Forest Trails and Landings

Indiana Job Sheet - 655 ***October 2010***

Eroding forest trails reduce site productivity and cause water quality problems

Stabilized trails improve water quality and increase property values.

Definition

Forest trails and landings are an infrequently used route, path, or cleared area within a forest to provide access on a periodic basis. They are often steeper than permanent access roads and traffic may be limited or eliminated upon completion of logging. Forest trails and landings often do not require an engineering design.

Purpose

Forest trails and landings are used to:

- Provide access to forest stands for management activities.
- Minimize on-site and off-site damage to resources during periods of access by controlling erosion during construction, during use, and upon completion of use.

Use

Forest trails are used on forested areas where permanent access roads are not needed. Locate trails outside of riparian management zones except where necessary for stream crossings. Landings are used for temporary storage of forest products until they are removed from the site.

Wildlife Considerations Stabilized trails and landings offer an opportunity to provide foraging areas for birds, and shrubs for food and nesting cover. Additional forbs, selected from the NRCS Seeding Tool, or Indiana Biology Tech Note Upland Wildlife Habitat,http://www.in.nrcs.usda.gov/intranet/TechnicalNotes/technicalnotes.html can be added to provide additional wildlife habitat.

Criteria

Forest trails and landings usually require structural measures to manage runoff and vegetative treatment to reduce soil erosion and sedimentation. Water flow can be controlled using techniques such as outsloping, broad-based dips, water bars, and culvert crossings. Cut and fill slopes and the travel surface can be stabilized with appropriate vegetation or material. Trails that do not concentrate water and that have not been denuded usually do not require treatment. New vegetative plantings should be protected from traffic to insure establishment.

Water Bars Are installed on skid trails and should be installed at a downslope angle of 30 degrees or less depending on the grade of the trail. Steeper trail grades require less downslope angle. The outlet of the water bar should be open to prevent water from accumulating and be protected by a buffer or filter zone of undisturbed forest floor to clean the sediment out of the water and prevent erosion.

Operation and Maintenance

Upon completion logging trails will be properly graded and outsloped if needed, and the entire disturbed area(s) seeded as needed to control soil erosion following the recommendations on the attached specifications sheet. Trails will be inspected during the establishment period to ensure that drainage systems and structures for water control are properly functioning and that vegetation has attained full coverage.

Forest Trails and Landings - Specification Sheet

Landowner **Tract Number** **Field Number**

Purpose	
☐ Forest Management	☐ Erosion Control
☐ Logging	☐ Other

Layout and Dimensions		
Total Length (ft):	**Average Width (ft.):**	**Total area (ac) or 1000 Ft.^{2}**
Additional location and layout requirements:		

Species	Seeding Rate lbs./ac. or lbs./ 1000 Ft.^{2}	Total = (Rate X Acres or Per 1000 Ft.^{2})	Planting Dates
1.			
2.			
3.			
4.			
5.			

☐ **Apply lime and or fertilizer according to an approved soils test and plan or as recommended by NRCS.**

☐ **Mulch according to NRCS recommendations.**

Site Preparation

Planting Method (s)	
☐ Broadcast	☐ Drilled

Maintenance Requirements – Check as Appropriate		
☐ Water Breaks Functioning	☐ Trails Outsloped	☐ Inspect Periodically
☐ Trails Properly Graded	☐ Vegetation Established	☐ Access Limited

Typical Water Bar

Water Bar Table

Trail Grade (percent)	Approx. distance between water bars (feet)
1-2	500-250
3-5	250-125
5-10	125-80
11-15	80-60
16-20	60-40
21-30+	40-30