

RESOURCES

Technical Assistance and Training

- **Watershed/Wetlands Protection.....1**
 - National Association of Counties
 - Center for Watershed Protection
 - Southeast Watershed Forum
 - Watershed Education for Communities and Officials (WECO)

- **Low Impact Development.....2**
 - Low Impact Development Center
 - Low Impact Development Resource Page, U.S. Environmental Protection Agency

- **Land Use Planning/Smart Growth.....3**
 - Smart Growth Readiness Assessment Tool
 - One NC Naturally Conservation Planning Tool
 - North Carolina Division of Community Assistance
 - Coastal Communities Services Program
 - Urban Land Institute

- **Sustainable Communities.....4**
 - Sustainable Environment for Quality of Life (SEQL)

- **Stormwater Best Management Practices and Stormwater Training.....5**
 - NC Division of Water Quality – Stormwater BMP Manual
 - NC State University’s Stormwater Management Group
 - Land-of-Sky Regional Council
 - Green Values Stormwater Toolbox

- **Tree Protection.....6**
 - NC Division of Forest Resources
 - The Forest Stewardship Program
 - CITYgreen – American Forests
 - i-Tree

- **Farm/Forest/Land Protection.....7**
 - Voluntary Agriculture Districts.
 - North Carolina Conservation Tax Credit Program
 - The Conservation Trust of North Carolina

Protecting and Managing Local Open Space.....	8
○ Recreation Resources Service	
○ The Nature Conservancy	
• Developing Capacity and Financing Environmental Services.....	9
○ Environmental Finance Center, UNC Chapel Hill	

Grant Funding Resources

• General Assistance Identifying Resource Information System.....	9
○ North Carolina Community Resource Information System	
○ Regional Development Institute, East Carolina University	
○ Million Acre Initiative	
• Water Quality Improvements: Acquisition Buffers, Stormwater and Wastewater Infrastructure, Habitat Restoration.....	10
○ Wetlands Program Development	
○ North Carolina Clean Water Management Trust Fund	
○ Section 319 Nonpoint Source Grants Program	
○ Community Conservation Assistance Program – Division of Soil and Water Conservation	
○ Marina Pumpout Program – Division of Coastal Management	
○ 205(j) Water Quality Planning	
• Land Acquisition and Public Access.....	12
○ Land and Water Conservation Fund	
○ National Recreational Trails Program	
○ Adopt-A-Trail Program	
○ NC Parks and Recreation Trust Fund	
○ Public Beach and Coastal Waterfront Access Program	
○ Transportation Enhancement Grant	
○ Eastman Kodak American Greenway Awards and Grant Program	
• Farmland/Forestland/Community Forestry.....	14
○ The Urban Community Forestry Grant	
○ Forest Legacy Program	
○ Agricultural Development and Farmland Preservation Trust Fund	
• Sustainable Economic Development.....	15
○ Z. Smith Reynolds Foundation	
○ The Conservation Fund	
• Consensus-Building and Civic Engagement.....	16
○ The Laura Jane Messer Fund	

Coastal Hazards Mitigation.....17

- Pre-Disaster Mitigation Program
- Flood Mitigation Assistance Program – Federal Emergency Management Act
- Water Resources Development Grants

University Centers and Resources.....18

- Elizabeth City State University
 - Department of Geological, Environmental and Marine Sciences (GEMS)
- East Carolina University
 - Center for Geographic Information Science
 - Institute for Interdisciplinary Coastal Science and Policy (IICSP)
 - Center for Sustainable Tourism
- University of North Carolina
 - Coastal Studies Institute
 - Institute of Marine Sciences (IMS)
 - Center for Marine Sciences (CMS)
- North Carolina State University
 - Center for Marine Sciences and Technology (CMAST)
 - NC Cooperative Extension
 - Natural Resource Leadership Institute
 - North Carolina Sea Grant
- Duke University
 - Nicholas School of the Environment

General Grant Writing Tips.....22

Technical Assistance and Training

Watershed/Wetlands Protection

National Association of Counties: www.naco.org

The National Association of Counties (NACo) is the only national organization that represents county governments in the United States. NACo provides essential services to the nation's 3,066 counties. NACo advances issues with a unified voice before the federal government, improves the public's understanding of county government, assists counties in finding and sharing innovative solutions through education and research, and provides value-added services to save counties and taxpayers money. NACo's membership totals more than 2,000 counties, representing over 80 percent of the nation's population. Valuable resources that can be downloaded from this site include: *Wetlands Factsheet: Protecting Wetlands and Fostering Economic Growth*; *County Wetlands Data Guidebook* and *Using GIS Tools to Link Land Use Decisions to Water Resource Protection*.

NACo also manages the Five Star Restoration Grant Program, a partnership with the Environmental Protection Agency Office of Wetlands, Oceans and Watersheds, the National Fish and Wildlife Foundation and the Wildlife Habitat Council that provides funds to help implement locally driven wetland and watershed restoration projects.

Current North Carolina representation on the Board of Directors: Brunswick County: Randy Thompson, Emergency Management Director; Craven County: Lee Kyle Allen, Commissioner; Cumberland County: Bill King, Commissioner; Forsyth County: Gloria Whisenhunt, Commissioner; Mecklenburg County: Norman Mitchell, Commissioner, Vance County: Danny Wright, Commissioner and Wake County: Betty Lou Ward, Commissioner.

NACo has a Sustainability Leadership Team and four of its current members are from North Carolina: Pearl Burns-Floyd, Commissioner, Gaston County; Chuck McGrady, Commissioner, Henderson County; Betty Lou Ward and Paul Meyer, Asst. General Counsel, NCACC. NACo provides training and technical assistance covering a variety of areas including land use, water resource management, climate protection, energy management, geographic information systems (GIS) and green government initiative.

Center for Watershed Protection: www.cwp.org

Founded in 1992, the Center for Watershed Protection is a non-profit corporation that provides local governments, activists, and watershed organizations around the country with the technical tools for protecting some of the nation's most precious natural resources: our streams, lakes and rivers. The Center has developed and disseminated a multi-disciplinary strategy to watershed protection that encompasses watershed planning, watershed restoration, stormwater management, watershed research, better site design, education and outreach and watershed training. There are a number of excellent resources on this website, including *A Handbook for Changing Development Rules in Your Community*; *Codes and Ordinances Worksheet and Conserving and Planting Trees at Development Sites* and *Watershed and Wetland Protection Information Tool Kit for County Officials*. Another valuable resource that can be ordered from

this website is *Resources for Writing Ordinances that Protect Natural Resources: "The Practice of Watershed Protection: Techniques for Protecting Our Nations Steams, Lakes, Rivers, and Estuaries"*, CWP, 2000, 741 pages

Southeast Watershed Forum: www.southeastwaterforum.org

The Southeast Watershed Forum is a nonprofit organization dedicated to enhancing local watershed initiatives through education, training and regional dialogue. The Forum strives to be a regional clearinghouse for successful case studies in watershed protection, restoration and management. The Forum has a Board of Directors representing the diversity of Southeast watershed interests over the nine-state region of Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia. Roger Sheats of the Cape Fear River Assembly is currently serving on the Board of Directors.

The Southeast Watershed Forum is working with NOAA's Coastal Services Center, U.S. Fish and Wildlife Service, the Gulf of Mexico Program, TVA and other agencies and organizations on plans for the first Regional Quality Growth conference - **Building Sustainable Communities for the 21st Century**, scheduled for August 12-14, 2008 in Charleston, South Carolina. The conference will highlight resource protection programs and management strategies to ensure more sustainable communities in a time of unprecedented growth and development pressures, diminished water availability and threats from climate change. Local case studies and presentation are being sought in the following categories: 1) Building Greener Communities; 2) Saving Habitat, Farmland, Green Infrastructure and Community Character, and 3) Designing Resilient Communities. For more information: www.southeastwaterforum.org/roundtables

Watershed Education for Communities and Officials (WECO):
www.ces.ncsu.edu/depts/agecon/WECO

Watershed Education for Communities and Officials is a Cooperative Extension Program based at North Carolina State University. WECO focuses on building the capacity of communities to collaboratively manage their water resources. WECO works with watershed groups, local governments, state and federal agencies to facilitate planning and implementation of strategies for protecting and restoring water resources. Resources developed include *Local Watershed Planning: Getting Citizens Involved*, and a companion video for training watershed groups in collaborative decision-making. These are available for free download on the WECO website. **Contact: Christy Perrin, Director 919-515-4542; E-mail: Christy_Perrin@ncsu.edu**

Low Impact Development

Low Impact Development Center: www.lowimpactdevelopment.org

The Center strives to help communities use proper site design techniques to protect their water resources. The LID Center worked as a subcontractor to the National Association of Home Builders Research Center to develop two LID brochures as part of a comprehensive outreach program. The brochures are used together to give municipal officials and builders basic

information and guidance on how to initiate acceptance of LID and integrate it into local building programs. They can be viewed at:

http://www.lowimpactdevelopment.org/lid%20articles/Municipal_LID.pdf

http://www.lowimpactdevelopment.org/lid%20articles/Builder_LID.pdf

The Low Impact Development Center has an easy-to-navigate publications page with factsheets and links to other resources: <http://lowimpactdevelopment.org/publications.htm>

Low Impact Development Resource Page, U. S. Environmental Protection Agency:
www.epa.gov/owow/nps/lid

The Environmental Protection Agency (EPA) provides a variety of resources on its website and this page includes links to a number of reports on low impact development including: *Reducing Stormwater Costs through Low Impact Development (LID) Strategies and Practices*, *Low Impact Development (LID) Literature Review and Fact Sheets* and *Low Impact Development Design Strategies: An Integrated Design Approach*.

Land Use Planning/Smart Growth

Smart Growth Readiness Assessment Tool: www.landpolicy.msu.edu/sgrat

The Smart Growth Readiness Assessment Tool is an online scorecard and resource for communities. Although developed for the state of Michigan, it can be used as a basic primer for local governments in other states. This tool is intended to help the user learn about Smart Growth and the benefits of applying Smart Growth principles in his/her community. Assess whether or not your community is ready to practice Smart Growth.

One NCNaturally Conservation Planning Tool: www.conservision-nc.net

A comprehensive reference that provides accurate information to support planning for growth in an environmentally sensitive way:

- 1) Helps local governments plan future water, wastewater and transportation projects while avoiding sensitive areas.
- 2) Reduces the need for expensive stormwater management, flood control and restoration projects.
- 3) Informs future growth patterns and provides a unifying vision for the future, for win-win scenarios.
- 4) Coordinates and guides compatible land use planning across jurisdictions - local, regional and state.
- 5) Coordinates existing conservation programs and increases overall effectiveness and efficiency.
- 6) Enables cost-effective investment of tax dollars towards our most precious and vulnerable remaining lands.
- 7) Ensures that ecosystems in each region continue to provide clean air and water.

Contact: Kim Douglass - DENR Conservation Planner 919 715-7807; E-mail:

Kim.Douglass@ncmail.net

North Carolina Division of Community Assistance:

www.nccommerce.com/en/CommunityServices

The Division of Community Assistance provides local governments with:

- Technical assistance in current and long-range planning, growth management and training through its Community Planning Program
- Technical assistance, training and networking opportunities in downtown revitalization through its Main Street Center

It also works to promote economic prosperity in targeted counties through the development of comprehensive strategic plans and initiatives through its 21st Century Communities Program. Four of the 26-targeted counties are in the coastal region (Beaufort, Hertford, Hyde and Washington)

Contacts: Community Planning: Lee Padrick, Chief Planner, 252-74-1308; E-mail: lpadrick@nccommerce.com; Main Street Center: Rodney Swink, Director, 919-733-2850; E-mail: rswink@nccommerce.com; 21st Century: J. Bradley Hufford, 252-974-1308; E-mail: bhufford@nccommerce.com.

Coastal Communities Services Program, North Carolina Coastal Reserve:

www.ncnerr.org/ccs

This program is designed to promote informed coastal decisions through science-based training for professionals. The staff of the Coastal Reserve, often in partnership with other organizations, assesses local needs and develops workshops on a variety of issues including onsite wastewater systems, funding environmental improvements in communities and wetlands protection. The workshops and training are available for community, government and private decision-makers.

Contact: Whitney Jenkins, Coastal Training Program Coordinator 252-728-2170; E-mail: whitney.jenkins@ncmail.net

Urban Land Institute: www.uli.org

The Urban Land Institute has a new resource with lessons for those interested in developing a regional vision for future growth called *New Guidebook for Developing A Regional Vision for Growth*. The guidebook focuses on Reality Check, a one-day, participatory, regional visioning exercise inspired by Envision Utah. The guide covers everything from costs to physical set-up. Appendices include sample materials, such as agendas and invitations, as well as case studies and lessons learned by communities that have implemented the exercise. Download the guidebook and appendices at:

http://www.uli.org/Content/NavigationMenu/MyCommunity/RegionalVisioningandCooperation/RealityCheckGuide/Reality_Check_Guide1.htm

Sustainable Communities

Sustainable Environment for Quality of Life (SEQL): www.seql.org/index.cfm

SEQL is an integrated environmental initiative for the 15-county metropolitan Charlotte region in North and South Carolina. It involves elected officials, local government staffs, business and industry groups, economic development groups and environmental stakeholder groups

working together toward viable solutions to regional growth.

SEQL is regional in its vision and influence, but local in application. It promotes implementation of specific Action Items on Air Quality, Sustainable Growth and Water Resources and consideration of environmental impacts in decision-making at local and regional levels. SEQL is funded by a grant from the Environmental Protection Agency (EPA) to Centralina Council of Governments in cooperation with Catawba Regional Council of Governments.

Contact: Rebecca Yarbrough, Regional Initiatives Program Coordinator, Centralina Council of Governments 704-348-2730; E-mail: ryarbrough@centralina.org

Stormwater Best Management Practices and Stormwater Training/Technical Assistance

North Carolina Division of Water Quality- Stormwater Best Management Practices Manual: http://h2o.enr.state.nc.us/su/bmp_forms.htm

The purpose of this manual is to assist designers, developers, owners, contractors, and local officials in determining what stormwater regulations apply to their situation, what the best stormwater BMP to meet those regulations might be, and how to then design and maintain that particular stormwater BMP. It is intended to provide the competent design professional with the information necessary both to properly meet the minimum requirements of the various North Carolina stormwater programs, and to be able to design a stormwater BMP that meets the water quality objectives. This manual is meant to supplement (not supplant) North Carolina's stormwater regulations by explaining the stormwater BMPs that will be allowed, their design criteria, and their assumed pollutant removal efficiencies in an easy-to-understand manner. In addition, local communities are free to adopt more stringent requirements than those presented in this manual (local standards that are more stringent do not result in increased removal credits).

Contact: Ken Pickle, Stormwater Permitting, 919-733-5083 ext. 584; E-mail: ken.pickle@ncmail.net

North Carolina State University's Stormwater Engineering Group:
www.bae.ncsu.edu/stormwater

The BAE Stormwater Engineering Group is a team of faculty, graduate students, part-time associates, and off-campus Extension Faculty. Its mission is to "learn and teach" stormwater management and cover the three main aspects of a land-grant university: (1) applied research, (2) extension and engagement, and (3) on- and off-campus teaching. Research areas of interest include the function and impacts of stormwater management such as bioretention areas, green roofs, stormwater wetlands, permeable pavements, water harvesting systems, and other innovative treatment practices. Other research areas target maintenance of stormwater systems, watershed and economic impacts of stormwater practices, Low Impact Development (LID), temperature impacts, and mosquito control.

This site has a great deal of information, ranging from workshop dates and agendas to guidelines for constructing various stormwater best management practices.

Land-of-Sky Regional Council: http://www.landofsky.org/planning/p_water.html

This western North Carolina council has factsheets on the following topics:

- Stormwater Problems and Impacts
- Control Principles and Practices
- Rules and Regulations
- Local Program Elements and Funding Alternatives
- Municipal Pollution Prevention Planning
- Managing Stormwater in Small Communities
- Maintaining Wetland Detention Ponds
- Plan Early for Stormwater in Your Development
- How Citizens Can Help Control Stormwater Pollution

Green Values Stormwater Toolbox: <http://greenvalues.cnt.org>

The Green Values Stormwater Toolbox was originally developed primarily for use by planners, engineers and other municipal staff. The site can help one: (1) learn what green infrastructure is and does; (2) learn how the use of green infrastructure saves money and (3) understand the costs and benefits of using green infrastructure to mitigate the need for different types of built water infrastructure, such as sewers and detention basins.

Tree Protection

NC Division of Forest Resources: Urban and Community Forestry Program:
www.dfr.state.nc.us/urban/urban_overview.htm

The Urban and Community Forestry Program promotes the management of urban trees in the state. Urban trees can be individual trees along street, scattered trees within a park, or a private or public forested area affected by urban and suburban surroundings. The Urban and Community Forestry Program can provide information and links about urban forestry issues to any group (including municipalities, counties, regional organizations, interest groups, educational institutions, private organizations, etc.), looking to improve the environment and aesthetics of their community through the management of their trees.

The Forest Stewardship Program:
www.dfr.state.nc.us/tending/tending_stewoverview.htm

The North Carolina Forest Stewardship Program is a cooperative effort to help owners realize the objective of managing their forests for the benefits they desire. The program is voluntary, and participants receive recognition for achievements in promoting total forest resource management. Landowners receive technical assistance in developing a stewardship management plan, which is based on the landowner's objectives. Actions are scheduled to enhance the forest for wildlife, soil and water quality, timber production, recreational opportunities, and natural beauty. Recommendations are made by agency and resource professionals, and the landowner decides which activities to pursue. The recommendations focus on practical modifications of existing conditions rather than costly investment.

CITYgreen- American Forests: www.americanforests.org/productsandpubs/citygreen

CITYgreen is a powerful GIS application for land-use planning and policy-making. CITYgreen uses the most up-to-date scientific research to calculate the dollar value of the functions trees and vegetation have in Stormwater Runoff, Air Quality, Summer Energy Savings, Carbon Storage and Avoidance and Tree Growth. An example of an Analysis Report generated by CITYgreen for Stanly County can be found at the back of this section. CITYgreen can be purchased from American Forests.

The City of Charlotte is using CITYgreen to assist them in protecting their trees. The Charlotte area lost 22% in tree canopy and open space. The region stands to lose \$6 billion in federal funding if it falls into non-attainment under the Clean Air Act. The City enacted a tree ordinance and used CITYgreen to help them develop a digital green data layer that allows staff to test the current tree ordinance to see if its canopy percentages and planting meeting their environmental requirements.

i-Tree: www.itreetools.org

i-Tree is a state-of-the-art, peer-reviewed software suite from the United States Forest Service that provides urban and community forestry analysis and benefits assessment tools. i-Tree can be used by communities of all sizes to strengthen their urban and community forest management efforts. State forestry agencies, municipal foresters, non-profit tree advocates, commercial arborists, environmental consultants, planners, and others interested in their community forests and the environmental benefits they produce can use this tool as well. I-Tree software is free and can be ordered at: www.itreetools.org/request_cd.shtm

Farm/Forest/Land Protection

Voluntary Agriculture Districts:

<http://www.ncadfp.org/VoluntaryAgriculturalDistricts.htm>

The purpose of the Agricultural District Program is to encourage the preservation and protection of farmland from non-farm development. Agricultural District ordinances provide for the creation of an Agricultural Advisory Board to administer the program. The Board reviews and approves applications for qualifying farmland as well as establishing the agricultural district. Participants in an Agricultural District agree not to develop for a period of at least ten years (this is a voluntary requirement of the Voluntary Agricultural District and a mandatory requirement of the Enhanced Voluntary Agricultural District). In exchange for remaining in farming Agricultural District members receive:

- signs identifying them as a member, increased protection from nuisance suits,
- waiver of water and sewer assessments (varies from county to county),
- required public hearings for proposed condemnation,
- eligibility for funding, and
- an official role in county or city government.

In an Enhanced Voluntary Agricultural District members may receive up to 25% of their gross farm sales from the sale of non-farm products and still qualify as a bona fide farm that is exempt from zoning regulations under G.S. 153A-340(b) and are eligible to receive a higher percentage of cost-share funds under the Agriculture Cost Share Program pursuant to Part 9 of Article 21 of Chapter 143 of the General Statutes. Beaufort, Brunswick and Currituck counties have Voluntary Agricultural District Ordinances. These can be viewed at: www.cals.ncsu.edu/wq/lpn/ncordinances.htm#ordinances

North Carolina Conservation Tax Credit Program:
www.enr.state.nc.us/conservationtaxcredit

This is an incentive program to assist landowners to protect the environment and quality of life by donating real property for conservation purposes. Interests in property that promote specific public benefits may be donated to a qualified recipient. Such conservation donations qualify for a substantial tax credit, which is subtracted directly from taxes owed. For federal tax purposes, the donation may be claimed as a charitable contribution. For state tax purposes, the donation counts as a charitable contribution, and can also be claimed as a conservation tax credit. Other tax advantages may also result, including reduction or avoidance of capital gains, estate, and property taxes.

Contact: Scott Pohlman, Program Administrator; 919-715-7808; E-mail:
scott.pohlman@ncmail.net

The Conservation Trust of North Carolina: www.ctnc.org

The Conservation Trust for North Carolina is a non-profit statewide conservation organization. Its mission is to protect the state's land and water through statewide conservation and cooperative work with land trusts to preserve our natural resources as a legacy for future generations. The Conservation Trust works directly with landowners, local land trusts, and government agencies to protect land and water resources most important to local communities throughout the state. It has 23 local land trust partners, including the North Carolina Coastal Land Trust, Northeast New Hanover Conservancy and Smith Island Trust in the coastal counties.

One useful document on the Trust's website is: *Voluntary Conservation Agreements: An Introduction for North Carolina Land Owners*. Information is presented in question and answer format beginning with "what is a conservation agreement?" and continuing with others including: what current and future uses do conservation agreements allow and what are the tax advantages to donating a conservation agreement? This document can be downloaded at: [www.ctnc.org/downloads/126741brochure%20\(2\).pdf](http://www.ctnc.org/downloads/126741brochure%20(2).pdf); www.ctnc.org/downloads/126741insert.pdf (update on federal tax incentives for conservation agreements)

Protecting and Managing Local Open Space

Recreation Resources Service: <http://cnr.ncsu.edu/rrs/>

Recreation Resources Service (RRS) is a technical assistance program offered through a cooperative partnership between the N.C. Division of Parks and Recreation and the N.C. State University Department of Parks, Recreation and Tourism Management. Technical assistance includes:

- Assisting with establishment of new parks and recreation departments
- Organize and train new parks and recreation advisory boards
- Grant development
- Benefits-based programming
- Playground safety
- Job Service Bulletin
- Workshops

In addition, RRS conducts the annual NC Municipal and County Parks and Recreation Services Study and coordinates a statewide teleconference series. RRS staff may also be available to assist in conducting special studies for your agency or community

The Nature Conservancy:

www.nature.org/wherework/northamerica/states/northcarolina/contact

The Nature Conservancy strives to preserve plants, animals and natural communities by protecting the lands and waters they need to survive. The Nature Conservancy can work with stakeholders to encourage stewardship through land acquisition. Since it began its activities in North Carolina 30 years ago, TNC has helped protect over 700,000 acres of land in the state. In 2006 alone, the Nature Conservancy protected 76,500 acres in four areas in eastern North Carolina.

Developing Capacity and Financing Environmental Services

Environmental Finance Center, University of North Carolina at Chapel Hill:

www.efc.unc.edu

The University of North Carolina at Chapel Hill hosts the Environmental Finance Center of EPA Region 4. The Environmental Finance Center's objective is to educate state and local officials and small businesses on various issues including, lowering costs of compliance and pollution prevention, increasing investments in environmental protection, improving financial capacity to own/operate environmental systems, encouraging the full cost pricing of environmental services, and identifying and evaluating financing tools and options.

Contact: Jeff Hughes Director, 919- 843-4956; E-mail: jhughes@sog.unc.edu.

Grant Funding Resources

General Assistance Identifying and Applying for Funding

North Carolina Community Resource Information System: www.cris.state.nc.us

The N.C. Community Resource Information System is an interagency collaboration designed to facilitate the efforts of citizens and resource providers in looking for information about state programs, including grants and loans administered by North Carolina state agencies.

Regional Development Institute, East Carolina University:

www.ecu.edu/rds/rdi/rdi.html

The Regional Development Institute (RDI) has been providing outreach services and conducting applied research in eastern North Carolina since 1964. RDI draws upon the expertise of faculty, students, and professional staff to assist in the economic development of the state's easternmost 40 counties. RDI provides assistance to units of local, state, and federal government, as well as to non-profit organizations, businesses, and individuals.

Services offered include:

- **Community planning and development** projects are conducted through economic impact studies, strategic plans, transportation plans, revitalization studies, and consultation on a wide range of community issues.
- **Grant applications and funding source identification** (when part of a larger overall project) are produced and submitted to federal and state agencies by RDI on behalf of local governments and nonprofit organizations.
- **Research information and statistics** are available through RDI resources, including Log Into North Carolina (LINC) and other databases. Data is provided to public agencies, private organizations, and university faculty, staff, and students.

Contact: J. Ted Morris, Assoc. Vice-Chancellor for Economic Development 252-727-1341; E-mail: morrisja@ecu.edu

Million Acre Initiative: www.onencnaturally.org/pages/home/home.html

The Million Acre Initiative is a collaborative, endeavor to accelerate the rate that land is protected in North Carolina and to permanently preserve an additional one million acres of land by the end of 2009, organized by the North Carolina Department of Environment and Natural Resources.

Contact: Manly Wilder, DENR Asst. Secretary, Natural Resources, 919-715-4152; E-mail: Manly.Wilder@ncmail.net

Water Quality Improvements: Acquisition of Buffers, Stormwater and Wastewater Infrastructure, Habitat Restoration

Wetlands Program Development Grants: www.epa.gov/owow/wetlands/grantguidelines

The Environmental Protection Agency's Wetland Program Development Grants (WPDGs), provide eligible applicants an opportunity to conduct projects that relate to the causes, effects, extent, prevention, reduction, and elimination of water pollution. Applicants wishing to build or strengthen comprehensive wetland protection programs to protect such vulnerable waters from a variety of potential impacts are encouraged to do so. EPA also encourages applicants to incorporate wetland issues into broader watershed planning and watershed management goals and to reflect on the contribution by wetlands to the broader aquatic ecosystem.

Efforts can include, but are not limited to, information dissemination, data exchange, studying State/Tribal/Local Government regulatory improvement opportunities, and surveying opportunities for land acquisition, conservation easements, and tax incentive provisions. Research, investigation, and studies that support the inclusion of vulnerable wetlands in comprehensive wetland and watershed restoration and protection programs, and/or support refinement of information regarding the function of these valuable resources are also encouraged. States, Tribes, local governments (S/T/LGs), interstate associations, intertribal consortia, and national non-profit, non-governmental organizations are eligible to apply. Projects are generally one to three year agreements and at least a 25% match of the total project cost is required.

Contact: Morgan Jackson, US EPA Region 4: 404-562-9393; Email: jackson.morgan@epa.gov

North Carolina Clean Water Management Trust Fund (CWMTF): www.cwmtf.net

The North Carolina Clean Water Management Trust Fund (CWMTF) makes grants to local governments, state agencies, and conservation nonprofits to help finance projects that specifically address water pollution problems. The CWMTF provides grants to: Enhance or restore degraded waters; Protect unpolluted waters; Contribute toward a network of riparian buffers and greenways for environmental, educational, and recreational benefits. The CWMTF accepts major grant applications once per year and the next application deadline is: **February 1, 2009** by 5 pm. The grant application page can be accessed at: www.cwmtf.net/appmain.htm. The CWMTF has a mini-stormwater grants program for which applications are accepted throughout the year. The maximum amount of funds per award is \$50,000 with a required 10% cash match. More information can be found at: www.cwmtf.net/stormmini.doc

Contact: Sarah King, Southern Coastal Plain Field Representative; 252-725-9069; E-mail: sarah.king@ncmail.net; Damon Tatem, Northern Coastal Plain Field Representative; 252-441-6672; E-mail: damon@cwmtf.net

Section 319 Nonpoint Source Grants Program:

http://h2o.enr.state.nc.us/nps/Section_319_Grant_Program.htm

The Section 319 Grant program was established under the federal Clean Water Act to provide funding for efforts to curb nonpoint source (NPS) pollution, including that which occurs through stormwater runoff. Each fiscal year, the U.S. Environmental Protection Agency provides funds to North Carolina that are then allocated via a competitive grant process to organizations to address current or potential NPS concerns. Grants are divided into two categories: Base and Incremental. Base Projects concern research-oriented, demonstrative, or educational purposes for identifying and preventing potential NPS areas in the state, where waters may be at risk of becoming impaired. Incremental projects seek to restore streams or other portions of watersheds that are already impaired and not presently satisfying their intended uses. State and local governments, interstate and intrastate agencies, public and private nonprofit organizations, and educational institutions may apply. The grant application process begins in November of each year and approximately \$2.7 million is available.

Contact: Kim Nimmer, Program Administrator; 919-733-5083, ext.582; E-mail: Kimberly.nimmer@ncmail.net

Community Conservation Assistance Program-Division of Soil and Water Conservation (DSWC)

The Community Conservation Assistance Program, created by 2006 legislation, provides technical assistance and cost share funds for non-agricultural landowners to install best management practices that improve water quality. Under the program, homeowners, civic groups, municipalities and others can apply for cost share funds for projects such as backyard wetlands, permeable surface conversion, stream bank restoration and cistern installation. CCAP is the first cost share program in the state that addresses water quality issues in established urban areas.

Contact: Julie Henshaw, Watershed Projects Manager, 919-715-9630; E-mail: Julie.henshaw@ncmail.net

Marina Pumpout Program-Division of Coastal Management (DCM):
www.nccoastalmanagement.net/Marinas/pumpout.htm

The program, established as a result of the federal Clean Vessel Act of 1992, provides financial assistance to marinas and other boat-docking facilities for the installation and renovation of pumpout and dump stations in North Carolina. Using funding from the US Fish and Wildlife Service, DCM has made grants of up to \$15,000 available on a yearly basis to private and commercial marinas, gas/service docks, fish houses/seafood dealers and other boat docking facilities in the 20 coastal counties. A 25 percent match is required of the marinas. A 25 percent match also is required of local governments installing pumpouts at public docks.

Contact: Mike Lopazanski, Policy Manager 919-733-2293, ext. 222; E-mail: Mike.Lopazanski@ncmail.net

205(j) Water Quality Planning:

<http://h2o.enr.state.nc.us/pb/205jPlanningGrantHomePage.htm>

This federal grants program is administered by the state and provides funding for water quality management and planning, including, but not limited to: (A) Identifying most cost effective and locally acceptable facility and non-point source measures to meet and maintain water quality standards; (B) Developing an implementation plan to obtain state and local financial and regulatory commitments to implement measures developed under subparagraph A; (C) Determining the nature, extent, and cause of water quality problems in various areas of the state.

Approximately \$50,000 will be available to regional Councils of Governments (only) for water quality planning efforts. The competitive grant application process will begin in early May 2008. No match is required but is preferred. Information is not currently available on the website. **Contact: Sandi Brown, Division of Water Quality. 919-733-5083, ext. 542, E-mail: sandi.brown@ncmail.net**

Land Acquisition and Public Access

Land and Water Conservation Fund: www.ncparks.gov/About/grants/lwcf_main.php

This fund was created in 1964 to provide funds for federal land acquisition, as well as matching grants for state and local government parkland acquisition and facility development. In North Carolina the program is administered by the Department of Environment and Natural Resources. More than 38,500 acres have been acquired with LWCF assistance to establish a

park legacy in the state. Historically, North Carolina's LWCF annual allocation has been split 60/40 between local governments and state agencies. This fund only provides reimbursement money for completed projects.

Contact: John Poole, Program Manager, DENR 919-715-2662; E-mail: john.poole@ncmail.net

National Recreational Trails Program:

www.fhwa.dot.gov/environment/rectrails/rtbroch.htm

The program provides grants to federal, state and local governments, as well as nonprofit organizations, for the acquisition, development and maintenance of land for trails. The Recreational Trails Program (RTP), within the Federal Highway Administration (FHWA), provides funds to states to develop and maintain recreational trail, such as hiking and bicycling trails, and trail-related facilities for both non-motorized and motorized recreational trail uses. Each State administers its own program, usually through a State resource or park agency. For 2008, the North Carolina program was allocated \$1.3 million, administered by the NC Division of Parks and Recreation. Match must be equal to or greater than 25% of grant award. This is a reimbursement grant program. Applications will be available on October 1, 2008.

Contact: Darrell L McBane, State Trails Coordinator, 919-715-8699; Fax 919-715-3085, darrell.mcbane@ncmail.net or Ann Coughlin, Coastal Region Trails Specialist, 919-751-2792; E-mail: Ann.Coughlin@ncmail.net

Adopt-A-Trail Program: www.ncparks.gov/About/grants/trails_grant.php

This program awards \$108,000 annually to government agencies, nonprofit organizations and private trail groups for trails projects. The funds can be used for trail building, trail signage and facilities, trail maintenance, trail brochures and maps, and other related uses. Requires no local match or in-kind services. No local match required and this is a reimbursements grant program. Applications will be available on October 1, 2008.

Contact: Darrell L McBane, State Trails Coordinator, 919-715-8699; Fax 919-715-3085, darrell.mcbane@ncmail.net or Ann Coughlin, Coastal Region Trails Specialist, 919-751-2792; E-mail: Ann.Coughlin@ncmail.net

NC Parks and Recreation Trust Fund: www.ncparks.gov/About/grants/partf_main.php

The North Carolina General Assembly established the Parks and Recreation Trust Fund (PARTF) on July 16, 1994 to fund improvements in the state's park system, to fund grants for local governments and to increase the public's access to the state's beaches. The PARTF program also provides dollar-for-dollar grants to local governments. Recipients may use the grants to acquire land and/or to develop parks and recreational projects that serve the general public. The Parks and Recreation Trust Fund will send letters announcing the 2008-2009 schedule in September 2008.

Recent coastal local government recipients include: Currituck County for Carovan Beach Park, Oak Island for the Oak Island Teen Center and Chowan County for Red Banks Farm Park.

Contact: John Poole, Program Manager, DENR 919-715-2662; E-mail: john.poole@ncmail.net

Public Beach and Coastal Waterfront Access Program:

<http://dcm2.enr.state.nc.us/Access/grants.htm>

This program was established in 1981 to provide matching grants to local governments for projects that improve public pedestrian access to the state's beaches, estuarine shorelines, coastal rivers and urban waterfronts. Funds may be used for land acquisition and for construction of access facilities such as parking, restrooms, dune crossovers and piers. The Division of Coastal Management awards over \$1 million a year in matching grants to local governments. Funding for the Public Beach and Coastal Waterfront Access Program comes from the N.C. Parks and Recreation Trust Fund.

Contact: John Thayer, Manager, CAMA Local Planning and Access Program 888-472-6278; E-mail: john.Thayer@ncmail.net

Transportation Enhancement Grant: www.ncdot.org/financial/fiscal/Enhancement

The NC Department of Transportation sets aside 10 percent of its federal Surface Transportation Program funds for use on specific types of enhancement projects. Funds go to state and local government grants for a number of open space preservation efforts, including bicycle and pedestrian facilities, scenic and historic acquisitions, and wildlife conservation projects. There will not be a Call for Projects in 2008 during the ongoing transformation of the Department of Transportation and its budget priorities. In previous Calls, the funds available ranged from \$10 million to \$22 million. A 20% cash match is required.

Contact: Debbie Oliver Vick, Northeastern and Southeastern Transportation Planning Areas 919-715-5522; E-mail: dovick@dot.state.nc.us

Eastman Kodak American Greenways Awards and Grants Program: www.conservationfund.org/node/245

Eastman Kodak, The Conservation Fund, and the National Geographic Society provide small grants to stimulate the planning and design of greenways in communities throughout America. Since 1992, the Kodak American Greenways program has awarded more than 630 seed grants across the nation, totaling roughly \$764,000, to support the development of community-based, action-oriented greenways projects.

Contact: The Conservation Fund 703-525-6300; E-mail: kodakawards@conservationfund.org

Farmland/Forestland/Community Forestry

The Urban and Community Forestry Grant: www.dfr.state.nc.us/urban/

The Urban Forestry Program in the NC Division of Forest Resources manages this grants program. The Program's goal is to develop, enhance and support sustainable urban and community forestry programs throughout North Carolina by encouraging citizen and community involvement. Local and state government entities, educational institutions and tax-exempt organizations can participate in this annual grants program. Awards range from \$1-5,000 and require a 1:1 match. Eligible projects include development or revisions to a tree ordinance; conduct of a tree inventory and analysis; development of street tree master plans and development and conduct of in-house training and continuing education, youth and public education programs.

Contact: Leslie Moorman, Urban Forestry Program Coordinator 919-733-2162, ext 253; E-mail: leslie.moorman@ncmail.net

Forest Legacy Program: www.dfr.state.nc.us/tending/tending_legacyoverview.htm

Congress created the Forest Legacy Program in the 1990 Farm Bill. Its purpose is to help landowners, state and local governments, and private land trusts identify and protect environmentally important forestlands that are threatened by present and future conversion to non-forest uses. In North Carolina, Forest Legacy has been used to purchase the development rights on environmentally important working forests to protect them forever. Potential forest properties must be within specific Forest Legacy Areas, which include: the Lower Cape Fear/Lower Lumber, the New-White Oak-Lower Neuse complex and the Tar and Lower Roanoke rivers region.

Contact: Les Hunter, Forest Legacy Coordinator, 919-733- 2162, ext. 254; E-mail: les.hunter@ncmail.net

Agricultural Development and Farmland Preservation Trust Fund: www.ncadfp.org

The original Farmland Preservation Trust Fund was established in 1986 by the General Assembly. Between 1998 and 2004 the Farmland Preservation Trust Fund was allocated a total of \$2.65 million, preserved 33 farms on more than 4.7 thousand acres and leveraged private, county and federal funds worth \$26 million. In September 2005, the General Assembly passed House Bill 607, establishing the North Carolina Agricultural Development and Farmland Preservation Trust Fund (ADFP). The ADFP Trust Fund received \$ 8 million from the General Assembly in this last budget session and has received 93 applications totaling \$29 million. ADFP anticipates announcing the awards in June 2008.

The purpose of the fund is to support the farming, forestry, and horticulture communities within the agriculture industry by:

- Supporting the purchase of agricultural conservation easements (on farm, forest, and horticulture lands), including transaction costs.
- Funding public and private enterprise programs that will promote profitable and sustainable family farms through assistance to farmers in developing and implementing plans for the production of food, fiber, and value-added products, agritourism activities, marketing and sales of agricultural products produced on the farm, and other activities.
- Funding conservation agreements (on farm, forest, and horticulture lands) targeted at the active production of food, fiber and other agricultural products.

Contact: Dewitt Hardee, Program Manager 919-733-7125;E-mail: Dewitt.Hardee@ncmail.net

Sustainable Economic Development

Z. Smith Reynolds Foundation: www.zsr.org/

The Z. Smith Reynolds Foundation was established in 1936 as a memorial to the youngest son of the founder of R.J. Reynolds Tobacco Company. The Foundation makes grants only to nonprofit, tax-exempt, charitable organizations and institutions that are exempt under Section 501(c)(3) of the Internal Revenue Code or to governmental units. The Foundation has the conviction that inclusiveness benefits everyone and is not only compatible with, but also promotes, excellence. The vision of the Foundation is to:

- To promote social, economic and environmental justice.
- To strengthen democracy, through an educated and informed populace.
- To encourage innovation and excellence in a dynamic non-profit sector.
- To support progressive public policy and social change.
- To foster cooperation and respect among all racial, ethnic, and socio-economic groups.
- To build strong, vibrant, economically sound, and peaceful communities.

The Foundation currently gives special attention to these focus areas: 1) community economic development; 2) the environment; 3) democracy and civic engagement; 4) pre-collegiate education and 5) social justice and equity. Examples of coastal projects funded in 2007 include: \$35,000 to Outer Banks Community Development in Kill Devil Hills to develop a master plan for affordable housing and work with planners from local governments; \$80,000 to the Neuse River Foundation, New Bern for its Muddy Water Watch Project. The Foundation has two grant cycles per year with deadlines on February 1 and August 1.

Contact: Leslie Winner, Executive Director 336-725-7541; E-mail: winner@zsr.org

The Conservation Fund: www.conservationfund.org/southeast/northcarolina

In North Carolina the Fund and its partners have worked closely with local communities to integrate conservation, sustainable economic development, and social justice principals to preserve more than 175,000 acres, including 1,200 acres in a conservation easement in the Lower Cape Fear River basin. In addition the Fund has a Resourceful Communities project that provides a range of direct assistance to develop the leadership and organizational capacity necessary for sustainable community development. In NC, the Conservation Fund has partnered with seven community development corporations to develop conservation-based affordable housing. The Cape Fear Regional CDC and the Black Family Land Trust are working together with the Conservation Fund to develop a 25-acre parcel in Brunswick County.

Contact: Mikki Sager, Resourceful Communities Director 919-967-2223; E-mail:

Consensus-Building and Civic Engagement

The Laura Jane Musser Fund: www.musserfund.org

The Fund provides grants for those involved in solving environmental problems and encouraging environmental stewardship. The Fund encourages communities - whether represented by local governments, state agencies or grassroots not-for-profit organizations - to use a consensus-based approach to environmental decision-making. The Fund supports a collaborative process, involving a neutral facilitator where appropriate, that strives to involve all key stakeholders as well as local citizens in developing environmental program and policies that satisfy common interests. The environmental stewardship grants also focus on community-based planning and management of resources.

Contact: Mary Karen Lynn-Klimenko, Managing Consultant 612-825-2024; E-mail: ljmusserfund@earthlink.net

Coastal Hazards Mitigation: Planning and Land Acquisition

Pre-Disaster Mitigation Program- NC Emergency Management (NCEM):

www.nccrimecontrol.org/index2.cfm?a=000003,000010,001623,000177,000498

The Pre-Disaster Mitigation (PDM) program provides funds for hazard mitigation planning and the implementation of mitigation projects prior to a disaster event. Eligible activities under the PDM program include: voluntary acquisition of real property (i.e. structures and land, where necessary) for open space conversion; relocation of public or private structures; elevation of existing public or private structures to avoid flooding; structural and non-structural retrofitting of existing public or private structures to meet/exceed applicable building codes; construction of safe rooms for public and private structures that meet FEMA requirements; hydrologic and hydraulic studies/analyses, engineering studies and drainage studies for the purpose of project design and feasibility determination directly related to the proposed project; and vegetation management for natural dune restoration, wildfire, or snow avalanche. NCEM anticipates announcing the opening of the pre-disaster grant application process by June 2008. These grants require a 25% non-federal match and are only available to local governments with state-approved hazard mitigation plans.

Contact: Chris Crew, Hazard Mitigation Section Chief, 919-715-8000, ext. 277; E-mail:

JCrew@ncem.org

Flood Mitigation Assistance Program- Federal Emergency Management Act:

This program provides funding to assist states and communities in implementing measures to reduce or eliminate the long-term risk of flood damage to buildings, manufactured homes and other structures insurable under the National Flood Insurance Program (NFIP). It is administered by NCEM. FMA was created as part of the National Flood Insurance Reform Act of 1994 (42 U.S.C. 4101) with the goal of reducing or eliminating claims under the NFIP. FMA is a pre-disaster grant program. NCEM anticipates announcing the opening of the flood mitigation assistance grant application process by June 2008.

Link to completed project at Masonboro Marina

http://149.168.212.15./mitigation/case_masonboro.htm

Contact: Chris Crew, Hazard Mitigation Section Chief, 919-715-8000, ext. 277; E-mail:

JCrew@ncem.org

Water Resources Development Grants: www.ncwater.org/Financial_Assistance

This program is designed to provide cost-share grants and technical assistance to local governments throughout the State. Applications for grants are accepted for seven purposes: general navigation, recreational navigation, water management, stream restoration, beach protection, land acquisition and facility development for water-based recreation, and aquatic Weed control. There are two grant cycles per year and the application deadlines are January 1st and July 1st. Cost share amounts vary based on the type of project proposed for funding.

Contact: Jeff Bruton, Aquatic Ecologist, 919- 715-0387; E-mail: jeff.bruton@ncmail.net

University Centers and Resources

Elizabeth City State University

Department of Geological Environmental and Marine Sciences (GEMS) Remote Sensing Program's Center for Coastal Habitat Research

The Center for Coastal Habitat Research is one of many partners engaged in a submerged aquatic vegetation (SAV) habitat mapping project in Albemarle Sound. ECSU plans to disseminate project data and research results to the regulatory commissions (MFC, CRC, and EMC) and their state agencies, academia, local governments, the general public and NOAA through webpages, workshops, seminars and the scientific literature. Additional coastal habitat research at ECSU includes work to study environmental triggers and impacts to submerged aquatic vegetation in Albemarle and Currituck Sounds.

Contact: Elizabeth Noble 252-335-3595; E-mail: enoble@mail.ecsu.edu

East Carolina University

Center for Geographic Information Science: www.ecu.edu/giscenter

The Center for Geographic Information Science provides an organizational structure and a central facility for the purposes of enhancing research, instructional, and outreach activities that deal with creation and use of geographically referenced data. The Center will facilitate the acquisition, quantitative analysis, and visualization of geographically referenced datasets. The Center provides an important platform for effective transfer of geographic information, geographic methods of investigation, and geographic information technologies. Recent or current projects include use of GIS to analyze land use factors and coastal water quality, linking demographic patterns to landscape indicators of coastal development and evaluating coastal storm inundation and monitoring shoreline change.

Contacts: Tom Allen 252 328-6624 allenth@ecu.edu; Tom Crawford 252-328-6082 crawfordt@ecu.edu

Institute for Interdisciplinary Coastal Science and Policy (IICSP) <http://author.ecu.edu/cs-acad/rgs/IICSP.cfm>

Research in the Institute concentrates on four main areas and their interrelationships: (1) **coastal ecology** (2) **coastal geoscience** (3) **social science and coastal policy** and (4) **maritime studies** Research findings and policy recommendations are communicated to the public, and to organizations and agencies outside the university through faculty presentations, workshops, conferences and the support of a communications and an outreach specialist.

Contact: Steve Culver, Interim Director 252-328-6360; E-mail: culvers@ecu.edu

Center for Sustainable Tourism: www.ecu.edu/sustainabletourism/

The North Carolina Center for Sustainable Tourism emphasizes analyses of tourism's net impact on economic, natural, and social issues. Research at the Center utilizes the concepts of financial, environmental, and social accounting to quantify the impacts, ascertain potential

tradeoffs, and identify synergy among these dimensions of sustainable tourism. As planning horizons lengthen, protecting and enhancing the environment and socio-cultural objectives become more important in sustaining economic growth. Over time these three dimensions of sustainability, often referred to as the "Triple Bottom Line," reinforce each other by creating long-term approaches that simultaneously promote better jobs, higher profits, better natural environments, and stronger social/cultural dimensions.

Contact: Dr. Patrick Long, Director 252-328-4354; E-mail: sustainabletourism@ecu.edu

University of North Carolina

Coastal Studies Institute: <http://csi.northcarolina.edu/index.htm>

The UNC Coastal Studies Institute (UNC-CSI) is an inter-university research institute located in Manteo. UNC-CSI's research focuses on four main areas: Estuarine Ecology and Human Health, Estuarine and Coastal Processes, Coastal Sustainability and Maritime History. While the institute emphasizes northeastern North Carolina in its outreach and education programs, its research draws on the resources of the entire region and encompasses all of the mid-Atlantic and southeastern coast of the United States. Research and education programs focus on Estuarine Ecology and Human Health, including monitoring ocean stormwater outfalls; Estuarine and coastal processes and coastal sustainability, including the implementation of low impact development techniques.

Contact: Dr. Nancy White, Director 252-474-3663; E-mail: nmwhite@cis.northcarolina.edu

Institute of Marine Sciences (IMS): www.marine.unc.edu/IMS/

The Institute's mission is to serve the state and nation through the conduct of high quality basic and applied marine sciences research, the training of students and young scientists, and the provision of professional expertise and leadership in marine issues ranging from local to global scale. IMS faculty are actively involved in:

- addressing important scientific questions related to the nature, use, development, protection, and enhancement of marine resources,
- developing and applying technologically-advanced approaches to field, laboratory, and analytical problems,
- communicating research results and new technologies to professional and public audiences and,
- providing consultative assistance to facilitate the application of new knowledge to practical marine problems and marine policy.

IMS also serves as a field site for the Carolina Environmental Program, in which undergraduate students participate in laboratory and field-based courses and investigate environmental research questions focused on such diverse subjects as risk analysis, ecosystem health, water quality, fisheries management, public policy and decision making, biodiversity and environmental law.

Contact: Rich Luettich, Director 252-726-6841, ext. 137; E-mail: rick_luettich@unc.edu

Center for Marine Studies (CMS): www.uncw.edu/cmsr/index.htm

CMS is dedicated to providing an environment that fosters a multidisciplinary approach to questions in basic marine research. The mission of the center is to promote basic and applied

research in the fields of oceanography, coastal and wetland studies, marine biomedical and environmental physiology, and marine biotechnology and aquaculture. Previous/current CMS projects include identification of the effects of human impacts on bacteriological water quality in coastal watersheds, conduct of a comprehensive research, education and environmental enhancement program dedicated to seeking and implementing ways to improve the water quality of six tidal creeks in New Hanover County and a study of water quality, algal bloom formation, and nutrient limitation in the New River Estuary.

Contact: Daniel Baden, Director 910-962-23-1; E-mail: baden@uncw.edu

North Carolina State University

Center for Marine Sciences and Technology (CMAST): www.cmast.ncsu.edu

The principal mission of the Center for Marine Sciences and Technology (CMAST) is to discover innovative solutions to questions and problems in marine systems and provide effective communication of these discoveries. By promoting multidisciplinary studies among research scientists, educators and extension specialists from the participating NC State University colleges, enhancing interaction with other educational institutions and agencies concerned with marine sciences and coastal natural resources, CMAST provides a focal point for citizen contact with NC State University's marine science and extension faculty. CMAST established a Bacterial Source Tracking (BST) laboratory to conduct monitoring and identifying sources of bacterial loading into the estuarine environment. Goals of the BST laboratory work include:

- Implementing BST technology in NC as part of a watershed based approach to reduce bacterial loading into shellfish resource waters
- Review/recommend watershed management strategies
- Provide information to local coastal governments on best management practices

Contact: Lu Garrigan, Laboratory Manager 252-222-6366; E-mail:

lu_garrigan@ncsu.edu

North Carolina Cooperative Extension: www.ces.ncsu.edu

North Carolina Cooperative Extension gives our residents easy access to the resources and expertise of NC State University and NC A&T State University. Through educational programs, publications, and events, Cooperative Extension field faculty deliver unbiased, research-based information to North Carolina citizens. To help the public understand complex issues related to environmental quality and to meet changing environmental regulations, North Carolina Cooperative Extension offers a range of educational programs covering water quality, waste management, wildlife management, collaborative problem solving and more.

Contact: There are links to each County Extension Program on www.ces.ncsu.edu

Natural Resources Leadership Institute (NRLI):

www.ces.ncsu.edu/depts/agecon/nrli/index.htm

The Natural Resources Leadership Institute works to improve the management of natural resources in North Carolina and to enhance rural economic development while improving environmental quality. NRLI works toward this goal by: 1) Improving leadership in natural resource management and policy development; 2) Bringing people together in action-oriented forums to identify and resolve issues; 3) Providing training to government, industry and

nonprofit organizations in dispute resolution; 4) Expanding the capacity of public issue facilitation and mediation services in North Carolina and 5) Developing and publishing case studies on successful models for participatory decision making and collaborative efforts to assist researchers and other conflict resolution educators.

Contact: Steve Smutko, Director 919-515-4683; E-mail: Steve_Smutko@ncsu.edu

North Carolina Sea Grant: www.ncseagrant.org

North Carolina Sea Grant links university researchers to the people, businesses and governments that manage, use and enjoy coastal and marine resources. Sea Grant conducts research, engages in public education and outreach, and provides technical assistance in the areas of fisheries, coastal communities, coastal hazards, water quality, law and policy and seafood science and technology. Sea Grant's extension staff has a strong track record of bringing together university researchers, elected officials, government agencies, industry representatives and the general public to increase understanding and facilitate informed decisions regarding limited resources.

Contacts: Michael Voiland, Executive Director 919-515-2455; E-mail:

Michael_Voiland@ncsu.edu

Coastal Offices: Manteo: 252-475-3663; Morehead City: 252-222-6307 and Wilmington: 910-962-2490

Duke University

Nicholas School of the Environment and Earth Sciences: <http://www.nicholas.duke.edu>

The school has three research divisions: Marine Science and Conservation, Earth and Ocean Sciences and Environmental Sciences and Policy. Duke researchers and students focus on a range of issues including monitoring and assessing the post-hurricane health of the Neuse River and Pamlico Sound, applications of social science to environmental policy and management and ecosystem science and management.

Contact: Dr. Cindy Van Dover, Director, Duke Marine Laboratory 252-504-7655; E-mail: c.vandover@duke.edu;

Dr. Ram Oren, Chair, Environmental Sciences and Policy Division 919-613-8032; E-mail: ramoren@duke.edu

General Grant Writing Tips*

- Resist the temptation to change your project to fit a funding agency's requirements. Instead, seek out grant opportunities that match your goals and objectives. Remember that the goal of a grant is not simply to bring in more money, but also to fund programs that will meet the needs of your community. If you change your project only to fit the needs of the funding agency, you will be restricted in your activities and may end up with a project that barely resembles your original plan.
- Clearly indicate your plan of work including an introduction stating the background of the issue and what you are addressing; and explain the work you will do, how it will be accomplished, and results that you expect.
- The appearance of your proposal matters. Many grant instructions have specific requirements for spacing, fonts, and margins. Follow these instructions exactly. If the grant administrator does not provide specific instructions, use a font size no smaller than 11 point, leave at least one inch in the margin, and leave plenty of white space. Bold headings make proposals easier to read. Have several people proofread your proposal. Grammar and spelling errors show lack of concern by the applicant.
- Know the review criteria for the grant. If grantors do not include this information in the application, do not hesitate to ask. Ask for copies of past approved project proposals. Grantors many not provide them, but you may be able to get them directly from past successful participants.
- Attach a cover letter to your proposal unless the application specifically asks you to exclude it. Keep the letter short – no more than one page. Use it to introduce yourself, and explain why you are asking for the funding and how much you are asking for. Be sure to include your contact information.
- Have a reasonable and detailed budget. Do not include a category for miscellaneous funds. If possible, use bids and estimates for work even if they are not final. Do not pad your budget; reviewers typically know the costs associated with projects and will recognize this. Remember to include all sources of support, including donated equipment and services.
- If you receive funding, stay in contact with the funding agency. Send a thank you note. Send updates on the project and inform them of major accomplishments.
- Develop evaluation criteria for the project. Funding organizations want to know not only if the project you are proposing will be successful, but also how successful you have been with other projects. Evaluation criteria make this evaluation possible.
- If the funding organization rejects your application, ask for the reviewer's comments. Use the tips to improve your future grant applications. It's also a good idea to send a thank-you note if you do not get the funding. It may help your next application.

*Modified from "Making It Happen: A North Carolina Coastal Community Development Resource Guide" by Lindsay Fullenkamp, NC Sea Grant; Publication Number: UNC-SG-04-11