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.

STREAMBANK AND SHORELINE PROTECTION	
Lifespan	5 years single-family home, 10 years all other properties
BMP Units	LINEAR FEET
Required Effects	Soil saved (volumetric calculation)

JAA	Commission JAA for streambank and shoreline protection
CS2 Reference Materials	 NC-ACSP-11 Signature Page Map with BMP location and fields

Specifications

Chapter 11, CCAP Design Manual, Streambank and Shoreline Protection
https://www.ncagr.gov/SWC/costshareprograms/CCAP/documents/Chapter11StreambankandShoreline
Protection.pdf

N.C. NRCS Technical Guide, Section IV, Specification #580 (Stream and Shoreline Protection) http://efotg.sc.egov.usda.gov/references/public/NC/NC580StrmbkProt_10.2011.pdf

N.C. NRCS Technical Guide, Section IV, Specification #612 (Tree and Shrub Establishment) http://efotg.sc.egov.usda.gov/references/public/NC/nc612 12-2011.pdf

N.C. NRCS Technical Guide, Section IV, Specification #472 (Access Control) http://efotg.sc.egov.usda.gov/references/public/NC/NC472AccessCntrl 10.2011.pdf

N.C. NRCS Technical Guide, Section IV, Specification #391 (Riparian Forest Buffer)

http://efotg.sc.egov.usda.gov/references/public/NC/NC391RipForBuffer 10.2011.pdf

Buffers >= 35 feet this NRCS Standard 391 shall be used; for buffers less than 35 feet in width the above standard shall be used with the exception of the zones. Native tree and/or shrub species must be planted.

N.C. NRCS Technical Guide, Section IV, Specification #584 (Channel Bed Stabilization) http://efotg.sc.egov.usda.gov/references/public/NC/NC584ChnlBEDStab 10.2011.pdf

N. C. NRCS Technical Guide, Section IV, Specification #342 (Critical Area Planting) http://efotg.sc.egov.usda.gov/references/public/NC/NC342 CriticalArea 04-2014.pdf

NRCS Engineering Field Handbook Chapter 16, Streambank and Shoreline Protection http://directives.sc.egov.usda.gov/OpenNonWebContent.aspx?content=17553.wba