Lincoln County Archaeological Initiative (LCAI) Update

Updated 4/29/2020

Round 1

Inventory, Evaluation and Management Assessment of Known Rock Art Sites on BLM Managed Lands in Lincoln County, Nevada

This project is a three year inventory and assessment project for rock art sites on BLM administered land in Lincoln County. Over the three years, all known rock art sites will be visited and recorded at a baseline level sufficient to allow site stewardship and assessed for condition and management needs. Digital and paper copies of all records will be provided to the BLM and the SHPO archives and an annual report will be produced that details the activities for the year, assesses progress, and identifies problems or issues requiring agency action. After each field season, a public presentation on the results of the work will be given at a regional venue. <u>Complete</u>

Oral Histories and Place Making Practices among the Paiute and Shoshone of Lincoln County: A Cultural Landscape of the Mormon Mountains

This two phase project is to identify and record oral histories and place making practices of Numicspeaking peoples associated with unique archaeological resources in the Mormon Mountains. This general goal will be met through the ethnographic evaluation of nine petro glyph and pictograph sites through interviews of Paiute and Shoshone cultural representatives with traditional knowledge. The final ethnographic report will provide in-depth ethnographic evaluations of the nine archaeological sites, digital photographs, and maps that situate each petro glyph and pictograph area within the context of cultural landscapes. Results also will be presented at professional meetings. <u>Complete</u>

Continuation of Lincoln County Rock Art Documentation Project

This project will complete on-going documentation of previously selected rock art sites on BLM administered land in Lincoln County. Fieldwork will document 50 rock art panels and involve taking photographs of each panel, recording UTM coordinates for each panel at each site, amending existing IMACS forms and compiling the work into a report for each site. <u>Complete</u>

Nomination for Archaeological Research and Management at Three Obsidian Quarries in Lincoln County, Nevada

This project will conduct fieldwork and analysis that will yield baseline data on the character, density, and distribution of tools and debris at three obsidian quarries (Modena, Kane Springs, and Tempiute) on land administered by the BLM. Deliverables will be a detailed report of activities with maps and NRHP forms for each obsidian source, scholarly and popular articles on the research, and presentation at regional and national venues. Local presentations during the field research are also proposed. <u>Complete</u>

Research Design for Obsidian Hydration Chronology-building in Lincoln County

This project is an obsidian hydration dating rate derivation feasibility study and the preparation of a research design. The design will outline the specific sampling strategies, field studies, and analysis of existing archaeological collections that could contribute to establish temperature-dependent obsidian hydration rate formulas for the various obsidian sources within Lincoln County that were used for stone tools by native people. The project would involve a literature review, field visits to non-quarry sites and quarry areas, assessment of exiting archaeological collections of obsidian artifacts, and the preparation of the research design. Deliverables are the research design and updates to IMACS forms with digital photographs for those sites subject to field visits. <u>Complete</u>

Archeological Site Condition Monitoring, Unauthorized Use Reporting, Incident Investigations, and Preliminary Damage Assessments in Lincoln County

This project will sustain the current program of archaeological site threat and condition monitoring with a professionally led corps of volunteer site stewards in Lincoln County. The project establishes a

Lincoln County Site Steward Coordinator to oversee and expand all aspects of the site stewardship program. In general, this project would increase the number of site stewards and conversely the number of cultural resources monitored, involve active public interpretive programs and training, and provide for the investigation and documentation of unauthorized impacts to sites. <u>Complete</u>

NVCRIS Research Enhancements and database Verification

This project was cancelled due to a majority of this proposal's deliverables being accomplished through other funding avenues.

Round 2

Historic Mining District Inventory, Evaluation, Protection and Management with Specific Emphasis on Panaca Kilns, Fay, and Deer Lodge

This project will document and evaluate the archaeological resources at the Panaca Charcoal Kilns and the two primary residential areas associated with the Eagle Valley Mining District, Fay and Deer Lodge, and to provide management recommendations for these early historic locales. These places, like other historic mining related areas, are popular with visitors. Visitation can lead to the inadvertent destruction of fragile resources or vandalism. A Class III archaeological inventory will be conducted at all three locations as well as an architectural inventory of existing structures. High quality archival photographs will be included in the documentation. Monitoring the condition of the mining sites will be accomplished through repeat photography at established photo points. Deliverables will include a technical report on the inventories that includes detailed discussions of the condition of the resources, recommendations regarding National Register eligibility, and recommendations for short and long-term protection measures as well as the standard requirements for inventory project reports. Public involvement will be achieved through web-based materials, a trifold brochure on the history of each location, and a poster that will be distributed to Lincoln County and nearby schools, local and state historical societies, and to museums. <u>Complete</u>

Formative (Fremont) Settlement Inventory in Lincoln County, Nevada: Conduct Class III Inventories and Evaluation of Areas at Risk due to Current or Predicted Increased Public Use

This project will conduct Class III archaeological inventories to identify Formative sites in eastern and southern Lincoln County. The goals and context for this project are similar to Proposal #3, emphasizing at risk locations of Formative sites. However, projects #3 and #5 will be conducted in different geographic areas by different contractors. Research questions to be addressed by this proposal relate to the age of Formative period occupations in the area, the Formative economic adaptations, and Formative ceramic data. Also, this project will involve trained volunteers in the fieldwork. The deliverables are a Class III inventory report including recommendations for National Register eligibility and the public dissemination of the information through web-based materials and presentation of results at the Great Basin Anthropological Conference. <u>Complete</u>

Formative (Fremont) Settlements Inventory and Educational Outreach in Lincoln County, Nevada

This project will conduct a Class III archaeological inventory of 1,000 acres to document Formative (Fremont) sites in areas where prehistoric land use and current population impacts overlap. Formative sites tend to be located in lowland areas near well-watered drainages due to the horticulture practiced by these ancient people. These places are the same locations where future impacts are most likely from recreation and development. The nature and extent of the Fremont occupation of eastern Nevada is not well understood and this project is a targeted approach to finding and detailing local variability. The identification and documentation of these resources, coupled with an evaluation of their eligibility to the National Register of Historic Places, will clarify the future management needs for Formative sites. Deliverables will include a Class III archaeological inventory report; a web-based public-oriented downloadable document available to the general public that can be linked to schools and other interested groups; and a brochure to direct people to the web site. **Complete**

Survey and Conditions Assessment of 10 Spots with Rock Art Habitation Sites on Public Lands in Lincoln County, Nevada

This project will record and assess the condition of 10 high-profile habitation sites that contain rock art. These sites are well known to the public and receive frequent visitation as a result of information available on the internet or from recent exposure by the media or popular rock art publications. An archaeological inventory will be conducted for a three-acre parcel surrounding each site. In addition, there will be an assessment of the current condition and integrity of the pictographs/petroglyphs and the subsurface habitation deposits. The deliverable is an inventory and conditions assessment report with recommendations for protective measures to reduce on-going impacts to these sites. The data also will provide a baseline for site stewardship monitoring activities. Presentations on this work will be given to local interest groups and at professional meetings. <u>Complete</u>

Cultural Resources Digital Data Clean Up for Lincoln County, Nevada

This project will work to enhance the Nevada Cultural Resource Information System (NVCRIS) for Lincoln County. NVCRIS is the Nevada state-wide spatial database of archaeological sites and inventories that is managed by the State Historic Preservation Office. It provides a restricted access, Geographic Information System data-hub for cultural resources information. The purpose of this proposal is to verify the existing archaeological data for Lincoln County and update the database. This effort is needed because the initial data digitization was not comprehensive and included some errors inherent in the documents used to generate the digital information. When this work is completed, Lincoln County land managers can be confident in the NVCRIS archaeological data, resulting in improved resource management practices to preserve and protect archaeological resources. Deliverables include monthly reports on work progress and a revised and current archaeological database for Lincoln County. <u>Complete</u>

Documentation, Analysis, and Evaluation of the Rock Shelters of Evergreen Flat, Lincoln County, Nevada

This is a three-year program to conduct investigations at seven rock shelters and archaeological deposits in southern Lincoln County. These locations have suffered various levels of vandalism and were not fully recorded prior to the impacts. The purpose of the project is to review the data from the vandalism investigation, fully record these sites and their environs, and conduct in-field analysis of the extant archeological data at each site. Fieldwork will include involvement by site stewards and other volunteers and the results will be shared through public presentations. The final report, besides presenting the formal archaeological results of this work, will develop a baseline for site monitoring and include recommendations for site protection and stabilization. <u>Complete</u>

Round 3

Protection of Lincoln County Archaeological Collections Housed at the Desert Research Institute

This project will inventory, upgrade and analyze the archaeological collections and field records that were excavated from the important archaeological sites of O'Malley Shelter, Conaway Shelter, the Scott Site and rock shelters in Stine Canyon. <u>Complete</u>

Archaeological Research at Sites Described in Ethnographic and Historic Literature

This project will conduct ethnographic and historical research combined with pedestrian cultural resource inventory of the Quinn Canyon Massacre site. Initially an intensive pre-field literature review will be conducted with an attempt to identify informants for pre-field contemporary ethnographic data collections. A detailed research context for the cultural resources identified in existing records will be developed. In addition, a study of the cultural resources records and literature prior to conducting a field inventory will be conducted that will cover approximately 1,330 acres, including the massacre site and adjacent areas. All cultural resources identified during the inventory will be evaluated for inclusion in the National Register of Historic Places. The final documentation will include recommendations

regarding protection and management of the cultural resources. Lectures/presentations during Nevada Archaeological Awareness and Historic Preservation month as well as participation at the Las Vegas Springs Preserve Culture History Fair with a booth and poster will be presented. <u>Complete</u>

Lincoln County Archaeological Collections Inventory and Upgrade

This project will inventory, stabilize and rehabilitate physical collections, site records, reports and other paper documentation that were collected by the BLM from Lincoln County lands. These collections are housed at the Harry Reid Center for Environmental Studies' Cultural Resources Program in Las Vegas, NV. There currently are artifacts and records from 114 archaeological sites, in Lincoln County, housed at the Center. <u>Complete</u>

Inventory and Assessment of Lincoln County Historic Cemeteries

This project will conduct a one-year long program of inventories of historic cemeteries on federal land in Lincoln County. This proposal will fund an inventory and condition assessment of cemeteries selected in consultation with BLM personnel to meet BLM's management concerns and will make recommendations for measures to protect and preserve the cemeteries. Local descendants, community members, and other persons interested in historic cemeteries of Lincoln County will be contacted, and heritage tourism materials to support public outreach will be developed. <u>Complete</u>

Inventory and Evaluation of Historic Transportation Systems for the National Register of Historic Places

This project will focus on transportation features at risk from urban expansion and public use. A multiphase approach within a broader, county-wide context will be utilized. The project begins with the compilation of historic documents and a historic context that serves as a historic transportation base and outlines a framework by which all transportation features may be evaluated for National Register significance. As historic transportation layers are built, at risk areas can be identified and prioritized. **Complete**

Inventory and Evaluation of Four Historic Cemeteries in Lincoln County

This project will inventory four specific cemeteries in Lincoln County. These cemeteries include Fay, Bristol Wells, Helene and Delamar, all of which are on public land. The inventory will include a review of the existing cultural resource documentation and historical archival records for each site, on-site recording of the cemeteries, and preparation and submission of a cultural resources technical report. **Complete**

Round 4

Delamar Lake Sample Survey to Identify At Risk Pleistocene Sites

This project will inventory Paleo-Archaic archaeological sites on BLM managed land near Delamar Lake. Paleo-Archaic sites are the oldest known sites in the Great Basin and often occur near Pleistocene age lakebeds, such as Delamar Lake. The purpose of this project is to acquire data that will facilitate the preservation, protection, and management of these significant resources. <u>Complete</u>

Intepretive and Public Use Site Plan for the Black Canyon Archaeological District, Pahranagat National Wildlife Refuge, Lincoln County, Nevada

This project will develop and finalize an interpretive and public use site plan for the Black Canyon Archaeological District on the Pahranagat Wildlife Refuge. This use plan will be based on a recent 400-acre archaeological survey that recorded 148 petroglyph panels among 37 archaeological sites. The purpose of the site management plan is to inform visitors of the cultural significance of the area and, at the same time, reduce degradation of the sites and habitat through infrastructure. <u>Complete</u>

Inventory, Evaluation and Management Assessment of the Gathering Petroglyph Site

This project will inventory and evaluate rock art site commonly known as "The Gathering." The Gathering site probably contains as many as 300 rock art panels, making it one of the largest rock art sites in Lincoln County and in Nevada. The purpose of the project is to record the rock art panels at a detailed level along with associated artifacts and features, and to conduct condition assessments of individual rock art panels. <u>Complete</u>

Interpretation of Select Rock Art Sites in the White River Narrows National Register District

This project will create educational materials for five rock art sites located within the recently recorded White River Narrows National Register District. The five sites identified for interpretation form a natural interpretive loop and are frequently visited by the public because they are adjacent to State Route 318, can be driven to in a car, and their locations are available on the internet. **Complete**

Obsidian Toolstone Inventory, Evaluation, Protection and Management

This project will develop a hydration chronology for primary obsidian sources in Lincoln County that can be used to relatively date obsidian artifacts at archaeological sites. The purpose of this project is to develop a sensitive hydration chronology for the primary obsidian sources by creating a relative obsidian chronology based on associated datable artifacts, such as ceramic styles and arrowhead types. <u>Complete</u>

Obsidian Crossroads: An Archaeological Investigation of the Panaca Summit/Modena Obsidian Source in Lincoln County, Nevada

This project will conduct an archaeological inventory on BLM managed land of selected portions of the Panaca Summit/Modena obsidian source area and collect obsidian nodules for geo-chemical studies. This project will produce information about prehistoric utilization of obsidian sources, the distribution of archaeological sites associated with obsidian flows, and contribute much needed detailed data on the variability of obsidian chemical signatures. **Complete**

A Class III Cultural Resources Inventory and Management Plan of Areas of Critical Environmental Concern in Lincoln County, Nevada

This project will conduct an archaeological inventory of 33,000 acres within the Mount Irish, Pahroc Rock Art, and Shooting Gallery Areas of Critical Environmental Concern (ACEC). This project will help with the understanding of site distribution within each ACEC and site data will provide the information needed to construct realistic resource management plans at a future date. <u>Complete</u>

Round 5

Educational Outreach for Archaeological Awareness in Lincoln County, Nevada

This project will prepare a comprehensive three-part packet of information for public education about Lincoln County and Southern Nevada's archaeology with an emphasis on the need to preserve and protect these resources for future generations. A presentation will be made available to area teachers and a Public Service Announcement will be distributed to Nevada radio stations. Three to five public lectures and three to five media interviews will be presented to local schools and media. <u>Complete</u>

Understanding the Rock Art of Lincoln County

This project will provide an educational program of six free workshops and public lectures to promote increased awareness, protection, and preservation of Lincoln County prehistoric archaeological heritage. The workshops and lectures will be held in Alamo and Caliente, aimed at educators and the public. The workshops will include one day of classroom instruction on the archaeology and rock art of

Lincoln County and the Great Basin, followed by a one-day visit to at least two rock art localities, ending with an evening lecture open to the public. <u>Complete</u>

Public Interpretation of Select Rock Art Sites in the Mount Irish Archaeological District

This project will create educational materials, a brochure, and webpage for eight rock art sites in the Mount Irish Archaeological District. The brochure will include a general description of rock art and the area's natural and cultural history, a description of each site with pictures, an explanation of unique characteristics, and interpretive information. **Complete**

Formative Period Occupations in Northwest Lincoln County: Interpreting Settlement Patterns Using Class III Inventory Data and Geomorphic Visibility

This project will inventory and evaluate Formative period sites in the Quinn Canyon Range, Sand Spring Valley, and the Worthington Mountains to characterize Formative period occupations in northwestern Lincoln County. The information obtained will facilitate recommendations for preservation and management of the cultural resources. The results will be presented to the public in Archaeological Awareness Month activities and to the archaeological community in conference presentations and pamphlets. <u>Complete</u>

A Shotgun Sequencing Approach to Clarifying Fremont and Shoshonean Settlement and Chronology Using Obsidian and Ceramic Artifacts in Lincoln County, Nevada

This project will study widely distributed small archaeological sites in order to refine the understanding of prehistoric settlement patterns in Lincoln County. This is an innovative approach to archaeological interpretation and should yield interesting results on an often ignored data set. The fieldwork will collect and analyze obsidian and ceramic artifacts, two types of artifacts that should provide reliable information to date the occupations at the small sites. The final analysis will compare the distribution of obsidian and pottery types. <u>Complete</u>

Cultural Resources Inventory for Paleo-Archaic Sites within Kane Springs Valley and Dry Lake Valley, Lincoln County, Nevada

This project will conduct a sample inventory for archaeological sites associated with the Pleistocene-Holocene Transition period in Lincoln County. The purpose of the inventory is to test an existing model of human settlement during the Pleistocene-Holocene Transition and establish baseline inventory data for managing Pleistocene-aged cultural resources in Kane Springs Valley and Dry Lake Valley in Lincoln County. Public outreach will include: 1) presentations to public groups, such as the Nevada Archaeological Association, Lincoln County historical societies, and amateur archaeological associations; 2) preparing a volume on the work for Lincoln County area libraries, tribal governments, and interested citizen associations; 3) involving non-professional volunteers, students, and tribal members during fieldwork, when possible; and, 4) preparing and presenting peer-reviewed articles at professional meetings. <u>Complete</u>

Re-evaluate Site Significance and Update Formative/Fremont Site Records in Lincoln County Using Geographic Information Systems (GIS)

This project will update old, outdated site records and re-evaluate National Register significance for Formative/Fremont sites in Lincoln County. The research will focus on sites recorded during early pioneering surveys conducted between 1967 and 1978. The study area will provide wide spatial coverage in Lincoln County. It is divided into four regions that include Pahranagat Valley, Delamar Valley, Lower Meadow Valley Wash, and Wilson Creek Range. Fifteen sites will be re-evaluated. Public outreach efforts will include a professional poster to be presented at conferences and presentations on the Formative Culture at two public schools in Lincoln County. **Complete**

Historic Re-photography, Documentation, and NRHP Evaluations of Twenty-Two Historic mine Sites in Lincoln County, Nevada

This project will conduct a study to verify 22 sites shown in the historic literature. The study will use 22 historic photographs as a beginning point; additional archival research, site recording, National Register of Historic Places (NRHP) evaluations. Report production will be guided by these photographs. **Complete**

Round 6

Investigating Formative Period Occupations within the Cedar Range and Sheep Creek Draw

This project will inventory and test previously undocumented sites in the east-central Cedar Range and Sheep Creek Draw, to further characterize Formative period occupations in east-central Lincoln County and develop a comprehensive prehistoric research context for the region. In addition, because the project area is immediately adjacent to the Panaca Summit Archaeological District (PSAD), the project will determine whether the PSAD extends into the area surveyed, and develop recommendations regarding expansion of the PSAD boundary. Results of the project will be submitted to BLM as technical reports, and presented to the public and the archaeological community in conference presentations and pamphlets. <u>Complete</u>

Remote Sensing and Evaluation of Agave Roasting Pits in the Northern Portion of the Sheep Mountain Range National Register Archaeological District, Lincoln County, Nevada

This project will provide an automated means to identify yucca roasting pit features located within the sheep Mountain Range National Register Archaeological District. Components include compilation of background imagery and environmental data, field verification, predictive model development, technical reporting and a public interpretation element that includes participation of Native American groups. <u>Complete</u>

Graffiti Removal at Vandalized Site 26LN351 (Curtis Canyon(and implementation of Consrvation and Mangement Program through Educational Public Outreach and Awareness

This project will mitigate effects of vandalism and develop a conservation and management program that includes public outreach for multi-panel rock art site 26LN351 near Curtis Canyon, Alamo, Nevada. This site is dominated by pictographs that are primarily attributable to the Fremont archaeological culture. The "Curtis Canyon Site" has been vandalized for more than 45 years. Vandalism at the site includes the following: graffiti scratched and incised initials, and chalked outlines; modern trash; and informal two-track roadways and foot paths that either directly adversely impact the rock art panels or indirectly compromise the sites integrity as a national Register property. Ongoing damage to the rock art panels, trash, and lack of any sign of site management invites further site destruction. Our project will restore site integrity and heighten public awareness of the sites' significance. Of primary importance is professional restoration and conservation of damaged rock art. On-site preservation measures would include clean-up, interpretive signage, designated access roads, parking and trails. Local public involvement aimed at protecting the site is crucial for success of the restoration efforts. Eetza Research Associates' outreach and education proposal component engages and recruits nearby Alamo residents through the schools and other public forums to assist with long-term site preservation. <u>Complete</u>

Treatment and Interpretive Plan for the Historic component of the Bailey springs Site (26LN1743)

This project will accomplish three major elements: a detailed documentation and condition assessment of the two extant buildings, a treatment plan for their stabilization/restoration, and an interpretive plan, based on historic research, for the whole homestead/ranching site. The Bailey Springs site is a multicomponent site on the west-facing slopes of the Fairview Range in Lincoln County. The site contains an archaic lithic scatter and a historic homestead that was established ca. 1880 and incorporated into the Adam's-McGill ranching corporation ca. 1914. The site was determined eligible to the National Register of Historic Places (NRHP) under Criteria A, B, and D in 2012. Its historic component includes two partially standing buildings, one contracted of milled lumber with corrugated metal roof, and the other constructed of native rough-cut mortared stone. These buildings, along with the rest of site's historic component, have experienced significant damage from wild horses and other animals accessing the spring that emerges from the interior of the stone structure. The Site also receives regular visitation from users of local roads and the Silver state OHV Trail. A treatment and interpretive plan for the homestead site will be created, in the form of a Historic Structures Report (HRS). The primary target audience for interpretation of the site would be the already numerous visitors to the site, particularly those using the Silver State Trail. **Complete**

Archaeological Context for Human Behavior and Environmental Change, Lincoln County, Nevada

This project will compile such synthesis including a review of past studies and development of new paleo environmental records that will serve as the basis for an archaeological context related to long-term human-environment interactions in Lincoln County This synthesis is intended to serve as crucial context to better understand the dynamics of human occupation in Lincoln County through time. The relationship of human activity and environmental change is a major theme in the study of Great Basin patterns of environmental change and/or stability, including the abundance and distribution of water and food resources important to human subsistence and settlement patterns. Studies have documented significant environmental changes pertinent to human land use in Lincoln County, but these disparate studies have not been placed into a synthetic framework amenable to effective use by archaeological researchers and managers. **Complete**

Round 7

A Historic Context for Paleoindian Archaeology in Lincoln County, Nevada

This project will write a historic context centered on the theme of Paleoindian archaeology in Lincoln County. The study will include an archaeological survey conducted on Bureau of Land Management lands in Cave and Lake Valleys in northern Lincoln County. This work will serve as an important test case of a new GIS-based model by Duke and King (2014) that measures the decline of Great Basin wetlands in the Pleistocene-Holocene Transition (PHT), including those located in Cave and Lake Valleys, and predicts how human responses are expressed in the archaeological record. <u>Complete</u>

A Ranching and Farming Context for Lincoln County, ca. 1855-1934

This project will develop and apply a historic context for ranching and farming in Lincoln County, Nevada in order to understand and organize the archaeological record and develop the themes and site types to facilitate evaluation of agricultural sites' eligibility for the National Register of Historic Places (NRHP). The project will engage community members in the Lincoln County Archaeological Initiative program and improve the public's archaeological awareness of this vital aspect of county and regional life. <u>Complete</u>

Public Interpretation of Three Rock Art Sites in the Pahranagat Region of Lincoln County, Nevada; Ash Springs, Crystal Wash and Shooting Gallery ACEC

This project will create educational materials for three rock art districts located in the Pahranagat Valley in Lincoln County; Ash Springs, Crystal Wash and Shooting Gallery ACEC. The Nevada Rock Art Foundation is modeling this after similar projects completed in the White River Narrows National Register District and the Mt. Irish Archaeological District. <u>Complete</u>

Documentation Update, Building Stabilization, and Interpretive Display at the Bailey Springs Site (26LN1743)

This project stems from a Round 6 project "Treatment and Interpretive Plan for the Historic Component of the Bailey Springs Site. This project will update archaeological and architectural documentation, stabilize two buildings, and design and install an interpretive display for the multicomponent Bailey Spring site (26LN1743), which is a prehistoric lithic scatter and a historic stage

station/ranching outpost. The site is located on the west side of the Fairview Range in Northern Lincoln County. **Complete**

An Archaeological Study of Ethnohistoric Occupations at Logan City, NV

This project stems from a Round 4 project "A Class III Cultural Resource Inventory and Management Plan of Areas of Critical Environmental Concern (ACEC) in Lincoln County", which focused on documenting prehistoric rock art in the Mount Irish ACEC. This project will complete an archival study using more localized records of the Pahranagat Mining District and conduct an archaeological investigation of presumed Native American house structures at Logan City. A portion of Logan City lies outside of the ACEC boundary to the south, and is a historic site that has not yet been recorded. Neither of the proposed tasks were included in the previous contract. **Complete**

Round 8

LCAI Archaeological Web Based Documentary

This project will produce an educational video suitable for web viewing (and other possible uses) to engage and inform the public about the intriguing prehistory and archaeology of Lincoln County, as well as the laws protecting cultural resources on public lands. The video will also present perspectives and insights from some of today's Native American residents. <u>Complete</u>

Imagine Black Canyon

This project will implement Phase II of an LCAI Round 4 project, Public Use Site Plan for the Black Canyon Archaeological District, in the Pahranagant National Wildlife Refuge. This second phase of a three phase project, will implement the design phase of the Site Plan that integrates National Environmental Policy Act (NEPA) compliance coordination with a national Register nomination for Black Canyon as a Traditional Cultural Property/Place (TCP) and design process that brings the concepts and research generated from Phase I to final design approved by the Fish and Wildlife Service (FWS), Nuwuvi, local residents and other stakeholders. FWS has applied through Round 15 of the Southern Nevada Public Land Management Act for funds to complete Phase III. <u>Cancelled</u>

Public Outreach and Archaeological Stewardship Expansion in Lincoln County

This project will enhance the Nevada Site Stewardship Program (NSSP) in Lincoln County. They will accomplish this through extensive community outreach, educational workshops which address archaeological resources and how to protect them, recruitment for the existing NSSP and an expansion of the number of sites monitored. They are proposing to increase the awareness of, and interaction with local interpreted archaeological resources, and encourage communication between community members and federal land managers in an effort to work together to protect for the cultural resources in Lincoln County. They propose to develop a brochure entitle "Preservation and Impact Reporting" and a coloring book which will be distributed at the events. **Complete**

Great Basin Land and Food: Development of a Social Studies Curriculum for Lincoln County

This project will develop an educational curriculum that conforms to Nevada's Common Core Content Standards for Social Studies, Grades 4 and 5. The curriculum will be used in Lincoln County public schools to educate students about hunter-gatherers and Desert Archaic lifeways, how resources are used, how humans interact with the physical environment, how populations share limited resources, and how to use and read maps. Students will also be introduced to the concept of social responsibility and the importance of protecting and investigating archaeological signatures of prehistoric activity. **Complete**

Panaca Summit Charcoal Kilns Public Use Site Plan and Environmental Assessment

This project will prepare a Site Plan and associated environmental document in compliance with NEPA for the Panaca Summit Charcoal Kilns Site. The Kilns are located in Lincoln County, Nevada along Kiln Wash, north of Panaca Summit. **Complete**

Round 9

An Archaeological Context of Desert Dust: Implications of Holocene Loess Deposition in Lincoln County, NV

This project will develop an archaeological context to assist resource evaluation and management based on where, when, and how these sedimentary packages form. The project will emphasize an understanding of the archaeological implications of loess in settings that "look like" or are older landforms but are in fact comprised of surface deposits of recent (i.e., Holocene) deposition. This intersection – old landforms and young surface deposits – underpins buried site potential and sensitivity on public lands in Lincoln County, the Basin and Range National Monument, and beyond. **Complete**

Portable X-ray Fluorescence Analysis of Rock Art Pigments

This project will conduct portable x-ray fluorescence (PXRF) studies at five prehistoric rock art sites. The study will focus on pictograph sites and sites will be selected from the Mount Irish, Shooting Gallery, Pahroc, White River Narrows Areas of Critical Environmental Concern (ACEC), and other prominent sites containing pictographs, such as Etna Cave. Innovative technology—specifically PXRF —will be used to identify the minerals used in pigments; differentiate between pigment types; infer pigment preparation and application techniques; and detect the work of different artists, painting events, and re-touch episodes. GIS will be used to study the relationship between rock art sites and potential sources of pigments. <u>Complete</u>

Rock Art of Lincoln County Booklet

This project will create a booklet interpreting the archaeological significance the rock art of Lincoln County to the general public. The booklet will offer a regional perspective of Lincoln County's rock art and its associated archaeological contexts as a medium to explore the County's ancient landscapes and peoples, raising public appreciation of its heritage significance. The booklet will be an even blend of photography and text, allowing the spectacular imagery of the rock art of Lincoln County to be seen in a large format. <u>Complete</u>

Late Pleistocene to Middle Holocene Landscape use in Coal Valley, Basin and Range National Monument, Lincoln County, Nevada

This project will construct an archaeological context of landscape use and subsistence practices in Coal Valley during the late Pleistocene to middle Holocene. The following tasks will be completed: 1) develop lake and landform histories to provide an environmental backdrop of the types of resources available to people at different places and at different times in Coal Valley; 2) Class III cultural resource inventory of approximately 2,400 acres on landforms identified as late Pleistocene to middle Holocene age and associated with past lakes or wetlands; and 3) video documentation of how geomorphologists, geoarchaeologists, and archaeologists study past landscapes and document and interpret archaeological remains. This project is expected to identify previously undocumented archaeological sites created by the valley's early inhabitants.

Historic Context and Research Design for the Silver King Mining District, Lincoln County, Nevada

This project will develop and apply a historic context for the Silver King Mining District in northern Lincoln County, Nevada. This project is designed to improve our understanding of early silver mining in Lincoln County through the identification and evaluation of the archaeological elements of the historic Silver King Mining District, thereby aiding in their management and protection. This proposed project also serves to increase archaeological awareness of historic resources in northern Lincoln County and provide the public with the means to learn more about, enjoy, and help preserve this public resource. <u>Complete</u>

A Historic Context for Mining in Lincoln County, Nevada

This project will prepare an historic context for mining in Lincoln County. There are potentially 33 historic mining districts in the county that were discovered over 100 years ago. This context will provide a much needed comprehensive document discussing mining-related research themes and property types within the county, research questions and the data necessary to address those questions, and how to apply all four National Register of Historic Places (NRHP) eligibility criteria to these property types. This document will aid future research work involving historic mining districts in Lincoln County and provide a consistent approach to identifying and evaluating these resources. Completion of the historic context may also illuminate unique aspects about the mining history of the county not previously known to scholars and the general public.

Round 10

The archaeological, alluvial, and wetland history of Meadow Valley Wash and its tributaries, Lincoln County, NV

This project will conduct a class III inventory of ~1200 acres on the valley floor surrounding Meadow Valley Wash, construct an alluvial and wetland history for the wash and its important tributaries, and video-document this process to inform the public how archaeologists, geoarchaeologists, geomorphologists, and archaeobotanists study past landscapes, collect field data, and interpret the results. The Meadow Valley Wash project is expected to identify previously undocumented archaeological sites created by the prehistoric and historic inhabitants of the valley, identify areas that are most likely to contain buried sites, and identify areas where sites were likely scoured away.

Crystal Wash Petroglyphs Public Use Site Plan and Environmental Assessment

This project will prepare a Public Use Site Plan and associated environmental document in compliance with the National Environmental Policy Act (NEPA) for the Crystal Wash Petroglyphs Site.

Ethnohistoric Context for Nineteenth-Century Native American Settlement and Land-Use Patterns in Lincoln County, Nevada

This project will prepare an ethnohistoric context for nineteenth-century Native American settlement and land-use patterns in Lincoln County. The main goals of the proposed project are to improve our knowledge of nineteenth-century Native American occupations in Lincoln County; identify and protect ethnohistoric Native American archaeological sites; to assist land managers and researchers in predicting the locations of such sites and evaluating them for their eligibility to the National Register of Historic Places; and to offer directions for future research concerning ethnohistoric, contact period Native American populations in Lincoln County.

3D Documentation Pilot Study: Crescent City Structures and Rock Art at Mt. Irish and Shooting Gallery

This project proposes a pilot study in which portions of three archaeological sites will be documented using state-of-the-art 3D documentation techniques; the results will be made available via an online database focusing on public interpretation. The sites in question are located in the Mt. Irish and Badger Mountain areas of Lincoln County, on lands administered by the Bureau of Land Management's Ely District, Caliente Field Office. The project's goals are to facilitate management and public interpretation of the three sites, and to explore the potential of 3D documentation for other sites in Lincoln County and the Great Basin as a whole.

Interpretive and Monitoring Opportunities for State Parks in Lincoln County

This project will enhance archaeological resource management and public engagement for State Parks in Lincoln County. This will be accomplished by developing and improving the knowledge, skills, and tools needed for State Parks to manage, protect, and preserve their archaeological resources while also providing opportunities for public education and participation in cultural resource preservation at

State Parks in Lincoln County. The project will approach this goal by focusing efforts in three areas. First, the project will educate State Parks and the community about State Parks' archaeological resources through the creation of a comprehensive overview document which places the resources within the history and prehistory of the County and a brochure for the public highlighting archaeological resources at the parks and their preservation. Second, the project will train State Park staff on how to identify cultural resources on State Park lands, engage with the public to encourage an appreciation for the local archaeology, and provide a process for the public to report when they discover new resources. Lastly, the project will assist State Parks in setting up archaeological sites for volunteer site stewardship and advise them in creating a system for managing archaeological information and stewardship reports.

Portable X-ray Fluorescence Analysis at 40 Rock Art Sites

This project will use portable x-ray fluorescence (PXRF) technology to study prehistoric rock art sites. All research will be conducted in Lincoln County and at sites on BLM-managed land. The study will use innovative technology—specifically PXRF—to identify the constituents of pigments (e.g., mineral or organic); differentiate between pigment types; infer pigment preparation and application techniques; and detect the work of different artists, painting events, and re-touch episodes. GIS will be used to study the relationship between rock art sites and potential sources of pigments. These studies will be non-invasive. The results will advance our knowledge of archaeological resources, gather new data, and, where feasible, will address research themes such as social interaction; Fremont groups along the margins of their distribution range; communication; and belief systems. The results will also provide new methods for studying, managing, and preserving pictograph sites.

Round 11

B061 Lincoln County High: Native Occupation of Lincoln County's Upper Elevations

This project will conduct an archaeological inventory and evaluation to document Native American occupation of Lincoln County's high country. Lincoln County, Nevada has numerous mountain ranges with many of them exceeding 8,000 feet in elevation. Rich in biological, hydrological, rangeland, mineral resources, and scenic values, these high mountain reaches played an essential part in prehistoric and ethnohistoric settlement for food gathering, summer habitation, spiritual engagement, refuge, and other roles. However, those roles are largely unknown because almost no archaeological investigation has been done in higher altitudes and because a modern understanding of uppermountain occupation, as developed elsewhere in western North America, has not been applied to Lincoln County's ranges.

B062 Graffiti Mitigation and Rock Art Recording, Lincoln County, Nevada

This project will remove and camouflage graffiti at 45 rock art panels in the Basin and Range National Monument. The panels are in the White River Narrows and Mount Irish Archaeological Districts. In addition to graffiti mitigation, conventional photography, and textual records, innovative recording technology will include cutting-edge drone photography to map the rock art surfaces. A three-dimensional record of the rock surfaces, "before" and "after" graffiti removal and camouflage will be produced.

B063 Testing the Pinyon Premise: Starch Grain Analysis of Bedrock Milling Slicks and Ground Stone Tools at Mt. Irish and Shooting Gallery ACEC's, Lincoln County, Nevada

This project will analyze starch grain residues on bedrock milling slicks and ground stone tools at archaeological sites in the Basin and Range National Monument. Ten of the sites are located within the Mt. Irish Area of Critical Environmental Concern (ACEC), and eight sites are located within the Shooting Gallery ACEC. At these sites, bedrock milling slicks and ground stone tools in a variety of spatial settings will be sampled in the field using non-destructive techniques to recover starch residues that can provide direct data about prehistoric land-use strategies, subsistence practices, and residential occupations in Lincoln County. In addition, the results of this project can be used to preserve archaeological sites in the subject ACECs and to increase awareness among the archaeological community and the public about the value of starch grain research.

B064 Archaeological and Geomorphological Contexts of Rockshelters, Caves, and Overhangs in Lincoln County, NV

This project will develop an archaeological and geomorphological context of rockshelters, caves, and overhangs RCO within Lincoln County. Finding intact cultural deposits at RCO sites is very important to the understanding of Lincoln County prehistory. The project will investigate RCO site locations, what is known about them, and if they have been excavated (either legally or illegally). They will develop a database designed to be useful in finding intact buried evidence of past human occupation for RCO sites. Site records will be updated and a technical report will be provided. Videos will be produced on how the archaeology and geologic research is conducted.

B065 Archaeology and Geomorphology Green Box: The importance of water and geology in the discovery and preservation of archaeological sites in Lincoln County, Nevada

The Archaeology and Geomorphology Green Box project will directly address public outreach a nd educational programs by developing science-based curriculum. Science Alive conducts education and engagement a global scientific research and development institute under the Nevada System of Higher Education. The mission of Science Alive is to support PreK-12 educators in science-based, environmental education by providing the tools, resources, and knowledge they need, so all students acquire the knowledge and skills needed to work, live and contribute in our community. Science Alive achieves the mission by providing inquiry-based Science, Technology, Engineering, and Math STEM curriculum through the Green Boxes, offering teacher trainings and workshops throughout the school year, and through school support in the form of speakers, field trips, and special opportunities The goal of the proposed project is to support evidence-based, effective, earth science-themed activities that increase awareness, understanding, and appreciation of the archaeological and geomorphological sciences and how they are applied within a local context. The Archaeology and Geomorphology Green Box is designed using a holistic approach that includes curriculum resources for teachers that provide hands-on learning opportunities for students, and formal and informal outreach experiences in classroom and public settings that aim to amplify or extend the dissemination of place-based archaeological information. The intent is to create educational resources that promote advocacy for cultural resources, and foster a sense of stewardship in local communities

B066 Unmanned Aerial Vehicle Sensor Testing for Archaeological Site and Feature Identification in Lincoln County, NV

This project will to fly a variety of cameras/sensors attached to Unmanned Aerial Vehicles (UAV, aka Unmanned Aircraft Systems – UAS or drones) over previously identified archaeological sites within Lincoln County in order to test their usefulness for feature identification and mapping, delineation of areas with potential depth, analysis of spatial characteristics (i.e., 3D modeling), and site monitoring/disturbance indicators. Each site selected will be flown over in three different seasons in order to capture seasonal soil moisture and vegetation characteristics that may be important to determine camera/sensor capabilities. Site selection, which will be made in collaboration with BLM agency archaeologists, will include a sample of different types, ranging from historic structures to open Paleoindian sites, in a variety of environmental settings. The goal is to sample the diversity of archaeological sites and ecosystems within Lincoln County and their potential for successful application of each camera/sensor/UAV. This project is designed to distinguish which combination of UAV systems (large DJI Matrice 600 Pro versus small DJI Phantom 4 Pro V2.0) and cameras/sensors (digital cameras [VIS], thermal [TIR], and NDVI [Normalized difference vegetation index] [NIR] cameras for both large and small UAV weight limitations and mounting systems) are most usefully applied to archaeological sites within Lincoln County, and potentially statewide and beyond. A costbenefit analysis of these configurations for archaeological research and management of cultural resources will result.