# Project Summary Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Data Recovery at Precontact Archeological Site 48YE114 in Area of Potential Effect

of Road Reconstruction near Frying Pan Springs, Phases II and III

Discipline: Cultural Resources

Type of Project: Technical Assistance
Funding Agency: National Park Service
Other Partners/Cooperators: University of Wyoming

**Effective Dates:** 6/20/2005 - 2/1/2010

Funding Amount: \$244,755

### Investigators and Agency Representative:

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### Project Abstract:

Federal Highways funding is available for another section of road reconstruction in Yellowstone NP. The park will cooperate with University of Wyoming to assess the precontact archeological site adjacent to the current Norris to Golden Gate segment of the Grand Loop road alignment. The site is approximately 1.8 miles north of Norris Junction, located on the south-facing slope of a wide, triangular-shaped valley east (across the road) of Nymph Lake and just to the northwest of Frying Pan Springs. The site is at an elevation of 7510 feet with UTM coordinates Zone 12, Easting 521980, Northing 4955350, datum NAD 27. The site is approximately 45 meters long and 40 meters wide with an estimated area of 1800 square meters. Vegetation at the site is dominated by burned Lodgepole pine forest interspersed with some living trees. Dry grass meadows and deadfall are also present within the valley.

In 2004, geophysical investigations conducted by Dr. Danny Walker identified areas of potential buried cultural deposits. The Office of the Wyoming State Archeologist conducted extensive shovel tests across the site (5 meter intervals) which identified areas with buried cultural materials. 1-meter test units were opened to investigate areas identified with buried cultural components. Radio-carbon dates and diagnostic projectile points recovered from the test units indicate important intact buried cultural components exist at the site.

The 2005 archeological work at the site will be to conduct block excavations to obtain a larger sample of the cultural materials where high densities of buried cultural materials were identified through the geophysical tests, shovel tests, and 1 x 1 meter test units excavated in 2004. It is estimated that between 25 and 50 square meters will be excavated to obtain a representative sample of the cultural materials buried in the sub-surface areas of the site. All excavated material will be screened through 1/8 inch mesh metal and larger flakes and tools will be point plotted.

At the end of the 2005 excavation Paul Sanders, Field Director for the data recovery at 48YE114, will evaluate the need for further excavation. It is hoped that the 2005 excavations will provide an adequate glimpse of the prehistoric lithic reduction activities associated with Obsidian Cliff National Historic Landmark. If it appears there is a homogenous mass of cultural material from a datable occupation event from which more information can be recovered, it may be determined that additional excavation is required. Cultural occupations with extensive deposits in in-tact stratigraphic sequence are rare in YNP and of significant importance in developing a cultural chronology for YNP.

In FY 06 the University of Wyoming will continue identification and analysis of the collected artifacts and geological data, including obsidian sourcing and chemical analysis, macrobotanical analysis, blood residue analysis, thermal soils and geoarchaeological analysis, and statistical analysis. Other tasks include final laboratory analysis, synthesis of information, taking of digital photographs and entry of articfact information into ANCS+ Museum catalog system.

## Outcomes with Completion Dates:

The final data recovery report will be due in draft form to NPS by September 1, 2007. The final report is due (24 hard copies) to the NPS by September 1, 2009. An executive summary in electronic form is due to the RM-CESU by September 1, 2009.

**Keywords:** Frying Pan Springs, data recovery, archeological site, Yellowstone National Park, University of Wyoming, highway reconstruction, cultural resources

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Date Final Report Received: Publications, etc. on file: