

**Award Number: P14AC00285**

**Project Number**: MNA-64

**CFDA #:** 15.945

**Park/NPS Unit:** Wupatki National Monument

Title of Project: Assess Condition and Gather Baseline Documentation of Horseshoe Mesa Rock Art

**Administered through the:** Colorado Plateau Cooperative Ecosystem Studies Unit Cooperative Agreement Number H1200-09-0005

**CESU Partner:** Museum of Northern Arizona

**PROJECT CONTACTS:**

**Principal Investigator:** Kimberly Spurr, Supervisory Archaeologist/Bioarchaeologist, Museum of Northern Arizona, 3101 N. Fort Valley Rd., Flagstaff, AZ 86001, Tel. (928) 774-5211, ext. 260, Fax. (928) 779-1527, kspurr@mna.mus.az.us

**Partner Administrative Contact:** Lynn Yeager, MNA Financial Controller, 3101 N. Fort Valley Rd., Flagstaff, AZ 86001, (928) 774-5211, ext. 253, Fax (928) 779-1527, lyeager@mna.mus.az.us

**NPS Certified ATR:** LisaBaldwin, Cultural Resources Program Manager, Flagstaff Area National Monuments, 6400 N. Hwy 89, Flagstaff, AZ 86004 Tel. 928-526-1157 ext. 233, Fax (928) 526-4259, Lisa\_Baldwin@nps.gov

**FUNDING INFORMATION:**

**Amount Funded:** $126,973.00

**NPS Account Numbers (amounts in parentheses): PPIMFLAG7R PPMRSCR1C.CA0000 PX.P0151989A.00.1**

**Fund Source (e.g., ONPS, FLREA, CRPP, CESU, etc.): CR**

NPS Funding

Is this funded using a reimbursable account number? If yes, IMR contracting needs a copy of the Interagency Agreement.

**PROJECT DATES:**

**Tentative Start Date:** 06/01/2014

***NOTE: This Task Agreement will become effective on the date of final signature or the effective date of the Award document, whichever is later.***

**End Date:** 12/31/2015

**NPS Administrative Contacts**

**CESU Coordinator:** Judy Bischoff, CPCESU Research Coordinator, NAU P.O. Box 5765, Flagstaff, AZ 86011, 928-523-6638, Fax: 928-523-2014, judy\_bischoff@nps.gov

**Intermountain Region Administrative Contact:** Kelly Adams, Grants and Agreements Specialist, National Park Service, 12795 West Alameda Pkwy, Lakewood, CO 80228 Phone: 303-969-2303 Fax: 303-969-2992 Email: Kelly\_adams@nps.gov

**FEDERAL FINANCIAL REPORTS AND DRAWDOWN SCHEDULE:**

***Federal Financial Reports***(Check as required for project based on spending plan, period of performance, risk, cooperator history, etc.)

{ } Quarterly { X} Semi-annually { } Annually {X} Final

**Project SCHEDULE AND TECHNICAL REPORT DEADLINES:**

*Project Start Date* – 06/01/2014

*Technical progress reports –* { } Quarterly { } Semi-annually {x} Annually

*Investigator’s Annual Report (IAR)* – 06/01/2015

*Draft Final Report and Data Compendium* – 08/01/2015

*Final Report and Data Compendium* – 09/15/2015

*Database, Collections/Specimens, Archives, and Maps provided to the NPS ATR or Technical Expert* – 09/15/2015

*Project End Date* – 9/30/2015

*Final SF425 FFR* – NLT 12/01/2015

**PAYMENTS**

**CFR PART 215.22*:*** Cash advance (drawdown) to recipient organization shall be limited to the minimum amounts needed and be timed to be in accordance with the actual immediate cash requirements of the recipient organization in carrying out the purpose of the approved program or project. The timing and amount of cash advances shall be as close as is administratively feasible to the actual disbursements by the recipient organization for direct program or project costs and the proportionate share of any allowable indirect costs.

**CESU REQUIRED PRODUCTS (may be different from those products required by the ATR – See Statement of Work for Products required by the NPS unit):**

The Principal Investigator will prepare a brief report abstract suitable for public distribution and two hard copies and an electronic version (in PDF file format) of the final report and mail all to Judy Bischoff, National Park Service, CPCESU, NAU P.O. Box 5765, Flagstaff, AZ 86011. Please be sure to include the project number (e.g.; NAU-###, UMT-###, UAZDS-###) and the P number on the cover page of the final report.

**PROJECT ABSTRACT:**

This cooperative agreement between Flagstaff Area National Monuments (FLAG) and the Museum of Northern Arizona (MNA) will focus on complete baseline documentation and condition assessment on 72 rock art panels and associated architectural features at Horseshoe Mesa (WS 834), located in Wupatki National Monument. The rock art panels and associated features are the material remains of the Ancestral Puebloan and date to AD1100–1250. The Horseshoe Mesa site is recommended eligible for listing in the National Register. The rock art images and associated features contain a wealth of information about the prehistoric occupation of the monument and are actively deteriorating due to environmental conditions.

**Scope of Work:**

This cooperative agreement between Flagstaff Area National Monuments (FLAG) and the Museum of Northern Arizona (MNA) will focus on complete baseline documentation and condition assessment on 72 rock art panels and associated architectural features at Horseshoe Mesa (WS 834), located in Wupatki National Monument. The rock art panels and associated features are the material remains of the Ancestral Puebloan and date to AD1100–1250. The Horseshoe Mesa site is recommended eligible for listing in the National Register. The rock art images and associated features contain a wealth of information about the prehistoric occupation of the monument and are actively deteriorating due to environmental conditions.

To date no formal documentation has been undertaken for rock art panels at the monument. MNA and FLAG archeologists and rock ark specialists will work together to obtain detailed baseline documentation of these unique resources. Tasks include archival research, scaled mapping, high resolution digital photography, 3D imaging, and completion of narrative and tabular data collection forms. This project will provide additional information on Ancestral Puebloan cultural history which will aid in the archeological research of the Puebloan peoples and public interpretation of the monument’s cultural resources.

**Background**

Rock art is a fragile, non-renewable resource that provides a tangible connection to the past. It is continually impacted by environmental forces, resulting in the deterioration of rock art, including fading pigmentation and erosion of underlying bedrock. The rock art panels and associated features were originally identified in 1983 during the first survey of the monument. The panels and features have not been revisited since they were monitored in 1997. The 1997 monitoring data showed moderate natural and human impacts at the site, with exfoliating rock art and minor vandalism present.

**Justification**

Without baseline documentation and condition assessment data, park management cannot measure the degree of impact or identify recent destructive activity. The rock art sites are actively deteriorating, delaying documentation will increase the likelihood of deterioration of elements beyond visual recognition, resulting in loss to regional understanding of this important resource for the Colorado Plateau.

**Tasks**

*1) Archival Research*

Pre-field project preparation work will include archival research. Currently known sources that will be consulted include *Petroglyphs of Wupatki* by Eric Davin and Gabrielle Dolphin (1973), *Rock Art at Wupatki: Pots, Textiles, Glyphs* by Polly Schaafsma (1987), and the *Rock Art* chapter in the *Wupatki Archeological Inventory Survey Project: Final Report*, by Bruce Anderson (1990). Additionally, the library and archives at MNA will be searched to see if any historic documentary material is available from the site. NPS will provide copies of all site forms, maps, and photos from previous documentation and monitoring work at the site.

*2) Scaled Mapping and Drawing of Rock Art and Associated Features, High Resolution Digital Photography, Rock Art and Associated Feature Imaging and Completion of Narrative and Tabular Data Collection Forms*

The fieldwork component of the project will consist of scaled mapping and drawing of rock art and associated features, high resolution digital photography, rock art and associated feature imaging and completion of narrative and tabular data collection forms. Each rock art panel will be plotted on a site-scale map and documented with a scaled drawing of the entire panel, photographs of each element, a description of the panel attributes and condition, and a tabular listing of all elements. All associated architecture will be photographed and field forms will be completed. Any new rock art panels identified during fieldwork will be included in the documentation process.

Selected rock art panels will be targeted for intensive element-by-element documentation using sophisticated imaging equipment by MNA researchers with extensive experience in rock art research. Among other things, the imaging process can differentiate rock art elements by degree of patination, thus establishing a rudimentary seriation of elements. Also, the imaging process can highlight/accentuate rock art that that is extremely difficult to see, regardless of lighting conditions, as well as identify rock art that is currently invisible to the naked eye. This technology allows a non-invasive approach to rock art analysis, and will produce high resolution images that can be used to transfer knowledge gained during the project to park staff, visitors, and Native American groups and individuals and enhance understanding and appreciation of rock art by all. Panels to be included in this phase of work will be selected based on in-field consultation among NPS and MNA..

*3) Native American Consultation*

FLAG personnel consult with a number of area Native American Nations and Tribes regarding Wupatki National Monument. The Nations and Tribes will be contacted by FLAG to arrange consultation visits to the site while fieldwork is underway and also to examine the maps, images, and other documentation produced by the project. Information offered by Tribal representatives about the site or specific panels may be included in the data compendium or report produced for the project, or documented in confidential records for NPS files, as preferred by the representatives.

*4)* *Assembly of Horseshoe Mesa Site Data Compendium*

After fieldwork the resulting data (maps, images, field forms, etc.) will be assembled into a data compendium for FLAG. Much of this data will be presented in electronic or digital form, but the data compendium will include one (1) printed set of digital photographic images that show all rock art panels, which can used for long-term monitoring of the site. The data compendium will be accompanied by a report that presents background information, including any additional archival data found at MNA, a site map, field methodology, description of work effort, and a finding aid for the data compendium.

**PRODUCTS:**

Products will include:

1) A draft report and data compendium.

2) A final report and data compendium.

3) All original field notes, maps, photos, and other documentation generated during field work.

**BUDGET (see attached):**