Project Summary Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Moose Exhibit Site 48YE201: Artifact Analysis, Geoarcheological Report, Macrobotanical Analysis, Geochemical Research, and Final Data Recovery Report Production and preparation of various journal articles

Discipline: Cultural Resources Type of Project: Technical Assistance Funding Agency: National Park Service Other Partners/Cooperators: University of Wyoming Effective Dates: 5/1/2011 - 9/30/2015 Funding Amount: \$250,191 [FY13: \$30,000; FY12: \$80,191; FY11: \$140,000]

Investigators and Agency Representative:

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Project Abstract: The National Register of Historic Places-eligible prehistoric archeological site 48YE201 is bisected by the current alignment of the Mammoth to Norris segment of the Grand Loop Road, also listed as nationally significant on the National Register of Historic Places. Under the stipulations of Yellowstone National Parks' Programmatic Agreement regarding the improvement of the major roads, archeological data recovery excavations will mitigate the road's impact to the archeological site as long as the excavations are in accordance with a Wyoming State Historic Preservation Office (WYSHPO) approved data recovery plan. Such a plan was previously developed, submitted and approved by the WYSHPO. The data recovery plan was designed to retrieve enough archeological data and information to get an understanding of the nature of the site without destroying the majority of the site. Sensitive wetland areas, such as the spring mound within the site boundary were avoided and the areas previously disturbed by the construction of the road and parking pull-through lack integrity and were not tested.

Phase 2 of the recovery of archeological data from the Moose Exhibit site 48YE201 completed a variety of analytical processes and prepared the artifacts for museum curation. At the OSWA laboratory the artifacts were closely examined and put into categories of commonly found chipped stone tools and debitage. A combination of morphological and technological categories was employed for tools and debitage was categorized into commonly established flake types. Bifaces were classified into stages of manufacture and reduction and use-phase categories. Use-wear analysis was conducted on appropriate artifacts. Flaked stone tools were organized by formal tools, expedient tools, and other lithic artifact types such as cores and tested cobbles. Projectile point styles and chronological affiliations will follow the Northwestern Plains chronology described by Frison (1991), Mummy Cave, and the Myers-Hindman sites chronologies were also employed; artifacts were subjected to protein residue analysis and obsidian source analysis.

The next phase of the project is to organize all of the information into a final data recovery report to summarize the findings from the excavation and to explore the research questions the findings were able to address. Additionally, the Wyoming State Historic Preservation Officer has asked that a synthesis of the six data recovery excavations located along the Golden Gate to Norris segment of the Grand Loop Road and associated with procurement of obsidian tool stone from Obsidian Cliff National Historic Landmark be drafted for publication in local journals. This agreement will also expand the production of journal articles to the recently completed Nez Perce Trail archeology project.

Outcomes with Completion Dates:

The draft of the final data recovery report for 48YE201 will be completed by the Office of the Wyoming State Archaeologist and provided to Yellowstone National Park for review by December 31, 2013. The journal articles can be produced at any time prior to the end date of the agreement, December 31, 2014.

Keywords: excavations, cultural materials, Moose Exhibit Site 48YE201, Yellowstone National Park, University of Wyoming