



THE BUREAU OF LAND MANAGEMENT

# New Mexico

## Fiscal Year 2020

# Cultural Heritage Program Report



BLM New Mexico  
Fiscal Year (FY) 2020 Cultural Heritage Program Report

Prepared by:

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## 2020 Major Highlights from New Mexico

### Fiscal Year (FY) 2020 Major Highlights

The Bureau of Land Management (BLM) New Mexico State Office (NMSO) is responsible for managing the cultural resources program for public lands in New Mexico, Oklahoma, Texas, and Kansas. The proactive component of the program is primarily focused on the public surface estate, but also includes outreach and education efforts in areas such as Oklahoma where the bulk of BLM's management responsibilities are for federal mineral estate. The highlights reported here focus on BLM's proactive management of cultural resources as well as its' responsibilities under cultural resources authorities beyond the Section 106 compliance requirements. Our proactive efforts support the Secretary of Interior's priorities over the entirety of FY20. The priorities supported by our work focus on creating a stewardship legacy, sustainable development of energy and natural resources, restoring trust and be a good neighbor, striking a regulatory balance, modernizing our infrastructure, and achieving our goals and lead our team forward.

Conservation stewardship is an important aspect of BLM proactive management of cultural resources, which range from archaeological sites, historic buildings, and traditional cultural places, to the artifact collections from those important resources. Due to the density of significant cultural resources across the public lands in New Mexico, effective management of these sites, including monitoring, protection, and stabilization, helps keep areas open for recreation opportunities. To this end, BLM NM-OK-TX-KS engages in a range of activities such as monitoring sites, mitigating vandalism, educating the public and industry, collecting baseline inventory data, maintaining access to interpreted sites, maintaining stabilized ruins, tribal consultation, and managing collections to ensure they are accessible to tribes, the public and researchers.

#### Public Outreach

##### Interpretative Hikes in the Organ Mountains Desert Peaks National Monument at Las Cruces District Office (LCDO)

As part of expanding new outreach events and programs during FY2020, two interpretative hikes were developed for archaeological sites within the Organ Mountains-Desert Peaks National Monument. The first hike took a small group of participants to explore the prehistoric rock shelters at Peña Blanca. Participants were engaged with stories and information about Archaic and Jornada Mogollon period rock art, subsistence and foraging strategies in the Chihuahuan Desert, and the importance of responsibly enjoying our nation's cultural heritage.

The second hike took participants to several prominent historical sites located within Dripping Springs Natural Area. The hike route toured part of the former Cox Ranch, Van Patten's Mountain Camp, and Boyd's Sanatorium. During the hike participants learned about several prominent figures in the early history of the area as well as the area's storied history of recreational use and ranching. The interpretative hikes are open to the public and rotate every month. Plans to develop two additional hikes or public talks for FY2021 are in the works.



**Photo 1.** *LCDO Monument archaeologist, Garrett Leitermann, speaking to hike participants at the Dripping Springs Natural Area*

### Archaeology of the Organ Mountains-Desert Peaks Day (LCDO)

In February, the Las Cruces District Office participated in Archaeology of the Organ Mountains-Desert Peaks National Monument day in collaboration with New Mexico State University and the Branigan Cultural Center. The event was hosted outside the Branigan Cultural Center in Las Cruces, New Mexico. For the event, BLM archaeologists tabled a booth for hands-on learning with prehistoric ceramic, lithic, ground stone, and bone tool artifacts. Children and adults of all ages were taught everything from the fundamentals of stone tool making to traditional sewing techniques. Students from New Mexico State University also operated an educational booth where participants could learn how to make shell jewelry with pump drills, learn about different types of prehistoric pottery, learn from artifacts collected from sites within the Monument, and much more. The event saw over 100 people participate. The booth was a success and fun time for all involved. Plans for hosting this event on a monthly or bi-monthly basis is under consideration for the future.



**Photo 2.** *NMSU students conversing with members of the public during Archaeology of the Organ Mountains event at the Branigan Museum.*

### Three Rivers Petroglyphs Tour and Field Trip with Las Cruces Academy (LCDO)

On November 8, 2019, the Las Cruces District Office gave a tour of the Three Rivers Petroglyphs Site to the Las Cruces Academy. Over 50 students, more than a dozen parents and four teachers participated in the field trip. The petroglyph tour was led by BLM Archaeologist Trinity Miller, BLM Park Ranger Ayleen Gutierrez, and Archaeology Volunteer and Rock Art Extraordinaire, Margaret Berrier. Ward Beers, an Archaeologist and Independent Researcher, also joined the event and gave a wonderful demonstration on flint knapping. Ward skillfully crafted a new blade, and then used it to cut raw meat. He also showed examples of tanned hides and sinews that would have been crafted using these technologies. After the flint knapping, Ward led a hands-on activity of atlatl spear-throwing, which was enjoyed by all. The students from Las Cruces Academy also joined Trinity on a guided tour to the habitation and village site at Three Rivers to learn about who inhabited this special place, and how we can protect it for generations to come. Finally, last but not least, Margaret led several groups on a hike up to the ridge to see the 21,000 petroglyphs that Three Rivers is renowned for. The field trip was a

success and gave students the opportunity to connect with our national heritage and cultural resources while also enjoying the rich, open-air.



**Photo 3.** *Students from Las Cruces Academy enjoying the hands-on activity of atlatl spear throwing (photo by BLM Volunteer Margaret Berrier).*

### Project Archaeology Workshop (OFO)

The Oklahoma Public Archaeology Network (OKPAN) held three Project Archaeology workshops: a day-long professional development training, a mini two-hour professional development training at the February 2020 Putnam County school district meeting, and workshop at the Oklahoma Archaeology conference.

### Roswell Science and Art Fair (Roswell Field Office [RFO])

On Saturday, October 12<sup>th</sup>, 2019, BLM RFO archaeologists Courtney Carlson and Shannon Gallagher attended the Roswell Science and Art Festival as presenters. We explained what our job is, why it is important, and presented a display of artifacts that are commonly found on public lands managed by the Roswell Field Office. The members of the public we spoke to were very receptive, and the BLM display was one of the most popular at the event. Gallagher and Carlson both agree that this is an event that is very worthwhile, and that BLM should be represented at this event in some capacity each year.



**Photo 4.** *RFO Archaeologist Courtney Carlson seated behind the RFO archaeology booth at the Roswell Science and Art Festival*

### New Mexico Project Archaeology Outreach (NMSO)

Project Archaeology curriculum is an important aspect of protecting sites in the long run. An assistance agreement with the Museum of New Mexico Foundation/Office of Archaeological Studies supports development and delivery of Project Archaeology programs throughout New Mexico (currently on virtual platforms due to Covid-19) to school-age children and their educators. This project was awarded late in the fiscal year, but the demand for high quality, engaging on-line content for educators is high, and many programs are planned for FY2021.

## **Proactive Inventory**

### Pecos District Corridor Survey (CFO)

Pecos River has one of the highest frequencies of recorded historic properties within a single geographic feature in the BLM-CFO. The Pecos River Corridor, which is made up of large swaths of BLM managed lands, has been identified in our Statewide Strategy Plan as an area of focus for Section 110 Survey. This fiscal year, a total of 313 acres within the Pecos River Corridor were inventoried. This portion of the River had never been intensely surveyed.

As oil and gas activity increases, more and more projects encroach on the Pecos River. With that increased activity, it has become even more important for areas around the river to be inventoried so resources can be protected. A total of 12 sites were recorded during field work, which is in the range of sites per acre found just north of this block area that was previously surveyed for a Section 110 project within the Pecos River Corridor. While the report is currently still in progress, these cultural resources have now been identified and future development can be

catered to their preservation. Also, this survey provides more data for analysis, adding another piece of important information to the previous pathways of those who inhabited the Pecos River Corridor before modern times, both prehistorically and historically.

### Survey within the Farmington Field Office (FFO)

Along the Continental Divide in Northern New Mexico, the Gallina archaeological culture thrived between in the twelfth and thirteenth centuries. Today this area is a patchwork of landownership with BLM being in the minority. An archaeological survey of 34 acres conducted by BLM archaeologists focused on a ridge overlooking the confluence of two important drainages. A total of 9 residential structures (3 subterranean and 6 masonry surface structures) representing atleast 11 households were identified in an area 14 acres in size. Also identified was a masonry Gallina tower currently standing 12 feet above the surrounding surface which was undoubtedly taller when in use. Unfortunately, several of the structures have been illegally excavated (pot hunted) doing significant damage to the structures and removing an unknown quantity of artifacts from public lands. It is hoped that the recordation and assessment of these structures will lay the groundwork for future stabilization. The comparative scarcity of BLM land in the immediate area and the Gallina culture area in general makes these sites important as potential places where the public can go to experience Gallina archaeology on public lands.



**Photo 5.** *Masonry residential structure mound*





**Photo 6.** *Gallina Black-on-White sherd a drill hole for mending a broken vessel.*

### Crossbar Management Area Survey (OFO)

The OFO contracted a Section 110, Class III 300-acre block survey of the Cross Bar Management Area to support BLM Wild and Scenic River land use management protocols, future development of the Cross Bar SRMA Recreation Area Management Plan, and future development of the Cross Bar SRMA Travel and Transportation Management Plan.



**Photo 7.** *Contract crew overlooking the survey area on the Cross Bar Management Area, Oklahoma Field Office. (Foreground: Sheldon Smith, Mel Nichols, and Gina Wetzal. Background: Scott Cole)*

### Socorro Field Office Survey at the Box (SFO)

Submission of report for a Class III cultural resources inventory of the Box, Socorro County, New Mexico. The purpose of this project is Class III field inventory, evaluation, and reporting in partial fulfillment of the agency's proactive responsibilities under section 110 of the National Historic Preservation Act (NHPA). The location was selected based on criteria established in the Socorro Field Office Resource Management Plan of 2010. The survey area is within the Box Special Recreation Management Area (SRMA). Within the surveyed area, 17 archaeological sites and two HCPI's were discovered and documented. In terms of potential impact to cultural resources discovered, no undertaking is currently planned. Eligible sites in the project area are generally low-visibility and currently are primarily at risk of impact from surface artifact collection associated with hiking and camping activities already evidenced throughout the project area. Future undertakings increasing foot traffic directly within site boundaries will pose a risk to these resources, and in most cases access provided by dirt roads has already likely lead to substantial depletion of diagnostic artifacts from surface assemblages. A total of 103 Isolated Occurrences were documented.

## Intensive Recordation, Evaluation and Study

### Recording of the Former Cox Ranch (LCDO)

During over the course of the summer, the Visitor Center and its associated supported facilities at Dripping Springs Natural Area of the Organ Mountains-Desert Peaks National Monument were recorded to assess their eligibility for inclusion in the National Register of Historic Places. The property was once home to renowned resort/ranch prior to BLM acquisition over 30 years ago. The former resort/ranch has a rich history connected to several prominent figures from Las Cruces' history. In the 1930s, the Hayner family built the property as a weekend resort and ranch, complete with a large swimming pool and airstrip. The last of owners of the ranch, the Cox's, made the property the center piece of their extensive ranching operation that encompassed most of the private lands within the western Organ Mountains. Extensive research and architectural analysis of the area's buildings has greatly expanded upon the available information regarding the property's history. Research stemming from the project will be incorporated into updated educational materials and interpretative displays for Dripping Springs Natural Area.



**Photo 8.** *Overview of the Dripping Springs Natural Area Visitor Center/Former Cox Ranch in the early 2000s (photo by BLM volunteer Craig Severy).*



## Rockshelter Site and Artifact Preservation within the Rio Puerco Field Office (RPFO)

This ongoing project did not receive funding in FY20, but activities conducted from FY17-FY20 are reported. This assistance agreement with Eastern New Mexico University (ENMU) faculty, Heather Smith, has supported a field school and subsequent analysis and reporting of a rockshelter where perishable items were identified by hikers back in 2016. The field school was reported previously, but more recent activities have focused on additional field visits, analysis of the curated perishable items, and ethnobotanical analysis that was supposed to occur in FY20, but was delayed due to Covid-19. Throughout the Fall of 2019 and beginning of Spring 2020, an undergraduate digitized field notes and forms and entered all provenience data into a digital database from the 2019 field season. Also during the Spring of 2020, a team of four undergraduate students began Rev. 4-2016 conducting the ceramic analysis and spatial analysis of features identified during the upland survey of the area northwest of the drainage, but their analysis was cut short when ENMU was ordered to close its facilities due to the COVID-19 pandemic in March 2020. materials.



**Photo 10.** *Rockshelter looking west.*

## Monitoring

### Northwest New Mexico Site Stewards (FFO)

The Northwest New Mexico Site Stewards program is a collaboration between the BLM and local volunteers who provide a variety of benefits through archaeological site visitation and monitoring. In fiscal year 2020 they were able to visit 243 archaeological sites on BLM lands. This required 789 hours of the volunteers' time and racked up 9,821 miles. Hours and miles that would otherwise be coming from BLM archaeologists. This year they have been replacing many of the aged and fading "Limited Use" signs that encourage the public to enjoy visiting archaeological sites with respect. The Site Stewards not only act as our eyes on the ground monitoring high value archaeological resources but also act as a visible presence during what has been a year of increased use of public lands.

## Stabilization, Management and Protection

### Caliche Rules at Carlsbad Field Office (CFO)

Caliche and barrow pits go hand and hand with oil and gas development. Every time oil and gas projects are approved, construction activities require thousands of yards of caliche to complete development. The BLM-CFO has 100s of these pits throughout the field office with some dating back three decades or more. The boom of oil and gas activities has created a larger risk for impacting historic properties from caliche pits. Pits are opened and fully mined out to their approved NEPA boundary so quickly that often pits are expanded outside their approved boundaries, which has impacted some historic properties.

BLM-CFO archaeologists Aaron Whaley and Jose Robledo took on the task to review over 100 existing negotiated/community pit locations throughout the field office. Through that exercise, approximately 70 pits were recommended for closure. Some pits were recommended to be permanently closed because they have or will if further mining occurs, impact historic properties. Others were recommended to be temporarily closed so additional Class III inventory can be conducted to expand the pit.

Working closely with Geology staff, we have increased the standard Class III cultural survey to include the project footprint plus 200ft cultural for all caliche/barrow pits, fencing and brightly colored painted H-Braces are being installed around the pits, new NEPA analysis is being done on older pits with the help of the reality and NRS staff. This has led to numerous caliche pits either been reclaimed or plans to reclaim them have been put in place when funds are available while also expanded existing and creating new caliche pits. Archaeologists will continue to work with all staff involved in this project to protect cultural resources, but also to restore the landscape of closed caliche pits and either open new or expand existing pits to keep supporting the oil and gas development of the Permian Basin.

## Guadalupe Ruin Maintenance (RPFO)

Guadalupe Ruins is an excavated Chacoan Outlier on BLM land near Cabazon, New Mexico. Protected under P.L. 96-550 as a designated Chacoan Archaeological Protection Site. Guadalupe Ruins was stabilized in 2005. The years of wind, rain and visitation have not been kind. One of the eastern most walls had been pushed over; hopefully inadvertently, by a visitor. By 2019, the stabilization had deteriorated to the point that stabilization maintenance was again necessary. The NPS Ruins Stabilization Team from Chaco Canyon National Historical Site spent six weeks in a five-person team, working on the Chaco-style masonry, bringing it back to its original glory. In total the team spent 1,200 hours conducting restoration efforts that included rethinking and capping the stone work at the site.



**Photo 11.** *West wall after restoration.*

## Removal and Camouflage of Graffiti from the Box Canyon Shelter Site (Socorro Field Office [SFO])

Submission of report documenting conservation efforts within an Archaic-age rock shelter focused on removing spray paint graffiti and chalk stains. Graffiti removal was preceded by thoroughly photographing the shelter's walls. Condition assessment was also done to determine the integrity of the shelter walls and pictograph surfaces. A long row of black spray paint graffiti occurred over the red ochre pictographs, located against the lower portion of the shelter's east wall. White chalk smudges were noted around the edges of natural handholds in the rock wall and ceiling. The following removal techniques were used, from the least to the most invasive: white cotton wash cloths; pressured air blasting inert aluminum oxide (corundum) particles; pH neutral and bio-degradable potassium hydroxide applied with cotton wool rolling poultice; water; diamond tipped Dremel drill; rotating wire brush attached to battery powered drill; and steel wire brush. Light-colored surfaces left by removal were camouflaged by applying charcoal and

natural earth pigments (both mixed with water) as colorants. Minimal maintenance and infrastructural changes within the shelter can pro-actively help minimize future occurrences of graffiti.



**Photo 12.** *Before and after vandalism restoration.*

### Site Recording of LA 196861 (TFO)

Returning to the truck, after assessing a grazing allotment for permit renewal, a prehistoric site was discovered in an adjacent allotment. The site, LA 196861, is located along the rim of the San Antonio Gorge, north of San Antonio Mountain, and within the boundaries of the Rio Grande Del Norte National Monument (RGDNNM). Adverse effects due to cattle trampling were apparent and ongoing. Cattle have been congregating on the site to access a water gap



located below the site via a trail on the west side of the site. Mineral supplements were also placed on the site by the allottee. LA 196861 was recorded by Aspen CRM Solutions (NMCRIIS #145856).

The documentation revealed LA 196861 to be a multicomponent site with a large scatter of lithic and ceramic artifacts, a series of hunting blinds, a stone corral, and a few historic artifacts. The site is recommended as eligible for listing in the National Register of Historic Places under Criterion A for a representation of the tradition of nomadic foraging in the RGDNNM and is a contributing property to the cultural landscape located in the San Luis Valley and surrounding areas. It is also eligible under Criterion D for the information it provides on Archaic and later Native use of the area including hunting technology, techniques, and tools; game processing; use of local plant resources; diet and subsistence; use of local lithic materials; participation in long distance trade networks, and historic use of the area including livestock raising.

In cooperation with the Interdisciplinary and Management Teams from the Taos Field Office, mitigation strategies are currently being developed to protect this sensitive historic property while providing for the needed infrastructure to support the grazing activity. These may include installation of fencing and the construction of a watering facility away from any sensitive resources (cultural and natural) to replace the water gap.

Mid May, 2020, while driving to a grazing allotment, it was noticed that Climbing hardware, including bolts and chains, were driven into a site (LA 46536) that contains prehistoric (Ancestral Puebloan) and historic petroglyphs. The historic petroglyphs include some attributed to the Spanish Colonial period (A.D. 1539 to A.D. 1680). The hardware had been drilled into the same cliff faces that contain these petroglyphs, diminishing the integrity of the site. The recreation staff of the Taos Field Office was informed of the damage.

## Historic Structures

### Lake Valley Historical Town Site Preservation Project (LCDO)

During this past fiscal year, funding was secured and SHPO approval was granted towards the restoration, stabilization, and rehabilitation project at Lake Valley Historic Town Site. The three structures the BLM owns at this moment are the Keil House, the Church, and the School House. The project includes roof replacement and/or ceiling repair at the Church and the School House, as well as bat guano removal at both of these locations. The School House will have ceiling repair in the form of repairing and/or replacing bead boards as well as repairing the cupola. The soffits and fascia will also be prepared and repainted. All three structures will have windows repaired and restored. The Keil House, although smaller, will require considerable more work than the other two structures as it has not been in use and been allowed to deteriorate to a greater degree. Repairs on that structure will include most of the above but will also need adobe restoration, floor repair, and greater structural repair. The Keil House also has intact historical features, such as intact wallpaper from the 1930s, which will be preserved. All repairs, of course, will be guided by the principal of preservation maintenance and repair in kind, meaning that, when completed, the buildings will retain their historic appearance. For example, on the School House, the original sheet metal roof that was leaking will be carefully removed, a

weather-proof roofing will be installed on the existing rafters, then the original sheet metal roof will be installed above that, so, when completed, the roof will retain it's original appearance but will no longer leak.



**Photo 13.** *Removal of original sheet metal roof of the School House by personnel from Cornerstones.*

## Museum Collections and NAGPRA

### Native American Graves Protection and Repatriation Act (NAGPRA) Interns at the NMSO

NMSO brought on 2 interns through an assistance agreement with Conservation Legacy / Southwest Conservation Corps. The internships initiated in FY19, but the bulk of their accomplishments occurred in FY20. Significant progress was made on several NICs published in the early 2000s, but that required correction notices. Additional research on BLM's NAGPRA responsibilities for a portion of the Navajo Reservoir Project from the 1950s and 1960s was completed, providing NMSO with a clear path forward to additional consultation and publication of a NIC. The interns also retrieved human remains from Fort Lewis College that were removed from BLM managed land in the Carlsbad Field Office. These were not previously known to the BLM. By the end of this reporting period, a correction notice had been submitted to NPS NAGPRA program, and returned to the NMSO for final approval. Publication occurred on October 2, 2020.

### National Council for Preservation Education (NCPE) Interns (NMSO)

A National Council for Preservation Education (NCPE) intern hosted by the Maxwell Museum of Anthropology worked 600 hours on three BLM collections (Bolack, Feather Cave, Casamero). The intern finished inventorying and cataloguing artifacts from the Bolack excavation and created two custom mounts for ceramic vessels, completing the rehousing of the site. The intern then continued processing the Feather Cave collection by cataloguing and inventorying boxes. Upon completion of Feather Cave, the intern completed his remaining hours with the Casamero

collection. This work entailed reviewing site reports for burial proveniences, identifying human remains and relocating them to the museum's osteology lab, flagging objects for NAGPRA, and editing the catalog. The intern catalogued 558 Casamero artifacts, inventoried 16 boxes, and created 11 custom mounts for ceramic vessels.

A second NCPE intern hosted by the Museum of New Mexico, Museum of Indian Arts and Culture Archaeological Research Facility has worked a portion of her 600 hours rehousing BLM collections, accessioning, and cataloging.

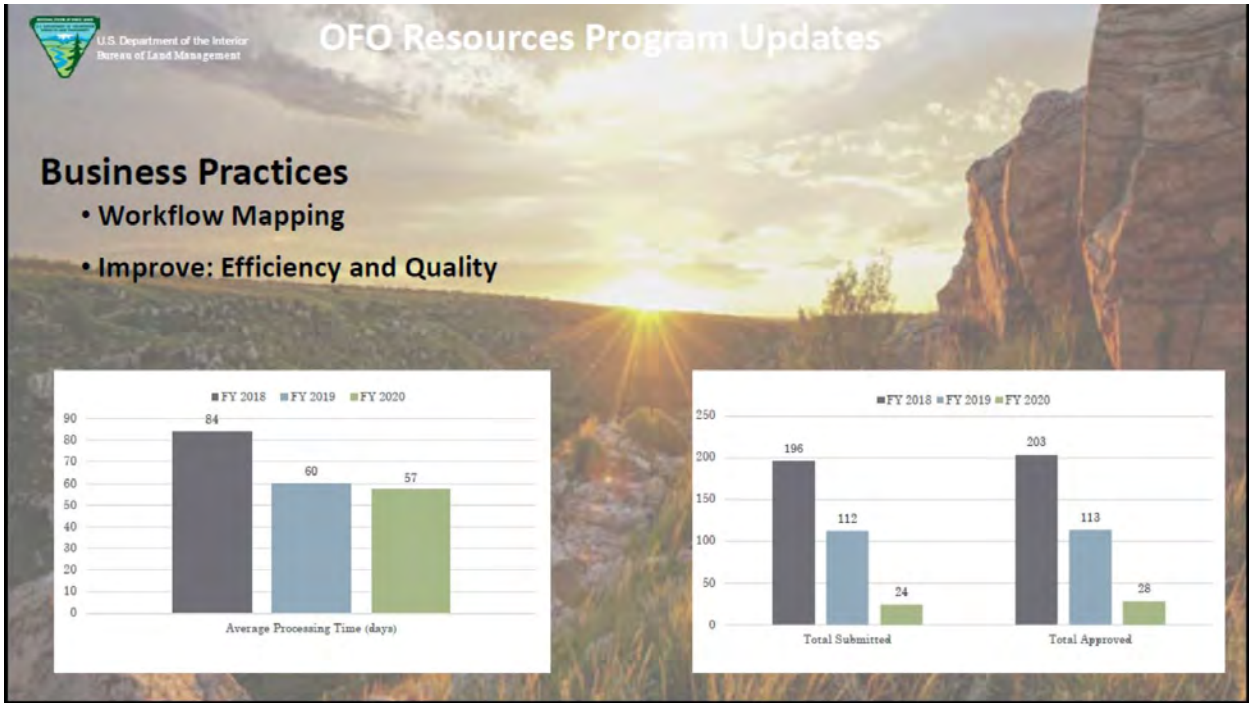
## Increasing Process Efficiency

### Improvements to Records Management and Data Collection (LCDO)

Over the last year, the Las Cruces District Office has made several important steps towards modernizing and streamlining its cultural records and data management system. A new recording scheme was developed by the team to ensure in-field data collection of archaeological features, artifacts and other data is now comprehensive and adaptive. LCDO archaeologists worked closely with GIS staff to ensure that project related GIS data, such as survey and sites boundaries, can be easily transmitted into the National Cultural Resources Information Management System (NCRIMS). All of the 7.5 quadrangle maps that were used in past years to record survey and site information have now been digitized in their entirety. The digitized maps are currently in the process of being geo-rectified in ArcGIS in order to be easily cross referenced with existing GIS data and subsequently incorporated into NCRIMS.

### National Environmental Policy Act (NEPA) Update for Applications for Permit to Drill (APDs) at Oklahoma Field Office (OFO)

Co-presented with the supervisory Natural Resource Specialist at the quarterly Oklahoma Agency-Industry Working Group meeting. Our presentation focused on business practice improvements and workflow analyses for the environmental and cultural aspects of the APD process. The results of our analyses showed a decrease in the amount of average days to process an APD.



**Photo 14.** Presentation slide showing average APD processing times for the past three fiscal years.

Additional Information

If you have any questions about this report, please contact Cynthia Herhahn, Deputy Preservation Officer at (505) 761-8938 or via email [cherhahn@blm.gov](mailto:cherhahn@blm.gov).