

CHAPTER 6

BMP STANDARDS AND SPECIFICATIONS FOR GENERAL LAND-DISTURBING ACTIVITIES

This chapter contains Standards and Specifications for planning, design and installation of erosion and sediment control measures. They are intended to provide minimum criteria for use at the local level. The many variations in climate, soils, topography, physical features and planned land use may require modifications at the local level. Local officials will assure that standards and specifications are implemented in harmony with existing ordinances, rules and regulations.

Variations of these standards have been in use since late 1930's, when Soil and Water Conservation Districts were first established. Continuing progress through experience and research will require periodic updating. The construction specifications contained herein are not intended to be complete. Detailed construction specifications should be prepared for each land-disturbing activity.

Information has been included on geotextiles based on the American Association of State Highway Transportation Officials (AASHTO). Information on Forestry Best Management Practices can be found in the Georgia Forestry Commission's publication entitled *Georgia's Best Management Practices for Forestry*.

Erosion control is of primary importance during land-disturbing activities, but sediment storage must be available on the site. Temporary sediment basins and retrofitted detention ponds most commonly achieve the required 67 cubic yards per acre of disturbed area of storage. Some situations may call for the use of practices other than those mentioned above. Appropriate sediment storage must be available on the site PRIOR to any land-disturbing activities. It is imperative that creative engineering practices are used to ensure that erosion and sediment control BMP's are appropriate for the situation and activity. Linear projects pose special treatment concerning erosion and sediment control. Guidelines for dealing with linear projects has been included.

Shall or Will, Should, and May are used in these specifications with the following definitions:

Shall or Will - A mandatory condition. When certain requirements are described with the "shall" or "will" stipulations, it is mandatory that the requirements be met.

Should - An advisory condition. Considered to be recommended but not mandatory.

May - A permissive condition. No requirement is intended.

Section I contains standards providing general instructions for the preparation of erosion and sediment control plans for land-disturbing activities.

Section II contains standards and specifications for vegetative type measures for general land-disturbing activities.

Section III contains standards for structural practices and provides instructions for the preparation of erosion and sediment control plans for land-disturbing activities.

Section IV contains tables for design of vegetated diversion, waterway or stormwater conveyance practices.

Waters of the United States and Erosion and Sediment Control

Wetlands are defined as areas that are inundated by surface or ground water for a long enough period of time that the area supports the growth of vegetation that can perpetuate in saturated soil. Wetlands are a valuable resource, and it is imperative that these areas are protected from damage caused by adjacent erosion and subsequent sedimentation. While state law does not necessarily require buffers adjacent to wetlands, these areas are still considered valuable, and all efforts must be made to protect these areas during land disturbing activities. Obviously, the best and most effective method for protecting wetlands is maintaining a buffer between and land-disturbing activity and the wetland. If this is not possible, standard erosion and sediment control devices can be utilized to protect these areas. As always, it is imperative that these devices be designed, installed, and properly maintained.

The Georgia Erosion and Sediment Control (E&SC) Act requires that land-disturbing activities in Georgia are protected from erosion and subsequent sedimentation up to and including a 25-year storm. Few realize that activities that impact Waters of the United States can mean stricter Federal requirements for erosion and sediment control. Waters of the United States are navigable waters as well as adjacent wetlands and tributaries to navigable waters. Discharge of dredged or fill material into Waters of the United States is regulated by the United States Army Corps of Engineers under Section 404 of the Clean Water

Act (33 U.S.C. 1344)

While State Law requires E&SC protection for a 25-year storm, Federal Law requires that adequate erosion and sediment control must be implemented during land-disturbing activities where a section 404 permit (usually known as a wetland permit) is required. Few realize that minor activities of filling and dredging, while not requiring U.S. Army Corps of Engineers notification, still must meet the Federal requirement of "adequate erosion and sediment control" as if a permit had been issued. According to Federal Law, "adequate equates to "no failures tolerated." In short, when filling or dredging activity impacts any Waters of the United States, adequate erosion control must occur at the site. Therefore, during land-disturbing activities regulated by the state, erosion and sediment control regulations fall under stricter Federal guidelines as well as the standard State guidelines if Waters of the United States are impacted.

To get more information concerning discharge of dredged or fill material into Waters of the United States, permitting for these activities, and stipulations for permitting please contact the United States Army Corps of Engineers, Savannah District, Regulatory Branch, at 1-800-652-5065.

STANDARDS AND SPECIFICATIONS

		<i>Page</i>
SECTION I: LAND-DISTURBING ACTIVITY PLAN		
	LAND-DISTURBING PLAN.....	6-9
SECTION II: VEGETATIVE MEASURES		
Bf	BUFFER ZONE	6-19
Cs	COASTAL DUNE STABILIZATION	6-29
Ds1	DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)	6-33
Ds2	DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING).....	6-35
Ds3	DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION).....	6-41
Ds4	DISTURBED AREA STABILIZATION (WITH SODDING).....	6-57
Du	DUST CONTROL ON DISTURBED AREAS	6-61
Mb	EROSION CONTROL MATTING AND BLANKETS.....	6-63
Pm	POLYACRYLAMIDE (PAM).....	6-67
Sb	STREAMBANK STABILIZATION (USING PERMANENT VEGETATION).....	6-69
Tb	TACKIFIERS AND BINDERS	6-73
SECTION III: STRUCTURAL PRACTICES		
Cd	CHECKDAM	6-77
Ch	CHANNEL STABILIZATION	6-81
Co	CONSTRUCTION EXIT	6-85
Cr	CONSTRUCTION ROAD STABILIZATION	6-87
Dc	STREAM DIVERSION CHANNEL	6-89
Di	DIVERSION.....	6-93
Dn1	TEMPORARY DOWNDRAIN STRUCTURE	6-97
Dn2	PERMANENT DOWNDRAIN STRUCTURE	6-101
Fr	FILTER RING.....	6-103
Ga	GABION.....	6-105

(Gr)	GRADE STABILIZATION STRUCTURE	6-107
(Lv)	LEVEL SPREADER	6-115
(Rd)	ROCK FILTER DAM	6-117
(Re)	RETAINING WALL	6-121
(Rt)	RETROFIT	6-123
(Sd1)	SEDIMENT BARRIER	6-127
(Sd2)	INLET SEDIMENT TRAP	6-139
(Sd3)	TEMPORARY SEDIMENT BASIN	6-147
(Sr)	TEMPORARY STREAM CROSSING	6-173
(St)	STORM DRAIN OUTLET PROTECTION	6-179
(Su)	SURFACE ROUGHENING	6-185
(Tp)	TOPSOILING	6-189
(Wt)	VEGETATED WATERWAY OR STORMWATER CONVEYANCE CHANNEL	6-191

SECTION IV: TABLES FOR DESIGN OF VEGETATED DIVERSION, WATERWAY OR STORMWATER CONVEYENCE PRACTICES

TABLE 6-28.1	6-205
TABLE 6-28.2	6-219
TABLE 6-28.3	6-233
TABLE 6-28.4	6-235