REQUEST FOR APPLICATIONS
Crop Protection and Pest Management Competitive Grants Program

FUNDING YEAR:	Fiscal Year 2020
APPLICATION DEADLINE:	June 8, 2020
LETTER OF INTENT DEADLINE:	Not Required
CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER:	10.329

INITIAL ANNOUNCEMENT
National Institute of Food and Agriculture
United States Department of Agriculture

Catalog of Federal Domestic Assistance. The Crop Protection and Pest Management (CPPM) is listed in the Assistance Listings under the Catalog of Federal Domestic Assistance number 10.329.

Table 1: Key Dates and Deadlines

Task Description	Deadline
Application:	5:00 P.M. Eastern, June 8, 2020 [*Ref to* Table 2 *of this RFA*]
Letter of Intent:	Not Required
Applicants Comments:	Within six months from the issuance of this notice (*NIFA may not consider comments received after the sixth month*)

Stakeholder Input. The National Institute of Food and Agriculture (NIFA) seeks comments on all requests for applications (RFAs) so it can deliver programs efficiently, effectively, with integrity, and with a focus on customer service. NIFA considers comments, to the extent possible when developing RFAs and uses comments to help 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)). Applicants may submit written comments to Policy@usda.gov (email is for comments only). Please use the following subject line: Response to the Crop Protection and Pest Management RFA.

Centers of Excellence. Applicants are encouraged to visit the NIFA's Center of Excellence (COE) for information on COE designation process, including COE criteria, and a list of programs offering COE opportunities. A recording of COE outreach and COE implementation webinars are also available.

EXECUTIVE SUMMARY

This notice identifies the objectives for Crop Protection and Pest Management (CPPM) projects, deadlines, funding information, eligibility criteria for projects and applicants, and application forms and associated instructions. The purpose of CPPM 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.

NIFA requests applications for the CPPM program for fiscal year (FY) 2020 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 program 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 2020, NIFA will only accept competitive 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 2020 is $18.1 million. Of this amount, approximately $10 million will be used to fund the Extension Implementation Program Area (EIP) projects through renewal awards; $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 to fund new ARDP awards.

TABLE OF CONTENTS

INITIAL ANNOUNCEMENT **1**

EXECUTIVE SUMMARY **2**

PART I. FUNDING OPPORTUNITY DESCRIPTION **5**
A. Legislative Authority 5
B. Purpose and Priorities 5

PART II. AWARD INFORMATION **15**
A. Available Funding 15
B. Application Restrictions 15
C. Project Types 15
D. Ethical Conduct of Funded Projects 15

PART III. ELIGIBILITY INFORMATION **16**
A. Eligibility Requirements 16
B. Cost Sharing or Matching 16
C. Centers of Excellence 16

PART IV. APPLICATION AND SUBMISSION **18**
A. Method of Application 18
B. Content and Form of the Application 18
C. Funding Restrictions 22

PART V. APPLICATION REVIEW REQUIREMENTS **24**
A. NIFA's Evaluation Process 24
B. Evaluation Criteria 24
C. Center of Excellence 27
D. Organizational Management Information 27
E. Application Disposition 27

PART VI. AWARD ADMINISTRATION **28**
A. General 28
B. Administrative and National Policy Requirements 28
C. Expected Program Outputs and Reporting Requirements ..... **Error! Bookmark not defined.**

PART VII. OTHER INFORMATION **29**
A. Use of Funds and Changes in Budget 29
B. Confidential Aspects of Applications and Awards 29
C. Regulatory Information 29

APPENDIX I: AGENCY CONTACT **30**

APPENDIX II: GLOSSARY OF TERMS **30**

APPENDIX III: DEFINITIONS **31**

TABLE OF TABLES

Table 1: Key Dates and Deadlines....1
Table 2: Program Key Information....7
Table 3. Steps to Obtain Application Materials....18
Table 4. Help and Resources....18
Table 5. Key Application Instructions....19

TABLE OF FIGURES

Figure 1: Schematic Representation of the CPPM Program's Desired Outcomes and Goals....6
Figure 2: Crop Protection and Pest Management Program Logic Model....13

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.

Section 7206 of the Farm Security and Rural Investment Act of 2002 amended section 406(b) of AREERA to add the 1994 Land-Grant Institutions as eligible to apply for grants under this authority. Section 7129 of the Food, Conservation, and Energy Act of 2008 (FCEA) (Pub. L.110-246) amended section 406(b) of AREERA (7 U.S.C. 7626(b)) adding Hispanic-serving agricultural colleges and universities (HSACU) as eligible entities for competitive funds awarded under this authority (see Part III § A for more information).

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.

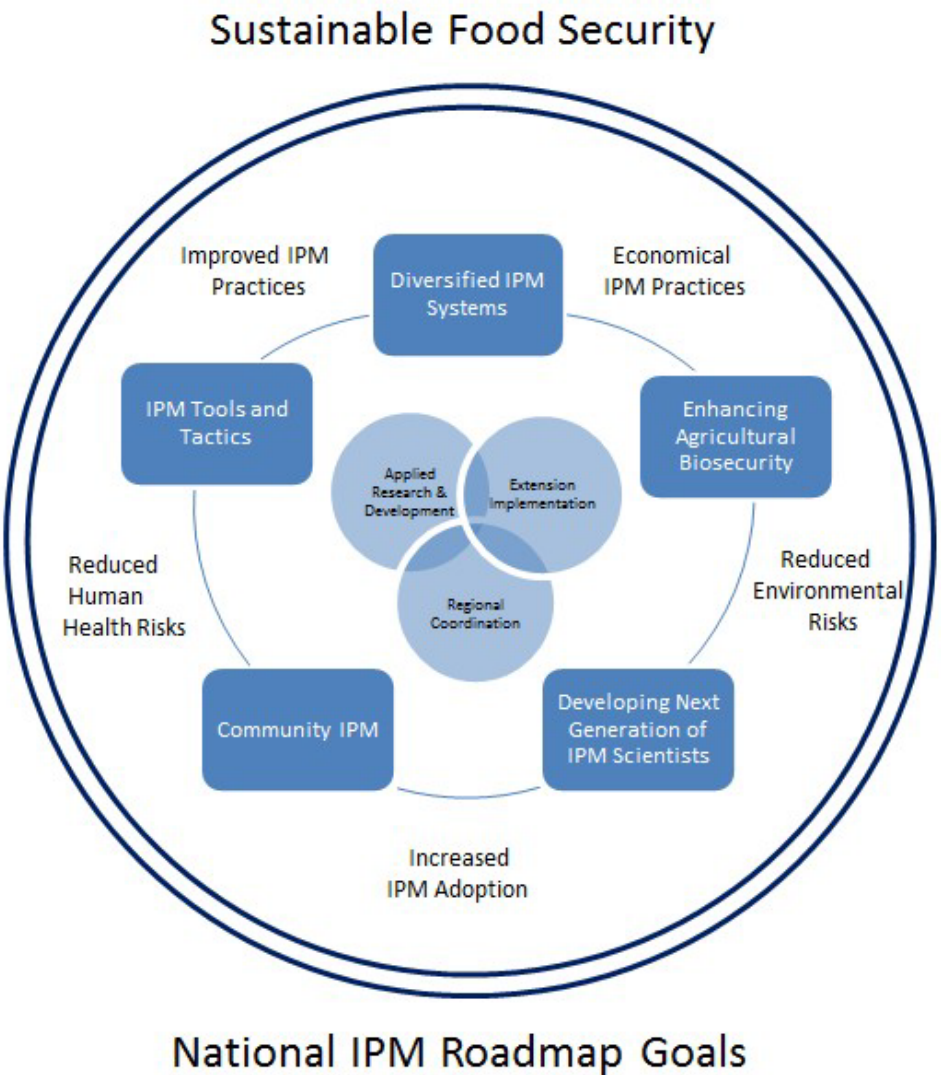
National IPM Roadmap. The CPPM program is aligned with the IPM goals identified in the National IPM Roadmap for Integrated Pest Management (see National IPM Roadmap). The

National IPM Roadmap identifies strategic directions for IPM research, implementation, and measurement for pests in all settings throughout the nation. In FY 2020, 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:

1. Improve cost-benefit analyses when adopting IPM practices
2. Reduce potential human health risks from pests and related management strategies
3. 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**. 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.

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



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.

The CPPM program, through ARDP, is soliciting new applications to 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).

eXtension. CPPM encourages (but does not require) projects that develop content suitable for delivery through eXtension.

The CPPM is aligned with USDA Strategic Goal 2: Maximize the Ability of American Agricultural Producers to Prosper by Feeding and Clothing the World.

Table 2: Program Key Information

Title	Description
Program Code:	ARDP
Program Code Name:	Applied Research and Development Area
CFDA Number	10.329
Project Type:	Applied Research, Research-led, Extension-led
Grant Type:	Standard
Application Deadline	June 8, 2020
Grant Duration:	24-36 Months
Anticipated # of Awards:	15-16
Maximum Award Amount:	$325,000

Proposed Budget Requests:

1. 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 number 3.

2. May not exceed a total of $325,000 for applications with Project Directors (PDs) from **more** than one state/U.S. territory.
3. A possible exception to the maximum budget of $200,000 may exist when multistate collaboration is not possible because PD(s) are studying a major crop/commodity of regional or national importance that is produced **only or predominantly 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.
4. Also note the paragraph on Multi-State/U.S. territory and/or Regional/National Involvement located in this section under Program Area Requirements, 2.

Program Area Priorities per Project Type:

1. *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.

a. Documenting (measuring) the impacts of IPM adoption
b. 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
c. 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

d. Promoting biological diversity in pest management systems and integration of multiple pest management tactics
e. Identifying constraints to greater adoption of IPM strategies and developing approaches to overcome these constraints
f. Promoting an interdisciplinary, IPM systems approach
g. Developing effective pest management tactics for invasive pests (arthropods, nematodes, vertebrates, pathogens, or weeds) in cropping systems and natural and urban areas
h. Developing projects that enhance the development of innovative, ecologically-based, sustainable IPM strategies and systems for current and/or emerging pests of national importance

2. *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 will be involved at the beginning of project planning and how the Extension activities will be 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.

3. *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.
   a. Providing IPM outreach and training to individuals involved with the production, processing, storage, transporting, and marketing of food and agricultural commodities
   b. 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
   c. Providing outreach on endangered species protection related to IPM
   d. Developing IPM programs for urban and natural systems, and address human and environmental health issues when appropriate

e. 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.

1. *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:
     i. Northcentral IPM Center
     ii. Northeastern IPM Center
     iii. Southern IPM Center
     iv. Western IPM Center
   - Needs identified in Crop Profiles
   - Needs identified in Pest Management Strategic Plans
   - 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
   - Other documented IPM needs assessment evaluations
2. *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 Program Area Requirement, 7. 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.
3. *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.

4. *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.
5. *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.
6. *Timeline.* Include a detailed timeline in the project narrative with key milestones for the project's objectives and other important project tasks.
7. *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.
8. *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.
9. *Logic Model.* Three-Page Limit. This attachment does not count against the 18-page limit for project narratives. All applicants are required to:
    i. Submit a project-specific logic model chart as part of each application; and
    ii. Explain how their project-specific logic model supports the CPPM programmatic logic model chart (**FIGURE 2**). The CPPM programmatic logic model chart 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.

The project-specific logic model must provide details for the: i*nputs*, *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 for the logic model. Proposals that are non-compliant with the requirements for a logic model chart will be at risk of being excluded from NIFA review. Additional information is available on the NIFA and University of Wisconsin web sites:

Integrated Programs Logic Model Planning Process

Logic Model Planning Process

Program Development and Evaluation

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

10. ***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).

PART II. AWARD INFORMATION

A. Available Funding

The anticipated amount available for CPPM in FY 2020 is approximately $18.1 million. The amount available for ARDP grants is approximately $4 million (see Executive Summary for additional funding distribution). All funds for ARDP awards will be provided in year one of the project. USDA is not committed to fund any particular application or to make a specific number of awards. The Automated Standard Application for Payments, operated by the Department of Treasury, Bureau of Fiscal Service, is the designated payment system for awards resulting from this RFA.

B. Application Restrictions

NIFA will evaluate applications using the criteria described in Part V of this RFA. Applications for FY 2020 are limited to the following applications types:

1. *New application*: New applications will be evaluated using the criteria described in Part V of this RFA and are subject to the due dates herein (see Appendix III for definition).
2. *Resubmitted application*: Resubmitted applications must include a response to major concerns raised in previous reviews, and are subject to the same criteria and due dates herein. Resubmitted applicants must enter the NIFA-assigned proposal number of the previously submitted application in the *Federal Field (Field 4)* on the application form (see Appendix III for definition).

C. Project Types

The following describes the types of *projects* that are eligible for funding. Applicants must propose one of these project types - Applied research, Research-led, Extension-led.

- *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.
  See Part I § B of this RFA.

D. Ethical Conduct of Funded Projects

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 must, upon request, make available to NIFA the policies, procedures, and documentation to support the conduct of the training. See Responsible and Ethical Conduct of Research for further information.

PART III. ELIGIBILITY INFORMATION

A. Eligibility Requirements

Applicants for the CPPM must meet all the requirements discussed in this RFA. Failure to meet the eligibility criteria by the application deadline may result in exclusion from consideration or, preclude NIFA from making an award. For those new to Federal financial assistance, NIFA's Grants Overview provides highly recommended information about grants and other resources to help understand the Federal awards process.

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.

Duplicate or Multiple Submissions – duplicate or multiple submissions are not allowed. NIFA will disqualify both applications if an applicant submits duplicate or multiple submissions. For those new to Federal financial assistance, NIFA's Grants Overview provides highly recommended information about grants and other resources to help understand the Federal awards process.

B. Cost Sharing or Matching

Match Required – Applicants **MUST** provide matching contributions on a dollar-for-dollar basis for all Federal funds awarded under the CPPM. NIFA may waive the matching funds requirement for a grant if one of the following applies:

1. The results of the project, while of particular benefit to a specific agricultural commodity, are likely to be applicable to agricultural commodities generally; or
2. 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), NIFA will recognize and prioritize COE applicants that carry out research, extension, and education activities that relate to the food and agricultural sciences. A COE is composed of one or more of the following entities that provide financial or in-kind support to the COE.

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; or
9. Any group consisting of two or more of the entities described in (1) through (8).

PART IV. APPLICATION AND SUBMISSION

A. Method of Application

Applicants must apply to this RFA electronically; no other method or response is accepted. The electronic application for this RFA and additional resources are available on Grants.gov and Grants 101. **Table 3** provides instructions on how to obtain an electronic application. **Part II § 1** of the NIFA Grants.gov Application Guide (Application Guide) contains detailed information regarding the Grants.gov registration process.

Table 3. Steps to Obtain Application Materials

Steps	Action
Step One: Register	*New Users* to Grants.gov must register early with Grants.gov prior to submitting an application (Register Here).
Step Two: Download Adobe	Download and Install Adobe Reader (see Adobe Software Compatibility for basic system requirements)
Step Three: Find Application	Using this funding opportunity number **USDA-NIFA-CPPM-007432** search for application here: Opportunity Package.
Step Four: Assess Readiness	Contact an AR prior to starting an application to assess the organization's readiness to submit an electronic application.

Table 4. Help and Resources

Grants.gov Support	NIFA Support
Grants.gov Online Support Telephone support: 800-518-4726 Toll-Free or 606-545-5035 Email support: support@grants.gov Self-service customer based support: Grants.gov iPortal *Key Information: Customer service business Hours 24/7, except federal holidays.*	Email: electronic@nifa.usda.gov *Key Information*: Business hours: Monday thru Friday, 7a.m. – 5p.m. ET, except federal holidays

B. Content and Form of the Application

The Application Guide is part of the corresponding application package for this RFA. The RFA overrides the Application Guide if there is a discrepancy between the two documents. NIFA will accept subsequent submissions to an application until the application deadline. However, applicants that do not meet the application requirements, to include partial applications, risk being excluded from NIFA's review. NIFA will assign a proposal number to all applications that meet the requirements of this RFA. Applicants must refer to the proposal number when corresponding with NIFA. **Table 5** outlines other key instructions for applicants.

Table 5. Key Application Instructions

Instruction	References (All references are to the Application Guide)
Attachments must be in a portable document format (PDF) format.	**Part III § 3**
Check the manifest of submitted files to verify attachments are in the correct format.	**Part III § 6.1**
Conduct an administrative review of the application before submission.	**Part VII**
Follow the submission instructions.	**Part IV § 1.5**
Provide an accurate email address, where designated, on the SF-424 R&R.	**Part IV § 1.5**
Contact the Grants.gov helpdesk for technical support, and keep a record of the correspondence.	
Contact NIFA if applicant does not receive correspondence from NIFA regarding an application within ***30*** days of the application deadline.	

SF 424 R&R Cover Sheet. See **Part V § 2** and **Part V § 2.17** of the Application Guide for the required certifications and assurances.

Please note the start date for FY 2020 ARDP awards can be no later than September 1, 2020.

SF 424 R&R Project/Performance Site Location(s). See **Part V § 3** of the Application Guide.

R&R Other Project Information Form. See **Part V § 4** of the Application Guide.

1. Field 7. Project Summary (PS)/Abstract. The PS must list the names and institutions of the PD and co-PDs. 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:
   a. Plant Protection Tools and Tactics
   b. Enhancing Agricultural Biosecurity
   c. IPM for Sustainable Communities

   The PS must show how the project goals align with the project goals of the CPPM. See **Part V § 4.7** of the Application Guide for instructions and suggested templates.
2. Field 8. Project Narrative (PN). The PN must not exceed 18 *1.5 spaced* pages of written text, figures and tables (the font size for tables should be no smaller than 11 points, Times New Roman). The page limits outlined here ensure fair and equitable competition. Appendices to the PN are allowed if they are directly germane to the proposed project.

Do not add appendices to circumvent the page limit. The PN must include all of the following:

a. 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 § B of this RFA for more information about stakeholder identified needs. General letters of support do not satisfy this requirement.
   iv. **Review and reference of relevant completed or ongoing work (local/ regional/ national**). Describe how previous research contributes to the proposed project.
   v. **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 § B of this RFA). Clearly describe how the project will provide benefit(s) to more than one state or U.S. territory.

b. 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 § B of this RFA). When stating the project impacts/outcomes in your application, refer to ***measurable*** changes that can be substantiated by ***data analyses***.

c. 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.

d. Multi-State/U.S. Territory and/or Regional/National Involvement and Partnerships: (see Part I § B of this RFA).
e. Implementation Plan and Timeline: (see Part I § B of this RFA).
f. Data Management Plan (DMP). See Data Management Plan information, below, for details.
g. Logic Model. (see Part I § B of this RFA).
h. Centers 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:

    a. 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;

    b. 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 be commensurate with the size of the award;

    c. 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

    d. 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).
i. Response to Previous Review (if applicable): This requirement only applies to Resubmitted Applications as described in Part II § B of this RFA. The response to previous review must not exceed 2 *1.5 spaced* pages. This does not count towards the page limit for the PN. The project narrative attachment must include two components: 1) a two-page response to the previous review (containing the previous proposal number in the first line) titled "Response to Previous Review" as the first page of the attachment and 2) the 18 page project narrative, as required.

3. Field 12. Add Other Attachments. See **Part V § 4.12** of the Application Guide.

    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.

R&R Senior/Key Person Profile (Expanded). See **Part V § 5** of the Application Guide for profile requirements, details about the biographical sketch, and suggested support templates.

R&R Personal Data. This information is voluntary and is not a precondition of award (see **Part V § 6** of the Application Guide).

R&R Budget. See **Part V § 7** of the Application Guide.

1. Match – If an applicant concludes that the matching requirements described under Part III § B of this RFA is not applicable to them; the applicant must include an explanation of their conclusion in the *budget justification*. NIFA 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.
   Grants that require matching funds as specified under Part III § B of this RFA must list in their *budget justification* the matching sources, the identification of the entity(ies) providing the match, and the total pledged amount. A written verification of commitments of matching support (a pledge agreement) is not required. However, applicants are subject to the documentation, valuing and reporting requirements, as specified in 2 CFR Part 200, "Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (the Uniform Guidance)," and 7 CFR 3430, "Competitive and Noncompetitive Non-Formula Federal Assistance Programs – General Award Administrative Provisions."
2. Indirect costs (IDC) – See Part IV § C of this RFA for funding restrictions regarding indirect cost, and **Part V § 7.9** of the Application Guide for additional information.
3. 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.

Data Management Plan. A DMP is required for this program. Applicants should 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 of this RFA, **Part III § 3.1** of the Application Guide and NIFA's Data Management Plan).

Supplemental Information Form. See **Part VI § 1** of the Application Guide.

1. Field 2. Program to which the applicant is applying. Enter the program name "**Applied Research and Development Program**" and the program code "**ARDP**". Accurate entry is critical.
2. Field 8. Conflict of Interest List. See **Part VI § 1.8** of the Application Guide.

Representations Regarding Felony Conviction and Tax Delinquent Status for Corporate Applicants. This is required for corporate applicants. See **Part VI § 2** of the Application Guide for a description of the term, "corporation."

C. Funding Restrictions

Indirect Cost (IDC) not to exceed 30 percent of Total Federal Funds Awarded (TFFA) of the recipient. Section 1462(a) and (c) of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (NARETPA) limits IDC for the overall award to 30 percent of Total Federal Funds Awarded (TFFA) under a research, education, or extension grant. The

maximum IDC rate allowed under the award is determined by calculating the amount of IDC 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 IDC rate under the award, including the IDC charged by the sub-awardee(s), if any, is the lesser of the two rates.

If the result of number one is the lesser of the two rates, the grant recipient is allowed to charge the negotiated IDC rate on the prime award and the sub-award(s), if any. Any sub-awards would be subject to the sub-awardee's negotiated IDC rate. The sub-awardee may charge its negotiated IDC rate on its portion of the award, provided the sum of the IDC 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 IDC rate allowed for the overall award, including any sub-award(s), is limited to 30 percent of the TFFA. That is, the IDC of the prime awardee plus the sum of the IDC 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 IDC 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 IDC are considered unallowable. See sections 408 and 410 of 2 CFR 200.

Successful applicants must not use grant funds awarded under the authority of this RFA to renovate or refurbish research, education, or extension space; purchase or install fixed equipment in such space; or to plan, repair, rehabilitate, acquire, or construct buildings or facilities.

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 AFRI 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

NIFA will use the following criteria to evaluate applications responding to this RFA:

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 area 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(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

In addition to evaluating applicants using the criterion listed in Part V § B of this RFA, NIFA will use the COE standards described in this RFA to evaluate applicants that rank highly meritorious and requested to be considered as a COE. In instances where applicants are found to be equally meritorious with the application of a non-COE applicant, NIFA will prioritize the COE applicant 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.

Applicants that meet the COE requirements will have the COE designation in their notice of award. 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. Organizational Management Information

Applicants must submit specific management information relating to an applicant prior to an award and update the information as needed. Applicants may only have to update their information if they had previously provided the information under this or another NIFA program. NIFA provides the requisite forms during the pre-award process. Although an applicant may be eligible for award under this program, 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, or a determination that an applicant is not responsible).

E. Application Disposition

Applicants may withdraw at any time before NIFA makes a final funding decision. NIFA will retain all applications, including withdrawn applications and unfunded applications.

PART VI. AWARD ADMINISTRATION

A. General

Within the limit of funds authorized, the NIFA awarding official will make grants to responsible and 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 must 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,7 CFR part 3430, subparts A through E.

Award Notice. The award document will provide pertinent instructions and information as described in 2 CFR 200.210 (see NIFA's Terms and Conditions).

B. Administrative and National Policy Requirements

Several federal statutes and regulations apply to grant applications and the projects outlined in this RFA (some are listed here: Federal Regulations). Unless specifically noted by statue or award-specific requirements, NIFA Policy Guide applies to all NIFA awards.

PART VII. OTHER INFORMATION

A. Use of Funds and Changes in Budget

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.

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 (the awardee is subject to the terms and conditions identified in the award):

1. Change in the scope or the objectives of the project or program without prior written approval (even if there is no associated budget revision requiring);
2. Change in a key person specified in the application or the federal award;
3. Disengagement from the project for more than three months, or a 25 percent reduction in time devoted to the project;
4. Inclusion of costs that require prior approval in accordance with 2 CFR 200 Subpart E (Cost Principles), 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, unless waived by the federal awarding agency;
5. Part 31, Contract Cost Principles and Procedures;
6. Transfer of funds budgeted for participant support costs to other categories of expense (§200.75 Participant support costs);
7. Sub-awarding, transferring or contracting out of any work under a federal award, including fixed amount sub-awards (see §200.332, Fixed Amount Sub-awards), unless described in the application and funded in the approved federal awards. This provision does not apply to the acquisition of supplies, material, equipment, or general support services;
8. Changes in the approved cost-sharing or matching provided by the non-federal entity; and
9. The need for additional federal funds to complete the project.

B. Confidential Aspects of Applications and Awards

When an application results in an award, it becomes a part of NIFA transaction records, which are available to the public. Information that the Secretary of Agriculture determines to be confidential, privileged, or proprietary in nature will be held in confidence to the extent permitted by law. Therefore, applicants should clearly mark any information within the application they wish to have considered as confidential, privileged, or proprietary. NIFA will retain a copy of an application that does not result in an award for three years. Such an application will be released only with the consent of the applicant or to the extent required by law. An applicant may withdraw 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.

APPENDIX I: AGENCY CONTACT

Programmatic Contact

Name	Email	Telephone
Robert Nowierski	robert.nowierski@usda.gov	202-552-9084
Michael Fitzner	michael.fitzner@usda.gov	202-450-9579

National Institute of Food and Agriculture
U.S. Department of Agriculture
6501 Beacon Drive
Kansas City, MO 64133

NIFA's Mailing Address:
National Institute of Food and Agriculture
U.S. Department of Agriculture
2312 East Bannister Road
Mail Stop 10000 (ten thousand)
Kansas City, MO 64131

APPENDIX II: GLOSSARY OF TERMS

Name	Acronyms
Authorized Representative	AR
Applied Research and Development Program Area	ARDP
Agricultural Research, Extension, and Education reform Act of 1998	AREERA
Catalog of Federal Domestic Assistance	CFDA
Center of Excellence	COE
Data Management Plan	DMP
Extension Implementation Program Area	EIP
Hispanic- serving Agricultural Colleges and Universities	HSACU
Integrated Pest Management	IPM
National Agricultural Research, Extension, Education, and Economics Advisory Board	NAREEEAB
National Agricultural Research, Extension, and Teaching Policy Act	NARETPA
National Institute of Food and Agriculture	NIFA
National Information Management and Support System	NIMSS
Non-Land Grant Colleges of Agriculture	NLGCA
Research Coordination Program Area	RCP
Request for Application	RFA
Research, Education, and Economics	REE
United States Department of Agriculture	USDA

APPENDIX III: DEFINITIONS

Refer to 7 CFR 3430 Competitive and Noncompetitive Non-formula Federal Assistance Programs – General Award Administrative Provisions for additional definitions.

Terms	Definitions
Applied Research Projects (single-function)	Develop innovative, ecologically-based, sustainable IPM technologies, tactics, strategies and systems that address regional and/or national IPM priorities.
Continuation Award	An award instrument by which NIFA agrees to support a specified level of effort for a predetermined period of time with a statement of intention to provide additional support at a future date, provided that performance has been satisfactory, appropriations are available for this purpose, and continued support would be in the best interest of the federal government and the public.
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.
Informal Education	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	"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 (2018) provides further description of IPM (see National IPM Roadmap).
IPM Collaborations	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.
Matching	The process through which a grant recipient match awarded USDA funds with cash and in-kind contributions on a dollar-for-dollar basis. The matching funds must derive from non-Federal sources.
Multidisciplinary Project	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.
New Application	An application not previously submitted to a program.
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.
Partnerships	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 timetable, 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.
Research-led Projects	Enhance the adoption of innovative, ecologically-based, sustainable IPM strategies and systems.
Renewal Application	A project application that seeks additional funding for a project beyond the period that was approved in an original or amended award.
Resubmitted Application	A project application that was previously submitted to a program, but the application was not funded.

Resubmitted Renewal Application	A project application that requests additional funding for a project beyond the period that was approved in the original award. This is an application that had previously been submitted for renewal, but not funded.
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	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.