

**NATURAL RESOURCES CONSERVATION SERVICE
MONTANA CONSERVATION PRACTICE STANDARD**

FENCE (FEET)

CODE 382

DEFINITION

A constructed barrier to animals or people.

Fences shall be designed, located, and installed to meet appropriate local wildlife and land management needs and requirements.

PURPOSE

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

All power fences must be grounded to protect humans, animals, wildlife and power fence equipment and materials from lightning. Safety guidelines for each type of fence must be strictly followed. When constructing power fences, it is critical that the energizer has sufficient output, the fence is grounded correctly, ample cut-off switches are installed in necessary locations and fence height and wire spacing are adhered to as outlined in the Field Office Technical Guide (FOTG), Section IV, Conservation Practice Specification, Power Fence (Code 382).

CONDITIONS WHERE PRACTICE APPLIES

This practice may be applied on any area where management of animal or human movement is needed.

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 objectives, 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, **tribal** and local laws and regulations. **Montana State law prohibits fencing across any navigable waterway.**

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

CONSIDERATIONS

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

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.

Where applicable, fences should be marked to enhance visibility as a safety measure for animals or people.

Fences across gullies, canyons or streams may require special bracing, designs or approaches.

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Conservation practice standards are reviewed periodically and updated if needed. To obtain the current version of this standard contact the Natural Resources Conservation Service.

NOTE: This type of font (**AaBbCcDdEe 123..**) indicates NRCS National Standards.
This type of font (**AaBbCcDdEe 123..**) indicates Montana Supplement.

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

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

Sandy soils may require more braces and closer bracing than finer-textured soils. Rocky soils may require fences built of rock jacks with figure-four posts or straddle jacks. Marshy areas may require the construction of figure-four or straddle jack posts with long flotation boards that keep the fence on top of the marsh.

Chromated Copper Arsenate (CCA) treated wood post chemicals are unlikely to cause significant water or soil contamination, but restricting the timing of the installation may be advisable in some locations and a sufficient solution to eliminate potential impacts to ESA listed species (EPA 2008, NOAA 2009). Wood posts are to be produced in accordance with "Best Management Practices for Treated Wood in Aquatic and Other Sensitive Environments" issued by the Western Wood Preservers Institute (Brooks 1997).

Areas of light snow usually do not require special fencing designs. Fences exposed to heavy snow may require sturdier stays, straddle jacks, with wire or pole fencing, or worm, block and log, post and pole wood fences or let-down fences.

Additional Considerations for Wildlife

Where possible, the fence design will account for safe passage of wildlife. Where deer, elk and moose are a concern, fences should not exceed 42 inches in height. Also where deer and elk are a concern, 12 inches of space between the top and bottom wire will help prevent animals from hooking their back legs between these wires when jumping over the fence. Antelope can generally pass under wire fences that are at least 16 inches above the ground.

When constructing fences on private lands, wildlife migration routes or corridors may be affected – consult wildlife biologists as needed.

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 to ensure continuing proper function of the fence. Operation and Maintenance (O&M) includes the following:

A schedule for regular inspections and after storms and other disturbance events.

Maintenance activities:

- Repair or replacement of loose or broken material, gates and other forms of ingress/egress
- Removal of trees/limbs
- Replacement of water gaps as necessary
- Repair of eroded areas as necessary
- Repair or replacement of markers or other safety and control features as required.

Old wire, posts and hardware that are replaced over time should be discarded off-site into an acceptable facility.

Electric fences need to be inspected periodically to remove any vegetation that is touching the wires. It is essential to remove all vegetation from the path of electrical fence wires, especially before snowfall. This permits proper grounding of the fence in all seasons.

REFERENCES

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