

UNITED STATES DEPARTMENT OF AGRICULTURE

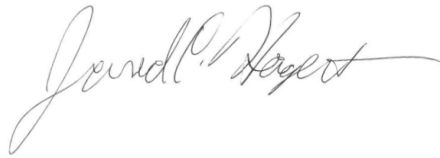
Farm Service Agency
Washington, DC 20250

Notice EFRP-12

For: State and County Offices

Authorization of C/S for Virtual Fence Under EFRP

Approved by: Deputy Administrator, Farm Programs



1 Overview

A Background

EFRP currently provides C/S payments for the repair or replacement of permanent fencing damaged by approved natural disaster events. Following a review of the conservation benefits, technical feasibility, and costs, virtual fence has been authorized for C/S when it is a suitable and cost-effective option for applicants with livestock operations grazing forest understory on eligible nonindustrial private forestland (NIPF).

Virtual fencing provides a non-physical containment system for grazing livestock that compliments, but does not replace, the need for physical perimeter fencing. It provides an alternative to interior cross-fencing and functions by using GPS-enabled collars worn by adult livestock that communicate through cellular service or a satellite base station to a computer or smartphone. When livestock approach a virtual fence boundary, the collar produces an audio cue followed by a mild electrical stimulus to encourage animals to remain within the designated area. Base stations and transmitters may be installed on trailers to become a portable system.

Virtual fencing is an effective adaptive management tool that delivers ongoing conservation benefits beyond its initial purpose. When suitable for the operation, it enables flexible and efficient forage and water management without creating physical barriers to wildlife movement.

Disposal Date	Distribution
February 1, 2027	State Offices; State Offices relay to NRCS State Offices and County Offices

1 Overview (Continued)

B Purpose

This notice provides:

- authorization, guidance, and instructions for determining suitability of virtual fence under EFRP
- guidance for establishing c/s component(s) and rate(s) for virtual fence
- producer fact sheet on virtual fence.

2 Policy Provisions

A C/S Approval Based on Suitability

C/S may be approved for implementing a virtual fence system, or system components, when it is the least-cost alternative to installing a physical fence. Approval may be justified when the virtual fence system reduces capital costs, minimizes long-term maintenance obligations, or supports land management outcomes that would otherwise require substantial infrastructure investment.

COC will approve C/S for virtual fence only when it is the least-cost option and the applicant meets **all** of the following suitability criteria:

- livestock typically graze forest understory on NIPF
- the operation includes at least 125 head of livestock, according to subparagraph 2 C
- virtual fence is the least-cost option to replace existing physical interior fence, or replace existing virtual fence component(s) damaged by an approved disaster event
- implementation meets **at least one** of the following conditions:
 - it is in large, remote, or rugged grazed forests where physical fence installation and upkeep are expensive or difficult
 - it enables grazing on previously underutilized NIPF acres, increasing usable animal unit months (AUM) without expanding land base
 - it allows control of access to sensitive areas such as water bodies, wildlife habitat, and other sensitive areas
- the applicant agrees to install and maintain virtual fence in accordance with manufacturer guidelines
- all other EFRP eligibility criteria are met.

2 Policy Provisions (Continued)

B Effective Date

C/S for virtual fence is authorized for all disasters occurring in FY 2025 and future years. EFRP applicants who have already installed permanent interior fencing are not eligible for C/S to convert to virtual fence.

C/S may be approved for both physical and virtual fence in separate fields when COC determines that the land would benefit from a hybrid approach using multiple fence types.

C Eligible Livestock for Virtual Fence

Virtual fence collars are only suitable for some livestock and is dependent on the manufacturer. Eligible livestock generally includes:

- cattle over 440 lbs.
- sheep
- goats.

Ineligible livestock includes:

- calves, lambs, and kids (not recommended because of rapid growth and the need for frequent collar adjustments)
- horses, donkeys, mules, and other equids (movement patterns, size, and behavior make them less responsive to audio training)
- pigs and swine (require different containment and training methods).

D Establishing C/S Component for Virtual Fence

STC's are authorized to establish EFRP C/S components and rates according to 1-EFRP, paragraphs 66-67. The Conservation Division and Program Delivery Division worked together to streamline the development of C/S components. STC's will establish virtual fence components using the naming convention shown in the following table, and will provide the STC-approved components to counties within the State. The "XX" in the component name will represent the State abbreviation.

Component	Description	Unit of Measure
XXEFVFBBase	one base station and two transmitters	each
XXEFVFCollar	animal collars	head
XXEFVFTrans	additional transmitters	each

2 Policy Provisions (Continued)

D Establishing C/S Component for Virtual Fence (Continued)

STC must consider the State NRCS payment scenario(s) for virtual fence, including:

- Virtual fence, Startup Year 1, base cost – includes the base station and two transmitters
- Implementation cost – per head cost of collars
- Additional Transmitters – if necessary, depending on topography, pasture configuration, and the vendor providing the virtual fence technology.

A table of examples is provided in Exhibit 1.

E Other Considerations

When discussing virtual fencing with applicants, staff and COC should consider the following:

- based on current technology and the NRCS practice lifespan, virtual fence equipment typically lasts approximately 7 years
- EFRP will not provide additional C/S to replace virtual fence equipment that fails
- the participant is responsible for maintaining the system, including purchasing any necessary replacement equipment
- annual collar lease fees or data subscriptions are not eligible for C/S
- C/S will not be approved to install physical fencing as a replacement if virtual fencing fails or is not effective
- economic analyses show that virtual fence becomes cost-competitive primarily when it replaces or eliminates the need for extensive new interior fencing, which would otherwise require significant materials, labor, and ongoing maintenance
- virtual fence has benefits, presents challenges, and requires special considerations for use by producers
- virtual fence will not be a suitable solution for all producers.

Ensure applicants are aware of the unique aspects of using virtual fence. See the NRCS Virtual Fence Systems Fact Sheet at https://www.nrcs.usda.gov/sites/default/files/2024-11/NRCS_Virtual%20Fence%20Systems%20for%20Managing%20Livestock_Factsheet_111224_0.pdf.

3 Action

A State Office Action

State Offices will:

- inform FSA STC, NRCS, the NRCS State Technical Committee, and State forestry partners of the provisions of this notice
- advise STC on establishing EFRP C/S components for virtual fence
- submit questions to:
 - Shanan Smiley, Acting ECP/EFRP Program Manager or
 - Emily Horsley, EFRP Program Specialist.

B County Office Action

County Offices will:

- review and follow the provisions in this notice
- provide potential applicants with the NRCS Virtual Fence Systems fact sheet
- document COC determinations of C/S approval and disapproval in COC minutes, including considerations related to operation suitability
- submit questions to their State Office.

Examples of Virtual Fence Systems

The following table provides examples of the component(s) and extent(s) needed for virtual fence implementation in various scenarios.

Example	Acres	# of Collars (Head)	# Transmitters Needed	Component	Extent
Example 1 (new system)	500	125	2*	XXEFVFBBase	1 each
				XXEFVFCollars	125 head
Example 2 (new system)	2,000	200	5	XXEFVFBBase	1 each
				XXEFVFCollars	200 head
				XXEFVFTrans	3 each
Example 3 (virtual fence system in place before disaster with only base and transmitters effected)	2,000	0	5	XXEFVFBBase	1 each
				XXEFVFTrans Transmitters	3 each

*No additional transmitters are approved in Example 1 because 2 transmitters are needed and the cost of 2 transmitters is included in the base cost.