

# CONSERVATION INNOVATION GRANT: NITROGEN USE EFFICIENCY

## A FLEXIBLE, OUTCOME-BASED INCENTIVE TO SUPPORT ON-FARM INNOVATION

Through an outcome-based incentive focused on nitrogen use efficiency (NUE), this project will empower farmers to make management decisions on their farms that result in improved N management and agronomic sustainability. Farm advisors will partner in the planning and implementation of these practices on corn and wheat acres in the Chesapeake Bay watershed areas of Pennsylvania and Maryland.

### PART 1: \$1,000 VOUCHER

- Farmers will work with trusted advisors to identify ways to increase NUE in corn and/or wheat crops using a \$1,000 planning voucher.
- Vouchers are flexible! Any planning that has the goal of increasing NUE in corn or wheat is eligible.
- The voucher can be used for trusted advisors to provide technical assistance, data management, equipment access, testing, etc. to help farmers to increase NUE.
- Voucher outcomes will be shared with TNC.

### PART 3: ON FARM TRIALS

- Three farms per year from each state will be invited to participate in a comprehensive field trial using a replicated design that will be developed with support from TNC.
- A payment of \$2,000 per year will be provided to farmers who participate in the replicated on-farm trials

### PART 2: NUE PAYMENT

- Farmers will implement management practices they identify from the voucher planning work with their advisor.
- Baseline management will be compared to new management in on-farm comparisons or replicated trials.
- NUE will be calculated for implemented practices and for baseline management.
- Economic outcomes will be calculated to compare revenue changes resulting from using new practices.
- Agribusinesses will receive a data reporting payment per farm to compensate for the time necessary for site visits, and for data organization, entry, and submission.
  - \$500 for farms up to 200 acres
  - \$800 for farms 201-400 acres

### HOW IS NUE CALCULATED?

$$\text{NUE} = \text{N removed in harvest} \div \text{N available to crop}$$

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NUE achieved	<60%	60-69%	70-79%	≥80%
Payment to farmer	\$15/ac	\$25/ac	\$35/ac	\$50/ac

## PART 4: SOCIAL EVALUATION

- Farmers will be interviewed twice: once following initial enrollment and once toward the end of the project.
- ‘Initial enrollment’ interviews will focus on reasons for enrollment and intended activities over the course of the project. ‘Post-participation’ interviews will focus on farmers’ experiences during the project, and document how and why voucher and NUE incentives contributed (or did not) to changes in on-farm activities.
- Farmers who drop out of the program for any reason will also be asked to participate in an interview. Farmer “drop-out” interviews help us understand issues with the project design and to what extent farmers intend to maintain adopted practices without project support.
- A representative from each agribusiness partner will be interviewed during the project to discuss challenges, and overall perspectives. Improvements will be made based on this input.

## ENROLLMENT REQUIREMENTS

- Agribusinesses will hold agreements with TNC for Voucher payments and data reporting payments.
- Farmers will hold agreements with TNC for NUE payments and on-farm trials payments.
- Farmers must meet NRCS eligibility requirements
  - highly erodible land and wetland conservation compliance,
  - have control of the land for the term of the contract,
  - have an adjusted gross income under \$900,000 with waivers considered by NRCS on a case-by-case basis).
- NUE payments must support a practice or approach not actively funded by a USDA program.

## Questions?

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