**PR Number:** R1242110031

**Award Number:** **P11AT10868 UNM-72**

**Park/NPS Unit:** El Malpais National Monument

**Title of Project:** Virtually Visiting El Malpais Lava Caves: Illuminating the Hidden World Beneath the Surface

**Administered through the: (pick from drop down list):** Colorado Plateau Cooperative Ecosystem Studies Unit Cooperative Agreement Number H1200-09-0005

**CESU Partner (pick from drop down list):** University of New Mexico

**Project Contacts**

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**Funding Information:**

**Amount Funded: $24,038**

**Project Dates:**

**Start Date:** September 30, 2011

**Any Other Product Milestone Dates you need to include:** Project Progress Review 3/1/11

**End Date:** September 30, 2012

**Reporting & Invoicing Requirements for All Agreements:**

Required of all agreements:

Invoice Payable up to 90% - Draft Final Product –June 1, 2012

Invoice Payable up to 100% - Final Product September 30, 2012

Project End Date – September 30, 2012

Final Invoice – September 30, 2012

**Project Schedule**:

List all reports and products in sequential order, *for example*:   
Project Start Date – *September 30, 2011*  
Progress Report (Mid-Year) – *March 1, 2012*

Virtual Tour Demonstration – *by April 1, 2012*

Draft Final Product – *June 30, 2012*

Recommendations – *July 31, 2012*

Final Product – *September 30, 2012*

**PROJECT ABSTRACT:**

**Statement of the Issue and Compelling Need**

Lava caves are one of the main treasures of El Malpais National Monument (ELMA). Several factors can prevent visitors from experiencing the beauty and other-worldliness of these caves in person: 1) Rough terrain prevents people with disabilities or poor conditioning from reaching and entering the caves. 2) The sensitive and fragile nature of some caves dictates their restricted access to visitors. 3) A new bat fungal pathogen has resulted in ELMA closing the caves. 4) Seasonally impassible roads prevent access to the backcountry caves. To provide an alternative to in-person visitation, and to reach new audiences of park visitors, we propose to create virtual tours that not only showcase the resources, but engage visitors in an exploration of the scientific features of the caves. By incorporating a young filmmaker from the University of New Mexico into the project team, we will also design the programs to appeal to the youth audience. Virtual tours have been used effectively in other parks, such as Glacier and Acadia National Parks.