



United States Department of the Interior

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In Reply Refer To:
NM 930 (8100)

Richard Hanes, Chief
Cultural & Fossil Resources &
Tribal Coordination
1620 L St NW
Washington, DC 20036

Dear Richard:

I am pleased to include with this letter the narrative and tabular portions of our Annual Report for the New Mexico Heritage Resource Management Program for FY11, which was compiled with the help of the New Mexico Heritage Resources staff. The Annual Report documents the hard work and many accomplishments of our cultural resources and paleontology staff during the past year. I have posted this document on the BLM Preservation Sharepoint Site, along with our tabular data, so that you and Emily Palus can retrieve it.

Please do not hesitate to contact me if you have any questions regarding this information.

Sincerely,

Signa Larralde
State Archaeologist
New Mexico Bureau of Land Management

NEW MEXICO
FY 11 ANNUAL REPORT NARRATIVE
CULTURAL RESOURCE MANAGEMENT PROGRAM

Major Accomplishments

New Mexico's National Historic Trails Program – Trailhead Exhibits Open

BLM is working with a broad coalition of partners to develop public access sites along the oldest colonial wagon road in North America, including the National Park Service (co-administrators of the national historic trail), the Camino Real de Tierra Adentro Trail Association (CARTA), the New Mexico Department of Transportation, Mexico's Institute for Anthropology and History (INAH), and the Spaceport Authority. In FY 11, 13 wayside exhibits were developed and installed interpreting the El Camino Real de Tierra de Adentro, the Yost Escarpment, and Point of Rocks. Eight of the panels were installed at the newly built Yost Escarpment parking lot and trailhead and along the hiking trail on the actual El Camino Real de Tierra Adentro. The hiking trail leading to the El Camino was built by Boy Scout Troup 85 under the direction of BLM archaeologist David Legare and CARTA Executive Director Jean Fulton. Five additional panels were installed at the newly built Point of Rocks parking lot and trailhead and along that trail. Additional exhibits will be developed for the new kiosk at the Interstate 25 Upham exit pull-out.



Sixteenth century travelers on El Camino Real de Tierra Adentro, October Trailhead dedication

To celebrate the completion of this work, the Las Cruces District Office held a dedication event at the Yost Trailhead on the Jornada del Muerto section of El Camino Real de Tierra Adentro. Speakers at the October 30th event included R. Ben Brown, INAH-Chihuahua, CARTA President Tom Harper, former CARTA President Pat Beckett, NPS Superintendent Aaron Mahr, Las Cruces District Manager Bill Childress, and State Office National Historic Trails Lead Sarah Schlanger. The trail-opening ceremony introduced the new full-color trail brochure for El Camino Real de Tierra Adentro as well as trail guides for the Yost Escarpment and Point of Rocks trails. The celebration culminated in a ribbon-cutting ceremony performed with a replica Spanish sword and overseen by historical re-enactors in authentic sixteenth century Spanish regalia. After the ribbon cutting, about half of the 110+ history buffs and trail aficionados on hand for the ceremony got their hiking boots dusty on the new trails.

Mesa Prieta Petroglyph Project

For the tenth straight year the BLM worked with Vecinos del Rio, a non-profit group, on a two-week petroglyph recording project on public lands on Mesa Prieta near Velarde, New Mexico. Vecinos del Rio recruited and trained local teenagers to record rock art. The students were signed up as BLM volunteers and supervised by BLM archaeologist Paul Williams and adult members of Vecinos del Rio and the Taos Archaeological Society. Students included Native Americans from the Ohkay-Owinge and Taos Pueblos, as well as youths from Velarde, Dixon and the Espanola. The youths used GPS, digital photography and extensive written documentation to record over 1200 petroglyphs that they discovered during the inventory. Data recorded during the project has been put into a GIS data base that will become a powerful tool for data curation and research.



Taos Field Office Archaeologist Paul Williams, Vecinos del Rio, and students received the Take Pride in America Award for Public Private Partnership at the White House in July.

The Mesa Prieta Petroglyph Project was awarded the 2011 Take Pride in America Award for Public Private Partnership at the White House in July. The BLM is a major partner with Vecinos del Rio on this monumental project with the long-term goal of locating and documenting all of the archaeological sites on Mesa Prieta, while educating the local youth about the importance of the archaeological resources in their area. This project was supported by the Take It Outside program.

The Permian Basin Mitigation Program: Changing the Way We Manage Cultural Resources

New Mexico continued to implement the Permian Basin Mitigation Program Memorandum of Agreement (MOA) in FY11. This agreement outlines procedures for mitigating adverse effects to cultural sites and historic properties through innovative research and outreach programs. The mitigation program is a coordinated effort between the BLM, the NM State Historic Preservation Office (SHPO), the Advisory Council on Historic Preservation, the oil and gas industry, Native American tribes, and the New Mexico Archaeological Council. We are presently in the fourth year of the five year MOA.

In FY 11, the MOA has been utilized for 663 projects, resulting in over \$1,934,197 in participant contributions that will be used to fund archaeological research in southeastern NM. To date, contributions of over \$3,500,000 have been received by the BLM as a result of the MOA. Because of the MOA, the Carlsbad Field Office cultural resource staff workload and program emphasis has shifted from reviewing a large number of small repetitive projects to overseeing proactive projects awarded with Permian Basin MOA funding.

Several projects funded through the Permian Basin MOA were either completed through contract with one of the four firms in the Permian Basin MOA IDIQ contract or are in progress during FY 10.

- The *Mescalero Apache Ethnographic Inventory* project was completed by TRC. Six areas of interest to the Mescalero Tribe were identified and approximately 400 acres were archaeologically inventoried.
- Final data comparability standards were completed by SWCA, documenting the results of the Permian Basin MOA *Data Comparability Workshop*.
- The final report *Archaeological Investigations at the Laguna Plata Site* was completed by TRC.
- The final report for the *Boothill Site Testing* project was completed by TRC.
- Fieldwork and laboratory analysis for *Documentation of the Burro Tanks Site* in the Roswell Field Office was completed by SWCA, Inc. The final report is nearing completion.
- An Archaeological Inventory is currently being conducted by Lone Mountain Archaeological Services at the Delaware River in an undersurveyed riparian area with a high density of both prehistoric and historic sites. BLM anticipates that a National Register nomination for an archaeological district will be completed as part of this project.
- A contract for preparation of a Multiple Property Documentation Form and one National Register nomination on the development of the oil and gas industry in southeastern New Mexico was awarded to SWCA, Inc.

The Permian Basin MOA was highlighted in an online publication, *Archaeological Practice: A Journal of the Society for American Archaeology*, at the following web address: <http://www.onlinedigeditions.com/publication/?i=62497&p=12>. This new journal may become the next publication for the 75-year-old national archaeological professional association. In the article, NM BLM archaeologists Sarah Schlanger, George MacDonell, and Signa Larralde discuss the Permian Basin program and its success in bringing a research oriented perspective to the management of fragile archaeological resources in one of the nation's most active oil and gas fields.

University of New Mexico Maxwell Museum Assistance with Curation of BLM Collections

During FY 11, New Mexico BLM entered into a Memorandum of Agreement for Curation Services (MOA) with the University of New Mexico Maxwell Museum of Anthropology for the curation and care of BLM's archaeological collections. The MOA outlines the roles and responsibilities of BLM and the Maxwell Museum in curation of BLM collections.

Along with this MOA, a new Assistance Agreement with the Maxwell Museum uses cultural resource program funds to undertake basic collections management tasks such as condition assessments, storage, cataloguing, and reporting. The Maxwell Museum will assist BLM by preparing annual collection inventory and NAGPRA reports. University of New Mexico anthropology student interns will assist with collections management tasks. The Maxwell Museum of Anthropology maintains a collection of millions of artifacts and documents, primarily from sites in New Mexico. Among these millions of items are collections from BLM-administered lands.

Paleontology Highlight: National Fossil Day

National Fossil Day celebrations held throughout New Mexico in FY 11 were a tremendous success. Sherrie Landon, Farmington Field Office Paleontology Coordinator, led six field trips for 150 people last fall to the Bisti/De-Na-Zin Wilderness to celebrate National Fossil Day. Sherrie Landon and Leslie-lynn Sinkey have organized a Paleontology Site Steward Program that will kick off this coming fall on National Fossil Day. Sherrie Landon also provided hands on paleontology field trips for middle school children for Simon Canyon Middle School "School Day" Field Trips. This event lasted five days and over 100 students participated.

The City of Las Cruces Museum and the New Mexico Museum of Natural History and Science cooperated on this event in southern New Mexico. Museum events were well attended. People really enjoyed the interaction with BLM staff and professional paleontologists.



National Fossil Day participants in the Bisti/De-Na-Zin Wilderness.

Other Accomplishments

National Programmatic Agreement implementation

- The New Mexico Cultural Resources Program holds monthly conference calls with cultural resources staff in New Mexico/Oklahoma/Texas/Kansas.
- State Archaeologist Signa Larralde met with Interim State Historic Preservation Officer several times during FY 11 to discuss revision of the New Mexico protocol.

Native American coordination and consultation

Field Offices and the State Office continue to coordinate and consult with Native Americans. The Farmington Field Office and the Rio Puerco Field Office consult regularly with the Navajo Nation and affected Chapters on oil and gas leasing, land exchanges, and undertakings within cultural Areas of Critical Environmental Concern (ACECs). The Roswell and Carlsbad Field Offices consult with tribes on oil and gas lease sale offerings. Oklahoma archaeologist Rick Fields is building relationships with the 40+ tribes in Oklahoma, Texas and Kansas as part of his compliance duties in the Oklahoma Field Office.

New Mexico State Office: State archaeologist Signa Larralde met individually with Zuni, Acoma and Hopi Tribal Historic Preservation Officers in spring 2011. Discussion included how BLM can best consult with these tribes, as well as negotiation of the National Programmatic Agreement.

The New Mexico State Office Minerals and Cultural Resource Programs assisted the Farmington and Oklahoma Field Offices with coordination of two of three national tribal consultation meetings regarding the revision of Oil and Gas Onshore Orders Nos. 3, 4 and 5 on July 11 and 13, 2011. The meetings were attended primarily by representatives of oil and gas revenue receiving tribes. The Tulsa meeting was hosted by the Cherokee Nation at their Hard Rock Hotel and Casino.

Farmington Field Office

- Esther Willetto joined the Farmington Field Office and New Mexico State Office staff in June 2011 as New Mexico's only Native American coordinator with no collateral duties. Esther's duties concentrate on coordination with the Navajo Nation.
- Consultation efforts are progressing with several tribes and three non-governmental consulting parties regarding oil and gas leasing near Chaco Culture National Historical Park.

Oklahoma Field Office Archaeologist Rick Fields represented BLM at the annual "Bridging the Gap" conference on tribal consultation for Oklahoma Tribes in April.

Museum Collections Management

Rio Puerco Field Office: Two small collections of several artifacts surface-collected during inventories were curated at the Maxwell Museum of Anthropology. These collections were accessioned as Maxwell accession number 2011.286, in Box 30254.

Native American Graves Protection and Repatriation Act (NAGPRA) compliance

Carlsbad Field Office: Seven tribes were notified of the discovery of human remains exposed by testing at site LA33085. After completing consultation, the remains were reinterred on site.

Resource Protection Projects and Activities

Identification, Recordation and Evaluation

Section 106 Inventory and Compliance

- NM BLM oversaw inventory of 48,476 acres on BLM-administered lands and non-BLM-administered lands in FY11, down almost 13,000 acres from FY10. New cultural properties recorded on BLM-administered and non-BLM-administered surface dropped to 905, down 8 percent from FY11. The Carlsbad Field Office continues to account for the majority of acres

surveyed; the Carlsbad office oversaw more than five times the survey performed in the next highest office.

- Farmington and Carlsbad continue to support significant NHPA Section 106 workloads as measured in numbers of undertakings requiring Class III inventory. Farmington archaeologists Michael Dussinger and Peggy Gaudy provide support for Farmington's extraordinary compliance workload. Carlsbad archaeologists Bruce Boeke, Martin Stein, Jeremy Iliff, and Jim Renn provide support for Carlsbad's workload.
- The Big Eddy Seismic project in the Carlsbad Field Office resulted in a Class III inventory of the Maroon Cliffs Archaeological District. Some 17,945 acres were inventoried, which will enable the Carlsbad Field Office to revise the boundaries of the District if necessary.
- The Oklahoma and Roswell Field Office archaeologists' time was entirely devoted to Section 106 workloads. In Tulsa, Rick Fields logged a 30% increase in undertakings and area inventoried, mainly in support of the oil and gas program. In Roswell, Justin Peters completed inventories in support of the oil and gas, recreation, range, and fire programs.
- Taos BLM archaeologists, funded through the Fire Program, are continuing a large inventory in the Cerro Montoso Area northwest of Taos, documenting the cultural resources in a previously under-inventoried area.
- Sherrie Landon conducted a paleontology survey and provided on site management of the resource during the filming of a TV episode of *Stargate Universe*. The episode was shot west of the Bisti/De-Na-Zin Wilderness in a fossil rich area.

Proactive Inventory (Section 110)

- Carlsbad Field Office
 - Paleontology Coordinator James Renn discovered four new bone beds in Pleistocene lake bed deposits. The discoveries include *Bison bison* bones and a woolly mammoth tusk. Mr. Renn has conducted several small paleontological surveys and has identified and documented several new paleontological resource areas, including a mastodon excavation site and mammoth and bison remains. He is working with the Southeastern New Mexico Archaeological Research Center in Hobbs.
 - A stain 70 centimeters below surface was discovered during the monitoring of a fluid spill clean-up operation; the report is in progress.
- Farmington Field Office
 - Cultural staff with assistance of Taos Field Office archaeologists collected tree-ring samples from LA155449 and Francais Tower V site.

- Cultural staff with assistance of the University of Arizona Laboratory of Tree-Ring Research collected tree-ring samples from the Rogers Site and the Chimney Draw antelope trap.
- Paleontology: A new track site was discovered this spring near Farmington. The site is in Paleocene sandstones and to date is the only recorded track site from this time period in New Mexico.



Justin Valdez of the Farmington Field Office at the new track site.

- Spencer Lucas and Gary Morgan of the New Mexico Museum of Natural History and Science (NMMNHS) have completed the first year of two multi-year projects in the Bisti/De-Na-Zin Wilderness. One project will re-inventory early Paleocene vertebrate and mega fossil plant localities and record polarity while the other project will be a re-inventory of all recorded fossil sites located within the wilderness. During this year's re-inventory of recorded fossil sites, an articulated sub-adult Pentaceratops and rare Ankylosaur skull were discovered. In addition, Sherrie Landon assisted Tom Williamson, NMMNHS, with the re-inventory of recorded fossil sites in the Fossil Forrest RNA, and collected mammal teeth from Paleocene deposits at Kutz Canyon. Two new species of mammals have been identified to date from the collected teeth.
- Las Cruces District Office: To date, approximately 200 paleontological localities have been inventoried and documented in the Prehistoric Trackways National Monument by Spencer

Lucas, NMMNHS, and Gary McDonald. The project involved an inventory of all recorded fossils sites within the approximately 5,280 acre monument. The inventory provides locality data and management recommendations for the Monument's Resource Management Plan currently in preparation.

- Rio Puerco Field Office:
 - El Malpais NCA – Cebolla Canyon Homesteads: The University of Arizona Laboratory of Tree Ring Research conducted its summer field school at a 20th century Anglo-American homestead patented by Joseph Shuman in 1941 in El Malpais National Conservation Area this May. This work was supported by BLM funding. Tree ring dates will help to establish site occupation history and use of wood resources. In addition, tree ring samples taken at this site will help preserve information that could be destroyed if an uncontrolled wildfire burned through the area. The tree ring research is also contributing to the knowledge of the long-term impacts of homesteading on the soil, hydrology, and timber of El Malpais NCA.



University of Arizona professor Ron Towner (right) with Dendroarchaeological field school student Donald Tatum at Shuman Homestead, El Malpais NCA. Photo by Michael Papirtis

- Rock Art Recording: A BLM volunteer group co-sponsored by the Albuquerque Archaeological Society has undertaken detailed recording of rock art sites in the Rio Puerco Field Office area. The group has completed recording known rock art in the Ojito Wilderness, Cañon Jarido, and San Ysidro Trials Area, as well as several smaller sites throughout the field office. This year, the rock art volunteers contributed 845 hours of their time.
- Cebolla Canyon Prehistoric Community Site Relocation and Updates: Rio Puerco Field Office STEP employees Leah Harrison and Michael Papirtis have relocated and done basic updates on 35 previously recorded sites in El Malpais NCA. The sites were originally located using compasses and 7.5' topographic maps, resulting in inaccurate site locations. The students also conducted repeat photography to gauge changes in site condition.
- Paleontology: Tom Williamson, NMMNHS, has documented over 1,789 fossils to date through a screen washing project looking for Paleocene micro vertebrates from the Torreon Fossil Fauna ACEC. NMMNHS has also collected and identified numerous new shark species from outcrops west of Albuquerque.
- Socorro Field Office
 - Approximately 1,269 acres were inventoried and 29 new sites recorded as part of the Chaco Frontier Communities Project. The field school is a partnership between BLM and Washington State University and is directed by Dr. Andrew Duff. The field school has been funded with Challenge Cost Share money since 2002. In FY 2011 Challenge Cost Share money was withheld from this and all cultural resource projects in New Mexico in favor of sage grouse studies in other states. The Socorro Field Office and Dr. Duff (and his students) are hopeful that data recovery can resume if Challenge Cost Share funds are restored.
 - In addition, 449 acres were inventoried for cultural resource by volunteers Allen Hard and Marjorie Siegel under the direction of Brenda Wilkinson. The survey took place northeast of Socorro in an area proposed for Off Highway Vehicle use, and for which a travel management plan is being prepared. The survey resulted in the recorded of 16 new sites and re-visitation of four previously recorded sites.
 - Volunteer rock art recording continued this year under the leadership of Carol Chamberland. Intensive recording of two previously recorded sites was completed, one more is underway.



A volunteer rock art recording crew works on a site in the Socorro Field Office.



Rock image in the Socorro Field Office documented by the volunteer rock art recording crew.

- Taos Field Office
 - Dr. Severin Fowles and his students from Barnard College have continued inventory under a BLM Cultural Resource Use Permit within the Rio Grande Gorge near Taos. The students continue to discover and record scratched petroglyphs representing tipis, horses and riders and other figures probably created by Utes, Comanches and Apaches in historic times. The petroglyphs show many horses but no guns and are thought to date to the early 18th century. Compilation of the data and analysis continued this summer.
 - Paleontology surveys have been conducted in the Sombrillo ACEC to provide data for the Taos Resource Management and Travel Management Plans. Recorded fossil sites have been inventoried and trails established for public use in the area.
- National Historic Trails
 - Seventeen segments of El Camino Real de Tierra Adentro NHT were listed on the New Mexico Register of Cultural Properties; listing on the National Register is pending.
 - The American Reinvestment and Recovery Act (ARRA)-funded National Historic Trails Inventory Project wrapped up archaeological survey, trail condition assessments, and visual resource inventory and assessment on significant trail segments on El Camino Real de Tierra Adentro and the Old Spanish National Historic Trails between May and August, 2011. This work identified new archaeological segments of the trails, established baseline trail conditions, and documented trail landscapes and viewscapes on public lands in New Mexico. The final report on this project is due in early Spring, 2012.

Stabilization and Rehabilitation

Las Cruces District Office: This year a Challenge Cost Share project with the New Mexico State University College of Engineering led to stabilization of the Martinez House in the Lake Valley Historic District. A brace was placed inside the west back room of the house to better support the replacement of the roof over that portion of the house. The roof had collapsed and was partially blown off the house. An interior support wall was built by the students and Dr. Sonia Cooper, who directed the project. This new temporary interior wall can now support a new superstructure that will, in turn, support a new roof. In the west front room, the exterior adobe wall was braced and pulled back into position, thus providing better support for the roof in that room.

During the course of work, it was observed that the front porch was pulling away from the house and posed a danger to people passing in front of the house. A new porch, with like materials, was constructed and attached through the adobe to better tie the porch to the house. The original porch was nailed to the adobe and the nails had pulled out. The porch was leaning away from the house and was in danger of falling into the street.

Monitoring and Site Protection

FY11 site protection efforts for BLM NM include continued development of site steward programs, administrative actions, and physical protection projects.

- Carlsbad Field Office
 - James Renn presented the Site Watch program to the Southeastern New Mexico Archaeological Research Center at the Western Heritage Museum in Hobbs, New Mexico. Twenty volunteers will complete the Site Watch training program on September 10.
 - Bruce Boeke and James Renn monitored heritage resources at Boyd Cave Traditional Cultural Property.

- Farmington Field Office
 - Northwestern New Mexico Site Stewards continue to monitor sites on behalf of BLM. Cultural staff assisted in training 22 new members of the Northwest New Mexico Site Stewards, in three separate training sessions.

 - A YCC crew helped repair protective fence around Pierre's Ruin ACEC and installed two pedestrian gates in the fence. They also helped repair protective fence around Halfway House. These two sites are World Heritage Chaco Protection sites.

 - The Farmington Field Office maintenance crew fenced the boundary of the Fossil Forest Research Natural Area to protect the paleontological resource from cattle.

- Las Cruces District Office: David Legare and Thomas Holcomb continued their support of the District's volunteer archaeological site monitoring program. The site monitors annually visit and assess condition for over one hundred significant archaeological and historic sites and districts.

- Rio Puerco Field Office
 - Interagency Wildland Fire Suppression and Cultural Resources Protection: Two Rio Puerco cultural resources staff, Cynthia Herhahn and Michael Papirtis, were assigned to the Las Conchas fire to help protect archaeological, historical, and traditional cultural sites and areas from damage from fire suppression activities.

 - The Rio Puerco Field Office has an active BLM volunteer program, with 45 volunteers who visited more than 500 BLM-managed sites. One crew, led by retired BLM archaeologist Tony Lutonsky, is completing site encounter forms for previously unrecorded sites. This information has been very useful for planning purposes. Another group of volunteers has been scouting a potential route for a trail alignment so that the alignment will avoid sites. A third group has been conducting reconnaissance for unrecorded sites in areas with little archaeological inventory. All volunteers monitor for looting and other sources of deterioration and install anti-looting/anti-vandalism signs

to protect cultural resources. A total of 5257 volunteer hours were spent in these activities.

- The Rio Puerco Field Office participates in the SiteWatch site steward program established by the New Mexico Historic Preservation Division. Twenty site stewards from two established chapters of this program are now formally monitoring critical archeological and historic sites in the Rio Puerco Field Office, as well as reporting unrecorded sites in unexplored areas.



Rio Puerco Field Office Archaeologist Cynthia Herhahn records a prehistoric site within the perimeter of the Las Conchas Fire. Photo by Michael Papirtis

- Roswell Field Office: Archaeologist Justin Peters and Field Office managers met with concerned citizens from Lincoln, New Mexico and New Mexico State Historic Preservation Office representatives concerning watershed restoration projects within the Lincoln National Historic District and National Landmark. These projects aim to remove invasive species and restore the historical vegetation as well as the historically more open view shed along the Rio Bonito through the historic district. Fencing and monitoring during the project ensured that historic sites were protected.

- Socorro Field Office
 - Site monitoring inspections at 34 cultural sites and two paleontological sites were conducted during the reporting period.
 - A site protection sign was placed at NM-02-3642, a multicomponent paleonindian site with great research potential.
- Taos Field Office: The site watch program in the Taos Field Office is represented by a Galisteo Group and a Taos Group. Over thirty-five sites are now being monitored by site stewards and more will be added. Taos site stewards have been researching historic structures near Taos Junction Bridge in the Orilla Verde Recreation Area, and an interpretive handout for visitors to the area is being produced. Taos site stewards are also carefully working with rock art vandalism mitigation, learning to remove paint on boulders and to fill in scratch vandalism with special pigments.

Data Recovery and Research Projects:

- Carlsbad Field Office
 - Martin Stein, Carlsbad Field Office archaeologist, is compiling a report that summarizes the results of the XRF sourcing of 140 obsidian samples, as well as all known sourced obsidian samples from the Carlsbad Field Office area.
 - Martin Stein is preparing a data recovery report for a roasting pit feature that was impacted by a salt water spill at site LA165923. Laboratory analysis of samples is complete, and includes a radiocarbon date, macrofloral analysis, and organic residue (FTIR) study.
- Farmington Field Office
 - Ten members of the YCC crew assisted in a brief signaling experiment between Pierre's Ruin/El Faro, the Burned Jacal Site and Arena Alta, on the Chaco North Road.
 - Dr. Robert Sullivan of the State Museum of Pennsylvania (SMP) has excavated *Glyptodontopelta*, *Alamosaurus sanjuanensis*, and *Parasaurolophus* bone beds in the Bisti/DeNaZin Wilderness. The University of Pennsylvania has also excavated a ceratopsian dinosaur from BLM land outside the wilderness.
 - The new species of Tyrannosaur named the "Bisti Beast" has been officially named this year. *Bistahieversor sealeyi* was excavated from the Bisti/DeNaZin in 1998. Twelve new species, including nascent mammals, sharks, ceratopsian and ankylosaur dinosaurs, were collected this past year from the San Juan Basin and Rio Puerco area.



Spencer Lucas (NMMNHS), Pat Hester of the BLM, Thetis Gamberg, and Robert Sullivan (SMP), during the excavation of a hadrosaur jaw in the Bisti/DeNaZin Wilderness.

- Las Cruces District Office: The 2011 project of the Southern Mimbres Archaeological Project directed by Dr. Patricia Gilman of the University of Oklahoma is a settlement pattern study of large Puebloan sites in the southern and western Mimbres regions, many of which are managed by the BLM. This study will provide a report to the BLM with the locations and descriptions of large Mimbres Classic sites useful for management purposes, and a poster presentation at either or both of the upcoming Southwest Symposium in Albuquerque in January 2012 and the Society for American Archaeology meeting in Memphis in the spring of 2012. A manuscript will be submitted to the *Kiva* for publication.
- Socorro Field Office
 - Jill Onken, a graduate student at the University of Arizona, conducted geoarchaeological and paleoenvironmental research work on BLM land in western Catron County. The research was funded through a grant from the National Science Foundation. The project included collection of core samples from each of two locations and collecting soil and radiocarbon samples from archaeological features exposed in arroyo cuts within four project areas. The soils and features are likely to be lost to erosion in the next year or two. The five sites from which samples were collected are LA 13681, 143346, 148779, 148780, and 162180. The research will shed light on the role environmental conditions

played in the prehistoric development of agriculture, and the role environment may have played in the total abandonment of the area in the AD 1300s. Onken's research also resulted in the discovery of eight newly recorded sites.

- The Socorro Oral History Project continued, with two new oral histories collected and five transcribed.

Heritage tourism interpretive developments

- Las Cruces District Office: The Las Cruces District Office entered into a formal partnership with the City of Las Cruces Museums to assist them with the development of Paleozoic Trackways displays for their new Museum of Nature and Science, which will open in November of 2012. BLM is involved with interpretive planning sessions, and acquisition and treatment of trackways specimens for the museum.
- New Mexico State Office: CARTA, through its partnership with BLM, displayed exhibits on the El Camino Real at Nopalitos Gallery in Las Cruces, reaching 150 people. An El Camino plaque was installed and dedicated in the same historic neighborhood. Two El Camino Real signs were installed on Mesquite Street in Las Cruces.
- See highlight at beginning of report on installation of El Camino Real trailhead exhibits, Las Cruces District Office.

Public Outreach, Public Involvement and Training

- Carlsbad Field Office
 - Carlsbad Field Office staff actively participated in the TransPecos Archaeological Society throughout the year.
 - James Renn is working with Patsy Jackson at the Carlsbad Museum and Art Center to develop public outreach programs incorporating de-accessioned artifacts from the museum. Additionally, James is providing assistance to the museum curation staff with artifact identification and pottery typology.
- Farmington Field Office
 - Cultural staff made the following presentations:
 - 2010 Pecos Conference to 200 people on the Chaco North Road by Jim Copeland
 - Cortez Cultural Center, Hisatsinom Chapter of the Colorado Archaeological Society to 40 people on the Chaco North Road
 - 2010 Philmont Archaeological Conference to 60 people on the Chaco North Road by Jim Copeland
 - 2010 New Mexico Archaeological Council Fall Conference to 90 people on Navajo antelope trap research by Jim Copeland
 - Fort Lewis College to 50 people on Chaco North Road research results

- Agave Chapter of the Arizona Archaeological Society, Snowflake, Arizona to 25 people on Chaco North Road research results
 - Sierra Club work group to 15 people on Chaco North Road research results
 - 2010 Conference on Archaeoastronomy in the American Southwest to 90 people on Chaco North Road and astronomy in Navajo rock art by Jim Copeland
- Paleontology staff made the following presentation: 9th Conference of Fossil Resources, Kemmerer, Wyoming by Sherrie Landon, who also participated in the 4th Fossil Preparation and Collection Symposium held following the conference.
- Cultural staff conducted the following tour: Pierre's Ruin Chacoan Outlier ACEC for the Chaco Sites Protection Act Interagency Management Group for 20 people
- Paleontology staff conducted the following tours: Hands-on paleontology field trips for Simon Canyon Middle School "School Day" for five days to over 100 students by Sherrie Landon
- Cultural staff conducted the following training:
 - Northwest New Mexico Site Stewards to 22 people in three separate sessions
 - BLM National Training Center Pipeline Systems Course to 50 people regarding data recovery and associated issues with cultural resources and pipelines by Jim Copeland
 - San Juan College field school students on survey techniques for 10 people
- Las Cruces District Office
 - Archaeology Day was held twice during the reporting period in Las Cruces. The fall event was at Dripping Springs (La Cueva) and included yucca fiber, corn grinding, spear throwing with an atlatl and flint knapping demonstrations. Approximately 30 children and adults attended. The spring event was expanded to include several partners (City of Las Cruces Museums, El Camino Real Trail Association (CARTA), White Sands National Monument, the Museum of New Mexico Office of Archaeological Studies (OAS), and the United States Forest Service) and held at the City of Las Cruces' Branigan Cultural Center. Featured were prehistoric artifact displays (real and replica) from the El Camino Real; and native technologies including yucca fiber, bead making, pottery making, fire making, corn grinding, and flint knapping demonstrations, and spear throwing with an atlatl. Approximately 300 children and adults attended.
 - Several educational events highlighting the paleontological resources of the Prehistoric Trackways National Monument (PTNM) were held by Las Cruces District Office recreation and cultural staff and New Mexico State Office cultural staff, including many children's programs at schools, some presentations to community groups, and some guided tours to the PTNM.
- New Mexico State Office
 - Heritage education accomplished through the partnership with the Museum of New Mexico Office of Archaeological Studies (OAS) resulted in 138 events/presentations statewide, reaching over 6,000 people, including over 3600 children.

- National Historic Trails heritage education and outreach
 - El Camino Real de Tierra Adentro National Historic Trail accomplishments were achieved primarily through the partnership with CARTA. CARTA sponsored 14 public events throughout the year, including talks, tours, and a student filming project. May events were especially noteworthy, since El Camino Real was the theme of the 2011 New Mexico Heritage Preservation Month.
 - CARTA participated in National History Day at the Farm and Ranch Museum in Las Cruces. The Executive Director was a judge and over 200 students participated.
 - CARTA hosted a bi-national Cultural Landscapes Documentation Training Workshop in El Paso in June, funded as part of a 2010 BLM Challenge Cost Share project. Participants included the BLM, the NPS, INAH, and others. The workshop resulted in the selection of four sites that will be the subject of future studies and field schools.
 - Sarah Schlanger presented an invited paper in a Society for American Archaeology Historic Trails Documentation symposium in Sacramento in April.

- A Historic Homestead Workshop and Training co-sponsored by BLM and the New Mexico Archaeological Council was attended by 90 people. A series of papers on homesteading in New Mexico and topics in homestead documentation was organized by David Kirkpatrick of the New Mexico Archaeological Council and Homestead Context author Tom Merlan. Presentations at the workshop were made by Cynthia Herhahn of the Rio Puerco Field Office and Brenda Wilkinson of the Socorro Field Office.

- Signa Larralde gave a presentation on the relationship between the National Environmental Policy Act and the National Historic Preservation Act at a graduate seminar on cultural resource management taught at New Mexico State University. The presentation reached 10 students.

- Rio Puerco Field Office: Staff archaeologists Gretchen Obenauf and Cynthia Herhahn each participated in two separate panel discussions in a graduate seminar on cultural resource management taught at the University of New Mexico. The two panel discussions reached a total of 20 students. Obenauf also conducted 1 guided hike of archeological sites, accommodating 10 people.

- Socorro Field Office
 - Brenda Wilkinson contributed a presentation on cultural resources and Pat Hester on geology and paleontology at an interdisciplinary tour of Ladron Peak NLCS Unit for the public.
 - On March 21, 2011, two companies of the 1st Battalion, 41st Infantry conducted a staff training or “staff ride” at historic Fort Craig. Under the command of Lieutenant Browser, and with the historical expertise of Kevin Kaveney and Gary Zeigler, the group was given presentations on the Civil War Battle of Val Verde. The companies then broke into their platoons and toured the fort. They were also required to write up a brief report for their commanding officers, discussing tactics and mistakes made by both

sides, and lessons to be learned from the battle. Socorro Field Office Archaeologist Sara Stebbins and Assistant Field Office Manager John Brenna represented the BLM at the event.

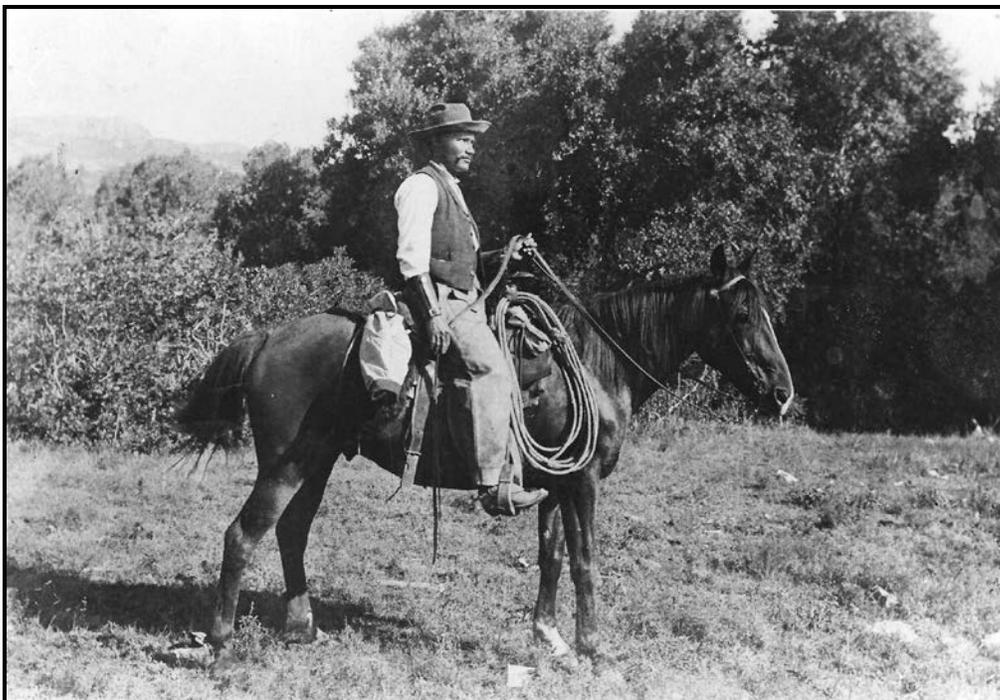
- Archaeologist Brenda Wilkinson gave a talk and led a field trip for a class of first and second graders from San Antonio, New Mexico Elementary school. The teacher, Mrs. Garrott, was provided with the video *Visit With Respect*, which the class watched prior to the presentation and field trip.
- Taos Field Office: The Taos Field Office cultural staff conducted eight public presentations for over 95 persons. These presentations included archaeological field trips, school programs, and archaeological society meetings.

Heritage Program Publications, Videos, Podcasts, and Brochures Produced

- Amarillo Field Office: As part of the Landis Property Archaeological Data Recovery Project, TRC Solutions, Inc. developed a web exhibit on the award-winning *Texas Beyond History* web site. The exhibit can be viewed at: <http://www.texasbeyondhistory.net/landis/index.html>. The web exhibit highlights results of excavations at an Archaic component, a Woodland component, and a Protohistoric component at three sites along West Amarillo Creek just north of Amarillo. Also discussed are geomorphology, past environments, environmental sampling of ground stone and firecracked rock to understand plant foods processed at the sites, and how butchering practices can be inferred from the large quantity of bison bones recovered.
- Farmington Field Office: Preparation of a new pueblitos of Dinétah brochure and map is progressing.
- Las Cruces District Office
 - The Las Cruces District Office recreation staff is working with New Mexico State University Film School to produce 10 podcasts on the Prehistoric Trackways National Monument (PTNM). Finished products for use on BLM's PTNM website will be available early next fiscal year. Four film students are working on the project.
 - Outdoor classroom products which combined cultural and environmental education were developed through the Youth Initiative program by a history student STEP for Dripping Springs, Aguirre Springs, Lake Valley Historic Townsite and Three Rivers Petroglyph Site.
- New Mexico State Office
 - Cultural resource staff statewide worked on development of a new cultural resources external web page with the assistance of GeoCorps Intern Maxine Paul.
 - The Historic Homestead training presented by BLM and the New Mexico Archaeological Council featured the New Mexico Historic Homestead Context, produced in 2008 through a SHPO contract funded by BLM. The document was assembled for distribution at the workshop by Jane Childress and will be published in the New Mexico BLM cultural resource series in FY 12. It is currently available on

both the New Mexico Archaeological Council web site and the New Mexico BLM web site.

- State Archaeologist Signa Larralde served on the BLM Preservation Board's Education and Training Committee by assisting with planning the on-line production of the "Fundamentals for Managing Cultural Resources" course offered through the BLM National Training Center.
- In partnership with BLM, the New Mexico Museum of Natural History and Science published *Traces of a Permian Trackway*, a publication for the general public on Prehistoric Trackways National Monument; and Bulletin 53, which features articles on the paleontology of the San Juan Basin.
- CARTA produces their *Chronicles of the Trail* quarterly newsletter through partnership funds with BLM.
- See Highlights for information on BLM's development and publication of El Camino Real de Tierra Adentro brochure and the development of the Old Spanish Trail brochure, in partnership with the National Park Service.
- Rio Puerco Field Office: The Rio Puerco Field Office, Farmington Field Office and New Mexico State Office Cultural Resources staff has worked for four years to publish a special joint report by the Archaeological Society of New Mexico and the Bureau of Land Management on the Casamero Community, a Chacoan Outlier. *The Casamero Community in the Red Mesa Valley of Northwestern New Mexico* compiled and edited by F. J. Mathien, New Mexico Bureau of Land Management Cultural Resources Series Monograph No. 17 was published in late 2010. This volume makes accessible information gathered during excavation and stabilization efforts that took place in the 1960s and 1970s, and also provides a compilation of previous and recent research involving the site and its larger context.
- Socorro Field Office
 - Brenda Wilkinson wrote two short articles on George McJunkin, the African American cowboy who discovered the Folsom type site. One was posted on NM BLM's Cultural Resource web site and on NM BLM's Facebook page. The second piece was prepared for the Washington Office BLM's Homestead Commemoration web page for use in the timeline. Most archaeologists have heard of George McJunkin, but who knew he had a homestead?



George McJunkin, New Mexican homesteader. Photo courtesy Georgia and Bill Lockridge, former owners of the Crowfoot Ranch

- This year an article on the Magdalena Trail, or Stock Driveway, was posted on the BLM Socorro Field Office external web page. In addition, the Magdalena Trail brochure was made available as a downloadable .pdf, and Part I of the Dave Farr oral history was posted. Part one describes Farr's experiences trailing cattle on the Stock Driveway. A BLM, NM Facebook posting alerted the public of the added features to the web page.
- Brenda Wilkinson's oral history project resulted in seven newspaper articles, two oral histories posted on New Mexico BLM's Cultural Resource web page, and three BLM Facebook postings.
- In addition, one oral history subject, Jewell Derrick, was featured in a video contracted by the BLM Washington Office. The five minute clip is one of five homestead videos that will be part of BLM's commemoration of the 150th anniversary of the Homestead Act. It was posted on BLM New Mexico's YouTube site in July 2011, and will be featured on the BLM Washington Office web page by the spring of 2012. Socorro Field Office archaeologist Brenda Wilkinson was also in the video, which was based on her research.
- The following publications and presentations by Washington State University faculty and students derived from research conducted through the Chaco Frontier Communities field school, a project supported with Challenge Cost Share and Youth Initiative funding administered by Brenda Wilkinson:

Duff, Andrew I.

2011 Archaeological Survey in the Cox Ranch Pueblo and Largo Gap Vicinities, Catron County, New

Mexico, 2010 Season. Report submitted to the Bureau of Land Management, Santa Fe, New Mexico. Chaco Frontier Communities Project, Cox Ranch Pueblo Community Research Project Report #6 & Largo Gap Community Research Project Report #1.

- 2011 Connectivity, Landscape, and Scale. In *Movement, Connectivity, and Landscape Change in the Ancient Southwest*, edited by Margaret Nelson and Colleen Strawhacker, pp. 467-479. University Press of Colorado, Boulder.

Conference presentations:

Duff, Andrew I.

- 2011 Survey of Three Pueblo II Community Centers in West-Central New Mexico. Poster presented at the 76th Annual Meeting of the Society for American Archaeology, Sacramento.

Bowser, Brenda, and Andrew Duff

- 2010 Technological Traditions and Ethnic Co-residence: A Comparative Study of Ethnoarchaeological and Archaeological Corrugated Cooking Pots. Paper presented at the 109th Annual Meeting of the American Anthropological Association, New Orleans.

Notable Planning Accomplishments

- Carlsbad Field Office: Cultural Resources staff has contracted for a Class I overview and data synthesis for the Carlsbad Field Office, in preparation for the ongoing Resource Management Plan (RMP) revision.
- Farmington Field Office: A RMP amendment for Visual Resource Management is in preparation. The amendment will consider VRM categories for cultural resource ACECs, including Chaco protection sites and the Chaco North Road, as well as lands surrounding Chaco Culture National Historical Park.
- Las Cruces District Office: The Prehistoric Trackways National Monument RMP is in preparation. A Draft EIS/Proposed RMP is expected in FY 12.
- Rio Puerco Field Office: Archaeologist Cynthia Herhahn participated on the interdisciplinary team for the Rio Puerco RMP revision, conducted analysis and wrote the cultural resources sections of the document. A Draft EIS/Proposed RMP is expected in FY 12.
- Roswell Field Office: The Ft. Stanton-Snowy River National Conservation Area RMP is in preparation.
- Socorro Field Office: The Record Of Decision (ROD) for the Socorro Field Office RMP was signed on August 20, 2010. Within ACECs and Special Management Areas (SMAs) designated all or in part for the protection of Cultural Resources, 622 sites are present. By designation the ACECs and SMAs are:

Mockingbird Gap ACEC – The area was designated for the protection of a complex of Paleoindian sites. Little inventory has been conducted to date, but 47 known BLM sites are protected within the boundaries.

Zuni Salt Lake ACEC – The area was upgraded from an SMA and expanded to include 46,746 acres to protect the area surrounding Zuni Salt Lake. The boundaries generally coincide with the Pueblo agreed-upon boundaries of the Zuni Salt Lake Sanctuary Zone, which includes numerous salt trails. The ACEC includes 206 previously recorded sites on BLM lands.

Fort Craig SMA – The SMA was carried forward to protect National Register listed Fort Craig, which was significant in the Indian Wars and Civil War.

Newton Site SMA - The SMA was expanded from 40 acres to approximately 7,000 acres to protect a complex of sites that are thought to constitute a community centered on the Newton Site. Site densities are known to be high, and 35 sites have been recorded to date within the SMA. Many more are expected to be documented in the coming years.

Penjeacu SMA – SMA was carried forward from the 1989 RMP for protection and interpretation of Penjeacu. The site was formerly called Teypama; however recent research indicates that the site is most likely Penjeacu.

Playa Pueblos SMA – The SMA includes two separate plots totaling 203 acres. The SMA is for the protection of two large Pueblo IV period pueblos.

Cerro Pomo ACEC – Much of the Cerro Pomo ACEC falls within the boundaries of the Eagle Peak and Mesita Blanca Wilderness Study Areas (WSAs). The ACEC will protect a high density of cultural sites should the WSAs be released from wilderness review. The area coincides with the focus area of Dr. Andrew Duff's research, and the majority of the 246 sites within the ACEC were recorded during the course of his research.

Ladron Peak/Devil's backbone ACEC – This is a large (57,474 acre) ACEC designated primarily for the protection of wildlife habitat and migration routes, but it encompasses the former Rio Salado Cultural Resource SMA, which was designated to protect a significant complex of Pueblo II Period habitation sites. The ACEC protects 56 recorded sites.

The Box SRMA – The Box was expanded from the 1989 RMP. It was designated as a recreation area for rock climbing, as well as for protection of a high density of cultural sites from a broad spectrum of time periods. There are 28 recorded sites within the SRMA.

Johnson Hill/Gordy Hill CRMA - Top priority for implementation of the RMP is a travel management plan for the Johnson Hill/Gordy Hill SRMA. A decision in the RMP states that the area will be used for Off-Highway Vehicles as a recreational activity. No funding has been made available for cultural resource inventory, and little survey has been conducted within the SRMA, which encompasses nearly 7,500 acres. The area is adjacent to the Camino Real de Tierra

Adentro National Historic Trail, and preliminary data indicate that the area has high densities of cultural resource sites which are at risk, both from OHV use and from erosion.

- Taos Field Office
 - Paul Williams is participating on the interdisciplinary team for the Taos Field Office RMP revision. The Final EIS/Proposed RMP is in preparation.
 - The Taos Field Office is the lead office in continuing implementation of the Galisteo Basin Archaeological Sites Protection Act, with assistance from the Rio Puerco Field Office. The cultural resource management plan required by the Act is expected to be completed in spring 2012. Two assistance agreements are providing support for preparation of the management plan and implementation of the Act. The Galisteo Basin Archaeological Sites Protection Act Ethnographic Study was completed this year, with extensive Native American input and interest in implementation of the Act.

Key Archaeological Resources Protection Act prosecutions

- Carlsbad Field Office
 - A damage settlement in the amount of \$69,000 was negotiated by Carlsbad Field Office management for damage through unauthorized maintenance on an existing Xcel power line in the Maroon Cliffs Archaeological District that impacted three archaeological sites. For more information, see the attached LOOT report in Appendix 4.
 - A damage assessment was completed for unauthorized power line construction by BOPCO that affected three prehistoric sites. The company paid \$5,941 as mitigation into the Center of Excellence for Hazardous Materials Management's BLM Archaeology Mitigation Fund.
 - A damage assessment was completed for unauthorized road construction by Devon, Inc. that affected one prehistoric site. The company paid \$8,588 as mitigation into the Center of Excellence for Hazardous Materials Management's BLM Archaeology Mitigation Fund.
- Las Cruces Field Office: Daniel S. Amick, head of the Anthropology Department at Loyola University in Chicago, Illinois, was convicted of a one-degree misdemeanor ARPA charge for directing several individuals to remove archaeological artifacts from BLM lands without a permit, and maintaining possession of artifacts from public land. For more information, see the attached LOOT report in Appendix 4.
- Numerous ARPA investigations are ongoing throughout the state and will be reported when they are completed.

Key 16 U.S.C. 470aaa (paleontological) prosecutions: none

Staffing Update: Staffing changes in FY 10 include the following:

- Carlsbad Field Office: Lead archaeologist George Macdonell became an Assistant Field Office Manager in the Carlsbad Field Office. James Smith, Carlsbad Field Office planner, became the new lead archaeologist. Jim Renn joined the Carlsbad Field Office cultural resources staff, filling a position vacated last year by Lynne Robinson. The Carlsbad Field Office is currently fully staffed with five archaeologists.
- Farmington Field Office: A position for a fourth archaeologist in the Farmington Field Office is currently being advertised.
- New Mexico State Office: The New Mexico State Office lost Sarah Schlanger, the National Historic Trails coordinator for El Camino Real de Tierra Adentro and the Old Spanish Trail; Sarah took a position as Associate Monument Manager at Grand Staircase-Escalante National Monument in Kanab, Utah. Sarah's position will not be filled. Jane Childress assumed the trail coordinator position for El Camino Real NHT. The Old Spanish Trail coordinator position will move to Utah, per direction in the FY 2012 PTA.
- Oklahoma Field Office: A position for a second archaeologist in the Oklahoma Field Office is currently being advertised.
- Rio Puerco Field Office: Sean Dougherty was hired as an archaeological technician. Joe Lally retired but came back as a part-time retired annuitant to assist with range projects.
- Roswell Field Office: Justin Peters was hired as assistant archaeologist in October, 2010. Beckie Hill, lead archaeologist, retired in January 2011, leaving Justin as the only archaeologist in that Field Office.
- Pat Hester, regional paleontologist, retired in May. Sherrie Landon of the Farmington Field Office has been on a detail serving as Acting Regional Paleontologist since June. Paleontology coordinators (a collateral duty) were named in seven Field Offices.

Awards: The Taos Field Office Mesa Prieta Petroglyph Project was awarded the 2011 Take Pride in America Award for Public Private Partnership at the White House in July. For more information, see the highlight at the beginning of this report.

Data Sharing

Archaeologist Dave Simons of the New Mexico State Office continues to work with the New Mexico Historic Preservation Division to improve the capacity of the statewide New Mexico Cultural Resources Information System (NMCRIS). NMCRIS introduced their new system for directly entering information and shapefiles for inventory data; their system for directly entering site form information and shapefiles is still under development.

New Mexico hosted the national meeting of the Cultural Resources Data Sharing Team in February in Santa Fe. Archaeological Records Management System Director Derek Pierce gave a presentation on the new NMCRIS features at the meeting.

Overall Workload

Workload among field offices continues to be very unevenly distributed, with the majority of undertakings at the two energy pilot offices, Farmington and Carlsbad (Figure 1). Some offices have few undertakings but a large number of acres per undertaking – most of those undertakings are surveys done in conjunction with fire and fuels projects. Las Cruces Field Office survey is tied mainly to other kinds of proponent-sponsored projects, such as land exchanges and range projects. Figure 2 below shows the average size of undertaking per Field Office for FY11. Figure 3 below shows the number of sites recorded per Field Office for FY 11, another measure of work load.

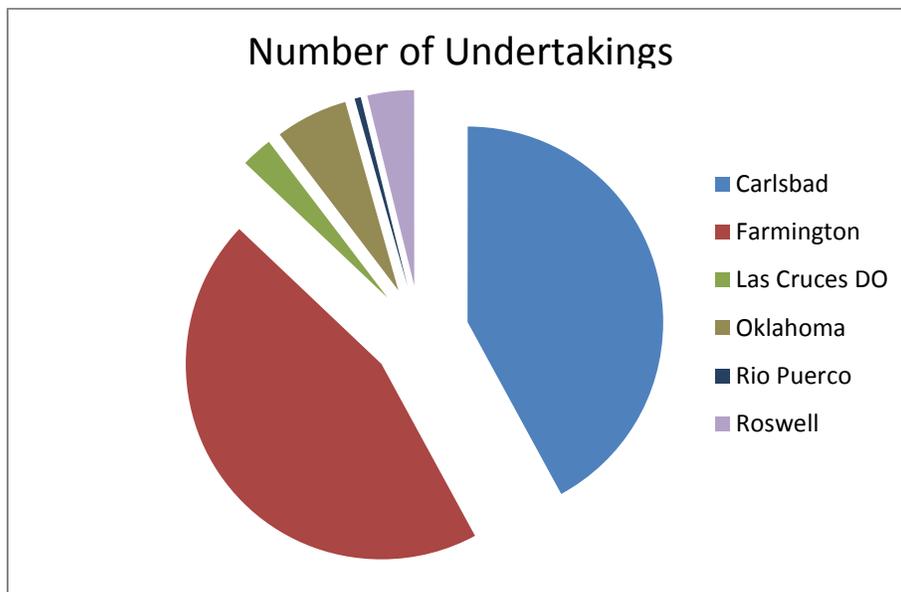


Figure 1. Total number of undertakings per Field Office, FY 11

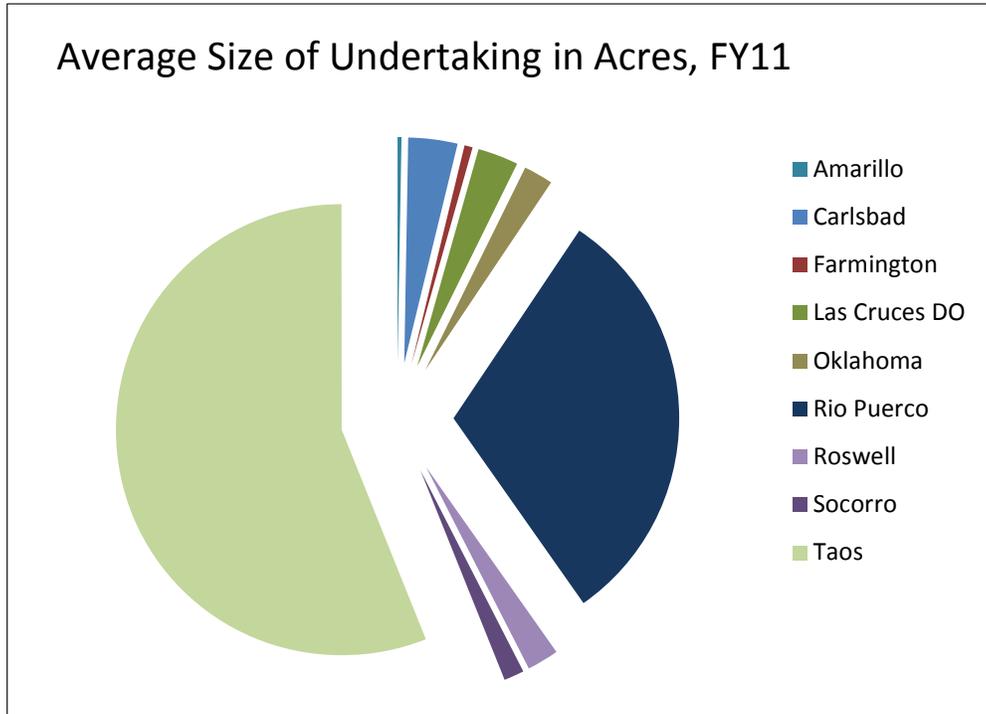


Figure 2. Average Size of Undertakings per Field Office, FY 10

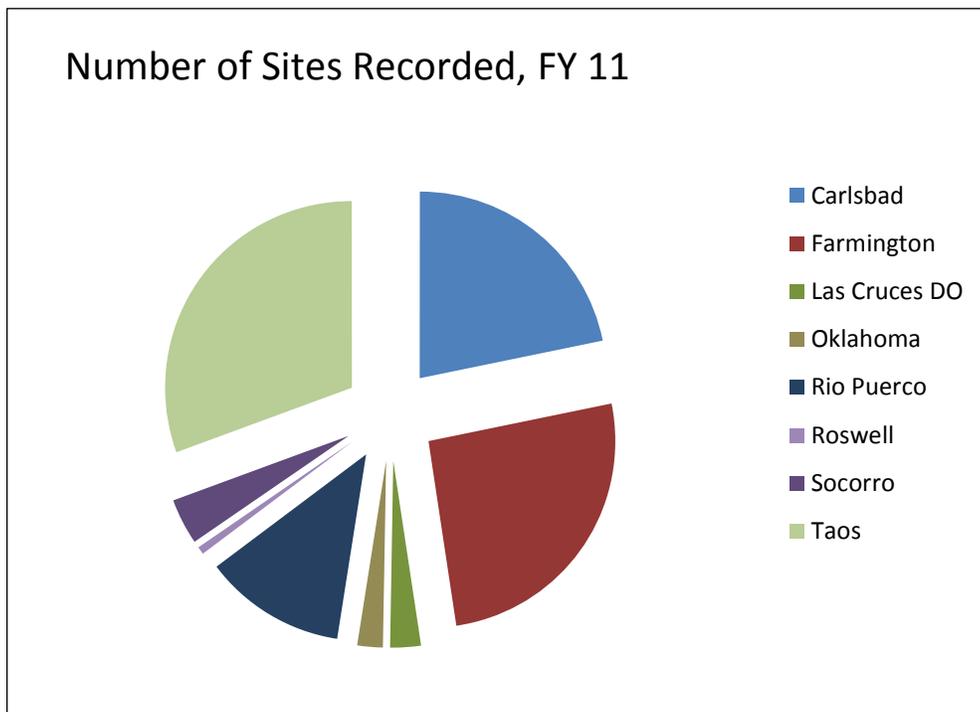


Figure 3. Number of Sites Recorded per Field Office

The trend in number of undertakings reflects the continued economic down-turn in the Farmington and Carlsbad Field Offices, less so in the other Field Offices, as shown in Figure 4.

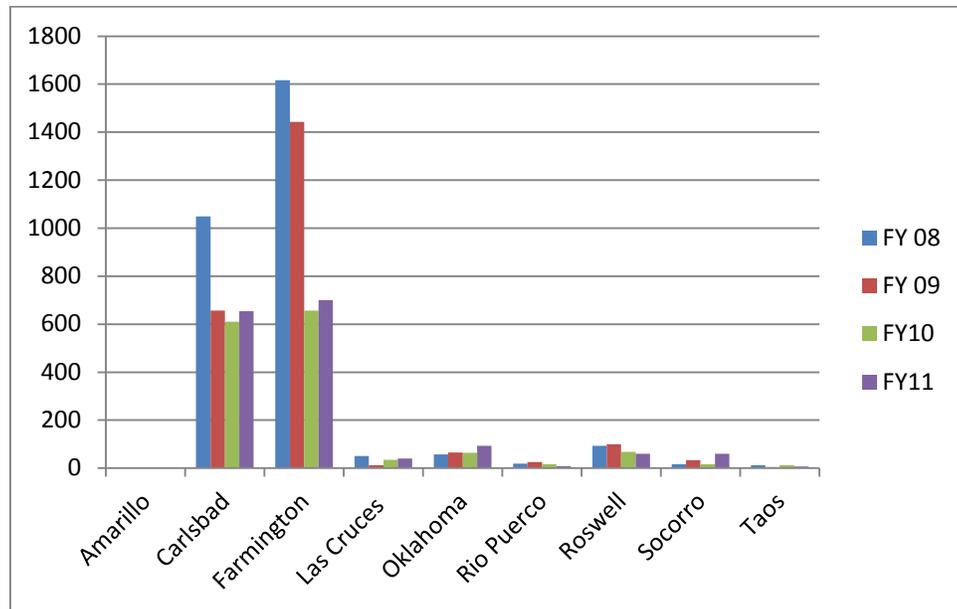


Figure 4. Trend in Number of Undertakings per Year

**New Mexico Cultural Resources Program Activities
Specified in BLM-SHPO NM Protocol, FY 11**

Albuquerque District:

Rio Puerco Field Office

1) Areas of Effect Not Surveyed to 100%

- Nine rights-of-way were renewed following review and determination that the previous inventories were adequate. These rights-of-way renewals had also been determined not to constitute undertakings according to Appendix 11, #7 of the NM Protocol.
- Two lease renewals for communications sites were issued following review and determination that the previous inventories were adequate. These rights-of-way renewals had also been determined not to constitute undertakings according to Appendix 11, #7 of the NM Protocol.
- Three rights-of-way to co-locate cellular phone antennas on existing cell towers were issued following review and determination that these rights-of-way do not constitute undertakings according to Appendix 11, #7 of the NM Protocol.
- Three rights-of-way were reassigned from the Public Service Company of New Mexico (PNM) to the New Mexico Gas Company following review and determination that the previous inventories were adequate. These rights-of-way renewals had also been determined not to constitute undertakings according to Appendix 11, #7 of the NM Protocol.
- Six right-of-way renewals and one right-of-way assignment were issued following review and determination that these rights-of-way do not constitute undertakings according to Appendix 11, #7 of the NM Protocol. The original grants of these rights-of-way did not comply with the provisions of Section 106 of the National Historic Preservation Act of 1966. An archeological survey was not performed and no survey was required for the renewals. Instead, a stipulation has been attached to the grant stating that the renewal does not authorize any surface-disturbing maintenance activities, and requiring that, prior to commencing construction/maintenance, removal, or any surface-disturbing activities to the right-of-way, the right-of-way holder contact its local BLM office for approval. The BLM would initiate compliance with Section 106 at that time (at the holder's expense).
- One grazing permit was transferred following review and determination that the transfer is not an undertaking under Section 106 of the National Historic Preservation Act (Protocol VI.B.3, Appendix 11 General #1) and that cultural resource inventory is not required to transfer the grazing permit.
- An extension of an existing trail system, highway bridge repair and a temporary right-of-way for bridge repair were approved without additional inventory following review and determination that the previous inventories were adequate.

2) Areas Considered So Disturbed That No Inventory Was Required

Two undertakings were approved without inventory due to disturbance within the Area of Potential Effects (APE). One was for maintenance of a berm in the channel of the Rio Puerco near La Ventana, and the other was for maintenance of a stock driveway under US Highway 550 at Piedra Lumbre involving use of a masticator. The entire ground surface in the berm maintenance area, from the crest of the berm to the river is construction fill, and the river is eroding the bank. For the stock driveway masticator project, cultural resource reconnaissance of the area confirmed that the vegetation is too thick and that there is too much ground litter to be able to carry out a cultural resource inventory. South of the project area, the only cultural resource known to be present between the road and the artificial channel is the Cuba Extension Railroad. The railroad grade has been identified to the west of the project area, outside the area of potential effects. There are no known cultural resources within the project area and none are anticipated. BLM archaeologist Joe Lally was present as an archaeological monitor during the brush-hog work. No properties were identified.

3) Post-Review Discoveries

None

4) BLM/SHPO Disagreements Concerning Undertakings

None

5) Monitoring of Sites within Old Land Exchanges

Los Lunas Land Exchange: LA 75244, 75253, 75254, and 75256 were revisited by Gretchen Obenauf (BLM) and Dick Chapman (OCA) for the purpose of determining that they were still locatable. When the original land exchange/sale occurred, the sites were to be mitigated as a condition of obtaining a clear title. The data recovery was not completed, and the sites are still protected as a condition of the title. If any ground disturbance is planned for the site areas, the data recovery must be completed. The project is currently on hold.

6) Data recovery projects submitted to the Data Recovery Team

None

Socorro Field Office

1) Areas of Effect Not Surveyed to 100%

- 37 grazing permit renewals, reports prepared for each one and incorporated by reference into EAs.
- Film permit in game unit 16E, no disturbance, in Wilderness Study Areas (WSAs), 2 people on foot, no Off Highway Vehicle (OHV) use, dispersed

- Polvadera Water Users right-of-way (ROW) renewal, renewal for existing facilities, no new disturbance
- Communication Site ROW renewal, no new disturbance, previously surveyed (CRR-NM-02-80-23)
- New Mexico Technological Institute (NM Tech). Seismic monitoring station ROW renewal, no new disturbance. 6' x 6', no previous survey, issued in the 1980s.
- Socorro Electric ROW renewal, previously surveyed, no sites
- Route Designations/Closures in the Eagle Peak and Mesita Blanca WSAs, Road closures will be through carsonite signing. Stipulations require that if any surface disturbance is to occur with this project, a cultural resource inventory will occur first.
- American Tower Access Road, existing road but surface disturbing maintenance requested. Class III inventory was required to be performed within 120 days, and no maintenance or disturbance was authorized prior to survey. Survey was negative (CRR-NM-02-11-28)
- NM Tech seismic study trenches, ROW renewal, previously surveyed
- 2 Socorro Electric Coop ROW renewals, no new disturbance, previously surveyed
- Ponciano Well Redrilling (deepening), No National Environmental Policy Act (NEPA) document prepared, previously surveyed
- East Magdalena Thinning, Lower Ryan Hill and Madera Section 20 units, Class I and reconnaissance, report no. CRR-NM-02-10-41

2) Areas Considered So Disturbed That No Inventory Was Required

- Y Ranch Dirt Tank cleanouts – Existing dirt tanks, most of the route had either cultural survey or reconnaissance, and all access was via an old existing, abandoned road. Two sites were within the access route, and were monitored during access.

3) Post-Review Discoveries

- None

4) BLM/SHPO Disagreements Concerning Undertakings

- None

5) Monitoring of Sites within Old Land Exchanges

- Not Applicable

6) Data recovery projects submitted to the Data Recovery Team

- The Jill Onken geoarchaeological data recovery proposal (CRR-NM-02-11-45) was reviewed by the Data Recovery Review Team (DRRT) and SHPO, SHPO concurred. The project entailed recording stratigraphic profiles, collecting soil samples, and collecting charcoal from archaeological features eroding out of the arroyo banks. No additional archaeological excavation was proposed, and no artifacts were collected. We do not have a final report yet, but features exposed in arroyo walls were sampled at five sites (LA 13681, 143346, 148779, 148780 and 162180). In addition, survey activities resulted

in the discovery of eight new sites, and expanded boundaries for four previously recorded sites. Additional samples will be collected from the newly recorded sites.

Farmington District

Farmington Field Office

- 1) *Areas of Effect Not Surveyed to 100%*
 - 59 undertakings were not required to have any survey because existing Class III survey was deemed adequate.
- 2) *Areas Considered So Disturbed That No Inventory Was Required*
 - 15 undertakings were not required to have any survey because natural and previous human activity had significantly modified or created a new land surface unlikely to have remnants of cultural remains (e.g. active flood plains, existing well pads).
- 3) *Post-Review Discoveries*

None
- 4) *BLM/SHPO Disagreements Concerning Undertakings*

None
- 5) *Monitoring of Sites within Old Land Exchanges*

Not applicable
- 6) *Data recovery projects submitted to the Data Recovery Review Team*

None

Taos Field Office

- 1) *Areas of Effect Not Surveyed to 100 Percent:*
 - Thirty-four grazing allotments, encompassing 8,059 acres of BLM-administered land, were subject to consideration in conjunction with an annual review of the attendant grazing permits. All thirty-four allotment areas had been previously and intermittently visited by BLM cultural resources staff. None of the allotments under consideration have been subjected to Class III level inventory. Consideration of permit renewal involved a review of extant cultural resources data and an assessment of substantial changes in grazing allotment use that might pose an adverse effect to cultural resources.

2) *Areas Considered So Disturbed That No Inventory Was Required:*

- Martinez Color of Title, encompassing 2.25 acres. A field inspection of the area by BLM revealed that it had been completely disturbed by erosion. In consideration of this condition of the project area, no cultural resources inventory was deemed necessary.

3) *Post-Review Discoveries:*

None

4) *BLM/SHPO Disagreements Concerning Undertakings:*

None

5) *Monitoring of Sites within Old Land Exchanges:*

None

6) *Data Recovery Projects Submitted to the Data Review Team:*

In FY11, one project from the Taos Field Office was submitted to the Data Recovery Review Team.

Cerro de la Olla rockshelters – LA 166597, LA 166616. LA 166604: The Taos Field Office planned a field school with the Metropolitan State College of Denver to conduct data recovery at the Cerro de la Olla rockshelters which might be subject to future vandalism. The proposal required extensive revision to meet the format required in the 8100-1 Handbook, and issues regarding sampling and proposed analyses, fieldwork methods and further elaboration on the Research design section of the plan. Due to scheduling issues the field school was cancelled and is now planned for 2012. The Data Recovery Review Team is now in the process of reviewing a fully revised plan which addresses the concerns and comments provided in 2011.

Las Cruces District Office

1) *Areas of Effect Not Surveyed to 100%*

None

2) *Areas Considered So Disturbed That No Inventory Was Required*

2

3) *Post-Review Discoveries*

None

4) *BLM/SHPO Disagreements Concerning Undertakings*

2

5) *Monitoring of Sites within Old Land Exchanges*

None

6) Data recovery projects submitted to the Data Recovery Review Team

In FY11, the Data Recovery Review Team reviewed two projects in the Las Cruces District Office:

Qwest trespass data recovery – LA 164213: A data recovery plan was presented by PaleoWest Archaeology for treatment of site LA 164213, which had been damaged by construction activities by Qwest. The plan followed the results of a damage assessment report at the site which evaluated the impacts of the construction. Comments on the initial plan provided focuses on revising the plan to elaborate on data needs specific to the research questions, adding a section on General Theoretical Perspective, and considering more sampling and analyses for phytolith, starch and residue analysis, and elaboration of thermoluminescence and OSL chronometric sampling plans. Also, a section for the standard requirements for status reports with field specimen lists as required in the H-8100-1 Handbook was added. The plan was revised, and the ARPA permit issued, and fieldwork completed at the site.

Tularosa fence data recovery – LA 10834 & LA 16849: A data recovery plan was developed by the Las Cruces Field Office for two sites requiring treatment following fence construction, for data recovery conducted by Las Cruces BLM personnel and student volunteers. Initial comments on the plan concerned site location and site plan maps, site and feature descriptions, adding a section for General Theoretical Perspective and minor format changes to meet the 8100-1 Handbook guidelines, and further discussion of artifact analyses. Additional comments on the plan concerned sampling and curation for future artifact analyses, and sampling for botanical remains, which were to be implemented during the fieldwork. Work at the site was completed and reporting is pending analysis.

Pecos District

Roswell Field Office

1) Areas of Effect Not Surveyed to 100%

No data available from previous Roswell Field Office archaeologist. Jeremy Iliff, the new Roswell Field Office archaeologist, is tracking these types of projects.

2) Areas Considered So Disturbed That No Inventory Was Required

None

3) Post-Review Discoveries

None

4) BLM/SHPO Disagreements Concerning Undertakings

None

5) Monitoring of Sites Within Old Land Exchanges

Not applicable.

6) *Data recovery projects submitted to the Data Recovery Review Team*

None

Carlsbad Field Office

1) Areas of Effect Not Surveyed to 100%

- Prescribed Fire FY 11: Ten prescribed fires were approved during FY 11. These projects were approved without 100% cultural inventories. The projects utilized existing roads as control lines and no surface disturbance was required. Of the ten approved, five were conducted: Flume Draw, Cottonwood Draw, Owl Draw, Creamer Lake, and Hay Hollow Prescribed Fires burned 8,943 acres.
- In accordance with a programmatic consultation with the New Mexico SHPO, routine grazing permit renewals were authorized following review of existing information. In FY 2011, 36 grazing permits were renewed under this provision.
- Thirty-three rights-of-way were renewed by assignment or amendment with a stipulation that no new surface disturbance is permitted. Specific permission from BLM will be required for any action that might result in surface disturbance and a Class III inventory would be required at that time.
- A series of 9 separate mesquite control/vegetation management projects were approved without 100% archaeological inventory. These projects involved no surface disturbance, only aerial application of herbicide. These projects were also covered by a previous Programmatic Environmental Assessment.
- Four oil and gas lease sale reviews were conducted in the Carlsbad Field Office. Proposed lease sale parcels were reviewed for cultural resources and standard cultural resource protection stipulations were added to each lease sale parcel. Tribal consultation was conducted for each lease sale to identify and address Native American concerns. These lease sales had no specific surface disturbance associated with them, and no archaeological inventory was conducted of these parcels. Any subsequent development proposals will require Section 106 review.
- Between 08/03/2010 and 07/27/2011, a total of 663 projects were received and 638 have been approved through the Permian Basin MOA alternative compliance process and 25 projects are pending. These projects included 487 well pads, 52 pipelines, 37 roads, 111 electric lines, and 1 seismic project. Contributions of \$1,934,197.04 were made by industry to mitigate the potential impacts of these projects. Mitigation projects implemented by the Permian Basin Advisory Workgroup during this time include completion of the report for an ethnographic inventory within the CFO boundary with

the Mescalero Apache Tribe, completion of a Permian Basin Data Comparability Workshop, completion of archaeological testing report at the Laguna Plata site, completion of the testing report at the Boot Hill site, and completion of the Burro Tanks report in the Roswell Field Office.

2) Areas Considered So Disturbed That No Inventory Was Required

- NEPA Project 11-574, the GC & MC Federal Lease compressor site was approved without an archaeological inventory as the locations were within a previously disturbed area.
- NEPA Project 11-414, the Bradley 28 Fed Com 2H Frac Pond, was approved without archaeological inventory because the pond was completely within a previously disturbed well pad.
- NEPA Project 11-459, the Mallon 34 Frac Pit, was approved without archaeological inventory because the location was within previous disturbance.
- NEPA Project 10-1001, the 1-Hackberry Federal oil well, was approved without archaeological inventory because the location is on a previous well pad.
- NEPA Project 11-42, the 1H-Hambone Fee Com oil well, and the 2H-HAMBONE FEE COM oil well and road are located within previous disturbance.
- NEPA Project 11-515, the Ranch Road Chip Seal project, was approved without inventory because the road is existing.
- NEPA Project 11-882, the Dorado 34 Fed Com 1H Access Road, was approved without archaeological inventory because the road already exists.
- NEPA Project 11-981, the Irrigation Pond project, was approved without archaeological inventory because the project was located on previous disturbance.
- NEPA Project 11-93, the Big Eddy #1 SWD, was approved without archaeological inventory because the project was a re-entry on a previously disturbed well pad.

3) Post-Review Discoveries

- A damage assessment was completed for unauthorized power line construction by BOPCO that affected three prehistoric sites. The company paid \$5,941 as mitigation into the Center of Excellence for Hazardous Materials Management's BLM Archaeology Mitigation Fund.
- A damage assessment was completed for unauthorized road construction by Devon, Inc. that affected one prehistoric site. The company paid \$8,588 as mitigation into the

Center of Excellence for Hazardous Materials Management's BLM Archaeology Mitigation Fund.

- An unplanned discovery of a stain 70 centimeters below surface was made during the monitoring of a fluid spill clean-up operation, report is in progress.

4) BLM/SHPO Disagreements Concerning Undertakings

Between August 2010 and August 2011, the BLM Carlsbad Field Office submitted to SHPO projects that had been reviewed and approved by BLM in accordance with our state protocol. The SHPO provided comments to various reports that addressed: consultant reports not providing enough information to determine impacts; reports lacking in how the inventory was conducted; BLM using discretion in the updating of previously recorded sites; contractors not updating sites that appear to be in the project APE; and BLM regulations not being met. For example:

Report BLM-10-NM-547-576. The SHPO reviewer commented that this project had the following issues: 5.9 acres were not surveyed by the contractor; LA 167396 was not illustrated on the map, nor was it identified in the records search; LA 167383 does not occur in the project area; and LA 158631 is in the project alignment but had no determination of eligibility, was not updated, evaluated, or assessed for impacts.

It appears these comments surfaced due to the lack of data being available to the contractor during the pre-field investigation. A block inventory of the area had been conducted and submitted a week earlier and was not available which would have showed the area had been recently block surveyed and that the proposed project would not impact the sites in question.

The SHPO reviewer also commented that report BLM-10-NM-547-565 was lacking survey plats and did not indicate how the survey corridor was staked in the field.

The survey in question was conducted for use of an existing road for access. The entire road already existed and the survey was conducted using the existing road as the centerline, however, the report did not indicate this and should have.

The BLM is meeting with the SHPO to address these issues and work proactively to provide the contractors and SHPO with the most current GIS data on both survey and site locations which should alleviate most of the SHPOs concerns. The BLM will also work with the contracting community to require them to explain clearly in their reports what the project construction activities and mitigation of impacts to sites will entail, so as to be easily understood by reviewers.

5) Monitoring of Sites within Old Land Exchanges

None

6) *Data recovery projects submitted to the Data Recovery Team*

Geo-Marine's Archaeological Investigations within the Maroon Cliffs Special Management Area: Test Excavations at LA 165710 and LA 33085, Eddy County, New Mexico.