



Program of Research on **Economics of Markets for Agricultural Greenhouse Gases**

Fiscal 2010

Competitive Grants and Cooperative Agreements Program: Description and Application Process



**Economic Research Service
United States Department of Agriculture**

Economics of Markets for Agricultural Greenhouse Gases

Competitive Grants and Cooperative Agreements Program

**Applications must be submitted electronically through
WWW.GRANTS.GOV
by midnight Monday, June 14, 2010**

**AP-048
May 2010**

Abstract

The Economic Research Service (ERS) of USDA is accepting proposals for fiscal year 2010 for economic research in three broad areas related to U.S. agricultural participation in proposed greenhouse gas markets. The research should focus on the economics of agricultural activities and practices, including agricultural land use, that increase carbon sequestration or reduce greenhouse gas emissions, together referred to as “greenhouse gas reductions.” Proposals must focus on U.S. agriculture. Of particular interest is research on (1) estimates of supply curves of greenhouse gas reductions from U.S. agriculture, (2) the integrity of agricultural greenhouse gas reductions procured through markets, including provisions designed to enhance this integrity; and (3) the role of non-neoclassical behavior in the provision of agricultural greenhouse gas reductions through markets. ERS will accept proposals under this program for funding levels of up to \$150,000 for a period not to exceed 3 years. Total funding available for this research is approximately \$500,000. The deadline for proposal submission is June 14, 2010.

Keywords: Carbon markets, greenhouse gas markets, carbon offsets, agricultural markets for ecosystem services, behavioral economics, ERS, USDA

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Checklist

All proposals submitted under the Agricultural and Rural Economic Research Program must contain the applicable elements described in this announcement, and must be submitted electronically through www.grants.gov by midnight on June 14, 2010. The following checklist has been prepared to assist in ensuring that the proposal is complete and in the proper order prior to sending:

- ✓ Application for Federal Domestic Assistance-Short Organizational (SF-424)
 - o Is all required information accurate and complete?
 - o Is the Catalog of Federal Domestic Assistance (CFDA) number: 10.250?
 - o Has the authorized organizational representative signed SF-424?
 - o Is the CFDA Title: "Agricultural and Rural Economic Research Program"?
 - o Is the Funding Opportunity Title: "Economics of Markets for Agricultural Greenhouse Gases"?
 - o Have you included a telephone number, fax number, and/or e-mail address where a message may be left for you?
 - o Have you included the requested total funding amount from the budget form?
- ✓ Budget (form SF-424A)
 - o Are budget items complete?
 - o Is the summary budget included?
 - o Is the funding level total within the stated limits of \$50,000 to \$150,000?
 - o Is the budget duration within the stated limit of 3 years?
- ✓ Proposal and all attachments in PDF
- ✓ Project Summary Page
 - o Is the project title listed at the top?
 - o Has the Project Summary, of no more than 250 words, been included?
 - o Does the summary include research objectives?
 - o Do the name and institution of the Principal Investigator, co-investigators, and subcontractors appear on the page?
 - o Does the page include the total amount requested?
 - o Does the page include the start and end date?
- ✓ Project Description
 - o Is the proposal description--EXCLUDING figures, tables, references, and other attachments such as survey or experiment instruments (if relevant)--a maximum of 8 pages?
 - o Do the name and institution of the Principal Investigator and co-investigators appear on the proposal?
- ✓ Documentation from Collaborator(s), or Host Institution (where appropriate)
- ✓ Vitae and Publications List(s)
 - o Are vitae included for the Principal Investigator and co-investigators, senior associates, and other key project personnel (including subcontractors—see instructions)?
 - o Are the vitae current and pertinent?
 - o Are the publications lists complete and limited to the last 5 years?
- ✓ Indirect Cost Rate Schedule
 - o For reimbursement of indirect costs, is a copy included of the applicant's indirect cost rate schedule that reports the applicant's federally negotiated audited rate?

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Overview

Applications are invited for competitive grant awards from the United States Department of Agriculture (USDA) to support research on U.S. agricultural participation in proposed greenhouse gas markets. The research should focus on the economics of agricultural activities and practices that increase carbon sequestration or reduce greenhouse gas emissions, together referred to as “greenhouse gas reductions.” Proposals must focus on U.S. agriculture. This document provides background on the research areas of interest, application procedures, deadlines for submission, and guidance for the application process.

USDA’s Economic Research Service (ERS) anticipates awarding \$500,000 in several individual grants and cooperative agreements. The minimum and maximum funding levels, including indirect costs per grant, are \$50,000 and \$150,000 (respectively) for the duration of the agreement, not to exceed three years. The deadline for proposal submission is June 14, 2010. The proposals selected for funding will be publicly announced by October 31, 2010.

Grant proposals may be submitted by any State agricultural experiment station, college, university, other research institution or organization, Federal, State, or county agencies, private organization, corporation, or individual. Proposals submitted by non-United States organizations will not be considered.

Applications for this program must be submitted electronically through the Grants.gov website at www.grants.gov. The Grants.gov website is the single access point to electronically find and apply for competitive Federal funding opportunities and manage grants from all Federal grant-making agencies.

First-time users of Grants.gov should go to the “Apply for Grants” tab on the website and carefully read and follow the steps listed in order to apply. Your organization will need to be registered with the Central Contractor Registry (CCR) at www.ccr.gov. Your organization also will need a Data Universal Number System (DUNS) number. A DUNS number is a unique nine-character identification number provided by the commercial company, Dun & Bradstreet (D&B). To investigate if your organization already has a DUNS number or to obtain a DUNS number, contact Dun & Bradstreet at 1-866-705-5711. Be sure to complete the Marketing Partner ID (MPIN) and Electronic Business Primary Point of Contact fields during the CCR registration process. These are mandatory fields that are required when submitting grant applications through www.grants.gov.

Authority

The authority for this program is contained in the Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, 2010 P.L. 111-80.

Applicable Federal Statutes, Regulations, and Guidelines

Applicable Federal statutes, regulations, and guidelines include the following: (a) guidelines to be followed when submitting grant proposals and cooperative agreements and rules governing the evaluation of proposals; (b) the USDA Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations, 7 CFR 3019; (c) the USDA Uniform Federal Assistance Regulations, 7 CFR Part 3015; (d) the SDA Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments, 7 CFR Part 3016; and (e) Cooperative Research Agreement 7 USC 3318b.

The Catalog of Federal Domestic Assistance (CFDA) number for this program is 10.250 The CFDA Title is Agricultural and Rural Economic Research Program

Description

Background

Most markets for environmental services are created by government mandates. A greenhouse gas (GHG) cap-and-trade system could create a potential opportunity for agriculture to sell emissions reductions (“offsets”). Agricultural producers who adopt climate-friendly practices such as no-till, nitrogen inhibitors, improved manure management, methane digesters, afforestation on cropland and pastureland, and improved livestock management could potentially be eligible to receive saleable offset credits, which could then substitute for the emissions permits that specified industrial sources would be required to hold under the cap-and-trade system. These sources would buy agricultural offsets whenever agricultural greenhouse gas reductions were less expensive than the costs of reducing fossil fuel emissions in the overall economy.

Examples of agricultural activities that might be eligible to participate in a greenhouse gas market are described in Johnson et al. (“Agricultural opportunities to mitigate greenhouse gas emissions,” *Environmental Pollution* 150 (2007) 107-24.) Agricultural activities that reduce greenhouse gases that are not described in Johnson et al. (2007) may also be suitable for study under this program.

The extent to which an offset market helps the U.S. achieve its climate goals depends on the likelihood that an agricultural activity, undertaken at a specific time and place, provides a reduction in net greenhouse gas emissions. This likelihood can be difficult to establish because of the uncertainty over the agricultural practices that would prevail on individual farms or fields in the absence of a carbon market (presenting potential problems of additionality, leakage, and reversals) and over the greenhouse gas emissions from those practices (presenting concerns about verification and measurement).

Market rules can address these issues. These rules may apply to: (i) the eligibility of an agricultural practice or land use to generate carbon offsets, (ii) the number of offsets awarded for that practice, and (iii) trading rules, such as the imposition of a trading ratio between offsets and the emissions tied to covered sources.

Agricultural practices that reduce greenhouse gas emissions will often be eligible for payments from other State or Federal programs aimed, at least in part, at other environmental services such as water quality or wildlife habitat. For example, eligible producers can currently receive payments for planting trees under the Conservation Reserve Program (which explicitly recognizes tree-planting’s contributions to water quality, wildlife habitat, and carbon sequestration); tree-planting on cropland would also likely be eligible to participate in a carbon market. The receipt of payments from multiple programs or markets for the same practice on the same parcel of land is called “stacking.” Market rules must cover the conditions, if any, under which practices are eligible for payments from different markets or programs.

Carbon markets would provide new economic opportunities for agricultural producers. Research that addresses the behavioral economics of these new markets, including proposals for experiments, is encouraged.

Priority Research Areas

Supported research will fall into at least one of the following three areas:

1. **Supply costs:** Estimates of supply curves of greenhouse gas reductions from U.S. agricultural practices.
2. **Supply integrity:** Research on the integrity of agricultural greenhouse gas reductions procured through markets, including provisions designed to enhance this integrity.
3. **Behavioral economics:** Research on the role of non-neoclassical behavior in the provision of agricultural greenhouse gas reductions through markets.

1. Supply Costs: Estimates of supply curves of greenhouse gas reductions from adoption of specific U.S. agricultural practices

The extent to which agricultural producers choose to participate in a carbon market will affect the costs to the overall economy of meeting the greenhouse cap. Agricultural participation in a carbon market will also determine, in part, the effect of greenhouse gas cap-and-trade legislation on agricultural incomes and the distribution of possible benefits (regionally and across farm types). Therefore, ERS encourages research to help Government agencies predict the costs and quantities of agricultural greenhouse gas reductions that might be provided to a carbon market by a specific practice.

We anticipate that proposals will focus on the adoption of a single agricultural practice of interest but proposals may focus on multiple practices if they are clear about the adoption or interaction of the individual practices. In this context, agricultural practice should be interpreted broadly to include practices, activities, and land uses tied to crop or livestock agriculture, including the afforestation of agricultural land. Adoption refers to changes in these practices.

This topic area may include research that uses evidence from existing policies or markets to estimate the costs of agricultural activities that provide greenhouse gas reductions, including afforestation and land conservation. Proposals may propose (but are not limited to) innovative econometric approaches, the use of data whose application to this topic has not previously been exploited, or examination of relevant U.S. experience in existing conservation programs or environmental markets.

2. *Supply Integrity:* *Research on the integrity of agricultural greenhouse gas reductions procured through markets, including provisions designed to enhance this integrity.*

Research should help the Government understand the nature and magnitude of the problems of additionality, leakage, uncertainty, reversals, and stacking. Research may also aim to identify or improve our understanding of provisions that might be used to address these concerns. ERS sees two related areas to address this research priority:

- a) Enhanced understanding of the integrity of agricultural greenhouse gas reductions procured through markets and of provisions to improve that integrity.
- b) Estimates of the costs or other consequences of market rules designed to address the integrity of agricultural greenhouse gas reductions procured through markets.

3. *Behavioral elements:* *Research on the role of non-neoclassical behavior in the provision of agricultural greenhouse gas reductions through markets.*

Recent research has shown that behavior inconsistent with common assumptions in neoclassical economic models (such as unbounded rationality) may have a large role to play in individuals' decisions relating to personal finance, health care, and food selection, among other areas. Although it seems likely that such behaviors may also affect agricultural management decisions, including participation in a carbon market, the exact role that they might play has not received much attention. This behavior includes (but is not limited to) hyperbolic discounting and possible time-inconsistent behavior, framing effects, choice-menu effects, drop-in-the-bucket effects, and other such patterns.

Research should help the Government predict how agricultural participation in a carbon market might be affected by non-neoclassical behavior, including its implications for the economic, environmental and distributional performance of that market. Research may help to identify policy provisions that might either minimize or build on these behaviors to enhance the integrity or reduce the cost of agricultural greenhouse gas reductions procured through markets.

This topic area may include research that examines existing policies or markets or that conducts experiments designed to identify behavioral elements that are particularly important for agricultural participation in carbon markets. Research proposals should be clear about the nature of the behavior being investigated and the applicability of results to real-world behavior.

Important Guidance for All Proposals

All proposals should contribute to an understanding of the economics of markets for agricultural greenhouse gas reductions. Proposals will be evaluated according to the evaluation criteria specified on page 14. Submitters should examine the evaluation criteria closely before preparing their proposal.

The research areas listed below WILL NOT qualify for support. Proposals that focus on topics on this list may be rejected prior to review.

1. Proposals that primarily focus on the measurement of greenhouse gas emissions or on the science behind agriculture's provision of greenhouse gas reductions.
2. Proposals that focus on why greenhouse gas reductions are or are not socially valuable; proposals that focus on valuation of climate change.
3. Proposals that focus on the prices that are likely to prevail in carbon markets using analysis based primarily on the demand side of the market.
4. Proposals that focus on fossil fuel use by agriculture.
5. Proposals that examine the management of existing forests except where this management has a clear connection to crop or livestock agriculture.
6. Proposals whose primary focus is the broader economic effects of carbon markets, such as effects on trade or commodity prices.
7. Proposals that examine greenhouse gas reductions from non-U.S. agriculture except where this reduction has a clear connection to participation by U.S. agricultural producers in a U.S. carbon market.
8. Proposals that request more than \$150,000.

Much of research listed above is potentially valuable and of interest to ERS but is not eligible for support in this program.

Policies that encourage greenhouse gas reductions from agriculture through means other than a market (for example, through conservation program payments or compliance provisions) are generally outside the scope of this research. Research on these policies may be considered, however, in cases where the policies interact with a carbon market or affect the working of a carbon market.

Eligibility and Indirect and Other Costs

Grant proposals may be submitted by any State agricultural experiment station, college, university, other research institution or organization, Federal, State, or county agencies, private organization, corporation, or individual. Proposals submitted by non-United States organizations will not be considered.

Types of Awards

- **Competitive Grants:** Competitive grants will be supported when the research topic does not require substantial involvement between ERS staff and the recipient during the performance of the award.
- **Cooperative Agreements:** Cooperative agreements will be supported when the research topic requires more substantial involvement between ERS and the investigator(s). There are two types of cooperative agreements: cooperative research agreements and assistance-type cooperative agreements. In a cooperative research agreement, ERS staff and extramural researcher are close collaborators and contributors to support the research; in an assistance-type cooperative agreement, the extramural researchers are responsible for conducting the greater part of the work on the project. Cooperative research agreements require both parties to contribute to the funding of the project; assistance-type cooperative agreements do not have this joint funding requirement.

Indirect and Other Costs

Federal statutes dictate the amount of indirect costs that ERS pays by type of award and institution. In competitive grants, ERS pays the negotiated indirect cost rate not to exceed the audited rate of any federally recognized audit agency to State cooperative institutions and institutions other than State cooperative institutions and nonprofit institutions; and the negotiated indirect cost rate (no statutory limitation) to nonprofit institutions other than State cooperative institutions. For reimbursement of indirect costs, the applicant must include a copy of its indirect cost rate schedule with the application. Tuition shall be treated as an allowable cost, subject to negotiation, where reimbursement of such costs is not prohibited by law.

Peer Review of Applications

All proposals received will be acknowledged. If you do not receive an acknowledgment within 30 days of the submission deadline, please contact ERS at (202) 694-5500 or e-mail: emagg@ers.usda.gov. A preliminary review will be made for meeting proposal eligibility requirements. Proposals that do not fall within the guidelines as stated in this document will be eliminated from program competition, and the applicant will be notified in writing.

Proposals will be evaluated by review panels consisting of academic experts and experts from within USDA or other government agencies. In addition to reviewers' comments, the selection process will also consider overlap among proposals and program needs.

During the evaluation process, care will be taken to prevent any actual or potential conflicts of interest that may have an impact on review or evaluation. Proposal content and peer evaluations will be kept confidential.

All applicants will be notified in writing by **October 31, 2010**, as to whether their proposal has been accepted for an award.

Evaluation Factors and Criteria

The evaluation criteria and weights are detailed below:

1. **Research Questions or Goals** – Evaluate the extent to which the research questions and goals are relevant and valuable for providing an improved understanding of possible U.S. markets for agricultural greenhouse gas reductions as described in this request. This criterion should be used to assess the conceptual adequacy of the proposal and how well the findings will advance policy knowledge and the development and implementation of greenhouse gas markets that can include cost-effective agricultural contributions. (30%)
2. **Research Methods** – Evaluate the extent to which the suggested work will be carried out in a way that will provide precise, accurate, reliable and generalizable contributions. (30%)
3. **Feasibility** – Evaluate the extent to which the proposed research can be carried out in the time frame and can reasonably be expected to meet the stated research goals. (25%)
4. **Staffing and Budget** – Evaluate the extent to which the staffing and budget are adequate and appropriate. (15%)

How To Obtain Application Materials

ERS uses the Internet for primary distribution of information and application materials for its Competitive Grants and Cooperative Agreements Program. All applications must be submitted electronically through www.grants.gov. Applicants may submit paper-copy applications under extenuating circumstances, such as outages of the Grants.gov website that can be substantiated by a valid case number with the Grants.gov support center. If you have questions, contact:

EMAGG

Resource and Rural Economics Division

1800 M Street, NW

Washington, DC 20036-5831

Telephone: (202) 694-5500

E-mail: emagg@ers.usda.gov

This material is also on <http://www.ers.usda.gov/Briefing/GlobalClimate/>.

Application Process

Overview

The guidelines below are provided to assist you in preparing a proposal. Please read these guidelines carefully before preparing your submission.

A checklist is provided at the beginning of this document to help you provide the necessary information for completing a proposal. An Application for Federal Domestic Assistance form (SF-424-short) and a budget form (SF-424A) are required for the proposal. These forms (from the Short Organizational family of forms) are included in the application package, downloadable from www.grants.gov.

Submission Requirements

The proposal should demonstrate that the proposed project is important, methodologically sound, and worthy of support under the “*Evaluation Factors and Criteria*” above. The application should present the merits of the proposed project, and should be written with care and thoroughness. In preparing the proposal, applicants are urged to ensure that the name of the Principal Investigator and, where applicable, the name of the submitting institution are included on the Application for Federal Domestic Assistance Form (SF-424-short).

Format and Contents of Proposals

For electronic submissions through Grants.gov, the proposal and all attachments must be submitted in portable document format (pdf). Using pdf allows applicants to preserve the formatting of their documents. In order to save a document as a pdf, the applicant will need to use pdf generator software. Grants.gov has published the following web page on tools and software that the applicant can use:
www.grants.gov/applicants/resources.jsp

Application for Federal Domestic Assistance-Short Organizational (SF-424-short)

The submission through Grants.gov must contain an Application for Federal Domestic Assistance-Short Organizational (SF-424-short), including authorized electronic signatures from your organization.

Table 1.

**Specific Instructions for Application for Federal Domestic Assistance-
Short Organizational (SF-424)**

Item	Specific Instruction
1. Name of Federal Agency	Enter "Economic Research Service, USDA"
2. Catalog of Federal Domestic Assistance Number	Enter "10.250"
CDFA Title	Enter "Agricultural and Rural Economic Research Program "
3. Date Received	Leave blank
4. Funding Opportunity Number	Enter "EMAGG2010A"
Funding Opportunity Title	Enter "Economics of Markets for Agricultural Greenhouse Gases"
5a-g. Applicant Information	Enter requested information
6a. Project Title	Enter title of project proposal
6b-c.	Leave blank
7. Project Directory	Enter requested information
8-9.	Enter requested information

Standard Budget Form (SF-424A)

A summary budget is required detailing requested support for the overall project period, which is not to exceed 3 years. Funding levels must be between \$50,000 and \$150,000, inclusive of indirect cost where applicable, for the duration of the project (not to exceed 3 years). Funds may be requested under any of the budget categories listed, provided that the item or service requested is identified as necessary for successful conduct of the proposed project, allowable under applicable Federal cost principles, and not prohibited under any applicable Federal statute or regulation.

Budget items include:

- Personnel
- Fringe benefits
- Travel
- Equipment
- Supplies
- Contractual
- Other direct costs, including any costs to carry out proposed experiments.
- Indirect charges

Salaries of faculty members and other personnel who will be working on the project may be requested in proportion to the effort they will devote to the project.

Indirect costs are limited by Federal statute to the federally recognized audited rate for the institution.

Electronic copies of the standard budget form and general instructions are available at www.grants.gov as part of the application package. Specific instructions for completing the proposal budget form are found below.

Table 2.

Specific instructions for Budget Information (SF-424A)

Item	Specific Instruction
1(a). Grant Program Function or Activity	Enter "Agricultural and Rural Economic Research Program"
1(b). Catalog of Federal Domestic Assistance Number	Enter "10.250"
1(c), (d), (f).	Leave blank
1(e), (g).	Enter amount of Federal funds requested
2-4.	Leave blank
5(b),(c),(d),(f).	Leave blank
5(e),(g).	Enter amount of Federal funds requested (same as item 1)
6(a-k) (columns 1 and 5).	Allocate Federal funds to appropriate budget categories
6(a-k) (columns 2-4).	Leave blank
7-20.	Leave blank
21-22.	Enter appropriate budget totals
23	Optional

Project Summary Page

The proposal must start with a Project Summary Page that includes:

- the title of the project;
- the names and institutions of the Principal Investigator, co-investigators, and subcontractors, and complete contact information for the Principal Investigator;
- the total amount of funding requested;
- the project start and end dates; and
- a project summary of no more than 250 words.

The summary is not intended for the general reader; consequently, it may contain technical language comprehensible by persons in disciplines relating to behavioral economics and nutrition. The project summary should be a self-contained, specific description of the activity to be undertaken and should focus on overall project goal(s), supporting objectives, and plans to accomplish project goal(s).

Project Description

The proposal description may not exceed 8 pages of written text. The project description should follow the following format:

Introduction and motivation: A clear statement of the long-term goal(s), objectives or research questions of the proposed project should be included. Relevant published work in the field under consideration and its relationship to the proposed research should be described. This section should make clear the relationship of the proposed research to the economics of markets for agricultural greenhouse gases. Novel ideas or contributions that the proposed project offers should be made clear in this section.

Proposed Research: Items that will likely be included in this section:

- A description of the research proposed in the sequence in which it is to be performed;
- Techniques to be used in carrying out the proposed project, including the feasibility of the techniques;
- Explanation of data collection methods, including experimental design, sample design and selection, and measures for obtaining adequate response rates (for proposed projects that plan to collect data);
- Results expected;
- Means by which data will be analyzed or interpreted;
- Discussion of relevant variables and of model specification issues (for proposed projects that plan to use multivariate analysis);
- Possible application of results;
- Pitfalls that may be encountered;
- Limitations to proposed procedures;

Hazardous to Personnel

In describing the research plan, the applicant must explain fully any materials, procedures, situations, or activities that may be hazardous to personnel (whether or not they are directly related to a particular phase of the proposed project), along with an outline of precautions to be taken to avoid or mitigate the effects of such hazards.

Format

All proposals are to be submitted as a pdf file. Margins must be at least 1 inch (based on a page size of 8½" x 11"). The type size must be 12 point and there should be no more than six (6) lines per inch (single spacing). To the extent possible, all material should be in a single pdf file rather than separate, multiple files.

Proposed Research Products

ERS encourages the publication of research findings in scholarly journals. ERS may summarize and synthesize the findings in ERS publications, to be identified later.

Note: The sections detailed below are not included in the page limitations for the Project Description section.

Collaborative Arrangements

If the nature of the proposed project requires collaboration or sub-contractual arrangements with other research scientists, corporations, organizations, agencies, or entities, the applicant must identify the collaborator(s) and provide a full explanation of the nature of the collaboration. Evidence (that is, letters of intent) should be provided to assure peer reviewers that the collaborators involved have agreed to render this service. When a project requests funds for multiple institutions, a lead institution must be designated.

Only one proposal may be submitted for the project and only from the lead institution. Other institutions may be designated as subcontractors. Proposals with Application for Funding Cover Pages from more than one institution are not permitted and will be returned without review. Identical proposals submitted by different investigators from different institutions are also not permitted and will be returned without review.

Vitae and Publications List(s)

For the Principal Investigator and each co-investigator listed on the Application for Funding Cover Page, for all collaborators and other senior personnel who expect to work on the project in a significant fashion (for instance, expectation of co-authorships on ensuing publications) whether or not funds are sought for their support, and for all subcontractors, the following should be included:

- *Curriculum Vitae (CV)*. The curriculum vitae should be limited to a presentation of academic and research credentials, such as educational, employment, and professional history, honors, and awards. The vitae shall be no more than two pages each in length, excluding publications listings; and
- *Publications List(s)*. A chronological list of all publications in refereed journals during the past 5 years, including those in press, must be provided for each professional project member for whom a curriculum vitae is provided. List only those non-refereed technical publications relevant to the proposed project. All authors should be listed in the same order as they appear on each paper cited, along with the title and complete references as these usually appear in journals.

Indirect Cost Rate Schedule

For reimbursement of indirect costs, the applicant must include with the application a copy of its indirect cost rate schedule that reports the applicant's federally negotiated audited rate.

Current and Pending Support

The proposal must list any other current public or private research support (including in-house support) to the Principal Investigator or co-investigators, whether or not salary support for the person(s) involved is included in the budget.

Analogous information must be provided for any pending proposals, including this proposal, that are now being considered by, or that will be submitted in the near future to, other possible sponsors, including other USDA programs or agencies. Note that this proposal must be listed as Pending.

Investigators also should include a brief statement of research objectives or project summaries for all projects listed in Current and Pending Support. Concurrent submission of identical or similar proposals to other possible sponsors will not prejudice proposal review or evaluation. However, a proposal that duplicates or overlaps substantially with a proposal already reviewed and funded (or that will be funded) by ERS will not be funded under this program.

Please include the following information under the heading "Current and Pending Support":

- Record information for active and pending projects in separate sections by name, supporting agency, total funding amount, effective and expiration dates, percentage of time committed, and title of project.
- All current research to which the Principal Investigator, co-investigators, and other senior personnel have committed a portion of their time must be listed, whether or not salary for the person involved is included in the budgets of the various projects.

What/When/Where To Submit

All applications must be submitted electronically through www.grants.gov. Applicants may submit paper-copy applications under extenuating circumstances, such as outages of the Grants.gov website that can be substantiated by a valid case number with the Grants.gov support center.

Every effort should be made to ensure that the proposal contains all pertinent information when originally submitted. Prior to submitting, it is urged that the application be compared with the checklist on the inside front cover of this announcement.

Late proposals will not be considered unless extenuating circumstances are documented with Grants.gov.

Reminder: Applications must be
submitted by midnight June 14

Award Administration

ERS reserves the right to negotiate with the Principal Investigator or project director and/or with the submitting organization or institution regarding project revisions (for example, reductions in the scope of work), funding level, or period or method of support prior to recommending any project for funding.

A proposal may be withdrawn by the Principal Investigator at any time before a final funding decision is made regarding the proposal; however, withdrawn proposals normally will not be returned. One copy of each proposal that is not selected for funding (including those that are withdrawn) will be retained by ERS for a period of one (1) year. The remaining copies will be destroyed.

Duration of Awards

The total period for which a grant agreement is awarded may not exceed 3 years.

Management Information

Once a grant agreement has been reviewed and recommended for funding, specific management and organizational information relating to the applicant shall be requested on a one-time basis prior to the award. Copies of forms needed in fulfilling the requirements will be provided by ERS.

Notice of Award

A competitive grant agreement award document, containing the budget, terms and conditions of the award, and other necessary information, will be prepared and forwarded to each grantee or cooperator, along with a Notice of Competitive Grant Agreement Award, by the Administrative and Financial Management, ARS, USDA.

Financial Obligations

For any competitive grant or cooperative agreement awarded, the maximum financial obligation of ERS shall be the amount of funds authorized for the award. This amount will be stated on the award instrument and on the approved budget. However, in the event of an erroneous amount is stated on the grant award instrument, the approved budget, or any supporting document, ERS reserves the unilateral right to make the correction and to make an appropriate adjustment in the amount of the award to align with the authorized amount. Nothing in these guidelines or any program announcement shall obligate ERS, the Department, or the United States to take favorable action on any application received in response to any announcement, or to support any project at a particular level. Further, neither the approval of any application nor the award of any project grant or cooperative agreement shall commit or obligate the United States in any way to make any renewal, supplemental, continuation, or other award with respect to any approved application or portion of an approved application.

Awardees will be required to ensure that all funds are expended in accordance with the terms and conditions of grant or cooperative agreement award, Departmental regulations, and the applicable Federal cost principles in effect on the date of the award.

Responsibility for the use and expenditure of grant or cooperative agreement funds may not be transferred or delegated in whole or in part to another party (even if a grantee or cooperator enters into a contractual relationship with that party), unless the grant or cooperative agreement itself is transferred in whole or in part to another party by ERS.

Post-Award Administration

Authorization to make changes in approved project plans, budget, period of support, etc., will be governed largely by the terms and conditions of the competitive grant award agreement. Among other things, these terms and conditions will set forth the kinds of post award changes that may be made by the awardee and the kinds of changes that are reserved to ERS. It is urged that all key project personnel and authorized organizational representatives read them carefully.

Release of Information

ERS receives grant agreement proposals in confidence and will protect the confidentiality of their contents to the extent permitted by law. When a proposal results in a grant agreement, however, it becomes part of the public record and is available to the public upon written request. Copies of proposals (including excerpts from proposals) that are not funded will not be released. Information regarding funded projects will be made available to the extent permitted under the Freedom of Information Act, the Privacy Act, and implementing USDA regulations.

Requests to obtain authorized information (and fee schedule relating to the handling of this information) or to obtain information regarding procedures related to release of grantor cooperative agreement information should be directed to the Freedom of Information Act (FOIA) Coordinator, ARS Information Staff, 5601 Sunnyside Ave., Bldg. 1, Rm. 2248, Mail Stop 5128, Beltsville, MD 20705-5128; telephone (301) 504-1640.