



Why Stormwater Pre-Development Approaches Matter and are Time Sensitive

Why is it important to address stormwater during pre-development meetings?



Improperly managed land development can harm groundwater recharge, as well as downstream stormwater quality and quantity.



Low impact development practices prevent harmful stormwater runoff by integrating effective site planning, design and a mix of structural and nonstructural measures.



Green infrastructure enhances natural exposure, reduces harm, encourages recreation and offers economic benefits to communities and households.



Minimizing stormwater impacts decreases exposure to water pollution, flooding-related health risks and associated outcomes like illnesses, injuries and stress.

Successful Innovative Stormwater Projects

Spencer, NC: Big Green Deal - Implementation of Nature-Based Solutions

Spencer's Big Green Deal includes various projects that aim to implement green infrastructure and low impact development mechanisms. The Yadkin River Park Trailhead (pictured left) utilized nature-based solutions to expand connectivity and recreation opportunities in Spencer. Also on the horizon is a collaborative greenway/bikeway project in partnership with NC Department of Information Technology, which will focus on developing green space in the town. To learn more details, visit these links:



- [!\[\]\(f9e62ae797645c5367e33d9390832789_img.jpg\) From The Mayor – Spencer's Big Green Deal](#)
- [!\[\]\(3ae06528cbf191565604ae076c36537e_img.jpg\) Flood Damage Prevention Ordinance](#)
- [!\[\]\(1c1752aff31fb3ae93f0f9295ffb3f4c_img.jpg\) Stormwater Protection Ordinance](#)
- [!\[\]\(4679a6072f35e7de59cae319523c5ac1_img.jpg\) Soil Erosion and Sedimentation Control Ordinance](#)
- [!\[\]\(e5b725fd97f9523c53f51647969c308a_img.jpg\) Spencer Official Zoning Map](#)

Thank you to Zachary Ollis, Josh Watkins, and Chase Sturgis from the Town of Cramerton and Mayor Jonathan Williams and Peter Franzese from the Town of Spencer for sharing information about these initiatives!



Cramerton, NC: Small Business Economic Resilience - Permeable Parking Lot

Once home to the Masonic Lodge in a neglected downtown parking area, a community-led initiative turned this flood susceptible lot into a vibrant, welcoming and economically resilient community asset. Funded through the American Rescue Plan Act (ARPA), this innovative parking lot relieved parking scarcity and flooding concerns by using **pervious pavers** to significantly improve stormwater drainage, reduce surface flows during heavy rain events and enhanced water quality by allowing the natural filtering out pollutants before they could enter the local waterways. The result not only made the downtown environment more attractive, but also bolstered the economic prospects of local businesses by enhancing accessibility and foot traffic.



How to Screen Applicants

The following is a list of questions that local governments can ask the applicant at pre-development meetings to ensure they are addressing local stormwater and flooding concerns.

- 🌀 How is your project implementing the highest and best practices of the local stormwater management regulations?
- 🌀 Can you highlight the nonstructural best practices you have implemented such as the preservation of natural areas, implementation of native ground cover and the use of vegetated buffers?
- 🌀 How did you attempt to minimize the natural land disturbance with your development footprint?
- 🌀 What measures did you incorporate for impervious area management and preventative source controls?
- 🌀 What makes your project a great example of nature-based solutions for stormwater management and the protection of real property?

Additional Resources

A user-friendly great example of how to understand stormwater and smart growth
[US EPA: Smart Growth: Using Smart Growth Techniques as Stormwater Best Management Practices \(epa.gov\)](#)

Green Infrastructure Basic Fact Sheet
[Healthy Benefits of Green Infrastructure in Communities \(epa.gov\)](#)

A StoryMap of municipal best practices across the United States
[Integrated Planning in Action \(arcgis.com\)](#)

To learn more about this topic, watch a recording of the Centralina Learns session [Stormwater Management: Innovation & Best Practices](#). For more information on how Centralina can support your local innovative stormwater management needs, contact Christina Danis at cdanis@centralina.org or 704-688-6502.