SECTION V

GUIDELINES FOR COST SHARED BEST MANAGEMENT PRACTICES

TABLE OF CONTENTS

Impervious Surface Conversion

Definition/Purpose

Impervious surfaces are covered by 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.

Policies

1. Practice must be combined with vegetation establishment or permeable pavement installation.

2. When vegetation is to be established on site, practice should be initiated as closely as possible to the optimum time for vegetation establishment.

3. Temporary conservation cover must be established within 14 calendar days if permanent vegetation cannot be established.

4. Vegetation establishment must include proper soil preparation. Deep tillage using a chisel plow, ripper or subsoiler may be required to address soil compaction. Addition and incorporation of topsoil or organic matter may be necessary for proper seedbed establishment.

5. A Sedimentation Erosion Control Permit may be required.

6. Removal of impervious surfaces adjacent to waterways should be given funding priority.

<u>Specifications</u>

N.C. NRCS Technical Guide, Section IV, Specifications #612 (Tree and Shrub Establishment), #342 (Critical Area Treatment)

Permeable Pavement

Definition/Purpose

Permeable pavement is an alternative to conventional concrete and asphalt paving materials that allows rapid infiltration of stormwater. Stormwater infiltrates into a porous paving material that provides temporary storage until the water infiltrates into underlying permeable soils or through an underground drain system. This practice is intended to reduce stormwater runoff rate and volume, as well as associated pollutants transported from the site by stormwater runoff.

Policies

1. Practice must be combined with impervious surface removal. Surface area of permeable pavement to be cost-shared shall not exceed the portion of impervious surface removed.

2. The soils beneath the permeable pavement must have sufficient infiltration capacity for the permeable pavement to drain.

3. The site must be located in the Sand Hills or Coastal Plains physiographic regions, including all barrier islands (refer to the map on following page). An exception to this requirement can be made on a case-by-case basis for sites in other areas of the state if soil within a one-mile radius of the site is classified as coarser than loamy very fine sand for the top three feet as defined by the USDA-NRCS.

4. Practice should be sited away from construction or other activities that can produce sediment-laden runoff. Soil clogs permeable pavement, making it ineffective.

5. Practice must be installed and maintained in accordance with manufacturer's specifications.

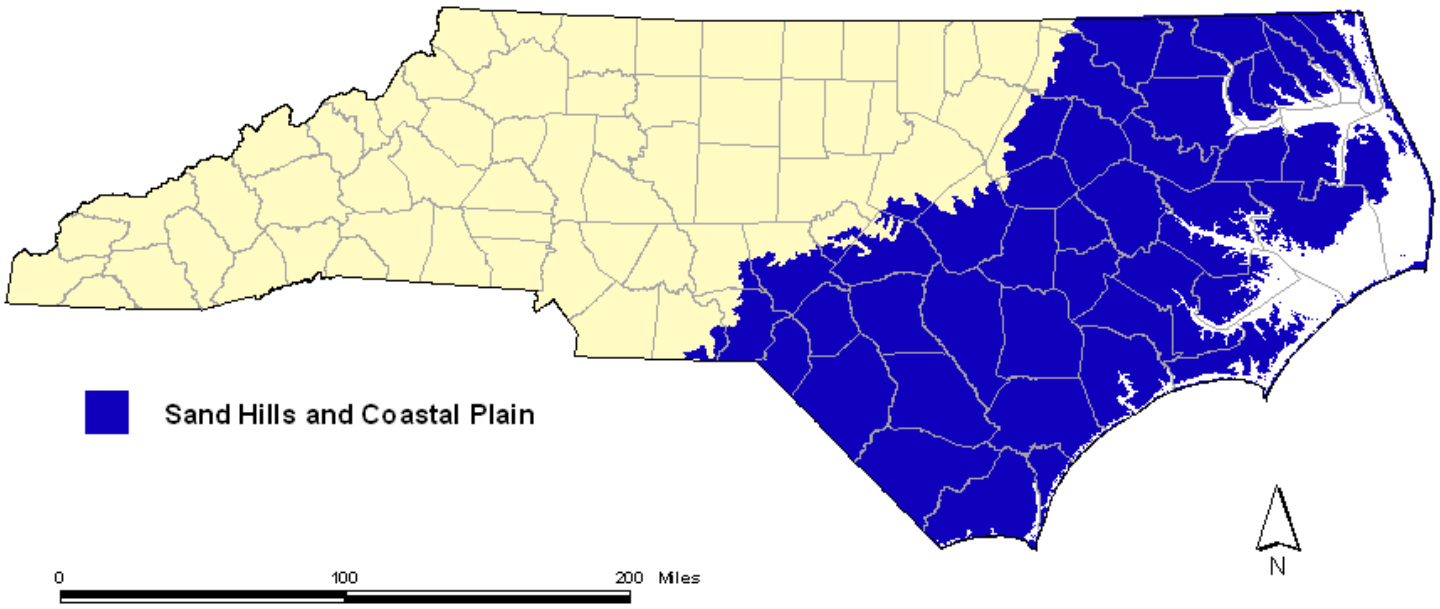
6. An operation and maintenance plan for the site must be developed and implemented.

<u>Specifications</u>

NCDENR. 2005. *Updated Draft Manual of Stormwater Best Management Practices*: *3.10 Permeable Pavement*. Raleigh, NC. Department of Environment and Natural Resources-Division of Water Quality

The Sand Hills and Coastal Plain physiographic regions of North Carolina.

Source: N.C. DWQ Stormwater Best Management Practices (BMP) Design Manual, 2006



Grassed Swale

Definition/Purpose

A *grassed swale* is 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, sedimentation and pollution from dissolved and sediment-attached substances.

Policies

1. This is a sediment control practice and must not be used if the primary purpose is to drain wet areas.

2. As a condition for cost sharing, the contributing watershed draining into the waterway must have installed, or the cooperator must agree to install as part of the agreement, erosion control measures necessary to prevent damage from washout or excessive sedimentation in the waterway.

3. Land smoothing for grassed waterways is intended for use only where existing terraces, diversions or other minor landscape features must be removed prior to initiating a grassed waterway system.

4. All NRCS standards and N.C. Community Conservation Assistance Program policies relative to vegetation must be followed.

5. BMP soil, nitrogen and phosphorus impacts are required on the contract.

6. This practice shall not drain directly into Shellfish (SA) Waters.

<u>Specifications</u>

N. C. NRCS Technical Guide, Section IV, Specification #412 (Grassed Waterway).

NCDENR. 2005. *Updated Draft Manual of Stormwater Best Management Practices*: *3.5 Grassed Swales*. Raleigh, NC. North Carolina Department of Environment and Natural Resources-Division of Water Quality.

Critical Area Planting

Definition/Purpose

A *critical area planting* means an area of highly erodible land that 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.

Policies

1. All NRCS standards and N.C. Community Conservation Assistance Program policies relative to vegetation must be followed (see Section V for guidance).

2. If concentrated surface water is identified as a cause of the degradation in the critical area, it shall be (a) temporarily or permanently diverted from the site during the establishment period, or (b) adequately handled through the use of erosion control mats, netting or other means.

3. If vehicular, human or animal traffic is identified as a cause of the critical area, then appropriate practices or measures shall be installed to mitigate these factors prior to planting.

4. Any area with slopes greater than 30 percent must be planted to trees or shrubs.

5. Vegetation shall be established using the NRCS critical area planting standard (NC FOTG 342), including the shaping of the site as needed to eliminate gullies, seedbed preparation, liming and fertilization according to a soil test, the selection of plant species adapted to the site and intended use, and mulching.

6. BMP soil, nitrogen and phosphorus impacts are required on the contract.

<u>Specifications</u>

N. C. NRCS Technical Guide, Section IV, Specification #342 (Critical Area Planting), #472 (Use Exclusion)

Bioretention Areas

Definition/Purpose

Bioretention 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.

Policies

1. Bioretention areas are intended to treat impervious surface areas of greater than 2500 ft^2. Refer to backyard rain garden practice if treating less than 2500 ft^2.

2. The seasonal high water table must be at least two feet below the proposed bottom of the facility.

3. Bioretention facilities may be constructed using native soils when the soil infiltration rate is at least 1 inch/hour. Installation in clay soils will require an imported soil mix and underdrains to achieve the minimum infiltration rate.

4. In draining to nutrient sensitive waters, the bioretention facility shall utilize a soil media with a P-Index between 15-40 to promote phosphorus removal.

5. Grassed swales, filter strips, or other structural practices such as forebays should be considered as a method of pretreatment to reduce sediment loading.

6. Native plant species capable of tolerating the extreme moisture conditions typical of this practice should be specified over non-native, invasive, or exotic species that require excessive care.

<u>Specifications</u>

N.C. DENR. 2005. *Updated Draft Manual of Stormwater Best Management Practices*: *3.2 Bioretention*. Raleigh, NC. North Carolina Department of Environment and Natural Resources-Division of Water Quality

Hunt, W.F. and N.M. White. 2001. *Designing Rain Gardens /Bioretention Areas.* North Carolina Cooperative Extension Service Bulletin. Urban Waterfronts Series. AG-599-3.

Hunt, W.F. and W.G. Lord. 2006. *Bioretention Performance, Design, Construction and Maintenance.* North Carolina Cooperative Extension Service Bulletin. Urban Waterfronts Series. AG-599-5.

N. C. NRCS Technical Guide, Section IV, Specifications #393 (Filter Strip), #412 (Grassed Waterway).

Backyard Rain Garden

Definition/Purpose

A *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. The rain garden absorbs and filter pollutants and returns cleaner water through the ground to nearby streams. Rain gardens can also reduce flooding by sending the water back underground, rather than into the street.

Policies

1. Backyard rain gardens shall treat no more than 2500 ft^2 of impervious surfaces. Refer to the bioretention practice if treating more than 2500 ft^2 of impervious surfaces or an underdrain is required for proper drainage.

2. Rain gardens should retain water for less than 48 hours after a storm event. If water poured into a hole dug one-foot deep is still there after two days (provided there has been no rain), the site should be designed as a backyard wetland or another site should be selected.

3. Grassed swales or filter strips should be considered as a method of pretreatment to reduce sediment loading.

4. Native plant species capable of tolerating the extreme moisture conditions typical of this practice should be specified over non-native, invasive or exotic species that require excessive care.

<u>Specifications</u>

N.C. Cooperative Extension Service, *Backyard Rain Gardens*
(http://www.bae.ncsu.edu/topic/raingarden/Entire_handout.doc)

Stormwater Wetlands

Definition/Purpose

Stormwater wetlands are constructed systems that mimic the functions of natural wetlands and are designed to mitigate the impacts of urbanization on stormwater quality and quantity. Stormwater wetlands provide an efficient method for removing a wide variety of pollutants such as suspended solids, nutrients (nitrogen and phosphorus), heavy metals, toxic organic pollutants, and petroleum compounds.

Policies

1. Stormwater wetlands are intended to treat impervious surface areas of greater than 2500 ft^2. Refer to the backyard wetland practice if the area to be treated is less than 2500 ft^2.

2. Stormwater wetlands that are constructed off-line from intermittent and perennial streams and are explicitly designed for stormwater management, are not subject to the provisions of Section 401 and 404 of the Clean Water Act. However, if stormwater wetlands are abandoned or no longer used for their original purpose, they may be regulated as wetlands.

3. Measures to reduce high flow velocities and sediments and pollutant loads should be considered. Pretreatment in conveyance facilities (such grass swales), filter strips or other buffers may be effective.

<u>Specifications</u>

N.C. DENR. 2005. *Updated Draft Manual of Stormwater Best Management Practices*: *3.1 Stormwater Wetlands*. Raleigh, NC. North Carolina Department of Environment and Natural Resources-Division of Water Quality

Hunt, W.F. and Doll, B.A. 2000. *Designing Stormwater Wetlands for Small Watersheds.* North Carolina Cooperative Extension Service Bulletin. Urban Waterfronts Series. AG-599-2.

Backyard Wetlands

Definition/Purpose

Backyard wetlands are constructed systems that mimic the functions of natural wetlands A backyard wetland 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.

Policies

1. Backyard wetlands shall treat no more than 2500 ft^2 of impervious surfaces. Refer to the stormwater wetland practice if the planned practice treats more than 2500 ft^2 of impervious surfaces.

2. If a berm is required to retain water, it should be less than one foot in height. There must be adequate area for flood flows to go around and over the berm.

3. Backyard wetlands shall be placed in low-lying areas where the water table is at or near the ground surface (within one foot). This will ensure proper hydrology within the wetland and provide water for wetland plants during drought conditions.

<u>Specifications</u>

N.C. NRCS, NACD, Wildlife Habitat Council. 1998. *Backyard Conservation: Wetland* (http://www.nrcs.usda.gov/Feature/backyard/pdf/wetland.pdf)

Diversion

Definition/Purpose

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. Benefits may include reduced soil erosion, sedimentation and pollution from dissolved and sediment-attached substances.

Polices

1. Diversion may also be used as a component to reduce and/or collect runoff in other BMP systems, such as bioretention areas, stormwater wetlands, critical area, etc.

2. Land smoothing for diversions should be used where existing terraces, diversions or other minor landscape features must be removed prior to initiating a diversion.

3. BMP soil, nitrogen, and phosphorus impacts are required on the contract.

<u>Specifications</u>

N.C. NRCS Technical Guide, Section IV, Specification #362 (Diversion)

Riparian Buffer

Definition/Purpose

A *riparian buffer* is an area adjacent to solid blue-line streams as shown on 7.5 minute USGS maps where a permanent, long-lived vegetative cover (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.

Policies

1. The width of riparian buffers must be a minimum of 15 feet.

2. Cost share for this practice will only be provided for those buffer areas planted to native shrubs or trees.

3. BMP soil, nitrogen and phosphorus impacts are required on the contract.

Specifications

N.C. NRCS Technical Guide: Specifications #390 (Riparian Herbacious Cover), #391 (Riparian Forested Buffer)

N.C. DENR Division of Water Quality *Updated Draft Manual of Stormwater Best Management Practices*: 3.9 Buffer

Refer to Planting Guidelines for Riparian Areas.

Planting guidelines for Riparian Areas

A mixture of trees and shrubs and diverse species selection is preferred.

Spacing:

- Trees: 10-15 feet apart.
- Shrubs: 3-6 feet apart.
- If planting multiple rows, leave 4-6 feet between rows.

If area is currently in grass up to stream edge:

- Mow planting area as short as possible.
- Plant trees and shrubs, removing 2-3 feet of grass around each planting.
- Add 2–4 inches of mulch around each planting.
- As trees and shrubs grow and the canopy closes, they will shade out the grass.

Reduce compaction and site disturbance:

- It is always better to limit the use of heavy machinery within the buffer strip.
- Use shovel, planting bar or auger for seedlings and smaller trees.
- For large tree planting, the use of a mini-skid with auger attachment may be necessary.

For more information, refer to *Riparian & Wetland Tree Planting Pocket Guide for North Carolina*. Forestry NPS Unit. N.C. Division of Forest Resources. September, 2006

Streambank and Shoreline Protection

Definition/Purpose

Streambank and shoreline protection is the use of vegetation to stabilize and protect banks of streams, lakes, estuaries or excavated channels against scour and erosion. This practice should be used to prevent the loss of land or damage to utilities, roads, buildings or other facilities adjacent to the banks, to maintain the capacity of the channel, to control channel meander that would adversely affect downstream facilities, to reduce sediment load causing downstream damages and pollution or to improve the stream for recreation or fish and wildlife habitat.

Policies

1. The use of this BMP for CCAP funding is intended for sites where the natural streambank has been severely damaged by human or animal access, other activities, or natural processes.

2. This practice is not intended to address ocean shoreline erosion problems.

3. A minimum setback of 20 feet of undisturbed native vegetation or restored riparian area adjacent to the installed practice is mandatory in all situations. Division staff is authorized to approve contracts with a lesser setback for instances where site conditions make a 20-foot setback infeasible, but the Division may not approve a setback that is less than 10 feet.

4. This practice may further be supported by other BMPs such as critical area planting and riparian buffer.

5. Additional measures to minimize or manage access or traffic may be necessary to ensure the long-term stability of the streambank/shoreline.

6. This practice is not intended to address situations where in-stream work or armoring of the shoreline or streambank is required.

7. Estimates of streambank/shoreline erosion in tons/yr. may be substituted for soil loss calculations on the contract.

<u>Specifications</u>

N. C. NRCS Technical Guide, Section IV, Specifications #580 (Streambank and Shoreline Protection, #322 (Channel Bank Vegetation), #584 (Channel Stabilization), #612 (Tree/Shrub Establishment), #382 (Fence), #342 (Critical Area Planting), #472 (Use Exclusion), #393 (Filter Strip), #578 (Stream Crossing), NRCS Engineering Field Handbook Chapter 16 (available in Draft from Area Offices).

Revised: November 19, 2008

Stream Restoration

Definition/Purpose

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 in order to protect upland BMPs, restore the natural function of the stream corridor and improve water quality by reducing sedimentation to streams from streambank.

Policies

1. The use of this BMP for CCAP funding is intended for sites where the natural streambank has been severely damaged by human or animal access, other activities or natural processes. Each site should be reviewed by the District Board to determine the eligibility for cost share funding and prioritize the sites as to the direct effects, long term benefits and the landowner's willingness to be involved, maintain and support the practice.

2. Planned practices require a contact with the U.S. Army Corps of Engineers and the N.C. Wildlife Resources Commission for all proposed sites to determine if a Section 404 permit is needed. A Section 401 Water Quality certification may also be needed from the N. C. Division of Water Quality.

3. A minimum setback of 20 feet of undisturbed native vegetation or restored riparian area adjacent to the installed practice is mandatory in all situations.

4. An analysis of the existing stream condition and the degree of departure for the existing stream condition from its full operating potential must be made as a part of the planning and design process for this BMP. The analysis of stream condition and departure may be made following the procedures established by Dave Rosgen in *Applied River Morphology*, Chapter 6 (Rosgen, 1996). Rosgen's field survey form, "Summary of Condition Categories for Level III Inventory" may be used to document the analysis.

5. If the analysis, when completed as outlined in item 4 (above), shows that the profile, pattern and/or dimensions of the stream need to be restored in order to restore the natural stability and function of the stream, assistance will be required from a person who has successfully completed Rosgen's Restoration Course or equivalent natural channel design training.

6. Installations of this BMP will be monitored upstream and downstream as necessary to determine the effects and compare the condition of the stream before versus after the installation. Monitoring can include physical measurements, biological/water quality indicator measurements, chemical measurements (WQ sampling) and/or documentation of visual observations. If documented visual observation is the only monitoring technique used, the observations will be mandatory for the first five years after installation. Other monitoring will be conducted for a minimum of three years.

7. This practice may further be supported by other BMPs such as, critical area planting and riparian buffer. In-stream techniques such as weirs, deflectors and other proven practices may also be used to address the stabilization of the streambanks.

8. Additional measures to minimize or manage access or traffic may be necessary to ensure the long-term stability of the restored stream/streambank.

9. Estimates of streambank erosion in tons/yr. may be substituted for soil loss calculations on the contract.

10. Effects:
    - Streambank erosion (required)
    - Runoff and flooding (required)
    - Turbidity (required)
    - Surface water temperature (optional)
    - Stream fish population (optional)
    - Stream benthic invertebrates (optional)

11. Repairs on established sites will require a new analysis to determine the suitability of repairing the BMP before the district can commit funds to a repair CPO.

Specifications

N. C. NRCS Technical Guide, Section IV, Specifications #580 (Streambank and Shoreline Protection), #322 (Channel Bank Vegetation), #584 (Channel Stabilization), #612 (Tree/Shrub Establishment), #382 (Fence), #342 (Critical Area Planting), #472 (Use Exclusion), #393 (Filter Strip), #391 (Riparian Forest Buffer), #578 (Stream Crossing), NRCS Engineering Field Handbook Chapter 16 (available in Draft from Area Offices).

LEVEL III: ASSESSMENT OF STREAM CONDITION AND DEPARTURE
SUMMARY OF "CONDITION" CATEGORIES FOR LEVEL III INVENTORY

Stream name _____ Observers _____
Location _____ Stream Type _____ Date _____
Riparian Vegetation _____ Flow regime _____
Stream Size, Stream order _____ Depositional pattern _____
Meander pattern _____ Debris/channel blockages _____
Channel stability rating (Pfankuch) _____ Altered Channel State: _____

Sediment supply (check appropriate category):
- Extreme _____
- Very High _____
- High _____
- Moderate _____
- Low _____

Streambed (vertical) stability
- Aggrading _____
- Degrading _____
- Stable _____

Width/depth ratio condition:
- Normal (stable) _____
- High _____
- Very high _____

Streambank erosion Potential:

Bank erodibility:	Near-bank stress:
Extreme _____	Extreme _____
High _____	High _____
Moderate _____	Moderate _____
Low _____	Low _____

Dimension/shape:
- Width _____
- Depth _____
- Width/depth ratio _____

Patterns: (*show as funct. of Wbkf):
- Meander length* _____
- Radius of curve* _____
- Belt width* _____
- Sinuosity _____

Profile:
- Water surface slope _____
- Valley slope _____

Bed features:
- Riffle/pool _____
- Step/pool _____
- Conver./divrg. _____
- Plane bed _____
- Other _____
- Spacing* _____

Describe alterations: _____

General Remarks

_____
_____
_____
_____
_____

Attach photographs taken mid-stream looking up and downstream. Make site map.
Attach vicinity map of reach and/or aerial photo for specific location.
Note any permanent cross-section for level IV verification of cross-section stability, actual erosion rates, change in pebble counts, deposition studies, sediment sampling, etc.
Attach copy of: stream classification field form, channel Stability rating form, bank erosion rating form, profiles, cross-sections, pebble counts, etc.

Signature: _____

Cisterns

Definition/Purpose

Cisterns are above or below ground storage tanks for rainwater harvesting systems used to collect and store rainwater. They are intended to reduce stormwater runoff, encourage runoff infiltration and conserve water.

Policies:

1. Cisterns must be placed in accordance with manufacturer's instructions.

2. Cisterns shall be sized to provide 0.5 - 1.0 gallon of cistern volume for each square foot of contributing rooftop depending on the site and the water use demand.

3. Cost share assistance will only be provided for cisterns 250 gallons or larger.

Specifications

Mecklenburg Soil and Water Conservation District Urban Conservation Practice Standard *Code 558-U (Cisterns)*

Pet Waste Receptacle

Definition/Purpose

Pet waste receptacles are designed to encourage pet owners to pick up after their animals in parks, neighborhoods and apartment complexes so as to prevent waste from transported off-site by stormwater runoff.

Policies

1. This practice should only be installed in public areas such as parks, neighborhood common areas and apartment complexes. This practice is not designed for the individual homeowner.

2. Each receptacle must include appropriate signage describing the use and purpose of the receptacle.

3. Community Conservation Assistance Program will not provide cost share assistance on waste bags.

4. A maintenance plan is required for this practice.

Specifications

Mecklenburg Soil and water Conservation District Urban Conservation Practice Standard *Code 311-U (Pet Waste Receptacles)*

Abandoned Well Closure

Definition/Purpose

An *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. Cost share for this practice is limited to $1,500 per well.

Policies

1. Bored, hand dug and drilled wells may be closed.
2. A well abandonment record (GW-30) must be completed by certified well contractor and submitted to the N.C. Division of Water Quality. The well closure must comply with all applicable state and local requirements for well abandonment and closure.
3. Payment will be based on 75% of actual cost with receipts, with the cost to the N.C. CCAP not to exceed $1,500.
4. The BMP must be inspected by district technical staff within 9-12 months following closure to ensure surface water is properly diverted and closure is adequate.
5. Minimum life of BMP is one year.

Specifications:

NRCS Practice Standard 351 – Well Decommissioning
N.C. Administrative Rule: 15A NCAC 2C.0113
N.C. General Statutes 87-83 through 87-99

Vegetative Guidelines

Invasive or noxious species are prohibited
*[*Refer to *North Carolina Noxious Weeds list* (NCDA & CS, Plant Industry Division - Plant Protection Section) or *Landscaping with Native Plants (*N.C. Cooperative Extension Service Bulletin AG-636-03*)]*

Species selected for seeding or planting shall be suited to current site conditions and intended uses. Selected species will have the capacity to achieve adequate density and vigor within an appropriate time frame to stabilize the site sufficiently to permit suited uses with ordinary management activities.

Species, rate of seeding or planting, minimum quality of planting stock and method of establishment shall be specified before application. Only viable, high-quality seed or planting stock will be used.

Site preparation and seeding or planting shall be done at a time and in a manner that best ensures survival and growth of the selected species. What constitutes successful establishment shall be specified before application.

Fertilization, mulching or other facilitating practices for plant growth shall be timed and applied to accelerate establishment of selected species

Soil amendments will be added as necessary according to a soil test report.

Additional Criteria to Restore Degraded Sites

- If gullies or deep rills are present, they will be treated, if feasible, to ensure proper site and seedbed preparation.

- Required amendments, such as compost to add organic matter and improve soil structure and water holding capacity, or application of lime to increase pH of acid soils, shall be included in the site specifications with amounts, timing and method of application.

CONSIDERATIONS

- Native species or mixes that are adapted to the site and have multiple values should be considered. Refer to Moorman, C, Johns, M. and Bowen, L. 2002. *Landscaping with Native Plants.* N.C. Cooperative Extension Service Bulletin AG-636-03.

- Control or exclude pests that will interfere with the timely establishment of vegetation.

- Inspections, reseeding or replanting, fertilization and pest control may be needed to insure that this practice functions as intended throughout the expected life.

Requirements Common to All Practices

- Sites must have been developed for three years or more to be eligible for cost share assistance and must be released from sedimentation erosion control permits, other than single-family homes.

- Single-family homes should have a certificate of occupancy for three years or more.

- Unless otherwise specified, the minimum life of all practices is 10 years. For single-family home sites, the minimum life of all practices is five years.

- All applicable federal, state and local permits must be obtained prior to contract approval.

- Practice will be cost-shared at a rate of 75 percent of average costs. Copies of receipts must be provided. Actual costs, as indicated by receipts, may be used if average costs are not available.