

**NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD**

FOREST HARVEST TRAILS & LANDINGS

(Acre)
CODE 655

DEFINITION

This practice includes the laying out, construction of, and use of forest harvest (skidder) trails and landings (loading areas).

with firm bottoms, stable banks and gentle along approaches.

Leave logging debris on exposed soil, dry washes and at points of concentrated drainage from skid trails and roads.

PURPOSES

To allow for the removal of forest products while minimizing on-site damage to other resources. This practice may be applied in a conservation management system as a component to support one or more of the following:

Water bars, rolling dips and other drainage measures for trails and haul roads shall be of sufficient size, intervals and gradient for adequate drainage and erosion control.

1. Maintain site productivity by minimizing soil compaction, erosion and sedimentation.
2. Control sheet and rill erosion.
3. Enhance water quality by minimizing stream sedimentation, pollution and degradation.

Landings shall be large enough to handle necessary loading activities. Locate these landings on stable, well-drained areas, well away from streams and other water bodies.

All trash generated during the harvesting operation should be collected. Oil drained while servicing equipment should be collected and disposed of properly.

CRITERIA

Harvesting is an integral part of forest management. The time of harvest and use of equipment will be commensurate with the site and soil type and conditions to maintain site productivity and minimize soil erosion, displacement and compaction. Skid trails and landings will be of a size, gradient, number and location to accomplish the removal and transportation of crop trees while at the same time minimizing adverse on-site and off-site impacts.

Place waterbars on **abandoned** roads, skid trails, and firebreaks where surface water runoff may be concentrated and cause erosion of the unvegetated soil. Waterbars should be placed at an angle of 45 to 60 degrees to the right or left of the center line of the road, firebreak or trail.

Proper spacing between waterbars can be determined from the following table:

Skid trails on steep slopes should be located on a gradual grade or on the contour rather than straight up the slope. Minimize the number of skid trails and traffic on steep slopes.

Skid away from permanent and intermittent streams. Watercourses and streambeds should not be used for skidding even if they are dry.

Skidding across streams should be minimized. When unavoidable, crossings should be at right angles and should take advantage of natural fords

Road Grade (percent)	Approx. Waterbar Spacing (feet)
2	245
5	125
10	78
15	58
20	47
25	40
30	35
35	32
40	29

When cross drains are used, trench depth should equal that of the uphill ditch line and be one to three feet below the surface of the road or trail. Spoil materials should be used to develop the bar height. To prevent additional erosion, waterbars used in conjunction with cross drains should be designed for the soil and the site. Diversion dams alone (without cross drains) should be used on sandy, easily erodible soils and sensitive sights. To fully intercept any ditch flows, the uphill end of the bar should extend beyond the side ditch line of the road and tie into the bank. The outflow end of the waterbar should be fully operational and extend far enough beyond the edge of the road or trail to safely disperse runoff water onto the undisturbed forest floor. The outlet length should not be excessive.

Care should be exercised in locating waterbars in order to take advantage of natural breaks in grade of the roads and stable outlet locations. If wing ditches are present and stable they should be considered as possible locations for waterbars.

Upon completion of the harvesting operation, temporary roads, skid trails and landings shall be conditioned by revegetation to control erosion. (See Critical Area Planning, Code 342). Comply with recognized Best Management Practices (BMP's) developed for Louisiana.

CONSIDERATIONS

1. Assure safe ingress and egress to harvesting site.
2. Locate landings and trails to preserve aesthetics.
3. Trails may be closed for erosion control, safety, liability, and reduced maintenance costs after harvesting operation.
4. Enhance wildlife habitat by planting trails and landings. (See Wildlife Upland Habitat Management, Code 645).

PLANS AND SPECIFICATIONS

This practice shall be applied by preparing specifications for each site and recorded by using approved specifications, jobsheets and narrative statements in the conservation plan.

OPERATION AND MAINTENANCE

Watercourses and water quality shall be protected during and after harvesting operations. Landings and trails will be left in stable condition.

Periodic inspections will be conducted at harvested area with necessary repairs applied to trails and landings if needed.