

NITROGEN OPTIMIZATION PILOT PROGRAM GRANTS

REQUEST FOR PROPOSALS, CYCLE 4 AWARD YEARS 2026-2027

PART 1: INTENT TO APPLY

<https://datcp.wi.gov/Documents2/IntentToApplyNOPP.docx>

DEADLINE DECEMBER 19, 2025

ELECTRONIC SUBMISSIONS ONLY TO: MONICA.SCHAUER@WISC.EDU

PART 2: FINAL APPLICATION

[HTTPS://DATCP2016-AUTH-
PROD.WI.GOV/PAGES/COMMERCIALNITROGENOPTIMIZATIONPILOTGRANTPROGRAM.A
SPX](https://DATCP2016-AUTH-PROD.WI.GOV/PAGES/COMMERCIALNITROGENOPTIMIZATIONPILOTGRANTPROGRAM.ASPX)

DEADLINE JANUARY 16, 2026

ELECTRONIC SUBMISSIONS ONLY TO: **DATCPNOPP@wisconsin.gov**

QUESTIONS MAY BE DIRECTED TO:

**PROGRAM MANAGER: SUSAN MOCKERT, 608-224-4648,
SUSAN.MOCKERT@WISCONSIN.GOV**

**RESEARCH DESIGN: MONICA SCHAUER, 920-296-6170,
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The Department of Agriculture, Trade & Consumer Protection (DATCP) provides funding to agricultural producers to focus on commercial nitrogen optimization activities through the Nitrogen Optimization Pilot Program (NOPP).

Agricultural producers will collaborate with the Universities of Wisconsin (UW) scientists to conduct research projects that enhance understanding of and refine new methods that optimize commercial nitrogen applied to agricultural fields.

Funding priorities

Funding priorities are set in statute and include:

- Projects located in different areas of the state to incorporate data from differing soils and geological characteristics.
- Innovative projects not currently funded by other state or federal programs.
- Multi-year projects, with a minimum of two years required.

What is commercial nitrogen?

A substance containing one or more plant nutrients designed for use in promoting plant growth, except unmanipulated animal or vegetable manures, marl, liming material, sewage sludge other than finished sewage sludge products, and wood ashes. Composted, uncomposted or liquid manures will only be regulated as fertilizer by ACM when they are not used as part of normal farming operations, and a business labels and sell the product as a fertilizer.

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OVERVIEW

The Nitrogen Optimization Pilot Program (NOPP) provides funding to agricultural producers to perform on-farm research pertaining to commercial nitrogen application. The Department of Agriculture, Trade and Consumer Protection (DATCP) will collaborate with the Universities of Wisconsin (UW), with DATCP as program administrator and UW providing technical and data support. This formal partnership fulfills the statutory collaboration requirement, with up to 20% of each grant award designated for UW.

Nitrogen Optimization is a process with the potential to use nitrogen in a manner that will sustain soil fertility and crop production.

Fine-tuning nitrogen (N) application rates while maintaining yield is one of the first things producers can do to address optimization. Having a better understanding of the most profitable N application rate under specific management scenarios can result in cost-savings and less N leaching into groundwater.

2026-2027 NOPP AWARD CYCLE PROJECT OPTIONS

Option 1	Option 2 New Producers only*	Option 3 New Producers Only*
• Full N-Rate Study with replicaton and randomization • 4-8 N-rates requiried • Max budget of \$40,000/producer	• Nitrogen Use Efficiency • Requires at least 3 participants per project • Max budget of \$2,500/producer	• Management comparison trial • Two N-rates required • Max budget of \$5,000/producer

*" New producer" is defined as a producer who has not previously been awarded a NOPP grant. These individuals may have previously participated in the program as part of a larger group.

Each of the Options has a set of requirements and a maximum budget allowed per agricultural producer. Each study in each field is a standalone study that uses accepted field research statistical approaches to address the study question.

The NOPP has the following stipulations:

- Multiple agricultural producers may work together to submit a single application (for example, an Option 1 project with two participating agricultural producers may apply for an award up to \$80,000).
- Applicants DO NOT need to factor the UW System award for monitoring and research assistance into their proposed budget. The UW System award will be calculated based on the total of all approved project budgets and will be awarded directly from DATCP to the UW System.
- **Option 2** applications are open to new producers only and must include at least three (3) producers, with each eligible for \$2,500.
- **Option 3** applications are available for new applicants only. The intent of the of the management comparison trial option to is offer experience in on-farm research with the anticipation that the applicant(s) will undertake an Option 1 project in the future. Multiple producers may apply under one project, with a maximum award of \$5,000 per producer.
- Funding commitments are not final until a signed contract is in place including all parties.
- DATCP may retain final payments until the final report has been submitted.

UNIVERSITIES OF WISCONSIN NOPP PARTNERSHIP

On behalf of all grantees, DATCP will enter into an agreement with UW to fulfill the collaboration requirement. This agreement will give the funding and authority to UW to provide the data management and monitoring support to grant recipients, as required by the statute (s. 92.14(16)(c), Wis. Stats.).

COLLABORATORS

Outside of the DATCP/UW agreement, agricultural producers are encouraged but not required to independently collaborate with other UW researchers or other entities, such as agricultural service providers, county conservation departments, non-profit associations, or producer-led group. The project budget should include any expenses for these consultants.

ELIGIBILITY REQUIREMENTS

The project application must meet all the following criteria:

INTENT TO APPLY

1.

All grant applicants MUST submit an [Intent to Apply](#) form in order to receive required pre-approval of the project research study design prior to submitting an application. The Intent to Apply form outlining project basics should be emailed to Monica Schauer by December 19, 2025.



Extension
UNIVERSITY OF WISCONSIN-MADISON

Technical [Research](#) Guide
[Monica Schauer \(UW Soil and Environmental
Science Department\)](#)

RESEARCH STUDY

2. The project design must be for **at least two years**, with priority given to longer-term projects. Awards will be for a two-year project unless otherwise specified in the contract.
3. The project must be **innovative**. This should be a new project for the agricultural producer or the agricultural producer's land. Priority will be given to projects that include current and emerging crop management techniques that are able to be evaluated through simple protocols and contribute to data generated by the network of on-farm trials being conducted through this program.
4. Any variants or deviations to the pre-approved project design must be discussed and approved by UW's NOPP Research Director prior to the submission of the final grant application. The final and **approved Intent to Apply document** will be submitted as part of the final application.
5. Participating producers in Options 1 & 2 agree to implement a **zero lb-N/acre test strip** or treatment (as detailed in the "[Nitrogen Use Efficiency: A guide to conducting your own assessment](#)" page 3). Option 3 projects may require a zero-N test strip if applicable. The zero lb.-

N/acre rate is used to determine the soil's natural N-supplying capacity and to understand the magnitude of potentially leachable nitrogen. Some valid research projects may not be able to conform to this requirement: contact UW's Monica Schauer to discuss variances. Agricultural producers may include a stipend for anticipated yield loss within zero N test strips in their project budget (see formula in the Budget Worksheet).

APPLICANTS

6. An agricultural producer may be the grant applicant for one (1) grant project per cycle. The same agricultural producer may be party to other grant projects if the total award to that producer does not exceed \$40,000.
7. Applicants who wish to site a NOPP project on land that they do not own must consult with and obtain permission to conduct the project from the landowner.
8. The producer must collaborate with the UW as detailed in this RFP and allow both DATCP and UW project personnel access to the trial site throughout the project duration.
9. The producer agrees to voluntarily conduct commercial nitrogen optimization field studies and agrees to plan and manage on-farm research or has chosen to partner with consultants or other farmers to plan and manage the on-farm research.

Can one agricultural producer be a part of multiple projects?

Ag Producer Jane is the applicant for a study she is planning and is eligible for the \$40,000 award. She is also part of Farmer Led Watershed Council of Running Creek who is also an applicant. Jane would like to take part in this project as well, on different acres she manages, and would be eligible for the stipend and any costs incorporated within the Council grant. The total amount of grant funding Jane can receive is \$40,000 so she will need to adjust her financial requests to stay within the eligibility of both grants.

CONTRACTING

10. Grant applicants, all agricultural producers, and fiscal managers must sign the NOPP Grant Contract.
11. The project cannot currently be funded through other state or federal programs.

DATCP NOPP APPLICATION

PART 1 - GENERAL PROJECT INFORMATION (WORD DOCUMENT)

Requested grant amount based on the project Option: (see Options above)

Project Title

Project Focus – 1-2 sentences addressing information being sought

Applying individual/organization– individual who will be legally responsible for administration of the project during the life of the grant. The applicant can be an agricultural producer, an independent crop consultant, a researcher, a nonprofit, or another individual or entity. The applicant can be one of the agricultural producers involved in the project but does not have to be. The applicant is required to sign the grant contract.

Agricultural producer – An agricultural producer must own a farm. They can apply in the name of their farm, but we will need the name of the individual who is legally eligible to sign a contract on behalf of the farm. Agricultural producers are required sign the grant contract.

One person may fulfill all of these roles, if desired. Contact Susan Mockert with questions.

Fiscal Manager – Entity who will be managing the grant reimbursement request, receive the funds, and disperse as necessary. This can be the applicant, one of the agricultural producers, or a third party. The fiscal manager must sign the grant contract.

Project Manager – Individual who will be managing the on-farm research project on behalf of the applicant. The project manager may be the applicant, an agricultural producer, or a third party. This individual will be the primary contact regarding all program management.

Payment Address – State the entity to receive the grant funds upon reimbursements. If the entity is not in the State's fiscal management system, a W9 will be required upon awarding.

Organization and Collaboration: If you are collaborating with multiple producers or entities, outline the roles and responsibilities for each.

Project Location: provide a lat/long center point for each field included in the study.

Research Study: See **Technical Research Guide** for further assistance. Submit approved Intent to Apply Study Summary: Answer questions a-d in the space provided or in a separate document.

- Research Study Design and Methods: Answer questions a-d in the space provided or in a separate document.

Outreach efforts: outreach plans such as field days, meetings, signs, or educational materials

Equipment Purchase Request

Pre-approval for equipment purchases over \$2,500 is required from DATCP. If you are requesting to purchase equipment costing over \$2,500 as part of the NOPP grant, please answer the Equipment Purchase Request questions.

Additional Information

Include additional details about the project to help reviewers assess the full project and impact.

PART 2 - BUDGET AND WORK PLAN (EXCEL SPREADSHEET)

ONLY COMPLETE THE BUDGET SHEET TO MATCH THE CHOSEN OPTION

[Sheet 1: Budget – Option 1](#)

[Sheet 2: Budget – Option 2](#)

[Sheet 3: Budget – Option 3](#)

Examples of Eligible Costs for each Category

Category 1 – Incentives and Stipends

Option 1 stipends limited to \$2,500 per agricultural producer over the duration of the project.

Option 2 stipends limited to \$100 per agricultural producer over the duration of the project.

Option 3 stipends limited to \$750 per agricultural producer over the duration of the project.

Zero-N yield loss stipend as calculated using Sheet 3 of the Application Spreadsheet (Options 1&2 required)

Category 2 – Sampling and Analysis

Field sampling costs (time)

Lab analysis fees

Category 3 – Equipment Purchases, Lease or Rental, Supplies and Materials (costs associated with research plots only)

Seed

Inputs (fertilizer, pesticides, additives/biologicals to test, etc.)

Equipment – purchases over \$2,500 require approval. See Equipment Purchase Request section of the DATCP-BLWR-009 of the NOPP application to share specifics regarding the equipment request.

Category 4 – Management Activities

Consultant services – administrative (capped at 25% of total budget request)

Planting / harvesting costs

Category 5 – Miscellaneous

Mileage (capped at \$0.51 per mile)
Shipping / delivery of samples to lab
Land rent
Outreach activities such as field days (food, advertising, etc.)

Sheet 4 – Work Plan (all Options)

Outline activities planned over the course of the project, divided into two years. Add columns if your project intends to continue for more than two years. Please include the budget categories impacted by the activity (2-5) and estimated timeline for each activity.

Sheet 5 – Zero-N Calculations (Options 1 & 2, Option 3 where applicable)

Use this sheet to calculate yield loss for Zero-N treatment based on previous on-farm research conducted across the state. For assistance with this effort, contact Monica Schauer (monica.schauer@wisc.edu).

DATA COLLECTION FOR ALL STUDIES

The information below is **the minimum level of information required** from each applicant to collect and report. To achieve the goal of expanding knowledge of commercial nitrogen optimization, we need to collect data across all projects that can be combined and contrasted to ascertain differences as well as similarities across the state. The more detailed information we receive from applicants, the more robust the analysis and subsequent communication of our efforts can be. If you feel your project cannot conform to one or more of the minimum data requirements, include this information and an explanation in your pre-approval. **A full explanation of data requirements will be included in contracts and during a late winter or early spring 2026 pre-growing season meeting with grant recipients.**

PROJECT CYCLE

- Apply for grant (Year 1). Concurrently take soil samples and put cropping practices into place to set up for the upcoming project. Retain receipts and records to submit for reimbursement consideration. Include these activities and expenses in your work plan and budget within the application.
- Implement project as detailed in the approved work plan (Year 1 and 2)
- Upon contracting, the grantee will complete background information data collection (Year 1) for each agricultural producer involved in the project.
- If needed, work with DATCP to extend projects/contracts. Please reach out as soon as possible.
- Submit progress report (Year 1) or final report (Year 2), per contract requirements.

DATA COLLECTION

The following measurements and information will be required for every study from each study plot (collected and provided by the applicant):

- Required for project options 1, 2, and 3
 - Routine soil analysis (pH, OM, P and K) – analysis must be from DATCP [certified](#) lab.
 - Pre-plant soil nitrate and ammonium 0-1' & 1-2'
 - Pre-sidedress soil nitrate and ammonium 0-1' IF nitrogen will be going out at sidedress timing
 - Yield (*measured with calibrated yield monitor or weigh wagon*)
 - Field history & in-season management data (*data collection survey will be provided*)

Additional sampling requirements will be dependent on project topic and management system. A list of specific required and optional data collection per each study option is available in [Appendix A](#) below.

ELIGIBLE AND INELIGIBLE COSTS

Examples of Eligible Costs

- Soil and plant tissue sampling and analysis.
- Groundwater or surface water monitoring and analysis.
- Stipend payment for inclusion of zero-N strips into project, per the Application Spreadsheet.
- Incentive payments for participation in study rate dependent upon chosen Option.
- Consultant or producer costs for coordinating project including expenses for contract and consulting services, and mileage. Project management costs are capped at 25% of the total project cost. Mileage reimbursement is set by the state and is currently \$0.51/mile.
- Materials and supplies directly associated with the project including inputs ONLY for the test strips/areas. Limited expenses incurred prior to contracting may be eligible for reimbursement if the activity and costs can be directly associated with the early stages of the project.
- County staff time at a rate of \$25/hour is an eligible cost under this grant as long as the county staff position is NOT already funded by DATCP SWRM grants.
- Equipment purchases directly associated with the research project. **DATCP preapproval is required for equipment purchases over \$2,500.** Equipment purchase requires a statement of ownership and intended use of the product after the NOPP project is completed.
- Rental costs for equipment directly associated with research projects. **DATCP preapproval is required**, if not itemized on the grant budget application.
- Other costs deemed as consistent with the purpose of this grant program.

Examples of Ineligible Costs

- Real estate purchases
- Repayment of loans or mortgages
- Rent or contract payments for time periods extending beyond the term of the grant contract
- County staff time that is already funded by DATCP SWRM grants
- Lobbying activities
- Inputs (e.g. fertilizer, seed) and management costs not associated with the research project area
- Calculated potential yield losses due to lower than normal nitrogen application, with the exception of the zero-N plots / strips.
- Other costs deemed by DATCP as not consistent with the purpose of this grant program

GRANT ADMINISTRATION

FUNDING

\$1.0 million is available for grants in this funding cycle. Funding for grant reimbursements will be available once both parties sign the contract and for activities no earlier than January 1, 2026. Contracts will be for a minimum of two years. The grant recipient may submit a written request to DATCP to extend the contract one additional year if they have funds remaining.

INTENT TO APPLY

The **Intent to Apply** form must be approved prior to completing the full application and is due to Monica.Schauer@wisc.edu by December 19. Monica Schauer the UW NOPP Research Director, is available to consult on research plans.

The application form can be found on the DATCP website:

<https://datcp.wi.gov/Pages/CommercialNitrogenOptimizationPilotGrantProgram.aspx>

Available documents include:

1. [Research Protocols](#)
2. [Intent To Apply NOPP.docx](#)
3. [Part 1 of the Application](#) (Word document)
4. [Part 2 of the Application](#) (Excel spreadsheet), referenced as the Application Spreadsheet in the RFP. The Application Spreadsheet has five tabs to be used:
 - a. Budget Form (three options, only complete the one corresponding with the research option chosen)

- b. Work Plan Form
- c. Zero-N reimbursement calculations
- ➡ Submit applications to DATCPNOPP@wisconsin.gov.
- ➡ Applications must be submitted no later than **January 16, 2026 by 11:59PM**

COMPLIANCE

An agricultural producer and the UW System institution collaborating with the agricultural producer in implementing a project under this subsection may not be held civilly liable and may not be subject to any remedial action or other administrative or enforcement action from the department or the Department of Natural Resources for any discharge of environmental pollution from the land involved in the project, if the actions were taken in good faith by the agricultural producer and the institution and conformed to the project specifications proposed to the department in the grant application. (s. 92.14(16)(f), Wis. Stats).

RECEIVING A GRANT: EXPECTATIONS

REPORTING REQUIREMENTS

Grant recipients are required to submit an **annual report** for each year the project is in place using the DATCP-provided form, which will be made available on the DATCP NOPP webpage. Content to be included in the report will be outlined in the grant contract between the agricultural producer and DATCP. Annual reports will be due no later than March 1 of the following year. Grant recipients will be required to provide quantitative information detailed in the annual report form as well as provide all required data, in the format requested, to the UW System institute. DATCP staff, in partnership with UW, will complete a program report.

FUNDING DISTRIBUTION AND REIMBURSEMENT INFORMATION

Awards will be distributed through a reimbursement process upon receipt of the reimbursement request(s), required receipts and other supporting documentation. Reimbursement may only be requested for activities completed after the signing of the grant contract, with the following exceptions:

- Soil tests completed in the fall prior to contracting, if approved as part of the application
- Installation of cropping practices one season prior that are demonstrably necessary for the project baseline. Please discuss in your project design the necessity of the practice.

A detailed invoice of expenses including **all** receipts, purchases made or services provided will be required at the time funding reimbursement requests are made. Reimbursement requests must use the DATCP reimbursement request form and submit all receipts and invoices associated with their reimbursement request.

OPEN RECORDS

Applications submitted along with all related contracts and reports are subject to disclosure under the Public Records law. If the grant applicant or recipient requests any information be deemed a trade secret, the document should be labeled using “trade secret” and the requested status should be noted to DATCP when the document is submitted. Such information may be kept confidential by DATCP only as authorized by law (see s. 19.36(5), Wis. Stats.).

OTHER CONSIDERATIONS

All applications submitted in response to this RFP become the property of DATCP. The agency reserves a royalty-free, nonexclusive and irrevocable license to reproduce, publish, otherwise use, and to authorize others to use materials produced under this grant agreement. Statistical summaries and general information about the overall project will be used in presenting research findings and in preparing reports with the grantees and other interested parties.

DATCP also reserves the right to:

- Post content from funded applications to the DATCP website.
- Use photos, outreach materials and publications generated as part of the projects or taken by DATCP staff, project collaborators or others to promote program successes and activities.
- Reject any or all applications received based on eligibility, funding available and scoring.
- Waive or modify minor irregularities in applications received, after prior notification and agreement of applicant.
- Amend program specifications after their release, with appropriate written notice to potential applicants.
- Require a good faith effort on the part of the applicant to work with DATCP after project completion to develop or implement project results in Wisconsin.
- Withhold any payments if contract conditions are not met.

EXPECTATIONS OF PARTICIPANTS

NOPP research projects are designed to be at least two years. If the timing of the project needs to be adjusted for any reason, a contract amendment must be completed.

If a multi-producer project has a producer who drops out of the project prior to or during the research project, the contract, budget and work plan will need to be updated to reflect the total available award for the number of remaining producers. Any reimbursements that have already occurred for expenses garnered by the producer while part of the project will not be recalled. Expenses by the producer who is leaving the project will not be reimbursed from the time of the removal.

If for any reason a grantee is unable to fulfill the two-year timeline, the producer will need to work with UW's NOPP Research Director to determine the minimum data required for the time the research project was active. Costs encumbered during year 1 will remain valid and reimbursable.

If a grantee wishes to continue a project past the two-year timeline, consult with DATCP to determine the scope of remaining budget and goals of research moving forward. In specific cases, an extension of the project may be possible, but no further grant monies will be made available without applying for a new grant award.

Stipends are to be used to incentivize producers to participate in NOPP. Zero-N stipends are only available for acres receiving no commercial nitrogen as part of the research study. Low nitrogen acres are not available for stipends.

APPLICATION TIPS

As you develop your grant application and work to create the strongest application possible, consider the following tips and suggestions.

- Be clear and concise. Members of the review panel may not work with you directly and will need background information on your project to fully understand the intentions of your project.
- Review the evaluation criteria included at the end of this RFP to make sure you are addressing all applicable criteria in your application.
- Ensure you included all the items listed in the Application Checklist (below).
- Include a clear and realistic budget and budget explanation so reviewers can understand what each line item will be used for and how it relates to the overall project.
- Have a partner review your application before you submit.
- Consult with UW on all projects to obtain pre-approval from UW. Keep receipts for approved activities such as soil sampling that may occur prior to the contract start.

APPLICANT CHECKLIST

A complete application includes:

- ☐ UW-approved [Intent to Apply](#)
- ☐ Application Word form with all required fields completed and fully signed
- ☐ Application Excel form with budget sheet and work plan completed.
- ☐ Separate documents as needed to describe and document the proposed project.
- ☐ Application Spreadsheet with completed budget, work plan and zero-N calculations
- ☐ Map of project area

[REFERENCES SOURCES](#)

For grant management:

[FAQ for Application](#)

For study project design and data collection:

[Research Protocols](#)

EVALUATION CRITERIA – OPTION 1

Completeness of Proposal (required)

UW Pre-approval obtained.

Proposal includes all required documentation and fulfills program goals and priorities.

Proposal meets all program eligibility requirements.

Project demonstrates a plan to incorporate new practices and/or testing methods to analyze nitrogen use.

***All above requirements MUST be met in order to rank application.*

Project plan

25

Two-year research project design is detailed, complete, and ready to start in 2026

5

Project demonstrates innovative approach to nitrogen optimization.

5

Project incorporates technology into design.

5

Project includes outreach/education plans.

5

Project continues previous research project.

5

Anticipated Results/Metrics Provided

25

Project demonstrates that it will contribute to commercial nitrogen optimization knowledge.

5

Project plan includes collecting more data than baseline requirements.

5

Project contains a zero-N test plot or strip

5

Applicant acknowledges how project data will be shared with the UW entity and accepts responsibility for this task

5

Research pertains to a specialty crop with need for improvements in nitrogen management.

5

Organization/Commitment

25

Applicant is associated with a project manager to complete the research project (e.g., Producer-Led group, watershed group, agronomist) or has demonstrated expert level of on-farm research.

10

Efforts by the agricultural producer/group are complementary to other local and state programs rather than duplicative.

5

Grant applicant is clear on the roles and responsibilities of all parties of the project.

5

Research project coordinator demonstrates acceptable knowledge and experience with on-farm research.

5

Budget

10

Justification exists for each budget item. Budget items are clear, specific and meet the program requirements.

5

Budget items and work plan tasks are clearly linked.

5

Priorities

15

Project is related to or located in an area with known data gaps related to commercial nitrogen optimization for the commodity type, soils and/or water.

5

Length of the study is projected to be greater than 2 growing seasons. (3 pts for 2 year project; 5 pts for more than 2 years)

5

Match is provided

5

Total Points 100

EVALUATION CRITERIA – OPTION 2

Completeness of Proposal (required)

UW Pre-approval obtained.

Proposal includes all required documentation and fulfills program goals and priorities.

Proposal meets all program eligibility requirements.

Project demonstrates a plan to incorporate new practices and/or testing methods to analyze nitrogen use.

***All above requirements MUST be met in order to rank application.*

<u>Project plan</u>	25
<i>Two-year research project design is detailed, complete, and ready to start in 2026.</i>	10
<i>Project includes 3 or more producers</i>	5
<i>Project includes outreach/education plans.</i>	10
<u>Anticipated Results/Metrics Provided</u>	25
<i>Project demonstrates that it will contribute to nitrogen use efficiency knowledge.</i>	5
<i>Project plan includes required data collection</i>	5
<i>Project contains a zero-N test plot or strip</i>	5
<i>Project plan includes collecting more data than baseline requirements</i>	5
<i>Applicant acknowledges how project data will be shared with UW entity and accepts responsibility for this task</i>	5
<u>Organization/Commitment</u>	25
<i>Applicant is associated with a project manager to complete the research project (e.g., Producer-Led group, watershed group, agronomist) or has demonstrated expert level of on-farm research.</i>	10
<i>Efforts by the agricultural producer/group are complementary to other local and state programs rather than duplicative.</i>	5
<i>Grant applicant is clear on the roles and responsibilities of all parties of the project.</i>	5
<i>Research project coordinator demonstrates acceptable knowledge and experience with on-farm research.</i>	5
<u>Budget</u>	10
<i>Justification exists for each budget item. Budget items are clear, specific and meet the program requirements.</i>	5
<i>Budget items and work plan tasks are clearly linked.</i>	5
<u>Priorities</u>	15
<i>Project is related to or located in an area with known data gaps related to commercial nitrogen optimization for the commodity type, soils and/or water; or in areas of high risk of nitrate leaching</i>	10
<i>Match is provided</i>	5
Total Points	100

EVALUATION CRITERIA – OPTION 3

Completeness of Proposal (required)

UW Pre-approval obtained.

Proposal includes all required documentation and fulfills program goals and priorities.

Proposal meets all program eligibility requirements.

Project demonstrates a plan to incorporate new practices and/or testing methods to analyze nitrogen use.

***All above requirements MUST be met in order to rank application.*

Project plan

25

Two-year research project design is detailed, complete, and ready to start in 2026.

10

Project demonstrates innovative approach to nitrogen optimization.

5

Project incorporates technology into design.

5

Project includes outreach/education plans.

5

Anticipated Results/Metrics Provided

25

Project demonstrates that it will contribute to commercial nitrogen optimization knowledge.

5

Project plan includes collecting more data than baseline requirements.

5

Project contains a zero-N test plot or strip

5

Applicant acknowledges how project data will be shared with the UW entity and accepts responsibility for this task

5

Research pertains to a specialty crop with need for improvements in nitrogen management.

5

Organization/Commitment

25

Applicant is associated with a project manager to complete the research project (e.g., Producer-Led group, watershed group, agronomist) or has demonstrated expert level of on-farm research.

10

Efforts by the agricultural producer/group are complementary to other local and state programs rather than duplicative.

5

Grant applicant is clear on the roles and responsibilities of all parties of the project.

10

Budget

10

Justification exists for each budget item. Budget items are clear, specific and meet the program requirements.

5

Budget items and work plan tasks are clearly linked.

5

Priorities

15

Project is related to or located in an area with known data gaps related to commercial nitrogen optimization for the commodity type, soils and/or water.

5

Length of the study is projected to be greater than 2 growing seasons. (3 pts for 2 year project; 5 pts for more than 2 years)

5

Match is provided

5

Total Points 100

APPENDIX A: TRIAL OPTION DETAILS

Option 1:

Nitrogen rate trial

- Requirements
 - Minimum 6 N rates. More nitrogen rates will strengthen application.
 - Rates equally spaced out. Minimum rate of 0, max rate 40% higher than grower standard.
 - Each rate must be replicated 4 times and randomized.
 - Required data collection
 - Cover crop sample and analysis (if cover crop grown on that field)
 - Manure sample and analysis (if field received manure in fall or spring)
 - Routine soil sample
 - Pre-plant soil nitrate and ammonium 0-1' & 1-2'
 - Pre-sidedress soil nitrate and ammonium 0-1' IF nitrogen will be going out at sidedress timing
 - Field history & management data (*data collection survey will be provided*)
 - Irrigation nitrogen content (*1 sample/field for irrigated fields*)
 - Yield (*measured with calibrated yield monitor or weigh wagon*)
 - Additional suggested measurements to strengthen application
 - Post-harvest soil nitrate and ammonium (0-1' & 1-2')
 - Soil health analysis
 - Corn ear leaf
 - Stalk nitrate
 - Grain %N
- Expected outcomes
 - Yield response curve predicting yield across nitrogen rates within the range of nitrogen applied.
 - Economic and agronomic optimum nitrogen rate for the field.
 - Predictability/correlation of any sampling to yield by nitrogen rate.
 - Contribution to statewide nitrogen recommendations.

Nitrogen rate trial with additional treatment

- Requirements
 - Minimum 4 N rates, more nitrogen rates will strengthen application.
 - 4 rates: 0, grower “business as usual” and a rate 25% above and 25% below.
 - 5+ rates: Rates equally spaced out. Minimum rate of 0, max rate <40% higher than grower standard.
 - Each rate and treatment must be replicated 4 times and randomized.
 - Required data collection
 - Cover crop sample and analysis (if cover crop grown on that field)
 - Manure sample and analysis (if field received manure in fall or spring)

- Routine soil sample
 - Pre-plant soil nitrate and ammonium 0-1' & 1-2'
 - Pre-sidedress soil nitrate and ammonium 0-1' IF nitrogen will be going out at sidedress timing
 - Field history & management data (*data collection survey will be provided*)
 - Irrigation nitrogen content (*1 sample/field for irrigated fields*)
 - Yield (*measured with calibrated yield monitor or weigh wagon*)
- Additional suggested measurements to strengthen application
 - Post-harvest soil nitrate and ammonium (0-1' & 1-2')
 - Soil health analysis
 - Corn ear leaf
 - Stalk nitrate
 - Grain %N
- Expected outcomes
 - If only 4 N rates
 - Detect differences in yield based on treatment and N rate. Determine nitrogen rate (limited to N rates applied) that led to highest yield and comparison by treatment.
 - Assess if differences in soil nitrogen and any additional sampling taken were caused by treatment (i.e. cover crop, manure, etc.).
 - Contribution to statewide nitrogen recommendations.
 - If more than 4 N rates
 - Yield response curve predicting yield across nitrogen rates within the range applied for each treatment. Economic and agronomic optimum nitrogen rate for the specific field AND comparison of these values between treatments.
 - Predictability/correlation of any samples to yield by nitrogen rate and treatment.
 - Assess treatment differences to soil nitrogen and any additional sampling taken.
 - Contribution to statewide nitrogen recommendations.

Option 2: NUE Assessment for corn grain & silage

- Outputs
 - Nitrogen Use Efficiency indicators (Partial Factor Productivity, Agronomic Efficiency of commercial N, Removal Efficiency of commercial N)
 - Partial Nitrogen Balance: risk of potentially leachable nitrogen
 - Metrics provide a step into investigating and evaluating nitrogen management for individual fields (like a report card), but do not inform optimum N rates or management practices for that field.
 - Contribution to statewide NUE database
- Requirements
 - Zero-N test strip (strip that does not receive any commercial N aside from that in starter, < 40 lb N/ac)
 - Field- level data required for all fields:
 - Routine soil test (*1 sample/field*)
 - Pre-plant nitrate and ammonium (*1 sample/treatment at 0-1' and 1-2'*)

- Pre-sidedress nitrate and ammonium (*or in-season sampling if all N was applied at plant*) (1 sample/treatment at 0-1')
- Post-harvest nitrate and ammonium (1 sample/treatment at 0-1' and 1-2')
- Yield (*measured with calibrated yield monitor or weigh wagon*)
- Field history & management data (*data collection survey will be provided*)
- Required data collection, if applicable to fields being monitored:
 - Manure analysis (1 sample per application if manure applied during this crop year)
 - Cover crop approximate height, surface cover, biomass and nutrient uptake (1 sample/field if have cover crop prior)
 - Grain nitrogen content (1 sample/treatment for corn grain fields)
 - Irrigation nitrogen content (1 sample/field for irrigated fields)
- Eligible to explore additional pieces of data, as long as budget allows (ex: cover crop forage quality, whole plant N content, leaf tissue samples, soil health metrics, etc.)

Option 3: Management comparison trial

Manure

- Requirements
 - Project design
 - N rates of grower standard and 0 N.
 - Manure treatment options with/without, different sources, or different application methods.
 - Each rate and treatment must be replicated 4 times and randomized.
 - Required data collection
 - Manure sample and analysis
 - Routine soil sample
 - Pre-plant soil nitrate and ammonium 0-1' & 1-2'
 - Pre-sidedress soil nitrate and ammonium 0-1' IF nitrogen will be going out at sidedress timing
 - Irrigation nitrogen content (1 sample/field for irrigated fields)
 - Yield (*measured with calibrated yield monitor or weigh wagon*)
 - Field history & management data (*data collection survey will be provided*)
- Expected outcomes
 - Assess nitrogen supply by manure with no additional synthetic nitrogen. What yield can be obtained with manure alone.
 - Compare corn yield at 0 N and grower standard across manure management options.
 - *This trial design cannot assess true nitrogen credit supplied from manure. Option 1 (N rate trial) required to determine nitrogen credit.*
 - Assess treatment differences to soil nitrogen and any additional sampling taken.

Cover crop

- Requirements
 - Project design
 - N rates of grower standard and rate lower or higher based on research question.
 - Cover crop treatments: with/ without cover or termination timing.
 - Each rate and treatment must be replicated 4 times and randomized.
 - Required data collection
 - Cover crop sample and analysis
 - Routine soil sample
 - Pre-plant soil nitrate and ammonium 0-1' & 1-2'
 - Pre-sidedress soil nitrate and ammonium 0-1' IF nitrogen will be going out at sidedress timing
 - Irrigation nitrogen content (*1 sample/field for irrigated fields*)
 - Yield (*measured with calibrated yield monitor or weigh wagon*)
 - Field history & management data (*data collection survey will be provided*)
- Expected outcomes
 - Assess yield following cover crop across 2 nitrogen rates.
 - Assess treatment differences to soil nitrogen and any additional sampling taken.
 - *If legume cover, cannot assess true nitrogen credit supplied from cover without full N rate trial.*

Nitrogen application timing

- Requirements
 - Project design
 - Nitrogen applied at different timing (i.e. pre-plant or split between plant and sidedress).
 - Total nitrogen applied equal across treatments (grower standard) OR two rates of grower standard and reduced rate.
 - Each rate and treatment must be replicated 4 times and randomized.
 - Required data collection
 - Routine soil sample
 - Pre-sidedress soil nitrate and ammonium 0-1' IF nitrogen will be going out at sidedress timing
 - Irrigation nitrogen content (*1 sample/field for irrigated fields*)
 - Yield (*measured with calibrated yield monitor or weigh wagon*)
 - Field history & management data (*data collection survey will be provided*)
- Expected outcomes.
 - Comparison of yield across nitrogen placement and nitrogen rate.

Nitrogen source

- Requirements
 - Project design
 - Nitrogen applied as two sources (i.e. urea vs UAN).
 - Total nitrogen applied equal across treatments (grower standard) OR two rates of grower standard and reduced rate.
 - Each rate and treatment must be replicated 4 times and randomized.

- Required data collection
 - Routine soil sample
 - Pre-sidedress soil nitrate and ammonium 0-1' IF nitrogen will be going out at sidedress timing.
 - Irrigation nitrogen content (*1 sample/field for irrigated fields*)
 - Yield (*measured with calibrated yield monitor or weigh wagon*)
 - Field history & management data (*data collection survey will be provided*)
- Expected outcomes
 - Comparison of yield across nitrogen source and nitrogen rate.

Nitrogen placement

- Requirements
 - Project design
 - Nitrogen applied at two placements (i.e. broadcast vs Y-drop).
 - Total nitrogen applied equal across treatments (grower standard) OR two rates of grower standard and reduced rate.
 - Each rate and treatment must be replicated 4 times and randomized.
 - Required data collection
 - Routine soil sample
 - Pre-sidedress soil nitrate and ammonium 0-1' IF nitrogen will be going out at sidedress timing
 - Irrigation nitrogen content (*1 sample/field for irrigated fields*)
 - Yield (*measured with calibrated yield monitor or weigh wagon*)
 - Field history & management data (*data collection survey will be provided*)
- Expected outcomes
 - Comparison of yield across nitrogen placement and nitrogen rate.

Product trial (inhibitor, biological, etc.)

- Requirements
 - Project design
 - With and without product.
 - Two nitrogen rates of grower standard and reduced rate.
 - Each rate and treatment must be replicated 4 times and randomized.
 - Required data collection
 - Routine soil sample
 - Pre-sidedress soil nitrate and ammonium 0-1' IF nitrogen will be going out at sidedress timing
 - Irrigation nitrogen content (*1 sample/field for irrigated fields*)
 - Yield (*measured with calibrated yield monitor or weigh wagon*)
 - Field history & management data (*data collection survey will be provided*)
- Expected outcomes
 - Comparison of yield with and without product and nitrogen rates.

