UNITED STATES DEPARTMENT OF THE INTERIOR

U.S. GEOLOGICAL SURVEY

-- Cooperative Research Units Program --

Authorized by the Cooperative Research Units Act (16 U.S.C. 753a-753b), Public Law 86-686, Sec. 1, Sept. 2, 1960, 74 Stat. 733, as amended by the Fish and Wildlife Improvement Act of 1978, Public Law 95-616, Sec. 2, Nov. 8, 1978, 92 Stat. 3110.

PROGRAM ANNOUNCEMENT No. G19AS00004
For Fiscal Year 2019

ISSUE DATE: September 20, 2018

CLOSING DATE:
June 19, 2019 (new or changes in scope of work or total estimated cost)
August 8, 2019 (other changes not involving change to scope of work or total estimated cost)

APPLICATIONS MUST BE SUBMITTED ELECTRONICALLY VIA THE GRANTS.GOV WEB SITE.

COMPLETE DETAILS ARE PROVIDED UNDER PART III.

PAPERWORK REDUCTION ACT STATEMENT: The Paperwork Reduction Act says that the agency must tell you why we are collecting this information, how we will use it, and whether you have to give it to us. This information is being collected to determine the eligibility of the applicant and as a basis for approval or disapproval of the proposed project. Cooperative Research Units were established with a trifold mission, a mission that is codified in the program's authorizing legislation and that has remained unchanged through time:

- Education - Provide advance training in fish, wildlife, and natural resource sciences, assuring a continuing supply of quality natural resource professionals for state and federal agencies.
- Research – Provide federal and state agencies access to the expertise, and facilities at leading universities around the country, to address the natural resource information needs expressed by Unit cooperators and partners.
- Technical Assistance - Provide technical assistance in the understanding and use of science and research findings, to State and Federal personnel and other natural resource managers. The OMB Control Number is 1028-NEW for this information collection; the expiration date is TBD. Direct comments regarding this collection of information may be sent to the Bureau Clearance Officer, U.S. Geological Survey, 12201 Sunrise Valley Drive, MS807, Reston VA20192.

PROGRAM ANNOUNCEMENT CHANGES

Footer – Updated year and Program Announcement No.

Front Pages

- Updated Program Announcement No., fiscal year and closing dates
- Updated 'Table of Contents", Part IV/C page number

Part 1. A. The Cooperative Research Units Program (page 1)

- Added Secretary of the Interior priorities in 3rd paragraph

Part II. A. Timeatables (page 2)

- Updated fiscal year and due dates

Part III. A. Preparing and Submitting a Research Work Order Application via Grants.gov (page 5)

- Updated Funding Opportunity Number

TABLE OF CONTENTS

PART I. Public Law and Program Priorities……1
A. The Cooperative Research Units Program.....1
B. Statutory Authority of Program.....2
C. Research Work Orders……..……2
PART II. Timetables, Eligibility and Proposal Format Instructions..... 2
A. Timetables.....2
B. Eligibility – Who May Submit a Proposal 2
C. Proposal and Budget Content Instructions.....2
PART III. Proposal Delivery/Submission Instructions and Deliverables..... 5
A. Preparing and Submitting a Research Work Order Application via Grants.gov 5
B. Grants.gov Application Submission and Receipt Procedures ……5
C. SF 424 Instructions 9
D. Award Administration Information 9
E. Reports and Publications.....9
PART IV. General Provisions 13
A. Cost Principles, Audit, and Administrative Requirements.....13
B. Method of Payment.....13
C. Additional Regulations……...……..14
D. Additional Articles Required For Compliance With Statute Or Regulation 14
E. Additional General Terms and Conditions……..…28
Important Contacts:..... 31

PART I. Public Law and Program Priorities

A. The Cooperative Research Units Program

The Cooperative Research Units (CRU) Program is a unique collaborative relationship between States, Universities, the Federal government and a non-profit organization. The program is comprised of 40 Cooperative Fish and Wildlife Research Units on university campuses in 38 states. Since the original nine Units were established in the 1930s, additional Units were established by Congress at specified universities. The 40 units in the program are jointly supported by the US Geological Survey, Host Universities, State Natural Resource Agencies, Wildlife Management Institute, and the US Fish and Wildlife Service.

Cooperative Research Units were established with a trifold mission, a mission that is codified in the program's authorizing legislation and that has remained unchanged through time:

- Education - Provide advance training in fish, wildlife, and natural resource sciences, assuring a continuing supply of quality natural resource professionals for state and federal agencies.
- Research – Provide federal and state agencies access to the expertise, and facilities at leading universities around the country, to address the natural resource information needs expressed by Unit cooperators and partners.
- Technical Assistance - Provide technical assistance in the understanding and use of science and research findings, to State and Federal personnel and other natural resource managers.

This tri-fold mission is consistent with the Secretary of the Interior priorities of 1) Create a conservation stewardship legacy second only to Teddy Roosevelt, and 2) Strike a regulatory balance. This mission also facilitates the linkage of the research and information needs of federal, state and other natural resource managers and professionals with the expertise and facilities of leading research universities, and graduate student training. Federal Unit scientists, affiliated university faculty, and advanced students work in a variety of fields of cutting edge science to address issues of importance to the science and management of fish, wildlife and natural resources. Sponsoring agencies are provided assistance in the interpretation and application of the research findings as well as a talent pool of trained biologists graduating from the program.

Cooperative Fish and Wildlife Research Units were created in 1935 to fill the vacuum of wildlife management information and the shortage of trained wildlife biologists. In 1960, the Cooperative Research Units Program was formally sanctioned with the enactment of the Cooperative Units Act (PL 86-686). The act specifies the participants in the program as well as its mission. All signatory parties to an individual Cooperative Fish and Wildlife Research Unit have joint ownership of the Unit and its direction. They all also contribute substantially to the partnership and by design, receive leveraged benefits from participating, allowing each to achieve more as part of a collective than would be achievable individually.

For a more detailed look at the CRU Program visit: http://www.coopunits.org

B. Statutory Authority of Program

Cooperative Research Units Act (16 U.S.C. 753a-753b), Public Law 86-686, Sec. 1, Sept. 2, 1960, 74 Stat. 733, as amended by the Fish and Wildlife Improvement Act of 1978, Public Law 95-616, Sec. 2, Nov. 8, 1978, 92 Stat. 3110.

C. Research Work Orders

All proposals must be coordinated with the Recipient's Cooperative Research Unit prior to submission, and will be required to be submitted electronically through grants.gov. Complete details are provided under Part III.

PART II. Timetables, Eligibility and Proposal Format Instructions

A. Timetables

The announcement shall open each year for new Research Work Orders and modifications to be submitted from October 1 through the due date stipulated by the USGS. For FY 2019, due dates are as follows:
June 19, 2019 (new or changes in scope of work or total estimated cost)
August 8, 2019 (other changes not involving change to scope of work or total estimated cost)

B. Eligibility – Who May Submit a Proposal

Only CRU Cooperating Universities are eligible to apply to the RWO component of the Cooperative Research Unit Program pursuant to the Cooperative Research Unit Act (Public Law 86-686).

C. Proposal and Budget Content Instructions

All proposal text shall include the following:

a. Introduction and Statement of Problem. Give a brief introduction to the research problem. Provide a brief summary of findings or outcomes of any prior work that has been completed or is ongoing in this area.
b. Objectives. Clearly define goals of project. State how the proposal addresses USGS goals and its relevance and impact. Explain why the work is important.
c. Methods. This section should include a fairly detailed discussion of the work plan and technical approach to both field and laboratory techniques**.**
d. Dissemination of Research Results. List any anticipated reports, analyses, digital data, etc. that will be disseminated during the performance period. The USGS considers dissemination of research data and results to potential users to be an integral and crucial aspect of projects funded by this program. Beyond the requirements for a final report, describe your plan for dissemination of project data and results that will result in the greatest possible benefit to customers as defined by your proposal. Applicants are

strongly encouraged to disseminate research results to the scientific community and appropriate professional organizations; local, State, regional and Federal agencies; and the general public. The USGS encourages the Recipient to publish project reports in scientific and technical journals.

e. Data Management Plan Requirements. Proposals submitted to USGS must include a supplementary document of no more than four pages labeled "Data Management Plan" (DMP). This supplementary document should describe how the proposal will conform to USGS policy on the dissemination and sharing of research results and associated data. A valid DMP may include only the statement that no detailed plan is needed (e.g. "No data are expected to be produced from this project"), as long as the statement is accompanied by a clear justification. This supplementary document may include:
    - the types of data, samples, physical collections, software, curriculum materials, and other materials to be produced in the course of the project;
    - the standards to be used for data and metadata format and content (where existing standards are absent or deemed inadequate, this should be documented along with any proposed solutions or remedies);
    - policies for access and sharing including provisions for appropriate protection of privacy, confidentiality, security, intellectual property, or other rights or requirements;
    - provisions for re-use, re-distribution, and the production of derivatives; and
    - plans for archiving data, samples, and other research products, and for preservation of free public access to them.

    Additional guidance on data management plans is available from the USGS Data Management web site here: http://www.usgs.gov/datamanagement/plan/dmplans.php. Simultaneously submitted collaborative proposals and proposals that include subawards are a single unified project and should include only one supplemental combined DMP by the lead PI that also addresses all subaward data management needs, regardless of the number of non-lead collaborative proposals or subawards included.

f. Description of educational training experience Provide a description of the educational and training experience planned for the individuals (other than PIs) doing the primary research. Based on past experience, this addition to the RWO format will greatly assist administrators in reviewing and approving projects.
    - For post-docs, the description should include whether an individual has already been selected or will be selected, and for those pre-selected a certification that they meet the standard described above; three or so sentences maximum should suffice.
    - For graduate students, no or minimal description is required; simply indicate in this section that a graduate student will be the primary workforce and what level (PhD and or MS).
    - For RWOs solely using research technicians (undergraduate or otherwise) describe the type of educational training experience anticipated to be gained; three or so sentences maximum should suffice.

g. References Cited. List all references to which you refer in text and references from your past work in the field that the research problem addresses. Be sure to identify references as journal articles, chapters in books, abstracts, maps, digital data, etc.

Detailed Budget Breakdown - Please include the following:

a. Salaries and Wages. List names, positions, and rate of compensation. If contract employees are hired, include their total time, rate of compensation, job titles, and roles.
b. Fringe benefits/labor overhead. Indicate the rates/amounts in conformance with normal accounting procedures. Explain what costs are covered in this category and the basis of the rate computations.
c. Lab Analyses. Briefly itemize cost of all analytical work (if applicable).
d. Supplies. Enter the cost for all tangible property. Include the cost of office, laboratory, computing, and field supplies separately. Provide detail on any specific item, which represents a significant portion of the proposed amount.
e. Equipment. Show the cost of all special-purpose equipment necessary for achieving the objectives of the project. "Special-purpose equipment" means scientific equipment having a useful life of more than 1 year and having an acquisition cost of $5,000 or more per item. Each item should be itemized and include a full justification and a dealer or manufacturer quote, if available. General-purpose equipment must be purchased from the applicant's operating funds. Title to non-expendable personal property shall be vested with the Recipient or the Federal Government as determined in the award terms and conditions. Under no circumstances shall property title be vested in a sub-tier recipient.
f. Services or consultants. Identify the tasks or problems for which such services would be used. List the contemplated sub-recipients by name (including consultants), the estimated amount of time required, and the quoted rate per day or hour.
g. Travel. State the purpose of the trip and itemize the estimated travel costs to show the number of trips required, the destinations, the number of people traveling, the per diem rates, airfare, the cost of transportation, and any miscellaneous expenses for each trip. Calculations of other special transportation costs (such as charges for use of applicant-owned vehicles or vehicle rental costs) should also be shown.
h. Publication costs. Show the estimated cost of publishing the results of the research, including the final report. Include costs of drafting or graphics, reproduction, page or illustration charges, and a minimum number of reprints.
i. Other direct costs. Itemize the different types of costs not included elsewhere; such as, shipping, computing, equipment-use charges, or other services.
j. Total Direct Charges. Totals for items a - j.
k. Indirect Charges (Overhead). The DOI has approved deviation from the federal negotiated indirect cost rate agreement for the CRU Program. For the CRU program, indirect cost rates are capped at 15% and this reduction is outlined within each CRU Cooperative Agreement.
l. Amount proposed. Total items k and l.

PART III. Proposal Delivery/Submission Instructions and Deliverables

A. Preparing and Submitting a Research Work Order Application via Grants.gov

Note: All proposals must be coordinated with the Recipient's Cooperative Research Unit prior to submission.

- **Funding Opportunity Number** field enter **G19AS00004**. This is the Funding Opportunity Number for the CRU Program.
- **Funding Opportunity Competition ID** field, enter the *last four digits* of your Cooperative Research Agreement Number (for example, 1434-12HQRU**1578**, or 1434-08HQRU**1511**).

B. Grants.gov Application Submission and Receipt Procedures

1. Electronic Delivery

USGS is participating in the Grants.gov initiative to provide the grant community with a single site to find and apply for grant funding opportunities. USGS requires applicants to submit their applications online through Grants.gov.

2. How to Register to Apply through Grants.gov

a. *Instructions:* Read the instructions below about registering to apply for USGS funds. Applicants should read the registration instructions carefully and prepare the information requested before beginning the registration process. Reviewing and assembling the required information before beginning the registration process will alleviate last-minute searches for required information.

The registration process can take up to four weeks to complete. Therefore, registration should be done in sufficient time to ensure it does not impact your ability to meet required application submission deadlines.

If individual applicants are eligible to apply for this grant funding opportunity, refer to:
https://www.grants.gov/web/grants/applicants/individual-registration.html

Organization applicants can find complete instructions here:
https://www.grants.gov/web/grants/applicants/organization-registration.html

1) *Obtain a DUNS Number*: All entities applying for funding, including renewal funding, must have a Data Universal Numbering System (DUNS) number from Dun & Bradstreet (D&B). Applicants must enter the DUNS number in the data entry field labeled "Organizational DUNS" on the SF-424 form.

For more detailed instructions for obtaining a DUNS number, refer to: https://www.grants.gov/web/grants/applicants/organization-registration/step-1-obtain-duns-number.html

2) *Register with SAM*: In addition to having a DUNS number, organizations applying online through Grants.gov must register with the System for Award Management (SAM). All organizations must register with SAM in order to apply online. Failure to register with SAM will prevent your organization from applying through Grants.gov.

For more detailed instructions for registering with SAM, refer to: https://www.grants.gov/web/grants/applicants/organization-registration/step-2-register-with-sam.html

3) *Create a Grants.gov Account*: The next step in the registration process is to create an account with Grants.gov. Applicants must know their organization's DUNS number to complete this process. Completing this process automatically triggers an email request for applicant roles to the organization's E-Business Point of Contact (EBiz POC) for review. The EBiz POC is a representative from your organization who is the contact listed for SAM. To apply for grants on behalf of your organization, you will need the Authorized Organizational Representative (AOR) role.

For more detailed instructions about creating a profile on Grants.gov, refer to: https://www.grants.gov/web/grants/applicants/organization-registration/step-3-username-password.html

4) *Authorize Grants.gov Roles*: After creating an account on Grants.gov, the EBiz POC receives an email notifying them of your registration and request for roles. The EBiz POC will then log in to Grants.gov and authorize the appropriate roles, which may include the AOR role, thereby giving you permission to complete and submit applications on behalf of the organization. You will be able to submit your application online anytime after you have been approved as an AOR.

For more detailed instructions about creating a profile on Grants.gov, refer to: https://www.grants.gov/web/grants/applicants/organization-registration/step-4-aor-authorization.html

5) *Track Role Status*: To track your role request, refer to: https://www.grants.gov/web/grants/applicants/organization-registration/step-5-track-aor-status.html

b. *Electronic Signature*: When applications are submitted through Grants.gov, the name of the organization's AOR that submitted the application is inserted into the signature line of the application, serving as the electronic signature. The EBiz POC **must** authorize individuals who are able to make

legally binding commitments on behalf of the organization as an AOR; **this step is often missed and it is crucial for valid and timely submissions.**

3. How to Submit an Application to USGS via Grants.gov

Grants.gov applicants can apply online using Workspace. Workspace is a shared, online environment where members of a grant team may simultaneously access and edit different webforms within an application. For each funding opportunity announcement (FOA), you can create individual instances of a workspace.

Below is an overview of applying on Grants.gov. For access to complete instructions on how to apply for opportunities, refer to:
https://www.grants.gov/web/grants/applicants/apply-for-grants.html

1) *Create a Workspace*: Creating a workspace allows you to complete it online and route it through your organization for review before submitting.

2) *Complete a Workspace*: Add participants to the workspace, complete all the required forms, and check for errors before submission.

a. *Adobe Reader*: If you decide not to apply by filling out webforms you can download individual PDF forms in Workspace so that they will appear similar to other Standard or [INSERT AGENCY NAME] forms. The individual PDF forms can be downloaded and saved to your local device storage, network drive(s), or external drives, then accessed through Adobe Reader.

NOTE: Visit the Adobe Software Compatibility page on Grants.gov to download the appropriate version of the software at:
https://www.grants.gov/web/grants/applicants/adobe-software-compatibility.html

b. *Mandatory Fields in Forms:* In the forms, you will note fields marked with an asterisk and a different background color. These fields are mandatory fields that must be completed to successfully submit your application.

c. *Complete SF-424 Fields First*: The forms are designed to fill in common required fields across other forms, such as the applicant name, address, and DUNS number. To trigger this feature, an applicant must complete the SF-424 information first. Once it is completed, the information will transfer to the other forms.

3) *Submit a Workspace*: An application may be submitted through workspace by clicking the Sign and Submit button on the Manage Workspace page, under the Forms tab. Grants.gov

recommends submitting your application package at least 24-48 hours prior to the close date to provide you with time to correct any potential technical issues that may disrupt the application submission.

4) *Track a Workspace*: After successfully submitting a workspace package, a Grants.gov Tracking Number (GRANTXXXXXXXX) is automatically assigned to the package. The number will be listed on the Confirmation page that is generated after submission.

For additional training resources, including video tutorials, refer to:
https://www.grants.gov/web/grants/applicants/applicant-training.html

Applicant Support: Grants.gov provides applicants 24/7 support via the toll-free number 1-800-518-4726 and email at support@grants.gov. For questions related to the specific grant opportunity, contact the number listed in the application package of the grant you are applying for.

If you are experiencing difficulties with your submission, it is best to call the Grants.gov Support Center and get a ticket number. The Support Center ticket number will assist the [INSERT AGENCY NAME] with tracking your issue and understanding background information on the issue.

4. Timely Receipt Requirements and Proof of Timely Submission

a. *Online Submission.* All applications must be received by the time on the due date established for each program. Proof of timely submission is automatically recorded by Grants.gov. An electronic date/time stamp is generated within the system when the application is successfully received by Grants.gov. The applicant AOR will receive an acknowledgement of receipt and a tracking number (GRANTXXXXXXXX) from Grants.gov with the successful transmission of their application. Applicant AORs will also receive the official date/time stamp and Grants.gov Tracking number in an email serving as proof of their timely submission.

When USGS successfully retrieves the application from Grants.gov, and acknowledges the download of submissions, Grants.gov will provide an electronic acknowledgment of receipt of the application to the email address of the applicant with the AOR role. Again, proof of timely submission shall be the official date and time that Grants.gov receives your application. Applications received by Grants.gov after the established due date for the program will be considered late and will not be considered for funding by USGS.

Applicants using slow internet, such as dial-up connections, should be aware that transmission can take some time before Grants.gov receives your application. Again, Grants.gov will provide either an error or a successfully received transmission in the form of an email sent to the applicant with the AOR role. The Grants.gov Support Center reports that some applicants end the transmission because they think that nothing is occurring during the transmission process. Please be patient and give the system time to process the application.

C. SF 424 Instructions

All new and continuation/revision applications must contain the completed SF 424 and project/budget narrative. Please take note of the following specific instructions regarding the SF 424:

*** for NEW Research Work Order (RWO) Applications:**

1. In Item 2, Type of Application, click New.
2. In Item 5a, Federal Entity Identifier, enter your Cooperative Research Agreement Number.
3. In Item 5b, Federal Award Identifier, enter the Research Work Order number of the new RWO.
4. Budget Section A, Lines 1-4, Columns (c) through (g): *For new applications*, leave Column © and (d) blank. For each line entry in Columns (a) and (b), enter in Columns (e), (f), and (g) the appropriate amounts of funds needed to support the entire project.
5. Complete all remaining required fields according to the regular form instructions.

*** for Modifications to increase total estimated costs for EXISTING RWOs:**

1. In Item 2, Type of Application, click Continuation or Revision. (Note: If you select revision, you are also required to select the appropriate revision code on the drop down menu in Item 2.)
2. In Item 5a, Federal Entity Identifier, enter your Cooperative Research Agreement Number.
3. In Item 5b, Federal Award Identifier, enter the RWO Number.
4. Complete all remaining required fields according to the regular form instructions.

D. Award Administration Information

Award recipients are responsible for managing the day-to-day operations of the Research Work Order agreements and supported activities to assure compliance with applicable Federal requirements, and that performance goals are being achieved. Recipient monitoring must cover each program, function or activity.

E. Reports and Publications

The following reports will be required from all award recipients:

1. Progress Reports

a) Progress Report Forms will be submitted to CRU HQ within 90 calendar days after the agreement year (i.e., 12 months after the approved effective date of the Agreement and every 12 months thereafter until the expiration date of the Agreement.). For Agreements with a total anticipated performance period of 12 months or less, only a Final Technical Report will be required. A progress report is not required in the final year, unless the Recipient requests an extension to the project period.

b) Progress shall include the following:

(i) A comparison of actual accomplishments to the objectives of the Federal award and overall progress in response to the performance metrics.
(ii) The reasons why established goals were not met, if appropriate.
(iii) Additional pertinent information.

c) Between the required reporting dates, events may occur which have significant impact upon the project or program. In such cases, the Recipient shall inform the USGS as soon as the following types of conditions become known:

(i) Problems, delays, or adverse conditions which will materially impair the ability to meet the objective of the Agreement. This disclosure must include a statement of the action taken, or contemplated, and any assistance needed to resolve the situation.
(ii) Favorable developments which enable meeting time schedules and objectives sooner or at less cost than anticipated or producing more or different beneficial results than originally planned.

2. Final Technical Report

a) The Recipient shall submit two copies of the final technical report to the USGS Project Officer and one copy of the transmittal letter to the USGS Contracting Officer. The final performance report will be due no later than 90 calendar days after the period of performance end date.

b) The final technical report shall document and summarize the results of Recipient's work. The report shall include a quantitative description of activities and overall progress in response to the performance metrics which documents and summarizes the results of the entire Agreement. The final report shall include tables, graphs, diagrams, sketches, etc., as required to explain the results achieved under the Agreement. The report shall also include recommendations and conclusions based upon both the experience and the results obtained.

3. Annual Financial Reports

a) The Recipient will submit an annual SF 425, Federal Financial Report, for each individual USGS award. The SF 425 is available at *https://www.grants.gov/forms/post-award-reporting-forms.html*. The SF 425 will be due in accordance with the following schedule.

Award Performance Start Date	Annual Interim Report End Date (year following start date)	Annual Interim Report Due Date (90 days after report end date)
January 1- March 31	March 31	June 30
April 1- June 30	June 30	September 30
July 1- September 30	September 30	December 31
October 1 – December 31	December 31	March 31

b) The SF 425 must be submitted electronically through the FedConnect Message Center (www.fedconnect.net) or, if FedConnect is not available, by e-mail to SF425@usgs.gov with a cc to the Contracting Officer. Recipient must include the USGS award number and Research Work Order Number in the subject line of all correspondence. If, after 90 days, Recipient has not submitted a report, the Recipient's account in ASAP will be placed in a manual review status until the report is submitted.

4. Final Financial Report

a) The Recipient will liquidate all obligations incurred under the award and submit a final SF 425, Federal Financial Report in accordance with C.3.b. no later than 90 calendar days after the Agreement completion date.

b) Recipient will promptly return any unexpended federal cash advances or will complete a final draw from ASAP to obtain any remaining amounts due. Once 120 days has passed since the Agreement completion date, USGS shall unilaterally deobligate federal funds as reflected in the Final SF 425.

c) Subsequent revision to the final SF 425 will be considered only as follows:

(i) When the revision results in a balance due to the Government, the Recipient must submit a revised final SF 425, Federal Financial Report, and refund the excess payment whenever the overcharge is discovered, no matter how long the lapse of time since the original due date of the report.

(ii) When the revision represents additional reimbursable costs claimed by the Recipient, a revised final SF 425 may be submitted to the USGS Contracting Officer with an explanation. If approved, the USGS will either request and pay a final invoice or reestablish the ASAP subaccount to permit the Recipient to make a revised final draw.

Any revised final report representing additional reimbursable amounts must be submitted no later than 1 year from the due date of the original report, i.e., 15 months following the Agreement completion date. USGS will not accept any revised SF 425 covering additional expenditures after that date and will return any late request for additional payment to the Recipient.

5. Publications

a) Acknowledgment of Support

Recipient is responsible for assuring that an acknowledgment of USGS support:

1. is made in any publication (including World Wide Web pages) of any material based on or developed under this Agreement, in the following terms:

> This material is based upon work supported by the U.S. Geological Survey under Grant/Cooperative Agreement No. (*insert agreement number*).

2. is orally acknowledged during all news media interviews, including popular media such as radio, television and news magazines.

b) Disclaimer

Recipient is responsible for assuring that every publication of material (including World Wide Web pages) based on or developed under this Agreement, contains the following disclaimer:

> The views and conclusions contained in this document are those of the authors and should not be interpreted as representing the opinions or policies of the U.S. Geological Survey. Mention of trade names or commercial products does not constitute their endorsement by the U.S. Geological Survey.

c) Publication

Publication of the results of any project carried out under this assistance award is authorized in professional journals, trade magazines, or may be made by the USGS. Such manuscripts or publications submitted to journals or professional publications for publication shall be accompanied by the following notation:

> This manuscript is submitted for publication with the understanding that the United States Government is authorized to reproduce and distribute reprints for Governmental purposes.

d) Copies for USGS

Recipient is responsible for assuring that the USGS Project Office is provided a digital version, preferably as a MS Word DOCx file, of every accepted manuscript upon acceptance for publication by the journal.

e) Department of the Interior Requirements

Two copies of each publication produced under a Grant or Cooperative Agreement shall be sent to the Natural Resources Library with a transmittal that identifies the sender and the publication. The address of the library is:

U.S. Department of the Interior
Natural Resources Library
Division of Information and Library Services
Gifts and Exchange Section
18th and C Streets, NW
Washington, DC 20240

PART IV. General Provisions

A. Cost Principles, Audit, and Administrative Requirements

The Recipient shall be subject to the following regulations, which are incorporated herein by reference. Copies can be obtained from the Internet at: *http://www.ecfr.gov/*

2 CFR Part 200, *Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards*, as implemented by the Department of the Interior in 2 CFR Part 1402 and 43 CFR Part 12.

B. Method of Payment

Payments under financial assistance awards must be made using the Department of the Treasury Automated Standard Application for Payments (ASAP) system (www.asap.gov).

a) The Recipient agrees that it has established or will establish an account with ASAP. USGS will initiate enrollment in ASAP. If the Recipient does not currently have an ASAP account, they must designate an individual (name, title, address, phone and e-mail) who will serve as the Point of Contact (POC).

b) With the award of each grant/cooperative agreement, a sub-account will be set up from which the Recipient can draw down funds. After Recipients complete enrollment in ASAP and link their

banking information to the USGS ALC (14080001), it may take up to 10 days for sub-accounts to be activated and for funds to be authorized for drawdown in ASAP.

c) Inquiries regarding payment should be directed to ASAP at 855-868-0151.

d) Payments may be drawn in advance only as needed to meet immediate cash disbursement needs.

e) RWOs are subject to periodic reviews by the Recipient's application Cooperative Research Unit and Project Officer designated in each RWO.

C. Additional Regulations

This award is subject to the following additional Governmentwide regulations:

- 2 CFR 180, Governmentwide Debarment and Suspension (Nonprocurement)
- 2 CFR 182, Governmentwide Requirements for Drug-Free Workplace (Financial Assistance)

This award is subject to the following additional regulations of the U.S. Department of the Interior:

- 2 CFR Part 1400, Nonprocurement Debarment and Suspension
- 2 CFR Part 1401, Requirements for a Drug Free Workplace (Financial Assistance)
- 43 CFR Part 17, Nondiscrimination in Federally Assisted Programs of the Department of the Interior
- 43 CFR Part 18, New Restrictions on Lobbying
    - Submission of an application also represents the applicant's certification of the statements in 43 CFR Part 18, Appendix A, Certification Regarding Lobbying
- 43 CFR Part 41, Nondiscrimination on the Basis of Sex in Education Programs or Activities Receiving Federal Financial Assistance *[Applies only if this award provides assistance to an education program or student(s)]*

D. Additional Articles Required For Compliance With Statute Or Regulation

a) <u>The Seat Belt Provision (Executive Order 13043)</u>

Recipients of grants/cooperative agreements and/or sub-awards are encouraged to adopt and enforce on-the-job seat belt use policies and programs for their employees when operating company owned, rented, or personally owned vehicles. These measures include, but are not limited to, conducting education, awareness, and other appropriate programs for their employees about the importance of wearing seatbelts and the consequences of not wearing them.

b) <u>Federal Leadership on Reducing Text Messaging while Driving (Executive Order 13513)</u>

Recipients are encouraged to adopt and enforce policies that ban text messaging while driving, including conducting initiatives of the type described in section 3(a) of the order.

(http://www.whitehouse.gov/the_press_office/Executive-Order-Federal-Leadership-on-Reducing-Text-Messaging-while-Driving/)

c) Use of U.S. Flag Air Carriers (49 USC Section 40118)

Any air transportation to, from, between or within a country other than the U.S. of persons or property, the expense of which will be paid in whole or in part by U.S. Government funding, must be performed by, or under a code-sharing arrangement with, a U.S. flag air carrier if service provided by such a carrier is "available" (49 U.S.C. 40118, commonly referred to as the Fly America Act). Tickets (or documentation for electronic tickets) must identify the U.S. flag air carrier's designator code and flight number. See the Federal Travel Regulation §301-10.131 - §301-10.143 for definitions, exceptions, and documentation requirements. (See also Comp. Gen. Decision B-240956, dated September 25, 1991.)

d) Trafficking in Persons (2 CFR Part 175)

a. *Provisions applicable to a recipient that is a private entity.*

1. You as the recipient, your employees, subrecipients under this award, and subrecipients' employees may not—

i. Engage in severe forms of trafficking in persons during the period of time that the award is in effect;

ii. Procure a commercial sex act during the period of time that the award is in effect; or

iii. Use forced labor in the performance of the award or subawards under the award.

2. We as the Federal awarding agency may unilaterally terminate this award, without penalty, if you or a subrecipient that is a private entity —

i. Is determined to have violated a prohibition in paragraph a.1 of this award term; or

ii. Has an employee who is determined by the agency official authorized to terminate the award to have violated a prohibition in paragraph a.1 of this award term through conduct that is either—

A. Associated with performance under this award; or

B. Imputed to you or the subrecipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR part 180, "OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement)," as implemented by our agency at 2 CFR part 1400.

b. *Provision applicable to a recipient other than a private entity.*

We as the Federal awarding agency may unilaterally terminate this award, without penalty, if a subrecipient that is a private entity—

1. Is determined to have violated an applicable prohibition in paragraph a.1 of this award term; or

2. Has an employee who is determined by the agency official authorized to terminate the award to have violated an applicable prohibition in paragraph a.1 of this award term through conduct that is either—

i. Associated with performance under this award; or

ii. Imputed to the subrecipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR part 180, "OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement)," as implemented by our agency at 2 CFR part 1400.

c. *Provisions applicable to any recipient.*

1. You must inform us immediately of any information you receive from any source alleging a violation of a prohibition in paragraph a.1 of this award term.

2. Our right to terminate unilaterally that is described in paragraph a.2 or b of this section:

i. Implements section 106(g) of the Trafficking Victims Protection Act of 2000 (TVPA), as amended (22 U.S.C. 7104(g)), and

ii. Is in addition to all other remedies for noncompliance that are available to us under this award.

3. You must include the requirements of paragraph a.1 of this award term in any subaward you make to a private entity.

d. *Definitions.*

For purposes of this award term:

1. "Employee" means either:

i. An individual employed by you or a subrecipient who is engaged in the performance of the project or program under this award; or

ii. Another person engaged in the performance of the project or program under this award and not compensated by you including, but not limited to, a volunteer or individual whose services are contributed by a third party as an in-kind contribution toward cost sharing or matching requirements.

2. "Forced labor" means labor obtained by any of the following methods: the recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery.

3. "Private entity":

i. Means any entity other than a State, local government, Indian tribe, or foreign public entity, as those terms are defined in 2 CFR 175.25.

ii. Includes:

A. A nonprofit organization, including any nonprofit institution of higher education, hospital, or tribal organization other than one included in the definition of Indian tribe at 2 CFR 175.25(b).

B. A for-profit organization.

4. "Severe forms of trafficking in persons," "commercial sex act," and "coercion" have the meanings given at section 103 of the TVPA, as amended (22 U.S.C. 7102).

e) Reporting Subawards and Executive Compensation Information (2 CFR Part 170).

a. *Reporting of first-tier subawards.*

1. *Applicability.* Unless you are exempt as provided in paragraph d. of this award term, you must report each action that obligates $25,000 or more in Federal funds that does not include Recovery funds (as defined in section 1512(a)(2) of the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5) for a subaward to an entity (see definitions in paragraph e. of this award term).

2. *Where and when to report.*

i. You must report each obligating action described in paragraph a.1. of this award term to *http://www.fsrs.gov.*

ii. For subaward information, report no later than the end of the month following the month in which the obligation was made. (For example, if the obligation was made on November 7, 2010, the obligation must be reported by no later than December 31, 2010.)

3. *What to report.* You must report the information about each obligating action that the submission instructions posted at *http://www.fsrs.gov specify*.

b. *Reporting Total Compensation of Recipient Executives.*

1. *Applicability and what to report.* You must report total compensation for each of your five most highly compensated executives for the preceding completed fiscal year, if—

i. the total Federal funding authorized to date under this award is $25,000 or more;

ii. in the preceding fiscal year, you received—

(A) 80 percent or more of your annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and

(B) $25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and

iii. The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at *http://www.sec.gov/answers/execomp.htm.*)

2. *Where and when to report.* You must report executive total compensation described in paragraph b.1. of this award term:

i. As part of your registration profile at *https://www.sam.gov.*

ii. By the end of the month following the month in which this award is made, and annually thereafter.

c. *Reporting of Total Compensation of Subrecipient Executives.*

1. *Applicability and what to report.* Unless you are exempt as provided in paragraph d. of this award term, for each first-tier subrecipient under this award, you shall report the names and total compensation of each of the subrecipient's five most highly compensated executives for the subrecipient's preceding completed fiscal year, if—

i. in the subrecipient's preceding fiscal year, the subrecipient received—

(A) 80 percent or more of its annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and

(B) $25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts), and Federal financial assistance subject to the Transparency Act (and subawards); and

ii. The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at *http://www.sec.gov/answers/execomp.htm.*)

2. *Where and when to report.* You must report subrecipient executive total compensation described in paragraph c.1. of this award term:

i. To the recipient.

ii. By the end of the month following the month during which you make the subaward. For example, if a subaward is obligated on any date during the month of October of a given year (*i.e.,* between October 1 and 31), you must report any required compensation information of the subrecipient by November 30 of that year.

d. *Exemptions*

If, in the previous tax year, you had gross income, from all sources, under $300,000, you are exempt from the requirements to report:

i. Subawards,

and

ii. The total compensation of the five most highly compensated executives of any subrecipient.

e. *Definitions.* For purposes of this award term:

1. *Entity* means all of the following, as defined in 2 CFR part 25:

i. A Governmental organization, which is a State, local government, or Indian tribe;

ii. A foreign public entity;

iii. A domestic or foreign nonprofit organization;

iv. A domestic or foreign for-profit organization;

v. A Federal agency, but only as a subrecipient under an award or subaward to a non-Federal entity.

2. *Executive* means officers, managing partners, or any other employees in management positions.

3. *Subaward:*

i. This term means a legal instrument to provide support for the performance of any portion of the substantive project or program for which you received this award and that you as the recipient award to an eligible subrecipient.

ii. The term does not include your procurement of property and services needed to carry out the project or program (for further explanation, see Sec. __ .210 of the attachment to OMB Circular A-133, "Audits of States, Local Governments, and Non-Profit Organizations").

iii. A subaward may be provided through any legal agreement, including an agreement that you or a subrecipient considers a contract.

4. *Subrecipient* means an entity that:

i. Receives a subaward from you (the recipient) under this award; and

ii. Is accountable to you for the use of the Federal funds provided by the subaward.

5. *Total compensation* means the cash and noncash dollar value earned by the executive during the recipient's or subrecipient's preceding fiscal year and includes the following (for more information see 17 CFR 229.402(c)(2)):

i. *Salary and bonus.*

ii. *Awards of stock, stock options, and stock appreciation rights.* Use the dollar amount recognized for financial statement reporting purposes with respect to the fiscal year in accordance with the Statement of Financial Accounting Standards No. 123 (Revised 2004) (FAS 123R), Shared Based Payments.

iii. *Earnings for services under non-equity incentive plans.* This does not include group life, health, hospitalization or medical reimbursement plans that do not discriminate in favor of executives, and are available generally to all salaried employees.

iv. *Change in pension value.* This is the change in present value of defined benefit and actuarial pension plans.

v. *Above-market earnings on deferred compensation which is not tax-qualified.*

vi. Other compensation, if the aggregate value of all such other compensation (e.g. severance, termination payments, value of life insurance paid on behalf of the employee, perquisites or property) for the executive exceeds $10,000.

f) <u>System of Award Management and Universal Identifier Requirements (2 CFR Part 25)</u>

a. *Requirement for System of Award Management*

Unless you are exempted from this requirement under 2 CFR 25.110, you as the recipient must maintain the currency of your information in the SAM until you submit the final financial report required under this award or receive the final payment, whichever is later. This requires that you review and update the information at least annually after the initial registration, and more frequently if required by changes in your information or another award term.

b. *Requirement for Unique Entity identifier Numbers*

If you are authorized to make subawards under this award, you:

1. Must notify potential subrecipients that no entity (*see* definition in paragraph C of this award term) may receive a subaward from you unless the entity has provided its unique entity identifier number to you.

2. May not make a subaward to an entity unless the entity has provided its DUNS number to you.

c. *Definitions*

For purposes of this award term:

1. *System of Award Management(SAM)* means the Federal repository into which an entity must provide information required for the conduct of business as a recipient. Additional information about registration procedures may be found at the SAM Internet site (currently at *http://www.sam.gov*).

2. *Unique entity identifier* means the identifier required for SAM registration to uniquely identify business entities.

3. *Entity,* as it is used in this award term, means all of the following, as defined at 2 CFR part 25, subpart C:

i. A Governmental organization, which is a State, local government, or Indian Tribe;

ii. A foreign public entity;

iii. A domestic or foreign nonprofit organization;

iv. A domestic or foreign for-profit organization; and

v. A Federal agency, but only as a subrecipient under an award or subaward to a non-Federal entity.

4. *Subaward:*

i. This term means a legal instrument to provide support for the performance of any portion of the substantive project or program for which you received this award and that you as the recipient award to an eligible subrecipient.

ii. The term does not include your procurement of property and services needed to carry out the project or program (for further explanation, see 2 CFR 200.330).

iii. A subaward may be provided through any legal agreement, including an agreement that you consider a contract.

5. *Subrecipient* means an entity that:

i. Receives a subaward from you under this award; and

ii. Is accountable to you for the use of the Federal funds provided by the subaward.

g) Prohibition on Members of Congress Making Contracts with Federal Government (41 USC Section 6306)

No member of or delegate to the United States Congress or Resident Commissioner shall be admitted to any share or part of this award, or to any benefit that may arise therefrom; this provision shall not be construed to extend to an award made to a corporation for the public's general benefit.

h) Enhancement of Recipient and Subrecipient Employee Whistleblower Protection (41 USC Section 4712)

a. This award, related subawards, and related contracts over the simplified acquisition threshold and all employees working on this award, related subawards, and related contracts over the simplified acquisition threshold are subject to the whistleblower rights and remedies established at 41 USC 4712.

b. Recipients, their subrecipients, and their contractors awarded contracts over the simplified acquisition threshold related to this award, shall inform their employees in writing, in the predominant language of the workforce, of the employee whistleblower rights and protections under 41 USC 4712.

c. The recipient shall insert this clause, including this paragraph (c), in all subawards and in contracts over the simplified acquisition threshold related to this award.

i) Prohibition on Issuing Financial Assistance Awards to Entities that Require Certain Internal Confidentiality Agreements (P.L. 113-235)

Section 743 of Division E, Title VII of the Consolidated and Further Continuing Resolution Appropriations Act of 2015 (Pub. L. 113-235) prohibits the use of funds appropriated or otherwise made available under that or any other Act for grants or cooperative agreements to an entity that requires employees or contractors of such entity seeking to report fraud, waste, or abuse to sign internal confidentiality agreements or statements prohibiting or otherwise restricting such employees or contractors from lawfully reporting such waste, fraud, or abuse to a designated investigative or law enforcement representative of a federal department or agency authorized to receive such information.

Recipients must not require their employees or contractors seeking to report fraud, waste, or abuse to sign internal confidentiality agreements or statements prohibiting or otherwise restricting such employees or contractors from lawfully reporting such waste, fraud, or abuse to a designated investigative or law enforcement representative of a federal department or agency authorized to receive such information.

Recipients must notify their employees or contractors that existing internal confidentiality agreements covered by this condition are no longer in effect.

j) Patent Rights (37 CFR § 401.14)

Unless otherwise provided in the Agreement, if this Agreement is for experimental, developmental, or research work, the following clause (implementing the Bayh-Dole Act, [35 U.S.C. § 200 et seq.]) shall apply. The recipient shall include this clause in all subawards for experimental, developmental, or research activities.

a. *Definitions*

1. INVENTION means any invention or discovery which is or may be patentable or otherwise protectable under Title 35 of the USC, to any novel variety of plant which is or may be protected under the Plant Variety Protection Act (7 U.S.C. § 2321 et seq.).
2. SUBJECT INVENTION means any invention of the recipient conceived or first actually reduced to practice in the performance of work under this Agreement, provided that in the case of a variety of plant, the date of determination (as defined in section 41(d)) must also occur during the period of performance.
3. PRACTICAL APPLICATION means to manufacture in the case of a composition or product, to practice in the case of a process or method, or to operate in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are to the extent permitted by law or Government regulations available to the public on reasonable terms.
4. MADE when used in relation to any invention means the conception or first actual reduction to practice of such invention.
5. SMALL BUSINESS FIRM means a small business concern as defined at section 2 of Pub. L. 85–536 (15 U.S.C. 632) and implementing regulations of the Administrator of the Small Business Administration. For the purpose of this clause, the size standards for small business concerns involved in government procurement and subcontracting at 13 CFR 121.3–8 and 13 CFR 121.3–12, respectively, will be used.
6. NON-PROFIT ORGANIZATION means a domestic university or other institution of higher education or an organization of the type described in Section 501(c)(3) of the Internal Revenue Code of 1954 (26 U.S.C. § 501(c)) and exempt from taxation under Section 501(a) of the Internal Revenue Code (26 U.S.C. § 501(a)) or any domestic non-profit scientific or educational organization qualified under a State non-profit organization statute. b. Allocation of Principal Rights The recipient may retain the entire right, title, and interest throughout the world to each subject invention subject to the provisions of this Patent Rights clause and 35 U.S.C. § 203. With respect to any subject invention in which the recipient retains title, the Federal Government shall have a non-exclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the U.S. the subject invention throughout the world. If the Agreement indicates it is subject to an identified international agreement or treaty, the U.S. Geological Survey (USGS) also has the right to direct the recipient to convey to any foreign participant such patent rights to subject inventions as are required to comply with that agreement or treaty.

b. *Allocation of Principal Rights*

1. The recipient may retain the entire right, title, and interest throughout the world to each subject invention subject to the provisions of this Patent Rights clause, including (2) below, and 35 U.S.C. § 203. With respect to any subject invention in which the recipient retains title, the Federal Government shall have a non-exclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the U.S. the subject invention throughout the world. If the Agreement indicates it is subject to an identified international

agreement or treaty, the U.S. Geological Survey (USGS) also has the right to direct the recipient to convey to any foreign participant such patent rights to subject inventions as are required to comply with that agreement or treaty.

2. If the recipient performs services at a Government owned and operated laboratory or at a Government owned and recipient operated laboratory directed by the Government to fulfill the Government's obligations under a Cooperative Research and Development Agreement (CRADA) authorized by 15 U.S.C. 3710a, the Government may require the recipient to negotiate an agreement with the CRADA collaborating party or parties regarding the allocation of rights to any subject invention the recipient makes, solely or jointly, under the CRADA. The agreement shall be negotiated prior to the recipient undertaking the CRADA work or, with the permission of the Government, upon the identification of a subject invention. In the absence of such an agreement, the recipient agrees to grant the collaborating party or parties an option for a license in its inventions of the same scope and terms set forth in the CRADA for inventions made by the Government.

If a known CRADA exists between the USGS and the recipient, include the CRADA as an attachment and include the following paragraph following b.2.:

USGS has determined that use of alternate paragraph (b) in the preceding clause is required to meet USGS' obligations under (identify CRADA). This determination may be appealed in accordance with 37 CFR 401.4. Recipient agrees that the work performed under this Agreement is directed by USGS to meet the obligations under the CRADA. Recipient further agrees to grant licenses to the government and (insert additional CRADA partner names, if applicable) as necessary to meet USGS' obligations under the CRADA.

c. *Invention Disclosure, Election of Title and Filing of Patent Applications by Recipient*

1. The recipient will disclose each subject invention to USGS within two months after the inventor discloses it in writing to recipient personnel responsible for the administration of patent matters. The disclosure to USGS shall be in the form of a written report and shall identify the Agreement under which the invention was made and the inventor(s). It shall be sufficiently complete in technical detail to convey a clear understanding of the nature, purpose, operation, and, to the extent known, the physical, chemical, biological or electrical characteristics of the invention. The disclosure shall also identify any publication, on sale or public use of the invention, whether a manuscript describing the invention has been submitted for publication and, if so, whether it has been accepted for publication, at the time of disclosure. In addition, after disclosure to USGS, the recipient will promptly notify USGS of the acceptance of any manuscript describing the invention for publication, or of any on sale or public use planned by the recipient.
2. The recipient will elect in writing whether or not to retain title to any such invention by notifying USGS within two years of disclosure to USGS. However, in any case where publication, on sale, or public use has initiated the one-year statutory period wherein valid patent protection can still be obtained in the U.S., the period for election of title may be

shortened by USGS to a date that is no more than 60 days prior to the end of the statutory period.

3. The recipient will file its initial patent application on an invention to which it elects to retain title within one year after election of title or, if earlier, prior to the end of any statutory period wherein valid patent protection can be obtained in the U.S. after a publication, on sale, or public use. The recipient will file patent applications in additional countries or international patent offices within either ten months of the corresponding initial patent application, or six months from the date when permission is granted by the Commissioner of Patents and Trademarks to file foreign patent applications when such filing has been prohibited by a Secrecy Order.
4. Requests for extension of the time for disclosure to USGS, election, and filing under subparagraphs 1., 2., and 3. may, at the discretion of USGS, be granted.

d. *Conditions When the Government May Obtain Title*

The recipient will convey to USGS, upon written request, title to any subject invention:

1. if the recipient fails to disclose or elect the subject invention within the times specified in paragraph c. above, or elects not to retain title, provided that USGS may only request title within 60 days after learning of the failure of the recipient to disclose or elect within the specified times;
2. in those countries in which the recipient fails to file patent applications within the times specified in paragraph c. above, but prior to its receipt of the written request of USGS, the recipient shall continue to retain title in that country; or in any country in which the recipient decides not to continue the prosecution of any application for, to pay the maintenance fees on, or defend in a reexamination or opposition proceeding on, a patent on a subject invention.

e. *Minimum Rights to Recipient*

1. The recipient will retain a non-exclusive royalty-free license throughout the world in each subject invention to which the Government obtains title, except if the recipient fails to disclose the subject invention within the times specified in paragraph c. above. The recipient's license extends to its domestic subsidiaries and affiliates, if any, within the corporate structure of which the recipient is a party and includes the right to grant sublicenses of the same scope to the extent the recipient was legally obligated to do so at the time the Agreement was made. The license is transferable only with the approval of USGS except when transferred to the successor of that part of the recipient's business to which the invention pertains.
2. The recipient's domestic license may be revoked or modified by USGS to the extent necessary to achieve expeditious practical application of the subject invention pursuant to an application for an exclusive license submitted in accordance with applicable provisions at 37 CFR Part 404. This license will not be revoked in that field of use or the geographical areas in which the recipient has achieved practical application and continues to make the benefits of the invention reasonably accessible to the public. The license in any foreign country may be revoked or modified at discretion of USGS to the extent the recipient, its

licensees, or its domestic subsidiaries or affiliates have failed to achieve practical application in that foreign country.

3. Before revocation or modification of the license, USGS will furnish the recipient a written notice of its intention to revoke or modify the license, and the recipient will be allowed thirty days (or such other time as may be authorized by USGS for good cause shown by the recipient) after the notice to show cause why the license should not be revoked or modified. The recipient has the right to appeal, in accordance with applicable regulations in 37 CFR Part 404 concerning the licensing of Government-owned inventions, any decision concerning the revocation or modification of its license.

f. *Recipient Action to Protect Government's Interest*

1. The recipient agrees to execute or to have executed and promptly deliver to USGS all instruments necessary to: (i) establish or confirm the rights the Government has throughout the world in those subject inventions for which the recipient retains title; and (ii) convey title to USGS when requested under paragraph d. above, and to enable the Government to obtain patent protection throughout the world in that subject invention.
2. The recipient agrees to require, by written agreement, its employees, other than clerical and non-technical employees, to disclose promptly in writing to personnel identified as responsible for the administration of patent matters and in a format suggested by the recipient each subject invention made under this Agreement in order that the recipient can comply with the disclosure provisions of paragraph c. above, and to execute all papers necessary to file patent applications on subject inventions and to establish the Government's rights in the subject inventions. The disclosure format should require, as a minimum, the information requested by paragraph c.1 above. The recipient shall instruct such employees through the employee agreements or other suitable educational programs on the importance of reporting inventions in sufficient time to permit the filing of patent applications prior to U.S. or foreign statutory bars.
3. The recipient will notify USGS of any decision not to continue prosecution of a patent application, pay maintenance fees, or defend in a reexamination or opposition proceeding on a patent, in any country, not less than 30 days before the expiration of the response period required by the relevant patent office.
4. The recipient agrees to include, within the specification of any U.S. patent application and any patent issuing thereon covering a subject invention, the following statement: "This invention was made with Government support under (identify the Agreement) awarded by the U.S. Geological Survey. The Government has certain rights in this invention."
5. The recipient or its representative will complete, execute and forward to USGS a confirmation of a License to the U.S. Government and the page of a United States patent application that contains the Federal support clause within two months of filing any domestic or foreign patent application.

g. *Subcontracts*

1. The recipient will include this Patent Rights clause, suitably modified to identify the parties, in all subcontracts, regardless of tier, for experimental, developmental or research

work. The subcontractor will retain all rights provided for the recipient in this Patent Rights clause, and the recipient will not, as part of the consideration for awarding the subcontract, obtain rights in the subcontractors' subject inventions.

2. In the case of subcontracts, at any tier, when the prime award by USGS was a contract (but not a cooperative agreement), USGS, subcontractor, and contractor agree that the mutual obligations of the parties created by this Patent Rights clause constitute a contract between the subcontractor and the Foundation with respect to those matters covered by this Patent Rights clause.

h. *Reporting on Utilization of Subject Inventions*
The recipient agrees to submit on request periodic reports no more frequently than annually on the utilization of a subject invention or on efforts at obtaining such utilization that are being made by the recipient or its licensees or assignees. Such reports shall include information regarding the status of development, date of first commercial sale or use, gross royalties received by the recipient and such other data and information as USGS may reasonably specify. The recipient also agrees to provide additional reports in connection with any march-in proceeding undertaken by USGS in accordance with paragraph j. of this Patent Rights clause. As required by 35 U.S.C. § 202(c)(5), USGS agrees it will not disclose such information to persons outside the Government without the permission of the recipient.

i. *Preference for United States Industry*
Notwithstanding any other provision of this Patent Rights clause, the recipient agrees that neither it nor any assignee will grant to any person the exclusive right to use or sell any subject invention in the U.S. unless such person agrees that any products embodying the subject invention or produced through the use of the subject invention will be manufactured substantially in the U.S. However, in individual cases, the requirement for such an agreement may be waived by USGS upon a showing by the recipient or its assignee that reasonable but unsuccessful efforts have been made to award licenses on similar terms to potential licensees that would be likely to manufacture substantially in the U.S. or that under the circumstances domestic manufacture is not commercially feasible.

j. *March-in Rights*
The recipient agrees that with respect to any subject invention in which it has acquired title, USGS has the right in accordance with procedures at 37 CFR § 401.6 and USGS regulations at 45 CFR § 650.13 to require the recipient, an assignee or exclusive licensee of a subject invention to grant a non-exclusive, partially exclusive, or exclusive license in any field of use to a responsible applicant or applicants, upon terms that are reasonable under the circumstances and if the recipient, assignee, or exclusive licensee refuses such a request, USGS has the right to grant such a license itself if USGS determines that:

1. such action is necessary because the recipient or assignee has not taken or is not expected to take within a reasonable time, effective steps to achieve practical application of the subject invention in such field of use;

2. such action is necessary to alleviate health or safety needs which are not reasonably satisfied by the recipient, assignee, or their licensees;
3. such action is necessary to meet requirements for public use specified by Federal regulations and such requirements are not reasonably satisfied by the recipient, assignee, or licensee; or
4. such action is necessary because the agreement required by paragraph i. of this Patent Rights clause has not been obtained or waived or because a licensee of the exclusive right to use or sell any subject invention in the U.S. is in breach of such agreement.

k. *Special Provisions for Agreements with Non-profit Organizations*
If the recipient is a nonprofit organization, it agrees that:
1. rights to a subject invention in the U.S. may not be assigned without the approval of USGS, except where such assignment is made to an organization which has as one of its primary functions the management of inventions, provided that such assignee will be subject to the same provisions as the recipient;
2. the recipient will share royalties collected on a subject invention with the inventor, including Federal employee co-inventors (when USGS deems it appropriate) when the subject invention is assigned in accordance with 35 U.S.C. § 202(e) and 37 CFR § 401.10;
3. the balance of any royalties or income earned by the recipient with respect to subject inventions, after payment of expenses (including payments to inventors) incidental to the administration of subject inventions, will be utilized for the support of scientific or engineering research or education; and
4. it will make efforts that are reasonable under the circumstances to attract licensees of subject inventions that are small business firms and that it will give preference to a small business firm if the recipient determines that the small business firm has a plan or proposal for marketing the invention which, if executed, is equally likely to bring the invention to practical application as any plans or proposals from applicants that are not small business firms; provided that the recipient is also satisfied that the small business firm has the capability and resources to carry out its plan or proposal. The decision whether to give a preference in any specific case will be at the discretion of the recipient. However, the recipient agrees that the Secretary of Commerce may review the recipient's licensing program and decisions regarding small business applicants, and the recipient will negotiate changes to its licensing policies, procedures or practices with the Secretary when the Secretary's review discloses that the recipient could take reasonable steps to implement more effectively the requirements of this paragraph k.4.

l. *Communications*
All communications required by this Patent Rights clause must be submitted through the Office of Policy and Analysis (OPA), U.S. Geological Survey, Reston, VA 20192, gs_usgs_patents@usgs.gov.

E. Additional General Terms and Conditions

a) Research Integrity

1) USGS requires that all grant or cooperative agreement Recipient organizations adhere to the Federal Policy on Research Misconduct, Office of Science and Technology Policy, December 6, 2000, 65 Federal Register (FR) 76260. The Federal Policy on Research Misconduct outlines requirements for addressing allegations of research misconduct, including the investigation, adjudication, and appeal of allegations of research misconduct and the implementation of appropriate administrative actions.

2) The Recipient must promptly notify the USGS Project Office when research misconduct that warrants an investigation pursuant to the Federal Policy on Research Misconduct is alleged.

b) Access and Rights to Research Data and Other Intangible Property

1) Recipients that are institutions of higher education, hospitals, or non-profit organizations are required to release research data first produced in a project supported in whole or in part with Federal funds that are cited publicly and officially by a Federal agency in support of an action that has the force and effect of law (e.g., regulations and administrative orders). "Research data" is defined as the recorded factual material commonly accepted in the scientific community as necessary to validate research findings. It does not include preliminary analyses; drafts of scientific papers; plans for future research; peer reviews; communications with colleagues; physical objects (e.g., laboratory samples, audio or video tapes); trade secrets; commercial information; materials necessary to be held confidential by a researcher until publication in a peer-reviewed journal; information that is protected under the law (e.g., intellectual property); personnel and medical files and similar files, the disclosure of which would constitute an unwarranted invasion of personal privacy; or information that could be used to identify a particular person in a research study.

2) These requirements do not apply to commercial organizations or to research data produced by State or local governments. However, if a State or local governmental grantee contracts with an educational institution, hospital, or non-profit organization, and the contract results in covered research data, those data are subject to these disclosure requirements.

3) Requests for the release of research data subject to this policy are required to be made to USGS, which will handle them as FOIA requests under 43 CFR 2.25. If the data are publicly available, the requestor will be directed to the public source. Otherwise, the USGS Contract Officer, in consultation with the affected Recipient and the PI, will handle the request. This policy also provides for assessment of a reasonable fee to cover Recipient costs as well as (separately) the USGS costs of responding.

4) Rights to research data and other intangible property shall be distributed in accordance with 2 CFR 200.315.

c) Conflict of Interest

The Recipient must establish safeguards to prohibit its employees and Subrecipients from using their positions for purposes that constitute or present the appearance of a personal or organizational conflict of interest. The Recipient is responsible for notifying the USGS Contracting Officer in writing of any actual or potential conflicts of interest that may arise during the life of this award. Conflicts of interest include any relationship or matter which might place the Recipient or its employees in a position of conflict, real or apparent, between their responsibilities under the agreement and any other outside interests. Conflicts of interest may also include, but are not limited to, direct or indirect financial interests, close personal relationships, positions of trust in outside organizations, consideration of future employment arrangements with a different organization, or decision- making affecting the award that would cause a reasonable person with knowledge of the relevant facts to question the impartiality of the Recipient and/or Recipient's employees and Sub-recipients in the matter.

The USGS Contracting Officer and the servicing Ethics Counselor will determine if a conflict of interest exists. If a conflict of interest exists, the USGS Contracting Officer will determine whether a mitigation plan is feasible. Mitigation plans must be approved by the USGS Contracting Officer in writing. Failure to resolve conflicts of interest in a manner that satisfies the government may be cause for termination of the award.

Failure to make required disclosures may result in any of the remedies described in 2 CFR § 200.338, Remedies for Noncompliance, including suspension or debarment (see also 2 CFR Part 180).

d) Program Income

1) If the Recipient is an educational institution or nonprofit research organization, any other program income will be added to funds committed to the project by the Federal awarding agency and Recipient and be used to further eligible project or program objectives, as described in 2 CFR 200.307(e)(2).

2) For all other types of Recipients, any other program income will be deducted from total allowable costs to determine the net allowable costs before calculating the Government's share of reimbursable costs, as provided in 2 CFR 200.307(e)(1).

e) Government Furnished Equipment or Equipment Authorized for Purchase

Title to equipment acquired wholly or in part with Federal funds shall be vested in the Recipient unless otherwise specified in the award document. The Recipient shall retain control and maintain an inventory of such equipment as long as there is a need for such equipment to accomplish the purpose of the project, whether or not the project continues to be supported by Federal funds. When there is no longer a need for such equipment to accomplish the purpose of the project, the Recipient shall use the equipment in connection with other Federal awards the Recipient has received. Disposal of equipment shall be in accordance with 2 CFR 200.313.

Important Contacts:

Cooperative Unit Headquarters Office Staff:

Melissa Thode
Phone: (703) 648-4265
Email: mthode@usgs.gov

Brenda Croston
Phone: (703) 648-4263
Email: brenda_croston@usgs.gov

Derek Geary
Phone: (703) 648-4380
Email: dgeary@usgs.gov

USGS Office of Acquisition and Grants Staff:

Grant Specialists:

Desiree Santa
Grant Specialist
Phone: (703) 648-7382
Email: dsanta@usgs.gov

Faith Diane Graves
Contract Specialist
Phone (703) 648-7356
Email: fgraves@usgs.gov

Grants.gov and ASAP Enrollment Support:

Laura M. Mahoney
Grant Analyst
Phone: (703) 648-7344
Email: lmahoney@usgs.gov

-- END OF PROGRAM ANNOUNCEMENT--