

Task Agreement Number P15AC00628
Under
Cooperative Agreement P14AC00921
Between
The United States Department of the Interior
National Park Service
And
Northern Arizona University
DUNS No: 806345542
Office of Grants and Contracts, Northern Arizona University, PO Box 4130,
Flagstaff, AZ 86011

CFDA: 15.945

Project Title: Glen Canyon Vegetation Mapping Project, 2015

Park Unit: GLCA

PI: Dr. Tina J. Ayers, Associate Professor, Northern Arizona University, ABOR,
Biological Sciences, PO Box 5640, Flagstaff, AZ, 86011-5640, 928-523-9482, Fax - 928-
523-7500, tina.ayers@nau.edu

ATR: Dr. Dustin W. Perkins, Program Manager, National Park Service, Northern
Colorado Plateau Network, Environmental Studies Department, Western State Colorado
University, 600 N. Adams St., 106 Kelley Hall, Gunnison, CO 81231, 970-589-1474, Fax
- 970-943-3380, dustin_w_perkins@nps.gov

Amount of Federal Funds Obligated: \$70,255

Total Amount of Task Agreement Award: \$70,255

Funding source: Inventory and Monitoring Division Vegetation Mapping

Period of Performance: May 1, 2015 to November 30, 2016.

Student Involvement: (Yes)

Sensitive Information: (No)

ARTICLE I – BACKGROUND AND OBJECTIVES

Cooperative Agreement Number P14AC00921 was entered into by and between the Department of the Interior, National Park Service, (NPS), and Northern Arizona University (hereafter referred to as ‘Recipient’) for the purpose of providing research, technical assistance, and/or education, as described below. Unless otherwise specified herein, the terms and conditions as stated in the Cooperative Agreement will apply to this Task Agreement.

For performance under this task agreement, the regulations set forth in 2 CFR, Part 200, supersedes OMB Circulars A-21 (2 CFR 220), A-87 (2 CFR 225), A-110, and A-122 (2 CFR 230); Circulars A-89, A-102, and A-133; and the guidance in Circular A-50 on Single Audit Act follow-up. The recipient shall adhere to 2 CFR, Part 200 in its entirety

in addition to any terms and conditions of the master agreement not superseded by 2 CFR 200, as well as the terms and conditions set forth in this agreement. In the event of a conflict between the original terms of the master agreement and 2 CFR, Part 200, relating to this task agreement, 2 CFR, Part 200 shall take precedence.

Glen Canyon Vegetation Mapping Project:

Northern Arizona University (NAU) is selected to support the field crew effort for the vegetation sampling to complete a vegetation map for Glen Canyon National Recreation Area (GLCA). This map is being completed in conjunction with GLCA and Northern Colorado Plateau Network (NCPN) staff. This effort will span the 2015 field season, with hitches between May 2015 and October 2015. Crews will be located in Flagstaff, AZ. All crew member hiring, salaries, training, equipment, per diem, and vehicles are included. Field equipment and herbarium supplies, as well as training materials and printing expenses are included. Data reduction and data checking are included.

ARTICLE II – LEGAL AUTHORITY

54 U.S.C. §100703 Cooperative Study Units

ARTICLE III – STATEMENT OF WORK

A. Statement of work:

The National Vegetation Mapping Program is a project to inventory, classify, describe, and map vegetation in more than 270 national park units within the United States. Consistent vegetation classification, mapping, and accuracy assessment protocols and standards are applied across projects supported by this program. The National Vegetation Mapping Program is administered by the USGS Center for Biological Informatics in cooperation with the NPS Inventory & Monitoring (I&M) Program. Through implementation of the National Park Service (NPS) Natural Resource Challenge (NPS 1999), significant funding became available for completing important natural resource baseline inventories in park units, including vegetation classification and mapping. This support provided the NPS with the opportunity to move forward with dozens of new park unit vegetation classification and mapping projects, including GLCA.

The purpose of this project is to describe and map existing plant associations and to provide this information in written, tabular, digital, and spatial formats useful to park resource managers, the I&M Program, and others. The basic project components consist of a classification and description of the park's vegetation and a spatial database encompassing an interpretation of the vegetation from aerial imagery.

Vegetation mapping work for GLCA, which began in 2011, is currently underway and is being accomplished through a collaborative effort between NCPN, GLCA, and NAU (R 1445-11-0040, R 1445-11-421, P13AC00536/NAU-431, P14AC00740 NAU-442). NCPN provides overall direction and management of these projects and is substantially involved in all project components including data analysis and management and report preparation. NAU provides field researchers with botanical expertise to complete field work, plant identification, and data entry.

Field Inventory Work – Field plot data collection by NAU cooperators will comply with NPS vegetation mapping standards
(http://science.nature.nps.gov/im/inventory/veg/docs/Veg_Inv_12step_Guidance_v1.1.pdf).

Duties of the NAU include:

1. Select and hire 2015 field crews;
2. Conduct field sessions with four field crew members, and provide support and funding for field work, May 2015 to October 2015. The second of two accuracy assessment field seasons begins. Continue mapping remaining southern sections of GLCA. Continue work on classification. Prepare for 2nd season of accuracy assessment field work, and manage field season/crews. ;
3. Finish data entry, verification, and validation for 2015 data collection;
4. PI programmatic support for agreement oversight.

Documentation and Data Management - At the conclusion of each field season, after data have been entered, verified and validated by NAU, all records entered to date for survey locations within NCPN park units will be provided to NCPN in an MS Access database.

B. Project schedule and products:

Project Start Date – 5/1/2015

Technical progress reports – { } Quarterly { } Semi-annually {X} Annually

Data entry and checking – June 15, 2015 to December 1, 2015

Database and Maps Provided to the NPS ATR – December 15, 2015

Collections/Specimens and Archives – December 31, 2015

Investigator's Annual Report (IAR) – March 30, 2015

Draft Final Report – December 1, 2015

Final Report – February 28, 2016

Project End Date – November 30, 2016

C. Recipient agrees to:

1. Hire, supervise, and lead field crew;
2. Participate in progress meeting in Flagstaff, AZ Nov. 2015;

3. Finish data entry for 2015 data collection;
4. QA/QC datasets for 2015 collection;
5. Update nomenclature for 2,000+ species records in MS Access database of legacy data and generate ArcGIS spatial data layers displaying them.

D. NPS agrees to:

1. Ordination of 2011-2013 vegetation data for classification (GLCA);
2. Coordination of NatureServe review of ordination (NCPN);
3. Project Management and support of field crews in GLCA (NCPN);
4. Duties to enable CESU agreement and sub-contracts to project manager (NCPN);
6. GLCA difficult access support and agreements (boat use on Lake Powell; permits) (GLCA);
7. Additional project agreement duties as described following 2011 initial planning meeting (NCPN).

ARTICLE IV – TERM OF AGREEMENT

This Task Agreement will become effective on the date of final signature and extend through November 30, 2016.

ARTICLE V – KEY OFFICIALS

- A. Key officials are essential to ensure maximum coordination and communication between the parties and the work being performed. They are:

1. **For the NPS:**

Agreement Technical Representative:

Dr. Dustin W. Perkins
Program Manager
National Park Service
Northern Colorado Plateau Network
Environmental Studies Department
Western State Colorado University
600 N. Adams St.
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970-589-1474
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dustin_w_perkins@nps.gov

Technical Expert:

Dr. Karl Brown
Vegetation Inventory Program Manager
Inventory and Monitoring Resources Division
Natural Resource Program Center
1201 Oak Ridge Drive, Suite 200
Fort Collins, CO 80525
970-225-3591
970-225-3585
Karl_Brown@nps.gov

Awarding Officer:

Kelvin A. Delaney
Financial Assistance Officer
National Park Service
Intermountain Region
12795 W. Alameda Parkway
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Phone: 303-969-2796
Fax: 303-969-2786
Email: kelvin_delaney@nps.gov

CPCESU Research Coordinator:

Todd Chaudhry, Ph.D.
Research Coordinator
Colorado Plateau Cooperative Ecosystem Studies Unit
National Park Service
Northern Arizona University
PO Box 15018
Flagstaff, AZ 86011
Phone: 928-523-6638
Email: todd_chaudhry@nps.gov

2. **For Recipient:**

Principal Investigator:

Dr. Tina J. Ayers
Associate Professor
Northern Arizona University

ABOR, Biological Sciences
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928-523-9482
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tina.ayers@nau.edu

Administrative Contact:

Cindy Judge
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Northern Arizona University
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928-523-6719
cindy.judge@nau.edu

- B. **Communications** - Recipient will address any communication regarding this Agreement to the Awarding Officer with a copy also sent to the ATR. Communications that relate solely to routine operational matters described in the current work plan may be sent only to the ATR
- C. **Changes in Key Officials** - Neither the NPS nor Recipient may make any permanent change in a key official without written notice to the other party reasonably in advance of the proposed change. The notice will include a justification with sufficient detail to permit evaluation of the impact of such a change on the scope of work specified within this Agreement. Any permanent change in key officials will be made only by modification to this Agreement.

ARTICLE VI – AWARD AND PAYMENT

- A. **Financial Assistance:** NPS will provide funding to Recipient in an amount not to exceed \$70,255 for the work described in Article III and in accordance with the approved budget (Attachment A). Any award beyond the current fiscal year is subject to availability of funds.
- B. Recipient shall request payment in accordance with the following:
1. **Method of Payment.** Payment will be made by advance and/or reimbursement through the Department of Treasury's ASAP system.

2. **Requesting Advances.** Requests for advances must be submitted via the ASAP system. Requests may be submitted as frequently as required to meet the needs of the FA Recipient to disburse funds for the Federal share of project costs. If feasible, each request should be timed so that payment is received on the same day that the funds are dispersed for direct project costs and/or the proportionate share of any allowable indirect costs. If same-day transfers are not feasible, advance payments must be as close to actual disbursements as administratively feasible.
3. **Requesting Reimbursement.** Requests for reimbursements must be submitted via the ASAP system. Requests for reimbursement should coincide with normal billing patterns. Each request must be limited to the amount of disbursements made for the Federal share of direct project costs and the proportionate share of allowable indirect costs incurred during that billing period.
4. **Adjusting payment requests for available cash.** Funds that are available from repayments to, and interest earned on, a revolving fund, program income, rebates, refunds, contract settlements, audit recoveries, credits, discounts, and interest earned on any of those funds must be disbursed before requesting additional cash payments.
5. **Bank Accounts.** All payments are made through electronic funds transfer to the bank account identified in the U.S Treasury ASAP system by the FA Recipient.
6. **Supporting Documents and Agency Approval of Payments.** Additional supporting documentation and prior Agency (NPS) approval of payments may be required when/if a FA Recipient is determined to be “high risk” or has performance issues. If prior Agency payment approval is in effect for an award, the ASAP system will notify the FA Recipient when they submit a request for payment. The Recipient must then notify the NPS Awarding Officer identified on the Assistance Agreement that a payment request has been submitted. The NPS Awarding Officer may request additional information from the Recipient to support the payment request prior to approving the release of funds, as deemed necessary. The FA Recipient is required to comply with these requests. Supporting documents may include invoices, copies of contracts, vendor quotes, and other expenditure explanations that justify the reimbursement requests.

ARTICLE VII – REPORTS AND/OR DELIVERABLES

- A. Specific projects or activities within this agreement will be tracked and reported by quarterly submission of a SF-425 Federal Financial Report (FFR) and quarterly submission of a Performance Report. A final SF-425 and Performance Report shall be submitted at the completion of the Agreement. The following reporting period end dates shall be used for interim reports: 3/31, 6/30, 9/30, 12/31. For final the SF-425 and Performance Report, the reporting period end date shall be the end date of the agreement. Interim reports shall be submitted no later than 30 days after the end of each reporting period. Annual and final reports shall be submitted no later than 90 days after the end period date. All reports shall be submitted via email to the NPS Awarding Officer with a copy to the NPS Agreements Technical Representative via email.
- B. An electronic version of the final report and separate abstract suitable for public distribution will be submitted by the Recipient to the ATR. The ATR will send the final report electronically to NPS's Technical Information Center and carbon-copy the CESU Research Coordinator. Please send Catherine Kisluk at Technical Information Center (TIC) one hard copy and one digital copy of the final report and abstract. Mail the hard copy to: NPS Technical Information Center (TIC) 12795 West Alameda Parkway, Lakewood, Colorado 80228
Attn: Catherine Kisluk and email the digital version to catherine_kisluk@nps.gov and cc the CESU Research Coordinator.
- If the report does not contain sensitive material, the Research Coordinator will send it to the host university for posting on the CESU website. If it does contain sensitive material, then a brief abstract must be supplied that will be posted on the CESU website.
- C. Sampling of points with description of vegetation, spatial locations, and physical characteristics.
- D. A final access database of the field data to be used by contractors to prepare GIS mapping layer. The database will have data from the Trimble data dictionaries from the field efforts.
- E. Quality checking and quality assurance on the field data and final database.
- F. Additions to the flora of Glen Canyon NRA as they are discovered during field sampling, as herbarium-ready specimens.
- G. Final report including the above products

ARTICLE VIII – MODIFICATION AND TERMINATION

ARTICLE X - SIGNATURES

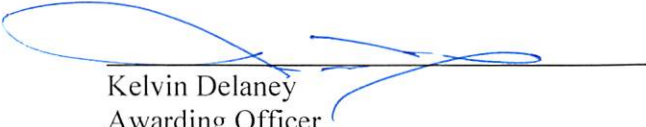
IN WITNESS WHEREOF, the parties hereto have executed this Task Agreement on the date(s) set forth below.

FOR RECIPIENT

Name
Title

Date

FOR THE NATIONAL PARK SERVICE



Kelvin Delaney
Awarding Officer

6.2.2015

Date