

NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD

FENCE
(feet)
CODE 382

DEFINITION

A constructed barrier to livestock, wildlife or people.

PURPOSES

This practice may be applied as part of a conservation management system to facilitate the application of conservation practices that treat the soil, water, air, plant animal and human resource concern.

CONDITIONS WHERE PRACTICE APPLIES

This practice may be applied on any area where livestock and/or wildlife control is needed, or where access to people is to be regulated. Fences are not needed where natural barriers will serve the purpose.

CRITERIA

Fencing materials shall be of a high quality and durability, and the construction performed to meet the intended management objectives.

Fences shall be positioned to facilitate management requirements.

Standard or conventional (barbed or smooth wire), suspension, woven wire, or electric fences shall consist of acceptable fencing designs to control the animal(s) or people of concern and meet the intended life of the practice.

Height, number, and spacing of wires will be installed to facilitate control and management of the animal(s) and people of concern.

Height, size, spacing and type of posts will be used that best provides the needs for the style of fence required and is best suited for the topography of the landscape.

CONSIDERATIONS

Consider installing fences in locations that will facilitate maintenance avoiding irregular terrain and/or water crossings.

Consider wildlife movement needs when locating fences.

Consider livestock management, handling, watering and feeding when locating fences.

Boundary fences shall comply with state laws and standards for construction.

Where applicable, clear right-of-ways will be established which will facilitate fence construction and maintenance.

Consider soil erosion potential when planning and constructing a fence on steep slopes.

Water Quantity

Normally fencing will have no effect on the quantity of surface and ground water. Refer to the conservation practices of which this is a component to determine the effect on water quantity.

Water Quality

Often a fence line will have grass and some shrubs and trees in it, which is due to the seeds from bird and animal droppings germinating and growing under perching areas. When a fence is built across the slope it will slow down runoff, and cause deposition of coarser grained materials, thereby reducing the amount of sediment delivered downslope. Fencing may protect riparian areas which act as sediment traps and filters along water channels and impoundments.

Livestock have a tendency to walk along fences. The paths become bare channels which concentrate and accelerate runoff, causing a greater amount of erosion within the path and where the path/channel outlets into another channel. This can deliver more sediment and associated pollutants to surface waters. Fencing can have the effect of concentrating livestock in small areas, causing a concentration of manure which may wash off into the stream, thus causing surface water pollution.

Endangered Species Considerations

Determine if installation of this practice with any others proposed will have any effect on any federal or state listed Rare, Threatened or Endangered species or their habitat. NRCS's objective is to benefit these species and others of concern or at least not have any adverse effect on a listed species. If the Environmental Evaluation indicates the action may adversely affect a listed species or result in adverse modification of habitat of listed species which has been determined to be critical habitat, NRCS will advise the land user 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 landowner selects one of the alternative conservation treatments for installation; or at the request of the landowners, NRCS may initiate consultation with the Fish and Wildlife Service, National Marine Fisheries Service and/or California Department of Fish and Game. If the Environmental Evaluation indicates the action will not affect a listed species or result in adverse modification of critical habitat, consultation generally will not apply and usually would not be initiated. Document any special considerations for endangered species in the Practice Requirements Worksheet.

Some species are year-round residents in some streams, such as, freshwater shrimp. Other species, such as steelhead and salmon, utilize streams during various seasons. Be aware that critical periods, such as spawning, eggs in gravels, and rearing of young may preclude activities in the stream that may directly affect the stream habitat during those periods. For example there should be no disturbance of stream gravel beds that may have eggs in them. That could include any equipment in the stream or even walking in the stream or work upstream that may result in sediment depositing in the gravel beds. Document any special considerations for endangered species in the Practice Requirements Worksheet.

PLANS AND SPECIFICATIONS

Plans and specifications are to be prepared for specific field sites based on the NRCS National and State Fence Standards and appropriate state and local statutes or laws.

Specifications Guide

Alternative types of materials and designs may be used for fence construction if 1) they meet or exceed the specifications and 2) they are approved in advance by the State Rangeland Management Specialist. Locally

accepted practices that meet these criteria may be incorporated into the Field Office Technical Guide with prior approval of the State Resource Conservationist. Bureau of Land Management and Forest Service joint publication 2400-Range 8824 2803, "FENCES" provides alternative designs and materials that may be used if approved by the State Rangeland Management Specialist .

Specify:

1. Type and height of fence;
2. size, spacing, and material of brace posts;
3. size, bracing, and material of corners and gate posts;
4. size, spacing and material of line posts;
5. gage, coating, and spacing of wire if barbed wire or other strands is used;
6. gage, coating, size of net, and additional top strands if net wire is used;
7. type of rails and spacing if rails are used;
8. type of staples, nails, or other fasteners to secure wire or rails to posts;
9. depth to set corner, brace, gate, and line posts; and
10. anchoring materials or devices.

OPERATION AND MAINTENANCE

Regular inspection of fences should be part of an ongoing management program. Inspection of fences after storm events is needed to facilitate the function of the intended use of the fence.

Maintenance and repairs will be performed as needed to facilitate the intended operation of the installed fence.