**PR Number:** R2146118001

**Award Number:** **P11AT10600 / MNA-51**

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

**Title of Project:** Determination of Elevation Differences from Digital Elevation Models (DEMs) Created From Historic Aerial Photography and LiDAR Data at Petroglyph National Monument, New Mexico.

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

**CESU Partner:** Museum of Northern Arizona

**Project Contacts**

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**Co-Investigator (if appropriate):** N/A

**Researcher (if appropriate):** N/A

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**NPS Technical Expert (if appropriate):** N/A

**Funding Information:**

**Amount Funded:** $15,000

**Project Dates:**

**Start Date:** August 1, 2011

**Any Other Product Milestone Dates you need to include:** N/A

**End Date:** March 31, 2013

**PROJECT ABSTRACT:**

As part of the Natural Resource Condition Assessment program, the National Park Service requires information regarding the extent to which erosional processes at Petroglyph National Monument have changed over time, and in particular in response to intense development occurring adjacent to park lands. Staff from the Museum of Northern Arizona (MNA) will measure changes in surface topology at several sites at the monument by analyzing and comparing historic aerial photography, recent LiDAR data, surface-based photography, and cross-section survey data. If possible, MNA will also calculate volumetric changes at specific sites resulting from erosion.