NATURAL RESOURCES CONSERVATION SERVICE

CONSERVATION PRACTICE STANDARD

FENCE

(Ft.)

CODE 382

DEFINITION

A constructed barrier to animals or people.

PURPOSE

This practice facilitates the accomplishment of conservation objectives by providing a means to control movement of animals and people, including vehicles.

CONDITIONS WHERE PRACTICE APPLIES

This practice may be applied on any area where management of animal or people movement is needed. Fences may be either permanent or temporary, based on need.

CRITERIA

General Criteria Applicable to All Purposes

Fencing materials, type and design of fence installed shall be of a high quality and durability. The type and design of fence installed will meet the management objectives and site challenges. Based on need, fences may be permanent, portable, or temporary.

Fences shall be positioned to facilitate management requirements. Ingress/egress features such as gates and cattle guards shall be planned. The fence design and installation should have the life expectancy appropriate for management objectives and shall follow all federal, state and local laws and regulations.

Height, size, spacing, and type of materials used will provide the desired control and management of animals and people of concern

The fence design and location must consider: topography, soil properties, livestock management and safety, livestock trailing, wildlife movement, location and adequacy of water facilities, development of potential grazing systems, human access and safety, landscape aesthetics, erosion problems, moisture conditions, flooding potential, stream crossings, and durability of materials. Natural barriers should be utilized instead of fencing, when appropriate.

Fence design and location must consider ease of access for construction, repair and maintenance.

All wooden materials used in this practice that require preservative treatment will conform with National Standard Material Specification NSMS #585

http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs143_026027.pdf (Chapter 3 - Part #585)

All materials used in field fencing will conform to National Standard Material Specification NSMS #591

http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs143_026027.pdf (Chapter 3 - Part #591)

Techniques used in Field Fence installation shall conform with Construction Specification 92—Field Fence

http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs143_026027.pdf (Chapter 2 – Construction Specification #92)

Special fence designs will be approved by the State Resource Conservationist.

Criteria Applicable to Facilitating Wildlife Movement

Planners are required to determine which wildlife species occur in the planning unit and if their movements can be impaired by fencing. Fencing will accommodate the movement of specie(s) present.

Where mule deer and/or elk range the top wire will not be higher than 38 inches with the top two wires 10-12 inches apart and stretched tight to reduce the hazard of tangling deer and elk in the fence). Where Deer and Elk are present and can be expected to cross the fence give consideration to all smooth wire fencing to minimize hazards to wildlife and address maintenance issues. Another effective technique is to place 1 inch dia. PVC pipe sleeves over the top wire in a 3 or 4 wire fence at locations where game trails intersect the fence and in fence corners.

In wildlife habitat, where it is intended to minimize affects to big game, net wire fences are strongly discouraged. If necessary, net wire fences will be no more than 38 inches high. A preferred net wire fence has 24 inches of woven wire with 2 strands of barbed wire at 2 and 12 inches above the net wire.

Where antelope range, the bottom wire will be 16 inches above ground surface and smooth. If net wire is used within antelope habitat install sections of smooth wire, 100 yards or more in length, every one half mile or leave a gap not greater than 32 inches high in net wire sheep fences. Pass structures or using small cattle guards of six feet wide and four feet in line length, installed about one mile apart can also be used to facilitate Antelope movement

https://efotg.sc.egov.usda.gov/references/public/NM/range103_transmittal_document.pdf

Criteria Applicable for planning and constructing wire fencing in occupied Lesser Prairie Chicken Habitat Area

All new wire fences installed within a 1/2 mile radius of known active (used at least once in the last 5 years) Lesser Prairie Chicken (LEPC) leking areas shall be marked to reduce fence collisions. Marking will consist of installing 3-inch pieces of vinyl siding undersill on the top wire and third wire from the top on a four or five wire fence. Where fence post spacing is 30 feet then 4 markers will be installed on the top wire (and evenly spaced) and 3 on the third wire from the top. Where fence post spacing is 20 feet place 3 markers on the top wire (evenly spaced) and 2 markers on the third wire from the top. In addition all brace and line posts will be configured to discourage raptors from perching.

Fence marking reference: http://www.suttoncenter.org/conservation/fence-marking/

CONSIDERATIONS

Where applicable, cleared rights-of-way may be established which would facilitate fence construction and maintenance. Avoid clearing of vegetation during the nesting season for migratory birds.

Fences across gullies, canyons, or streams may require special bracing, designs or approaches. Break away or swing away fencing can be appropriate in these situations.

Fence construction requiring the removal of existing unusable fence should provide for the proper disposal of scrap materials to prevent harm to animals, people and equipment.

Consider constructing fences on a contour for increased water quantity and quality. When fencing is used to facilitate vegetative management, an increase of surface and ground water can result. Increased water

quality will result if the contour fence facilitates a vegetative filter along the fence, which will slow down runoff, and cause deposition, reducing the amount of sediment delivered downslope. Fencing on the contour will cause animals to trail on the contour, which will result in decreased concentrated water flow, reducing sediment and associated pollutants to be delivered into surface water.

Consider introducing animals to electric fencing in a designated training facility. Select a well-fenced area and construct an electric fence across or around the area to allow animals to come in contact with the electric fence. Normally, a minimum 12 hours of exposure to the electric fence is required. Most animals will be trained in 48 hours. When animals are approaching the fence with caution, they are trained.

To facilitate management requirements, locate fences on range site boundaries, pasture type and classes, or other significant areas of differing forage quality and quantity.

The following are a few of the more pertinent laws in NM concerning fences;

● Most of New Mexico is “Open Range”.

● Landowners increase their legal protection against trespass livestock by having fences that are at least equal to the 4-strand fence described in 77-16-4 NMSA

● The State Highway Department and county commissions are required by 30-8-13 NMSA to construct and maintain fences along certain roads in order to prevent livestock entry (Appendix B).

● A 1991 opinion of the Interior Department Solicitor’s Office indicates that there is a federal mandate to protect wildlife on federal lands which may take precedence over state requirements for fencing of highways.

Consider letdown fences for elk movement and/or winter snow pack (See Letdown Fence specification).

Where wire fences run along or across exposed ridges or other areas where lightning can be expected to contact the fence and move along it consideration should be given to installing ground wires and grounding rods periodically along the fence.

PLANS AND SPECIFICATIONS

Plans and specifications are to be prepared for all fence types, installations and specific sites. Requirements for applying the practice to achieve all of its intended purposes shall be described.

OPERATION AND MAINTENANCE

Regular inspection of fences should be part of an ongoing maintenance program. Inspection of fences after storms and other disturbance events is necessary to insure the continued proper function of the fence. Maintenance and repairs will be performed in a timely manner as needed, including tree/limb removal and water gap replacement.

Remove and properly discard all broken fencing material and hardware. All necessary precautions should be taken to ensure the safety of construction and maintenance crews.

REFERENCES

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