



Steve Troxler  
Commissioner

North Carolina Department of Agriculture  
and Consumer Services  
*Division of Soil and Water Conservation*

Patricia K. Harris  
Director

**COMMUNITY CONSERVATION ASSISTANCE PROGRAM ADVISORY COMMITTEE MEETING:  
MEETING MINUTES JUNE 21, 2012**

- I. Welcome and introductions
- II. Review and approval of March 9, 2012 minutes  
Minutes approved by consensus.
- III. NC Association of Soil and Water Conservation update  
Bill Hart, representing the president of the NCASWCD presented an update of Association activities.
  - The association hosted a legislative breakfast in the Legislative Building on June 14, 2012. Twenty five members of the General Assembly attended a briefing of the association's legislative program given by Charles Davenport, Chair of the Legislative Committee.
  - The Community Conservation Committee of the association will be meeting in Winston-Salem on July 26, 2012.
  - The National Association of Conservation Districts (NACD) is asking districts to support the national Farm Bill. Primary interest is in Title II of the bill where the conservation programs are authorized, but there is growing interest in separating the two titles because Title I authorizes programs such as crop support and food stamps that do not directly affect district programs. And there is a need to expand Title II to include authorization for a federal agency to engage in urban conservation programs.
  - The association is beginning the process of encouraging the DWQ recognition of low impact development techniques to manage stormwater flows. It was the policy of the association request a continuing appropriation of \$2 million for CCAP.
- IV. Registered Landscape Architects and job approval authority  
The committee discussed the issue of job approval authority (JAA) that can be granted to Registered Landscape Architects (RLAs). A letter from DWQ was reviewed regarding RLAs approval for designing bioretention areas. However, there is still some discussion with the North Carolina Board of Examiners for Engineers and Surveyors regarding design approval for piping size, etc.

At this time, the committee recommends the following policy for Soil and Water Conservation Commission approval. It grants the same JAA for RLAs for backyard BMPs that district employees can obtain.

MAILING ADDRESS  
Division of Soil and Water Conservation  
1614 Mail Service Center  
Raleigh, NC 27699-1614

Telephone: 919-733-2302  
Fax Number: 919-733-3559

**An Equal Opportunity Employer**

LOCATION  
Archdale Building  
512 N. Salisbury Street, Suite 504  
Raleigh, NC 27604

A NC licensed landscape architect is allowed to sign as Job Approval Authority for the following CCAP practices: backyard rain gardens (treats impervious areas < 2500 sq. ft.), backyard wetlands (treats impervious areas < 2500 sq. ft.) and cisterns (< 3,000 gal).

The committee will continue to follow this issue.

- V. Draft PY2013 average cost list  
The draft PY2013 average cost list was reviewed and changes were approved by the committee. Please refer to attachment A for more detailed information regarding the changes.
- VI. Critical area BMP operation and maintenance agreement  
The draft critical area BMP operation and maintenance agreement was reviewed by the committee. Revisions were made and the revised draft was approved for program use. Please refer to attachment B to view the agreement.
- VII. Design manual
  - a. Review committee
  - b. Backyard rain gardens
  - c. Backyard wetlands
  - d. Cisterns
- VIII. Detailed implementation plan  
The draft PY2013 detailed implementation plan was reviewed and approved by the committee. Please refer to attachment C to view the detailed implementation plan.
- IX. NC Forest Service Urban Forestry Grant Program  
Alan Moore presented information about the NC Forest Service Urban Forestry Grant Program. Please refer to attachment D to view a copy of the presentation.
- X. Set future meeting dates  
A doodle poll for will be distributed to the committee.

Best Management Practice	Components	Unit Type	All Areas Unit Cost	Cost Type	Share Rate	Cost Share Cap *	Notes
<b>Abandoned well closure</b>		Each		Actual Cost	75%	\$ 1,500	
<b>Backyard rain garden</b>							
	Excavation (including mobilization)	CuYd	\$ 67.50	Average Cost	75%	\$ 1,000	used to be \$2.50 per sqft
	Bioretention soil amendment	CuYd	\$ 28.00	Average Cost	75%		
	Triple shredded hardwood mulch	CuYd	\$ 25.00	Average Cost	75%		
	Bioretention plants (installed)	SqFt	\$ 1.50	Average Cost	75%		
	Brick - 8"	Each	\$ 0.51	Average Cost	75%		
	Concrete block - 6" or 8"	Each	\$ 1.90	Average Cost	75%		
	Concrete block - 12"	Each	\$ 2.30	Average Cost	75%		
	Catch basin	Job		Actual Cost	75%	\$ 1,000	
	Sod (Bermuda, Centipede, Fescue)	SqFt	\$ 0.25	Average Cost	75%	\$ 25	Inlet & outlet only
	Sod (Zoysia)	SqFt	\$ 0.37	Average Cost	75%	\$ 25	Inlet & outlet only
	Matting - temporary rolled erosion control product, installed	SqYd	\$ 0.95	Average Cost	75%		Includes pins & installation
	Turf reinforced matting	SqYd	\$ 5.50	Average Cost	75%		Includes pins & installation
	Vegetation (grass) - minimum	Job	\$ 15.00	Average Cost	75%		only necessary if adjacent areas are disturbed during installation
<b>Backyard wetland</b>							
	Excavation (including mobilization)	CuYd	\$ 67.50	Average Cost	75%	\$ 1,000	used to be \$2.50 per sqft
	Wetland plants (installed)	SqFt	\$ 2.30	Average Cost	75%		
	Wetland outlet structure	Each	\$ 50.00	Average Cost	75%		
<b>Cisterns</b>							
	Cistern 250-3,000 gallons installed	Gallon	\$ 1.00	Average Cost	75%		
	Cistern above 3,000 gallons installed	Gallon		Actual Cost	75%		
	Accessories package	Each		Actual Cost	75%	\$ 700	
	Cistern gravel foundation	CuYd	\$ 37.80	Average Cost	75%		
	Concrete pad for cistern	CuYd	\$ 123.00	Average Cost	75%		
	Shipping charge	Each		Actual Cost	75%	\$ 500	
<b>Critical area planting</b>							
	Grading - minimum	Job	\$ 25.00	Average Cost	75%		
	Grading - light, 1" - 3" avg	SqFt	\$ 0.04	Average Cost	75%		
	Grading - medium, 3" - 6" avg	SqFt	\$ 0.05	Average Cost	75%		
	Grading - heavy, 6" - 9" avg	SqFt	\$ 0.06	Average Cost	75%		
	Grading - extra heavy, 9" - 12" avg	SqFt	\$ 0.07	Average Cost	75%		
	Grading - max heavy, more than 12" avg	SqFt	\$ 0.08	Average Cost	75%		
	Vegetation (grass) - minimum	Job	\$ 15.00	Average Cost	75%		
	Vegetation (grass, native grasses, wildflowers)	SqFt	\$ 0.03	Average Cost	75%		
	Vegetation (trees/shrubs)	SqFt		Actual Cost	75%		
	Vegetation - mulch, netting	SqFt	\$ 0.07	Average Cost	75%		used to be actual cost/ sqft
	Vegetation - mulch, small grain straw	SqFt	\$ 0.02	Average Cost	75%		
	Compost blanket	SqFt	\$0.20	Average Cost	75%		Includes mulch & seed
	Compost sock	LFt	\$3.00	Average Cost	75%		Includes mulch & seed
	Bioretention soil amendment	CuYd	\$ 28.00	Average Cost	75%		
	Triple shredded hardwood mulch	CuYd	\$ 25.00	Average Cost	75%		
	Sod (Bermuda, Centipede, Fescue)	SqFt	\$ 0.25	Average Cost	75%	\$ 250	new component for this practice
	Sod (Zoysia)	SqFt	\$ 0.37	Average Cost	75%	\$ 250	new component for this practice

Best Management Practice	Components	Unit Type	All Areas Unit Cost	Cost Type	Share Rate	Cost Share Cap *	Notes
	Hydroseeding	SqFt	\$0.12	Average Cost	75%		
	Matting - excelsior, installed	SqYd	\$ 0.95	Average Cost	75%		
<b>Diversions</b>		Feet					
	Excavation (including mobilization)	SqFt		Actual Cost	75%	\$2.50/SqFt	
	Vegetation (grass)	SqFt	\$ 0.03	Average Cost	75%		
	Filter cloth-geotextile fabric	SqYd	\$ 2.25	Average Cost	75%		Includes pins & installation
	Vegetation - mulch, netting	SqFt	\$ 0.07	Average Cost	75%		used to be actual cost/ sqft
	Vegetation - mulch, small grain straw	SqFt	\$ 0.02	Average Cost	75%		
	Matting - excelsior, installed	SqYd	\$ 0.95	Average Cost	75%		Includes pins & installation
	Sod (Bermuda, Centipede, Fescue)	SqFt	\$ 0.25	Average Cost	75%		
	Sod (Zoysia)	SqFt	\$ 0.37	Average Cost	75%		
	Turf Reinforced Matting	SqYd	\$ 5.50	Average Cost	75%		Includes pins & installation
	Temporary liners	SqYd		Actual Cost	75%	\$5.50/SqYd	Includes pins & installation
	Rip rap (based on PE design)	Ton	\$ 24.00	Average Cost	75%		includes Class A,B,1,2
	Pipe (based on PE design)			refer to ACSP PY13 cost list			
<b>Grassed Swale</b>		SqFt					
	Excavation (including mobilization)	SqFt		Actual Cost	75%	\$2.50/SqFt	
	Vegetation (grass)	SqFt	\$ 0.03	Average Cost	75%		
	Filter cloth-geotextile fabric	SqYd	\$ 2.25	Average Cost	75%		Includes pins & installation
	Vegetation - mulch, netting	SqFt	\$ 0.07	Average Cost	75%		used to be actual cost/ sqft
	Vegetation - mulch, small grain straw	SqFt	\$ 0.02	Average Cost	75%		
	Matting - excelsior, installed	SqYd	\$ 0.95	Average Cost	75%		Includes pins & installation
	Sod (Bermuda, Centipede, Fescue)	SqFt	\$ 0.25	Average Cost	75%		
	Sod (Zoysia)	SqFt	\$ 0.37	Average Cost	75%		
	Turf Reinforced Matting	SqYd	\$ 5.50	Average Cost	75%		Includes pins & installation
	Temporary Liners	SqYd		Actual Cost	75%	\$5.50/SqYd	Includes pins & installation
	Rip rap (based on PE design)	Ton	\$ 24.00	Average Cost	75%		includes Class A,B,1,2
	Pipe (based on PE design)			refer to ACSP PY13 cost list			
	Earth fill - hauled	CuYd		Actual Cost	75%	\$9/CuYd	
<b>Impervious surface conversion</b>	conversion to trees	SqFt	\$ 6.00	Average Cost	75%		
	conversion to grass	SqFt	\$ 4.00	Average Cost	75%		
<b>Permeable pavement</b>		SqFt	\$ 12.00	Average Cost	75%		increase in cost based on receipts
<b>Pet waste receptacle</b>		Each					
	Receptacle (installed)	Each		Actual Cost	75%	\$ 400	
	Receptacle (retrofit of existing trash can)	Each		Actual Cost	75%	\$ 100	
	Plastic bags (per receptacle at time of original contracts)			Actual Cost	75%	\$ 75	
<b>Riparian buffer</b>		SqFt		Actual Cost	75%		

Best Management Practice	Components	Unit Type	All Areas Unit Cost	Cost Type	Share Rate	Cost Share Cap *	Notes
Stream restoration		Feet		Actual Cost	75%		
Streambank and shoreline protection		Feet		Actual Cost	75%		
Bioretention areas		SqFt		Actual Cost	75%		
Stormwater wetlands		SqFt		Actual Cost	75%		
Marsh sills		Feet		Actual Cost	75%	\$ 5,000	
Structural Stormwater Conveyance		Each		Actual Cost	75%	\$ 4,000	

The cost share cap listed above is the maximum amount of cost share reimbursement allowed.



## CRITICAL AREA PLANTING OPERATION AND MAINTENANCE PLAN

All critical area plantings must be maintained and functioning for 10 years (5 years for single-family homes). At a minimum the following operation and maintenance items must be followed:

Critical area planting maintenance activities	Frequency
Checking new seedings and plantings	Every four days during establishment
Watering <i>*Use water conservation measures and rainwater reuse where available.</i>	As necessary <i>* very important during establishment</i>
Vegetation survival	
More than 80% survival	No action necessary
50-80% survival	Apply additional seed during next appropriate planting window
Less than 50% survival	Reseed using original planting plan
Controlling weeds	As necessary, using mechanical removal where feasible
Mowing	As necessary, must maintain a minimum height of 4 inches.
Applying lime and fertilizer	At establishment only. Apply at recommended rates of a soil test.

Any critical area plantings found not performing its intended function may result in the applicant having to repay a prorated amount of the cost share funds received to install the practice.

\_\_\_\_\_  
Applicant Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Landowner Signature

\_\_\_\_\_  
Date

**COMMUNITY CONSERVATION ASSISTANCE PROGRAM  
DETAILED IMPLEMENTATION PLAN  
PY2013**

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 stormwater from flowing across impervious areas, collecting sediment and reaching the storm drains. Benefits may include the reduction of stormwater 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.
- (16) Marsh sills protect estuarine shorelines from erosion, combining engineered structures with natural vegetation to maintain, restore, or enhance the shoreline's natural habitats. A sill is a coast-parallel, long or short structure built with the objective of reducing the wave action on the shoreline by forcing wave breaking over the sill. Sills are used to provide protection for existing coastal marshes, or to retain sandy fill between the sill and the eroding shoreline, to establish suitable elevations for the restoration or establishment of coastal marsh and/or riparian vegetation.
- (17) A structural stormwater conveyance includes various techniques to divert runoff from paved surfaces where a vegetated diversion is not feasible. The purpose is to direct stormwater runoff (sheet flow or concentrated) away from a direct discharge point and divert it to an approved BMP or naturally vegetated area capable of removing nutrients through detention, filtration, or infiltration.



## North Carolina Urban & Community Forestry Grant Program

Presented to Community Conservation Assistance Program Advisory Committee  
June 21, 2012



## Program History

- Authorized by 1990 Farm Bill and renewed in 2008
- Funded by USDA Forest Service and administered by the NC Forest Service




## Who Are Our Partners?

• USDA Forest Service	• Tree Boards
• Cities and Counties	• Nonprofits & Volunteers
• NC Urban Forest Council	• Arborists
• NC Cooperative Extension	• Planners
• NCSU	• Schools
• RC&D	• Land Trusts
• COG	• Developers
• Keep America Beautiful	• Landscape Architects

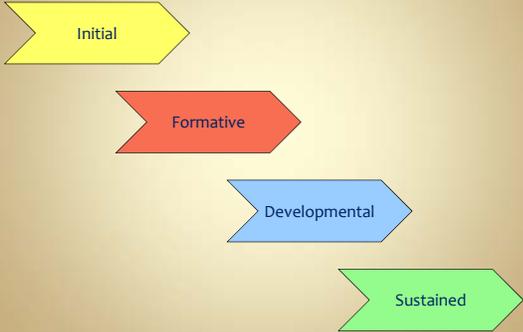
## NC Forest Resources Assessment Goal and Objectives

Goal #7: Enhance the benefits and sustainable management of urban forests.

Objectives:

1. Reduce the impacts of land-use change and urbanization on forested landscapes in and around urban areas
2. Facilitate strategic planting and maintenance of community trees for public benefits
3. Assist communities with establishing and managing their urban forests
4. Encourage policies and guidelines that sustain urban and community forests for the public's benefit

## Where are you in the process?



## Applying for an Urban & Community Forestry Program Grant




## Eligibility

- Local Governments
  - Counties
  - Cities
  - Towns
- Non-profit organizations/Community Groups
- Educational Institutions
- Other Governmental Agencies (e.g. Coop Extension)

## Financial Matters

- Grant amounts: **\$1,000 - \$ 15,000**
- Match requirements: **1:1** – must be matched dollar for dollar
  - Cash Purchases
  - In-Kind Contributions
- Cannot use Federal Funds as Match



## Timetable

- January 1 – March 31 – Application period
- April through June – Review Process
- Early July – Recipient Notification
- September 1 – August 31 – Contract period



## Project Categories

1. Urban & Community Forestry Program Development
2. Urban & Community Forestry Program Improvement
3. Non-Profit Development
4. Tree Planting Projects
5. Information, Education, and Training
6. Demonstration and Site Specific Projects

## Eligible Grant Ideas

[http://ncforestservice.gov/Urban/urban\\_eligibleprojects.htm](http://ncforestservice.gov/Urban/urban_eligibleprojects.htm)



## RFP & Application Forms

[http://ncforestservice.gov/Urban/urban\\_grant\\_applying.htm](http://ncforestservice.gov/Urban/urban_grant_applying.htm)



## Current Grants (2011 – 2012)

- 8 grants
  - 4 UF Program Improvement
    - Elizabeth City, Greenville, Alamance Community College, Kinston
  - 3 Information and Education
    - Kernersville, Triangle J COG, Chatham County
  - 1 Non-profit Program Development
    - Trees Across Raleigh
- \$77, 313 awarded



## Upcoming Grants (2012 – 2013)

- 15 Applications
- \$152,972 requested
- Will award 7 grants
  - ~ \$80,000
  - 4 Program Improvement
  - 2 Information and Education
  - 1 Non-Profit Program Development



## Community Firewise & Urban Interface Grant Program

[http://ncforestservation.gov/ui\\_firewise\\_grant/ui\\_firewise\\_grant.htm](http://ncforestservation.gov/ui_firewise_grant/ui_firewise_grant.htm)



## NCFS Urban Forestry Regions



### North Carolina Forest Service

1616 Mail Service Center  
Raleigh, NC 27699-1616

<http://ncforestservation.gov/index.htm>

- Nancy Stairs – (919) 857-4842; [nancy\\_stairs@ncagr.gov](mailto:nancy_stairs@ncagr.gov)  
 Alan Moore – (919) 857-4841; [alan.moore@ncagr.gov](mailto:alan.moore@ncagr.gov)  
 Eric Muecke – (828) 438-3795; [eric.muecke@ncagr.gov](mailto:eric.muecke@ncagr.gov)  
 Jennifer Rall – (919) 857-4849; [jennifer.rall@ncagr.gov](mailto:jennifer.rall@ncagr.gov)

