

NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD
FOREST TRAILS AND LANDINGS

(Ft.)

CODE 655

DEFINITION

A temporary or infrequently used route, path or cleared area.

PURPOSE

- Provide routes for temporary or infrequent travel by people or equipment for management activities.
- Provide periodic access for removal and collection of forest products.

CONDITIONS WHERE PRACTICE APPLIES

Trails and landings including low use seasonal roads are applicable on forest land and other lands where woody biomass is being removed. They typically connect to an Access Road (Code 560)

Practice applies where restoration activities include 1) reducing sediment for TMDL conformity 2) restoring T&E species (fish), 3) reducing fuel for fire hazard, and 4) moving legacy road/trail routes off unstable slopes.

CRITERIA

General Criteria Applicable To All Purposes

Trails and landings will be of a size, gradient, number and location to accomplish the intended purpose. Legacy trail, road and landing systems should be evaluated and a systematic layout pattern planned. Trails, roads and landing design will consider appropriate existing routes and minimizes mileage, watercourse crossings and avoids riparian areas, unstable areas, steep slopes, and reduce impacts on T&E species.

Avoid locating trails and landings on poorly suited soils of low-bearing strength and sites such as wetlands, riparian areas, critical wildlife

habitat, or other environmentally sensitive areas. Locate trails on the contour to the greatest extent possible and incorporate breaks in grade (rolling dips or rolled grades) for trails on slopes. Skid logs to minimize mechanical displacement of soil. Trails and landings will be set back from water bodies and water courses. Stream crossings, if necessary, will be minimized in size and number.

Assure safe ingress and egress from trails and landings to junctions with access roads. Refer to the practice standard Access Road (Code 560), for travel-ways including logging spur roads needing construction design and possibly surfacing to accommodate frequent, intensive, or repeated vehicular traffic.

Trails and landings shall be located and minimized in number and size to reduce adverse onsite and off-site impacts such as accelerated erosion, slope failure, water quality and riparian area degradation, stream channel and streambank damage, hydrologic modification, aesthetics, unacceptable damage to advance regeneration or residual growing stock, or fragmentation of wildlife habitat.

Those trails and landings intended or anticipated for management activities in subsequent years shall be designated for reuse to minimize the need for new trails and landings and associated site impacts.

Timing and use of equipment shall be appropriate for site and soil conditions to maintain site productivity and minimize soil rutting, erosion, displacement and compaction.

Drainage and erosion control measures shall be integrated with trails and landings and located to minimize detrimental effects of concentrated flow, erosion and sedimentation rates both during and after trail/landing use. Effort will be taken to hydrologically disconnect the watercourses from the landing and trail/road prism. After usage, stream crossings will be

restored and stabilized. Refer to applicable drainage and erosion-sedimentation prediction technology and practice standards such as Critical Area Planting (Code 342), Structure for Water Control (Code 587), Stream Crossing (Code 578) and Mulching (Code 484).

CONSIDERATIONS

In most cases legacy forest trails, roads and landings exist and need to be restored/ storm proofed for the long-term to protect fish, water quality and/or provide access to resource protection (fire protection, forest health and management)

Consider impacts to wildlife from increased fragmentation of the forest stand. Creation of openings can benefit some wildlife species (e.g., early successional and edge species) yet be detrimental to others (e.g., forest interior species).

Trails and landings, particularly after usage, may be utilized and managed for wildlife food and cover plantings. Refer to appropriate wildlife habitat practice standards, e.g., Upland Wildlife Habitat Management, (Code 645), and Early Successional Habitat Development/ Management (Code 647).

Properly located trails and landings of sufficient width and location may be utilized and managed as firebreaks and landscape-wide access for fire and restoration plans. Fuel Breaks (Code 383) are often integrated with this practice.

Favor native species for revegetating trails and landings. Measures will be used to protect against invasive species of plants and animals, natural areas and wetlands.

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

Cultural Resources Considerations

NRCS policy is to avoid any effect to cultural resources and protect them in their original location. Determine if installation of this practice or associated practices in the plan could have an effect on cultural resources. The

National Historic Preservation Act may require consultation with the California State Historic Preservation Officer.

<http://www.nrcs.usda.gov/technical/cultural.html> is the primary website for cultural resources information. The California Environmental Handbook and the California Environmental Assessment Worksheet also provide guidance on how the NRCS must account for cultural resources. The electronic Field Office Technical Guide, Section II contains general information, with Web sites for additional information.

Document any specific considerations for cultural resources in the design docket and the Practice Requirements worksheet.

Endangered Species Considerations

If during the Environmental Assessment (CPA-52), NRCS determines that installation of this practice, along with any others proposed, will have an effect on any federal or state listed Rare, Threatened or Endangered species or their habitat, NRCS will advise the client of the requirements of the Endangered Species Act and recommend alternative conservation treatments that avoid the adverse effects. Further assistance will be provided only if the client selects one of the alternative conservation treatments for installation; or with concurrence of the client, NRCS initiates consultations concerning the listed species with the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service. Permits may be required (1600) by California Department of Fish and Game for activities that may affect surface water and a Regional Water Quality Control Board waiver may be necessary where basin plans address forest land management near streams. When biomass is being removed and commercialized, a timber harvest plan (THP, exemption and/or equivalent) must be obtained from CAL FIRE.

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

Regular and timely inspections for adverse effects will be conducted with trails and landings and associated measures maintained or restored as necessary. Following the first major rainfall after practice installment, an inspection of all erosion control measure will take place and corrective measures applied.

Trails and landings utilized and managed as firebreaks will be properly maintained to accomplish this purpose while maintaining acceptable mitigation of other concerns.

Access to trails and landings shall be controlled when and where needed for erosion abatement, fire suppression access, safety and liability, and reduced maintenance costs. Refer to the

practice standard Access Control (Code 472) as needed.

Trails and landings no longer needed may be decommissioned. Refer to the practice standard Road/Trail/Landing Closure and Treatment (Code 654), as needed.

REFERENCES

Garland, John. 1997. Designated Skid Trails Minimize Soil Compaction. Woodland Workbook, Oregon State University Extension Service, EC1110.

California Code of Regulations (CCR), California Forest Practice Rules; Chapter 4, sections 923.1 through 923.17.