

## FPP02 - On-Farm Pilot Project



### **On-Farm Pilot Projects**

On-farm pilots consist of the installation, monitoring and publicizing of projects that fit within the identified state priority areas. Pilots should be practices, components, or management techniques that have shown environmental benefits through research but are not used by farmers in the project area. Practices, components, or management techniques must be implemented, monitored and publicized according to protocols developed specifically for the project.

### **Benefits**

Conservation activities can show promise in research but until they are proven in actual field use farmers may be reluctant to adopt them. Pilot projects will provide a mechanism to prove that a new conservation activity is viable in the project area. Publicizing the implementation of the conservation activity can help other farmers learn about new conservation techniques by observing their peers.

### **Criteria for Demonstrations**

- Pilots should be practices, components, or management techniques that have shown environmental benefits but have not been adopted by farmers in the project area.
- The pilots must be implemented and monitored according to protocols developed specifically for the project.
- The farmer must conduct at least 3 events to publicize the project to other farmers in the area. These events can be field days conducted in Conservation Districts or other similar entities.
- Data on the costs and performance must be collected for the demonstration project. The exact data collection needs will be identified for the project.
- The *State Supplemental Information Sheet* provides the details of topics that are available for pilots in each state.

### **Documentation Requirements for On Farm Research**

- Documentation of the events held to publicize the demonstration.
- Data collected for the demonstration.



**FRD01 – On Farm Research and Demonstration and FPP02 – On-Farm Pilot Project**

**Nebraska Criteria/Requirements for Pilots, on Farm Research and Demonstration**

- Focus must be in the topic areas listed below.
- Operator must have concurrence of Plant Materials Center, University of Nebraska extension specialist or educator prior to initiated demonstration or on farm research.
- Operators are responsible for any fees and negotiating terms with University of Nebraska Extension.
- Access to the research/demonstration or pilot project site must be provided for follow-up educational program or tours.
- Adequate strips, plots or areas within fields must be established for pilots, demonstrations, or on farm research as defined by the University of Nebraska Extension or Plant Materials Center. The methodology for making a valid comparison will need to be carefully defined which will typically include use of a control (comparison of alternative practice with conventional practice), multiple replications or comparisons, and other considerations.
- An agreement or letter of concurrence must be provided prior to initiating a CSP contract for University of Nebraska Extension projects prior to establishing the pilot, demo or research project that includes the area (acres), purpose, protocol etc.
- Provide annual report according to University of Nebraska Extension, or Plant Materials Center requirements to verify that the project is established and being carried out adequately in order to certify this each fiscal year.
- For University of Nebraska Extension projects the producer will be responsible for out of pocket costs or identifying a funding partner. On-farm research programs may require the operator to pay a fee.
- The pilot/research/demonstration can not be used to promote a commercial product or process. It must focus on demonstrating the strength and weaknesses of a management practice or technology in the three areas listed below: (check those that apply)
  - Pollinators (University of Nebraska Extension)**
    - Investigate the impacts of various agricultural production systems on the life cycles of pollinators.
      - Examples: impact of various pollinating cover crops on pollinator populations and life cycles; impact of use pollinating plants used on field borders on pollinator populations and life cycles i.e. different sizes, widths, locations, species.
  - Energy (University of Nebraska Extension)**
    - Evaluate energy usage for traditional farming practices vs. conservation systems.
      - Examples: conversion to a grazing dairy vs. a confined dairy; change, conversion from conventional nitrogen application to a system that includes annual legumes to reduce nitrogen energy needs; conversion from a conventional tillage system to a no-till system.
  - Water Quality (University of Nebraska Extension)**
    - Evaluate various cover crops for nutrient uptake and recycling nutrients.
      - Examples: establish plots or strips of various types of cover crops or cover crop mixtures and determine their impact on nutrient uptake and recycling.
  - Pollinators (Plant Materials Center or specialist)**
    - Evaluation of PMC released plant materials to identify pollinator friendly species for use at the farm level as follows:



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**Nebraska criteria for On-Farm Research and Demonstration, Pilots for Plant Materials:**

**Choose one of the following (circle or highlight choice):**

1. Plant a mix of native forbs and native grasses containing no more than 25% of the mix being native grass. Forbs will be at least 75% of the mix and contain a minimum of 9 species with three species from each flowering period (early, middle, and late).
2. Plant alternating strips of native grass and native forbs. Strips will be of equal width not being greater than 300 feet wide across the entire field. Strips of native grass will contain at least 50% native grass. Strips containing forbs will consist of a minimum 9 species with three species from each flowering period (early, middle, late) equaling 100% of the mix.

**Additional Criteria for Pilots, On-Farm Research and Demonstration, Pilots for Plant Materials:**

1. Implementation of this enhancement requires the use of the flowering plant species noted below. Substitute species may be approved by NRCS provided they are native and adapted to site conditions. New seedings must incorporate the required nine or more flowering species with three species from each flowering period. Total seeding rates (grasses plus wildflowers) should be a minimum of 30 PLS/ft<sup>2</sup>.
2. Existing habitat areas must contain the required nine or more flowering species and make up at least 75% of the land cover. It may be necessary to upgrade or enhance existing habitat areas by suppression of established plants using prescribed burning, tillage, or herbicide application followed by interseeding of the necessary flowering plant species. The minimum seeding rate of 30 PLS/ft<sup>2</sup> should be used for interseeded forbs.
3. Vegetation will not be disturbed between April 15 and October 15 unless approved by NRCS as part of a management plan intended to maintain and enhance plant diversity and vigor.
4. Refer to 550DP, Herbaceous Vegetation Design Procedures for information concerning seeding rates, species, seeding methods and maintenance. An NE-CPA-8 Grass Seeding Job sheet will be provided by NRCS that details seeding requirements.
5. Inventory of the acreage to be seeded will be completed prior to seeding to determine a benchmark for wildlife and pollinator populations. After seeding, an inventory of wildlife and pollinators will be completed annually to document changes in benchmark condition. Inventories will be completed for a minimum of 5 years following seeding.



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**Native Forbs**

Early

Blanketflower  
Canada milkvetch  
Illinois bundleflower  
Leadplant  
Purple coneflower  
Purple prairieclover  
Roundhead lespedeza  
Scarlet globemallow  
Western yarrow  
White prairieclover

Middle

Blackeyed Susan\*  
Blanketflower  
Canada goldenrod  
Canada milkvetch  
Dotted gayfeather  
False sunflower  
False boneset  
Illinois bundleflower  
Leadplant  
Missouri goldenrod  
Plains coreopsis\*  
Prairie sunflower  
Purple coneflower  
Purple prairieclover  
Roundhead lespedeza  
Scarlet globemallow  
Showy partridgepea  
Stiff goldenrod  
Stiff sunflower  
Upright coneflower  
Western yarrow  
White aster  
White prairieclover  
Wild bergamot \*

Late

Canada goldenrod  
Dotted gayfeather  
False sunflower  
False boneset  
Maximilian sunflower\*  
Missouri goldenrod  
Prairie sunflower  
Showy partridgepea  
Stiff goldenrod  
Stiff sunflower  
Upright coneflower  
White aster

\* = only appear in one season (no native forbs appear in all three seasons)

**Documentation Requirements for pilot, research and demo project (prior to initiating CSP contract)**

1. Copy of project proposal as agreed to with University of Nebraska Extension or PMC
2. Agreement or documentation of concurrence with University of Nebraska Extension or PMC
3. A map showing fields where the enhancement will be applied
4. A completed Grass Seeding Job Sheet NE-CPA-8 seed tags and bills (Pollinator Establishment for PMC projects only).



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NE-FRD01 & FPP02

**TABLE OF PLANNED AND APPLIED ACTIVITY –FRD01, FPP02**

Tract	Field(s)	Acres Planned	Indicate Whether Project is Pilot, Research, or Demonstration	Indicate Whether Focus Area is Pollinator (UNL), Energy, Water Quality, or Pollinators (PMC)	Specific Topic Area	Acres Applied (completed by operator)
<i>1</i>	<i>1</i>	<i>20</i>	<i>Research</i>	<i>Water Quality</i>	<i>Cover Crop Nutrient Uptake/Tie Up</i>	

**I certify that the following information meets specifications and has been provided to NRCS:**

1. Complete the table above and provide a map with delineation of the area where the enhancement was applied including partial fields.
2. Photographs of a representative number of fields showing demonstration or research.
3. Annual report based on University of Nebraska Extension Service or PMC that documents accomplishments (required each year before certified).

**Certified by:** \_\_\_\_\_ **Date:** \_\_\_\_\_