

Alliance to Advance Climate-Smart Agriculture practice enrollment guide
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Practices eligible for enrollment in the Alliance pilot must 1) result in GHG mitigation and 2) require producers to carry out activities (i.e. incur costs) for practice establishment or enhancement during the period of enrollment in the Alliance pilot.

As per previous communication, the following applies to only the acres/AUs to be enrolled in the Alliance pilot. Simultaneous enrollment of the same practice on the same acres is not allowed for any NRCS, state cost-share, or CSC program.

Conservation Crop Rotation (328) has a practice lifespan of one year according to NRCS. The practice requires a minimum of two different crops to be grown in rotation which will typically span more than one year. Also, there are standard crop rotations, for example corn and soybeans, that are widely adopted, and it is not the purpose of the pilot to incentivize standard crop rotations. To meet the previously stated intent, producers are eligible to enroll this practice in the Alliance pilot, for new implementation or enhancement of the existing crop rotation through the addition of a different conservation crop with planting of the selected crop during the Alliance contract year.

Residue and Tillage Management, No Till (329) has a practice lifespan of one year according to NRCS. However, continuing implementation of no-till does not require a change of action on the part of the producer, and does not impose any additional costs. It seems unlikely that producers can enhance implementation of 329 to increase GHG mitigation. For producers who have already adopted no-till and want to enroll in the Alliance pilot, we require adding a practice, such as 340 or 590 to accrue additional GHG benefits.

Cover Crop (340) has a practice life of one year according to NRCS. Because 340 must be renewed annually, it is eligible for enrollment in the Alliance pilot regardless of previous adoption.

Residue and Tillage Management, Reduced Till (345) has a practice lifespan of one year according to NRCS. However, continued implementation of reduced-till does not require a change of action on the part of the producer, and does not impose any additional costs. It seems unlikely that producers can enhance 345 to increase GHG mitigation, although they could enroll for switching to 329. For producers who have already adopted reduced-till and want to enroll in the Alliance pilot, we require adding a practice, such as 340 or 590 to accrue additional GHG benefits.

Silvopasture (381) has a practice lifespan of 15 years, according to NRCS. Therefore, enrollment is only possible for year one of this practice.

Riparian Herbaceous Cover (390) has a practice lifespan of 5 years, according to NRCS. Therefore, enrollment is only possible for year one of this practice.

Riparian Forest Buffer (391) has a practice lifespan of 15 years, according to NRCS. Therefore, enrollment is only possible for year one of this practice.

Filter Strip (393) has a practice lifespan of 10 years, according to NRCS. Therefore, enrollment is only possible for year one of this practice.

Nutrient Management (590) has a practice lifespan of one year according to NRCS. Because 590 must be renewed annually, it is eligible for enrollment in the Alliance pilot regardless of previous adoption. Requirements for enrolling 590 in the Alliance pilot are outlined on page 3.

Tree/Shrub Establishment (612) has a practice lifespan of 15 years, according to NRCS. Therefore, enrollment is only possible for year one of this practice.

Irrigation Water Management, Alternative Wetting and Drying (449) has a practice life of one year according to NRCS. Because 449 must be renewed and watering schedules are adjusted annually, it is eligible for enrollment in the Alliance pilot regardless of previous adoption. 449 applies only to rice production.

Pasture and Hay Planting (512) has a practice lifespan of 5 years, according to NRCS. Therefore, enrollment is only possible for year one of this practice. One exception to this is adding another species in a logical planting sequence (e.g. warm season grass in the spring and planting legumes in the fall) or enhancing an established pasture through adding new species for diversity.

Prescribed Grazing (528) has a practice lifespan of one year according to NRCS. Because forage availability and livestock class and numbers must be evaluated and adjusted annually and continually adapted throughout the year, it is eligible for enrollment in the Alliance pilot regardless of previous adoption.

Feed Management (592) has a practice lifespan of one year according to NRCS. Because 592 must be adjusted and renewed annually with respect to feed quality and the nutritional needs of the livestock, it is eligible for enrollment in the Alliance pilot regardless of previous adoption.

Nutrient Management (590) Standard Practices to Cost-Share

Minimum requirements (we will not pay cost-share to implement and must be done):

- 1) Use of a current soil test as recommended by state Land Grant University (LGU) – for initial planning, not more than 2 years old.
- 2) Continual/current soil testing – at frequency prescribed by the LGU.
- 3) Maintain soil pH as required by state LGU.
- 4) If organics/manure/biosolids are used – they must be tested according to LGU guidance.
- 5) Utilize the local NRCS risk assessment tool.
- 6) Utilize the 4-Rs, the right source, right rate, right time, and right place.
- 7) For soil test analyses, use laboratories successfully meeting the requirements and performance standards of the North American Proficiency Testing Program under the Soil Science Society of America and NRCS or use an alternative NRCS- or State-approved certification program that considers laboratory performance and proficiency to assure accuracy of soil test results.

Practices to cost-share per acre. Only one of these practices required to receive payment.

- 1) Reduce the potential for volatilization by applying sources subject to volatilization during cooler, higher humidity conditions or by placement that minimizes vulnerability to volatilization.
 - a. Inorganic and organic sources containing urea and ammonium.
 - b. Subsurface application
 - c. Irrigate after application with at least 0.5-inches per acre in less than 2 days if weather conditions are hotter than 80°F for a high and humidity is greater than 70%.
- 2) Use application methods, timing, technologies, or strategies to reduce the risk of nutrient movement or loss, such as—
 - a. Soil and plant tissue testing for N rate applications:
 - i. Small
 - ii. Applications (3 per crop) with N rates based on fall soil nitrate tests (FSNT), tiller counts [Zadok's growth stage (GS) 25] and tissue tests (GS30).
 - iii. Corn: Pre-sidedress nitrate test (PSNT) to reduce or justify N applications in conjunction with yield goals.
 - iv. Cotton, tomato, potato: Petiole nitrate testing to adjust last split of N applications for optimal N rate.
 - b. Banded applications
 - i. Subsurface (knifing-in) on second split application for crop.
 - ii. Streamer jets reduce N contact with residue on small grains and pastures.
 - c. Enhanced efficiency fertilizers
 - i. Slow or controlled release fertilizers to match crop uptake patterns.
 - ii. Urease inhibitors applied at rates per LGU guidelines for optimal active ingredient ratios.
 - d. Sensor based technologies.
 - i. Chlorophyll meters or real-time sensors to adjust N rates across the landscape.
 - ii. On-farm adaptive N management based on on-farm research.
 - iii. Using CC-NCALC to calculate cover crop contribution and reduce inorganic/organic fertilizer applications.
 - iv. GreenSeeker, Crop Circle, and other NDVI type sensors to variably apply N rates across the landscape.