APPENDIX VII

USDA Forest Service Transportation System
Management Guidelines

Table III-1. Forest-wide Direction. (continued)

ACTIVITIES	GENERAL DIRECTION	STANDARDS
Transportation System Management	1. Manage roads. trails and other travelways consistent with Management Area direction. Designate roads as open to motorized public use by: -Signing for specific uses; or -Surfacing with stone, shale, pavement or other hard surface material and not closing by gate, natural barricade, sign, or other visible closure method or device.	
	2. Manage closed forest development roads for a wide range of non-motorized uses. Minimize conflicting uses (example bicycle use vs. linear wildlife opening). Resolve conflicts using an ID team approach and coordinate with other federal, state, and county agencies and user groups.	a. Assure drainage structures will accommodate mowing with motorized equipment without resource damage when areas are converted to permanent wildlife openings.
	3. Identify temporary roads currently used as linear strip openings. Determine whether to incorporate them into the Forest Development Road system and continue to use them as wildlife opening if water quality standards can be met, or convert to permanent wildlife openings, or restore to forest conditions. Coordinate the decision about long term uses with the North Carolina Wildlife Resources Commission.	
	4. Allow non-motorized bicycle and horse travel on Forest development roads unless signed as closed to that use.	
	5. Limit opportunities outside of established ORV areas for primitive roads suitable for travel only be off-road	

Table III-1. Forest-wide Direction. (continued)

ACTIVITIES	GENERAL DIRECTION	STANDARDS
Transportation System Management	vehicles. Inventory forest roads currently used by such vehicles. Determine whether to incorporate these roads into the Forest Development Road System (traffic service level D) as designated four-wheel drive ways open for public use or permanently close and restore to forest conditions. Include designated roads in calculations of open road densities specified for different management areas. Identify where existing road conditions do not meet water quality standards and develop strategies to bring them into compliance, except where physical conditions preclude complete correction and the road can not be legally closed. Schedule implementation consistent with funding availability. Newly constructed roads designed as four-wheel drive ways will comply with water quality standards. Four-wheel drive ways are exempted from the Highway Standards Act.	
Road Planning Construction and Maintenance	1. Insure road stability and protection of the environment, except; existing four-wheel drive ways may not be in full compliance with water quality standards. Develop strategies to bring these roads into compliance unless physical conditions preclude complete correction and the road can not be legally closed. Schedule implementation consistent with funding.	a. During transportation planning and road location, incorporate historic, geologic, physiographic, and soils information to locate potential problem areas and to select road locations least likely to cause damage to National Forest Resources. b. Design broad-based dips and ditch outlets so that runoff water will infiltrate soils and erosion will be deposited before reaching stream channels. c. Design and construct access road and skid trail crossings of intermittent streams so as to: not obstruct or impede stream flow; provide crossings with effective structures or ground

Table III-1. Forest-wide Direction. (continued)

ACTIVITIES	GENERAL DIRECTION	STANDARDS
		cover to protect the banks and channel from accelerated erosion. Provide crossings with sufficient water control devices to collect and divert surface flow from the access road or skid trail into undisturbed areas or other control structures to restrain accelerated erosion and prevent visible sediment from entering intermittent streams; and provide crossings with ground cover or other means sufficient to prevent visible sediment from entering intermittent streams within 10 working days of initial disturbance and maintain such cover or structures until the site is permanently stabilized. (NC PPGRWQ Regulations)
Road Planning Construction and Maintenance (continued)	2. Use Traffic Service Level C or higher construction standards where roads are open to public travel with conventional vehicles or where specialized needs exceed Traffic Service Level D capabilities (Traffic Service Levels are described in Appendix G). In all cases, road grades will not exceed that which, through proper design and maintenance, can not prevent erosion and damage to resources adjacent to the roadbed.	a. Use the following standards for Traffic Service Level C roads: Design speed: 5-25 mph Width: 12-14 ft. with turnouts. Surface: Gravel as needed to support traffic. Max. sustained grade: 10% Lanes: 1 Min. curve radius: 50 feet Drainage: Outslope or ditch. Max. pitch: 12% for 200 feet.
	3. Use Traffic Service Level D construction standards where this standard will accommodate the intended use. Except for existing designated four-wheel drive ways, road grades will not exceed that which, through proper design and maintenance, can not prevent erosion and	

Table III-1. Forest-wide Direction. (continued)

ACTIVITIES	GENERAL DIRECTION	STANDARDS
Road Planning Construction and Maintenance (continued)	damage to resources adjacent to the roadbed. Develop strategies to correct resource damage adjacent to the roadbed on designated four-wheel driveways. Schedule implementation consistent with funding availability.	a. Use the following standards for Traffic Service Level D roads: Design speed: 5-10 mph Width: 12-14 feet Surface: Native or gravel as needed to support traffic. Max. sustained grade: 12% Lanes: 1 Min. curve radius: 50 feet Drainage: Outslope or ditch. Max. pitch: 14% for 200 feet. b. Use the following standards for Traffic Service Level D, four-wheel drive ways: Design speed: 2-10 mph Width: 6-10 feet Surface: Native rough, irregular, large rocks or boulders, mud, sand, loose materials, obstacles such as logs, some winching may be required. Max. sustained grade: 20-30% for 200-300 feet. Max pitch: 20-40% up to 100 feet Lanes: 1 Template: Existing
	4. Construct temporary roads only for non-recurrent use. Do not plan or permit purchasers to construct temporary roads in lieu of building specified roads needed for future recurrent management of the area.	a. Use the following standards for temporary roads: Width: 12-14 feet Surface: Native or spot surfacing. Max. sustained grade: 12% Lanes: 1 Drainage: Outslope or ditch.

Table III-1. Forest-wide Direction. (continued)

ACTIVITIES	GENERAL DIRECTION	STANDARDS
Road Planning Construction and Maintenance (continued)		Max. pitch 15% for 200 feet. Revegatation of Roadbed: Establish vegetative cover in first seeding season after road closure. b. For temporary stream crossings, minimize soil movement through the use of temporary bridges or fords.
	5. Approve temporary road and skid road locations prior to construction.	