

# Chapter 28

## Agriculture and Water Quality

---

### 28.1 Impacted Streams in Agricultural Areas

Cultivated cropland was 16 (947,100 acres) percent of the land use in the Cape Fear River basin in 1997. While still a large portion of the basin land use, this is 20 percent (1,177,000 acres) less cultivated cropland than in 1982 (USDA-NRCS, 2001). In the Cape Fear River basin, there are nearly 265 stream miles that may be impacted by agricultural activities. There are over 25 Impaired stream miles where agriculture is identified as a potential source of water quality stressors. Impacts to water quality from agricultural sources may decrease over the next basin cycle due to substantial increases in urban/built-up areas throughout the river basin.

#### *2005 Recommendations*

DWQ will identify streams where agricultural land use may be impacting water quality and aquatic habitat. This information will be related to local Division of Soil and Water Conservation and NRCS staff to investigate the agricultural impacts in these watersheds and to recommend BMPs to reduce impacts. DWQ recommends that funding and technical support for agricultural BMPs be continued and increased. Refer to Appendix VIII for agricultural nonpoint source agency contact information.

### 28.2 Agricultural Best Management Practices Funding Opportunities

#### 28.2.1 USDA – NRCS Environmental Quality Incentives Program (EQIP)

The Environmental Quality Incentives Program provides technical, educational and financial assistance to eligible farmers to address soil, water and related natural resource concerns on their lands in an environmentally beneficial and cost-effective manner. The program provides assistance to farmers in complying with federal and state environmental laws and encourages environmental enhancement. The purposes of the program are achieved through the implementation of a conservation plan that includes structural, vegetative and land management practices on eligible land. Five to 20-year contracts are made with eligible producers. Cost share payments may be made to implement one or more eligible structural or vegetative practice, such as animal waste management facilities, terraces, filter strips, tree planting and permanent wildlife habitat. Incentive payments can be made to implement one or more land management practices, such as nutrient management, pest management and grazing land management.

Fifty percent of the funding available for this program will be targeted at natural resource concerns relating to livestock production. The program is carried out primarily in priority areas that may be watersheds, regions or multi-state areas and for significant statewide natural resource concerns that are outside of geographic priority areas. EQIP's authorized budget of \$1.3 billion is prorated at \$200 million per year through the year 2002.

NRCS district contacts for the Cape Fear River basin are provided in Appendix VIII or visit the website at <http://www.nrcs.usda.gov/programs/eqip/> for more information.

## 28.2.2 NC Agriculture Cost Share Program

The North Carolina Agriculture Cost Share Program (ACSP) was established in 1984 to help reduce the sources of agricultural nonpoint source pollution to the state's waters. The program helps owners and renters of established agricultural operations improve their on-farm management by using Best Management Practices (BMPs). These BMPs include vegetative, structural or management systems that can improve the efficiency of farming operations while reducing the potential for surface and groundwater pollution. The Agriculture Cost Share Program is a voluntary program that reimburses farmers up to 75 percent of the cost of installing an approved BMP. The program is implemented by the Division of Soil and Water Conservation (DSWC). The cost share funds are paid to the farmer once the planned control measures and technical specifications are completed. The annual statewide budget for BMP cost sharing is approximately 6.9 million.

From 1998 to 2003, DSWC ACSP implemented nearly \$5 million in practices to 1580 projects. The practices have affected 65,586 acres, saved 251,451 tons of soil, 1.5 million pounds of nitrogen and 425,130 pounds of phosphorus in the Cape Fear River basin. SWCD contacts for the Cape Fear River basin are included in Appendix VIII or for more information, visit the website at <http://www.enr.state.nc.us/DSWC/pages/agcostshareprogram.html>.

## 28.2.3 Agricultural Sediment Initiative

In 2000, the NC Association of Soil and Water Conservation Districts and the NC Soil and Water Conservation Commission initiated an effort to assess stream channels and watersheds of streams on the state's 2000 303(d) list due to sediment where agriculture was included as a potential source. The primary objective of the Agricultural Sediment Initiative was to evaluate 303(d) listed waters in order to assess the severity of sedimentation associated with agricultural activities within the watershed and to develop local strategies for addressing sedimentation. The initiative involved 47 Impaired stream segments in 34 counties and 11 river basins.

In 2001, the Soil and Water Conservation Commission allocated additional Agriculture Cost Share Funds to districts to address agricultural sediment. Table 29 summarizes the results of the completed Agricultural Sediment Surveys for five watersheds in three counties in the Cape Fear River basin. District staff requested approximately \$2,840,000 for restoration and protection work in two of the watersheds.

Table 29 Summary of Agricultural Sediment Initiative Surveys

Stream	County	Problems Identified	Funds Requested by District
Haw River	Guilford/ Alamance	Cropland erosion, urban development, impervious surface, road construction, streambank erosion, deforestation	\$1,200,000
Little Troublesome Creek	Rockingham	Streambank erosion, urban development, unpaved roads, cropland erosion	\$160,000