

## Precision Agrichemical Application

### Definition/Purpose

Precision Agrichemical Application means using a system of components that enable reduction and greater control of fertilizer or pesticide application. This is accomplished through avoidance of excessive overlapping, unnecessary application to end/turn rows, and more precise control of application rates (DIP).

### Policies

1. Cost share for this practice shall be based upon actual cost with a cap. The cap for each tier is additive upon the previous tier. It is acceptable for an applicant who has already adopted a lower tier to receive cost share to adopt higher tiers and receive cost share up to the incremental cap(s).
2. This practice can be used to either retrofit existing application equipment or to replace existing equipment with new equipment with precision technology.
3. The applicable cost share cap for this practice shall be based upon the capabilities of the system according to the following tiers. To qualify for the higher tiers, the applicant must also implement or have already adopted all of the lower tiers:
  - a. Tier 1: GPS guidance system
    - i. Guidance system must have at least sub-meter pass-to-pass accuracy
    - ii. System must include the capability to compensate for tilt if used on slopes > 4%.
  - b. Tier 2: Automatic Application Rate Control
    - i. Rate control system must be capable of recording the application rate data and producing an application map
    - ii. Must include automatic correction for ground speed and number of boom sections being used.
  - c. Tier 3: Boom section control
    - i. Guidance system must have at least sub-meter pass-to-pass accuracy
    - ii. The system must have enough controls that the average length of each independently controlled section is no more than 12 feet.
4. Before the applicant can receive payment for this practice, they must demonstrate operation of properly calibrated equipment while applying agrichemicals.
5. For spot checks, district staff should either observe the cooperator using the equipment for agrichemical application or view the data stored or downloaded by the control system to ensure the system is being used.
6. The cooperator may upgrade any component of the precision application system without additional cost share during the maintenance period, as long as the upgraded system has components that are equivalent or better than the system originally cost shared.

Agriculture Cost Share Program

7. This practice is limited to one system per cooperator. However, a cooperator is free to utilize components of the system on multiple pieces of equipment, provided the cooperator can produce the cost shared components for spot checks with adequate advance notice.
8. The cooperator is eligible to receive the precision nutrient management incentive while using this practice.

<b>PRECISION AGRICHEMICAL APPLICATION</b>	
<b>Maintenance Period</b>	5 years
<b>BMP Units</b>	EACH
<b>Required Effects</b>	DIFFERENCE IN BEFORE AND AFTER P APPLICATION RATES (if resource concern is nutrient loss) ACRES_AFFECTED
<b>JAA</b>	The applicant must supply manufacturer documentation to verify system components meet: "ISO 12188 - Tractors and machinery for agriculture and forestry — Test procedures for positioning and guidance systems in agriculture."  <b>AND</b>  SWCC - 590-PAA Precision Agrichemical Application  <b>OR</b>  NRCS - ECS - 590 - Nutrient Management (if the resource concern is nutrient loss).  <b>OR</b>  NRCS - ECS - 595 - Pest Management Conservation System (if the resource concern is pesticide loss)
<b>NRCS Practice Standards</b>	NRCS - ECS - 590 - Nutrient Management NRCS - ECS - 595 - Pest Management Conservation System
<b>CS2 Reference Materials</b>	NC-ACSP-11 Signature Page  Map with BMP location, fields, and roads  Manufacturer documentation to verify the system components meet ISO 12188.

(August 2022, May 2019, August 2015, July 2012)