

Lower Cape Fear Stewardship Development Award Winners

Outstanding Recognition

Raintree Wetland - Wilmington, NC



Hewletts Creek and Bradley Creek are two polluted and urbanized waterways in New Hanover County. Both tidal creeks are heavily contaminated with bacteria to the point that valuable resources, like shellfish beds, are closed to public use or harvest. When water resources can no longer meet their assigned uses, they are place on the Clean Water Act's 303(d) list of impaired waterbodies. Rather than wait for timeconsuming regulatory action, the City of Wilmington undertook a progressive voluntary program that targets water quality improvements in both Bradley and Hewletts Creeks. program is known as the Bradley and Hewletts Creek Watershed Restoration Plan, or Heal Our Waterways (HOW). The restoration plan was approved and supported by City Council in 2012.

Part of the plan involves installing Management **Practices** (BMPs) within impaired watersheds to increase pollution absorption and filtration and reduce the total amount of runoff flowing into Hewletts Creek. Since much of the land in these watersheds is developed, public participation from homeowners and business owners is crucial for success since most BMPs will need to be installed

on private property.

One of these retrofits was a constructed wetland installed within a city easement in the Raintree neighborhood in the Hewletts Creek Watershed. The site was a former stormwater runoff ditch with a drainage pipe located between two residential properties that frequently overflowed and flooded into surrounding properties and the nearby street. The constructed wetland not only acts as an exemplary educational resource for homeowners but also treats approximately 2,628 cubic feet of stormwater runoff. This lessened the flooding concern of adjacent residents and also reduced direct pollutant loading into Hewletts Creek.

The City partnered with a team led by the NC National Estuarine Research Reserve (NCNERR), the North Carolina Coastal Federation and the University of Wilmington (UNCW) who received grant funding to reduce the polluted stormwater runoff that enters Masonboro Sound. Some of this grant funding was also used throughout the Raintree Neighborhood to incorporate pervious pavement on properties. This served to multiply the impact of pollutant removal and reduced the amount of runoff into Hewletts Creek. As part of the grant funding UNCW will be conducting pre- and post-monitoring to quantify the pollution reduction gained from the stormwater retrofit.

Anne McCrary Park Stormwater Demonstration Site - Wilmington, NC

The Anne McCrary Park Stormwater Demonstration Site is a remarkable education area showcasing stormwater BMPs within the City of Wilmington.

Burnt Mill Creek is currently listed on the 319(d) list of impaired waterways. Land cover within the watershed consists mainly of impervious surfaces. It is estimated that when impervious surface coverage reaches 10%, there is increased bacterial contamination, sediment loading and polluted stormwater runoff. As a result, Burnt Mill Creek is one of the most degraded creeks in Wilmington.



The City Stormwater Services applied for a 319 grant and received funding to support the Burnt Mill Creek Outreach and Demonstration Project in 2002. Anne McCrary Park was selected to host examples of BMPs to encourage citizens to "adopt responsible watershed practices". Not only do these BMPs help reduce the amount of polluted runoff entering Burnt Mill Creek, but they also act as examples of how home and business owners can easily incorporate BMPs on private properties. Through partnerships between City Stormwater Services, Parks and Recreation and several other organizations, the site now has several BMP examples: a bioretention area, a rain garden, a pervious parking lot, a pervious walkway, a roadside buffer, thicker riparian buffers along Randall Pond, a habitat garden, native plant gardens, a grass swale, rain barrels and pet waste stations.

The site recently underwent a significant revitalization to improve the aesthetics and function of the various BMPs. With the City's recent status as a "Bee City USA", the re-vitalization plans included plant selections favored by bees. Hundreds of new native plants were successfully installed with hard work from committed city employees and local volunteers. To protect the plants after installation, mulch was placed with the BMPs at the site. The mulch was "green" as it was created from trees that had been removed elsewhere in the city.

DREAMS of Wilmington - Wilmington, NC

Dedicated to building creative and committed citizens of their community since 1996, DREAMS of Wilmington is now not only a place for children to learn and perform, but a place to learn about the natural resources and beauty of the region.

By January 2012, DREAMS of Wilmington had exceeded its available space. With the support of the City of Wilmington, as well as corporations, foundations and individual benefactors, DREAMS renovated and relocated to a 1939-built, City-owned, 12,800-square-foot vacant former bus maintenance garage. All materials utilized in the renovation process were selected with careful attention to environmental stewardship and integrity. In May 2012, the Historic Wilmington Foundation honored DREAMS with the Adaptive Reuse award.



The facility was renovated to create classrooms and space for performances and events.

Education and creativity are the primary missions for DREAMS of Wilmington. That educational role has been expanded to include environmental stewardship. The first thing you notice as you enter the DREAMS facility is the 'Forest of Dreams' mural located at the intersection of 10th Street and Fanning Street. The 240-foot outdoor mural was created through a partnership with UNCW along with hundreds of volunteers from 76 organizations throughout the community. The importance and demonstration of environmental stewardship is noticeable on-site and provides hands-on educational opportunities for students. Located in the Burnt Mill Creek watershed, DREAMS has partnered with NC State Cooperative Extension and other organizations to reduce stormwater runoff pollution by deconstructing the existing parking lot and replacing it with permeable pavement, as well as by implementing a bio-retention area in the form of a rain garden. The organization also has a large community garden which students cultivate and is fed by water collected in rain barrels. DREAMS students and families were involved in the design process and participated in educational programming.

The creation of the mural and the overall reclamation of this space has fostered beauty, vitality, environmental integrity, and a positive presence in a threatened neighborhood, providing hundreds of youth and their families with a safe place where their creativity can shine. Not only has DREAMS of Wilmington been an organization that promotes creativity, expression, and education to the youth of our community, but their commitment to the environment through the adaptive reuse of space and the integrated low impact design features has made DREAMS of Wilmington a model for environmental stewardship that the entire region can learn from.

Significant Achievement

RiverLights Marina Village - Wilmington, NC

The RiverLights Marina Village is a 23-acre mixed-use area of the RiverLights Development, which will include multiple riverfront buildings, townhomes, single residential family and community boating facility. The RiverLights Marina Village has been crafted to create a small riverfront village that mixes residential, commercial public open space all focused on access to the Cape Fear River.

The first phase of Marina Village is designed to provide a commercial riverfront with multiple connections to the proposed commercial buildings



and right-of-way. Public spaces are included between each structure along the boardwalk to provide waystations for people to meet, relax and enjoy the views of the Cape Fear River. All buildings are setback from the river a minimum of 100 feet as to not disturb the CAMA area of environmental concern or the City of Wilmington conservation resource setback.

Within the interior development pods of Marina Village, residential and commercial uses are concentrated to allow for the preservation and enhancement of a 1.25-acre public park (Village Green), intended to be another space for people to relax and includes hammocks nestled within the tree cover and an open lawn space for activities, concerts and other cultural events. To the maximum extent practicable, all parking is located on street or behind the buildings. Parking that is located along the Village Green is pervious concrete allowing water to naturally infiltrate into the sandy soils underlying the site.

Marina Village is intended to be a walkable community and as such the project includes 8 foot sidewalks around the Village Green and along the riverfront commercial frontage. All other locations provide a 5-foot sidewalk on both sides of the street. Bicycle and pedestrian access to adjacent developments is available through bike lanes and the multi-use path along River Road.

Stewardship Champion Award

The Stewardship Champion Award recognizes exceptional individuals or organizations that exemplify extraordinary vision, innovation, leadership and action for the environment in the Cape Fear Region.

Angela Faison

Angela Faison served on the Stewardship Development Coalition board as the City of Wilmington representative from 2012 to 2016. During her tenure on the board as the Secretary and on multiple committees she was always the person on the side line reminding us to seize all opportunities for projects worthy of recognition. She always kept her eyes and ears open for potential projects and opportunities to promote the Lower Cape Fear Stewardship Development Program. She believed in the program whole heartedly and truly lead by example, ever looking for opportunities to encourage others to be good stewards of our resources.

A native of Willard, NC, Angela is the daughter of the late Geraldine Gore Woodard of Willard, NC. Angela is also a NC certified Low Impact Design professional and a Certified NC Zoning Official. Angela is married to District Court Judge James H. Faison, III, also a Pender County native.