Alfalfa Forage Research Program (AFRP)

FY 2021 Request for Applications (RFA)

APPLICATION DEADLINE: April 16, 2021

ELIGIBILITY: See Part III, A of RFA

United States Department of Agriculture

National Institute of Food and Agriculture

NATIONAL INSTITUTE OF FOOD AND AGRICULTURE
U.S. DEPARTMENT OF AGRICULTURE

ALFALFA FORAGE RESEARCH PROGRAM (AFRP)

INITIAL ANNOUNCEMENT

CATALOG OF FEDERAL DOMESTIC ASSISTANCE: This program is listed in the Catalog of Federal Domestic Assistance under 10.330.

DATES: Applications must be received by **5 p.m. Eastern Time** on April 16, 2021. Applications received after this deadline will normally not be considered for funding (see Part IV, C of this RFA). Comments regarding this request for applications (RFA) are requested within six months from the issuance of this notice. Comments received after that date will be considered to the extent practicable.

STAKEHOLDER INPUT: We at the National Institute of Food and Agriculture (NIFA) seek your comments about this RFA. We will consider your comments when we develop the next RFA for the program, if applicable, and we'll use them to meet the requirements of section 103(c)(2) of the Agricultural Research, Extension, and Education Reform Act of 1998 (7 U.S.C. 7613(c)(2)). Submit your written stakeholder comments by the deadline set forth in the DATES portion of this notice via email to Policy@usda.gov. (This email address is only for receiving comments regarding this RFA and ***not*** for requesting information or forms.) In your comments, please state that you are responding to the Alfalfa Forage Research Program RFA.

EXECUTIVE SUMMARY: NIFA requests applications for the Alfalfa Forage Research Program (AFRP) for fiscal year (FY) 2021 exclusively for alfalfa systems. Areas of potential research include increase yields and quality; improve harvest and storage systems; develop methods to estimate forage yield and quality to support marketing and reduce producer risks; explore new and novel uses for alfalfa; and improve production and quality of alfalfa seed. This is an integrated research and extension program. The anticipated amount available for grants in FY 2021 is approximately **$2.7 million**.

This notice identifies the objectives for AFRP projects, deadline dates, funding information, eligibility criteria for projects and applicants, and application forms and associated instructions needed to apply for an AFRP grant.

Table of Contents

PART I—FUNDING OPPORTUNITY DESCRIPTION 5
A. Legislative Authority 5
B. Purpose and Priorities 5
PART II—AWARD INFORMATION 9
A. Available Funding 9
B. Types of Applications 9
C. Project and Grant Types 9
D. Responsible and Ethical Conduct of Research 10
PART III—ELIGIBILITY INFORMATION 11
A. Eligible Applicants 11
B. Cost Sharing or Matching 11
IV—APPLICATION AND SUBMISSION INFORMATION 12
A. Notice of Intent to Submit an Application 12
B. Electronic Application Package 12
C. Content and Form of Application Submission 13
D. Submission Dates and Times 16
E. Funding Restrictions 17
F. Other Submission Requirements 18
PART V—APPLICATION REVIEW REQUIREMENTS 19
A. NIFA's Evaluation Process 19
B. Evaluation Criteria 19
C. Conflicts of Interest and Confidentiality 20
D. Organizational Management Information 20
E. Application Disposition 21
PART VI—AWARD ADMINISTRATION 22
A. General 22
B. Award Notice 22
C. Administrative and National Policy Requirements 22
D. Responsible and Ethical Conduct of Research 22
E. Expected Program Outputs and Reporting Requirements 22
PART VII—AGENCY CONTACT 23
PART VIII—OTHER INFORMATION 24
A. Use of Funds; Changes 24
B. Confidential Aspects of Applications and Awards 24
C. Regulatory Information 25

D. Definitions 25
E. Materials Available on the Internet 25

PART I—FUNDING OPPORTUNITY DESCRIPTION

A. Legislative Authority

The authority for this program is contained in 7 USC 5925(d) (8): High-priority research and extension initiatives as amended by Section 7209 of the Agricultural Improvement Act of 2018.

B. Purpose and Priorities

Alfalfa is essential to sustainable agricultural production systems and is an economic engine for rural communities. Value for soil conservation, nitrogen fixation, energy savings, crop rotation benefits, and wildlife habitat is high. However, to provide these societal benefits, the production of alfalfa must be profitable to farmers through market outlets so they will be willing to maintain or expand the use and acreage of alfalfa.

The Alfalfa Forage Research Program (AFRP) aligns with the USDA Strategic Plan and specifically addresses the following goals:

- Strategic Goal 1: Ensure USDA programs are delivered efficiently, effectively, and with integrity and a focus on customer service;
- Strategic Goal 2: Maximize the ability of American agricultural producers to prosper by feeding and clothing the world;
- Strategic Goal 4: Facilitate rural prosperity and economic development; and
- Strategic Goal 7: Provide all Americans access to a safe, nutritious and secure food supply.

The AFRP aligns with the USDA Science Blueprint:

- Theme 1: Sustainable Agricultural Intensification
- Theme 2. Agricultural Climate Adaption
- Theme 3. Food and Nutritional Translation

The AFRP aligns with USDA's Agriculture Innovation Agenda:

1. develop an innovation strategy that aligns and synchronizes public- and private-sector research.
2. align the work of our customer-facing agencies and integrate innovative technologies and practices into USDA programs.
3. conduct a review of USDA productivity and conservation data.
4. set benchmarks to improve accountability.

In addition, it emphasizes research and innovation themes of the USDA's Agriculture Innovation Agenda. The AFRP supports development of resources and strategies to meet expanding feed and climate needs in the USA. Additional requirements on expected performance goals, indicators and targets may be required as a condition of award.

Program Area Description

The AFRP is an alfalfa-oriented, integrated research and extension program that supports technology transfer to improve overall agricultural productivity, profitability, and conservation of natural resources through conventional and organic alfalfa forage and seed production systems.

The AFRP encourages applicants to establish interdisciplinary and multi-location regional research and extension networks to address national priorities or regional science needs of the U.S. alfalfa forage industry. By bringing together expertise across multiple university, federal agency, and industry organizations and states, AFRP projects seek to enhance the effectiveness of limited state, federal, and industry resources and so produce greater long-lasting impacts.

In FY 2021, under Assistance Listing 10.330, AFRP will support the development of improved alfalfa forage and seed production systems, practices, and supporting technologies. NIFA is soliciting applications for FY 2021 under the following areas:

1. Increase alfalfa forage and seed yields and forage quality through improved management practices, plant breeding, and other strategies to reduce biotic and abiotic stresses and costs of production.
2. Improve alfalfa forage and seed harvest and storage systems to optimize economic returns to alfalfa producers as well as end-users including milk producers.
3. Develop methods to estimate alfalfa forage yield and quality to support marketing as a livestock feed and instruments to reduce producer risks.
4. Explore new uses for alfalfa such as in fish feeds, nutritive supplements, high-value chemical manufacturing, or other novel uses.
5. Develop systems that increase the yield of alfalfa seed crops and improve the quality of the seed produced.

Handling of baseline data and data collection will be addressed per approved project evaluation or performance measures/outcomes.

Identification of Program Area: You must specify in the introductory part of the narrative which of the five areas above are addressed by your proposal. If multiple areas are covered, provide an estimate of the percentage of effort/funds dedicated to each with the sum of percentages equaling 100 percent.

Regional Collaboration: AFRP projects must integrate research and extension objectives and represent a collaboration of at least two states within the same region (see table). Regional balance and involvement of new investigators may be taken into consideration during the proposal review process.

REGION	REGION	REGION
Western	**Central**	**Eastern**
Alaska	Arkansas	Alabama
Arizona	Iowa	Connecticut
California	Kansas	Delaware
Colorado	Louisiana	Florida
Hawaii	Minnesota	Georgia
Idaho	Missouri	Illinois
Montana	Nebraska	Indiana
Nevada	North Dakota	Kentucky
New Mexico	Oklahoma	Maine
Oregon	South Dakota	Maryland
Utah	Texas	Massachusetts
Washington	N/A	Michigan
Wyoming	N/A	Mississippi
N/A	N/A	New Jersey
N/A	N/A	New Hampshire
N/A	N/A	New Jersey
N/A	N/A	New York
N/A	N/A	North Carolina
N/A	N/A	Ohio
N/A	N/A	Pennsylvania
N/A	N/A	Rhode Island
N/A	N/A	South Carolina
N/A	N/A	Tennessee
N/A	N/A	Vermont
N/A	N/A	Virginia
N/A	N/A	West Virginia
N/A	N/A	Wisconsin

Proposals must include stakeholder input in priority setting, project development and implementation, and pursue national coordination of alfalfa research. Applicants are encouraged to provide evidence, as appropriate, of interdisciplinary, multi-state cooperation and use the expertise and resources of land-grant and other colleges and universities, Federal agencies, and private industry.

Management Plan: Applications must provide a Management Plan that describes public access to the research results (see Management Plan Section IV.B.c.). For NIFA-funded projects in the areas of plant breeding, genetics, and genomics a description and budget plan for the public release of and access to research results (e.g., data, germplasm, cultivars, and genetic resources) will need to

be compliant with the award *Terms and Conditions*. The terms and conditions can be found at: NIFA Terms and Conditions. The following sections are particularly relevant: Genetic Resources from Outside of the U.S (page 7); Patents and Inventions including Plant Variety Protection (page 12); and Release of Animal or Plant Genome Sequence Data and Distribution of Animal or Plant Genomic Resources, and the Release or Distribution of Plant Germplasm (pages 16-17).

Information Dissemination Plan: The AFRP is an integrated research and extension program and both components are required. The Project Narrative must include well-defined information dissemination and extension activities. Target audiences should be identified.

NIFA encourages (but does not require) Integrated Projects that develop content suitable for delivery through eXtension.

PART II—AWARD INFORMATION

A. Available Funding

The anticipated amount available for AFRP grants in FY 2021 is approximately **$2.7 million**. The total project budget requested cannot exceed a maximum of $300,000 per year for a project period of up to three years, including indirect costs. There is no commitment by USDA to fund any particular application or to make a specific number of awards.

The Automated Standard Applications for Payment System (ASAP), operated by the Department of Treasury's Bureau of the Fiscal Service, is the designated payment system for awards resulting from this RFA. For more information see ASAP.

B. Types of Applications

In FY 2021, you may submit applications to the AFRP as one of the following types of applications:

New application. This is a project application that has not been previously submitted to the AFRP. We will review all new applications competitively using the screening for administrative requirements, review panel evaluation of proposals using evaluation criteria and selection process described in Part V—Application Review Requirements.

Resubmitted application. This is an application that had previously been submitted to NIFA but not funded. Project Directors (PDs) must respond to the previous review panel summary (see Response to Previous Review, Part IV). We must receive resubmitted applications by the relevant due dates. We will evaluate resubmitted applications in competition with other pending applications in the appropriate area to which they are assigned and review them according to the same evaluation criteria (Part V, B) as new applications. If you are submitting a resubmission application, enter the NIFA-assigned proposal number of the previously submitted application in the Federal field (Field 4 on the form).

B. Project and Grant Types

1. Project Types

Only projects that integrate research and extension objectives will be considered. Projects must include collaborations among at least two states, with a minimum of two states being from the same region (See Table, Part I C).

2. Grant Types

The following is a list of available grant types under this RFA.

A. Standard. This is an award instrument by which NIFA agrees to support a specified level of effort for a predetermined project period without the announced intention of providing additional support at a future date.

B. Continuation. This is an award instrument by which NIFA agrees to a specified level of support for a specified period of time with the intention to provide additional future support provided performance has been satisfactory, funds are available and continued support is in the interest of the public and the Federal government.

D. Responsible and Ethical Conduct of Research

In accordance with sections 2, 3, and 8 of 2 CFR Part 422, institutions that conduct USDA-funded extramural research must foster an atmosphere conducive to research integrity, bear primary responsibility for prevention and detection of research misconduct, and maintain and effectively communicate and train their staff regarding policies and procedures. In the event an application to NIFA results in an award, the Authorized Representative (AR) assures, through acceptance of the award that the institution will comply with the above requirements. Award recipients shall, upon request, make available to NIFA the policies, procedures, and documentation to support the conduct of the training. See NIFA Responsible and Ethical Conduct of Research for more information.

PART III—ELIGIBILITY INFORMATION

A. Eligible Applicants

Applications may only be submitted by (1) State agricultural experiment stations; (2) Colleges and universities; (3) University research foundations; (4) Other research institutions and organizations; (5) Federal agencies; (6) National laboratories; (7) Private organizations, foundations or corporations; (8) Individuals who are United States citizens or nationals; or (9) A group consisting of two or more of the entities described in (1) through (8). Award recipients may subcontract to organizations not eligible to apply provided such organizations are necessary for the conduct of the project. Failure to meet an eligibility criterion by the application deadline may result in the application being excluded from consideration or, even though an application may be reviewed, will preclude NIFA from making an award.

B. Cost Sharing or Matching

The matching funds requirements for this program may be found at 7 USC 5925(a)(2). In general, an entity receiving a grant shall provide non-Federal matching funds (including funds from an agricultural commodity promotion, research, and information program) equal to not less than the amount of the grant unless the program is granted a waiver as indicated in paragraph (C) below.

(2) Matching funds requirement

(A) In general

Subject to subparagraph (C), an entity receiving a grant under paragraph (1) shall provide non-Federal matching funds (including funds from an agricultural commodity promotion, research, and information program) equal to not less than the amount of the grant.

(B) In-kind support

Non-Federal matching funds described in subparagraph (A) may include in-kind support.

(C) Waiver

The Secretary may waive the matching funds requirement under subparagraph (A) with respect to a research project if the Secretary determines that-

(i) the results of the project are of a particular benefit to a specific agricultural commodity, but those results are likely to be applicable to agricultural commodities generally; or

(ii)(I) the project-

(aa) involves a minor commodity; and

(bb) deals with scientifically important research; and

(II) the recipient is unable to satisfy the matching funds requirement.

IV—APPLICATION AND SUBMISSION INFORMATION

A. Notice of Intent to Submit an Application

Prospective applicants are asked to email a Notice of Intent to Submit an Application by 5 p.m. Eastern time on **Monday, March 15, 2021**. This notification is not required and does not enter into the review of a subsequent application. The information it contains will be used by program staff to plan the review process. It will not be used for screening for project appropriateness or applicant eligibility, nor will feedback be offered.

This email should include the following information:

1. Descriptive (draft) title of proposed research
2. Name of the Project Director and Applicant Institution name
3. Names of other potential co-Project Directors and their affiliations, if applicable
4. Priority area(s) addressed
5. Subject line of email should read: AFRP – Intent to Submit
6. E-mail should be sent to SM.NIFA.SCRI@USDA.GOV

B. Electronic Application Package

Only electronic applications may be submitted via Grants.gov to NIFA in response to this RFA. We urge you to submit early to the Grants.gov system. For information about the pre-award phase of the grant lifecycle see Grants 101.

New Users of Grants.gov

Prior to preparing an application, we recommend that the Project Director/Principal Investigator (PD/PI) first contact an Authorized Representative (AR, also referred to as Authorized Organizational Representative, or AOR) to determine if the organization is prepared to submit electronic applications through Grants.gov. If not (e.g., the institution/organization is new to the electronic grant application process through Grants.gov), then the one-time registration process must be completed **PRIOR** to submitting an application. It can take as long as two weeks to complete the registration process, so it is critical to begin as soon as possible. In such situations, the AR should go to **"Register," in the top right corner of the Grants.gov web page (or go to** Grants.gov**), for information on registering the institution/organization with Grants.gov.** Part II,1 of the NIFA Grants.gov Application Guide contains detailed information regarding the registration process. Refer to item 2, below, to locate the "NIFA Grants.gov Application Guide."

Steps to Obtain Application Package Materials

To receive application materials:

1. You must download and install a version of Adobe Reader compatible with Grants.gov to access, complete, and submit applications. For basic system requirements and download instructions, see Grants.gov for a test package that will help you determine whether your current version of Adobe Reader is compatible.

2. To obtain the application package from Grants.gov, go to Application Package and enter the funding opportunity number where appropriate

Click "Search." On the displayed page, click the corresponding link to continue. A Grant Application Package is tied to a particular funding opportunity. You may submit an application ONLY to the particular funding opportunity to which the Grant Application Package is associated.

Contained within the application package is the "NIFA Grants.gov Application Guide." This guide contains an introduction and general Grants.gov instructions, information

about how to use a Grant Application Package in Grants.gov, and instructions on how to complete the application forms. **If you require assistance to access the application package** (e.g., downloading or navigating Adobe forms) **or submitting the application,** refer to resources available on the Grants.gov website (Grants.gov Support). Grants.gov assistance is also available at:

Grants.gov customer support
800-518-4726 Toll-Free or 606-545-5035
Business Hours: 24 hours a day, 7 days a week. Closed on federal holidays.
Email: support@grants.gov

Grants.gov iPortal (see Grants.gov Self Help): Top 10 requested help topics (FAQs), Searchable knowledge base, self-service ticketing and ticket status, and live web chat (available 7 a.m. - 9 p.m. EST).
Have the following information available when contacting Grants.gov:

- Funding Opportunity Number (FON)
- Name of agency you are applying to
- Specific area of concern

C. Content and Form of Application Submission

Electronic applications are to be prepared following Parts V and VI of the NIFA Grants.gov Application Guide. This guide is part of the corresponding application package (see Section A of this part). The following is **additional information** you need to prepare an application in response to this RFA. **If there is discrepancy between the two documents, the information contained in this RFA is overriding.**

Note the attachment requirements (e.g., PDF) in Part III, Section 3 of the guide. ANY PROPOSALS THAT ARE NON-COMPLIANT WITH THE REQUIREMENTS (e.g., content format, PDF file format, file name restrictions, and no password protected files) WILL BE AT RISK OF BEING EXCLUDED FROM NIFA REVIEW. Grants.gov does not check for NIFA required attachments or whether attachments are in PDF format; see Part III, Section 6.1 of the guide for how to check the manifest of submitted files. Partial applications will be excluded from NIFA review. We will accept subsequent submissions of an application until close of business on the closing date in the RFA (see Part V, 2.1 of the NIFA Grants.gov Application Guide for further information).

For any questions related to the preparation of an application, review the NIFA Grants.gov Application Guide and the applicable RFA. If assistance is still needed for preparing application forms content, contact:

- Email: policy@usda.gov Business hours: Monday through Friday, 7 a.m. – 5 p.m. EST, excluding federal holidays.

1. SF 424 R&R Cover Sheet

Information related to the questions on this form is dealt with in detail in Part V, 2 of the NIFA Grants.gov Application Guide. See Part V, Section 2.18 of the NIFA Grants.gov Application Guide for the required certifications and assurances (e.g., Prohibition Against Entities Requiring Certain Internal Confidentiality Agreements).

2. SF 424 R&R Project/Performance Site Location(s)

Detailed information related to the questions on this form is available in Part V, 3 of the NIFA Grants.gov Application Guide.

3. R&R Other Project Information Form

Detailed information related to the questions on this form is available in Part V, 4 of the NIFA Grants.gov Application Guide.

a. Field 7. Project Summary/Abstract.

The summary should also include the relevance of the project to the goals of AFRP. See Part V. 4.7 of NIFA Grants.gov Application Guide for further instructions and a link to a suggested template.

b. Field 8. Project Narrative.

NOTE: The Project Narrative shall not exceed 18 pages of written text and up to three additional pages for figures and tables. We have established this maximum (21 pages) to ensure fair and equitable competition. The Project Narrative must include all the following:

i. Introduction. First identify which of the five program areas you are applying for and the % of your project in each area. Clearly state the high priority need of the alfalfa industry, who will benefit and how they will benefit, and the research goals. Summarize the body of knowledge or other past activities related to your proposed research, citing the work of key project personnel or others that is relevant to the project. Preliminary data or information pertinent to the proposed research should be included in this section.

ii. Rationale and Significance. Concisely present the rationale behind the proposed research as it relates to alfalfa forage or seed production. This section should address:

a. The priority-setting process and method of engaging stakeholder involvement in problem identification, planning, implementation of the research, evaluation, and utilization of results.
b. Describe any coordination of the research in national or regional efforts, and how this research complements other work conducted by land-grant and other universities, Federal agencies, and industry.
c. Discuss novel ideas or contributions that the proposed project offers.

iii. Objectives: Include a list of project objectives.

iv. Approach. Describe how you will address each stated objective. Include in your approach:

- Methods to be used in carrying out the research and extension components.
- Means by which results will be analyzed, assessed, and interpreted.
- A detailed description of how you will communicate your findings and transfer technologies to intended users (Information Dissemination Plan).

- A clear description of each team members' role and responsibility to the project.
- For the entire project, a timeline that outlines all important phases as a year-by-year function of time, including periods beyond the grant funding period.

v. Expected outcomes and benefits. Projects must include a clear description of the expected accomplishments, and how research's progress and benefits (outputs and outcomes) will be tracked and measured. This section can include:

- Anticipated specific uses for your results or products.
- Specific changes in knowledge about alfalfa forage or seed crops and their performance that will directly result from your research. Also, present status and expected advancement of information or technology components towards the marketplace measured as technology readiness level (TRL).
- Performance measures such as number of new alfalfa acres planted, increased seed sales, relative changes in land use, enhanced sustainability of production systems, or change in market share.
- Estimated increases in profit or risk reductions from growing alfalfa, or other quantitative measures of impact in crop or livestock production.
- Describe the potential long-term benefits of utilizing the new technology based on current knowledge and practice, and the estimated impact on the alfalfa industry and American agriculture.

NOTE: Appendices to the Project Narrative are allowed if they are directly germane to the proposed project. Do not add appendices to circumvent the page limit.

Field 12. Add Other Attachments
See Part V. Section 4.12 of the NIFA Grants.gov Application Guide (Field 12 on the form) for instructions regarding mandatory Felony Convictions or Tax Delinquent Status.

Management Plan (including Data Management Plan) (Mandatory, 1-2 pages, in addition to project narrative): The management plan is to be clearly articulated and include an organizational chart, administrative timeline, and a description of how the project will be governed, as well as a strategy to enhance coordination, collaboration, communication, and data sharing and reporting among members of the project team. The plan must also address how the project will be sustained beyond termination of an award, if relevant.

The management plan should describe how the quality, expected measurable outcomes, and potential impacts for the proposed research, education and/or extension will be evaluated. Please include rationale for each role, and how the individual will function effectively to support the goals and objectives of the project. The plan must demonstrate how partners contribute to project assessment.

In addition, applications must provide a description and budgeted plan for releasing germplasm, cultivars, or other genetic resources that is compliant with the Research Terms and Conditions that govern NIFA-funded projects in the areas of plant breeding, genetics and genomics. The terms and conditions can be found at: . Research Terms and Conditions. The following sections are particularly relevant: Genetic Resources from Outside of the U.S (page 7); Patents and Inventions including Plant Variety Protection (page 12); and Release of Animal or Plant Genome Sequence Data and Distribution of Animal or Plant Genomic Resources, and the Release or Distribution of

Plant Germplasm (pages 16-17).

R&R Senior/Key Person Profile (Expanded)
Detailed information related to the questions on this form is available in Part V, 5 of the NIFA Grants.gov Application Guide. This section of the guide includes instructions about senior/key person profile requirements, and details about the biographical sketch and the current and pending support, including a link to a suggested template for the current and pending support.

4. R&R Personal Data – As noted in Part V, 6 of the NIFA Grants.gov Application Guide, the submission of this information is voluntary and is not a precondition of award. Part V.6 also notes the importance and use of the information. However, NIFA strongly recommends applicants to provide the requested information to help NIFA identify and address any inequities based on gender, race, ethnicity, or disability of its proposed PDs/PIs and co-PDs/PIs. Information not submitted will seriously undermine the statistical validity, and therefore the usefulness, of information received from others. The information you submit will be kept confidential and will be used only for tracking and statistical purposes necessary to meet the demands of the agency and will not be part of the review process.

5. R&R Budget
Detailed information related to the questions on this form is available in Part V, 7 of the NIFA Grants.gov Application Guide. Not be part of the review process.

6. Indirect Costs
For further information and instructions regarding indirect costs, refer to Part V, section 7.9 of the NIFA Grants.gov Application Guide. For indirect cost funding restrictions, refer to Part IV, D. of this RFA.

7. Supplemental Information Form
Detailed information related to the questions on this form is available in Part VI, 1 of the NIFA Grants.gov Application Guide.

a. **Field 2. Program to which you are applying. Enter the program code name (i.e., enter "Alfalfa Forage Research Program") and the program code (i.e., enter "AFRP"). Note that accurate entry of the program code is very important for proper and timely processing of an application.**

b. **Field 8. Conflict of Interest List**. See Part VI, 1.8 of the NIFA Grants.gov Application Guide for further instructions and a link to a suggested template.

D. Submission Dates and Times
We recommend that you conduct an administrative review of the application before submission of it via Grants.gov to ensure that it complies with all preparation instructions. An application checklist is included in Part VII of the NIFA Grants.gov Application Guide to assist with this review.

Instructions for submitting an application are included in Part IV, Section 1.9 of the NIFA Grants.gov Application Guide.

Applications must be received by Grants.gov by **5 p.m. Eastern Time on April 16, 2021**. Applications received after this deadline will normally not be considered for funding.

If you have trouble submitting an application to Grants.gov, you should FIRST contact the Grants.gov Help Desk to resolve any problems. Keep a record of any such correspondence. See Part IV. A for Grants.gov contact information.

We send email correspondence to the AR regarding the status of submitted applications. We strongly encourage you to provide accurate email addresses, where designated, on the SF-424 R&R Application for Federal Assistance.

If the AR has not received correspondence **from NIFA** regarding a submitted application within 10 days of the established deadline, contact the Agency Contact identified in Part VII of the RFA and request the proposal number assigned to the application. **Failure to do so may result in the application not being considered for funding by the peer review panel. Once the application has been assigned a proposal number, you should cite this number on all future correspondence.**

E. Funding Restrictions

Section 1462(a) and (c) of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (NARETPA), as amended by Section 7124 of the Agriculture Improvement Act of 2018, limits indirect costs for the overall award to 30 percent of Total Federal Funds Awarded (TFFA) under a research, education, or extension grant. The maximum indirect cost rate allowed under the award is determined by calculating the amount of indirect costs using:

v. the sum of an institution's negotiated indirect cost rate and the indirect cost rate charged by sub-awardees, if any; or
vi. 30 percent of TFFA.

The maximum allowable indirect cost rate under the award, including the indirect costs charged by the sub-awardee(s), if any, is the lesser of the two rates.

If the results of number one, is the lesser of the two rates, the grant recipient is allowed to charge the negotiated indirect cost rate on the prime award and the sub-award(s), if any. Any sub-awards would be subject to the sub-awardee's negotiated indirect cost rate. The sub-awardee may charge its negotiated indirect cost rate on its portion of the award, provided the sum of the indirect cost rate charged under the award by the prime awardee and the sub-awardee(s) does not exceed 30 percent of the TFFA.

If the result of number two, is the lesser of the two rates, then the maximum indirect cost rate allowed for the overall award, including any sub-award(s), is limited to 30 percent of the TFFA. That is, the indirect costs of the prime awardee plus the sum of the indirect costs charged by the sub-awardee(s), if any, may not exceed 30 percent of the TFFA.

In the event of an award, the prime awardee is responsible for ensuring the maximum indirect cost allowed for the award is not exceeded when combining indirect costs for the Federal portion (i.e., prime and sub-awardee(s)) and any applicable cost-sharing (see 7 CFR 3430.52(b)). Amounts exceeding the maximum allowable indirect cost is considered unallowable. See sections 408 and 410 of 2 CFR 200.

You may not use grant funds awarded under this authority to renovate or refurbish research, education, or extension space; purchase or install fixed equipment in such space; or the planning, repair, rehabilitate, acquire, or construction of buildings or facilities.

F. Other Submission Requirements

You should follow the submission requirements noted in Part IV, Section 1.9 in the document entitled "NIFA Grants.gov Application Guide."

For information about the **status of a submitted application**, see Part III, Section 6 of the NIFA Grants.gov Application Guide.

PART V—APPLICATION REVIEW REQUIREMENTS

A. NIFA's Evaluation Process

NIFA evaluates each application in a two-part process. First, we screen each application to ensure that it meets the administrative requirements as set forth in this RFA. Second, a scientific peer-review process will be used to technically evaluate applications that meet the administrative requirements using a review panel (see NIFA Peer Review Process).

Scientific Peer Review Process:
NIFA selects reviewers for the review panel based upon their training and experience in relevant scientific, extension, or education fields, taking into account the following factors:

- the level of relevant formal scientific, technical education, or extension experience of the individual, as well as the extent to which an individual is engaged in relevant research, education, or extension activities;
- the need to include experts from various areas of specialization within relevant scientific, education, or extension fields;
- the need to include other experts (e.g., producers, range or forest managers/operators, and consumers) who can assess relevance of the applications to targeted audiences and to program needs;
- the need to include experts from a variety of organizational types (e.g., colleges, universities, industry, state and Federal agencies, and private profit and non-profit organizations) and geographic locations;
- the need to maintain a balanced composition with regard to minority and female representation and an equitable age distribution; and
- the need to include reviewers who can judge the effective usefulness of each application to producers and the general public.

After each peer review panel has completed its deliberations, the responsible program staff of NIFA will recommend that your project is either approved for support from currently available funds or declined due to insufficient funds or unfavorable review.

NIFA reserves the right to negotiate with the PD/PI and/or the submitting organization or institution regarding project revisions (e.g., reductions in the scope of work, funding level, period, or method of support) prior to recommending any project for funding.

After the review process has been completed, NIFA sends copies of reviews, *not* including the identity of reviewers, and a summary (if applicable) of the review panel comments to the PD.

Conflicts of interest. NIFA takes extreme care to prevent any actual or perceived conflicts of interest that may influence the review or evaluation (see NIFA Peer Review Process for Competitive Grant Applications.

B. Evaluation Criteria

A reviewer's written evaluation entails two levels of assessment. First, the reviewer summarizes how well the application addressed each evaluation criterion. After the application has been assessed for strengths and weaknesses of each criterion, the reviewer then evaluates the overall likelihood that the project will have significant outcome and impact. These written reviews are used to begin panel discussions with other reviewers serving on the peer review panel. Through these discussions, peer

review panelists come to consensus on the final rating and ranking of proposals. A complete description of NIFA's peer review process can be found at the NIFA website: The NIFA Peer Review Process for Competitive Grant Applications.

1. Conceptual adequacy (20 points). Application clearly states which research area(s) of alfalfa forage or seed production systems is/are to be addressed, and the specified objectives are relevant to RFA purpose and priorities and potentially attainable within project time, scope, and budget.
2. Design (40 points). The application's methodologies and analytical approaches are appropriate to project objectives, and effectively integrate the research and extension activities. The application demonstrates understanding of a whole system(s) approach and discusses how the project will contribute to a part or the whole of an integrated solution to the identified problem. Even if a single component is the focus of the project, the proposal must provide a thorough analysis of the broader systems context for why that component is critical.
3. Appropriate use of a regional, interdisciplinary, and industry-engaged approach (10 points). Application documents the bringing together of needed expertise in biological sciences, physical sciences and engineering, socio-economic sciences, extension, and program evaluation, as well as participation from principal stakeholders and partners. Project goals should address ways to increase the productivity and profitability of alfalfa forage and seed production systems.
4. Outreach plan (20 points). Application includes a detailed Extension-other engagement-outreach plan and schedule for how information, knowledge, and technology will be delivered to those served by the project. A description of how impacts will be measured and reported is included.
5. Overall feasibility and appropriateness of budget (10 points). The likelihood that the project will help maintain or expand the use and acreage of alfalfa grown in the U.S. Budget allocations should reflect the personnel and tasks associated with the activities needed to accomplish your objectives.

C. Conflicts of Interest and Confidentiality

During the peer evaluation process, we take extreme care to prevent any actual or perceived conflicts of interest that may impact review or evaluation. See http://www.nifa.usda.gov/business/competitive_peer_review.html for further information about conflicts of interest and confidentiality as related to the peer review process.

D. Organizational Management Information

Specific management information relating to an applicant shall be submitted one-time, with updates on an as-needed basis. This requirement is part of the responsibility determined prior to the award of a grant identified under this RFA, if such information has not been provided previously under this or another NIFA program. We will provide you copies of forms

recommended for use in fulfilling these requirements as part of the pre-award process. Although an applicant may be eligible based on its status as one of these entities, there are factors that may exclude an applicant from receiving federal financial and nonfinancial assistance and benefits under this program (e.g., debarment or suspension of an individual involved or a determination that an applicant is not responsible based on submitted organizational management information).

E. Application Disposition

An application may be withdrawn at any time before a final funding decision is made regarding the application. Each application that is not selected for funding, including those that are withdrawn, will be retained by AFRP for a period of three years.

PART VI—AWARD ADMINISTRATION

A. General

Within the limit of funds available for such purpose, the NIFA awarding official shall make grants to those responsible, eligible applicants whose applications are judged most meritorious under the procedures set forth in this RFA. The date specified by the NIFA awarding official as the effective date of the grant shall be no later than September 30 of the federal fiscal year in which the project is approved for support and funds are appropriated for such purpose, unless otherwise permitted by law. The project need not be initiated on the grant effective date, but as soon thereafter as practical so that project goals may be attained within the funded project period. All funds granted by NIFA under this RFA may be used only for the purpose for which they are granted in accordance with the approved application and budget, regulations, terms and conditions of the award, applicable federal cost principles, USDA assistance regulations, and NIFA General Awards Administration Provisions at 7 CFR part 3430, subparts A through E.

B. Award Notice

The award document will provide pertinent instructions and information including, at a minimum, the information described in 2 CFR 200.211.

See NIFA Terms and Conditions to view current NIFA award terms and conditions.

C. Administrative and National Policy Requirements

Several federal statutes and regulations apply to grant applications considered for review and to project grants awarded under this program. These may include, but are not limited to, the ones listed on the NIFA web page – NIFA FEDERAL REGULATIONS PAGE.

NIFA Federal Assistance Policy Guide—a compendium of basic NIFA policies and procedures that apply to all NIFA awards, unless there are statutory, regulatory, or award-specific requirements to the contrary—is available at NIFA-20-016 NIFA Federal Assistance Policy Guide 2020.

D. Responsible and Ethical Conduct of Research

Refer to Part II, D for more information.

E. Expected Program Outputs and Reporting Requirements

The output and reporting requirements are included in the award terms and conditions (see NIFA Terms and Conditions for information about NIFA award terms). If there are any program or award-specific award terms, they will be identified in the award.

Proposal requirement changes: Please note this year progress reports within the proposal for renewal applications will not be allowed extra pages. In addition, a technology readiness level form must be submitted with each project.

PART VII—AGENCY CONTACT

Applicants and other interested parties are encouraged to contact:

Programmatic Contact –
Tom Bewick
National Program Leader
Institute of Food Production and Sustainability
Division of Plant Systems - Production
Phone: (202) 913-3052
Email: tbewick@usda.gov

For administrative questions related to

- Grants.gov, see Part IV of this RFA
- Other RFA or application questions, please email policy@usda.gov
- Awards under this RFA, please email awards@usda.gov

U.S. Postal Mailing Address:
National Institute of Food and Agriculture
U.S. Department of Agriculture
P.O. Box 419205, MS 10000
Kansas City, MO 64141-6205

Courier/Package Delivery Address:
National Institute of Food and Agriculture
United States Department of Agriculture
2312 East Bannister Road, MS 10000
Kansas City, MO 64141-3061

PART VIII—OTHER INFORMATION

A. Use of Funds; Changes

1. **Delegation of Fiscal Responsibility**

Unless the terms and conditions of the award state otherwise, awardees may not in whole or in part delegate or transfer to another person, institution, or organization the responsibility for use or expenditure of award funds.

2. **Changes in Budget or Project Plans**

In accordance with 2 CFR 200.308, awardees must request prior approval from NIFA for the following program or budget-related reasons:
(i) Change in the scope or the objective of the project or program (even if there is no associated budget revision requiring prior written approval).

(ii) Change in a key person specified in the application or the federal award.

(iii) The disengagement from the project for more than three months, or a 25 percent reduction in time devoted to the project, by the approved project director or principal investigator.

(iv) The inclusion, unless waived by the federal awarding agency, of costs that require prior approval in accordance with 2 CFR 200 Subpart E—Cost Principles of this part or 45 CFR Part 75 Appendix IX, "Principles for Determining Costs Applicable to Research and Development under Awards and Contracts with Hospitals," or 48 CFR Part 31, "Contract Cost Principles and Procedures," as applicable.

(v) The transfer of funds budgeted for participant support costs as defined in 2 CFR §200.75 Participant Support Costs to other categories of expense.

(vi) Unless described in the application and funded in the approved federal awards, the sub awarding, transferring or contracting out of any work under a federal award, including fixed amount subawards as described in 2 CFR §200.333 Fixed amount subawards. This provision does not apply to the acquisition of supplies, material, equipment, or general support services.

(vii) Changes in the approved cost-sharing or matching provided by the non-federal entity.

(viii) The need arises for additional federal funds to complete the project.

The awardee will be subject to the terms and conditions identified in the award. See NIFA Terms and Conditions for information about NIFA award terms.

B. Confidential Aspects of Applications and Awards

When an application results in an award, it becomes a part of the record of NIFA transactions, available to the public upon specific request. Information that the Secretary of Agriculture determines to be of a confidential, privileged, or proprietary nature will be held in confidence to the extent permitted by law. Therefore, any information that the applicant wishes to have

considered as confidential, privileged, or proprietary should be clearly marked within the application. We will retain for three years a copy of an application that does not result in an award. Such an application will be released only with the consent of the applicant or to the extent required by law. An application may be withdrawn at any time prior to the final action thereon.

C. Regulatory Information

This program is not subject to the provisions of Executive Order 12372, which requires intergovernmental consultation with state and local officials.

Under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35), the collection of information requirements contained in this notice have been approved under OMB Document No. 0524-0039.

D. Definitions

Refer to 7 CFR 3430, Competitive and Noncompetitive Non-formula Financial Assistance Programs--General Award Administrative Provisions, for applicable definitions for this NIFA grant program.

E. Materials Available on the Internet

AFRP program information is available on the internet in two different places. Specific program information on contacts and RFA updates are available on the NIFA Website at Alfalfa Seed and Forage System Program More general information on Forage programs can be found at Agronomic & Forage Crops Program.