Funding Opportunity Announcement

MUSSEL HABITAT SURVEY AND ASSESSMENT
FORT LEONARD WOOD, MISSOURI

Funding Agency : *U.S. ARMY CORPS OF ENGINEERS* *KANSAS CITY DISTRICT* *601 E 12TH STREET, ROOM 647* *KANSAS CITY, MO 64106*	**Funding Instrument:** Cooperative Agreement **Funding Opportunity No:** W912DQ-18-2-0008 **CFDA No:** 12.114 **Program Title:** Mussel Habitat Survey And Assessment at Fort Leonard Wood, Missouri
Issue Date: 20180801	**Application Due Date:** 20180831

Overview:

SUMMARY OF WORK: The non-federal entity will conduct is to conduct habitat assessments, qualitative presence/probable absence, and follow-up quantitative survey for the threatened and endangered freshwater mussel species within the Big Piney River and Roubidoux Creek, the primary tributaries that support the species within Fort Leonard Wood, Missouri.

BACKGROUND: Fort Leonard Wood currently consists of 61,410 acres and is designated as an active IMCOM installation. The Installation is located just south of Waynesville and St. Robert, in Pulaski County, Missouri. Fort Leonard Wood is the home of the U.S. Army Engineer's School, the U.S. Army Maneuver Support Center of Excellence, the U.S. Army Military Police School, and the U.S. Army Chemical, Biological, Radiological and Nuclear School. Fort Leonard Wood consists of approximately 44,500 acres of forested habitat within the Ozarks Highlands region of Missouri. The results of Phase I of this project and Stream surveys for mussel and fish communities have been conducted at Fort Leonard Wood will be utilized as background information for developing investigation protocols for Phase II of this project.

ELIGIBILITY REQUIREMENTS: All responsible, non-federal entities submitting funding requests that meet the requirements in the program description will be considered for this funding opportunity.

STATUTORY AUTHORITY: Title 16 U.S.C. Section 670c-1 provides, in part, that "[t]he Secretary of a military department may enter into cooperative agreements…with nongovernmental organizations" for the purposes of "[t]he maintenance and improvement of natural resources on, or to benefit natural and historic research on, military installations and State-owned National Guard installations."

Estimated Total Funding: $48,000	**Estimated Number of Awards:** 1

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Contact Information: Questions relating to Grants.gov including the registration process and system requirements should be directed to the Grants.gov Contact Center at 1-800-518-4726. For assistance with the requirements of this Funding Opportunity Announcement, please contact Ms. Mandy Ashmore by email at mandy.ashmore@usace.army.mil or by phone at (816) 389-3839.

Instructions to Applicants:
The complete funding opportunity announcement, application forms, and instructions are available for download at Grants.gov.

Applications in response to this Funding Opportunity Announcement shall be submitted by the application due date. Applications may be submitted by mail, email, or via the internet through Grants.gov.

Applicants shall have a Dun and Bradstreet Data Universal Numbering System (DUNS) number, register with the System of Award Management (SAM), and if submitting application via the internet, register with Grants.gov.

See Section D of the Funding Opportunity Announcement for complete application submission information.

Section A: Program Description

1.0 Purpose of Assistance Agreement

The project objective is to evaluate military operations and sustainment/enhancement activities in accordance with Section 7 of the Endangered Species Act to develop programmatic conservation measures for federally listed and mussel species of concern on Fort Leonard Wood (FLW). Specific threatened and endangered target species for the surveys include the Spectaclecase (Cumberlandia monodonta) and to a lesser degree the Scaleshell (Leptodea leptodon) within an approximate 10 mile stretch of the Big Piney River and its primary tributaries that fall within the FLW boundary (Figure 1). In addition, the study area shall also include approximately 9 miles of the upper reach of the Roubidoux Creek that extends from the southern FLW installation boundary to western installation boundary (Figure 1).

The project purpose, to be completed under this agreement, is to conduct habitat assessments, qualitative presence/probable absence, and follow-up quantitative survey for the threatened and endangered freshwater mussel species within the Big Piney River and Roubidoux Creek, the primary tributaries that support the species within Fort Leonard Wood, Missouri.

Tasks will assess the geomorphic and hydrologic characteristics of the Big Piney River and Roubidoux Creek and evaluate their impact on mussel habitats and past/present bed sites as described in the Biological Assessment. Specifically, the study shall: (i) evaluate the locations and degree of reduced connectivity by barriers to fish migration in the channel: (ii) assess the influence of excess sedimentation, bedload transport, and related habitat loss on mussel habitat degradation; (iii) identify the locations of runoff and sediment inputs from land use activities and drainage systems in relation to mussel beds and habitats; and (iv) offer suggestions for improving physical habitat and other ecological factors to help promote mussel recovery.

2.0 Fort Leonard Wood

Fort Leonard Wood currently consists of 61,410 acres and is designated as an active IMCOM installation. The Installation is located just south of Waynesville and St. Robert, in Pulaski County, Missouri. Fort Leonard Wood is the home of the U.S. Army Engineer's School, the U.S. Army Maneuver Support Center of Excellence, the U.S. Army Military Police School, and the U.S. Army Chemical, Biological, Radiological and Nuclear School. Fort Leonard Wood consists of approximately 44,500 acres of forested habitat within the Ozarks Highlands region of Missouri. The results of Phase I of this project and Stream surveys for mussel and fish communities have been conducted at Fort Leonard Wood will be utilized as background information for developing investigation protocols for Phase II of this project.

3.0 Period of Performance

The NFE shall perform all work in accordance with the approved project schedule. The Period of Performance shall commence upon award and expire on 31-DEC-2019.

4.0 Assistance Agreement Costs

The written price proposal shall be rounded to whole dollars and must demonstrate the University's costs to complete the required staffing and or tasks described in the scope of work. The price proposal should be line itemized and reflect the cost elements to complete each task. Any assumptions made in development of the price proposal should be documented.

The price proposal to execute the work does not need to be overly complicated or detailed. We encourage straightforward price proposals. The price proposal needs to show line items and F&A with a clear understanding that the University can provide the required technical assistance at Fort Leonard Wood.

The estimated funding for this requirement is $48,000.

5.0 Payments

Invoices should be sent to the following with the updated schedule and budget:

U.S. Army Corps of Engineers
ATTN: CENWK-EC-DT/Payment Coordinator
601 East 12th Street, Room 505
Kansas City, MO 64106-2896

6.0 Authorizing Statutes

Sikes Act - Title 16 U.S.C. Section 670c-1 - The maintenance and improvement of natural resources on, or to benefit natural and historic research on, military installations and State-owned National Guard installations.

7.0 Project Tasks

In order to accomplish the objectives of this project, it shall be necessary for the NFE to complete the following tasks at Fort Leonard Wood:

Task 1: Kick Off meeting

Prior to beginning work at FLW, the NFE shall coordinate with the Kansas City District and the Environmental Division and Integrated Training Area Management at Fort Leonard Wood. The purpose of this meeting will be to finalize project goals/objectives and develop a project schedule. In addition, the degree of collaboration between FLW staff and university workers necessary to complete Phase II tasks will be discussed and finalized.

Task 2: Historical Assessment of River Channel Geomorphology using Aerial Photographs

Several sets of aerial photographs shall be acquired from available data sources going back at least 30 years to examine patterns of river bar and bank locations, channel migration, widening/aggradation, and land use disturbances on the Big Piney River (10 mi) and Roubidoux Creek (9 mi). In addition, a length of channel extending one mile upstream and downstream from the FLW boundary shall be assessed for each of the two river segments to check for disturbances from off-base locations. Channel bar and bank features shall be digitized and then compared over time, with special attention on periods after major floods and in reaches where mussel beds and Spectaclecase were previously identified. Channel reaches shall be classified according to level of planform change and bar sediment activity.

Task 3: Field Survey of Physical Habitat and Channel Disturbance Indicators

Field surveys shall be performed by canoe access in order to observe the entire length of river on the base. Potential fish barriers should be assessed directly and comprehensively from within the river corridor. Locations of channel instability and excessive sedimentation shall be classified, delineated, and marked by GPS. Indicators of mussel habitat fragmentation include channel crossings and dams, gravel mining operations, historical channel disturbance due to land clearing and logging, localized areas of poor water quality, and erosion/deposition of bed sediment by recent floods. The presence of important mussel habitat components shall also be assessed including the condition of the under-bedrock shelves along the outside bends of bluff pools, channel units where firm mud deposits occur between large stable rocks along the bed, and number of tree stumps, root masses, and vegetated root beds below the low flow waterline. Special attention shall be put on assessing mussel sampling sites included in the recent Biological Assessment including MDC Hellbender sites. The proposed assessment shall focus on evaluating channel and mussel habitat conditions at intervals of 200-500 m using more quantitative methods such as:

(i) Channel sediment assessments of texture using pebble count procedures, activity (loose, light colored, fine gravel/sand deposits) and thickness (probe depths to bedrock or buried cobble/boulder substrate);

(ii) Bank erosion and fine sediment assessments based on bank height, slope angle, tree root protection, erosion, texture/resistance to flow; and mapping with GPS.

(iii) Runoff/sediment inputs mapping from adjacent lands and drainage infrastructure using GPS.

Task 4: Geomorphic Habitat Assessment

A Geomorphic Habitat Assessment (GHA) report shall be prepared describing the physical channel habitat characteristics in the Big Piney River and Roubidoux Creek and identifying reaches with poor habitat conditions that may limit mussel bed presence, including federally listed species at FLW. The GHA shall include the (i) review of physical habitat quality in Ozark rivers, (ii) rationale for the methods used; (iii) results and analysis of the aerial photograph analysis and field assessments; (iv) classification/causes of habitat degradation; (v) habitat quality mapping by channel reach for FLW; and (vi) description of potential actions to restore, conserve, or protect mussel habitat.

Task 5: GIS Data

GIS data shall be delivered as specified by and required by FLW management.

8.0 Personnel Qualifications

All tasks listed above shall be conducted by personnel holding proper Federal Fish and Wildlife permits. Personnel should be proficient in mussel populations of Southwest Missouri, especially extensive knowledge in the biology and history of Spectaclecase and Scaleshell, which includes, but is not limited to species identification and habitat requirement. Personnel should hold at a minimum of a master's degree in biology; a specialty in mussel research would be ideal and at least two years' experience conducting field research in the areas listed above.

9.0 Project Review Meetings

Project Review Meetings shall take place as needed throughout the project, but at a minimum at major milestones during the period of performance.

10.0 Government Furnished Information and Materials

The government will furnish the following:

a. Access to installation written documents and electronic files relevant to T&E Species and Habitat.
b. The necessary permission to enter and conduct field investigations.

11.0 Government Project Personnel

Kansas City District Corps of Engineers Project Manager (PM): Mr. Matthew Sailor (816-389-3739, e-mail matthew.c.sailor@usace.army.mil) is the PM responsible for execution of this agreement.

Fort Leonard Wood Program Manager: Mr. Kenton Lohraff (573-596-2814, e-mail kenton.m.lohraff.civ@mail.mil) is the Fort Leonard Wood Chief, Natural Resources Branch and is responsible for program management of the work requirements.

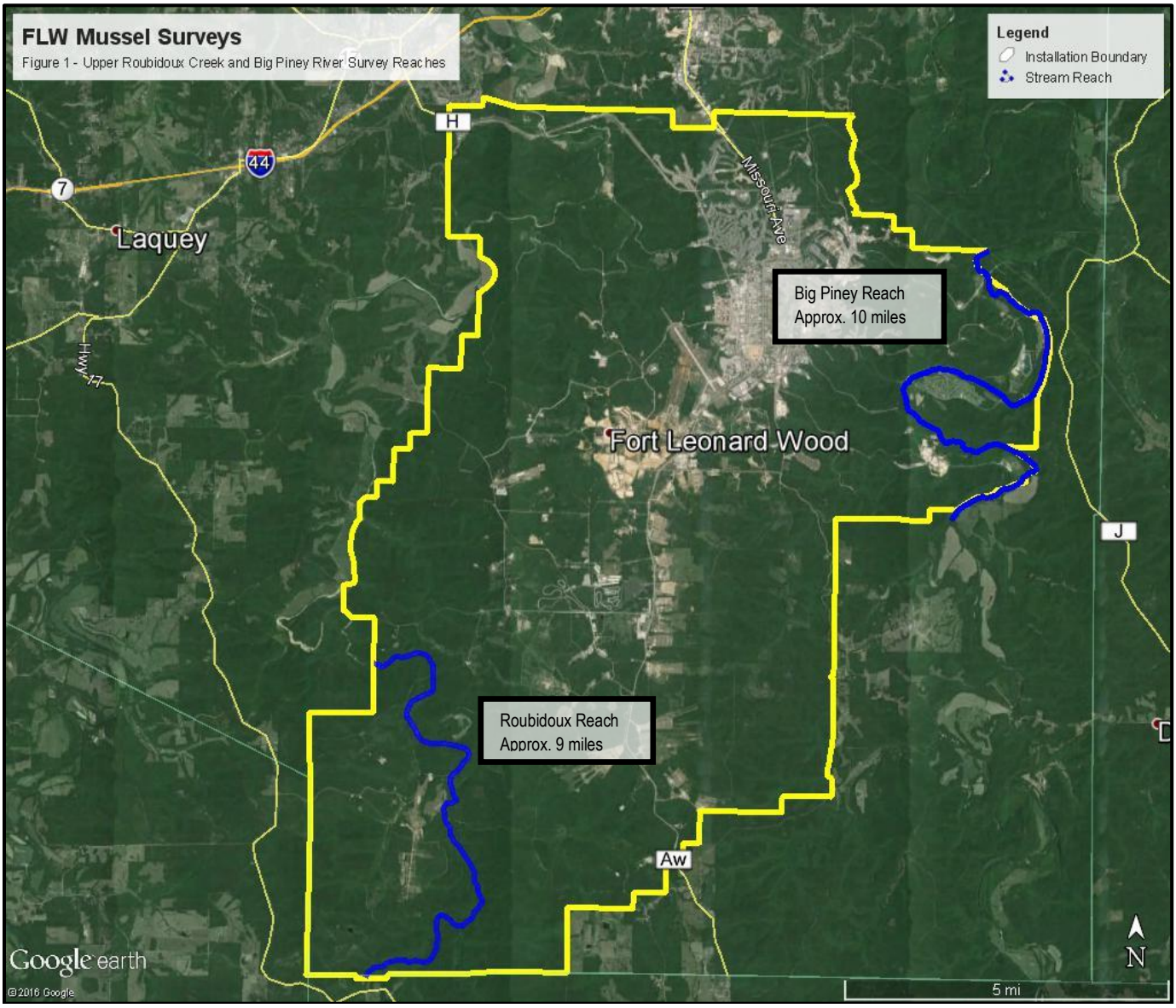


Figure 1. Stream Survey Reaches at Fort Leonard Wood.

Section B: Federal Award Information

One Cooperative Agreement with estimated funding of $48,000 for the program period as defined in the program description.

The Fort Leonard Wood DPW government employees and USACE employees will be substantially involved in the agreement by providing oversight and task distribution to the agreement personnel. The NFE will collaborate with the government employees to accomplish Geomorphology studies. NFE's may be requested to advise the government on the best path forward on certain tasks and collaborate with the government on program decisions. NFE's may be requested to produce data reports that will be approved by government officials before consultation with USFWS. Government employees will provide guidance, review completed work, and provide approval of work within agreement

Section C: Eligibility Information

1. Eligible Applicants – All qualified, non-federal entities submitting funding requests that meet the requirements in the program description will be considered for this funding opportunity.

2. Cost Sharing – The action will be 100% funded by USACE.

Section D: Application and Submission Information

1. Address to Request Application Package

   The complete funding opportunity announcement, application forms, and instructions are available for download at Grants.gov. USACE is not responsible for any loss of internet connectivity or for an applicant's inability to access documents posted at the referenced website.

   The administrative point of contact is Jo Ann McCue (816)389-3822 jo.a.mccue@usace.army.mil.

2. Content and Form of Application Submission

   All mandatory forms and any applicable optional forms must be completed in accordance with the instructions on the forms and the additional instructions below.

   a. SF 424 - Application for Federal Assistance
   b. SF 424 A – Budget Information for Non-construction Programs
   c. SF 424 B – Assurances – Non-Construction Programs
   d. Program Narrative – The program narrative should include a program description illustrating applicant's ability to meet the goals and objectives described in Section A of the announcement. The narrative should provide an overview of the organization. The narrative should also describe the methods the applicant will use to monitor project progress and what accountability measures will be used to evaluate the project results.
   e. Proposed Project Staff – Provide a biographical sketch of each key person who will be working on the project, including their relevant experience and particular qualifications for the proposed project.
   f. Organization chart – Provide an organizational chart detailing the key personnel involved in performance and oversight of performance, including names and titles.
   g. Past Performance Information – Applicant will submit examples of recent relevant experience to demonstrate ability to successfully and satisfactorily meet the requirement. Applicants will provide information regarding why they believe any submitted past performance information is relevant to the current application. Experience is considered recent if it has been completed within five years from the due date for applications.

h. Budget narrative – Provide a budget narrative that justifies the direct costs for the proposed project. The budget narrative should discuss the necessity, reasonableness, and allocability of all proposed costs. Applicants should provide a copy of either their latest indirect cost agreement or state their indirect cost rate. The narrative should identify resources and needs required for the proposed project, including equipment, facilities, and training among others.

3. Complete applications shall be received by our office NO LATER THAN **August 31, 2018 at 1600 local time.** For emailed applications, an acknowledgement of receipt will be sent by email. For mailed applications, acknowledgement of receipt will be provided to the point of contact upon receipt.

   If any portion of a proposal received by our office electronically is unreadable, the grants officer will notify the applicant and permit the applicant to resubmit the unreadable portion of the application. The method and time for resubmission will be prescribed by the grants officer after consultation with the applicant. The resubmission shall be considered as if it were received at the date and time of the original unreadable submission for the purpose of determining timeliness, provided the applicant complies with the time and format requirements for resubmission prescribed by the grants officer.

   Applicants are responsible for submitting applications so as to reach our office by the application deadline

   Any application that is received by our office after the exact time specified for receipt of applications is "late" and will not be considered unless it is received before award is made, the grants officer determines that accepting the late application would not unduly delay the acquisition; and—

   -If it was transmitted by email, it was received at the initial point of entry to the Government infrastructure not later than 5:00 p.m. one working day prior to the date specified for receipt of applications; or

   -There is acceptable evidence to establish that it was received by our office and was under the Government's control prior to the time set for receipt of applications; or

   -It was the only application received.

   Acceptable evidence to establish the time of receipt at our office includes the time/date stamp of the Bolling Federal Building mailroom on the proposal wrapper, other documentary evidence of receipt maintained by the mailroom, or oral testimony or statements of Government personnel.

   If an emergency or unanticipated event interrupts normal Government processes so that applications cannot be received at the Government office designated for receipt of applications by the exact time specified, and urgent Government requirements preclude amendment of the closing date, the time specified for receipt of applications will be

deemed to be extended to the same time of day specified in the solicitation on the first work day on which normal Government processes resume.

Applications may be withdrawn by written notice at any time before award.

The grants officer will promptly notify any applicant if its application was received late, and will inform the applicant whether its application will be considered.

4. Submission Instructions
   Applications may be submitted by mail or e-mail. Choose ONE of the following submission methods:

   a. Mail one unbound copy of your complete proposal to:
      US Army Corps of Engineers, Kansas City District
      Attn: Jo Ann McCue
      601 E 12th Street, Room 647
      Kansas City, MO 64106

   b. E-mail:
      Format all documents to print on Letter (8 ½ x 11") paper. E-mail applications to jo.a.mccue@usace.army.mil; also upload to the grants.gov website.

Section E: Application Review Information

1. Review and Selection Process

   Timely applications will be evaluated in accordance with the process outlined below.

   a. Initial Review

      The Government will perform an initial review to determine if an applicant is (1) eligible in accordance with Section C of the announcement; (2) all information required by Section D has been submitted; and (3) all mandatory requirements are satisfied.

   b. Merit Review

   (i) Each eligible application will be evaluated by a federal awarding technical team based on the following criteria utilizing the adjectival ratings listed above in Section E, Paragraph 1 and ranked in order from most-highly rated to least. These criteria are listed in decreasing order of weight.

Management (heavyweight criterion) – Applicant demonstrates how internal quality controls will take place and accounting or bookkeeping procedures as well as the organizational structure for performance and oversight of the program description (Section A).

Qualifications of Key Personnel (middleweight criterion) – Applicant demonstrates the qualification for personnel who will be working on the requirement. Resumes or qualifications statements may be submitted for key personnel. NOTE: The recipient must receive prior approval from the Grants Officer listed in Section G for any changes in key personnel during the life of the agreement.

Technical Merit (lightweight criterion) – Applicant demonstrates how performance of the program description (Section A) will be accomplished.

(ii) Each merit review criteria will be rated with the following descriptions:

- ***Exceeds*** – Exceeds the program support requirements listed in Section A
- ***Meets*** – Meets the program support requirements listed in Section A
- ***Does Not Meet*** – Does not meet the program support requirements listed in Section A

c. Budget Review

Each qualified application budget will be evaluated as described below:

- Cost Reasonableness – Cost analysis will be conducted to determine if the applicant's budget is reasonable and realistic with allocable and allowable costs and if the applicant demonstrates the ability to comply with all financial regulatory requirements and financial reporting.

d. Pre-award risk survey

A pre-award risk survey will be conducted to determine the qualification of the applicant and to determine if the level of risk of the most highly ranked applicant is too high to allow for award of a federal assistance agreement, if the risk is such that special terms and conditions are necessary to mitigate risk, or if the risk is low enough to award without any special terms and conditions. The Government will review for each applicant the following:

-Single Audit Act audit (if applicable)
-FAPIIS Report
-Dun & Bradstreet Report
-SAM Exclusions (EPLS)
-Past Performance – Past performance information will be reviewed to determine the applicant's probability of meeting the program description requirements.

2. Anticipated Award Date
   Announcement Issue Date: August 01, 2018
   Announcement Due Date: August 31, 2018
   Estimated Award Date: September 30, 2018

Section F: Federal Award Administration Information

1. Award Notices
   Written notice of award will be given in conjunction with issuance of a cooperative agreement signed by a Grants Officer. The cooperative agreement will contain the effective date of the agreement, the period of performance, funding information, and all terms and conditions. The recipient is required to sign and return the document before work under the agreement commences. **Work described in this announcement SHALL NOT begin without prior authorization from a Grants Officer.**

2. Administrative Requirements

   i) The cooperative agreement issued as a result of this announcement is pursuant to the administrative requirements in 2 CFR 200.
   ii) Governing Regulations: This agreement will be administered in accordance with, and recipients shall comply with, the applicable requirements of the Defense Grant and Agreement Regulatory System (DGARS), in particular Chapter XI of Title 2, Code of Federal Regulations and Chapter I, Subchapter C of Title 32, Code of Federal Regulations, commonly referred to as the Department of Defense Grant and Agreement Regulations (DoDGARs). Currently, Parts 32 and 33 of the DoDGARs are being revised. In the interim, 2 C.F.R. Part 200 "Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards" replaces Parts 32 and 33 in accordance with 2 C.F.R. Part 1103.
   iii) Order of Precedence: In the event of a conflict between the terms of this agreement and other governing documents, the conflict shall be resolved by giving precedence in descending order as follows: (1) The DoDGARs found at Chapter xi of Title 2; Code of Federal Regulations including 2 CFR Part 200, (2) the articles of this agreement, and (3) the attachments to this cooperative agreement.

3. Reporting
   See deliverable information in the program description.

   The following forms shall be utilized to meet 2 C.F.R. part 200 reporting requirements

   Bi-annual reporting
   (1) SF-425 Federal Financial Report
   (2) Progress reports

Annual Reporting

(1) SF-428 Tangible Personal Property Report
   (a) SF-428 A – Annual Report (reporting Federally-owned property)
   (b) SF-428 B – Final Report
   (c) SF-428 C – Disposition Request

(2) RPSR – Real Property Status Report (if applicable)
   (a) RPSP Attachment A – General Reporting
   (b) RPSR Attachment B – Request to Acquire, Improve or Furnish
   (c) RPSR Attachment C – Disposition Request

(3) Recipient shall submit an annual inventory report to the Government listing all federally owned property in their custody.

Section G: Federal Awarding Agency Contact

Mandy Ashmore, Grants Officer, Contracting Division
USACE, NWK District
601 E 12th Street, Room 647
Kansas City, MO 64106
E-mail: mandy.ashmore@usace.army.mil
Tel: 816-389-3839

Section H: Other Information

Nothing follows