United States Department of the Interior

NATIONAL PARK SERVICE
Great Basin National Park
100 Great Basin National Park
Baker, Nevada 89311-9700

SNPLMA Round 16: Conservation Initiatives

Title: Protection, Stabilization, and Restoration of the Lehman Caves Historic Area

Amount Requested: $926,597

Nominating Organization: National Park Service, Great Basin National Park

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Supporting Documentation (attached)

- Cost Estimate Summary
- Five-year Expanded Budget
- Maps
- Letters/Statements of Support

Federal Manager Initials: _____
Steve Mietz
Superintendent
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Baker, NV 89311

Purpose Statement

- **Who:** Great Basin National Park (GRBA)
- **What:** GRBA will protect, stabilize, and where appropriate restore the Lehman Caves Historic Area. Historical features inside Lehman Caves (eligible for the National Register of Historic Places [NRHP]) will be documented and appropriate conservation measures will be applied. The 130 year old Lehman Orchard and Aqueduct (listed in NRHP) will be stabilized to protect historic integrity. The aqueduct will be inventoried, documented, protected, and interpreted. Lehman Orchard will be stabilized and replanted with heirloom stock and grafted cuttings from remaining apricot parent trees to retain historical genetic integrity. Rhodes Cabin (listed in NRHP) will be stabilized with appropriate historic preservation techniques and interpretive exhibits will explain the historical importance of the cabin and Lehman Caves Historic Area in the development of tourism and recreation in the National Parks, Nevada, and White Pine County.
- **Where:** The Lehman Caves Historic Area is located near the Lehman Caves Visitor Center within Great Basin National Park, in White Pine County, Nevada. The project area is located in the Nevada Congressional District 4 at the following Latitude and Longitude: N 39° 0’ 21”; W 114° 13’ 7”.
- **Why:** The Lehman Caves Historic Area is an integral part of Great Basin National Park and is encompasses significant historic properties. Stabilization and repair guided by survey, documentation and archival research are needed to ensure sustainability and uphold the NPS Mission to, “preserve unimpaired the natural and cultural resources and values of the national park system for the enjoyment, education, and inspiration of this and future generations.” The area contains two properties listed in the National Register of Historic Places (NRHP); these are the Lehman Orchard and Aqueduct, and the Rhodes Cabin. In addition, the tour area in Lehman Caves needs detailed documentation of historic elements for inclusion in the NRHP. This project will provide much needed protection to these important resources and provide accurate information to interpret them for park visitors.

Background Information and Need for the Project

<u>Background Information</u>

The Lehman Caves Historic Area is an important part of the early history of the developing tourism and outdoor recreation industry in Nevada. It remains the heart of National Park Service administration of Great Basin National Park today. With a visitation of over 100,000 people per year, almost every visitor passes through the Lehman Caves Historic Area.

A small area inside the natural entrance to Lehman Caves was first used by Native Americans. It was not until Absalom Lehman found an entrance into the caverns in the 1880s that the cave was deeply explored. Lehman began developing the area as a private tourism enterprise and promoted cave tours. The cave became the star attraction in area newspapers known as the “*Mr. Lehman’s Fabulous Cave*”.

Lehman established a small homestead of nearly 7 acres near the cave entrance. He planted an orchard of fruit trees and created an irrigation system to bring water from the creek two miles to his ranch. The original orchard consisted of approximately 40 trees, which included apricot, peach, apple, pear, crabapple, and plum trees. Less than 10 trees remain today. Portions of the water system and aqueduct still remain although they have not carried water for many years.

After Lehman various owners continued promoting tourism with varying degrees of success. In 1922, Lehman Caves National Monument was created under administration of the U.S. Forest Service. The Forest Service contracted the ranch residents Clarence T. Rhodes and his wife as caretakers. In 1928 Rhodes built a complex of log cabins to accommodate tourists. These included a dance hall and 10 "tourist" cabins for rent. Rhodes Cabin is listed on the NRHP, and is the only remaining of the original tourist facility from that period.

The National Park Service took over administration of Lehman Caves National Monument in 1932, implementing the dual mandate of the Organic Act to preserve resources and provide recreation for current and future generations. Decades later the Monument including the historic area was incorporated into Great Basin National Park and remains the most visited area of the Park today.

Need for the Project

Lehman Caves Historic Area comprises unique and important historic resources currently in a state of decline. Varying degrees of upkeep over the years have kept essential elements in tact but decades of maintenance work need to be updated with improved methods to ensure sustainability for future generations. Updated and improved documentation and planning is the foundation for that effort.

Inside Lehman Caves visitor inscriptions tell a story of over 130 years of public access. Inscriptions are fading and could be lost in the near future. Portions of trail features date to important periods of American and Nevada history during the Public Works era of the 1930's. Those features have never been documented. Recording the traces of history inside will support informed management, and provide accurate information for cave tours and interpretive media. Lehman Caves is a historic property worthy of inclusion in the National Register of Historic Places (NRHP) and is significant for the contribution it has made to the recreation and tourism play in the economy of White Pine County and Nevada.

The Lehman Orchard and Aqueduct are declining and in need of protection, stabilization, and restoration. Orchard trees over 100 years old need to be cared for in an appropriate manner with proper pruning and efficient sustainable irrigation. Replanting trees from grafting cuttings of original stock or selecting similar heirloom varieties will reinvigorate the viability of the orchard and restore the original configuration. The goal will be to maintain the historic integrity and secure heirloom stock for future generations. Lehman Orchard is the only

orchard in the state of Nevada listed in the NRHP, and is one of only a few across the country.

The Lehman Aqueduct was constructed to bring water to the orchard from Lehman Creek. The aqueduct was approximately 2 miles long. Remnants of the aqueduct are found along the Mountain View Nature Trail, to the north of the Rhodes Cabin. An archeological investigation of the aqueduct is needed to determine appropriate treatment measures. Preserving and interpreting the aqueduct in multi-lingual format will enhance the visitor experience.

Important historic elements of Rhodes Cabin have been compromised and need stabilization. The cabin has been repaired multiple times over the past 50 years, however many of the techniques were inappropriate in maintaining the historic integrity and longevity of the structure. These inappropriate treatments need to be removed and/or corrected. Exhibits in the cabin are outdated and should be changed to highlight the appropriate historic themes. This project will allow the park to accurately interpret the structure for the period of significance of the Lehman Caves National Monument in the 1920s and 1930s.

Values

This project will address three values identified by the Executive Committee (EC); sustainability, connectivity, and community.

Sustainability is ensured through the updated documentation, protection, stabilization, and restoration of the historic resources within the Lehman Caves Historic Area. The interior tour area of Lehman Caves, the Lehman Orchard and Aqueduct, and Rhodes Cabin are important resources. Documenting historic inscriptions and features inside the cave ensures the legacy of public enjoyment is preserved. Replanting genetic and heirloom tree stock in Lehman Orchard will provide sustainable enjoyment for decades. This project provides appropriate historic preservation techniques and treatments that will improve the condition of Rhodes Cabin for enjoyment of future generations of park visitors.

Connectivity is enhanced by recognizing collective past and providing access through interpretive media. Multi-lingual wayside exhibits stimulate recognition of our shared heritage. Increasing physical access to the heirloom trees in Lehman Orchard immerses visitors in physical experience stimulating emotional connections with the environment. Involving local area students in growing and planting heirloom trees connects a future generation to parks, conservation, and history.

Community is engaged through improved recreational and educational opportunities in rural Nevada. Recognizing the history and importance of recreation in rural development connects people to a shared communal past. Installing an Americans with Disabilities Act (ADA) accessible trail in the Lehman Orchard, providing multi-lingual wayside exhibits, and updating media will expand and engage the community of National Park Visitors. The next generation of community is created by involving school students in conservation and preservation activities.

Project Timeframe

This will be a 5 Year Project.

- **Year 1**
  - Historic and archival research begins
  - National Environmental Policy Act (NEPA) initiated
  - National Historic Preservation Act (NHPA) Section 106 consultation initiated
  - Orchard Management Plan begins
- **Year 2**
  - Historic and archival research continues
  - NEPA continue
  - NHPA Section 106 consultation completed
  - Lehman Orchard Management Plan completed
  - Stabilization and of the Rhodes Cabin begins
  - Stabilization and re-establishment of the Lehman Orchard begins
  - Temporary greenhouse and/or tree nursery established
  - Identify and secure replacement historic tree stock for grafts where necessary
  - Grafting of historic tree stock
  - Revision of the trail adjacent to the Rhodes Cabin laid out
  - Fuels reduction project to protect the Lehman Caves Historic Area from fire begins
  - Begin NHPA Section 110 of archeological survey and documenting Lehman Aqueduct and Lehman Caves including historical inscriptions in tour areas of cave
  - Plan Lehman Orchard irrigation system
- **Year 3**
  - NEPA completed
  - Historic and archival research continues
  - Stabilization and re-establishment of the Lehman Orchard continues
  - Rhodes Cabin stabilization completed
  - Fuels reduction continues
  - Continue NHPA Section 110 of archeological survey and documenting Lehman Aqueduct and Lehman Caves including historical inscriptions in tour areas of cave
  - Revision of the trail adjacent to the Rhodes Cabin begins
  - ADA accessible trail planning in the Lehman Orchard begins
  - Multi-lingual exhibits for the Rhodes Cabin planned and draft layout begins
  - Multi-lingual wayside signs for the Lehman Orchard, Lehman Aqueduct, and Rhodes Cabin planned and draft layout begins
  - Other multi-lingual interpretive media (electronic, print, etc.) plan and begin draft
  - Replacement of Lehman Orchard irrigation system begins

- **Year 4**
  - Historic and archival research compiled
  - Stabilization and re-establishment of the Lehman Orchard continues

- Fuels reduction activities completed
- Complete NHPA Section 110 of archeological survey and documenting Lehman Aqueduct and Lehman Caves including historical inscriptions and prepare National Register of Historic Places nomination
- Revision of the trail near Rhodes Cabin completed
- ADA Accessible trail in the Lehman Orchard continues
- Multi-lingual exhibits for the Rhodes Cabin fabricated
- Multi-lingual wayside signs for the Lehman Orchard, Lehman Aqueduct, and Rhodes Cabin fabricated
- Other multi-lingual interpretive media (electronic, print, etc.) finalized and created
- Complete the installation of the irrigation system
- Begin out-planting grafted historic heirloom orchard tree stock

- **Year 5**
  - Historic and archival material collection accessioned
  - Stabilization and re-establishment of the Lehman Orchard completed
  - ADA Accessible trail in the Lehman Orchard completed
  - Multi-lingual exhibits for the Rhodes Cabin installed
  - Multi-lingual wayside signs for the Lehman Orchard, Lehman Aqueduct, and Rhodes Cabin installed
  - Other multi-lingual interpretive media (electronic, print, etc.) completed
  - Outplanting grafted historic heirloom orchard tree stock completed
  - Project closeout completed

Location of the Project

The project area is located in the Nevada Congressional District 4 at the following Latitude and Longitude: N 39° 0’ 21”; W 114° 13’ 7”. See Figure 1 for a map of the project location. See Figure 2 for a map of the resources located within the project area and Figure 3 for a map of the existing Lehman Orchard as of 2007.

Project Deliverables

1. **Primary**
   a. Conduct archaeological inventory (survey) for NHPA Sections 106 and 110 complete and submit required reports to State Historic Preservation Officer
   b. Perform and compile historic and archival research generating a Class I (literature review) report
   c. Prepare an interpretive guide for Lehman Caves Historic Area tour leaders
   d. Complete Lehman Orchard Management Plan
   e. Stabilize, and repair Rhodes Cabin
   f. Stabilize, preserve, and re-establish Lehman Orchard installing efficient irrigation system planting up to 40 trees, and installing fencing or barrier to protect new trees from deer and rabbits

g. Document and protect historical inscriptions and features inside Lehman Caves through a National Register of Historic Places nomination
h. Construct ADA accessible trail in the Lehman Orchard
i. Protect the Lehman Caves Historic Area from fire through fuels reduction and invasive plant control of up to 54 acres
j. Prepare and install multi-lingual interpretive media (3 wayside signs, up to 10 exhibit panels)

2. **Anticipated**
    a. Involve local area students in growing and planting grafted trees
    b. Construct temporary greenhouse and/or tree nursery facility
    c. Accession and catalog any historic and archival materials collected
    d. Install additional wayside signs
    e. Re-route up to .5 miles of trail adjacent to the Rhodes Cabin
    f. Create and distribute electronic interpretive media
3. **Standard**
    a. NEPA
    b. Public scoping
    c. Develop scope of work for contracting and/or agreements
    d. Implementation plan detailed
    e. Budget tracking
    f. Quarterly and annual reporting
    g. Final project submittal

Relevant Performance Measures

- Outcome: Increase information about Lehman Caves Historic Area to inform better preservation actions, and to improve accuracy of educational material for visitors. Achieving the following outputs will accomplish this outcome:
    - Output (Primary Deliverable): Sections 106 and 110 of NHPA Archeological Inventory of 100 acres including up to 2 volunteers. The SNPLMA Performance Measures include:
        - Performance Measure C3 – Acres of Cultural/Paleontological Resources Survey, Inventoried, or Monitored (100 acres)
        - Performance Measure O4 Number of Scientific / Technical Reports Produced (2 reports)
        - Performance Measure O10 – Number of Volunteers Used (2 volunteers)
    - Output (Primary Deliverable): Historic and archival research compiled generating a Class I Cultural Resource report and information for interpretive material
        - Performance Measure O4 Number of Scientific / Technical Reports Produced (1 reports)
    - Output (Primary Deliverable): Prepare interpretive guide for tour leaders with improved information about Lehman Caves Historic Area
        - Performance Measure O12 – Number of Management Plans/Handbooks/Manuals/Guides for Activity on Public Lands Completed (1 plan)

- Outcome: Provide a guide for sustainable management of an important historic property. Achieving the following output will accomplish this outcome:
    - Output (Primary Deliverable): Complete an orchard management plan for the Lehman Orchard. The SNPLMA Performance Measures include:
        - Performance Measure O12 – Number of Management Plans/Handbooks/Manuals/Guides for Activity on Public Lands Completed (1 plan)
- Outcome: Ensure important historic resources are protected to extend longevity and provide tangible places for people to learn about history of Great Basin National Park, White Pine County, and Nevada. Achieving the following outputs will accomplish this outcome:
    - Output (Primary Deliverable): Stabilization and repair Rhodes Cabin (1 Structure). The SNPLMA Performance Measures include:
        - Performance Measure C1 – Number of Cultural or Historic Sites or Structures Stabilized or Protected (1 site)
    - Output (Primary Deliverable): Stabilize, preserve, and re-establish Lehman Orchard installing efficient irrigation system and planting up to 40 trees involving volunteers and rural area school children, and installing fence or barrier to protect new trees. The SNPLMA Performance Measures include:
        - Performance Measure C1 – Number of Cultural or Historic Sites or Structures Stabilized or Protected (1 site)
        - Performance Measure O10 – Number of Volunteers Used (up to 20 volunteer including rural area youth engaged)
    - Output (Primary Deliverable): Documentation and protection of historical inscriptions and features of Lehman Caves and prepare a National Register of Historic Places nomination
        - Performance Measure C1 – Number of Cultural or Historic Sites or Structures Stabilized or Protected (1 site)
        - Performance Measure H1- number of acres of land identified for withdrawal or withdrawn from multiple use management (e.g., as the result of a cultural or biological survey, etc.). (5 acres National Register of Historic Places designation)
        - Performance Measure O4 – Number of scientific technical reports produced (1 Class III CR report)
    - Output (Anticipated Deliverable): Accession and catalog any artifacts and archival material generated through the project. The SNPLMA Performance Measures include:
        - Performance Measure C-2 Number of Cultural or Paleontological Artifacts Protected (1 accession, 500 artifacts)
- Outcome: Provide improved trails for increased visitor access to historic sites and features. Achieving the following outputs will accomplish this outcome:
    - Output (Primary Deliverable): Construct, 1 mile of new ADA accessible trail in the Lehman Orchard. The SNPLMA Performance Measures include:
        - Performance Measure R4 – Miles of New Recreational Roads/Trails Constructed or Routes Improved (1 mile)

    - Output (Anticipated Deliverable): Re-route and improve the portion of the trail adjacent to the Rhodes Cabin, less than 1 mile of trail re-routes and improvements along the existing trail. The SNPLMA Performance Measures include:
        - Performance Measure R4 – Miles of New Recreational Roads/Trails Constructed or Routes Improved (1 mile)
- Outcome: Protect the Lehman Caves Historic Area from fire to ensure longevity of the historic resources. Achieving the following output will accomplish this outcome:
    - Output (Primary Deliverable): Fuels Reduction within the Lehman Caves Historic Area. 54 Acres of thinning highly flammable material and 54 acres of reseeding with more fire resistant, resilient native plants. The SNPLMA Performance Measures include:
        - Performance Measure H4 – Acres of Upland Habitat Treated, Enhanced, or Restored (54 acres)
        - Performance Measure F2 – Acres of Hazardous Fuels Treated – Wildland Urban Interface (WUI) (54 acres)
- Outcome: Improve communication with diverse communities about the history of Lehman Caves Historic Area to increase understanding and support for preservation of our common heritage. Achieving the following outputs will accomplish this outcome:
    - Output (Primary Deliverable): Install and Update up to 10 exhibit panels with a multi-lingual component within the Rhodes Cabin with the assistance of up to 1 volunteer. The SNPLMA Performance Measures include:
        - Performance Measure O6 – Number of New Interpretive or Education Publications/Signs/Kiosks/Displays/etc. Produced (1 display, [10 panels])
        - Performance Measure O10 – Number of Volunteers Used (1 volunteer)
    - Output (Primary Deliverable): Install 1 multi-lingual trailhead sign and up to 5 multi-lingual wayside signs in the Lehman Caves Historic Area with the assistance of up to 1 volunteer. The SNPLMA Performance Measures include:
        - Performance Measure O6 – Number of New Interpretive or Education Publications/Signs/Kiosks/Displays/etc. Produced (6 signs)
        - Performance Measure O10 – Number of Volunteers Used (1 volunteer)
    - Output (Primary Deliverable) Produce an interpretive overview binder "Handbook for Interpreting the Cultural Resources of Lehman Caves" for Park Rangers, with the assistance of up to 1 volunteer.
        - Performance Measure O12 – Number of Management Plans/Handbooks/Manuals/Guides for Activity on Public Lands Completed (1 handbook)
    - Output (Anticipated Deliverable): Create and distribute up to 5 interpretive electronic media products to inform public about historic resources and preservation efforts. The SNPLMA Performance Measures include:
        - Performance Measure O6 – Number of New Interpretive or Education Publications/Signs/Kiosks/Displays/etc. Produced (5 media produced)
        - Performance Measure O10 – Number of Volunteers Used (1 volunteers)
- Outcome: Construct a temporary greenhouse and/or tree nursery to grow grafted historic tree stock and native plants. Achieving the following output will accomplish this outcome:

- Output (Anticipated Deliverable): Construct 1 temporary greenhouse and/or tree nursery for the growing of grafted historic tree stock and native plants. The SNPLMA Performance Measures include:
    - Performance Measure O2 – Number of Buildings, Facilities, and/or Amenities Constructed or Refurbished (1 facility)

Project Implementation Process

This project will take place over five years. Throughout the project information will be available to the public through postings on the park Facebook page, the Resource Management electronic newsletter and other appropriate media. A list of interested parties including the Tribes, other Federal and local government entities, partners, and public will be developed and information provided throughout the process will invite comment.

In addition to outreach efforts the SNPLMA quarterly and yearly reports will be filed and NPS standard reporting and tracking systems will be used including:

- Planning and Environmental Public Comment (PEPC) for NEPA, and NHPA.
- Project Management Information Systems (PMIS) track progress for NPS.
- Interior Collection Management System (ICMS) for museum and archival cataloging.
- List of Classified Structures (LCS) to document condition of historic assets.

<u>Detailed Implementation Process</u>

Historic and Archival Research performed by the Cultural Resource Manager, Park Archeologist and Museum Technician or research consultants during years 1 through 4 supports all aspects of this project. It is required for compliance, stabilization, restoration, trails, and informs interpretive material for the Lehman Caves Historic Area. An annotated bibliography, final report, and finders guide will be compiled and made available to researchers through electronic and/or print media. Documents or reports generated will be accessioned and cataloged in the park museum and archive collection.

NHPA Sections 106 and 110 Archeological Inventory and National Register Nomination of the Lehman Caves Historic Area will be completed in year 2 through year 5. NRHP Section 106 consultation and compliance will be completed year 2. An archeological inventory under Section 110 of NHPA of Lehman Caves will be completed in years 2 through 4. All work will be completed by the park cultural resource manager, park archeologist, and archeological technicians. Standard archaeological survey and documentation process for Class III (intensive survey) inventory will be followed.

Required archaeological documentation forms will be completed and submitted to the Nevada State Historic Preservation Officer. Standard reporting forms include:

- Intermountain Antiquities Computer System (IMACS) archaeological site forms.
- Nevada Historic Resource Forms (NRHF) historic structures documentation form.
- List of Classified Structures (LCS) condition assessment form.

- National Register of Historic Places Nomination (NRHP) form to assess eligibility.

Appropriate documents will be disseminated via electronic and/or hard copy to interested parties including, but not limited to the BLM, Forest Service, Nevada State Historic Preservation Officer (SHPO), and Great Basin National Heritage Area Partnership (GBNHAP), a park partner invited to consult in planning this project.

Update and Complete an Orchard Management Plan will be finished in year 2. The Orchard Management Plan will guide appropriate management and actions for stabilization, restoration and long term care of the historic Lehman Orchard. NPS Historic Orchard Preservation Specialists from NPS Pacific West (PWR) and Intermountain (IMR) Regions will be consulted to provide assistance with development. Electronic and/or hard copies of the orchard management plan will be distributed to all interested parties including, but not limited to the BLM, Forest Service, Nevada SHPO, and GBNHAP.

Construct a Temporary Greenhouse and/or Tree Nursery will be done in year 2 to provide shelter for grafting and starting orchard stock and allowing hardening before outplanting.

Stabilization, Restoration, and Preservation of the Rhodes Cabin will take place during years 2 and 3. Historic Preservation Specialists will guide stabilization, restoration, and preservation efforts based on the Preliminary Condition Assessment and Treatment Plan for the Rhodes Cabin created by NPS Vanishing Treasures Historic Preservation Architect. This report is on file GRBA Cultural Resource office. Treatment includes, in kind replacement of rotten logs, replacement of the roof, floor, and windows using appropriate historic techniques. Trees used to replace rotten logs will be removed from an appropriate area within the vicinity of the site in consultation with Natural Resource specialists from the park.

Stabilization, Restoration, and Preservation of the Lehman Orchard will take place during years 2 through 5. NPS Historic Orchard Preservation Specialists will guide the efforts based on the Orchard Management Plan. Treatments include pruning and other appropriate management techniques of existing trees, upgrading an irrigation system, grafting trees from the existing historic stock and then planting them in their historic locations. Fencing or barriers will be installed to protect new trees. Local school children will be engaged and encouraged to help with grafting, caring for, and outplanting nursery tree stock. These efforts will this restore the orchard to its original configuration, and preserve the genetics of these historic heirloom trees while providing a living connection with the NPS for students.

Construction of an ADA Accessible Trail in the Lehman Orchard will be accomplished during years 3 through 5. This ADA accessible trail ensures safe access with orchard paths, stairs, ramps, and crosswalks connecting the existing Lehman Caves Visitor Center parking area and the orchard. The trail will provide benches and resting

areas. Planning and installation will be accomplished involving permanent, term and seasonal GRBA Resource Management and Maintenance staff.

Protect the Lehman Caves Historic Area from Fire will be accomplished with a fuels reduction of the area taking place during years 2 through 4. Fuels within the Lehman Caves Historic Area are within a Fire Regime Condition Class (FRCC) 2 a9fires have not occurred in 0-35 years) and 3 (fires have not bured in 35 – 100 years) and located within the Wildland Urban Interface (WUI) Fire Management Unit. These areas are subject to severe fires. Thinning will protect the historic resources and Great Basin National Park infrastructure. Removing established pinyon-juniper also allows more precipitation to penetrate the ground improving habitat and reducing groundwater depletion. NPS Fuels Management Teams from PWR will be used to accomplish this task.

Install and Update Exhibits in the Rhodes Cabin will begin with planning in year 3 and be completed upon installation in year 5. Exhibits will accurately interpret the history of early tourism in the area and provide information about historic preservation in a multi-lingual format. A seasonal or term exhibit specialist position will be hired for design and creation of all exhibit and media content. Cultural Resource, Interpretive, and Maintenance staff will cooperate to complete the interpretive tasks.

Install Wayside Sign at the Rhodes Cabin in a multi-lingual format describing the history of the Rhodes Cabin will be planned and installed adjacent to the cabin in years 3 through 5.

Install a Trailhead Sign and Wayside Signs along the new Lehman Orchard Trail – for the multi-lingual educational and interpretive component along the Lehman Orchard Trail will be planned and installed in years 3 through 5.

Complete and Update Other Education and Interpretive Materials associated with the historic area including both electronic and print media will be planned and completed during years 3 through 5. Materials may include social media postings, podcasts, interactive kiosk in the visitor center, and an interpretive guide for park employees as well as brochures and news articles.

Install a Wayside Sign at the Lehman Aqueduct in a multi-lingual format interpreting the Lehman Aqueduct will be completed during years 3 through 5 along the Mountain View Nature Trail where appropriate sections of the Aqueduct are visible.

Re-Route Portions of the Trail Adjacent to the Rhodes Cabin to allow for proper drainage around the cabin during will be completed in years 2 through 4.

Accession and catalog any historic and archival materials collected or generated during completion of the project should be completed in year 5 to support reporting and provide a permanent record of accomplishments. A museum technician will accomplish this task.

Level of Readiness for Project Implementation

The park level of readiness to implement the project within one year of notification of funds availability (NOFA) is high. The park has necessary resources and knowledge of historical documentation to complete archival research and archaeological survey and inventory documentation. Tools and equipment are available and can be purchased or rented for special tasks. With the current staff the project can be implemented with minimal outside assistance. Current staff includes:

- Environmental Protection Specialist - permanent
- Cultural Resource Manager - permanent
- Archeologist – permanent
- Archeological Technician – term and seasonal
- Museum Technician – collateral duty permanent, seasonal
- NPS Fuels and Plants Team- PWR permanent, term, and seasonal
- Outdoor Recreation Planner - term
- Trails staff – permanent ,term, and seasonal
- Maintenance staff for irrigation installation – permanent, term, and seasonal
- Interpretive Ranger Supervisor - permanent
- Interpretive Rangers –permanent, term, and seasonal

The Environmental Protection Specialists will be able to perform the necessary NEPA tasks by the start of the third year. The project is driven by the Cultural Resource Management division and necessary NHPA Section 106 documentation and consultation will be accomplished in the second year with the assistance of the NPS Fuels and Plants Team, a fuels reduction plan can be drafted within the second year to be implemented within years 2 through 4 of the project. The Trails Crew Leader along with the Trails staff will be able to plan and implement the trail maintenance and construction necessary for this project. The NPS Pacific West Region has a Historic Architect, Historic Preservation Specialists, and Preservation Crews available in various parks and nationwide in the Vanishing Treasures program. These parties have been contacted and all are willing and able to assist the park in this project. If NPS specialists are not available cooperative agreements and/or contract specialists will be consulted.

Relationship to Previous Phases and Anticipated Future Phases

This project has no relationship to any previous SNPLMA projects or phases. There are no anticipated future phases for this project through SNPLMA.

Budget

The proposed budget for this project is: $926,597
This proposal represents the best value option for a viable project of this nature. The proposed budget is necessary to complete this project as outlined above with the highest quality of standards, in the most cost effective and efficient manner.

Conservation Initiatives Ranking Criteria

1. Project Supports One of the Three Priority Types of Projects

   This project is Cultural Resources priority project. The main purpose of this project is to protect historic resources. It will to stabilize, restore, and preserve the Lehman Caves Historic Area, which includes, the Lehman Orchard and Aqueduct, Lehman Caves, and Rhodes Cabin. Lehman Orchard and Aqueduct and Rhodes Cabin and are listed in the National Register of Historic Places (NRHP). Lehman Caves is eligible for inclusion in the NRHP.

2. Project Includes Public Outreach/Education as a Component

   Education is an important component of this project. The project invites local area school students to participate in caring for and planting heirloom orchard trees to reinvigorate the historic Lehman Orchard. Multi-lingual education materials developed as part of this project are available to the public through a variety of electronic and print media. Exhibits, trailhead and wayside signs, brochures and articles provide on-site interpretation. Electronic media provide distance contact and learning through social media, podcasts, and other avenues.

3. Project Supports 1 of the 20 of the Priority Sub-Types of Projects

   This project supports 2 of the 20 priority sub-types. The three priority sub-types are:
   7) Cultural – Restoration/Stabilization; the main objective meets the priority sub-type - the stabilization and restoration of the Lehman Caves Historic Area including the Rhodes Cabin and the Lehman Orchard
   16) Cultural – Surveys; will be conducted for the Lehman Orchard and Aqueduct and inside Lehman Cave to document historic elements within the Cave tour area.

4. Project Enhances Partnerships in Promotion of Cooperation and Collaboration

   This project is supported by several organizations.
   a. It will involve local schools and students as a citizen group to accomplish the goals and the Nevada Archaeological Association in planning and implementation.
   b. However it will not address the needs of more than one Federal Agency.

   c. It will involve non-Federal public partners; Great Basin National Heritage Area Partnership in the development and planning to accomplish the goals.

5. Project Has Identified Committed non-SNPLMA Sources of Funding or In-Kind Contributions in the Development and/or Implementation of the Project

   This project will include in-kind contributions in the form of volunteer labor and salaried employee labor.

6. Project Promotes Sustainability by Providing Benefits in the Near and Long Term by Emphasizing Healthy and Resilient Landscapes as well as Durability, Relevancy, and Shared Support

   This project supports sustainability through the protection, stabilization, and restoration of the historic resources located within the Lehman Caves Historic Area.

   a. It conserves cultural resources through stabilization and restoration providing an enduring cultural landscape for future generations.
   b. The project necessitates shared support and strengthens the long term viability of both the natural and cultural environment by removing dense fuels and continuity thereby reducing the threat of fire that could damage or destroy historic resources. Installing efficient irrigation systems will encourage natural processes and conserve water over time.
   c. Through the educational and interpretive materials explaining the importance of the historic sites and objects, the project will encourage current and future generations to protect heritage resources.
   d. The project necessitates shared support from diverse divisions and strengthens the long term viability of both the natural and cultural environment. A long term management plan for the Orchard will provide guidance for care and provisions for monitoring Orchard health. Cabin restoration will involve maintenance division and interpretive rangers in implementing giving a connection of shared responsibility.
   e. Stabilization of historic resources provides a level of condition that will ensure minimal change over time. Thinning dense fuels and continuity thereby improving ecological condition and habitat minimizing danger of catastrophic fire damaging the environment.

7. Project Promotes Connectivity by Linking People to Nature and Recreational Opportunities, and by Uniting Important Places Across the Landscape

   The project addresses connectivity by upgrading and enhancing recreational and educational opportunities within the Lehman Caves Historic Area.

   a. This project encourages people to meaningfully connect with their natural and cultural environment by enhancing the visitor experience of the Lehman Caves Historic Area. This is achieved through the upgraded and enhanced recreational and educational opportunities including increased access to the Lehman Orchard, educational wayside exhibits about the historic environment of the area. Educational and interpretive material encourages park visitors to appreciate and care for the natural and cultural heritage of the area. Involving local school students in the project connects a new generation to protection of their heritage and natural environments.
   b. This project does not connect or increase habitats, migratory corridors, or protected areas.

8. Project Promotes Community by Improving the Quality of Life for the Human Community and Protecting the Integrity of Biological Communities

   The project addresses community by enhancing recreational opportunities in rural Nevada.

   a. This project restores functionality and resiliency in biological communities through fuels reduction that improves resistance to catastrophic fire. Improved irrigation systems and protection of newly planted trees protects the biological community through water conservation efficient use that does not overwater in undesirable locations.
   b. This project encourages partnership with local schools and students. It encourages individuals to protect and preserve their natural and cultural heritage. This project builds a bridge from the history of tourism in the area to the community of tourism that is still strong within the region.
   c. This project preserves the history of Great Basin National Park and the local community and recognizes the importance of tourism to the local area through time. By stabilizing and restoring the Rhodes Cabin and the Lehman Orchard and documenting the decades history in Lehman Caves the community investment in the area is strengthened to pass to the future generations.

Schedule B						
CONSERVATION INITIATIVE						
ESTIMATED NECESSARY EXPENSES						
Project Name:	Protection, Stabilization, and Restoration of the Lehman Caves Historic Area					
Project #:		**Priority #:**		**Agencies:**	NPS	
Prepared by:	Eva Jensen					
Phone:	775-234-7550				**Initial**	x
Date:	4/25/2016				**Updated**	

1. Planning & Environmental Documentation		$ 7,500.00	1%
(Surveys/ reports for cultural, natural, biological, archaeological resources, NEPA documentation, etc)			
2. FWS Consultation - Endangered Species Act		$ -	0%
(direct expenses for FWS if consultation is required)			
3. Direct Federal Labor to Implement Project (Payroll)		$ 578,030.00	62%
(Federal labor costs for completing the project)			
4. Project Equipment and/or Supplies/ Materials		$ 184,500.00	20%
(include specialized equipment, supplies and materials not included in contracts/ agreements)			
5. Travel & Per Diem for Implementation		$ 32,250.00	3%
6. Official Vehicle Use		$ 13,500.00	1%
(Based on agencies procedures for use, fuel, equipment, and mileage charges)			
7. Contracts/Grants/Agreements to complete the project		$ 75,817.00	8%
8. Required Training to Implement Project		$ -	0%
(includes initial and annual training for LEOs and training necessary to implement the project)			
9. Other Necessary Expenses - See Expanded Budget		$ 35,000.00	4%
	TOTAL	$ 926,597.00	100%

COMMENTS

Detailed Cost Estimate Other Necessary Expense Worksheet

Project Title: Protection, Stabilization, and Restoration of the Lehman Caves Historic Area

DETAILED COST ESTIMATE			
1. Planning and Environmental Assessment Costs			
Specialist Surveys/Reports		$	7,500.00
	Subtotal	$	7,500.00
2. FWS Consultation - Endangered Species Act	**Subtotal**	$	-
3. Direct Labor/Payroll to Perform the Project (use fully loaded labor rate)			
Project Manager, GS-09		$	288,102.00
Archeological tech, GS-07		$	74,422.00
Archeological tech, GS-05		$	52,358.00
Museum technician, GS-05		$	35,342.00
Bio science tech, GS-07		$	23,425.00
Maintenance Crew Leader, WG-07		$	26,919.00
Maintenance Crew staff, WG-05		$	23,787.00
Maintenance Crew staff, WG-04		$	17,024.00
Interpretive Ranger		$	36,651.00
	Subtotal	$	578,030.00
4. Project Equipment			
General Archeology equipment		$	2,500.00
General natural resource equipment		$	2,500.00
General maintenance equipment		$	2,500.00
General historic preservation equipment		$	1,000.00
Orchard soil moisture monitor system		$	5,000.00
	Subtotal	$	13,500.00
5. Project Materials and Supplies			
General Archeology supplies		$	2,000.00
General natural resources supplies		$	2,000.00
General maintenance supplies		$	2,000.00
General historic preservation supplies		$	500.00
General Orchard management supplies		$	2,000.00
Greenhouse/tree nursery materials		$	20,000.00
Orchard irrigation supplies		$	30,000.00
Replacement parts		$	4,000.00
Orchard fencing supplies		$	7,000.00
Trail materials and supplies		$	8,000.00
Interpretation wayside signs		$	40,000.00
Interpretation exhibits		$	40,000.00
Interpretation brochures		$	5,000.00
Incidental		$	5,000.00
Interpretation signs		$	3,500.00

Subtotal	$	171,000.00
6. Travel (airfare, car rental, per diem, etc)		
Travel for Historic Research	$	3,916.00
Travel of Historic Architect to the Site	$	1,380.00
Travel of Historic Preservation Crew	$	9,143.00
Travel for Historic Orchard Manager	$	17,811.00
Subtotal	$	32,250.00
7. Official Vehicle Use		
Vehicle Use 1	$	13,500.00
Subtotal	$	13,500.00
8. Required Training for Project Implementation (list purpose)		
Subtotal	$	-
9. Cost of Contracts and/or Agreements to Perform Project		
Historic Preservation Crew	$	20,000.00
Historic Orchard Manager	$	40,817.00
CESU Cooperative Agreement	$	15,000.00
Detailed Cost Estimate Subtotal	$	75,817.00
OTHER NECESSARY EXPENSES (APPENDIX B-11)		
10. Examples of Other Necessary Expenses (providing a breakdown of these costs is optional, however a		
ADMINISTRATION COSTS		
Budget Tracking/Accounting and Execution	$	5,000.00
Allocation of Transferred Funds to the Region and to the Field*	$	2,500.00
Preparation of OMB Reports Required in Association with Transferred Funds*	$	3,750.00
Preparing Transfer Requests*	$	1,250.00
Managing Allocation of Transferred Funds*	$	5,000.00
Travel Administration for Required Project Travel	$	5,000.00
Human Resource/Relations Tasks for SNPLMA-funded Personnel	$	7,500.00
Preparing Quarterly Status Reports	$	5,000.00
Other Necessary Expenses Subtotal	$	35,000.00
GRAND TOTAL	**$**	**926,597.00**
CASH/ IN-KIND CONTRIBUTIONS		
Volunteer labor	$	85,440.00
NPS Employees	$	475,673.00
Total	**$**	**561,113.00**

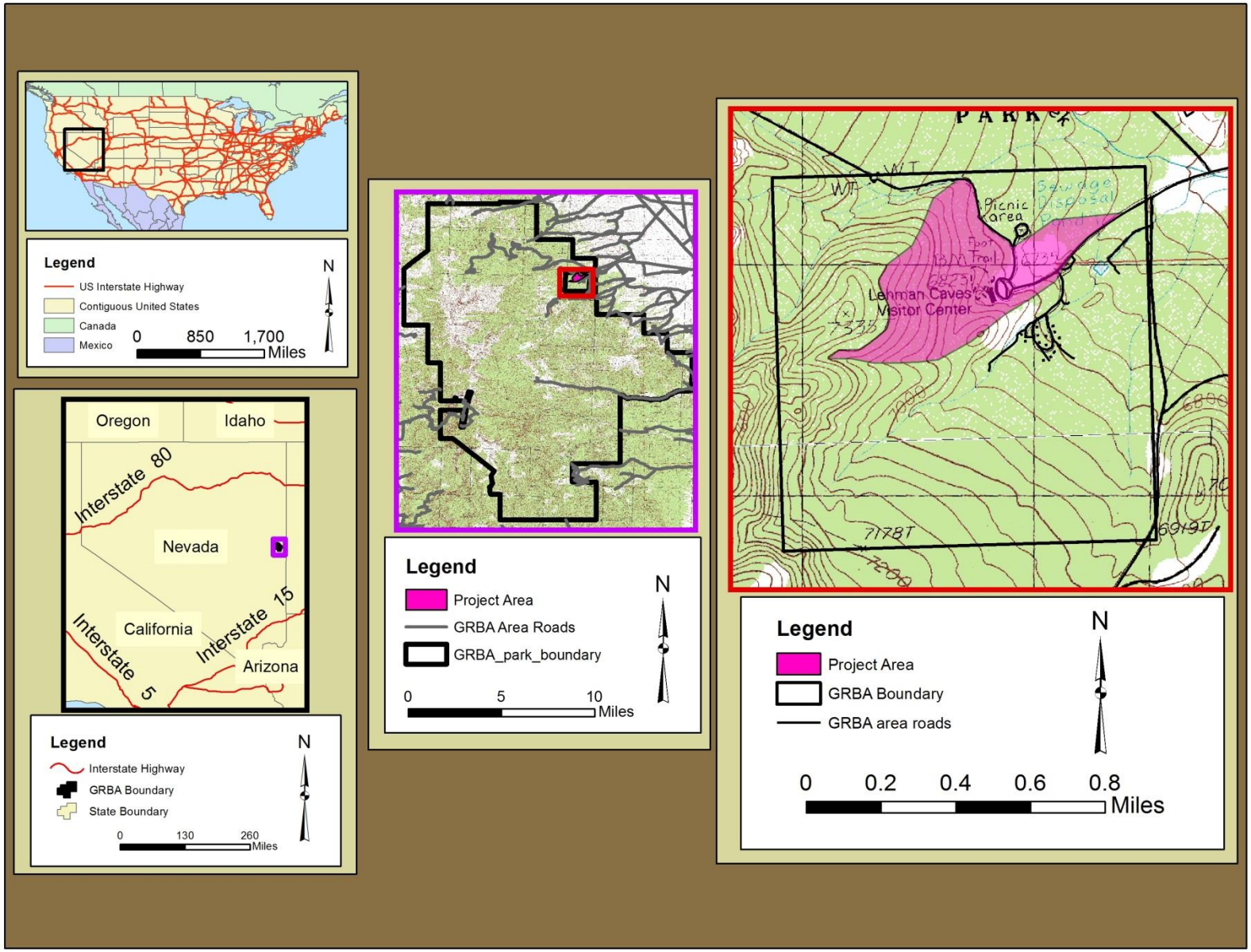

Figure 1. Lehman Cave Historic Area Project Location

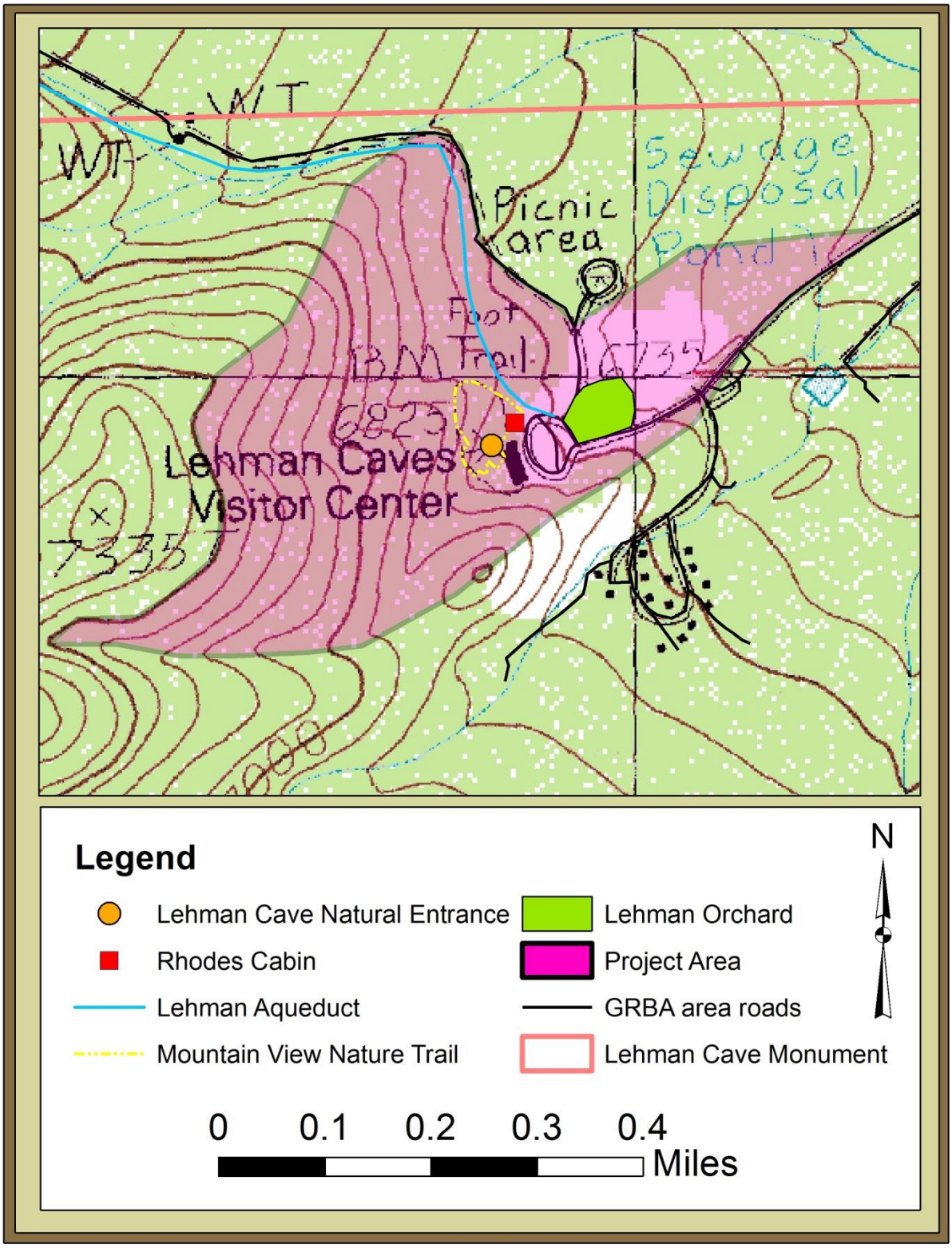

Figure 2. Lehman Cave Historic Area Resources Associated with the Project

Figure 3. Building over the Natural Entrance to Lehman Cave circa 1920

Figure 4. Constructed Cave Entrance circa 1961

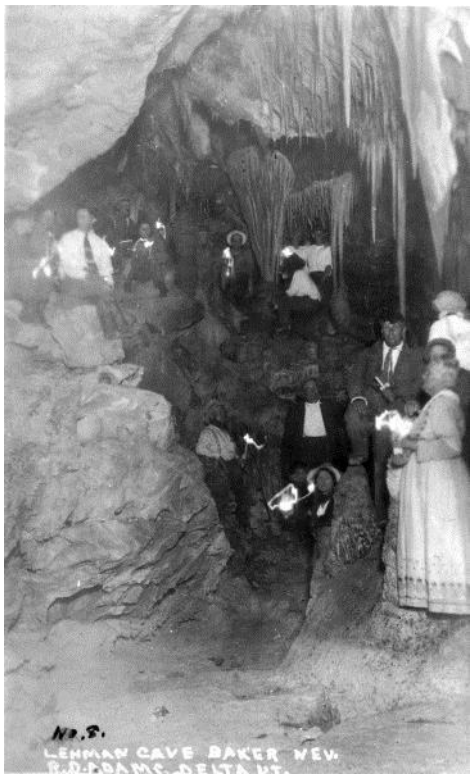

Figure 5. Group in Lehman Cave
circa 1921

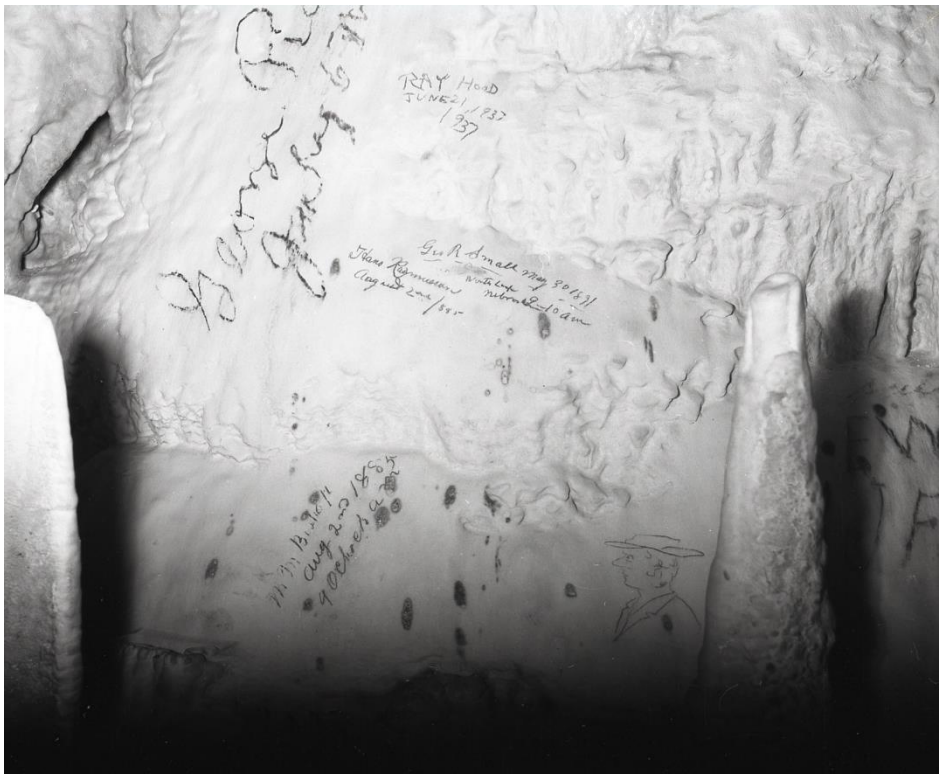

Figure 6. Example of Historic Graffiti in Lehman Cave

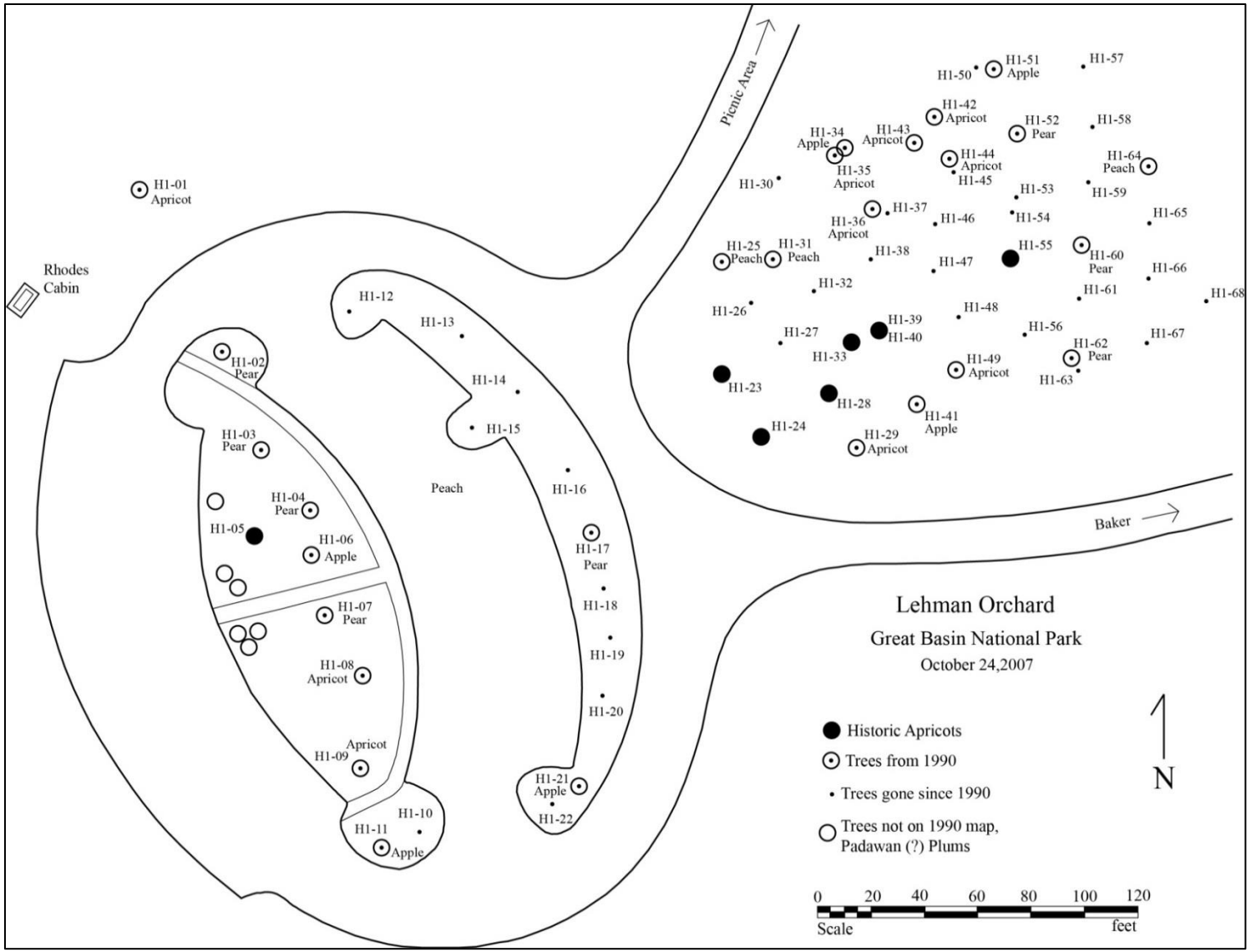

Figure 7. Map of Lehman Orchard in 2007

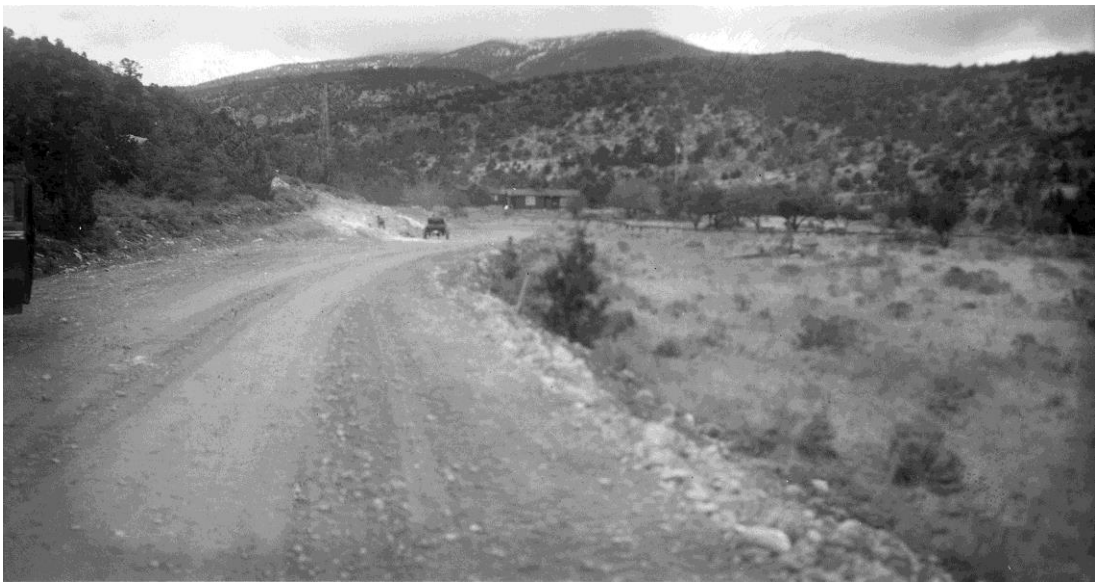

Figure 8. Overview of Historic Lehman Orchard circa 1930s

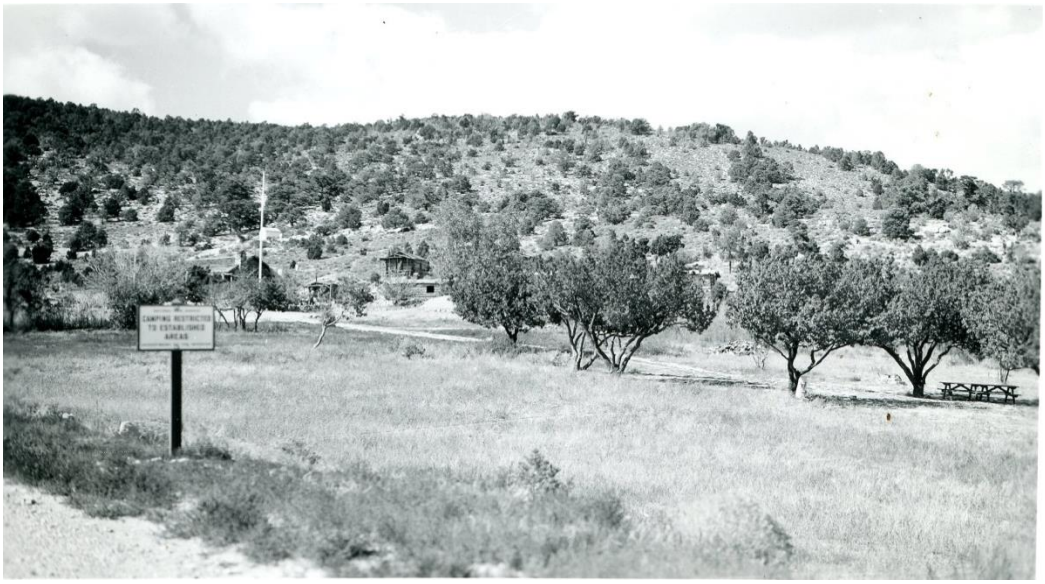

Figure 9. Overview of Historic Lehman Orchard circa 1952

Figure 10. Overview of the Historic Lehman Orchard with the Lehman Caves Visitor Center in the background

Figure 11. Overview of the Historic Lehman Orchard

Figure 12. Historic Lehman Aqueduct

Figure 13. Reconstructed Water Flume on the Historic Lehman Aqueduct

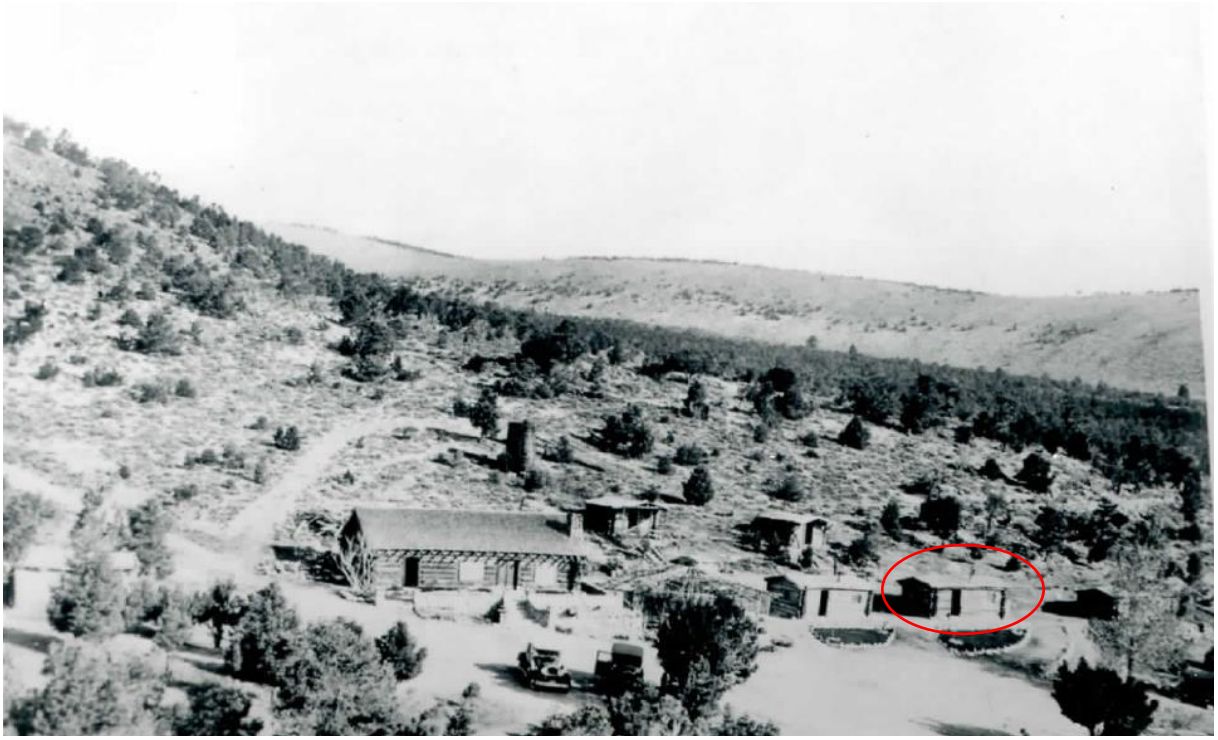

Figure 14. Historic Rhodes Cabin Complex circa 1933 (Rhodes Cabin Circled in Red)

Figure 15. Historic Rhodes Cabin Complex circa 1934 (Rhodes Cabin Circled in Red)

Figure 16. Exterior of the Front of the Historic Rhodes Cabin

Figure 17. Interior of the Historic Rhodes Cabin facing southwest

GREAT BASIN HERITAGE AREA PARTNERSHIP
Post Office Box 78; Baker, Nevada 89311
(775) 234-7171

April 20, 2016

Robert Wandel
Acting Conservation Initiatives Program Manager
Bureau of Land Management – Southern Nevada District Office
Division of SNPLMA Acquisition, Improvement and Conservation Programs
4710 N. Torrey Pines Drive
Las Vegas, NV 89130

Dear Mr. Wandel,

The Great Basin Heritage Area Partnership, the coordinating entity of the Great Basin National Heritage Area, supports the Lehman Cave Historic Area Stabilization project proposed by Great Basin National Park as part of Round 16 of the Southern Nevada Public Lands Management Act (SNPLMA) Conservation Initiatives Program.

Part of the mission of the Great Basin Heritage Area Partnership is to support our partners with the important charge of preserving our past. Projects like this one will help educate the public about our collective heritage and the importance of history and conservation for the future of our country. Because this resource is located adjacent to the visitor center, members of the public from throughout the world and across the United States will be able to experience this part of western history.

As the President of the Great Basin Heritage Area Partnership, I support this important project and recommend that you fund it in order that this important resource is protected into the future.

Sincerely,

Greg Seymour
President
Great Basin Heritage Area Partnership

NEVADA ARCHAEOLOGICAL ASSOCIATION
PO Box 73145, Las Vegas, Nevada 89170-3145 • www.nvarch.org•

April 19, 2016

Robert Wandel
Conservation Initiatives Program Manager (Acting)
Bureau of Land Management – Southern Nevada District Office
Division of SNPLMA Acquisition, Improvement and Conservation Programs
4701 N. Torrey Pines Drive
Las Vegas, NV 89130

Dear Mr. Wandel,

The Nevada Archaeological Association (NAA) supports the Lehman Cave Historic Area Stabilization project proposed by Great Basin National Park as a part of Round 16 of the Southern Nevada Public Lands Management Act (SNPLMA) Conservation Initiatives Program. This is an important project that will preserve and protect a valuable part of the cultural and archaeological history of our state.

Nevada's cultural resources like the Lehman Cave Historic Area provide educational and recreational opportunities for Nevada Residents and visitors. Our collective history gives us a sense of our place in the world. Land managers increasingly face challenges in preserving the real tangible places that connect us with our past. Historic research and archaeological inventory are a vitally important first step in historic preservation. This proposal provides for that step in creating a comprehensive historic preservation program that includes developing a preservation plan. Actions include using professional historic preservation crews to stabilize and preserve the deteriorating log structure and historic orchard. Trail construction and reducing fuel loads will minimize the potential resource damage and reduce safety concerns on a short and long-term basis.

We feel strongly that the monitoring plan and program are an essential responsibility of the National Park Service in protecting cultural resources. This project will develop a plan of regular monitoring by NPS cultural resource staff and Law Enforcement Rangers to identify specific concerns and needs for timely maintenance. Regular monitoring has proven effective in helping reduce vandalism and educating the public about the value and importance of our history.

This project provides a sustainable product of preservation and protection for important historic resources. Developed to its full intent, the project effects will continue well beyond the five year support of the initial investment.

Nevada Archaeological Association strongly urges you to approve this program under the SNPLMA Round 16 Conservation Initiatives.

Sincerely,

Jeffrey Wedding
NAA President
(Signed on behalf of, and with full endorsement of the NAA Board)