

Crop Protection and Pest Management Competitive Grants Program

Modification page 23 to correct indirect cost language (3/12/2019)

Fiscal Year (FY) 2019 Request for Applications (RFA)

APPLICATION DEADLINE: April 16, 2019

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

CROP PROTECTION AND PEST MANAGEMENT COMPETITIVE GRANTS PROGRAM

INITIAL ANNOUNCEMENT

CATALOG OF FEDERAL DOMESTIC ASSISTANCE: This program is listed in the Assistance Listings under the Catalog of Federal Domestic Assistance number 10.329.

DATES: Applications must be received by **5 p.m. Eastern Time on April 16, 2019**. 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@nifa.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 Crop Protection and Pest Management Competitive Grants Program RFA.

Visit the [NIFA website](#) to access a factsheet on the Center of Excellence (COE) designation process, including COE criteria, and a list of programs offering COE opportunities. You may also review a recording of COE outreach webinars and COE implementation webinars on the site. We will update COE webpages as appropriate.

EXECUTIVE SUMMARY: NIFA requests applications for the Crop Protection and Pest Management (CPPM) Competitive Grants Program for fiscal year (FY) 2019 to address critical state, regional and national integrated pest management (IPM) needs to ensure food security and respond effectively to other major societal pest management challenges. The CPPM supports projects that address these challenges with IPM approaches developed by coordinated state, regional, and national research and extension efforts. The impact of these research and extension efforts will be increased by the establishment of communication networks and stakeholder participation in setting priorities. In FY 2019, NIFA will only accept applications for funding in the Applied Research and Development Program Area (ARDP) of the CPPM program.

The anticipated amount available for CPPM grants in FY 2019 is \$18.1 million. Of this amount, approximately \$10 million will be used to fund some Extension Implementation Program Area (EIP) projects and \$4.1 million for Regional Coordination Program Area (RCP) through continuation awards and the anticipated remaining amount of approximately \$4.0 million will be used for ARDP.

This RFA is being released prior to the passage of an appropriations act for FY 2019; enactment of additional continuing resolutions or an appropriations act may affect the availability or level of funding available for the CPPM program.

The purpose of ARDP awards are to enhance the development, adoption, and implementation of innovative, ecologically-based, sustainable IPM, technologies, tactics and strategies that address regional and/or national IPM priorities.

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

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PART I—FUNDING OPPORTUNITY DESCRIPTION

A. Legislative Authority

Section 406 of the Agricultural Research, Extension, and Education Reform Act of 1998 (AREERA) (7 U.S.C. 7626), authorizes the Secretary of Agriculture to establish a competitive grants program that provides funding for integrated, multifunctional agricultural research, extension, and education activities. Subject to the availability of appropriations to carry out this program, the Secretary may award grants to colleges and universities (as defined by section 1404 of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (NARETPA) (7 U.S.C. 3103)), as amended, on a competitive basis for projects that address priorities in United States agriculture and involve integrated research, education, and extension activities, as determined by the Secretary in consultation with the National Agricultural Research, Extension, Education, and Economics Advisory Board (NAREEEAB), 7 U.S.C. 7626.

B. Purpose and Priorities

The purpose of the CPPM program is to address high priority issues related to pests including insects, nematodes, pathogens, weeds, and other pests and their management using integrated pest management (IPM) approaches at the state, regional and national levels. The CPPM program supports projects that will ensure food security and respond effectively to other major societal pest management challenges with comprehensive IPM approaches that are economically viable, ecologically prudent, and safe for human health. The CPPM program addresses IPM challenges for emerging issues and existing priority pest concerns that can be addressed more effectively with new and emerging technologies. The outcomes of the CPPM program are effective, affordable, and environmentally-sound IPM practices and strategies needed to maintain agricultural productivity and healthy communities.

The CPPM program provides support for research to develop new IPM approaches, extension to disseminate IPM knowledge and improve adoption of IPM practices, and coordination of IPM activities at the regional and national levels to increase the adoption and implementation of IPM practices on a broad scale. The CPPM program provides support for these functions with three linked program areas that emphasize research and development for discovery of IPM knowledge; extension activities for IPM adoption and implementation; and enhanced coordination, collaboration and communications among related CPPM programs and awardees. Together the Applied Research and Development Program Area (ARDP), the Extension Implementation Program Area (EIP), and the Regional Coordination Program Area (RCP) represent a comprehensive approach for developing IPM practices and strategies and extending this new knowledge across many environments through a coordinated national network. It is anticipated that the application of this evidence-based science will have positive outcomes for society.

National IPM Roadmap

The CPPM program is aligned with the IPM goals identified in the National IPM Roadmap for Integrated Pest Management (National IPM Roadmap). The National IPM Roadmap identifies strategic directions for IPM research, implementation, and measurement for pests in all settings throughout the nation (see [National IPM Roadmap](#)). In FY 2019, successful CPPM program applicants will develop knowledge and information and improved IPM practices needed for the

adoption and implementation of IPM methods that have the following National IPM Roadmap goals:

- Improve cost-benefit analyses when adopting IPM practices;
- Reduce potential human health risks and related management strategies;
- Minimize adverse environmental effects from pests and related management strategies.

A schematic representation of the CPPM program's desired outcomes and goals is illustrated in **FIGURE 1** (page 35). The three CPPM program areas at the center address IPM needs in the five focus areas described below, thereby contributing to the achievement of the five goals of the National IPM Roadmap shown in the outer ring, resulting in outcomes for sustainable food security.

The CPPM program, through its three component program areas (ARDP, EIP, and RCP), addresses overall IPM needs in the five following focus areas as funding is available:

- 1) **Plant Protection Tactics and Tools.** Need for discovery, development, and introduction of new pest management tactics for use in IPM systems.
- 2) **Diversified IPM Systems.** Need for long-term sustainable solutions to pest management problems on a regional or national scale.
- 3) **Enhancing Agricultural Biosecurity.** To develop and maintain key information systems, networks, and decision support tools that provide the knowledge infrastructure needed for early detection and the application of science-based IPM systems for invasive, emerging and high-consequence pests that threaten U.S. agriculture (e.g., early warning and decision support systems such as the Pest Information Platform for Extension and Education (ipmPIPE) have a direct effect on biosecurity).
- 4) **IPM for Sustainable Communities.** Direct application of IPM knowledge and expertise to address pest management challenges in non-traditional settings such as urban structures, landscapes and gardens, homes and schools.
- 5) **Development of the Next Generation of IPM Scientists.** To develop pre-doctoral and post-doctoral education programs to prepare the next generation of IPM scientists.

For more detailed descriptions of the focus areas see: [CPPM focus areas](#).

In FY 2019, NIFA is soliciting new applications for one of the program areas supported by the CPPM program, ARDP. The CPPM program, through ARDP, will provide funding for Plant Protection Tactics and Tools (focus area one), Enhancing Agricultural Biosecurity (focus area three), and IPM for Sustainable Communities (focus area four).

C. Program Area Description

The program area supported in FY 2019 is ARDP.

Applied Research and Development Program

Area Program Code: ARDP
Proposed Budget Requests:

- May not exceed a total of \$200,000 for applications with Project Directors (PD) from one state/U.S. territory. Note a possible exemption to the \$200,000 budget total described below in the third bullet.
- May not exceed a total of \$325,000 for applications with Project Directors (PDs) from **more** than one state/U.S. territory.
- A possible exception to the maximum budget of \$200,000 may exist for PD(s) who are studying a major crop/commodity of regional or national importance that is produced **only or predominately in one state or U.S. territory** and as a result multistate collaboration is not practical (e.g., Western Region where major crops/commodities are grown only or predominately in one state or U.S. territory). Contact the programmatic contact in Part VII to determine if your project is eligible for this exception and a higher total budget request up to \$325,000.
- Also note the paragraph on Multi-State/U.S. territory and/or Regional/National Involvement located in this section.

Project Period: Two to four years

Requested Project Type: The ARDP supports three project types:

- Applied research (single-function) projects develop innovative, ecologically-based, sustainable IPM technologies, tactics, strategies and systems that address regional and/or national IPM priorities.
- Research-led projects enhance the adoption of innovative, ecologically-based, sustainable IPM strategies and systems.
- Extension-led projects extend implementation of innovative, ecologically-based, sustainable IPM strategies and systems by IPM practitioners and growers. Extension-led projects enhance outreach efforts and maximize opportunities to build strategic alliances with stakeholders to expand their active participation in increasing the implementation of IPM methods.

Program Area Priorities per Project Type:

a. Applied Research (single-function) Projects

Research priorities include: 1) development of individual tools and tactics needed for pest management systems (e.g., biocontrol, cultural/physical/mechanical control, host plant resistance, and particularly novel uses of chemicals, monitoring methods or decision support) and 2) increased understanding of how interactions among tactics alter the effectiveness of pest management within agricultural, recreational, suburban, and urban ecosystems. Field-scale experiments over multiple seasons and/or locations are the desired experimental approach for ARDP proposals, where appropriate. The desired outcomes for new IPM practices include reducing initial pest populations, lowering the carrying capacity of the ecosystem for pests, increasing tolerance of hosts to pest injury, and/or providing tools for making management decisions, such as monitoring methods and action thresholds.

Long-term fundamental research is not appropriate for funding in this category. We encourage research on novel, cutting-edge methods, for which data exist to support the likelihood of successful IPM research and adoption. Research outcomes involving chemical pesticides include reducing the amount applied, the frequency of applications, increasing the selectivity, reducing the risks associated with their use, and/or developing novel resistance management strategies. Incorporate minimizing adverse impacts of pesticides on beneficial

organisms and limiting buildup of resistant pest populations. Clearly describe: 1) how the tactic or IPM system, once developed, can be incorporated into an existing production or management system, and 2) the economic, social, and environmental benefits of the proposed IPM strategies, and identify ways to overcome constraints to greater adoption of IPM methods by users.

The following are examples of topic areas that could be addressed by Applied Research (single-function) proposals. Identification of these topic areas is illustrative and is not intended to be exclusionary or a deterrent for submission of applications that address other appropriate topic areas.

- Documenting (measuring) the impacts of IPM adoption;
- Developing an effective strategy or tactic for a pest problem that currently limits production efficiency in a plant or animal production system, and is recognized by the user community as a key priority;
- Addressing multiple cycles of pests (arthropods, nematodes, vertebrates, pathogens, or weeds) over seasons, and/or multiple species and complexes at the landscape or ecosystem level (agricultural production, urban, or natural systems) with consideration of the interactions of the entire system;
- Promoting biological diversity in pest management systems and integration of multiple pest management tactics;
- Identifying constraints to greater adoption of IPM strategies and developing approaches to overcome these constraints;
- Promoting an interdisciplinary, IPM systems approach;
- Developing effective pest management tactics for invasive pests (arthropods, nematodes, vertebrates, pathogens, or weeds) in cropping systems and natural and urban areas; and
- Developing projects that enhance the development of innovative, ecologically-based, sustainable IPM strategies and systems for current and/or emerging pests of national importance.

b. Research-led Projects

Research-led projects are appropriate when the completion of the project's research component will support the addition of an initial Extension component for IPM adoption by stakeholders. The research priorities for the research component are listed below. The extension component is directed toward the initial adoption of individual IPM tools, tactics, or systems developed through the research component of the project. At least 20 percent of project effort must be focused on the Extension priorities listed below. Include a description of how Extension personnel are involved at the beginning of project planning and how the Extension activities are conducted concurrently with research activities throughout the life of the project.

Research priorities include: 1) final development of individual tools and tactics needed for pest management systems (e.g., biocontrol, cultural/physical/mechanical control, host plant resistance, particularly novel uses of chemicals, monitoring methods or decision support) and 2) advanced understanding of how interactions among tactics alter the effectiveness of pest management within agricultural, recreational, suburban, and urban ecosystems. Extension priorities include: 1) initial development of extension materials and information delivery

systems for outreach efforts, 2) initial pilot implementation of field-scale or on-farm demonstrations, and 3) initial delivery of IPM extension outreach and training.

c. Extension-led Projects

Extension priorities include: 1) development of extension materials and information delivery systems for outreach efforts, 2) implementation of field-scale or on-farm demonstrations, and 3) delivery of IPM extension outreach and training. Document the existence of a research base relevant to the extension effort. ARDP funding is not intended to support ongoing extension programmatic efforts. At least 20 percent of project effort must be focused on the research priorities identified for Applied Research (single-functions) projects or research-led projects (listed above).

Identification of these topic areas listed below is illustrative and is not intended to be exclusionary or a deterrent for submission of applications that address other topic areas appropriate for Extension-led priorities.

- Providing IPM outreach and training to individuals involved with the production, processing, storage, transporting, and marketing of food and agricultural commodities;
- Developing educational materials and information delivery systems that provide IPM personnel in the public and private sectors with timely, state-of-the-art information about effective IPM strategies;
- Providing outreach on endangered species protection related to IPM;
- Developing IPM programs for urban and natural systems, and address human and environmental health issues when appropriate; and
- Enhancing the development and implementation of innovative, ecologically-based, sustainable IPM strategies and systems for current and/or emerging pests of national importance.

The ARDP extension-led projects are separate from extension projects funded in the Extension Implementation Program Area (EIP) and are generally not as mature, are more narrowly focused, and/or are outside the scope of EIP.

Program Area Requirements: All ARDP applications must address the following requirements:

a. Stakeholder-Identified IPM Needs: Include the citation of IPM needs identified by diverse regional and national stakeholders. Include at least one explicit citation that clearly documents the specific stakeholder-identified needs addressed by the proposed project. Clearly reference each identified need with corresponding citations. The citation of stakeholder-identified IPM needs is important because it demonstrates that a project is both important to stakeholders and that PDs are engaged with the stakeholder community. Sources of stakeholder-identified needs include, but are not limited to:

- Needs identified by the regional IPM centers. See:
 - www.ncipmc.org/grants/stakeholder_priorities.php
 - www.northeastipm.org/grant-programs/stakeholder-priorities
 - www.sripmc.org/Policy/Priorities
 - westernipm.org/index.cfm/center-grants/priorities;
- Needs identified in crop profiles. See <https://ipmdata.ipmcenters.org>;

- Needs identified in Pest Management Strategic Plans. See <https://ipmdata.ipmcenters.org>;
- Recommendations or reports from state IPM programs;
- Recommendations from relevant IPM research and/or extension multi-state committees;
- IPM needs from Sustainable Agriculture Research and Extension (SARE) sub-regional conferences;
- Recommendations from other IPM stakeholder groups; and
- Other documented IPM needs assessment evaluations.

b. Multi-State/U.S. Territory and/or Regional/National Involvement: Clearly cite regional and/or national IPM priorities and describe multi-state, regional, and national collaborations for purposes of efficiency, economy, and synergy. **All applications, including those with PDs from one state or U.S. territory, must clearly describe how the project will provide benefits to more than one state or U.S. territory.** Describe the role of each individual on the project team in enough detail to convince peer reviewers of the application that the multi-state/U.S. territory collaboration is meaningful. When a proposal involves a crop/commodity that is of regional or national importance and is produced predominately in one state or U.S. territory, include documentation that the crop/commodity is grown predominately in one state/U.S. territory and describe why multistate collaboration is impractical. See the Program Area Requirement, g. Coordination, below for further information on participation in the appropriate regional Hatch Multistate IPM Education/Extension and Research Activities, other relevant research multi-state projects, and the respective regional IPM center.

c. Multi-Disciplinary and Systems-Oriented: Describe how the project will promote cooperative efforts across appropriate disciplines, linkages between research and extension, and the improvement of existing or emerging integrated pest management systems. Describe the role of each member of the multi-disciplinary team and their responsibilities on the project.

d. Systems Approach: Describe how the proposal will enhance the development, adoption, and implementation of innovative, ecologically-based, sustainable IPM strategies and systems. ARDP seeks applications for developing IPM strategies: 1) with the potential to significantly enhance and protect environmental quality, reduce the risk of health problems and other problems associated with pest control practices, promote biological diversity in pest management systems, and integrate multiple pest management tactics, and 2) with the primary emphasis on enhancing productivity and profitability while addressing critical environmental quality and human health issues. Examples of areas that proposals may address include: major acreage agricultural production systems, high value crops such as key fruit and vegetable systems, animal production systems, urban systems, or other agro-ecosystems including natural areas. For ARDP applications submitted for projects in agricultural settings, IPM projects in both conventional and organic production systems are appropriate.

e. Implementation Plan: Describe, as appropriate, in the project narrative for each project type: 1) how the project will implement results generated by the project with stakeholders, and 2) how the project will measure and assess adoption, implementation, and potential impacts by stakeholders using cost-effective approaches and criteria.

- f. Timeline:** Include a detailed timeline in the project narrative with key milestones for the project's objectives and other important project tasks.
- g. Coordination:** Describe the project team's plans to participate in the appropriate regional Hatch Multistate IPM Education/Extension and Research Activities (e.g., NCERA222, NEERA1604, SERA3, and WERA1017), other relevant research multi-state projects, and the respective regional IPM center. See the National Information Management and Support System (NIMSS) at www.nimss.org for information on these Hatch Multistate projects. See contacts for the regional IPM centers and the regional programmatic efforts they coordinate at www.ipmcenters.org. The purpose of these coordination opportunities is to facilitate collaboration and cooperation on IPM projects, move research results to actual application through IPM adoption and implementation, and achieve CPPM program outcomes.
- h. Partnerships:** Describe plans to develop and enhance partnerships that include collaboration with small- or mid-sized, accredited colleges and universities; 1890 land-grant institutions; 1994 land-grant institutions; Hispanic-serving institutions; Hispanic-serving Agricultural Colleges and Universities (HSACUs); and/or other institutions that serve high-risk, under-served, or hard-to-reach audiences.
- i. Logic Model:** All applicants are required to submit a project-specific logic model (see Other Project Information under Part IV, B.).
- j. National IPM Roadmap:** Address in the project narrative and the project-specific logic model chart applicable goals identified by the National IPM Roadmap for Integrated Pest Management (see [National IPM Roadmap](#)).
- k.** The CPPM program supports USDA strategic Goal 2 – Maximize the Ability of American Agricultural Producers to Prosper by Feeding and Clothing the World - (<https://www.usda.gov/our-agency/about-usda/strategic-goals>).

PART II—AWARD INFORMATION

A. Available Funding

The anticipated amount available for CPPM grants in FY 2019 is \$18.1 million. The anticipated amount available for ARDP is approximately \$4.0 million (see *Executive Summary* for additional funding distribution). NIFA is only funding ARDP for CPPM. This RFA is being released prior to the passage of an appropriations act for FY 2019. Enactment of additional continuing resolutions or an appropriations act may affect the availability or level of funding for this program.

All funds for ARDP awards will be provided in year one of the project.

There is no commitment by USDA to fund any particular application or to make a specific number of ARDP 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

https://www.fiscal.treasury.gov/fsservices/gov/pmt/asap/asap_home.htm.

B. Types of Applications

In FY 2019, you may submit applications to the CPPM program as one of the following types of requests:

New application. This is a project application that has not been previously submitted to the CPPM program. 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 the 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 SF 424 (R&R) form).

C. 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 <http://nifa.usda.gov/responsible-and-ethical-conduct-research>.

PART III—ELIGIBILITY INFORMATION

A. Eligible Applicants

Applications may only be submitted by colleges and universities (as defined in section 1404 of NARETPA) (7 U.S.C. 3103) to the CPPM program. Section 1404 of NARETPA was amended by section 7101 of the Food, Conservation, and Energy Act of 2008 (FCEA) to define Hispanic-serving Agricultural Colleges and Universities (HSACUs), and to include research foundations maintained by eligible colleges or universities. Section 406(b) of AREERA (7 U.S.C. 7626), was amended by section 7206 of the Farm Security and Rural Investment Act of 2002 to add the 1994 Land-Grant Institutions as eligible to apply for grants under this authority.

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.

For those new to Federal financial assistance, a [grants overview page](#) is available on the NIFA website. This page includes information about free Grants 101 Training and other resources that are highly recommended for those seeking an understanding of Federal awards.

B. Cost Sharing or Matching

The Agriculture Improvement Act of 2018 (HR 2) removed the matching requirements for some NIFA competitive grants imposed by the Agricultural Act of 2014. Therefore, there are changes to the matching requirements for some funds awarded in 2019.

For FY 2019, when a grant provides a particular benefit to a specific agricultural commodity, the grant recipient must match awarded USDA funds with cash and in-kind contributions on dollar-for-dollar basis from non-Federal sources (see Part IV, B, item 6 for details).

NIFA may waive the matching funds requirement for a grant if we determine that:

- (a) the results of the project, while of particular benefit to a specific agricultural commodity, are likely to be applicable to agricultural commodities generally; or
- (b) the project involves a minor commodity, the project deals with scientifically important research, and the grant recipient is unable to satisfy the matching funds requirement.

C. Centers of Excellence

Pursuant to Section 7214 of the Agricultural Act of 2014 (Pub. L. 113-79), beginning in Fiscal Year 2015, for applicable competitive research and extension programs, NIFA will recognize and provide priority in the receipt of funding to applications from “centers of excellence” that carry out research, extension, and education activities that relate to the food and agricultural sciences. NIFA held listening sessions in July 2014 and accepted written comments from stakeholders to inform NIFA’s implementation of the COE provision. Information from the webinars and a summary of the input are available on NIFA’s website at <https://nifa.usda.gov/centers-excellence> and <https://nifa.usda.gov/resource/centers-excellence->

[prior-webinars.](#)

A COE is composed of one or more of the following entities that provide financial or in-kind support to the COE.

- (A) State agricultural experiment stations;
- (B) Colleges and universities;
- (C) University research foundations;
- (D) Other research institutions and organizations;
- (E) Federal agencies;
- (F) National laboratories;
- (G) Private organizations, foundations, or corporations;
- (H) Individuals; or
- (I) Any group consisting of two or more of the entities described in (A) through (H).

COE designation is available only to CAP and standard grant applicants. Part IV, B, 3 of this RFA contains additional requirements for COE consideration.

PART IV—APPLICATION AND SUBMISSION INFORMATION

A. 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 <https://www.grants.gov/web/grants/learn-grants/grants-101/pre-award-phase.html>.

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 <https://www.grants.gov/web/grants/register.html>), 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 <https://www.grants.gov/web/grants/applicants/adobe-software-compatibility.html>. Grants.gov has 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 <https://www.grants.gov/web/grants/applicants/search-opportunity-package.html> and enter the funding opportunity number where appropriate.

Funding Opportunity Number: USDA-NIFA-CPPM-006698.

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 move forms amongst different Grant Application Packages but you may **ONLY** submit an application 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 (<https://www.grants.gov/web/grants/support.html>). 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 <https://grants-portal.psc.gov/Welcome.aspx?pt=Grants>): 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. ET).

Have the following information available when contacting Grants.gov:

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

B. 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: electronic@nifa.usda.gov
- Phone: 202-401-5048
- Business hours: Monday through Friday, 7 a.m. – 5 p.m. ET, 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).

Please note the start date for FY 2019 awards can be no later than September 1, 2019.

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. See Part V 4 of NIFA Grants.gov Application Guide for further instructions and a link to a suggested template. The following are additional instructions.

a. Field 7. Project Summary/Abstract.

The Project Summary must list the names and institutions of the PD and co-PDs and indicate which specific FY 2019 program area and/or project type the proposed project addresses. Project types are stated in the Program Area Description (see Part I, C.). The summary should also include the relevance of the project to the goals of CPPM. See Part V. 4.7 of NIFA Grants.gov Application Guide for further instructions and a link to a suggested template.

For Applied Research and Development Program Area (ARDP) Applications: The first line of your summary should state the type of project you are submitting, for example, “This is an ARDP research (single-function) project” or “This is an ARDP Research-led project” or “This is an ARDP Extension-led project.” Your summary should also list which of the CPPM focus area(s) your proposal addresses:

- 1) Plant Protection Tools and Tactics
- 2) Enhancing Agricultural Biosecurity
- 3) IPM for Sustainable Communities

Also include the relevance of the project to the goals of CPPM.

b. Field 8. Project Narrative.

NOTE: The Project Narrative shall not exceed **18** pages of written text and tables regardless of whether it is single- or double-spaced with font size no smaller than 12 point. Applicants requesting consideration of center of excellence status must include their justification within the page limit of the project narrative. We have established this maximum **18** pages to ensure fair and equitable competition.

Below are the particulars for what is to be included in the Project Narrative for proposals submitted to ARDP:

a) Response to Previous Review (if applicable)

This requirement only applies to Resubmitted Applications as described in Part II, B.

Respond to the previous review panel summary on no more than two (2) pages, titled “Response

to Previous Review.” These two pages will not be counted against the page limit of the project narrative. Provide the NIFA proposal number of the previous submission.

b) Problem, Background, and Justification

- i. Project type:** Include in the initial sentence the project type (Applied Research (single-function), Research-led, or Extension-led) and the amount of the request.
- ii. Problem:** Describe, in simple terms, the problem. Consider including the economic importance of the crop or problem, the importance of the pests, and the reason for your study (e.g., conventional pest-control strategies no longer work; beneficial insects are being harmed by available pest-control options; there is a lack of training or implementation of new IPM tactics).

- iii. Background:** Provide the explicit citation that documents the specific stakeholder-identified need(s) addressed by the proposed project and describe how the project addresses those needs. Demonstrate that you are engaged with stakeholders and that your project addresses their needs. See Part I, C, 1 for more information about stakeholder identified needs. General letters of support do not satisfy this requirement.

Review and reference relevant completed or ongoing work (local/regional/national). Describe how previous research contributes to the proposed project.

- iv. Justification:** Identify who will benefit from your project in multistate/U.S. territory, regional, and/or national terms. Consider environmental, human health, and/or economic benefits. Describe why current technologies and practices are inadequate, and explain how the proposed approach will: (1) help to improve or implement existing pest management systems; and (2) address the specific needs identified in the application. Discuss the potential applicability of the proposed approach to other states/U.S. territories or regions and the relevance of the project to the ARDP priorities (see Part I, C). Clearly describe how the project will provide benefit(s) to more than one state or U.S. territory.

c) Objectives and Anticipated Impacts

Provide clear, concise, and logically numbered statements of the specific aims of the proposed effort. **If you are writing a Research-led or an Extension-led proposal, identify each objective as either a research or extension objective.**

Describe the anticipated impacts that could be associated with the fulfillment of your objectives (you may do this in list or table format). Identify the connection of your objectives and your impacts to the goals of the National IPM Roadmap (see Part I, C.). When stating the project impacts/outcomes in your application, refer to *measurable* changes that can be substantiated by *data analyses*.

d) Approach and Procedures

Fully describe the procedures for each objective and how the project team will reach each of the stated objectives. In your description, include details on the experimental design and experimental units, reference methods to be used, and statistical analysis. Include a timetable for the start and completion of each phase of the project. For an ARDP Research-

led project or an ARDP Extension-led project, describe how the project will be managed, particularly how coordination between research and extension components will be achieved and maintained.

e) **Multi-State/U.S. Territory and/or Regional/National Involvement and Partnerships** – See Part I, C.

f) **Implementation Plan and Timeline** – See Part I, C.

g) **Center of Excellence Justification**

For consideration as a COE, you must provide a brief justification statement, as part of your Project Narrative and within the page limits provided, which describes how you meet the standards of a COE, based on the following criteria:

- i. The ability of the COE to ensure coordination and cost effectiveness by reducing unnecessarily duplicative efforts in the research, teaching, and extension activities outlined in this application;
- ii. In addition to any applicable matching requirements, the ability of the COE to leverage available resources by using public-private partnerships among agricultural industry groups, institutions of higher education, and the federal government in the proposed research and/or extension activities outlined in this application. Resources leveraged should be commensurate with the size of the award;
- iii. The planned scope and capability of the COE to implement teaching initiatives that increase awareness and effectively disseminate solutions to target audiences through extension activities of the proposed research and/or extension activity outlined in this application; and
- iv. The ability or capacity of the COE to increase the economic returns to rural communities by identifying, attracting, and directing funds to high-priority agricultural issues in support of and as a result of the implementation of the proposed research and/or extension activity outlined in this application.

Additionally, where practicable (not required), COE applicants should describe proposed efforts to improve teaching capacity and infrastructure at colleges and universities (including land-grant colleges and universities, cooperating forestry schools, certified Non-Land Grant Colleges of Agriculture (NLGCA) (list of certified NLGCA is available at http://www.nifa.usda.gov/funding/pdfs/nlgca_colleges.pdf, and schools of veterinary medicine).

c. **Field 9. Bibliography & References Cited.** Refer to Part V Section 4.9 of NIFA Grants.gov Application Guide for details.

d. **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 for this field. The following are additional instructions.

- 1) **Logic Model: Required. Three-Page Limit. This attachment does not count against the 18 page limit for project narratives.**

All applications require submission of a logic model chart. The CPPM programmatic logic model chart (see **FIGURE 2** on page 36) incorporates stakeholder input; anticipated outcomes; appropriate elements from IPM logic models from previously funded NIFA IPM programs; and goals for the National IPM Roadmap. NIFA will use the programmatic logic model chart to guide evaluating the proposals, the development of future funding priorities, and to document the impact of investments made by the CPPM program.

All applicants are required to: (1) submit a project-specific logic model chart as part of each application and (2) explain how their project-specific logic model supports the CPPM programmatic logic model chart (FIGURE 2). The project-specific logic model must provide details for the: inputs, outputs (activities and participants), and outcomes, situation, assumptions, and external factors of the proposed project. The logic model planning process may also be used to develop your project before writing your application. Format this information as a logic model chart as illustrated in FIGURE 2. Note the correct location for these elements as illustrated in FIGURE 2. Refer to the logic model chart in your project description, evaluation plans, and elsewhere, as applicable. Title the attachment as ‘Logic Model’ and save file as ‘LogicModel’. There are no font restrictions (e.g., may be smaller than the 12 point font). **Proposals that are non-compliant with the requirements for a logic model chart will be at risk of being excluded from NIFA review.** For samples and templates see www.ipm.gov/LogicModels; additional information is available on the NIFA and University of Wisconsin web sites:

www.nifa.usda.gov/funding/integrated/integrated_logic_model.html;
<https://nifa.usda.gov/resource/logic-model-planning-process>;
<http://fyi.uwex.edu/programdevelopment>;
www.ipm.gov/LogicModels/index.cfm.

- 2) **Letters of support and collaboration from stakeholders.** Letters of support may be submitted, however, they do not satisfy the requirement for ARDP applications to include at least one explicit citation that documents the specific stakeholder-identified needs addressed by the proposed project.
- 3) **Data Management Plan. Two-Page Limit. This attachment does not count against the 18 page limit for project narratives.** A Data Management Plan (DMP) is required and is to clearly articulate how the project director (PD) and co-PDs plan to manage and disseminate the data generated by the project. The DMP will be considered during the merit review process (see Part V, B.). See Part III Section 3.1 of the NIFA Grants.gov Application Guide for NIFA attachment specifications.

The requirements for preparation and inclusion of a DMP in your application is included on the following web page, <https://nifa.usda.gov/resource/data-management-plan-nifa-funded-research-projects>. Also included on the web page are FAQs and information about accessing examples of DMPs.

4. **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.

5. 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.

6. 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.

a. Matching. If you conclude that matching funds are not required as specified under Part III, B Cost-Sharing or Matching, you must include an explanation for your conclusion in the Budget Justification. We will consider this justification when determining final matching requirements or if required matching can be waived. NIFA retains the right to make final determinations regarding matching requirements.

For grants that require matching funds as specified under Part III, B, the Budget Justification must list matching sources along with the identification of the entity(ies) providing the match as well as the total dollar amount being pledged. NIFA is no longer requiring written verification of commitments of matching support (a pledge agreement). However, you are still subject to documentation, valuing and reporting requirements, etc. as specified in 2 CFR Part 200, “Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (the Uniform Guidance),” 7 CFR 3430, “Competitive and Noncompetitive Non-Formula Federal Assistance Programs – General Award Administrative Provisions,” and program-specific regulations, as applicable. In instances where match is required, any resulting award will require the signature of an Authorized Representative. Only when NIFA receives the award signed by the AR will award funds be released and available for drawdown.

You must establish the value of applicant contributions in accordance with applicable cost principles. Refer to 2 CFR Part 200, “Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (the Uniform Guidance),” for further guidance and other requirements relating to matching and allowable costs.

b. PD Workshop. ARDP awardees must attend a PD workshop during the life of the project, therefore, funds must be included in the budget with details included in the budget narrative. See Part VI, D.

c. 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 and the program code. Note that accurate entry of the program code is very important for proper and timely processing of an application:

Program Code Name: Applied Research and Development Program Area,
Program Code: ARDP

- 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.

8. Representations Regarding Felony Conviction and Tax Delinquent Status for Corporate Applicants

This is a required form for corporate applicants. See Part VI, 2 of the NIFA Grants.gov Application Guide for a description of the term, “corporation,” and detailed information related to the questions on this form.

C. 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. While you may use the checklist to check the application for completeness, the application should be checked for the following required item(s). The list includes:

- Project Summary/Abstract
- Project Narrative
- Logic Model Chart (for all applications)
- Timeline and Implementation Plan
- Bibliography and References Cited
- Data Management Plan

This is not an exhaustive list of required items; it only serves to highlight items that may be overlooked.

Instructions for submitting an application are included in Part IV, Section 1.5 of the NIFA Grants.gov Application Guide.

Applications must be received by Grants.gov by **5 p.m. Eastern Time on April 16, 2019.**

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 30 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.

D. Funding Restrictions

Section 1462(a) and (c) of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (NARETPA) 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:

- 1) the sum of an institution's negotiated indirect cost rate and the indirect cost rate charged by sub-awardees, if any; or
- 2) 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.

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 plan, repair, rehabilitate, acquire, or construction of buildings or facilities.

E. Other Submission Requirements

You should follow the submission requirements noted in Part IV, Section 1.5 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. General

We evaluate 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 technical review panel will evaluate applications that meet the administrative requirements.

We select reviewers 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 be approved for support from currently available funds or be declined due to insufficient funds or unfavorable review.

NIFA reserves the right to negotiate with the PD/PI and/or with 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.

We will send copies of reviews, *not* including the identity of reviewers, and a summary of the panel comments to the PD after the review process has been completed.

B. Evaluation Criteria

The evaluation for this RFA entails two levels of assessment. A panel of reviewers will evaluate applications independently. The reviewers will assess how well the application addresses each evaluation criterion identified in this RFA, assess the overall strength and weaknesses of each criterion, and evaluate the overall likelihood that the project will have significant outcomes and impacts. The reviewers will then summarize their review and assign a review score based on the criteria in this RFA.

After the independent reviews are completed, a peer review commences. The peer review includes

a discussion with other reviewers serving on the peer review panel. The panel uses the summarized reviews to facilitate these discussions. Through these discussions, peer review panelists come to consensus on the final rating and ranking of proposals. See a complete description of NIFA's peer review process here: https://nifa.usda.gov/sites/default/files/resource/NIFA-Peer-Review-Process-for-Competitive-Grant-Applications_0.pdf

We will use the evaluation criteria below to review applications submitted in response to this RFA:

Applied Research and Development Program Area (ARDP)

Applied Research (single-function) Project Applications

1. Technical Merit of Applied Research (single-function) (45 points)

This criterion will be used to assess the likelihood that the proposal will have an impact upon and advance goals of the CPPM ARDP program area. Elements include:

- a. The description and documentation of project IPM objectives and proposed outcomes of the applied research problem to be addressed.
- b. When model systems are used, the transferability of knowledge gained from these systems to organisms of importance to U.S. agriculture.
- c. The conceptual soundness of the proposal approach including appropriate research hypotheses.
- d. The description of the suitability, feasibility, originality, and innovation of the proposed approach, procedures, and methodologies.
- e. Preliminary data submitted in the proposal which demonstrate feasibility of the proposed research.
- f. The level of scientific originality and risk-reward balance that indicate a high probability of project success.
- g. Description of the suitability and feasibility of the data management plan.

2. Qualifications of Project Personnel, Adequacy of Facilities, and Project Management (20 points)

This criterion relates to the adequacy of the number and qualifications of key personnel who will plan and carry out the proposed project as well as the institution(s) capability to perform the project. Elements include:

- a. Qualifications of applicants (individual or team), performance record, and potential to conduct the proposed project and achieve research objectives.
- b. Awareness of the team of previous and alternative approaches to the identified problem.
- c. The institutional capacity and competence to complete the proposed area of work.
- d. The capacity of support personnel, facilities, and instrumentation to complete the proposed area of work.
- e. Appropriate timelines and key milestones to complete objectives on schedule, administer and manage the project partnerships/collaborations, translate outcomes, and coordinate project participants and institutions.

3. Project Relevance (35 points)

This criterion will be used to assess the likelihood that the proposal will advance goals of the CPPM ARDP program. Elements include:

- a. Adequate documentation that the proposal is directed toward specific research program areas priorities identified in this RFA;
- b. The description and documentation of identified stakeholder needs for the proposed work.
- c. The suitability and feasibility of the proposal plan and methods for evaluating success of project activities and documenting potential impacts against measurable short and mid-term outcomes.
- d. The description of the proposal's plan for adoption and implementation of results generated by the project, and description of cost effective approaches and criteria to measure and assess adoption, implementation, and potential impact(s) of the project.
- e. The description of each of the required elements of the Logic Model chart is appropriate and supports the CPPM programmatic Logic Model Chart.

Research-led and Extension-led Project Applications

1. Technical Merit of Research-led or Extension-led Applications (45 points)

This criterion will be used to assess the likelihood that the proposal will have an impact upon and advance goals of the CPPM ARDP program area. Elements include:

- a. The description and documentation of project objectives and outcomes of the problem to be addressed. Research-led projects primarily address the priorities identified for Applied Research (single-function) projects with at least 20 percent of project effort focused on the topic areas identified for Extension-led projects. Extension-led projects primarily address the priorities for Extension-led projects with at least 20 percent of the project effort focused on the topic areas identified for Applied Research (single-function projects).
- b. The description of the suitability, feasibility, originality, and innovation of the proposed approach, procedures, and methodologies.
- c. Description of proposed measurable results or outcomes achievable within the allotted project timeframe.
- d. Description of how the proposed research fills knowledge gaps that are critical to the development of practices and programs to address the stated problem or issue.
- e. Description of how proposed extension participants and activities will lead to measurable, documented changes in knowledge/learning, actions/behaviors, or conditions in an identified audience or stakeholder group.
- f. Description of the suitability and feasibility of the data management plan.

2. Qualifications of Project Personnel, Adequacy of Facilities, and Project Management (20 points)

This criterion relates to the adequacy of the number and qualifications of key personnel who will plan and carry out the proposed project as well as the institution(s) capability to perform the project. Elements include:

- a. Description of roles of key project personnel.

- b. Expertise of key personnel necessary to complete the proposed project, and where appropriate, establishment of partnerships with other needed disciplines (e.g., social science or economics).
- c. The institutional capacity and competence to complete the proposed area of work.
- d. The capacity of support personnel, facilities, and instrumentation to complete the proposed work.
- e. Presentation of the project timeline and key milestones needed to complete project objectives on schedule, administer and manage project partnerships/collaborations, translate outcomes, and coordinate project participants and institutions.
- f. Description of project management, including time allocated for attainment of objectives and delivery of products, maintenance of partnerships and collaborations, and a strategy to enhance communication, data sharing, and reporting among members of the project team.
- g. The budget allocation with sufficient resources to carry out a set of research and extension activities that will lead to desired outcomes.

3. Project Relevance (35 points)

This criterion will be used to assess the likelihood that the proposal will advance goals of the CPPM ARDP program. Elements include:

- a. Adequate documentation that the project is directed toward specific program topic areas identified in this RFA.
- b. Integration of project research and extension components to fully address the problem or issue addressed in the proposal.
- c. Description of identified stakeholder needs.
- d. Inclusion of stakeholder involvement in project development, implementation, and evaluation, where appropriate.
- e. Suitable and feasible plan and methods for evaluating success of project activities and for documenting potential impact(s) against measurable short and mid-term outcomes.
- f. The description of the proposal's plan for adoption and implementation of results generated by the project, and description of cost effective approaches and criteria to measure and assess adoption, implementation, and potential impact(s) of the project.
- g. The likelihood of sustainability of products and functions from extension activities beyond the life of the project.
- h. The likelihood that extension outputs or materials produced include information and recommendations from a broad range of research initiatives.
- i. The description of each of the required elements of the Logic Model chart is appropriate and supports the CPPM programmatic Logic Model Chart.

C. Center of Excellence Status

All eligible applicants will be competitively peer reviewed (as described in Part V, A and B of this RFA), and ranked in accordance with the evaluation criteria. Those that rank highly meritorious and requested to be considered as a COE will be further evaluated by the peer panel to determine whether they have met the standards to be a COE (Part III, C and Part IV, B). In instances where they are found to be equally meritorious with the application of a non-COE, based on peer review, selection for funding will be weighed in favor of applicants meeting the

COE criteria. NIFA will effectively use the COE prioritization as a “tie breaker.” Applicants that rank highly meritorious but who did not request consideration as a COE or who are not deemed to have met the COE standards may still receive funding.

In addition, the applicant’s Notice of Award will reflect that, for the particular grant program, the applicant meets all of the requirements of a COE. Entities recognized as COE will maintain that distinction for the duration of their period of performance or as identified in the terms and conditions of that award.

D. 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: <https://nifa.usda.gov/resource/nifa-peer-review-process-competitive-grant-applications> for further information about conflicts of interest and confidentiality as related to the peer review process.

E. 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).

F. 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 NIFA 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 200.210](#).

See <https://nifa.usda.gov/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 – <http://nifa.usda.gov/federal-regulations>.

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 <http://nifa.usda.gov/policy-guide>.

Responsible and Ethical Conduct of Research

Refer to Part II, C for more information.

D. Expected Program Outputs and Reporting Requirements

The output and reporting requirements are included in the award terms and conditions (see <https://nifa.usda.gov/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.

ARDP awardees - The project team must plan to attend and give a presentation at a PD workshop during the term of the project. The regional IPM centers will organize and host these PD workshops or other opportunities/venues for presentations in each region. The regional IPM

Centers may hold this PD workshop in conjunction with a Hatch Multistate meeting, another conference, or separately from any other meeting.

PART VII—AGENCY CONTACTS

Applicants and other interested parties are encouraged to contact:

Programmatic Contacts –

Herbert Bolton

Title: National Program Leader

Unit: Institute of Food Production and Sustainability

Location: 3343 Waterfront Centre

Phone: (202) 401-4201

Email: hbolton@nifa.usda.gov

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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 §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 sub awards as described in §200.332 Fixed amount sub awards. 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 <https://nifa.usda.gov/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.

For the purpose of this program, the following additional definitions are applicable:

Informal education is an education approach that occurs outside of a classroom setting, in loosely structured settings, with non-traditional learners. It may link closely to life skills. Contact time may be erratic and learners are not in classes or cohorts. Education can be led by trained educators or peers.

Integrated Pest Management (IPM) is “a sustainable approach to managing pests by combining biological, cultural, physical and chemical tools in a way that minimizes economic, health and environmental risks” (Food, Conservation, and Energy Act of 2008). The National IPM Roadmap (2013) provides further description of IPM (see [National IPM Roadmap](#)).

IPM Collaboration(s) refer to a section of a program proposal that contains a component of collaboration with another institution: (1) in which an applicant institution includes a cooperative element with at least one other entity that is not legally affiliated with the applicant institution; and (2) where the applicant institution and each cooperating entity will assume a significant role in the implementation of the proposed collaborative program component. Funds need not be subcontracted in all cases, and may be administered by the applicant institution. Only the applicant institution must meet the definition of an eligible institution as specified in this RFA.

Interdisciplinary projects are composed of representatives from multiple disciplines who engage together to create and apply new knowledge as equal stakeholders to address a shared goal.

Multidisciplinary project means a project in which investigators from two or more disciplines collaborate to address a common problem. These collaborations, where appropriate, may integrate the biological, physical, chemical, or social sciences.

Non-formal education includes assorted structured learning situations. These learning scenarios are sometimes described as “training”. Usually, participation in non-formal education does not

earn the learner credits, but certificates may be issued. The objectives may be limited to increasing skills and knowledge.

North Central Region includes the following states: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin.

Northeastern Region includes the following states: Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and West Virginia.

Partnership requires that all partners have a substantial involvement in the project throughout the life of the project. If a partnership between multiple entities is proposed, the proposal should clearly identify the following:

1. A narrative of each entity's clearly established role in the project;
2. How each entity involved as a partner on the project will contribute to execution of project objectives, determine experimental design, develop the project work plan and time table, and submit collaborative, timely reports; and
3. A comprehensive project budget that reflects each entity's financial or in-kind contribution to the total project budget costs.

Southern Region includes the following states: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, Puerto Rico, South Carolina, Tennessee, Texas, Virginia, and Virgin Islands.

Transdisciplinary is the term for a unique collaborative approach that is often mistakenly used as a synonym for interdisciplinary and multidisciplinary. But these terms are distinct and differ in scale and scope. Transdisciplinary projects address strategic approaches that span the boundaries of many disciplines in a holistic or systems approach. Transdisciplinary projects consider the human element of social and economic issues in decision-making as key considerations. Projects with a transdisciplinary approach consider the effects of one action on another dynamic, for example, the effect of reduced tillage on both weed growth and diversity; on pest and disease risks; and on the economics of control.

Western Region includes the following states: Alaska, American Samoa, Arizona, California, Colorado, Federated States of Micronesia, Guam, Hawaii, Idaho, Montana, Nevada, New Mexico, Northern Marianas, Oregon, Utah, Washington, and Wyoming.

E. Materials Available on the Internet

Crop Protection and Pest Management program information is available on the NIFA web site at: <http://nifa.usda.gov/funding-opportunity/crop-protection-and-pest-management>.

Figure 1: Schematic Representation of the CPPM Program’s Desired Outcomes and Goals

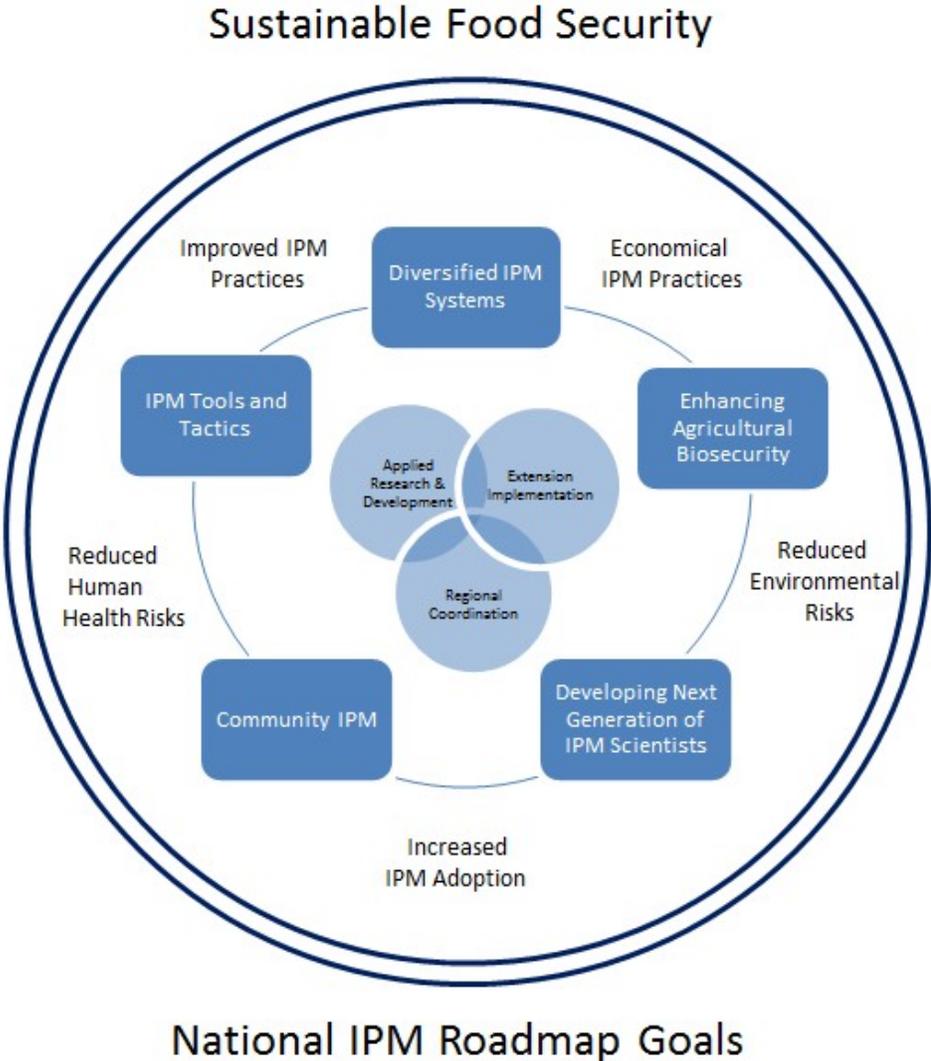


Figure 2: Crop Protection and Pest Management Program Logic Model

Inputs	Outputs: Participants	Outputs: Activities/Products	Outcomes/Impacts: Change in Knowledge (Short Term)	Outcomes/Impacts: Change in Actions/Behavior (Medium Term)	Outcomes/Impacts: Change in Condition (Long Term)
Legislative authority Annual appropriation USDA involvement NIFA intra-agency coordination Multi-state projects Program directors Support staff Panel Managers Peer Review Panels Stakeholder and partner comments	Stakeholders Commodity associations Public interest groups Farmers Ranchers General public NGOs End Users or Consumers Underserved individuals or communities Land-grant university partners Cooperative Extension Research, teaching and extension faculty State agencies Federal agencies USDA-NIFA Other allied state and federal agencies Regional IPM stakeholders eXtension CoPs NGOs Public interest groups	Respond to Congressional authorization and appropriation Publish RFA Recruit panel managers and peer review panelists Conduct peer review panel meetings Award funds to meritorious applications Support IPM research to address priority IPM needs Promote collaborative team-building through national and regional coordination meetings and activities and broad-based stakeholder participation Promote the development and implementation of IPM by facilitating coordination and collaboration across states, disciplines and programs Establish and maintain pest management information networks Build partnerships and address challenges and opportunities Develop notable IPM training programs and foster their sustainability Review and evaluate impacts of IPM implementation and communicate successes Communicate positive outcomes to key stakeholders Manage funding resources effectively Collect program impact data	Increase knowledge and implementation of new IPM tools and tactics in integrated strategies for IPM Adapt existing science-based IPM knowledge to new pest scenarios and foster sound IPM solutions Engage broadest possible IPM scientific, extension, and education communities in challenges faced by IPM Engage new stakeholder communities challenged by pest issues who could benefit from IPM Facilitate production of audience-appropriate information/training materials including mobile, web-based, and other digital, as well as traditional formats Facilitate communication among the scientific IPM community and among the research, teaching and extension communities, practitioners, stakeholders, and consumers in a proactive communication strategy Facilitate production of original materials and collaboration with existing or new eXtension CoPs	Innovative and diversified IPM systems are adopted on an area-wide or landscape scale Key information systems, networks, and decision-support tools are adopted for emerging and high-consequence pests and diseases Enhanced coordination and responsiveness of IPM research, education, and extension effort for critical, priority pest management and food security challenges New stakeholders are using IPM; Stakeholders are using more advanced IPM best management practices Producers and processors adopt newly developed IPM technologies and innovations Regional and national trans-disciplinary systems approaches are being used to solve IPM problems A new generation of research and extension scientists capable of and adept at working in effective, trans-disciplinary regional and national teams are in place Networks improve information flow among IPM components, among stakeholders, and among IPM research, education, and extension communities Stakeholders can document why IPM was beneficial for them and the environment	Crop protection systems are more profitable with IPM Agricultural production increased through reduced pest and disease losses Cost benefit ratios of adopting IPM practices are improved Sustainable IPM practices are adopted Human health and environmental risks from managing pests are reduced U.S. food producers are more competitive globally Global capacity to meet growing food demand improved Safe, affordable and high-quality crops are widely available to consumers Hunger is reduced through improved food security in vulnerable populations Effective, affordable, and environmentally-sound IPM strategies are in place to reduce economic, environmental, and societal losses from pests and diseases that affect crops and livestock, human well-being and community vitality Coordinated state-based, region-wide and national research, education, and extension programs function as catalysts for promoting further development and use of new IPM approaches

Logic Model Chart Supporting Information:

Situation: Emerging diseases, insects, weeds and other pests continue to negatively impact U.S. agricultural production, natural areas, and urban setting including places where people live, work, and attend school. Obtaining new science-based IPM knowledge and implementing that knowledge with effective, affordable, and environmentally-sound IPM strategies at the local, state, regional and national levels are needed to address these priority IPM challenges.

Assumptions: Sustainability is a foundation of integrated pest management (IPM). IPM plays a significant role in U.S. agricultural production. Complimentary and coordinated state, regional and national approaches are needed in obtaining increased adoption of IPM in agricultural, natural and urban setting.

External Factors: Congressional appropriations/funding; stakeholder input; emerging and critical issues requiring IPM practices and technologies; new pests and pathogens.