## **Urban Greening in North Carolina**

Case Studies from New Bern, Mecklenburg County, and Raleigh

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With an introduction by Karen Cragnolin

Editors' Note: Carolina Planning regularly solicits articles on recent projects from members of the North Carolina chapter of the American Planning Association (NCAPA). This year's submissions focused on water resource management – an important element of urban greening efforts. From a riverwalk in New Bern – the host city for the 2010 NCAPA Conference – to a stream restoration project in Mecklenburg County and an educational wetlands park in Raleigh, these projects provide valuable insight into the local planning process.

For a moment, imagine that North Carolina's total water supply is stored in one immense bowl and that every resident, new and old, is given a straw to siphon water for their daily gardening, industrial, recreational, and personal needs. This consumption would be enormous, since every American uses about 100 gallons of water each day – compared with residents throughout the rest of the world, especially in poorer countries, who may have access to fewer than five gallons per day (National Geographic, 2010).

Now, consider that the total amount of water available today is the same as it was millions of years ago; that the worldwide population increases by 83 million people each year; and that North Carolina's population is estimated to increase by more than four million new residents by 2030 (Wohlschlegel and Outzs, 2010). Water resources are seriously threatened by the impact of population growth on open space. According to Wohlschlegel and Ouzts:

...between 1987 and 2007, an average of 325 acres of natural lands were converted to residential or commercial use in North Carolina

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every day. North Carolina has lost more than one million acres of natural lands in the past decade, more than any other state in the U.S.

These straightforward yet daunting facts alert us to the important role that water conservation and protection play in our own state.

Recent and prolonged droughts, as well as natural and manmade disasters, remind us that access to clean water is not certain. Protecting our water resources – in the form of rivers, streams and wetlands – becomes not just a consideration but a necessity. Doing so productively will demand new ways of thinking, legislating, and acting. State government, for example, will need to support stricter laws and more creative, incentive-based policies. Because water resources cross political boundaries, future challenges may require us to rethink our complicated inter-governmental relations and redefine those boundaries. Protecting our water resources will require more dialogue, more cooperation, and less ideological polarization if we are to meet the wants and needs of our growing population.

Because of the threatened state of our water systems today, water resource management is a critical component of any successful urban sustainability initiative. Regardless of their other well-planned systems, both rural and metropolitan communities cannot survive and thrive without an adequate water supply. North Carolina's cities and neighborhoods are becoming greener, with more parks, urban gardens, greenways, and other design elements dotting the landscape, but the greening of cities also requires water resource conservation.

Policy changes resulting from innovative programs such as the Clean Water Management Trust Fund (CWMTF) have helped to facilitate an increased focus on water resource protection in North Carolina. The CWMTF was established in 1996 in response to an environmental catastrophe on the Neuse River that resulted in broadly publicized fish kills. Since our state's economy relies heavily on tourism and the second-home market, the national and international headlines touting polluted inland and coastal waters were not what recruiters, businesses, or residents want to broadcast about our state.

Since its inception, the CWMTF has distributed approximately \$1 billion in competitive grants to nonprofits and governmental agencies to clean up the state's surface waters. Grants have funded stream restoration, land conservation, and innovative wastewater treatment projects. The CWMTF, coupled with community sweat equity and creativity, private foundation funds, bonds, and other government programs, has helped to reclaim abused and neglected rivers, streams, and creeks; conserve forever thousands of acres of land; and achieve greater vitality for communities across the entire state.

Recognizing the importance of water conservation in urban greening efforts, this article features three cities in North Carolina that have simultaneously addressed greening and water issues. In their respective projects, each group sought to preserve a "sense of place," involve diverse stakeholders, and improve the economy while protecting the environment. Along the way, project stakeholders helped to revitalize a riverfront on the Neuse and Trent Rivers in New Bern, restore a creek and wildlife corridor in Huntersville, and bring wetlands education to an African-American neighborhood in south Raleigh.

If the rest of us are to address similar problems in our own communities, we will need to change the way we have approached urban problems in the recent past. This will likely mean cleaning up debris and reclaiming brownfields, as was done at the Raleigh Walnut Creek Wetland Center. It may also require working with the political leadership to pass parks and recreation bonds that fund creek restoration and green alternative transportation routes, as was done in Huntersville and Mecklenburg County. Or, it may involve riverfront reclamation for public health and tourism purposes, as was done in New Bern. Seeing the change we want will mean having the courage and the leadership to design comprehensive projects that address multiple issues in the same stroke.

While many environmental conservation efforts in our state have focused on large, rural upland tracts of more than 100 acres, we must also focus on urban riparian buffers as potential areas for water resource protection. Those organizations working on this issue, such as Asheville-based RiverLink, Inc., recognize that riparian buffers in urban areas can help to clean the air, provide alternative routes for transportation, reduce sedimentation, and provide wildlife habitats. North Carolina has led the way in water protection and ecological health in the past, and we now have the potential to lead other states into the future. The lessons learned from the North Carolina cities featured here provide a peek into how we can work together for greener communities across the state. Those lessons include the following principles:

- Water resource protection takes a village. No one agency, individual, or institution working alone can create really successful projects. The synergy in collaboration can turn good projects into great projects that change how we live and enjoy our communities.
- Change does not happen overnight. Each of these
  projects illustrates the importance of being patient
  and persistent. Anything that is worth doing is worth
  doing right. Leaders, government priorities, and
  economic conditions may change, but a good project
  will weather these setbacks and evolve, coming to
  fruition in time.
- Project funding can emerge through dollars or sweat equity. If the project is creative and attracts diverse support, it will succeed. Each of the projects presented here leveraged broad-based community support to marry a variety of funding sources and interests.
- Education, environment, economy and excellence

- comprise the "four Es." When you have all four Es in one project, you will have a winner; and if you add economic justice, you will have a community revived.
- Creating a shared vision is imperative. While
  the vision will evolve, each of these projects had
  champions along the way who shared their thoughts
  and time, asked for others' needs and opinions, and
  incorporated suggestions into a project with broad
  support.

Building a better future will require resource sharing. The environmental and population changes we face will present new challenges that will encourage us to embrace differences, engage in dialogue, challenge each other, and re-engage until we achieve a shared vision for moving forward. After all, we all live downstream.

## References

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