

**NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE GENERAL SPECIFICATIONS**

**FOREST TRAILS AND LANDINGS
(FT.)
CODE 655**

GENERAL SPECIFICATIONS

Procedures, technical details, and other information listed below provide additional guidance for carrying out selected components of the named practice. This material is referenced from the conservation practice standard for the named practice and supplements the requirements and considerations listed therein.

This practice may adversely affect significant cultural resources and should be submitted to a cultural resource specialist for a determination of impacts before the practice commences.

Timber harvesting activities should be planned and conducted to minimize erosion. Usually, sedimentation from logging is less during dry weather. Dry times are the best times to plan logging activities so as to have minimal impacts on soil productivity and water quality.

For highly erodible areas, plan the harvest activities so as revegetation efforts occur when it is favorable for vegetation establishment.

LOG DECKS AND LANDINGS

Decks and landings are areas where logs are collected in a central location for storing, handling, and loading onto trucks. This includes landings along skid trails and access roads as well as concentration yards near mills.

Log landings will be no larger than necessary to handle loading activities. Numbers of landings will be minimized.

Care will be taken to properly locate decks and

landings to minimize the potential for erosion and sedimentation. Log deck sites will be located prior to road construction in the area to be harvested. They will be located on dry, firm sites and have a slight slope (2 to 5%) to allow for drainage. They will be located outside of a forest riparian buffer zone or other sensitive area and at least 35 feet from a water body. Ridge top trail locations are preferred

Plan for good drainage on all road and trail approaches to the landing so that surface water does not drain onto the landing to cause ponding and mud holes.

If surface flow is entering the landing area from an uphill source, a diversion ditch will be constructed to intercept the flow of water and direct it away from the landing area.

Locate residue piles (logging debris, chipping residue, etc.) outside of ephemeral and intermittent drainages so the natural flow will not be blocked.

Consider revegetating landings as soon as possible after completion of the harvest (Refer to the practice standard for Critical Area Treatment, Code 342). Smoothing, shaping, and other site preparation may be necessary before seeding the area. If revegetation is not planned, the logging debris will be spread over the site to provide ground cover until natural revegetation takes place.

Maintenance of these areas can create desirable habitat for wildlife. Turkey and quail will use them for feeding, nesting, and brood rearing, and deer will be attracted to the food source. Where wildlife habitat is a consideration, these areas will be revegetated with food plant species that will also provide the erosion control needed (Refer to Upland Wildlife Management, Code 645, or Wetland

Wildlife Management, Code 644).

Avoid the use of invasive species or those plant species which are considered to be detrimental or of low value to wildlife (e.g., fescue and bermudagrass).

Servicing equipment onsite will be done in such a way that waste oil, etc., will be collected and disposed of in accordance with disposal regulations. Garbage and trash will be removed and disposed of properly.

SKID TRAILS

Skid trails are unsurfaced, single lane paths or narrow roads usually narrower and sometimes steeper than a truck haul road. They are used to skid trees or portions of trees from the stump to the log deck or landing. Primary skid trails are used many times to collect trees or logs from a harvest area and move them to the landing. Secondary skid trails are used only 1 or 2 times to move trees or logs to the primary skid trail.

Skid trails will be planned to minimize damage to the residual stand, reduce erosion and sedimentation, and provide the most economical means for skidding. Because heavy equipment is usually used in skidding, considerable soil disturbance may occur.

Disruption of natural drainage patterns will be avoided. Trails through wet sites will be closely monitored.

Skidding will follow the contour as much as possible to reduce soil erosion potential. In areas where this is not possible, logs will be skidded uphill to a landing. This results in a cone-shaped pattern of skid trails which disperses water running downhill. If trees must be skidded downhill, erosion can be minimized by using smaller log decks with fewer, shorter, and less-traveled skid

trails leading to any one deck. Ridgetop trail locations are preferred.

Avoid long, steep grades. Keep skid trail grades below 15 percent whenever possible.

Skid trails will be located so that they occupy the least amount of area to log the site effectively.

Stream channels will not be used as skid trails. Where stream crossings cannot be avoided, the stream will be crossed at right angles. Natural fords with firm bottoms, stable banks, and gentle slopes along approaches will be used whenever possible. Temporary crossings utilizing culverts (Refer to the practice standard for Structure for Water Control, Code 587), logs, or portable bridges will be removed upon completion of use.

Water flow on skid trails will be controlled with broad-based dips, rolling dips, wing ditches, or water bars. Broad based dips and rolling dips will be installed on permanent trails and roads in use, and water bars should be used on temporary and retired trails/roads to control water flow. These drainage measures will be of sufficient size, intervals, and gradient for adequate drainage and erosion control. They will divert water at least 50 feet from the stream at stream crossings.

Spacing of Broad Based Drainage Dips:

Gradient (% Slope)	Interval (Feet)
2	300
3	233
4	200
5	180
6	167
7	157
8	150
9	144
10	140

Spacing of Rolling Dips:

Gradient (% Slope)	Interval (Feet)
2 - 5	180
5 - 10	150
10 - 15	135
+15	120

Spacing of Wing Ditches:

Gradient (% Slope)	Interval (Feet)
2 - 5	200
5 - 10	100
>10	75

Spacing of Water Bars:

Gradient (% Slope)	Interval (Feet)
1	400
2	245
5	125
10	78
15	58
20	47
25	40
30	35
35	32

Refer to Arkansas Best Management Practice Guidelines for Silviculture for further design considerations and diagrams.

Protect the discharge area of these water management measures with stone, grass sod, brush, logging debris, or other materials that will reduce the velocity of the runoff and control scouring.

Trails will be revegetated as soon as possible after completion of the harvest (Refer to the practice standard for Critical Area Treatment, Code 342). If wildlife habitat is a consideration, these areas will be revegetated with food plants to improve the habitat (Refer to the practice standard for Upland Wildlife Habitat Management, Code 645, or Wetland Wildlife Habitat Management, Code 644).