**COOPERATIVE AGREEMENT NUMBER G17AC00095 BETWEEN**

**THE UNITED STATES GEOLOGICAL SURVEY**

**AND**

**NORTHERN ARIZONA UNIVERSITY**

**OFFER AND ACCEPTANCE:**

The United States of America, acting by and through the USGS, hereby offers a Cooperative Agreement to ABOR for and on behalf of Northern Arizona University for all approved costs up to and not exceeding $50,000 (See B.1) for support described herein. Acceptance of a Federal Financial Assistance award from the Department of the Interior (DOI) carries with it the responsibility to be aware of and comply with the terms and conditions of award. Acceptance is defined as the start of work, drawing down funds, or accepting the award by signature or electronic means. Awards are based on the application submitted to and approved by DOI and are subject to the terms and conditions incorporated either directly or by reference below.

# SECTION A – PROJECT DESCRIPTION

**A.1 Project Description**

The goal is of this research is to synthesize the available data to: 1) resolve and clarify some of the most controversial aspects of biocrust contribution to ecosystem function, and 2) predict changes to biocrust community structure and function in response to land degradation and climate change to inform management and restoration practices. For this research, a team has been assembled of dryland experts, spanning a variety of disciplines, several of which are major contributors to the biocrust literature, to address two broad questions: 1) What factors control the degree to which biocrusts contribute to key ecosystem functions (vascular plant success, water capture and redirection, and soil stability)?; and 2) How is global change likely to affect the function, distribution and diversity of biocrusts?

**A.2 USGS Involvement**

Substantial involvement is anticipated through the terms of this Agreement between the USGS and the Recipient. A summary of the involvement is as follows: USGS researchers will be highly involved in all aspects of data gathering, evaluation, model development, scientific interpretation, and application. USGS scientists provide complimentary expertise to that of outside collaborators, including expertise on biocrusts functions. The recipient, USGS researchers, and other collaborators will alternately assist statistical and modeling analyses focused on different combinations of data parts of the database; in all cases those analyses will be collaborative in nature.

The USGS will also institutionally provide data storage space at the myUSGS portal, physical meeting space, administrative support, and computational resources. The USGS and the recipient will create, and make publicly available, the integrated remotely sensed, modeled and measured database. All final products will involve the recipient, UGSS researchers, and others collaborators as authors.

**SECTION B – FUNDING AND AWARD PERIODS**

**B.1 Funding**

a) The total estimated cost of the USGS share for the performance of this Agreement is

$50,000 inclusive of any renewal years.

b) The amount of federal funds obligated under this Agreement, presently the sum of $50,000, shall be available for payment of costs incurred by the Recipient in performance of this Agreement from March 6, 2017, through March 5, 2018. In no event shall costs be incurred in performance of this Agreement in excess of the funds currently obligated.

**B.2 Award Periods**

The initial budget period is from March 6, 2017, through March 5, 2018. The total project period is from March 6, 2017, through March 5, 2020.

The USGS will consider continued funding for the project upon (1) availability of funds, (2) the Recipient showing satisfactory progress and the USGS’ determination that continuation of the program would be in the best interest of the Government, (3) the submission of a SF 424 “Application for Federal Assistance” with a technical proposal describing the research objectives for the requested budget period, (4) submission of a detailed budget for the requested funding period, 60 calendar days before the current budget period expires; and, (5) strict adherence to the terms and conditions of this Agreement. Any funding that may be provided in excess of the amount currently obligated is subject to the availability of funds and their obligation in accordance with applicable law.

**B.3 Pre-Agreement Costs**

The Recipient is not authorized to incur costs prior to the award of this Agreement. Costs incurred prior to the award of this agreement are not allowable.

**SECTION C - DELIVERABLES**

**C.1 Progress Reports**

1. The Recipient shall submit two copies of each Progress Report to the USGS Project Officer and one copy of the transmittal letter to the USGS Contracting Officer. Unless otherwise specified in this Agreement, annual progress reports should be submitted at least sixty (60) days prior to the end of the current budget period to allow adequate time for the designated office to review the report. In the case of multi-year Agreements, failure to submit timely reports may delay processing of funding increments. For Agreements with a total anticipated performance period of twelve months (12) months or less, only a Final Technical Report will be required. A progress report is not required in the final budget year, unless the Recipient requests an extension to the project period.
2. The progress reports shall include the following information:
3. A comparison of actual accomplishments to the objectives of the Agreement established for the budget period and overall progress in response to the performance metrics.
4. The reasons why established goals were not met, if appropriate.
5. Additional pertinent information including, when appropriate, analysis and explanation of cost overruns or high unit costs.
6. An outline of anticipated activities and adjustments to the program during the next budget period.

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:

* 1. 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.
  2. 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.

**C.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 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.

**C.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 *http://www.whitehouse.gov/omb/grants\_forms*. The SF 425 will be due in accordance with the following schedule. USGS acknowledges that this annual reporting schedule may not always correspond with a specific budget period.

|  |  |  |
| --- | --- | --- |
| 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 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.

**C.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.

**C.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

**SECTION D – ASSISTANCE ADMINISTRATIVE DATA**

**D.1 Assistance Administration**

This Agreement will be administered by the USGS Contracting Officer indicated on the award cover page. Written communications shall make reference to the Assistance Award number and shall be mailed (or emailed) to the Contracting Officer.

This Agreement will be administered by:

U.S. Geological Survey

Office of Acquisition and Grants

12201 Sunrise Valley Drive, MS 205

Reston, VA 20192

Attn:  Faith Graves

Telephone: 703-648-7356

Fax: 703-648-7901

Email:  [fgraves@usgs.gov](mailto:fgraves@usgs.gov)

Written communications shall make reference to the Assistance Award number and shall be mailed (or emailed) to the above address.

**D.2 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](http://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.

**D.3 Revisions and Prior Approvals**

Modifications to this Agreement shall generally be executed by mutual written consent of the parties, with the exception of certain purely administrative changes that may be executed unilaterally by the USGS. Recipients may make certain limited budgetary and programmatic changes without prior USGS approval as outlined in 2 CFR 200.308 and 200.407. Any proposed change which requires prior written approval of the USGS shall be submitted in writing to the address at D.1 at least thirty (30) days prior to the requested effective date of the proposed change. The USGS will respond to the change request within thirty (30) days of receipt.

a) Extensions. Recipients are specifically advised that requests for extension or other change to the budget or project period(s) require prior written approval. Such requests must be submitted as outlined above and be accompanied by a statement supporting the extension and a revised budget indicating the planned use of all unexpended funds during the proposed extension period.

b) Transfer of Funds. Recipients are specifically advised that prior written approval of the USGS Contracting Officer is not required for transfer of funds between direct cost categories when the cumulative amount of the transfer during the performance period does not exceed ten percent (10%) of the total USGS award. Prior written approval is required from the USGS Contracting Officer for transfers of funds in excess of the ten percent limitation.

c) Carry Forward of Funds. Recipients are specifically advised that prior written approval by the USGS Contracting Officer is required to carry forward unobligated balances to subsequent budget periods. It is expected that funds be expended during the budget period for which they are obligated. The request must include the amount of funds to be carried over, why the carry-over of funds is necessary, and for how long the funds should be carried over.

**SECTION E - GENERAL PROVISIONS**

**E.1 Cost Principles, Audit, And Administrative Requirements**

The Recipient shall be subject to the following regulations, which are incorporated herein by reference. Copies of these regulations can be obtained from the Internet at: *http://www.whitehouse.gov/omb/grants\_docs*

Educational Institutions / State and Local Governments / Non-Profit Organizations

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.

Foreign Entities

* **Administrative Requirements**

Foreign entities are subject to the requirements applicable to non-Federal entities in 2 CFR Part 200, Subparts A through D and:

*Foreign public entities* are also subject to the requirements specific to States, with the following exceptions:

* The State payment procedures in 200.305(a) do not apply. Foreign public entities must follow the payment procedures in 200.305(b).
* The requirements in 200.321 “Contracting with small and minority businesses, women’s business enterprises, and labor surplus area firms” do not apply.
* The requirements in 200.322 “Procurement of recovered materials” do not apply.

*Foreign non-profit organizations* (see definition in 2 CFR 200.70) are also subject to the requirements specific to non-profit organizations.

*Foreign Institutions of Higher Education* (IHEs) (i.e., institutions located outside the United States that meet the definition in 20 US.C. 1001) are also subject to the requirements specific to IHEs.

* **Cost Principles**

*Foreign for-profit entities* are subject to the cost principles in 48 CFR 1, Subpart 31.2.

*Foreign hospitals* (i.e., a facility licensed as a hospital under the law of any foreign governmental entity or a facility operated as a hospital by a foreign public entity) are subject to the cost principles in 45 CFR Part 74, Appendix E.

*All other foreign entities* are subject to the requirements applicable to non-Federal entities in 2 CFR Part 200, Subpart E.

*Foreign public entities* are also subject to the requirements specific to States.

* **Indirect Cost Rate Negotiations**

*Foreign IHEs*: [Appendix III to Part 200](http://www.ecfr.gov/cgi-bin/text-idx?SID=1a927c7fbc22cb60d19bcdd27f7b9c35&node=pt2.1.200&rgn=div5#ap2.1.200_1521.iii)—Indirect (F&A) Costs Identification and Assignment, and Rate Determination for IHEs. The U.S. Department of Health and Human Services (HHS) is the cognizant agency for indirect costs for foreign IHEs. Visit HHS’ Cost Allocation Services website at <https://rates.psc.gov/> for more information.

*Foreign non-profit organizations*: [Appendix IV to Part 200](http://www.ecfr.gov/cgi-bin/text-idx?SID=1a927c7fbc22cb60d19bcdd27f7b9c35&node=pt2.1.200&rgn=div5#ap2.1.200_1521.iv)—Indirect (F&A) Costs Identification and Assignment, and Rate Determination for Nonprofit Organizations.

*Foreign public entities:* [Appendix VII to Part 200](http://www.ecfr.gov/cgi-bin/text-idx?SID=1a927c7fbc22cb60d19bcdd27f7b9c35&node=pt2.1.200&rgn=div5#ap2.1.200_1521.vii)—States and Local Government and Indian Tribe Indirect Cost Proposals.

*Foreign for-profit entities:* Contact the National Interior Business Center (IBC), Indirect Cost Services by telephone at (916) 566-7111 or by e-mail at: [ics@ibc.doi.gov](mailto:ics@ibc.doi.gov). Visit the IBC’s Indirect Cost Services website at <http://www.doi.gov/ibc/services/Indirect_Cost_Services/index.cfm> for more information.

*Foreign hospitals:* 45 CFR Part 74, Appendix E—Principles for Determining Cost Applicable to Research and Development Under Grants and Contracts with Hospitals. HHS is the cognizant agency for indirect costs for foreign hospitals. Visit HHS’ Cost Allocation Services website at <https://rates.psc.gov/> for more information.

For-Profit Entities, Individuals, and Others Not Covered Above

* **Administrative Requirements**

2 CFR Part 200, Subparts A through D, *Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards*

* **Cost Principles**

48 CFR 1, Subpart 31.2, *Contracts with Commercial Organizations*

* **Indirect Cost Rate Negotiations**

For information on indirect cost rate negotiations, contact the Interior Business Center (IBC) Indirect Cost Services Division by telephone at (916) 566-7111 or by e-mail at: [ics@](mailto:ics@nbc.gov)[ibc.doi.gov](mailto:doris_w_jensen@nbc.gov). Visit the IBC Indirect Cost Services Division website at <http://www.doi.gov/ibc/services/Indirect_Cost_Services/index.cfm> for more information.

**E.2 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)]*

**E.3 Additional Articles Required For Compliance with Statute or Regulation**

a) The Seat Belt Provision (Executive Order 13043)

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) Federal Leadership on Reducing Text Messaging while Driving (Executive Order 13513)

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) System of Award Management and Universal Identifier Requirements (2 CFR Part 25)

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.

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.4 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.

No equipment is provided or authorized for purchase on this grant/cooperative agreement.

**SECTION F – SPECIAL PROVISIONS**

NONE.

**SECTION G – DOCUMENTS INCORPORATED BY REFERENCE AND ORDER OF PRECEDENCE**

**G.1 Documents Incorporated By Reference**

The following documents are hereby incorporated into this Agreement by reference:

1. The Recipient’s proposal titled: “Completing the Dryland Puzzle: Creating a Predictive Framework for Biological Soil Crust Function and Response to Climate Change”, dated February 21, 2017.
2. The Recipient’s application for financial assistance (SF424, SF424A, SF424B), dated February 21, 2017.

**G.2 Order of Precedence**

In the event of any inconsistency within this Agreement, the following order of precedence shall be followed:

1. The cover page.
2. Sections A through F of this Agreement.
3. Documents incorporated by reference (see G.1) in the order in which they are incorporated.

**– END OF ASSISTANCE AWARD DOCUMENT –**