

**NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD**

FOREST TRAILS AND LANDINGS

(Ac.)

CODE 655

DEFINITION

A temporary or infrequently used route, path or cleared area within a forest.

unacceptable fire or pest hazard or interfere with the intended purpose. See FOREST SLASH TREATMENT (384) for further guidance.

PURPOSE

- Provide infrequent access to forest stands for management and monitoring activities including fire suppression.
- Provide periodic access for removal and collection of forest products.

Drainage and erosion control measures for trails and landings shall be used and located to minimize water flows and erosion rates to acceptable levels.

Avoid skidding through stream channels, springs, seeps, sinkholes, and other wet areas.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies on applicable forested areas where trails and landings are used.

Trails and landings shall be revegetated to control erosion as needed. Refer to CRITICAL AREA PLANTING (342) or CONSERVATION COVER (327). Locally invasive and noxious plants will not be used for revegetation.

CRITERIA

General Criteria Applicable To All Purposes

Trails and landings will be of a size, gradient, number and location to accomplish the intended purpose.

Measures, including the use and treatment of equipment, will be used to control or protect against locally invasive species. If pesticides are used, refer to PEST MANAGEMENT (595).

Trails and landings shall be located to minimize adverse onsite and off-site impacts such as accelerated erosion, riparian area degradation, stream channel and streambank damage, hydrology modification, aesthetics or unacceptable damage to advance regeneration, residual growing stock or wildlife habitat.

CONSIDERATIONS

Assure safe ingress and egress to site.

Locate landings and trails to preserve aesthetic qualities.

Timing and use of equipment will be commensurate with site and soil conditions to maintain site productivity and minimize soil erosion, displacement and compaction.

Landings and trails may be used for wildlife food and cover plantings.

Favor native species for revegetating trails and landings.

Slash, debris and vegetative material left on the site after use will not present an

Landings and trails may be utilized as firebreaks.

Natural leaf-fall and volunteer vegetation will often stabilize non-erosive sites when coupled with controlled vehicle access.

Consider cultural resources and environmental concerns such as threatened and endangered species of plants and animals, natural areas and wetlands.

Landings and trails no longer needed can be retired by removing high maintenance structures, such as culverts and bridges, and restored to a vegetative cover by planting and seeding.

PLANS AND SPECIFICATIONS

Specifications for applying this practice shall be prepared for each site and recorded using approved specification sheets, job sheets, technical notes and narrative statements in the conservation plan, or other acceptable documentation.

OPERATION AND MAINTENANCE

Periodic inspections of landings and trails will be conducted and maintained as necessary.

Landings and trails utilized as firebreaks will be properly maintained to accomplish this purpose.

Landings and trails shall be closed when and where needed for erosion control, safety and liability, and reduced maintenance costs. Refer to USE EXCLUSION (472).

Landings and trails no longer needed, and not used as a firebreak, can be retired. They shall be sufficiently revegetated as needed.

GENERAL SPECIFICATIONS

Specifications for re-vegetation of landings and trails should include species, timing and method of application.

Landings or Yarding Areas

Locate landings or yarding areas before developing skid roads and trails. Preferred sites include ridgetops, well-drained areas, areas close to an all-weather road, or sites close to the stand being harvested. The areas should have some slope to facilitate drainage. Construct road approaches to the area at a slight grade to divert road drainage from the landing area.

Do not locate landings within 200 feet of streams, ponds, lakes, sink holes, springs, caves, or wetlands.

Seed abandoned landing areas using adequate site preparation. For erosive areas, refer to CRITICAL AREA PLANTING (342).

For areas where erosion will not be a problem and seeding is desired, refer to CONSERVATION COVER (327) or UPLAND WILDLIFE HABITAT MANAGEMENT (645).

Harvest Trails

Keep grades as low as possible. Avoid long, steep grades that exceed 20%.

Plan the location of trails to minimize the number of stream crossings. Remove any temporary bridges and culverts when logging activities are completed. Fords shall not be used in watersheds which provide drainage to public surface water supplies or on state or federal designated important fishing streams.

On harvest (skid) trails with erosion problems, install water breaks (bars). Use Missouri Department of Conservation Watershed Protection Practice Guidelines - Best Management Practices (BMPs).

Water bars, rolling dips and other drainage measures for trails shall be of sufficient size, intervals and gradient for adequate drainage and erosion control. Start building water bars at the end of the trail and work back up the slope to avoid damaging previously constructed water bars. Adjust spacing to place water bars at abrupt gradient changes. Protect the discharge area with stone, grass sod, brush, logs, or other materials that will reduce the velocity of the runoff and control scouring.

Seed abandoned harvest trail areas that will be susceptible to erosion. Refer to CRITICAL AREA PLANTING (342).

For areas where erosion will not be a problem and seeding is desired, refer to CONSERVATION COVER (327), UPLAND WILDLIFE HABITAT MANAGEMENT (645) or the following table.

Table 1. For areas where erosion will not be a problem, the following species and rates can be used:

Species	Seeding Rate/Acre
Virginia Wildrye <i>Elymus virginicus</i>	3 pounds
Hairy Wildrye <i>Elymus villosus</i>	2 pounds
Bottle Brush Grass <i>Hystrix patula</i>	2 pounds
Orchard Grass <i>Dactylis glomerata</i>	4 pounds
Common Lespedeza <i>Kummerowia sp.</i>	7 pounds
Wheat, Rye, or Oats	20 pounds

REFERENCES

Forestry Handbook, Second Edition: Society of American Foresters; Wiley Press; 1984.

"Missouri Watershed Protection Practices: Management Guidelines for Maintaining Forested Watersheds to Protect Streams"
Missouri Department of Conservation; 2005.

"A Guide to Logging Aesthetics: Practical Tips for Loggers, Foresters, and Landowners".
Northeast Regional Agricultural Engineering Service. NRAES-60. 1993.