) 706-4559.

Pet owners can learn more about their important role in keeping local water resources clean and safe by visiting the [Carolina Clean and Lowcountry Stormwater Partners' webpage](#). You can also follow Lowcountry Stormwater Partners on [Facebook](#) to learn more about stormwater education in our community.

- Staff have developed a new Town of Bluffton Pet Waste Station Program, that will be made public at the end of October or early November 2025.



Stormwater Education Updates

Beach Sweep/River Sweep



- Held the Beach Sweep/River Sweep on September 20, 2025. This is the 17th year the Town has participated in this statewide event.
- 14 event partnerships and approximately 300 volunteers attended.
- Total waste collected is pending.





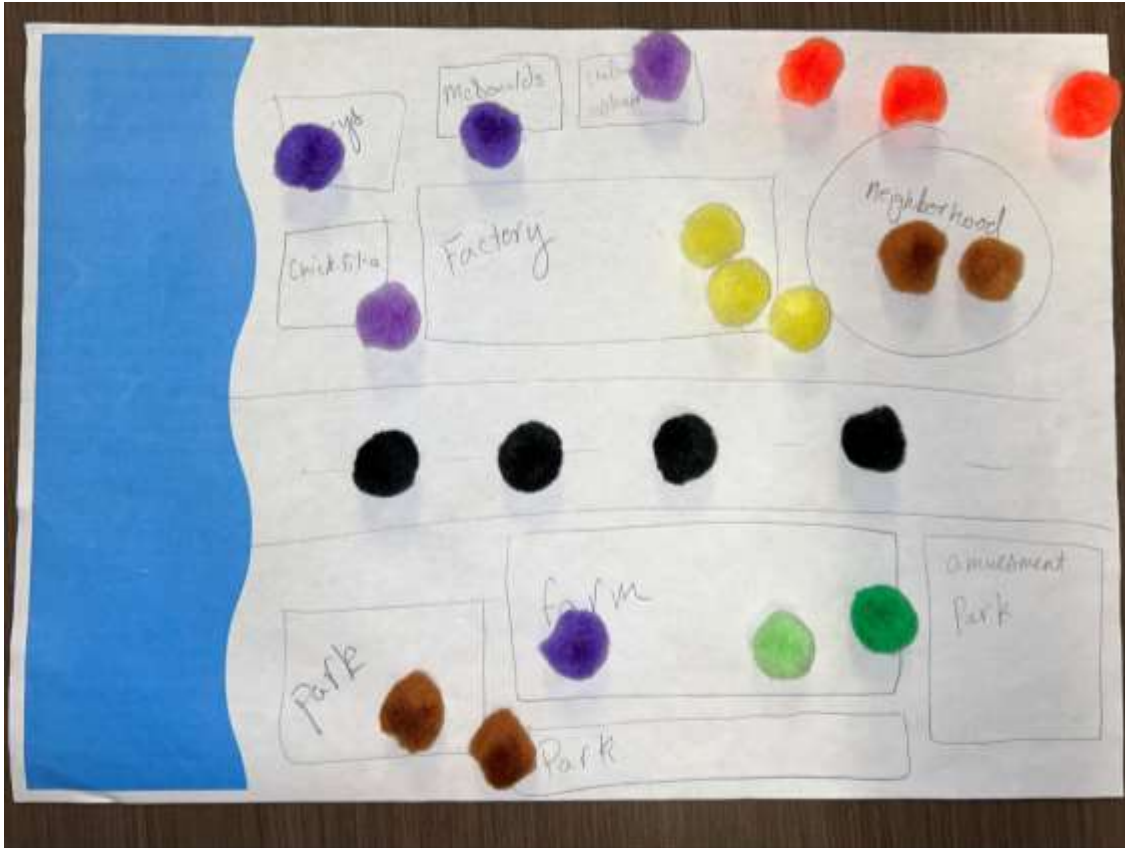
Kids in Kayaks



- Staff have presented to over 50 middle schoolers from River Ridge Academy and HE McCracken Middle School in 2025 through Kids with Kayaks.
- Used the EnviroScape model to discuss common stormwater pollutants and how to prevent them.

Pritchardville Elementary

- Staff led 3 Pritchardville Elementary School classes through the 'Build Your Own Watershed' activity where students design a watershed and then discuss different forms of pollutants and how to prevent them.



Pritchard Street Streetscape & M.C. Riley Elementary



- The Pritchard Street Streetscape Project construction contract was awarded in October 2025 by Town Council.
- A portion of this project involves stormwater improvements to the Beaufort County School District/M.C. Riley Elementary parking lot located adjacent to Bluffton Town Hall.
- A portion of the project's water quality Best Management Practices (BMPs) are funded by a \$124,577 Environmental Protection Agency (EPA) Section 319 Grant. These funds were made possible by the SC Department of Environmental Services.
- The grant also supports stormwater education for M.C. Riley Elementary 3rd-grade students.
- Staff used the Enviroscape to demonstrate stormwater runoff, related pollutants, and water quality improvement devices associated with the project on October 22, 2025.



QUESTIONS & DISCUSSION