

For: State and County Offices**Authorization of Virtual Fence as an Eligible Practice Under ECP****Approved by:** Deputy Administrator, Farm Programs**1 Overview****A Background**

ECP currently provides program payments for the repair or replacement of permanent fencing damaged by natural disaster events under ECP practice EC3. Following review of the conservation benefits, technical feasibility, and NRCS payment scenarios, virtual fence has been approved as an eligible supporting practice. Using virtual fence is optional for producers.

Virtual fencing provides a non-physical containment system for grazing livestock that compliments, but does not replace, the need for 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 them to remain within the designated area. Base stations and transmitters may be installed on trailers for a portable system.

Virtual fencing is an effective adaptive management tool that delivers ongoing conservation gains beyond its initial purpose. When suitable for the operation, it enables flexible forage and water management efficiently 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 ECP
- virtual fence payment scenarios
- decision tree for situations appropriate for use of virtual fence
- producer fact sheet on virtual fence.

2 Policy Provisions

A Authorization of Virtual Fence and Suitability

Support or installation of virtual fencing will be considered when it offers measurable financial advantages to USDA by reducing capital costs, minimizing long term maintenance obligations, or enabling land management outcomes that would otherwise require substantial infrastructure investment. County Offices will use the virtual fence decision tree (Exhibit 2) to determine if an operation is suitable for virtual fence authorization.

Virtual fence may be authorized when needed to address a resource concern caused by natural disaster events, provided the producer is interested and the operation is suitable. An operation is considered suitable when virtual fence is more cost-effective for USDA and includes the following:

- virtual fence was in use by the producer and was damaged by a disaster event
- replaces large amounts of interior fencing that would otherwise require significant material, labor, and maintenance costs
- the operation manages at least 125 head
- grazing area is large, remote, or rugged pastures where physical fence installation and upkeep are expensive or difficult
- used to manage livestock access to sensitive areas such as water bodies, wildlife habitat and locations prone to soil erosion
- avoids ecological, regulatory, or physical challenges posed by building fence in wildlife corridors, archeological areas, sensitive habitats, or wildfire-prone zones

2 Policy Provisions (Continued)

B Effective Date

Authorization of virtual fence is effective for all disasters occurring in FY 2025 and forward if requested by the producer and the operation is determined suitable under subparagraph A. Producers who have already installed permanent interior fencing are not eligible to switch to virtual fence for the pasture because the resource concern has already been addressed. When the land under an ECP agreement would benefit from a hybrid approach using multiple fence types, use the least-cost alternative for the evaluated land to ensure that updating to virtual fence does not increase the cost of the repair or replacement.

C Eligible Livestock for Virtual Fence

Virtual fence collars are only suitable for some livestock and will depend on the manufacturer the producer chooses. Eligible livestock generally include adult:

- cattle over 440 lbs. (can include weaned calves)
- 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 Eligible Integrated Payment Scenarios

Virtual fence payment scenarios will follow the FY 2026 NRCS EQIP payment schedules, including standards and specifications, for the conservation practice 382 - Fence. As such, applications found to be suitable for the use of virtual fence will include the integration and inclusion of the following scenarios:

- virtual fence, Startup Year 1, Base Cost – includes base station and two transmitters
- virtual fence, Startup Year 1, Implementation Cost – per head cost of collars

2 Policy Provisions (Continued)

D Eligible Integrated Payment Scenarios (Continued)

Notes: Each application must include at least one Base Cost and at least 125 Implementation Cost. An application may not have one or the other alone. Each application must include both scenarios. If producers will share the cost, their separate applications must reflect the total and indicate the producer's share of the total.

If the producer had virtual fence in use at the time of the natural disaster, the application will only include the damaged portions of the system needing replacement.

- additional Transmitters – if necessary, and will depend on topography, pasture configuration, and the vendor chosen to provide virtual fence technology.

A table of examples is provided in Exhibit 1.

E Land Under Which Virtual Fence May Be Approved

Virtual fence may be used on privately owned or leased federal lands (Forest Service, Bureau of Land Management, etc.). If virtual fence will be on federally leased lands, applicants are responsible for communicating with the agency for approval and following the agency's requirements and restrictions.

F Producer Suitability

Virtual fence will not be a suitable solution for all producers and has benefits, challenges, and special considerations depending on the operation. Ensure producers are aware of the unique aspects of using virtual fence by providing them with the Producer Information Sheet (Exhibit 3). If a producer chooses to install virtual fence and later determines it does not work for their operation, they will not receive additional ECP program payments to install physical fence as a replacement. The producer is responsible for maintaining the virtual fence system, including purchasing any necessary replacement equipment, annual collar lease fees or data subscriptions (not required by all vendors). 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 for benefits, challenges, and key considerations associated with virtual fencing.

G Technical Requirements and NRCS Coordination

FSA may consult and coordinate with NRCS for technical documentation for State standards and specifications, and may include assistance to evaluate suitability and confirm practice performance is to standard.

2 Policy Provisions (Continued)

H GIS Representation

EC3 fence typically uses a line to represent fence repair or replacement on the ECP software map module. Virtual fence will be represented by a single point for each practice instance, which will be placed anywhere on agricultural land in the area of interest (AOI), which includes all selected farms and tracts on the application. Individual points for each scenario will not be required. Transmitters may need to be placed outside of the AOI to avoid signal shadow and maximize signal coverage on the pasture. This is acceptable if all required access is permitted by the landowner.

3 Action

A State Office Action

State Offices will:

- inform FSA STC, NRCS, and State Technical Committee of the provisions of this notice
- submit questions to either of the following:
 - Shanan Smiley, Acting ECP Program Manager
 - Michelle (Shelly) Berry, CRP/ECP Specialist.

B County Office Action

County Offices will:

- review and follow the provisions in this notice
- provide producers potentially interested in virtual fence with the Producer Information Sheet (Exhibit 3)
- review land and producer eligibility, determine operation suitability, consult with State Office and NRCS when necessary
- document COC determinations of approvals and disapprovals in software and provide justification and deliberation in COC minutes
- submit questions to the State Office.

Examples of Integrated Virtual Fence Payment Scenarios

The following table provides examples of the integrated approach for virtual fence payment scenarios.

Acres	# of Collars (Head)	# Transmitters Needed	Scenarios	Extent
500	125	2	Startup Year 1, Base Cost	1 each
			Implementation Cost	125 each (head)
			Transmitters	0 (because the base cost includes 2 transmitters, so no additional are necessary)
2,000	200	5	Startup Year 1, Base Cost	1 each
			Implementation Cost	200 each (head)
			Transmitters	3 each (because the base cost includes 2 transmitters, so 3 additional are necessary to provide a total of 5)
2,000	0 Virtual fence system was in use at time of disaster. No collars needed for replacement.	5	Startup Year 1, Base Cost	1 each
			Implementation Cost	0
			Transmitters	3 each (because the base cost includes 2 transmitters, so 3 additional are necessary to provide a total of 5)

Decision Tree for Suitability of Virtual Fence

Use the following decision tree to determine suitability of virtual fence.

1. Was interior fencing, or an existing virtual fence system, damaged or destroyed by disaster event?
 - **Yes**-proceed to Question 2
 - **No**-virtual fence cannot be authorized.
2. Are producer and land eligible for ECP?
 - **Yes**-proceed to Question 3
 - **No**-Virtual Fence cannot be authorized.
3. Is virtual fence suitable for livestock type?
 - **If livestock are eligible**-proceed to Question 4. Eligible livestock are adult:
 - cattle over 440 lbs. (can include weaned calves)
 - sheep
 - goats.
 - **If livestock are ineligible**-virtual fence cannot be authorized. Ineligible livestock are:
 - calves/lambs/kids (not recommended due to rapid growth and the need for frequent collar adjustment)
 - horses, donkeys, mules, and other equids (movement patterns, size and behavior make them less responsive to audio treatment)
 - pigs/swine (require different containment and training methods).
4. Is virtual fence suitable for terrain and operation size (minimum 125 head of eligible livestock)?
 - **Yes**-proceed to question 5
 - **No**-Virtual Fence cannot be authorized.
5. Does the land meet at least one of the following conditions?
 - ☐ large, remote, rugged, or difficult to fence
 - ☐ sensitive areas needing livestock exclusion
 - ☐ producer needs to implement adaptive livestock management
 - **If Yes to any**-proceed to Question 6
 - **If No to all**-virtual fence cannot be authorized.

Decision Tree for Suitability of Virtual Fence (Continued)

6. Is the producer aware of the unique benefits and challenges of virtual fence?

- **Yes**-proceed to Final Decision
- **No**-virtual fence should not be authorized until awareness is ensured.

Final Authorization Decision: If **ALL** criteria above is answered **YES** — virtual fence may be authorized.