

# REQUEST FOR APPLICATIONS

## Crop Protection and Pest Management

### Competitive Grants Program

MODIFICATION: Page 33

FUNDING YEAR: Fiscal Year 2021  
APPLICATION DEADLINE: March 15, 2021  
LETTER OF INTENT DEADLINE: Not Required  
ANTICIPATED AVAILABLE FUNDING: Approximately \$18,100,000  
ASSISTANCE LISTING 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, March 15, 2021 [ <i>Ref to Table 2 and Table 3 of this RFA</i> ]
Letter of Intent:	Not Required
Applicants Comments:	Within six months from the issuance of this notice ( <i>NIFA may not consider comments received after the sixth month</i> )

**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](mailto: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) 2021 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 2021, NIFA will only accept competitive applications for funding in the Applied Research and Development Program area (ARDP) and the Extension Implementation Program area (EIP) of the CPPM program. NIFA will fund current Regional Coordination Program area (RCP) projects through continuation applications. The anticipated amount available for CPPM grants in FY 2021 is approximately \$18.1 million. Of this amount, approximately \$4.0 million will be used to fund ARDP awards, approximately \$10 million to fund EIP awards; and approximately \$4.1 million to fund current RCP continuation awards. This RFA is being released prior to the passage of an appropriations act for FY 2021. Enactment of additional continuing resolutions or an appropriations act may affect the availability or level of funding for this program.

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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) as amended authorizes the Secretary of Agriculture to establish a competitive grants program that provides funding for integrated, multifunctional agricultural research, extension, and education activities. The Secretary may award these grants to colleges and universities, as defined in 7 U.S.C. 3103, 1994 Institutions, and Hispanic-serving agricultural colleges and universities on a competitive basis for integrated agricultural research, education, and extension projects 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) (see [Part III § A](#) for more information).

### **B. Purpose and Priorities**

The purpose of the CPPM program, Assistance Listing 10.329, is to provide funding for integrated, multifunctional agricultural research, extension, and education activities. The goals and objectives of CPPM are 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 also 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.

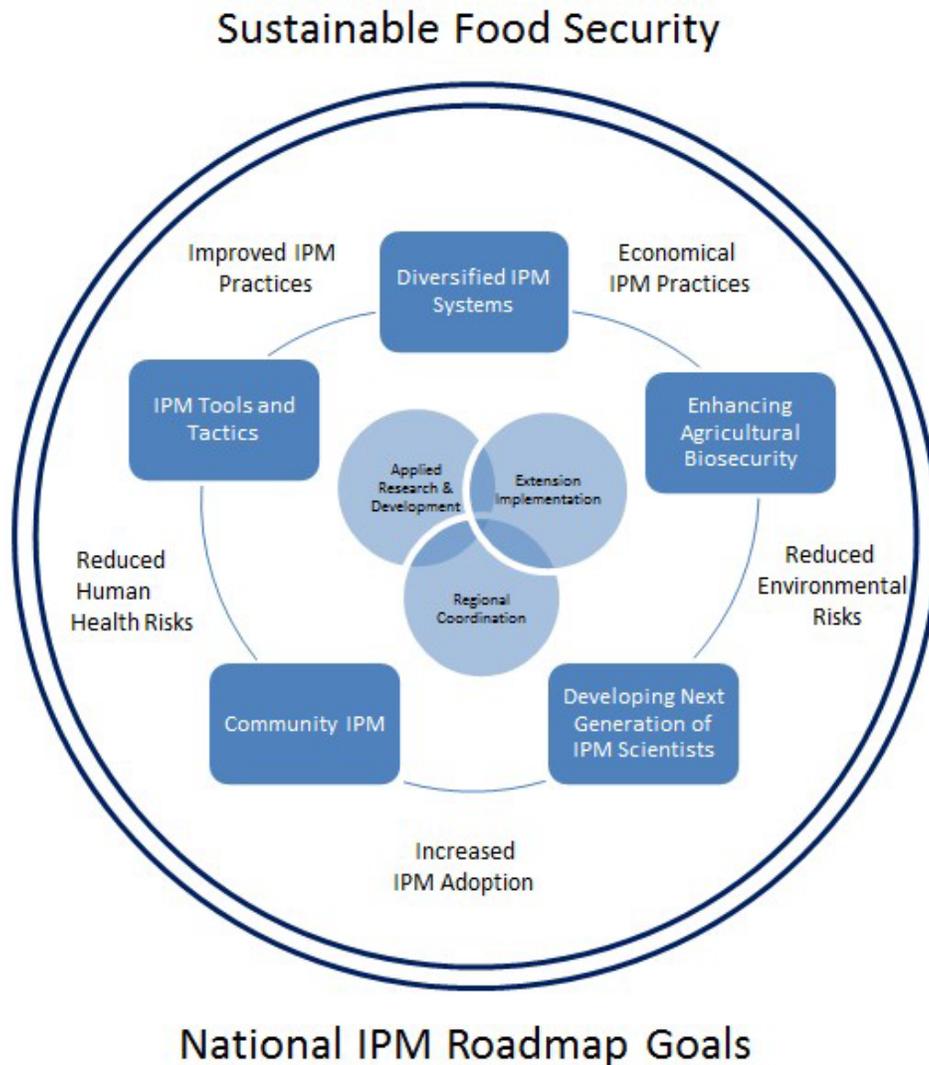
**National IPM Roadmap.** The CPPM program is aligned with the IPM goals identified in the National IPM Roadmap for Integrated Pest Management ([National IPM Roadmap](#)). The National IPM Roadmap identifies strategic directions for IPM research, implementation, and measurement for pests in all settings throughout the nation. In FY 2021, 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: [Crop Protection and Pest Management Program](#).

In FY 2021, the CPPM program, through ARDP and EIP, 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).

Handling of baseline data and data collection will be addressed in the Data Management Plan (DMP) in accordance with the Part IV(B) of this RFA.

The CPPM is aligned with the following strategies of the [USDA Strategic Plan \(FY 2018-2022\)](#):

1. Ensure USDA Programs Are Delivered Efficiently, Effectively, With Integrity and a Focus on Customer Service;
2. Maximize the Ability of American Agricultural Producers To Prosper by Feeding and Clothing the World;
3. Promote American Agricultural Products and Exports; and
7. Provide All Americans Access to a Safe, Nutritious, and Secure Food Supply.

The CPPM is aligned with the following themes of the [USDA Science Blueprint](#);  
Theme 1 - Sustainable Ag Intensification and Theme 2 - Ag Climate Adaptation.

The CPPM actively supports research projects that promote the [USDA Agriculture Innovation Agenda](#) commitments of creating a comprehensive U.S. agriculture innovation strategy to align public and private research efforts and integrating the latest innovative conservation technologies and practices into USDA programs that aim to increase US agricultural production, to build landscape resiliency by investing in active forest management and forest restoration, to reduce food loss and waste, to enhance carbon sequestration through soil health and forestry, to reduce nutrient loss, and to support renewable energy.

**CPPM Logic Model:** The CPPM programmatic logic model chart (**FIGURE 2**) 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:

- 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.

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. 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](#)

Additional requirements on expected performance goals, indicators and targets may be required as a condition of award.

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

### C. Program Area Description

NIFA is soliciting applications under the following program areas:

1. Applied Research and Development Program
2. Extension Implementation Program

#### Applied Research and Development Program

**Table 2: Applied Research and Development Program Key Information**

Title	Description
Program Code:	ARDP
Program Code Name:	Applied Research and Development Area
CFDA Number	10.329
Project Type:	<a href="#">Applied Research</a> , <a href="#">Research-led</a> , <a href="#">Extension-led</a>
Grant Type:	Standard
Application Deadline	March 15, 2021
Grant Duration:	24-36 Months
Anticipated # of Awards:	15-16
Maximum Award Amount:	Approximately \$200,000 or \$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 [Appendix I](#) 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 \(NIMSS\)](#) for information on these Hatch Multistate projects. See [Regional IPM Centers](#) for contacts and the regional programmatic efforts they coordinate. 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.
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](#)).

### Extension Implementation Program

**Table 3:** Extension Implementation Program Key Information

Title	Description
Program Code:	EIP
Program Code Name:	Extension Implementation Program
CFDA Number:	10.329
Project Type:	N/A
Grant Type:	Standard
Application Deadline:	March 15, 2021
Grant Duration:	Approximately 36 Months
Anticipated # of Awards:	Approximately 53
Maximum Award Amount:	Approximately \$300,000 per year

**Proposed Budget Requests** – Budgets must not exceed \$300,000 per year and \$900,000 per project. This program area is limited to one application per institution per year and each application must include an endorsement letter. For details see: [Part IV. §B.2](#). Proposals Submitted to the Extension Implementation Program Area.

The program will support an extension IPM coordination project at eligible institutions. Applications submitted to EIP should describe institution-based programs that are extension-led but may include research-demonstration components. Any research activities must be directly related to the extension program. No more than 20 percent of a project’s activities may be research-led.

**Table 4:** EIP Program Area Priorities - EIP applications must address the following:

<b><u>Primary Priorities</u></b> <i>Must include at least one. Budgets must adhere to the funding cap.*</i>	<b><u>Secondary Priorities</u></b> <i>May be included if appropriate. No single secondary priority may exceed \$50,000 per year*.</i>
IPM Implementation in Agronomic Crops	IPM Conservation Partnerships
IPM Implementation in Animal Agriculture	IPM Support for Pest Diagnostic Facilities
IPM Implementation in Communities	IPM Training and Implementation in Housing
IPM Implementation in Specialty Crops	IPM Education for Pesticide Applicators
IPM for Pollinator Health	<ul style="list-style-type: none"> <li>• IPM in Public Health</li> <li>• IPM on Recreational Lands</li> <li>• IPM Training and Implementation in Schools</li> <li>• IPM Partnerships in Wide-Area Pest Monitoring and Reporting Systems</li> </ul>

\*EIP proposals must adhere to a \$300,000 per year funding cap. Proposals may request a total of \$300,000 per year (for each year in the three-year award period) to support any combination of up to six primary (must include one primary priority) and secondary program area priorities. The list of priorities above is in alphabetic order by priority keywords and does not represent any prioritization. Each priority will carry equal weight in the ranking of an application during the peer review process. Including more priorities will not positively impact the review ranking of the proposal.

### **Program Priorities Descriptions**

This section provides descriptions of the EIP primary and secondary priorities. Applications may include a maximum of six primary and secondary priorities but may have fewer than six priorities. Applications must describe active IPM programming for at least one primary priority; additional priorities may be any combination of primary or secondary priorities.

**For EIP proposals, the Project Summary/Abstract and the Project Narrative must include the following mandatory information. For each primary and secondary priority in the EIP proposal, list the priority and provide the percentage of the total proposal budget that the primary or secondary priority represents. An example is: IPM Implementation in Agronomic Crops (55%), IPM for Pollinator Health (30%), and IPM in Public Health (15%).**

#### **Primary Priorities:**

1. *IPM Implementation in Agronomic Crops.* Agronomic crops include grain and oilseed crops such as wheat, corn, cotton, soybean, rice cultivated forages, mixed rangeland forages, and other crops traditionally viewed as agronomic. Applicants must provide justification for the size of the funding request based on the economic significance of the crop and the need for IPM in the crop as defined by statewide agricultural receipts,

planted acres, the potential for addressing environmental or health risks, stakeholder input, and/or the importance of the pest in a local cropping system.

2. *IPM Implementation in Animal Agriculture*. Extension training, outreach programs, and materials development to increase adoption of IPM practices in livestock production and other areas of animal agriculture is included in this priority. Applicants must provide justification for the size of the request based on the scope and significance of the industry and opportunities for adoption of IPM.
3. *IPM in Communities*. This priority includes extension training programs and materials development and delivery to increase adoption of IPM practices by private citizens in the home landscape, lawn care companies, garden centers, urban foresters, and similar practitioners. [**Note:** Programming for commercial nursery and greenhouse production should be included in the priority listed below, “IPM Implementation for Specialty Crops”. Home horticulture is included in the IPM in Communities priority.] NIFA strongly encourages significant linkages with state and/or county Extension Master Gardener programs for this priority. Applicants must provide justification for the size of the funding request based on the local risk from the pests described in the proposal, the level of service provided to the public, and the economic significance of the pest to consumer horticulture.
4. *IPM Implementation in Specialty Crops*. Specialty crops are defined as fruits and vegetables, tree nuts, dried fruits, and horticultural and nursery crops (including floriculture). Input costs, intensiveness of labor or production, or return on investment are typically greater for specialty crops than for agronomic crops. Applicants must provide justification for the size of the funding request based on the economic significance of the crop and the need for IPM in the crop as defined by statewide receipts, planted acres, the potential for addressing environmental or health risks, stakeholder input, and/or the importance of the pest in a local cropping system.
5. *IPM for Pollinator Health*. This priority includes extension projects that support Pollinator Health. Projects could include:
  - a. Implementation of outreach and extension strategies to reduce declines of pollinators in agroecosystems and/or surrounding landscapes caused by one or more factors such as habitat changes or loss, nutritional imbalances, pathogens, pests, pesticides, toxins, genetic factors, or management practices;
  - b. Implementation of successful habitat restoration systems that maximize conservation of pollinators and integrate with management of other components of agricultural systems, including, but not limited to, invasive plants and other pests and diseases;
  - c. Implementation of improved best management practices for protection and conservation of pollinators and coordination with pest management practitioners using an Integrated Pest Management (IPM) framework to ensure that pests and diseases are effectively managed; or
  - d. If an educational component is included, projects may incorporate curriculum development, novel experiential learning opportunities, online educational resources, citizen science, apps and/or educational games.

For these projects, partnerships between public and private entities are encouraged, such as universities, government agencies (e.g., USDA’s APHIS, ARS, FS, FSA, NRCS; USEPA; USGS; and/or State programs), beekeepers, crop producers, farm advisors, IPM practitioners, land managers, private industries, or non-profit organizations. The specific

contribution(s) of these entities to the project (e.g., outreach coordination, leveraging additional funds and other resources, sharing data and information, and/or citizen engagement) must be specified in the application.

### **Secondary Priorities:**

Secondary priorities may complement primary priorities but are more focused priorities and typically have a narrower scope. Secondary priorities are not required in EIP applications.

1. *IPM Conservation Partnerships.* This priority includes coordination with local Natural Resources Conservation Service (NRCS) districts or state conservationists to implement the NRCS 595 standard for IPM. The 595 standard for IPM practice is applied as part of a conservation system to mitigate the negative impacts on soil, water, air, plant, and animal and/or human resources and to protect and enhance quantity and quality of agricultural outputs. Applicants must show evidence of collaboration with their NRCS state conservationist or local conservation districts. The project budget must reflect the level of collaboration. You must provide justification for the size of the request based on the significance of the issue and the potential of successful coordination with NRCS and local conservation districts. You can find further explanation in Agronomy Technical Note No. 5 ([Pest Management in the Conservation Planning Process](#)) as summarized in the documents: [NRCS Conservation Practice Standard-Integrated Pest Management \(IPM\) \(Acre\) Code 595](#) and [NRCS Conservation Practice Standard-Integrated Pest Management \(IPM\) \(Ac.\) Code 595-1](#); and [NRCS Conservation Practice Standard-Pest Management Conservation System Code 595](#).
2. *IPM Support for Pest Diagnostic Facilities.* Accurate identification of the pest or problem is fundamental to IPM strategies. Applicants must provide justification for the size of the request based on the defined need and existing support for diagnostic facilities.
3. *IPM Training and Implementation in Housing.* This priority includes extension training programs, and materials development and delivery, to increase adoption of IPM practices in housing and to address resident exposure to pest-related allergens and pesticide residues. Applicants must provide justification for the size of the request based on the number of housing units to be served and the need for IPM in the facilities. Applications may target public housing, housing on tribal lands, or other types of housing, particularly when addressing underserved audiences in collaboration with county social services or other entities that make housing affordable and accessible (e.g., Habitat for Humanity).
4. *IPM Education for Pesticide Applicators.* IPM principles may be an integral part of many pesticide applicator-training activities. This training often takes place as part of topic-specific training for certification/recertification category credits. However, general IPM principles are also incorporated into core credit education delivered to all types of applicators. You must provide a justification for the size of the funding request based on the training outputs to be achieved and their corresponding outcomes. NIFA will give priority to educational activities with the highest likelihood of achieving positive and measurable impacts toward the goals articulated in the [National IPM Roadmap](#). NIFA expects proposals that address this priority to include information necessary to demonstrate strong linkages with the Pesticide Safety Education Program (PSEP) or other existing applicator education programs. However, only activities specifically providing

IPM education for pesticide applicators are eligible for funding; proposals that provide general support for related extension programs will not be considered for funding.

5. *IPM in Public Health*. This priority supports extension training programs (including material development) to increase adoption of IPM practices for management of ticks and lice, mosquitoes, and similar pests of humans, particularly those that may vector disease. Applicants must provide a justification for the size of the request based on the local risk from the described pests. Because risks from pests of humans may be highly regional, evidence of incidence of disease or frequency of pest incidence in a locale are valid justifications for importance of a local pest problem. Partnerships may involve entities outside the university community such as city or county public health services, federal service agencies, and non-governmental entities. However, these IPM partners may not originate a proposal. Indoor pests, such as bedbugs, may also be addressed under two other secondary priorities: “IPM Training and Implementation in Housing” and/or “IPM Training and Implementation in Schools.”
6. *IPM on Recreational Lands*. This priority supports extension training programs (including material development) to increase adoption of IPM practices in parks, athletic facilities, golf courses, natural areas, parklands, and other recreational areas. For this priority, applications should identify partnerships that would be *formed* with federal and state agencies that manage public lands.
7. *IPM Training and Implementation in Schools*. This priority includes extension training, outreach programs, and materials development to increase adoption of IPM practices in schools to address childhood exposure to pest related allergens and pesticide residues in the PreK-12 school environment. Additional activities may include development and/or delivery of Extension IPM education programs. Applicants must provide justification for the size of the request based on the number of school districts to be served, the need for IPM in the educational environment, or a demonstrated need for IPM in the district served.
8. *IPM Partnerships in Wide-Area Pest Monitoring and Reporting Systems*. This priority includes participation in pest monitoring when it is associated with wide-area tracking, such as through the Pest Information Platform for Extension and Education (ipmPIPE). Tracking and monitoring efforts require implementation of standardized national protocols for area-wide efforts involving ipmPIPE. Preparation of training and Extension education materials within those systems may be a component of this emphasis area. The ipmPIPE provides a delivery model for the development of tools to increase usefulness, improve data retrieval and interpretation, and maintain databases and other information resources needed for pest management decision-making. Detailed information about ipmPIPE can be found at [www.ipmpipe.org](http://www.ipmpipe.org). Similar systems are also eligible as long as the proposal includes data sharing with producers and decision-makers to improve their pest management decisions based on IPM principles and enhanced knowledge of pest distributions. Applicants must provide justification for the size of the request based on costs to conduct the proposed activities associated with the monitoring of the program and how the funds will complement funding from other sources.

## Successful EIP applications will:

1. Include an administrative coordination plan for project activities and a description of project activities with expected outcomes for the primary and secondary priorities included in your application. Most applicants will describe this section separately and budget for the associated costs.
2. Explain why the priority(ies) included in the application are appropriate based on identified need and stakeholder input.
3. Specifically describe plans/design to implement the project by delivering and coordinating extension/outreach programs within the audiences and geography served by the institution. Include short, medium and long-range outcomes that show measurable advances in knowledge of IPM, understanding/attitudes about IPM, and adoption of increasingly higher level IPM strategies in any of the primary or secondary priorities.
4. Specify project activities that may include informal and non-formal educational approaches (see definitions in [Appendix III](#)). In these cases, describe how the project will:
  - a. Provide technical assistance and troubleshooting to build understanding when clients are most receptive to instruction;
  - b. Develop materials to assist in program delivery that could include printed manuals and fact sheets, media productions, internet resources, decision support guidance and other teaching aids;
  - c. Maintain programs addressing the management of endemic, established pests of economic and social concern that aid in the implementation across appropriate geographic areas;
  - d. Respond to emerging pests of economic and social concern and aid in IPM implementation across appropriate geographic areas;
  - e. Use participatory and demonstration research techniques to engage practitioners and stakeholders in IPM systems that employ novel tactics;
  - f. Coordinate with current researchers in appropriate disciplines, incorporate new IPM tactics into educational programs, and measure the improvements resulting from the application or implementation of those enhanced IPM strategies. Any application that includes research activities must clearly describe how the research is directly connected to the extension effort and how it will contribute to applied outcomes. No more than 20 percent of the described project and budget should be devoted to research;
  - g. Train key clientele (agents/educators, consultants, scouts, growers, and others) to enhance understanding of pest management tactics and strategies.
5. Build collaborative teams among other CPPM programs in the region and nation to leverage resources, expertise, and coordination with your regional IPM center. Proposals must also address the desired outcome of multiple regional and national team building efforts, active communication networks, and enhanced stakeholder participation. Successful applicants will be expected to participate in the current and future iterations of the Hatch Multistate IPM Education/Extension and Research Activity (currently labeled NEERA1604, NCERA222, SERA3, and WERA1017. See the [National Information Management and Support System \(NIMSS\)](#) for the purpose of facilitating and obtaining regional IPM outcomes consistent with the CPPM program and other regional programmatic efforts coordinated through their appropriate regional IPM center.

6. Partner, engage, and involve diverse audiences in building collaborative teams. NIFA strongly encourages collaboration with small- or mid-sized accredited colleges and universities; 1994 land-grant institutions; insular areas; 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.
7. Engage stakeholders to assure a shared vision of the advantages of IPM implementation and seek their involvement in establishing program priorities and evaluation of program successes.
8. Apply appropriate guidance provided in the [National IPM Roadmap](#).
9. Measure and evaluate program successes by implementing an integrated plan for education, implementation, and assessment. A successful program will include indicators and measures of program success, reflecting outcomes addressing issues critical to clientele that will lead to high level outcomes.
10. Participate in a project director (PD) workshop. Successful applicants, or a designee, are required to attend a PD workshop during the term of their project. The regional IPM centers will organize and conduct these project director workshops in each region. The regional IPM centers may hold this workshop in conjunction with another conference or separately from any other meeting. For the purpose of budget development, applicants are required to request funds for attending this workshop. The request for these funds should be clearly indicated in the budget narrative section of the application. Applicants may contact their regional IPM center for more details on upcoming project director workshops.
11. Submit a separate logic model chart for each EIP primary or secondary priority in your application. The logic models will explain the situation and how inputs and outputs will result in outcomes that are in line with the CPPM programmatic logic model (Figure 2; also see Application and Submission Information [Part IV, § B](#)). Each logic model chart must provide details for the activities, participants, outputs, and outcomes for that priority.

### **Other EIP Program Area Information**

It is important to recognize that EIP is an extension implementation program and as such does not directly create knowledge through fundamental or basic research. EIP disseminates knowledge to users beyond the traditional classroom through both classical and creative methods of informal and non-formal education and both delivers and assesses program outcomes through a transdisciplinary approach. For the differentiation between the terms ‘transdisciplinary,’ ‘multidisciplinary’, and ‘interdisciplinary’, see definitions ([Appendix III](#)).

Eligible institutions may apply independently or may apply together with other eligible universities to deliver programs to more diverse audiences or to provide a broader expertise or expanded project scope. See Part III for eligible institutions. Collaboration with institutions in other states may also be appropriate where common issues exist and complementary expertise is available. Please note that sub-awardees do not need to be eligible applicants for the CPPM program.

Institutions awarded EIP funding in FY 2021 will be expected to build on the successes and capacity developed by [previous CPPM/EIP grants](#) and activities associated with the program. New applicants will not be disadvantaged from not previously receiving funding from the CPPM/EIP program.

To provide an extensive collaborative national extension network, NIFA expects to fund EIP projects at as many eligible institutions as possible, providing the peer review panel ranks individual proposals in a fundable category and activities are complementary rather than duplicative.

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

## **PART II. AWARD INFORMATION**

### **A. Available Funding**

The anticipated amount available for CPPM in FY 2021 is approximately \$18.1 million. The amount available for ARDP grants is approximately \$4 million, approximately \$10 million for EIP grants, and \$4.1 million to fund current RCP continuation awards. All funds for ARDP awards will be provided in year one of the project. Funds for EIP are expected to be provided as new continuation awards or fully funded at the time of award. 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 2021 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 *ARDP 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 7 U.S.C. 3103, 1994 Institutions, and Hispanic-serving agricultural colleges and universities.

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 for the EIP and ARDP **MUST** provide matching contributions at minimum on a dollar-for-dollar basis for all Federal funds awarded under the CPPM. By statute, match may include funds from an agricultural commodity promotion, research and information programs.

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](https://www.grants.gov) and [Grants 101](#). **Table 5** 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](https://www.grants.gov) registration process.

**Table 5:** Steps to Obtain Application Materials

Steps	Action
Step One: Register	<i>New Users</i> to <a href="https://www.grants.gov">Grants.gov</a> must register early with <a href="https://www.grants.gov">Grants.gov</a> prior to submitting an application ( <a href="#">Register Here</a> ).
Step Two: Download Adobe	Download and Install <a href="#">Adobe Reader</a> (see <a href="#">Adobe Software Compatibility</a> for basic system requirements)
Step Three: Find Application	Using this funding opportunity number <b>USDA-NIFA-CPPM-008055</b> , search for application here: <a href="#">Opportunity Package</a> .
Step Four: Assess Readiness	Contact an AR prior to starting an application to assess the organization’s readiness to submit an electronic application.

**Table 6:** Help and Resources

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

### 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 7** outlines other key instructions for applicants.

**Table 7: Key Application Instructions**

<b>Instruction</b>	<b>References (All references are to the <u>Application Guide</u>)</b>
Attachments must be in a portable document format (PDF) format.	<b>Part III § 3</b>
Check the manifest of submitted files to verify attachments are in the correct format.	<b>Part III § 6.1</b>
Conduct an administrative review of the application before submission.	<b>Part VII</b>
Follow the submission instructions.	<b>Part IV § 1.5</b>
Provide an accurate email address, where designated, on the SF-424 R&R.	<b>Part IV § 1.5</b>
Contact the <a href="https://www.grants.gov">Grants.gov</a> 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 <b>30</b> 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.

**Note: the start date for FY 2021 CPPM awards can be no later than September 1, 2021.**

**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 and indicate which specific FY 2021 program area and/or project type the proposed project addresses.

For Applied Research and Development Program Area (ARDP) Applications: The first line of your PS 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:

- Plant Protection Tools and Tactics
- Enhancing Agricultural Biosecurity
- IPM for Sustainable Communities

For Extension Implementation Program Area (EIP) Applications: The first line of your PS must state the type of project you are submitting, “This is an EIP project.” Please indicate

in the summary, the overall goals and supporting objectives, a list of the primary and secondary priorities included in the application, and the names of the IPM coordinator and program administrative contact (see [Appendix III](#) for definitions). A breakdown of research-extension investments is not required in this program area because all research conducted should be directly related to the extension function.

For EIP applications, the PS must include the following mandatory information. For each primary and secondary priority in the EIP proposal, list the priority and provide the percentage of the total proposal budget that the primary or secondary priority represents. An example is: IPM Implementation in Agronomic Crops (55%), IPM for Pollinator Health (30%), and IPM in Public Health (15%).

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:

- 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.

***Proposals Submitted to the Applied Research and Development Program Area (ARDP)***

- 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.
- 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*.

- 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.
- Multi-State/U.S. Territory and/or Regional/National Involvement and Partnerships: (see [Part I § B](#) of this RFA).
- Implementation Plan and Timeline: (see [Part I § B](#) of this RFA).

### ***Proposals Submitted to the Extension Implementation Program Area (EIP)***

For EIP proposals the Project Narrative must include the following mandatory information. For each primary and secondary priority in the EIP proposal, list the primary and secondary priorities and provide the percentage of the total proposal budget that the primary or secondary priority represents. An example is: IPM Implementation in Agronomic Crops (55%), IPM for Pollinator Health (30%), and IPM in Public Health (15%).

The following information must be included for the overall application and each program area priority:

- Program Scope. Fully describe the program area priorities that will be addressed by the program along with expected outcomes for each; address the items listed in [Part I § B](#) for each priority and specific project activities;
- Program Leadership. List the IPM Coordinator, IPM Administrative Contact (see [Appendix III](#)) and other key personnel required for the delivery of the program;
- Stakeholder Engagement. Describe how stakeholders were engaged in identifying the need for the activities proposed in this application and how they will be involved as the program is implemented;
- Coordination/Management Plan. Describe how projects and activities supported by the program will be coordinated to ensure that stakeholder-identified needs are addressed and expected outcomes are achieved;
- Collaborative Teams and Information Dissemination. Provide a plan for establishing and maintaining collaborations and communications networks within the institution and (if appropriate) across the region and nation. Describe how these networks will be used to develop and review science and regulatory issues, to collaborate on regionally pertinent projects, and to share new results and outcomes with pest managers and other stakeholders;
- Program Evaluation. Include a plan to measure program successes. Include milestones and indicators of success that are critical to stakeholders and lead to high level outcomes (see CPPM programmatic logic model, Figure 2), and can be used to assess progress and accomplishments throughout the project; and
- Endorsement Letter. Only one application will be allowed per institution. That application must be endorsed by the Director of Cooperative Extension, Extension Administrator or Director of Outreach at the institution. Multiple applications from an institution may lead to the disqualification of all of those applications. The endorsement letter should be included in the application as an appendix.

***Proposals Submitted to Either Applied Research and Development Program or Extension Implementation Program***

- Centers of Excellence Justification; Applicants requesting consideration of COE status must include their justification at the end of their Project Narratives and within the page limits provided for the project narratives:
  1. 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.
  2. 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.

3. 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.
4. 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 \(NLGCA\)](#), and schools of veterinary medicine).

- Data Management Plan (DMP). Two-Page Limit. This attachment does not count against the 18-page limit for project narratives. See Data Management Plan information, below, for details.
- Logic Model(s). Required. Three-page limit per logic model. Does not count against the 18-page limit for project narratives. 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. (see [Part I § B](#) of this RFA).

3. Field 12. Add Other Attachments. See **Part V § 4.12** of the [Application Guide](#).

ARDP 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 and EIP 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**” or “**Extension Implementation Program**” and the program code “**ARDP**” or “**EIP**”. 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**

**For ARDP, 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.

~~Additional restrictions on indirect costs may be imposed at time of award, when required by law, such as in the annual appropriations act that provides funding for the program.~~

~~For EIP, indirect costs are not allowed. The Consolidated Appropriations Act, 2021 (P.L. 116-260) provided NIFA with the following directive for EIP awards: “Provided further, That notwithstanding any other provision of law, indirect costs shall not be charged against any Extension Implementation Program Area grant awarded under the Crop Protection/Pest Management Program. For this reason, no indirect costs may be reimbursed from EIP awards in FY 2021.~~

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 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 Applied Research and Development Program 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.

**NIFA will use the following criteria to evaluate Extension Implementation Program applications responding to this RFA:**

*1. Relevance of activities (55 points)*

- a. Documented need. Application includes documentation substantiating that the program is directed to current or to likely future problems/challenges in IPM (10 points);
- b. Clear stakeholder involvement. Application includes information on how stakeholders will be involved in defining the program and how their input will be solicited and incorporated or how stakeholder input was used to determine program goals (10 points);
- c. Quality of extension outreach plan. Criteria include: program is extension-led with limited and applied research activities to inform the extension effort; outreach plan is detailed and includes analysis of the situation, inputs, outputs, and outcomes as well as methods for measurements to deal with proactive and reactive scenarios; description of outcomes includes stakeholder and end user benefits from the investment including measurable impacts and indicators or milestones (15 points);
- d. Application demonstrates understanding of IPM in the primary and secondary priorities addressed, effective team building involving appropriate cooperators and disciplines, and networking with other regional programs (10 points); and
- e. Application documents a transdisciplinary approach addressing economic, environmental, and human health aspects of IPM and application to relevant pests and disciplines (10 points).

*2. Quality of application and activities (45 points)*

- a. Conceptual adequacy. Application clearly states objectives which are potentially attainable within project time, scope and budget (10 points);

- b. Design. The application's methodology and analytical approach are appropriate to project objectives. The planned activities will result in the expected outcomes. Activities for each priority in the project are connected to stakeholder needs and expected outcomes (15 points);
- c. Appropriate expertise. Personnel involved represent a breadth and depth of knowledge and experience. Senior/key project/program personnel, including collaborators, respective roles described in planned activities, analysis and evaluation (5 points);
- d. Audiences are well defined and identify underserved populations, when appropriate (5 points);
- e. Appropriateness of budget. Funds are reasonable and appropriate to complete tasks proposed (5 points); and
- f. Application adheres to RFA guidelines (5 points).

### **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 statute 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 [§200.333, 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 CONTACTS

### Applied Research and Development Program Programmatic Contacts

Name	Email	Telephone
Dr. Vijay Nandula	<a href="mailto:vijay.nandula@usda.gov">vijay.nandula@usda.gov</a>	816-894-7229

### Extension Implementation Program Programmatic Contacts

Name	Email	Telephone
Dr. Vijay Nandula	<a href="mailto:vijay.nandula@usda.gov">vijay.nandula@usda.gov</a>	816-894-7229

**For administrative questions related to**

- Grants.gov, see Part IV of this RFA
- Other RFA or application questions, please email [policy@usda.gov](mailto:policy@usda.gov)
- Awards under this RFA, please email [awards@usda.gov](mailto:awards@usda.gov)

• **U.S. Postal Mailing Address:**

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

• **Courier/Package Delivery Address:**

National Institute of Food and Agriculture  
United States Department of Agriculture  
2312 East Bannister Road, MS 10000  
Kansas City, MO 64141-3061

## 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 <a href="#">National IPM Roadmap</a> ).
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.

IPM Coordinator(s)	The individual(s) with programmatic lead responsibilities at institutions with IPM programs. Programs may exist with or without funding from this program, but in reference to the CPPM program, the term is used to identify the individual responsible for executing the institutional extension IPM program funded through the EIP.
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: <ol style="list-style-type: none"> <li>1. A narrative of each entity's clearly established role in the project;</li> <li>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</li> <li>3. A comprehensive project budget that reflects each entity's financial or in-kind contribution to the total project budget costs.</li> </ol>

Program Administrative Contact	Program Administrative Contact is the institutional staff member responsible for direct supervision of personnel conducting the EIP program. At various institutions, this individual may be a dean, associate dean, department head, or section head. The contact information is needed to ensure all key personnel are kept apprised in communications.
Research-led Projects	Enhance the adoption of innovative, ecologically-based, sustainable IPM strategies and systems.
Resubmitted Application	A project application that was previously submitted to a program, but the application was 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.