



North Carolina Department of Environment and Natural Resources  
Division of Soil & Water Conservation

Beverly Eaves Perdue  
Governor

Patricia K. Harris  
Director

Dee Freeman  
Secretary

TO: Senator Robert Atwater  
Senator Daniel Clodfelter  
Representative Lucy Allen  
Representative Pryor Gibson  
Chairs, Environmental Review Commission

FROM: Patricia K. Harris  
Director, Division of Soil and Water Conservation

DATE: Wednesday, January 27, 2010

RE: Annual Report on the Community Conservation Assistance Program

General Statute 143-215.74M(e), Section 1(e) of S.L. 2006-78, requires the Soil and Water Conservation Commission to submit annual reports on the Community Conservation Assistance Program no later than January 31 of each year beginning January 31, 2008, to the Environmental Review Commission and the Fiscal Research Division.

If you have any questions regarding this report, please contact Julie Henshaw, with the N.C. Division of Soil and Water Conservation, at (919) 715-9630.

Attachment

cc: Chief Deputy Secretary Manly Wilder  
Soil and Water Conservation Commission  
Elizabeth Biser  
Jeff Hudson

**Report to the Environmental Review Commission  
and Fiscal Research Division of the N.C. General Assembly  
on the Community Conservation Assistance Program**



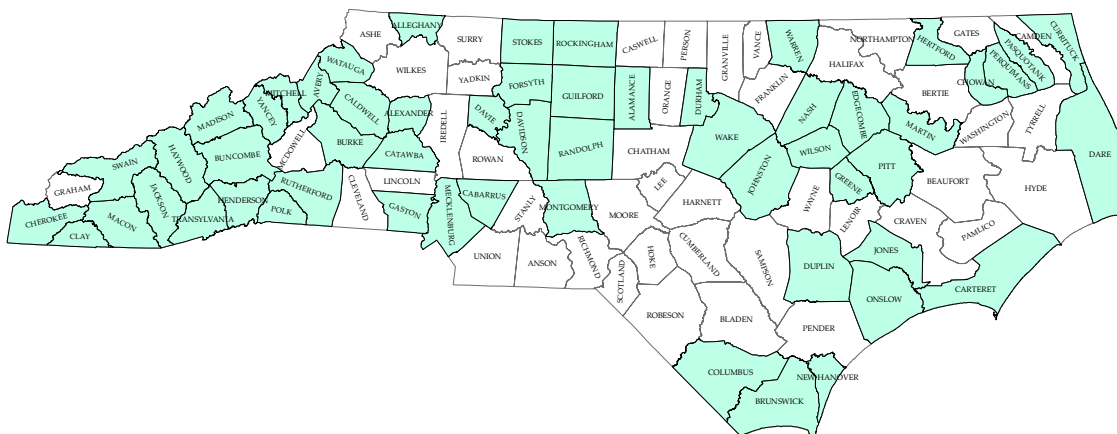
**FISCAL YEAR 2009 ANNUAL REPORT  
January 2010**

In accordance with General Statute 143-215.74M(e), of S.L. 2006-78, the purpose of the Community Conservation Assistance Program (herein referred to as CCAP) is to reduce the delivery of nonpoint source (NPS) pollution into the waters of the State by installing best management practices (BMPs) on urban, suburban and rural lands. Through this voluntary, incentive-based conservation program, landowners are provided educational, technical and financial assistance.

Local Soil and Water Conservation Districts (districts) provide landowner assistance, and the Division of Soil and Water Conservation (Division) and the Soil and Water Conservation Commission administer the program. CCAP BMPs include: backyard rain gardens, cisterns, permeable pavement, riparian buffers, stormwater wetlands. Eligible landowners, including homeowners, businesses, schools, parks, churches, and others, may be reimbursed up to 75 percent of the cost of retrofitting these BMPs.

During Fiscal Year (FY) 2009 the Division of Soil and Water Conservation received recurring appropriated funds for CCAP in the amount of \$200,000. These funds support a full-time permanent employee to coordinate the program and funds for program implementation. The CCAP coordinator has worked with the Division since February 25, 2008. The Soil and Water Conservation Commission allocated \$175,090 to interested districts at the July 16, 2008 meeting based on the parameters outlined in 15A NCAC 06I .0103(9). The districts that received an allocation of CCAP state funds in FY2009 are displayed in Figure 1 below.

Figure 1: Soil and Water Conservation Districts with CCAP State Funds in FY2009



In addition to the State appropriation, the Commission distributed over \$988,000 in unencumbered BMP implementation funds to 61 districts in July 2008. These funds were obtained through three grants, two from the Clean Water Management Trust Fund and one from the Clean Water Act Section 319 Program. These funds, in combination with the recurring state appropriation, allowed this program to address water quality concerns and reach citizens across the state.

Ongoing program development is successful, and BMPs are steadily being implemented throughout the state.

Program highlights and accomplishments in FY2009 include the following:

- The CCAP Advisory Committee met quarterly during FY2009 to provide technical review of the program.
- North Carolina State University provided technical training for district staff at the District Employees Workshop in August 2008. To date, over 157 district employees have completed the CCAP design training.
- 139 project contracts were submitted to encumber \$531,767 and \$255,176 was expended on completed projects using both state appropriations and grant funds. BMPs installed include abandoned well closures, backyard rain gardens, bioretention areas, cisterns, critical area plantings, pet waste receptacles, riparian buffers, and streambank protection. Pictures of selected BMPs are included in Appendix B. CCAP contracts encumbered using state funds are listed by county and contract in Appendix C.
- The job approval authority process was implemented to ensure district employees are certified to design and approve installation of CCAP BMPs. To date, 34 district employees have CCAP job approval authority for select conservation practices.

The N.C. Community Conservation Assistance Program is securing a future for Soil and Water Conservation Districts as North Carolina's landscape, community and pollutant sources change. Demand for the program from districts across the state continues to exceed the current funding. Since this is a relatively new program, additional materials regarding the Community Conservation Assistance Program are included in appendices. Appendix A is the detailed implementation plan for CCAP that includes information regarding the 15 eligible conservation practices. Appendix B includes pictures of some of the CCAP practices installed in FY2009, and Appendix C contains a summary of all state funded CCAP contracts in FY2009.

## **Appendix A: Community Conservation Assistance Program Detailed Implementation Plan: Program Year 2009**

All practices defined below are to be maintained by the landowner of a single-family residence for a five-year period; all other types of properties are to be maintained by the landowner for a 10-year period.

### **Definition of Practices**

- (1) Abandoned well closure is the sealing and permanent closure of a supply well no longer in use. This practice serves to prevent entry of contaminated surface water, animals, debris or other foreign substances into the well. It also serves to eliminate the physical hazards of an open hole to people, animals and machinery.
- (2) Bioretention area is the use of plants and soils for removal of pollutants from stormwater runoff. Bioretention can also be effective in reducing peak runoff rates, runoff volumes and recharging groundwater by infiltrating runoff. Bioretention areas are intended to treat impervious surface areas of greater than 2500 ft<sup>2</sup>.
- (3) A backyard rain garden is a shallow depression in the ground that captures runoff from a driveway, roof, or lawn and allows it to soak into the ground, rather than running across roads, capturing pollutants and delivering them to a stream. Backyard rain gardens are intended to treat impervious surface areas of less than 2500 ft<sup>2</sup>.
- (4) Stormwater wetland means a constructed system that mimics the functions of natural wetlands and is designed to mitigate the impacts of stormwater quality and quantity. Stormwater wetlands are intended to treat impervious surface areas of greater than 2500 ft<sup>2</sup>.
- (5) Backyard wetlands are constructed systems that mimic the functions of natural wetlands. They can temporarily store, filter and clean runoff from driveways, roofs and lawns, and thereby improve water quality. The wetland should be expected to retain water or remain saturated for two to three weeks. Backyard wetlands are intended to treat impervious surface areas of less than 2500 ft<sup>2</sup>.
- (6) A cistern is a system of collection and diversion practices to prevent storm water from flowing across impervious areas, collecting sediment and reaching the storm drains. Benefits may include the reduction of storm water runoff thereby reducing the opportunity for pollution to enter the storm drainage system.
- (7) A critical area planting means an area of highly erodible land, which cannot be stabilized by ordinary conservation treatment on which permanent perennial vegetative cover is established and protected to improve water quality. Benefits may include reduced soil erosion and sedimentation and improved surface water quality.
- (8) A diversion means a channel constructed across a slope with a supporting ridge on the lower side to control drainage by diverting excess water from an area to improve water quality.
- (9) A grassed swale consists of a natural or constructed channel that is shaped or graded to required dimensions and established in suitable vegetation for the stable conveyance of runoff to improve water quality. Benefits may include reduced soil erosion, and

sedimentation and improve the quality of surface water pollution from dissolved and sediment-attached substances.

- (10) Impervious surface conversion means the removal of impenetrable materials such as asphalt, concrete, brick and stone. These materials seal surfaces, repel water and prevent precipitation from infiltrating soils. Removal of these impervious materials, when combined with permeable pavement or vegetation establishment, is intended to reduce stormwater runoff rate and volume, as well as associated pollutants transported from the site by stormwater runoff.
- (11) Permeable pavement means materials that are designed to allow water to flow through them and thus reduce the imperviousness of traffic surfaces, such as patios, walkways, sidewalks, driveways and parking areas.
- (12) A pet waste receptacle means a receptacle designed to encourage pet owners to pick up after animals in parks, neighborhoods and apartment complexes so as to prevent waste from being transported off-site by stormwater runoff.
- (13) A riparian buffer means an area adjacent to a stream where a permanent, long-lived vegetative cover (sod, shrubs, trees or a combination of vegetation types) is established to improve water quality. Benefits may include reduced soil erosion, sedimentation, pathogen contamination and pollution from dissolved, particulate and sediment-attached substances.
- (14) A stream restoration system means the use of bioengineering practices, native material revetments, channel stability structures and/or the restoration or management of riparian corridors to protect upland BMPs, restore the natural function of the stream corridor and improve water quality by reducing sedimentation to streams from streambanks.
- (15) Streambank and shoreline protection means the use of vegetation to stabilize and protect banks of streams, lakes, estuaries or excavated channels against scour and erosion.

**Appendix B: Selected Pictures of CCAP Funded Projects during PY2009**



Stormwater wetland, New Hanover County



Rain garden, Dare County



Cisterns, Wake County



Rain garden, Durham County



Cistern, Catawba County



Rain garden, Gaston County

## Appendix C:

**CCAP FY2009 Contracts  
Funded by State Appropriations**

<b>County</b>	<b>Contract Number</b>	<b>Best Management Practices</b>	<b>Contract Amount</b>
Yancey	00-2009-501	cistern	\$2,180
Alamance	01-2009-501	abandoned well closure	\$304
Alamance	01-2009-502	abandoned well closure	\$1,000
Alamance	01-2009-503	abandoned well closure	\$1,000
Brunswick	10-2009-501	pet waste receptacles	\$570
Brunswick	10-2009-502	cistern and bioretention area	\$3,387
Buncombe	11-2009-501	cistern	\$525
Buncombe	11-2009-504	critical area planting	\$451
Buncombe	11-2009-505	stormwater wetland	\$3,225
Burke	12-2009-521	cistern	\$849
Burke	12-2009-522	cistern	\$1,983
Caldwell	14-2009-512	cistern	\$3,955
Caldwell	14-2009-513	cistern	\$813
Carteret	16-2009-501	cistern	\$4,079
Catawba	18-2009-503	cistern	\$2,239
Catawba	18-2009-504	cistern	\$2,047
Clay	22-2009-501	stormwater wetland	\$2,533
Currituck	27-2009-501	backyard wetland	\$1,693
Dare	28-2009-501	backyard rain garden	\$744
Davidson	29-2009-501	abandoned well closure	\$900
Davidson	29-2009-502	abandoned well closure	\$1,050
Davidson	29-2009-503	abandoned well closure	\$1,050
Davie	30-2009-501	bioretention area	\$3,105
Durham	32-2009-501	cistern	\$1,728
Durham	32-2009-502	cistern	\$2,385
Durham	32-2009-503	cistern	\$1,038
Forsyth	34-2009-501	backyard rain garden, cistern	\$1,698
Forsyth	34-2009-502	cistern	\$1,289
Forsyth	34-2009-503	impervious surface conversion, critical area planting	\$1,043
Guilford	41-2009-510	abandoned well closure	\$600
Guilford	41-2009-511	riparian buffer	\$3,710
Hertford	46-2009-501	backyard rain garden	\$1,500
Johnston	51-2009-501	streambank protection	\$3,397
Jones	52-2009-501	impervious surface conversion, pervious pavement	\$1,500
Macon	56-2009-501	bioretention area, stormwater wetland	\$2,910
Madison	57-2009-502	cistern	\$2,070
Mecklenburg	60-2009-506	impervious surface conversion	\$4,103
Mitchell	61-2009-501	cistern	\$774
Mitchell	61-2009-502	cistern	\$1,308
Nash	64-2009-501	stream restoration	\$4,152
New Hanover	65-2009-508	bioretention area	\$2,517
New Hanover	65-2009-509	stormwater wetland	\$2,378
Pasquotank	70-2009-501	stormwater wetland	\$1,965
Pitt	74-2009-502	abandoned well closure	\$1,534
Pitt	74-2009-503	abandoned well closure	\$964
Pitt	74-2009-504	cistern	\$925
Pitt	74-2009-505	grassed swale	\$23
Polk	75-2009-501	cistern	\$1,586
Randolph	76-2009-501	abandoned well closure	\$3,250
Rockingham	79-2009-507	cistern	\$2,360
Rutherford	81-2009-501	cistern	\$1,778

Appendix C:

CCAP FY2009 Contracts  
Funded by State Appropriations

County	Contract Number	Best Management Practices	Contract Amount
Stokes	85-2009-501	bioretention area	\$3,154
Transylvania	88-2009-501	backyard rain garden, cistern, critical area planting	\$1,000
Wake	92-2009-502	cistern	\$4,883
Watauga	95-2009-501	riparian buffer	\$1,021
Wilson	98-2009-502	grassed swale	\$576
<b>Total</b>			<b>\$104,801</b>