Crop Protection and Pest Management Competitive Grants Program

FY 2015 Request for Applications (RFA)

APPLICATION DEADLINE: April 7, 2015

ELIGIBILITY: See Part III, A. of RFA

United States Department of Agriculture

National Institute of Food and Agriculture

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

CROP PROTECTION AND PEST MANAGEMENT – APPLIED RESEARCH AND DEVELOPMENT COMPETITIVE GRANTS PROGRAM

INITIAL ANNOUNCEMENT

CATALOG OF FEDERAL DOMESTIC ASSISTANCE: This program is listed in the Catalog of Federal Domestic Assistance under 10.329, Integrated Research, Education, and Extension Competitive Grants Program.

DATES: Applications must be received by **5:00 p.m. Eastern Time on April 7, 2015**. Applications received after this deadline will normally not be considered for funding (see Part IV, C. of this RFA). Comments regarding this request for applications (RFA) are requested within 6 months from the issuance of this notice. Comments received after that date will be considered to the extent practicable.

STAKEHOLDER INPUT: The National Institute of Food and Agriculture (NIFA) seeks your comments about this RFA. We will consider the comments when we develop the next RFA for the program, if applicable, and we'll use them to meet the requirements of section 103(c)(2) of the Agricultural Research, Extension, and Education Reform Act (AREERA) of 1998 (7 U.S.C. 7613(c)(2)). Submit written stakeholder comments to: Policy@nifa.usda.gov. (This e-mail address is intended only for receiving comments regarding this RFA and not requesting information or forms.) In your comments, please state that you are responding to the Crop Protection and Pest Management Program RFA.

As part of the National Institute of Food and Agriculture's (NIFA) strategy to successfully implement the 2014 Farm Bill, NIFA is soliciting stakeholder input on NIFA's centers of excellence strategy. Between January and March 2015 NIFA will hold webinars to collect stakeholder input about the centers of excellence strategy in fiscal year (FY) 2015. Upcoming dates for the webinars will be announced on the NIFA website. The full transcript of the webinars will also be available on the NIFA website. NIFA will also request to receive input through an advertised call-in number, fax and email. All comments and suggestions for the FY 2015 centers of excellence should be received by March 30, 2015.

EXECUTIVE SUMMARY: NIFA requests applications for the **Crop Protection and Pest Management (CPPM)** Competitive Grants Program for fiscal year (FY) 2015 to ensure food security and effectively respond to other major societal challenges. The CPPM program supports projects that address high priority integrated pest management (IPM) challenges with 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 2015 NIFA will competitively solicit only Applied Research and Development Program Area (ARDP) applications under the Crop Protection and Pest Management (CPPM) program.

Pursuant to H.R. 83, the 2015 Appropriations Act, the amount available for support of ARDP projects in FY 2015 is approximately $4 million.

This notice identifies the objectives for **ARDP** projects, the eligibility criteria for projects and applicants, and the application forms and associated instructions needed to apply for an ARDP grant.

In this RFA, NIFA is soliciting applications for:

Applied Research and Development Program Area (ARDP)

a. Project Period – Two to four years.
b. Budget – Awards must not exceed $300,000 per project.
c. Depending upon project budget requests, NIFA anticipates making in the range of 13 to 23 awards.
d. Purpose – To enhance the development, adoption, and implementation of innovative, ecologically-based, sustainable IPM tactics and strategies that address regional and/or national IPM priorities.

NIFA will administer ARDP awards as fully-funded projects (i.e., all funds provided in year one, without continuations).

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PART I—FUNDING OPPORTUNITY DESCRIPTION

A. Legislative Authority and Background

H.R. 83, the Consolidated and Further Continuing Appropriations Act of 2015, provided NIFA with funding for the Crop Protection and Pest Management Competitive Grants Program authorized under section 406 of the Agricultural Research, Extension, and Education Reform Act (AREERA) of 1998 (7 U.S.C. 7626), and reauthorized by Section 7302 of the Agricultural Act of 2014 (Pub. L. 113-79). These funds are available to support integrated, multifunctional agricultural research, extension, and education activities. Subject to the availability of appropriations to carry out this program, the Secretary may award grants to colleges and universities (as defined by section 1404 of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (NARETPA) (7 U.S.C. 3103)), as amended. These grants are awarded 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.

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

Background

<u>Crop Protection and Pest Management Program</u>

This RFA solicits applications for the Applied Research and Development Program Area (ARDP) of the CPPM program. The ARDP is one of three program areas supported by the CPPM program; the other two program areas are: (1) Extension Implementation Program Area (EIP) and (2) Regional Coordination Program Area (RCP).

The purpose of the CPPM program is to address high priority issues related to pests and their management using integrated pest management (IPM) approaches at the state, regional and national levels. The CPPM program supports projects that will increase food security and respond effectively to other major societal challenges with comprehensive IPM approaches that are economically viable, environmentally sound and will help protect human health. The CPPM program addresses IPM challenges for emerging issues and existing priority pest concerns that can be addressed more effectively with new and emerging technologies. The outcomes of the CPPM program are effective, affordable, and environmentally sound IPM practices and strategies supporting more vital 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 programs 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 grantees. Together the ARDP, EIP, and RCP program areas 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.

United States Department of Agriculture (USDA) Strategic Plan

The CPPM program supports the following USDA Strategic Plan, FY 2014 – 2018 (www.usda.gov/documents/usda-strategic-plan-fy-2014-2018.pdf) strategic goals:

- Goal 1 – Assist Rural Communities to Create Prosperity so They Are Self-Sustaining, Repopulating, and Economically Thriving.
- Goal 3 – Help America Promote Agricultural Production and Biotechnology Exports as America Works to Increase Food Security.
- Goal 4 – Ensure That All of America's Children Have Access to Safe, Nutritious, and Balanced Meals.

Research, Education, and Economics (REE) Action Plan

The CPPM program directly aligns with the USDA, REE Plan (www.ree.usda.gov/ree/news/USDA_REE_Action_Plan_03-2014.pdf) and specifically addresses the following goals:

- Goal 1 – Sustainable Intensification of Agricultural Production, Subgoals 1A, 1B, 1C, and 1D (which focus on Crop and Animal Production; Crop and Animal Health; Crop and Animal Genetics, Genomics, Genetic Resources, and Biotechnology; and Consumer and Industry Outreach, Policy, Markets, and Trade);
- Goal 2 – Responding to Climate and Energy Needs;
- Goal 3 – Sustainable Use of Natural Resources, Subgoals 3A and 3B (which focus on Water Availability: Quality and Quantity; and Landscape-Scale Conservation, Management and Resiliency;
- Goal 5 – Food Safety;
- Goal 6 – Education and Science Literacy; and
- Goal 7 – Rural Prosperity/Rural-Urban Interdependence.

The CPPM program aligns well with major specific goals in the REE Action Plan, which calls for efforts to:

- Develop and extend effective, affordable, and environmentally-sound integrated management strategies to reduce losses caused by crop and animal disease pathogens, insect pests, and weeds, including early detection, identification, monitoring, and

implementation of biologically-based and area wide strategies to manage key native and invasive species and postharvest pests.

- Optimize integrated pest management practices for crops by developing knowledge and tools for cultural methods, biological control, and host plant resistance management tactics.
- Improve ability to provide surveillance, early detection, rapid response, and appropriate recovery for emerging or reemerging plant and animal diseases of high consequence through the development of tools and enhancement of national plant and animal disease diagnostic networks.

National Institute of Food and Agriculture (NIFA) Strategic Plan

The CPPM program directly supports the NIFA Strategic Plan for FY 2014-2018, Science Goal 1 – Catalyze exemplary and relevant research, education and extension programs, sub-goal 1.1 Advance our Nation's ability to achieve global food security and fight hunger.

National IPM Roadmap

The CPPM program is aligned with the goals identified in the National IPM Roadmap for Integrated Pest Management (National IPM Roadmap). The National IPM Roadmap identifies strategic directions for IPM research, implementation, and measurement for pests in all settings throughout the nation (see www.nifa.usda.gov/nea/pest/pdfs/ipm_roadmap.pdf). In FY 2015, successful CPPM program applicants will develop knowledge and information needed for the adoption and implementation of IPM methods that:

- Result in improved cost-benefit ratios when IPM practices are adopted and implemented;
- Reduce potential human health risks from pests and related pest management strategies; and
- Minimize adverse environmental impacts from pests and related pest management strategies.

B. Purpose and Priorities

In this RFA, NIFA is soliciting applications for the ARDP program area of CPPM (see Part I, Section C – Program Area Descriptions). ARDP funds projects that develop new IPM tactics, technologies, practices, and strategies. Applied Research (single-function) projects develop innovative, ecologically-based, sustainable IPM 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 increase levels of implementation of innovative, ecologically-based, sustainable IPM strategies and systems by IPM practitioners and growers.

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

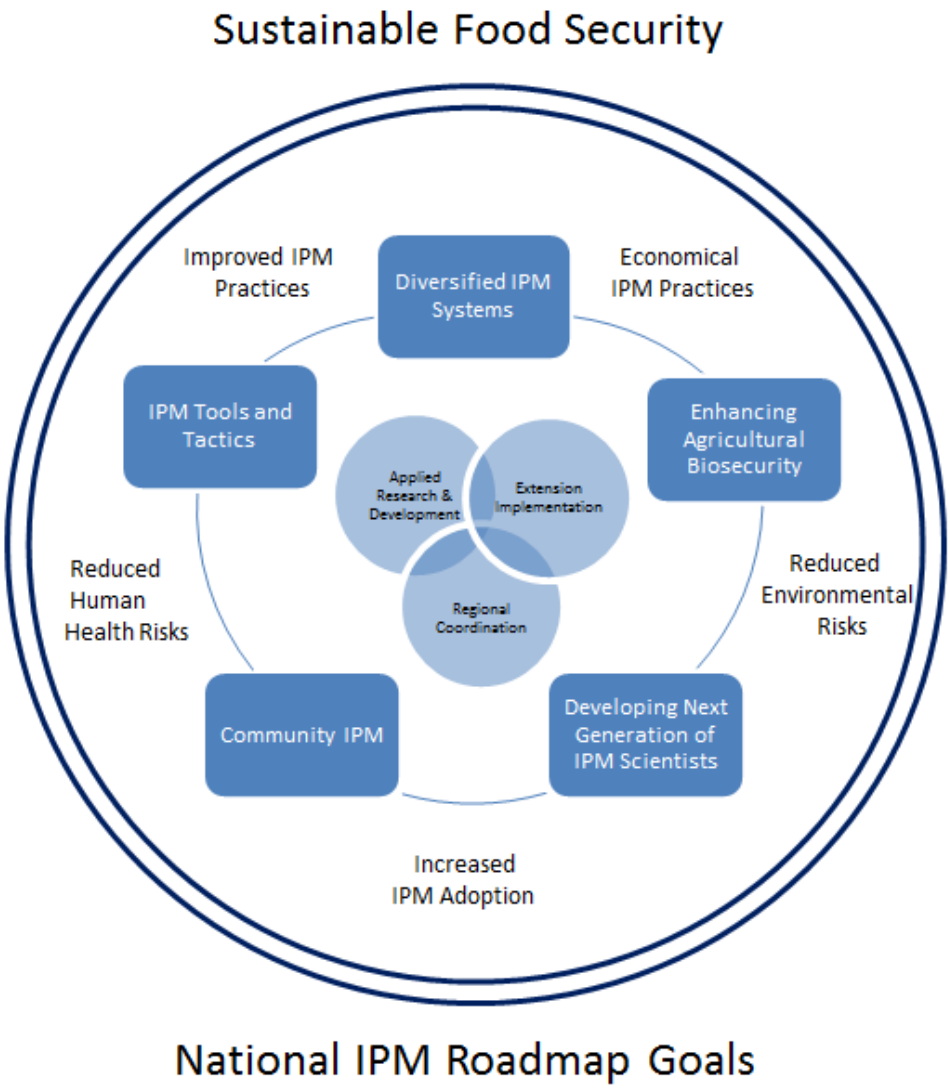

Figure 1. The three CPPM program areas at the center of the figure address IPM needs in the five focus areas described below, thereby contributing to the achievement of the goals of the National IPM Roadmap and sustainable food security.

The three CPPM program areas (ARDP, EIP, and RCP) will address IPM needs in five focus areas as funding is available:

1) **Plant Protection Tactics and Tools.** This focus area represents the need for discovery, development, and introduction of new pest management tactics for use in IPM systems.
2) **Diversified IPM Systems.** This focus area represents the need for long-term sustainable solutions to pest management problems.

3) **Enhancing Agricultural Biosecurity.** This focus area represents the need 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. For example, 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.** This focus area represents the need for 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.** This focus area represents the need 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: www.nifa.usda.gov/funding/cppm/cppm_info.html.

In FY 2015, the ARDP program area will provide funding for Plant Protection Tactics and Tools (focus area one), Enhancing Agricultural Biosecurity (focus area three), and IPM for Sustainable Communities (focus area four) (see Part I. C.).

CPPM Logic Model: The logic model for the CPPM program (Figure 2) incorporates stakeholder input, anticipated outcomes, appropriate elements from IPM logic models from previously funded NIFA IPM programs, and goals for the REE Action Plan and strategic plans for USDA and NIFA. NIFA will use the logic model to guide the development of future funding priorities and to document the impact of investments made by the CPPM program.

Please Note: All applicants are required to: (1) submit a project-specific logic model chart as part of each application and (2) explain how the logic model supports the CPPM programmatic logic model provided in Figure 2. See Program Area Descriptions (Part I, Section C) and Application and Submission Information (Part IV, Section B, item 3b, Field 8-Project Narrative) for specific logic model requirements. The project-specific logic model chart must provide details for the inputs, outputs (activities and participants), and outcomes of the proposed project. The logic model chart must also include the project specific situations, assumptions, and external factors statements. See the logic model on page 10 to see where these elements are placed in the logic model. For more general information on logic model charts, see www.ipm.gov/LogicModels/index.cfm.

Figure 2. Crop Protection and Pest Management Program Logic Model

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

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

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

External Factors:
Congressional appropriations/funding
Stakeholder input
Emerging and critical issues requiring IPM practices and technologies
New pests and pathogens

C. Program Area Description

Program Code – ARDP
Proposed Budget Requests – Budgets may not exceed $300,000 total per project for (1) applications with Project Directors (PDs) from more than one state/territory or (2) applications that address a significant crop/commodity that is predominately produced in one state/territory and where multistate collaboration is not practical. Budgets must be $175,000 or less for all other applications with PDs from one state/territory. (See table below and Multi-State/Territory and/or Regional/National Involvement (page 14)).
Project Period – Two to four years
Requested Project Type – The ARDP supports three project types:

- Applied Research (single-function) projects develop innovative, ecologically-based, sustainable IPM 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.

Please Note – Project proposals must indicate in the Project Summary whether the project is Applied Research (single-function), Research-led, or Extension-led.

Maximum Award for Each ARDP Project

Project Directors (PDs) from one state/ territory	PDs from more than one state/territory or PDs from one state/territory addressing a significant crop/commodity predominately produced in one state/territory.
$175,000	$300,000

Program Area Priorities

Applied Research (single-function) Projects

Applied Research (single-function) projects develop the foundation of IPM knowledge needed for on-going IPM adoption and implementation efforts. Applied Research (single-function) projects develop innovative, ecologically-based, sustainable IPM strategies and systems that address regional and/or national IPM priorities. Research may be proposed 1) to develop 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) or 2) to increase the understanding of how interactions among tactics alter the effectiveness of pest management within agricultural, recreational, suburban, and urban ecosystems. The experimental approach for ARDP proposals should emphasize field-scale experiments over multiple seasons and/or locations, where appropriate. IPM practices should be designed to reduce initial pest populations, lower the carrying capacity of the ecosystem for pests, increase tolerance of hosts to pest injury, and/or

provide 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 integrated pest management research and adoption. Research involving chemical pesticides should be designed to reduce the amount applied, frequency of applications, increase the selectivity, reduce the risks associated with their use, and/or develop novel resistance management strategies. Project proposals should be designed to minimize adverse impacts on beneficial organisms and to limit buildup of resistant pest populations. Proposals should clearly describe how the tactic or IPM system, once developed, can be incorporated into an existing production or management system. Proposals should also clearly describe 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.

Applied Research (single-function) Projects

The following are examples of possible topic areas covered in Applied Research (single-function) proposals. Identification of these topic areas is not intended to be exclusionary and should not deter submission of applications that address other topic areas appropriate for Applied Research (single-function) projects.

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

Research-led Projects

Research-led projects primarily address the priorities identified for Applied (single-function) projects (listed above), but at least 20 percent of the project effort must be focused on the topic

areas identified for Extension-led projects (listed below). Proposals should clearly describe 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.

Extension-led Project

Extension-led projects enhance outreach efforts that support IPM methods and maximize opportunities to build strategic alliances with stakeholders to expand their active participation in increasing the implementation of IPM methods. Projects may be proposed to 1) develop extension materials and information delivery systems for outreach efforts, 2) conduct field-scale or on-farm demonstrations, or 3) deliver IPM extension outreach and training. The proposals should 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 should be focused on the topic areas identified for Applied Research (single-functions) projects (listed above).

Examples of possible topic areas covered in Extension-led proposals are listed below. Identification of these topic areas is not intended to be exclusionary and should not deter submission of applications that address other topic areas appropriate to Extension-led priorities.

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

Successful ARDP applications will fully address each of the following:

- **Stakeholder-identified IPM Needs.** Proposals should address IPM needs identified by diverse regional and national stakeholders. Applications must include at least one explicit citation that documents the specific stakeholder-identified needs addressed by the proposed project. Clearly reference identified needs to corresponding citations. The citation of stakeholder IPM needs is important because it demonstrates that a project is both important to stakeholders and that PDs are engaged with the stakeholder community. Sources of stakeholder-identified needs include, but are not limited to:
    - Needs identified by the Regional IPM Centers. See:
        www.ncipmc.org/priorities/index.cfm
        www.northeastipm.org/grant-programs/stakeholder-priorities

www.sripmc.org/Policy/Priorities
westernipm.org/index.cfm/center-grants/priorities/;

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

- **Multi-State/Territory and/or Regional/National Involvement.** Proposals must address regional and/or national IPM priorities and should include multi-state, regional, and national collaborations for purposes of efficiency, economy, and synergy. **All applications, including those with PDs from one state/territory, must clearly describe how the project will provide benefits to more than one state/territory**. Multi-state/territory, regional, and national proposals must describe the role of each collaborating partner in enough detail to convince the peer reviewers of the application that the multi-state/territory collaboration is meaningful. **Projects undertaken by PDs in a single state/territory will be accepted, but the expected benefits for other states/territories must be described** (see Part III, Section A, Eligible Applicants). **Please note the exception below for PD(s) from one state/territory who are studying a significant crop/commodity that is produced predominately in one state/territory.** The need for multi-state/regional/national involvement is exempted in the case where the project addresses a crop/commodity that is predominately produced in one state/territory and where multistate collaboration is not practical. When a proposal involves a crop/commodity that is of regional or national importance and is produced predominately in one state/territory, the proposal must include documentation that the crop/commodity is grown predominately in one state/territory and must describe why multistate collaboration is impractical.

- **Multi-Disciplinary and Systems-Oriented.** Proposals should promote cooperative efforts across appropriate disciplines, with linkages between research and extension efforts, and components of existing or emerging pest management systems. The proposal must describe the role of each member of the multi-disciplinary team and their responsibilities to the project.

- **Systems Approach.** Proposals should describe a plan for enhancing the development, adoption, and implementation of innovative, ecologically-based, sustainable IPM strategies and systems. The IPM strategies that are developed should have 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. The primary emphasis of the proposed project should be to enhance productivity and profitability while addressing critical environmental quality and human health issues. Proposals may address major acreage

agricultural production systems, high value crops such as key fruit and vegetable systems, urban systems, or other agro-ecosystems including natural areas.

- **Implementation Plan.** Proposals must include a plan for implementation of results generated by the project, and a plan for measuring and assessing implementation, adoption and potential impact using cost-effective approaches and criteria.

- **Timeline.** Proposals must include a detailed timeline with key milestones for the project objectives and other important project tasks.

- **Logic Model.** Proposals must include a project-specific logic model chart, and explain how the project logic model supports the CPPM programmatic logic model (see Application and Submission Information, Part IV, B, item 3b, Field 8-Project Narrative). The project-specific logic model chart must provide details for the inputs, outputs (participants and activities/products), outcomes/impacts (short term, medium term, and long term), situations, assumptions, and external factors of the proposed project.

- **Coordination.** Successful applicants must participate in appropriate Hatch Multistate IPM Education/Extension and Research Activities (e.g., NEERA1004, NCERA222, SERA003, and WERA1017. See the National Information Management and Support System (NIMSS) – http://nimss.umd.edu/lgu_v2/), other relevant research multi-state committees, and other regional programmatic efforts coordinated through relevant regional IPM centers. The purpose of this coordination is to facilitate collaboration and cooperation; move research results to actual application through IPM adoption and implementation; and achieve CPPM program outcomes.

- **Partnerships.** Applicants are strongly encouraged to develop 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.

- **National IPM Roadmap.** Proposals should address goals and priorities identified by the National IPM Roadmap for Integrated Pest Management (see www.nifa.usda.gov/nea/pest/pdfs/ipm_roadmap.pdf).

- **Project Director (PD) Workshop.** Successful applicants, or a designee, will be required to attend a PD workshop during the term of their project. NIFA 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.

Please Note: The CPPM program encourages all project applications to develop content and programs suitable for delivery through the Cooperative Extension System's eXtension Initiative.

You may use funds to develop new or to enhance eXtension: (1) Communities of Practice (CoPs), (2) Learning Networks, or (3) Innovation Hubs focused on appropriate IPM topic areas. You must have a letter of acknowledgement from eXtension. Letters of support are also encouraged from the relevant CoPs. For detailed guidance on how to partner with eXtension, go to http://create.extension.org/node/2057.

PART II—AWARD INFORMATION

A. Available Funding

Pursuant to H.R. 83, the Consolidated and Further Continuing Appropriations Act of 2015, NIFA anticipates that approximately $4 million will be available for new awards in the Applied Research and Development Program Area (ARDP) of the Crop Protection and Pest Management (CPPM) program in FY 2015. The funds will be awarded through grants. There is no commitment by USDA to fund any particular application or to make a specific number of awards.

Awards issued as a result of this RFA will have designated the Automated Standard Applications for Payment System (ASAP), operated by the Department of Treasury's Financial Management Service, as the payment system for funds. For more information see www.nifa.usda.gov/business/method_of_payment.html.

B. Types of Applications

In FY 2015, you may submit applications to the ARDP program area as one of the following two types of requests:

(1) **New application.** This is a project application that has not been previously submitted to the ARDP program area. We will review all new applications competitively using the selection process and evaluation criteria described in Part V—Application Review Requirements.

(2) **Resubmitted application.** This is an application that had previously been submitted to the ARDP program area but was not funded. Project Directors (PDs) must respond to the previous review panel summary (see Response to Previous Review, Part IV, B. 3. b.). Resubmitted applications must be received by the relevant due dates, will be evaluated in competition with other pending applications in the appropriate area to which they are assigned, and will be reviewed according to the same evaluation criteria as new applications.

C. Project Types

Three types of proposals can be submitted: Applied Research (single-function) projects, Research-led projects, or Extension-led projects. **Applicants must indicate the type of project they are proposing in the Project Summary.**

D. Responsible and Ethical Conduct of Research

The responsible and ethical conduct of research (RCR) is critical for excellence, as well as public trust, in science and engineering. Consequently, we consider education in RCR essential to the preparation of future scientists. 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. Per award terms and conditions, grant recipients shall, upon request, make available to NIFA the policies, procedures, and documentation to support the conduct of the training.

Note that the training referred to herein shall be either on-campus or off-campus training. The general content of the ethics training will, at a minimum, emphasize three key areas of research ethics: authorship and plagiarism, data and research integration, and reporting misconduct. Each institution will be responsible for developing its own training system, as schools will need flexibility to develop training tailored to their specific student needs. Grantees should consider the Collaborative Institutional Training Initiative (CITI) program for RCR (https://www.citiprogram.org/rcrpage.asp). Typically this RCR education addresses the topics of: Data Acquisition and Management - collection, accuracy, security, access; Authorship and Publication; Peer Review; Mentor/Trainee Responsibilities; Collaboration; Conflict of Interest; Research Misconduct; Human Subject Research; and Use of Animals in Research.

PART III—ELIGIBILITY INFORMATION

A. Eligible Applicants

Pursuant to Section 7214 of the Agricultural Act of 2014 (Pub. L. 113-79), beginning in Fiscal Year 2015, for applicable competitive research and extension programs, NIFA will be recognizing and providing priority in the receipt of funding to applications from "centers of excellence" that have been established for purposes of carrying out research, extension, and education activities relating to the food and agricultural sciences. In July of 2014, NIFA held listening sessions and accepted written comments from stakeholders to inform NIFA's implementation of the centers of excellence provision. Information from the webinars and a summary of the input gathered are available on NIFA's website at http://www.nifa.usda.gov/about/offices/legis/cntr_ex_webinar_documents.html

A center of excellence is composed of 1 or more of the following entities that provide financial or in-kind support to the center of excellence. Therefore, an eligible applicant who wishes to be considered as a center of excellence must be one of the following entities that provides financial or in-kind support to the center being proposed, as described in the grant application.

(A) State agricultural experiment stations;
(B) colleges and universities;
(C) university research foundations;
(D) other research institutions and organizations;
(E) Federal agencies;
(F) national laboratories;
(G) private organizations, foundations, or corporations;
(H) individuals; or
(I) any group consisting of 2 or more of the entities described in (A) through (H).

Applications may only be submitted by colleges and universities (as defined in section 1404 of NARETPA) (7 U.S.C. 3103). Section 1404 of NARETPA was amended by section 7101 of the Food, Conservation, and Energy Act of 2008 (FCEA) to define Hispanic-serving Agricultural Colleges and Universities (HSACUs) (defined in 7 CFR 3430), and to include research foundations maintained by eligible colleges or universities. Section 406(b) of AREERA (7 U.S.C. 7626), was amended by section 7206 of the Farm Security and Rural Investment Act of 2002 to add the 1994 Land-Grant Institutions as eligible to apply for grants under this authority.

For the purposes of this program, the terms "college" and "university" mean an educational institution in any state which (1) admits as regular students only persons having a certificate of graduation from a school providing secondary education, or the recognized equivalent of such a certificate; (2) is legally authorized within such state to provide a program of education beyond secondary education; (3) provides an educational program for which a bachelor's degree or any other higher degree is awarded; (4) is a public or other nonprofit institution; and (5) is accredited by a nationally recognized accrediting agency or association. Applications also may be

submitted by 1994 Land-Grant Institutions (defined in 7 CFR 3430), HSACUs, and research foundations maintained by eligible colleges or universities.

The 2014 Farm Bill required NIFA to establish an ongoing process allowing public colleges and universities that offer 4-year or advanced degrees in the food and agricultural sciences to apply for designation as NLGCA institutions. HSACUs are given the opportunity to opt out of their status to be considered for designation as a NLGCA; however, this decision will be binding on them until September 30, 2018.

Pursuant to section 406 of the Agricultural Research, Extension, and Education Reform Act of 1998 (AREERA) (7 U.S.C. 7626), which authorized the Integrated Research, Education, and Extension Competitive Grant Program, all four-year HSIs are eligible to apply for integrated projects as identified in this RFA. Two-year HSIs may also be eligible to apply but only if the institution has been certified as a HSACU for the fiscal year in which funding is being provided.

Approximately by January 2014, a list of the institutions certified and therefore eligible to apply as HSACUs for grants under FY 2015 RFAs, including this RFA, will be made available at www.nifa.usda.gov/nea/education/in_focus/hispanic_if_hispanic_HSACU.html. Institutions appearing on this list are granted HSACU certification by the Secretary for the period starting October 1, 2014, and ending September 30, 2015. Certifications are valid for FY 2015 only. Additional questions on HSACU eligibility can be addressed to Ms. Lisa DePaolo, Policy Specialist, by email at ldepaolo@nifa.usda.gov or phone at (202) 401-5061.

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 time of application deadline may result in the application being excluded from consideration or, even though an application may be reviewed, will preclude NIFA from making an award.

B. Cost Sharing or Matching

In accordance with section 1492 of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (7 U.S.C. 3371), as added by section 7128 of the Agricultural Act of 2014 (Pub. L. 113-79), for grants awarded after October 1, 2014, the recipient of an award from the CPPM program must provide funds, in-kind contributions, or a combination of both, from sources other than funds provided through such grant in an amount that is at least equal to the amount awarded by NIFA. The matching funds requirement does not apply to grants awarded:

1. To a research agency of the United States Department of Agriculture (USDA); or
2. To an entity eligible to receive funds under a capacity and infrastructure program (as defined in section 251(f)(1)(C) of the Department of Agriculture Reorganization Act of 1994, 7 U.S.C. 6971(f)(1)(C)), including a partner (see Part VIII, E. Definitions for definition of partnership) of such an entity.

Entities eligible to receive funds under a capacity and infrastructure program and exempt from the matching funds requirement include:

a. 1862 Land-grant Institutions, including State Agricultural Experiment Stations receiving funding under the Hatch Act of 1887;
b. 1890 Land-grant Institutions;
c. 1994 Land-grant Institutions;
d. Recipients of Continuing Animal Health and Disease, Food Security, and Stewardship Research, Education, and Extension Program Funds — Capacity and Infrastructure Program (CIP);
e. Hispanic-Serving Agricultural Colleges and Universities (HSACU);
f. Insular Area Schools Eligible to Receive Funds from the Distance Education/Resident Instruction Grant Programs;
g. Recipients of McIntire-Stennis Cooperative Forestry Program Funds;
h. Non-Land Grant Colleges of Agriculture (NLGCA) – (for exemption from the new matching requirement, these applications must include NLGCA certification. Instructions for requesting certification are available at: http://www.nifa.usda.gov/form/form.html, and for attaching the certification to the application in Part IV, C. 3. d. of this RFA.
i. Recipients of funds under a program established under section 1417(b) of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (7 U.S.C. 3152(b)), including: (1) 1890 Institution Teaching, Research, and Extension Capacity Building Grants Program; (2) Higher Education Challenge Grants Program; (3) Higher Education Multicultural Scholars Program; and (4) Food and Agricultural Sciences National Needs Graduate and Postgraduate Fellowship Grants Program.

A proposal submitted in response to this RFA may indicate that the work will be completed by multiple entities as a collaborative partnership. All partners must have a substantial involvement in the project throughout the life of the project. If a partnership among multiple entities is proposed, the proposal must clearly identify the following:

1) A narrative of each entity's clearly established role in the project;
2) How each entity involved as a partner on the project will contribute to execution of project objectives, determination of experimental design, development of the project work plan and time table, and submission of collaborative, timely reports; and
3) A comprehensive project budget that reflects each entity's financial or third party in-kind contribution (see section 2 of 7 CFR 3430 or section 96 of 2 CFR part 200) to the total project budget costs.

If a proposal indicates that the work on the project will be completed by multiple entities as partners, and at least one entity is exempt from the matching requirement under #2 above, the entire project will be exempt from the matching requirement regardless of whether all entities involved are otherwise exempt. Any partner entity can serve as the lead entity on the project. All partners must be significantly involved in the project.

After proposals have been recommended for award, NIFA will determine if the submitted proposal and proposed division of work reflects substantial involvement of all entities involved. If a proposal is recommended for award to a lead entity not otherwise exempt from the matching requirement and the proposal does not reflect substantial involvement of at least one partner that is exempt under #2 above, then the matching requirement will apply. Exemption from the matching requirement for an entity not otherwise exempt is limited to the project for which it is a partner.

Waiver of Match - NIFA may waive the matching funds requirement for a recipient for one year with respect to a competitive grant that involves research or extension activities that are consistent with the priorities established by the National Agricultural Research, Education, Extension and Economics Advisory Board (NAREEEAB) for the year involved. To determine whether proposed activities are consistent with the priorities of the NAREEEAB, please refer to the 2014 Research, Education and Economics Action Plan. Instructions for requesting a waiver are included in Part IV, B. of this RFA.

C. Centers of Excellence

In addition to meeting the other requirements detailed in Part IV, C., of this Request for Application (RFA), eligible applicants who wish to be considered as centers of excellence must provide a brief justification statement, as part of their Project Narratives and within the page limits provided, describing how they meet the standards of a center of excellence, based on the following criteria:

> (A) the ability of the center of excellence to ensure coordination and cost effectiveness by reducing unnecessarily duplicative efforts regarding research, teaching, and extension in the implementation of the proposed research and/or extension activity outlined in this application;
>
> (B) in addition to any applicable matching requirements, the ability of the center of excellence to leverage available resources by using public-private partnerships among agricultural industry groups, institutions of higher education, and the Federal Government in the implementation of the proposed research and/or extension activity outlined in this application. Resources leveraged should be commensurate with the size of the award;
>
> (C) the capacity of the center of excellence plans to implement teaching initiatives to increase awareness and effectively disseminate solutions to target audiences through extension activities in the implementation of the proposed research and/or extension activity outlined in this application; and
>
> (D) the ability or capacity of the center of excellence 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), center of excellence applicants should describe proposed efforts to improve teaching capacity and infrastructure at colleges and universities (including land-grant colleges and universities, cooperating forestry schools, certified Non-Land Grant Colleges of Agriculture (NLGCA) (list of certified NLGCA is available at http://www.nifa.usda.gov/funding/pdfs/nlgca_colleges.pdf), and schools of veterinary medicine).

PART IV—APPLICATION AND SUBMISSION INFORMATION

A. Electronic Application Package

Only electronic applications may be submitted via Grants.gov to NIFA in response to this RFA. We urge you to submit early to the Grants.gov system. For an overview of the Grants.gov application process see http://www.grants.gov/web/grants/applicants/grant-application-process.html.

New Users of Grants.gov

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

Steps to Obtain Application Package Materials

To receive application materials:

1. You must download and install a version of Adobe Reader compatible with Grants.gov to access, complete, and submit applications. For basic system requirements and download instructions, see http://www.grants.gov/web/grants/support/technical-support/software/adobe-reader-compatibility.html. Grants.gov has a test package that will help you determine whether your current version of Adobe Reader is compatible.

2. To obtain the application package from Grants.gov, go to http://www.grants.gov/web/grants/applicants/apply-for-grants.html. Under Step 1 click on "Download a Grant Application Package," and enter the funding opportunity number

   Funding Opportunity Number: USDA-NIFA-CPPM-004955

   in the appropriate box and click "Download Package." From the search results, click "Download" to access the application package.

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

about how to use a Grant Application Package in Grants.gov, and instructions on how to complete the application forms.

If you require assistance to access the application package (e.g., downloading or navigating Adobe forms) **or submitting the application,** refer to resources available on the Grants.gov website (http://www.grants.gov/web/grants/applicants/applicant-resources.html). Grants.gov assistance is also available at:

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

Grants.gov iPortal (see https://grants-portal.psc.gov/Welcome.aspx?pt=Grants): Top 10 requested help topics (FAQs), Searchable knowledge base, self-service ticketing and ticket status, and live web chat (available 7 a.m. - 9 p.m. ET). Get help now!

Have the following information available when contacting Grants.gov:

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

See http://www.nifa.usda.gov/funding/electronic.html for additional resources for applying electronically.

B. Content and Form of Application Submission

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

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

Grants.gov provides online tools to assist if you do not own PDF-generating software. You will find PDF conversion software at http://www.grants.gov/web/grants/support/technical-support/software/pdf-conversion-software.html.

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

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

1. SF 424 R&R Cover Sheet

Information related to the questions on this form is dealt with in detail in Part V, Section 2. of the NIFA Grants.gov Application Guide.

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

Information related to the questions on this form is dealt with in detail in Part V, Section 3. of the NIFA Grants.gov Application Guide.

3. R&R Other Project Information Form

Information related to the questions on this form is dealt with in detail in Part V, Section 4. of the NIFA Grants.gov Application Guide.

a. Field 7. Project Summary/Abstract.

The project summary must list the names and institutions of the PD and co-PDs. In the first line of the summary state the type of project you are submitting, for example, "This is an Applied Research (single-function) project" or "This is a Research-led project" or "This is an Extension-led project." The summary should also include the relevance of the project to the goals of the CPPM program. See Part V, Section 4.7 of NIFA Grants.gov Application Guide for further instructions and a link to a suggested template. The Project Summary is limited to 250 words. Title the attachment as 'Project Summary' in the document header and save file as 'Project Summary'.

b. Field 8. Project Narrative.

PLEASE NOTE: The Project Narrative shall not exceed **18** pages of written text, figures, and tables regardless of whether it is single- or double-spaced with font size no smaller than 12 point. Pages should be numbered sequentially. This maximum (**18** pages) has been established to ensure fair and equitable competition.

The Project Narrative must include all of the following:

(1) Response to Previous Review. This requirement only applies to "Resubmitted Applications" as described in Part II, Section B. PDs must respond to the previous review panel summary on no more than two (2) pages, titled "Response to Previous Review". This will not be counted against the page limit of the project narrative. Please provide the NIFA proposal number of the previous submission.

(2) Problem, Background, and Justification.

Project type: The initial sentence must state the project type (Applied Research [single-function], Research-led, or Extension-led) and the amount requested in the proposal.

Problem: Describe, in simple terms, the problem 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, adoption, or implementation of new IPM tactics).

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, Section C, for more information about stakeholder identified needs.

Include citations and discussion of relevant completed or ongoing work (local/regional/national). Describe how previous research contributes to the proposed project.

Justification: Identify who will benefit from your project in multistate/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 further implement existing pest management systems; and (2) address the specific needs identified in this application. Discuss the potential applicability of the proposed approach to other regions in the U.S. and the relevance of the project to the ARDP priorities (see Part I, Section C). When a proposal involves a crop/commodity that is of regional or national importance and is produced predominately in one state/territory, the proposal must include documentation that the crop/commodity is grown predominately in one state/territory and must describe why multistate collaboration is impractical.

(3) Objectives and Anticipated Impacts.

Provide clear, concise, and logically numbered statements of the specific aims of the proposed effort. **For Research-led and Extension-led proposals, please clearly label each of your proposal's objectives as either a research or an 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). Both your objectives and your impacts should connect to the goals of the National IPM Roadmap, which are to advance the implementation of IPM to safeguard human health, protect the environment, and promote economic benefits. These Roadmap goals should be reflected in your logic model chart.

The stated project impacts/outcomes in your application refer to ***measurable*** changes that can be substantiated by ***data analyses***. Your evaluation plan to verify that you have achieved these impacts will significantly strengthen your application.

(4) Approach and Procedures.

Describe the procedures for each objective. Describe how you will achieve each of the stated objectives. Include an appropriate experimental design and experimental units, and describe the methods and statistical analyses that will be used. Include a timetable for the start and completion of each phase of the project (see (6) below). For a Research-led project or an Extension-led project, describe how you will manage the project, particularly how you will achieve and maintain coordination between research and extension components.

(5) Cooperation and Institutional Units Involved.

When appropriate, you must coordinate project activities with the efforts of other states/territories and/or national programs. Identify each institutional unit contributing to the project. Identify each state/territory in a multiple-state/territory application and designate the lead state/territory. Specifically address the degree of collaboration where the project involves multi-state/territory collaboration, and/or is submitted as multi-disciplinary or multi-organizational. Clearly describe the roles of all collaborating participants in the project. When a proposal involves a crop/commodity that is of regional or national importance and is produced predominately in one state/territory, the proposal must include documentation that the crop/commodity is grown predominately in one state/territory and must describe why multistate collaboration is impractical.

(6) Timeline.

Your project narrative must include a detailed timeline for your project that includes the key milestones for the project objectives and other important project tasks.

(7) Logic Model.

Your logic model chart should be attached as an appendix and does not count toward the 18 page limit. It can be more than one page if necessary. Font sizes in logic model chart can be smaller than 12 point. Logic model charts for ARDP proposals must contain all of the elements of the CPPM logic model chart on page 10 of the RFA. Each project-specific logic model chart must provide details for the inputs, outputs (participants and activities/products), outcomes/impacts (short term, medium term, and long term), situations, assumptions, and external factors of the proposed project. Refer to your logic model in your project description, evaluation plans, and elsewhere, as applicable. **See specific requirements for logic models in Part I, Section C.**

For more general information on logic model charts, see www.ipm.gov/LogicModels/ and more information at the NIFA and University of Wisconsin web sites: www.nifa.usda.gov/about/strat_plan_logic_models.html; www.nifa.usda.gov/funding/integrated/integrated_logic_model.html; and www.uwex.edu/ces/pdande/index.html.

c. Field 9. Bibliography & References Cited: PDF Attachment. No Page Limit. Title the attachment as 'Bibliography & References Cited' in the document header and save file as 'BibliographyReferencesCited'.

All work cited in the text should be referenced in this section of the application. All references must be complete; include titles and all co-authors; conform to an acceptable journal format; and be listed in alphabetical order using the last name of the first author or listed by number in the order of citation.

d. Field 12. Other Attachments.

Logic Model. PDF attachment. See instructions above.

Non-Land Grant College of Agriculture (NLGCA) Certification. PDF attachment. Applicants claiming exemption from the new matching requirement as NLGCA, must attach the NLGCA certification letter they requested and received from NIFA. Title attachment 'NLGCA Certification' and save file as 'NLGCACertification'. To request certification as an NLGCA, complete the form at http://www.nifa.usda.gov/form/form.html. Note that certification can take up to 30 days from submission of request form.

4. R&R Senior/Key Person Profile (Expanded)
Information related to the questions on this form is dealt with in detail in Part V, Section 5. of the NIFA Grants.gov Application Guide. This section of the Guide includes information about the people who require a Senior/Key Person Profile, and details about the Biographical Sketch and the Current and Pending Support, including a link to a suggested template for the Current and Pending Support.

5. R&R Personal Data – As noted in Part V, Section 6. of the NIFA Grants.gov Application Guide, the submission of this information is voluntary and is not a precondition of award.

6. R&R Budget
Information related to the questions on this form is dealt with in detail in Part V, Section 7. of the NIFA Grants.gov Application Guide.

Additional Budget Information:

Applicants must complete one SF 424 (R&R) Budget (Total Fed + Non-Fed form) for each 12-month period, plus a cumulative budget form for the entire project. Budgets may be from two to four years. **Applications may request up to a total budget of $175,000 for projects with PDs**

from one state/territory or a total budget of $300,000 for projects with PDs from more than one state/territory or PDs from one state/territory addressing a significant crop/commodity predominately produced in one state/territory.

Matching.

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

For grants that require matching funds as specified under Part III, B., the Budget Narrative should include written verification of commitments of matching support (including both cash and in-kind contributions) from third parties. Written verification means:

(a) For any **third party cash contributions**, a separate pledge agreement for each donation, signed by the authorized representatives of the donor organization (and the applicant organization ONLY if provided after submission of the application), must include: (1) The donor's name, address, and telephone number; (2) the name of the applicant organization; (3) the title of the project; (4) the dollar amount of the cash donation (the budget narrative must describe how the cash donation will be used); (5) a statement that the donor will pay the cash contribution during the grant period; and (6) whether the applicant can designate cash as the applicant deems necessary or the cash contribution has been designated to a particular budget item.

(b) For any **third party in-kind contributions**, a separate pledge agreement for each contribution, signed by the authorized representatives of the donor organization (and the applicant organization ONLY if provided after submission of the application), must include: (1) The donor's name, address, and telephone number; (2) the name of the applicant organization; (3) the title of the project; (4) a good faith estimate of the current fair market value of the third party in-kind contribution and a description of how the fair market value was determined; and (5) a statement that the donor will make the contribution during the grant period.

Summarize on a separate page the sources and amount of all matching support from outside the applicant institution and place that information in the proposal as part of the Budget Narrative. You must place all pledge agreements in the proposal immediately following the summary of matching support.

Establish the value of applicant contributions in accordance with applicable cost principles. Refer to OMB Circular A-21 (2 CFR Part 220), Cost Principles for Educational Institutions, for further guidance and other requirements relating to matching and allowable costs. **All contributions, including cash and third party in-kind, must meet the criteria included in section 23 of 7 CFR 3019, "Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations."**

Project Director Workshop. It is the intent of the CPPM program to require successful applicants or a designee to attend at least one project director workshop during the term of their

project. For the purposes of budget development, applicants are required to request funds for travel for attending at least one such workshop. The request for these funds should be clearly indicated in the budget narrative section of the application.

7. <u>Supplemental Information Form</u>
Information related to the questions on this form is dealt with in detail in Part VI, Section 1. of the NIFA Grants.gov Application Guide.

a. **Field 2. Program to which you are applying.** Enter the program code name "**Applied Research and Development Program Area**" and the program code "**ARDP**". Note that accurate entry of the program code is very important for proper and timely processing of an application.

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

C. Submission Dates and Times

Prior to electronic submission of the application via Grants.gov, it is strongly recommended that an administrative review be conducted to ensure that an application complies with all application preparation instructions. An application checklist is included in Part VII of the NIFA Grants.gov Application Guide to assist with this review. While the checklist should be used to check the application for completeness, the application should be checked for the following required items in addition to the items on the checklist:

a. **Logic Model**

b. **Timeline**

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

Applications must be received by Grants.gov by **5 p.m. Eastern Time on April 7, 2015.** Applications received after this deadline will normally not be considered for funding.

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

We send email correspondence to the AR regarding the status of submitted applications. Therefore, applicants are strongly encouraged to provide accurate e-mail addresses, where designated, on the SF-424 R&R Application for Federal Assistance.

If the AR has not received correspondence **from NIFA** regarding a submitted application within 30 days of the established deadline, contact the Agency Contact identified in Part VII of the

applicable RFA and request the proposal number assigned to the application. **Failure to do so may result in the application not being considered for funding by the peer review panel. Once the application has been assigned a proposal number, this number should be cited on all future correspondence.**

D. Funding Restrictions

Section 716 of the Consolidated Appropriations Act, 2014 (H.R. 3547) limits indirect costs to 30 percent of the total Federal funds provided under each award. Therefore, when preparing budgets, you should limit your request for the recovery of indirect costs to the lesser of your institution's official negotiated indirect cost rate or the equivalent of 30 percent of total Federal funds awarded.

If your institution does not have, or cannot obtain, a negotiated rate, you must calculate an indirect cost rate in order to request indirect costs. You should calculate an indirect cost rate based on actual costs for the entire organization from the most recently completed accounting year. If no prior cost history exists, you should use budgeted costs for the entire organization. You should follow the example(s) found at: http://nifa.usda.gov/business/indirect_cost_process.html for information regarding this process. You may elect not to charge indirect costs and, instead, use all grant funds for direct costs. If indirect costs are not charged, the phrase "None requested" should be written in this space.

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

Statutory language or agency policy limits the maximum potential funding period (including any awards transferred from another institution or organization) to five years in duration. The funding period will commence on the effective date cited in the award instrument. Any such limitation also applies to subcontracts made under awards subject to a funding period limitation.

E. Other Submission Requirements

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

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

PART V—APPLICATION REVIEW REQUIREMENTS

A. General

We evaluate each application in a 2-part process. First, we screen each application to ensure that it meets the administrative requirements as set forth in this RFA. Second, a technical review panel will evaluate applications that meet the administrative requirements.

We select reviewers based upon their training and experience in relevant scientific, extension, or education fields, taking into account the following factors: (a) 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; (b) the need to include as reviewers experts from various areas of specialization within relevant scientific, education, or extension fields; (c) the need to include as reviewers 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; (d) the need to include as reviewers 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; (e) the need to maintain a balanced composition of reviewers with regard to minority and female representation and an equitable age distribution; and (f) the need to include reviewers who can judge the effective usefulness of each application to producers and the general public.

When each peer review panel has completed its deliberations, the responsible program staff of ARDP will recommend that the project: (a) be approved for support from currently available funds or (b) be declined due to insufficient funds or unfavorable review.

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

B. Evaluation Criteria

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

<u>Applied Research (single-function) Project Applications</u>

1. **Merit of Applied Research (single-function) Applications**
    a. Project objectives and outcomes are clearly described, adequate, and appropriate. The Applied Research (single-function) project proposal addresses applied research topic areas;
    b. When model systems are used, the proposal demonstrates the ability to transfer knowledge gained from these systems to organisms of importance to U.S. agriculture;
    c. Proposed research is conceptually sound and research hypotheses are applicable and appropriate;

d. Proposed approach, procedures, or methodologies are innovative, original, clearly described, suitable, and feasible;
e. Preliminary data submitted in the proposal demonstrates feasibility of proposed research;
f. Probability of project success is high given the level of scientific originality and risk-reward balance.

2. Qualifications of Project Personnel, Adequacy of Facilities, and Project Management

a. Applicant(s) (individual or team) are qualified to conduct the proposed project and have performance record(s) and potential to achieve research objectives and outcomes;
b. Application demonstrates awareness of previous and alternative approaches to the identified problem;
c. Evidence of institutional capacity and competence in the proposed area of work is provided in the proposal;
d. Support personnel, facilities, and instrumentation are sufficient; and
e. The proposal has a detailed timeline that includes the key milestones for the project objectives and other important project tasks. Project timelines allow sufficient time to complete objectives on schedule, administer and manage the project partnerships/collaborations, translate outcomes, and coordinate project participants and institutions.

3. Relevance

a. Documentation in the proposal is adequate that the project is directed toward specific research program topic areas identified in this RFA;
b. The proposed work addresses identified stakeholder needs;
c. The plan and methods for evaluating success of project activities and documenting potential impact against measurable short and mid-term outcomes are suitable and feasible; and
d. The application adequately describes a plan for implementation of results generated by the project. The application provides cost effective approaches and criteria to measure and assess adoption, implementation, and potential impact.

<u>Research-led and Extension-led Project Applications</u>

1. Merit of Research-led and Extension-led Applications

a. Project objectives and outcomes are clearly described, adequate, and appropriate. Research-led project proposals address applied research topic areas and at least one extension-led topic area; Extension-led projects address extension topic areas and at least one applied research topic area;
b. Proposed approaches, procedures, or methodologies are innovative, original, clearly described, suitable, and feasible;
c. Expected results or outcomes are clearly stated, measurable, and achievable within the allotted time frame;
d. Proposed research fills knowledge gaps that are critical to the development of practices and programs to address the stated problem or issue; and

e. Proposed extension participants and activities lead to measurable, documented changes in knowledge/learning, actions/behaviors, or conditions in an identified audience or stakeholder group.

2. **Qualifications of Project Personnel, Adequacy of Facilities, and Project Management**
   a. Roles of key personnel are clearly defined;
   b. Key personnel have sufficient expertise to complete the proposed project, and where appropriate, partnerships with other disciplines (e.g., social science or economics) and institutions are established;
   c. Evidence of institutional capacity and competence in the proposed area of work is provided in the proposal;
   d. Support personnel, facilities, and instrumentation are sufficient to complete the proposed work;
   e. The proposal has a detailed timeline that includes the key milestones for the project objectives. The proposal articulates a clear plan for 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; and
   f. The budget clearly allocates sufficient resources to carry out a set of research and extension activities that will lead to desired outcomes, with appropriate allocations of funds in the budget across all selected project areas. If funds are budgeted in support of eXtension Communities of Practice core functions and project-specific activities, they are adequately justified with respect to adding value to the eXtension vision, mission, and values.

3. **Project Relevance**
   a. Documentation is adequate that the project is directed toward specific program topic areas identified in this RFA;
   b. Project components (research and extension) are fully integrated and necessary to address the problem or issue;
   c. The proposed work addresses identified stakeholder needs;
   d. Stakeholder involvement in project development, implementation, and evaluation is demonstrated, where appropriate;
   e. Plan and methods for evaluating success of project activities and documenting potential impact against measurable short and mid-term outcomes are suitable and feasible;
   f. For extension activities, resulting products will sustain extension functions beyond the life of the project; and
   g. For extension activities, the resulting outputs or materials include information and recommendations from a broad range of research initiatives.

C. Conflicts of Interest and Confidentiality

During the peer evaluation process, we take extreme care to prevent any actual or perceived conflicts of interest that may impact review or evaluation. For the purpose of determining

conflicts of interest, we determine the academic and administrative autonomy of an institution by reference to the current Higher Education Directory, published by Higher Education Publications, Inc., 1801 Robert Fulton Drive, Suite 555, Reston, VA, 20191. Phone: (888) 349-7715. Web site: http://www.hepinc.com.

Names of submitting institutions and individuals, as well as application content and peer evaluations, are kept confidential, except to those involved in the review process, to the extent permitted by law. In addition, the identities of peer reviewers will remain confidential throughout the entire review process, to the extent permitted by law; therefore, the names of the reviewers will not be released to applicants.

D. Organizational Management Information

Specific management information relating to an applicant shall be submitted on a one time basis, with updates on an as needed basis. This requirement is part of the responsibility determination prior to the award of a grant identified under this RFA, if such information has not been provided previously under this or another NIFA program. We will provide you copies of forms recommended for use in fulfilling these requirements as part of the preaward process. Although an applicant may be eligible based on its status as one of these entities, there are factors that may exclude an applicant from receiving federal financial and nonfinancial assistance and benefits under this program (e.g., debarment or suspension of an individual involved or a determination that an applicant is not responsible based on submitted organizational management information).

E. Centers of Excellence Status

All eligible applicants will be competitively peer reviewed (as described in Part V, A. and B. of this RFA), and ranked in accordance with the evaluation criteria. Those that rank highly meritorious and requested to be considered as a center of excellence will be further evaluated by the peer panel to determine whether they have met the standards to be centers of excellence (listed A. through D. above). In instances where they are found to be equally meritorious with the application of a non-center of excellence, based on peer review, selection for funding will be weighed in favor of applicants meeting the center of excellence criteria. Applicants that rank highly meritorious but who did not request consideration as a center of excellence or who are not deemed to have met the centers of excellence standards may still receive funding.

In addition, the applicant's Notice of Award will reflect that, for the particular program, the applicant meets all of the requirements of a center of excellence. Entities recognized as centers of excellence will maintain that distinction for the specific area of science or subject matter associated with the center of excellence for the duration of their period of performance or as identified in the terms and conditions of that award when applying for funding in covered research and extension programs.

F. Application Disposition

An application may be withdrawn at any time before a final funding decision is made regarding the application; however, withdrawn applications normally will not be returned. One copy of each application that is not selected for funding, including those that are withdrawn, will be retained by ARDP for a period of three years.

PART VI—AWARD ADMINISTRATION

A. General

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

B. Award Notice

The award document will provide pertinent instructions and information including, at a minimum:

(1) Legal name and address of performing organization or institution to which the director has issued an award under the terms of this request for applications;

(2) Title of project;

(3) Name(s) and institution(s) of PDs chosen to direct and control approved activities;

(4) Identifying award number and the Federal Agency Identification Number assigned by NIFA;

(5) Project period, specifying the amount of time NIFA intends to support the project without requiring recompetition for funds;

(6) Total amount of financial assistance approved for the award;

(7) Legal authority(ies) under which the award is issued;

(8) Appropriate Catalog of Federal Domestic Assistance (CFDA) number;

(9) Applicable award terms and conditions (see http://www.nifa.usda.gov/business/awards/awardterms.html to view NIFA award terms and conditions);

(10) Approved budget plan for categorizing allocable project funds to accomplish the stated purpose of the award; and

(11) Other information or provisions deemed necessary by NIFA to carry out its respective awarding activities or to accomplish the purpose of a particular award.

C. Administrative and National Policy Requirements

Several federal statutes and regulations apply to grant applications considered for review and to project grants awarded under this program. These include, but are not limited to the ones listed below.

2 CFR Part 200—Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards.

2 CFR Part 400 —USDA implementation of 2 CFR Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards.

2 CFR Part 415—USDA General Program Administrative Regulations.

7 CFR Part 1, subpart A—USDA implementation of the Freedom of Information Act.

7 CFR Part 3—USDA implementation of OMB Circular No. A-129 regarding debt collection.

7 CFR Part 15, subpart A—USDA implementation of Title VI of the Civil Rights Act of 1964, as amended.

2 CFR Part 180 and Part 417—OMB Guidelines to Agencies on Government-Wide Debarment and Suspension (Nonprocurement) and USDA Nonprocurement Debarment and Suspension.

7 CFR Part 331 and 9 CFR Part 121—USDA implementation of the Agricultural Bioterrorism Protection Act of 2002.

2 CFR Part 416—USDA General Program Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments.

2 CFR Part 418—USDA implementation of Restrictions on Lobbying. Imposes prohibitions and requirements for disclosure and certification related to lobbying on recipients of federal contracts, grants, cooperative agreements, and loans.

2 CFR Part 421—USDA Implementation of Governmentwide Requirements for Drug-Free Workplace (Grants).

2 CFR Part 422—Research Institutions Conducting USDA-Funded Extramural Research; Research Misconduct.

7 CFR Part 3407—USDA procedures to implement the National Environmental Policy Act of 1969, as amended.

7 CFR 3430—Competitive and Noncompetitive Non-formula Financial Assistance Programs--General Award Administrative Provisions.

29 U.S.C. 794 (section 504, Rehabilitation Act of 1973) and 7 CFR Part 15b (USDA implementation of statute)—prohibiting discrimination based upon physical or mental handicap in federally-assisted programs.

35 U.S.C. 200 et seq.—Bayh Dole Act, controlling allocation of rights to inventions made by employees of small business firms and domestic nonprofit organizations, including universities, in federally-assisted programs (implementing regulations are contained in 37 CFR Part 401).

44 U.S.C. 3541 et seq. (Pub. L. 107-347)—Federal Information System Security Management Act of 2002 (FISMA), to improve computer and network security within the Federal Government. Applies to awardees if it will collect, store, process, transmit, or use information on behalf of NIFA.

D. Expected Program Outputs and Reporting Requirements

Grantees are to use REEport, NIFA's electronic, web-based inventory system to submit an initial project initiation which documents expected products and outcomes of the project. Additionally, annual progress report documenting realized project outcomes must be submitted to the electronic system. The web-based system facilitates an electronic workflow between grantees and NIFA for project accomplishments to be easily searchable and allows for public access to information on Federally-funded projects. The details of these reporting requirements, including those specific to the annual and final technical reports, are included in the award terms and conditions.

PART VII—AGENCY CONTACT

Applicants and other interested parties are encouraged to contact:

Programmatic Contact –

Robert Nowierski
Title: National Program Leader
Unit: Institute of Food Production and Sustainability
Location: 3405 Waterfront Centre
Phone: (202) 401-4900
Fax: (202) 401-1782
Email: rnowierski@nifa.usda.gov

Administrative/Business Contacts –

Bruce Mertz
Unit: Office of Grants and Financial Management
Location: 2174 Waterfront Centre
Phone: (202) 401-5062
Fax: 202-401-2880
Email: bmertz@nifa.usda.gov

Sondra Watkins
Unit: Office of Grants and Financial Management
Location: 2170 Waterfront Centre
Phone: (202) 401-4249
Fax: (202) 401-6271
Email: swatkins@nifa.usda.gov

PART VIII—OTHER INFORMATION

A. Access to Review Information

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

B. Use of Funds; Changes

1. Delegation of Fiscal Responsibility

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

2. Changes in Project Plans

a. The permissible changes by the awardee, PD(s), or other key project personnel in the approved project shall be limited to changes in methodology, techniques, or other similar aspects of the project to expedite achievement of the project's approved goals. If the awardee or the PD(s) is uncertain as to whether a change complies with this provision, the question must be referred to the Authorized Departmental Officer (ADO) for a final determination. The ADO is the signatory of the award document, not the program contact.

b. The awardee must request, and the ADO must approve in writing, all changes in approved goals or objectives prior to effecting such changes. In no event shall requests be approved for changes that are outside the scope of the original approved project.

c. The awardee must request, and the ADO must approve in writing, all changes in approved project leadership or the replacement or reassignment of other key project personnel, prior to effecting such changes.

d. The awardee must request, and the ADO must approve in writing, all transfers of actual performance of the substantive programmatic work in whole or in part and provisions for payment of funds, whether or not federal funds are involved, prior to instituting such transfers, unless prescribed otherwise in the terms and conditions of the award.

e. The project period may be extended without additional financial support, for such additional period(s) necessary to complete or fulfill the purposes of an approved project, but in no case shall the total project period exceed any applicable statutory limit or expiring appropriation limitation. The terms and conditions of award include information about no-cost extensions of the award and when ADO’s prior approval is necessary.

f. Changes in Approved Budget: Unless stated otherwise in the terms and conditions of award, changes in an approved budget must be requested by the awardee and approved in writing by the

ADO prior to instituting such changes, if the revision will involve transfers or expenditures of amounts requiring prior approval as set forth in the applicable Federal cost principles, Departmental regulations, or award.

C. Confidential Aspects of Applications and Awards

When an application results in an award, it becomes a part of the record of NIFA transactions, available to the public upon specific request. Information that the Secretary determines to be of a confidential, privileged, or proprietary nature will be held in confidence to the extent permitted by law. Therefore, any information that the applicant wishes to have considered as confidential, privileged, or proprietary should be clearly marked within the application. The original copy of an application that does not result in an award will be retained by the Agency for a period of three years. Other copies will be destroyed. Such an application will be released only with the consent of the applicant or to the extent required by law. An application may be withdrawn at any time prior to the final action thereon.

D. Regulatory Information

For the reasons set forth in the final Rule related Notice to 2 CFR part 415, subpart C, this program is excluded from the scope of the 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.

E. Definitions

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

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

Integrated Pest Management (IPM) is "a sustainable approach to managing pests by combining biological, cultural, physical and chemical tools in a way that minimizes economic, health and environmental risks." (Food, Conservation, and Energy Act of 2008). The National IPM Roadmap (2013) provides further description of IPM (see www.nifa.usda.gov/nea/pest/pdfs/ipm_roadmap.pdf).

IPM Collaboration(s) refer to a section of a program proposal that contains a component of collaboration with another institution: (1) in which an applicant institution includes a cooperative element with at least one other entity that is not legally affiliated with the applicant institution; and (2) where the applicant institution and each cooperating entity will assume a significant role in the implementation of the proposed collaborative program component. Funds need not be

subcontracted in all cases, and may be administered by the applicant institution. Only the applicant institution must meet the definition of an eligible institution as specified in this RFA.

Integrated project means a project incorporating two or three functions of the agricultural knowledge system (research, education, and extension) around a problem or activity.

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

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

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

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

Transdisciplinary is 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.