Memorandum of Understanding between The United States Department of the Interior National Park Service Lava Beds National Monument and the

Cave Research Foundation

This Memorandum of Understanding (MOU) is entered into by and between the National Park Service ("NPS"), United States Department of the Interior, acting through the Superintendent of Lava Beds National Monument (hereinafter "Lava Beds" or "LBNM"), and the Cave Research Foundation (hereinafter "CRF"), acting through the President of the CRF.

This MOU tiers off of and supplements the national MOU between the NPS and the CRF, initially executed in 2006, in which the CRF and the NPS acknowledge their mutual interest in and the benefits from scientific research, cartography, and interpretive activities on lands administered by the NPS.

ARTICLE I - BACKGROUND AND OBJECTIVES

Lava Beds National Monument was established by Presidential Proclamation No. 1755 on November 21, 1925. LBNM contains numerous lava tube caves with associated resources throughout its 46,692 acres. Caves located near developed areas receive significant levels of visitor use per year, while caves found outside of this zone are infrequently visited.

The CRF is a national 501(c)(3) organization whose goals are to promote exploration and documentation of caves and karst areas, to initiate and support cave and karst research, to aid in cave conservation and protection, and to assist with the interpretation of caves and karst to the public.

Since 1988, the CRF has contributed significantly to the investigation and understanding of cave resources at LBNM. CRF activities have included the discovery of previously undocumented caves, conducting surveys and drafting cave maps, conducting cave inventories, monitoring ice levels, establishing a photo-monitoring project, conducting dust studies, and the development of interpretive material. In addition to these research activities, the CRF was the main impetus in the construction of the Lava Beds Research Center. This project was a 3-way partnership, established in 1998 by Memorandum of Agreement (MOA) 8410-8-001 between Lava Beds, the CRF, and the Lava Beds Natural History Association. In accordance with that MOA, the CRF raised the funds for construction of the RC, and subsequently supervised its design and construction.

This MOU recognizes that the longstanding partnership between Lava Beds and the CRF has advanced the knowledge and conservation of caves and geologic features within LBNM. The NPS wishes for the CRF to continue to provide technical expertise while also contributing to new strategies for accomplishing cave research and preservation at LBNM.

In 2006, Lava Beds developed a General Management Plan foundation statement on caves. A foundation statement documents a shared understanding of an NPS unit's purpose, significance, resources and values, primary interpretive themes, special mandates, and legal and policy requirements. These statements identify what is most important for a monument to provide basic guidance for decision-making and management. The overall fundamental resources and values for caves at LBNM are captured within six programmatic areas: (1) cave structures and features, (2) ecosystem of cave—dependent species, (3) cave research, documentation, and inventories, (4) physical processes sustaining caves, (5) public understanding, enjoyment, and access of caves, (6) cave preservation and restoration.

Cave monitoring, inventory, and research activities are based on overall guidance provided in the 1990 Cave Management Plan, 2006 Wilderness Stewardship Plan, 2011 General Management Plan, and 2012 Resource Stewardship Strategy.

The overall objective of this MOU is to establish the standards, terms, and conditions under which the CRF will conduct cave monitoring, inventory, research, cartography, and interpretive activities within LBNM. The specific objectives of this partnership are to:

- Provide Lava Beds managers with fundamental baseline information and analytical data on the caves and related surface features of LBNM.
- Promote essential understanding through research and education including, but not limited to: surveying, mapping, resources inventory, assessment, monitoring, and interpretation.
- Develop hardcopy and digital reports and maps, published materials, technical advice, and other informative materials and assistance in support of cave conservation and management goals.
- Provide a natural laboratory in which to conduct research that has far reaching benefits for cave systems worldwide, and which advances the science of speleology.
- Develop, conduct, and demonstrate exemplary conservation practices and activities.

ARTICLE II - AUTHORITY

This MOU is entered into pursuant to 16 U.S.C. §§1-3, 4 (Organic Act) and Presidential Proclamation No. 1755, November 21, 1925, Establishing Lava Beds National Monument.

ARTICLE III - STATEMENT OF RESPONSIBILITIES

A. The CRF will:

- 1. Agree to follow all rules and regulations of the National Park Service and Lava Beds National Monument.
- 2. Identify the Lava Beds Operations Manager as the lead contact to communicate and coordinate all CRF activities within LBNM.
- 3. Work with Lava Beds to develop and approve an annual work plan.
- 4. Conduct surface or subterranean research, inventory, and monitoring in specified locations of LBNM under approved research permits (RP) as detailed in and associated within the annual work plan.
- 5. Research activities conducted by the CRF, in the caves or lands administered by Lava Beds, must be under the authority of an approved RP. Each permit will identify a qualified Principal Investigator (PI) who will act under CRF auspices. The proposal will indicate scope, logistics, personnel, and reporting requirements and recommend a schedule through completion. RP information is covered in depth on the NPS Research Permit and Reporting System (RPRS) website, but should adhere to the following guidelines specific to Lava Beds:
 - a. Research proposals will be developed in coordination with researchers and the NPS to assure scientific validity.
 - b. Data management responsibilities will be specified in each RP. Copies of raw data collected will be provided as specified within the approved RP. The CRF will assure that legible copies, digital and/or paper, of data collected under approved projects within LBNM are provided annually, or more frequently as appropriate.
 - c. The exploration of a minimally documented cave without an approved RP is not allowed. This MOU does not grant permission to open, enlarge, modify, dig, stabilize, or otherwise alter cave passages or entrances.
 - d. Each PI will work with NPS staff to identify potential impacts associated with each approved RP and develop mitigation measures. Mitigation measures may include limiting the number of personnel, minimizing entry into sensitive caves, and low impact research methods.
 - e. A brief report will be submitted to the Chief of Resources and Cave Specialist after every site visit. The report will include activities and progress relating each participating PI's relevant RP.
 - f. An Investigators Annual Report (IAR) of work accomplished within each RP will be submitted annually through RPRS by December 31.
- 6. Notify the Lava Beds Chief of Resource Management of all proposed external publications prior to printing. Any general, non-scientific, external publications

resulting from the CRF's activities in LBNM will be released only after approval by the Superintendent of Lava Beds. The CRF will follow the procedures regarding data and publication that are set forth in Article VII below.

- 7. Prevent the distribution of sensitive cave locations, which include caves currently classified under the 1990 Cave Management Plan as Class 2, Class 3, and certain Class 4 Caves.
- 8. Prevent the distribution of location information on any sensitive resources within Lava Beds caves.
- 9. Photo images associated with Fern Cave are not allowed to be published.
- 10. Adhere to all safety procedures while involved with project-related activities at LBNM. Refer to Article X.
- 11. The CRF may use Lava Beds housing or facilities as available and acknowledges that the use of such facilities, including the Lava Beds Research Center (RC), may not be exclusive. The RC Management Plan allows for the colocation of multiple parties as space is available. Reservations are taken on a first come, first serve basis.
- 12. Provide the Lava Beds Cave Specialist advance notice of scheduled research visits. In order to minimize conflicts and achieve efficient use of the RC, scheduling is recommended 4 months in advance with the Lava Beds Cave Specialist.
- 13. Provide personal transportation, safety equipment, and caving gear.
- 14. Vehicles used for approved field activities must display a Park Permit, which may be issued at the Lava Beds Entrance Station or Visitor Center. Personnel will not park in front of road gates or otherwise obstruct access along primary or fire roads, and will utilize designated parking areas to the greatest extent possible.
- 15. Maintain complete and accurate records on all CRF members, making sure all persons working on CRF RPs in LBNM are current CRF members..
- 16. Provide any other information acquired from its activities in LBNM which may assist the NPS in the conservation, management, or interpretation of the cave resources in LBNM.
- 17. Provide Lava Beds with copies of the CRF Newsletter, the Annual Report, a Lava Beds-specific safety plan, and other products related to activities in LBNM.
- 18. When requested in writing, assist Lava Beds with cave related topics including interpretation, by reviewing programs, providing the latest and most accurate information, preparing materials, assisting with training programs, and giving lectures or programs to visitors and or staff.

19. Personnel working within the caves must be qualified in applicable scientific or technical disciplines; proficient and physically capable to traverse cave environments, and possess the needed equipment for safe entry and travel.

B. The National Park Service (NPS) will:

- 1. Provide general oversight for cave research and interpretation activities within the boundaries of LBNM.
- 2. Consult with the CRF, as appropriate, to take advantage of its considerable expertise and information in the study, management, and interpretation of cave resources.
- 3. Identify the Lava Beds Chief of Resource Management as the approving official for CRF activities within LBNM.
- 4. Identify the Lava Beds Cave Specialist as the lead contact to communicate and coordinate CRF activities within the monument. The NPS will inform both the CRF President and Lava Beds Operations Manager, in writing, in instances where an alternate logistics contact for the NPS is designated (for example, during periods when the Cave Specialist position is vacant).
- 5. The Lava Beds Chief of Resource Management and Cave Specialist will collaborate with the CRF on establishing an annual CRF work plan which will identify an agreed upon list of research projects to be undertaken by the CRF that addresses NPS priorities in the preservation, management, or interpretation of cave resources.
- 6. Provide guidance on submitting and maintaining RPs using the NPS online Research Permit and Reporting System (RPRS).
- 7. Provide keys to CRF members on a sign in/sign out basis that allows for access to storage, work space, road gates or other NPS facilities as appropriate.
- 8. Provide safety information to support the CRF in performing all research activities within LBNM in a safe manner.
- 9. Provide CRF PIs with information and field survey equipment as determined in approved RPs and available for use. Equipment may include compass, inclinometer and tape, and global positioning systems (GPS) units.
- 10. Assist the CRF in networking with university scientists and others in the development and/or implementation of research proposals.
- 11. Provide copying services for maps and other materials to researchers as needed to assist with their fieldwork.

- 12. Provide a physical location for a repository of information gathered by CRF researchers.
- 13. Provide specific direction from environmental compliance documents and policies regarding any habitat modification or cave surface modification that could impact natural or cultural resources (i.e. ground disturbance and gating etc.) undertaken by the CRF.
- 14. Notify the CRF of any opportunities to submit proposals to the NPS or to other entities for funding of projects.
- 15. Lava Beds staff participating in CRF activities while in official duty status must receive prior written approval from their respective division chief. NPS personnel on official duty from other NPS units shall notify the Lava Beds Chief of Resource Management.
- 16. In accordance with CRF policies, off-duty NPS personnel participating in CRF activities while not in official duty status must be CRF members, and must sign the CRF "Joint Venturer Agreement" prior to participation. Execution of the "Joint Venturer Agreement" between such an individual and the CRF does not imply involvement by the NPS, and such agreement is undertaken by the individual in his or her capacity as an individual.
- 17. Provide housing to CRF members during scheduled research activities at LBNM. Due to the limitations of bed space at the Lava Beds RC the use of large groups (more than 8 people) will be approved on a case-by-case basis. In addition, the NPS will provide access to storage facilities and work space at the RC. If the RC is not available or numbers of researchers exceed the capacity of the RC, then employee housing units or camp sites would be utilized on a space-available basis. The source of funds used to pay required housing rent or camping fees would be determined on a case-by-case basis.
- 18. Waive entrance fees for CRF members implementing approved research projects, in accordance with RPRS guidelines.
- 19. NPS will provide maps and cave location data to researchers in accordance with approved RPs.
- 20. NPS will provide containment, cleaning, and decontamination equipment, supplies, and materials at the RC for CRF use.
- C. Lava Beds National Monument and the CRF agree to:
 - 1. The CRF and Lava Beds will develop an updated work plan annually. This document will provide guidance in the implementation of approved RPs. The CRF Lava Beds

Operations Manager and at least one other PI will attend this meeting. The Lava Beds Chief of Resources and Cave Specialist will also attend.

- 2. Communicate through email, phone calls, and in person to:
 - Review Lava Beds and CRF cave management related priorities, research plans, and other issues.
 - Prepare joint annual research objectives.
 - Review and amend (as necessary) agreements and project proposals.
 - Formally exchange data, support materials, and related reports.
- 3. Coordinate any publicity concerning findings, discoveries, or other activities in LBNM not of public record. All formal press releases will be issued or approved by the Lava Beds Superintendent. The CRF, and individuals representing the CRF, shall not publicly disclose information concerning the location or disposition of sensitive resources and policy issues protected under applicable federal laws and regulations. The CRF and NPS shall acknowledge each entity's contribution to said findings, discoveries, or other activities within LBNM.
- 4. Cooperate in meeting the requirements of the Federal Cave Resources Protection Act (FCRPA) of 1988 (PL 100-691, 16 U.S.C Ch. 63) and the Department of Interior implementing regulations (43 CFR Part 37), including confidentiality of cave information; and other laws, policies, and guidelines applicable to the management of National Park lands and resources.

ARTICLE IV – TERM OF AGREEMENT

This Agreement will become effective immediately upon signature approval for a period of five years from the date of final signature, unless it is terminated earlier by one of the parties pursuant to Article XII that follows.

The MOU will be formally reviewed by both parties beginning two months prior to the termination date, and may be renewed for an additional five years upon signature by both parties.

The permission granted herein to the CRF to conduct research or other activities related to the caves within LBNM is nonexclusive.

ARTICLE V – <u>KEY OFFICIALS</u>

- A. Key officials are essential to ensure maximum coordination and communication between the parties and the work being performed. They are:
 - 1. For the National Park Service:

Larry Whalon (Superintendent)

Lava Beds National Monument E-mail: larry whalon@nps.gov Telephone: (530) 667-8101

Nancy Nordensten (Chief of Resource Management)

Lava Beds National Monument E-mail: nancy nordensten@nps.gov

Telephone: (530) 667-8106

David A. Riggs (Cave Specialist) Lava Beds National Monument E-mail: david a riggs@nps.gov Telephone: (530) 667-8155

Alicia Watson (Agreements Technical Representative) Lava Beds National Monument PO Box 1240 Tulelake, CA 96134 E-mail: alicia watson@nps.gov

Telephone: (530) 667-4581 Facsimile: (530) 667-2737

2. For the Cave Research Foundation:

Ed Klausner (President) Cave Research Foundation 1132 Hotz Avenue Iowa City, IA 52245 E-mail: klausnere@gmail.com

Telephone: (319) 430-4392

John Tinsley (Lava Beds Operations Manager) Cave Research Foundation 1040 Oakland Avenue Menlo Park, CA 94025

E-mail: jtinsley@usgs.gov Telephone: (650) 329-4928

B. Communications - The CRF will address any communication regarding this Agreement to the Agreements Technical Representative with a copy to the Chief of Resource Management.

Communications that relate solely to routine operational logistical matters described in the current work plan may be sent to the Lava Beds Cave Specialist.

C. Changes in Key Officials - Neither the NPS nor the CRF may make any permanent

change in a key official without written notice to the other party reasonably in advance of the proposed change. The notice will include a justification with sufficient detail to permit evaluation of the impact of such a change on the scope of work specified within this Agreement. Any permanent change in key officials will be made only by modification to this Agreement.

ARTICLE VI – PRIOR APPROVAL

- A. Implementation of project work within LBNM by CRF members requires the development of a RP that identifies the scale of the project and identifies any destructive analysis and other consumptive uses. The RP will fall within the agreed annual work plan objectives.
- B. Access to caves and information associated with caves will follow terms defined in the 1988 FCRPA and in the 1990 Native American Graves Protection and Repatriation Act.

ARTICLE VII – REPORTS AND/OR OTHER DELIVERABLES

In accordance with the National MOU, the CRF shall provide to Lava Beds reports on its work and its other activities associated with the approved annual work plan and this MOU.

Reports

All reports and correspondence related to CRF research or other activities shall be addressed to the Lava Beds Chief of Resource Management.

Required reports, other than those discussed in this MOU, will be specified in individual research proposals. At a minimum, each PI will submit individual trip reports, an NPS Investigator's Annual Report, and a final RP report in the approved digital format.

Data Publication and Distribution

Both Lava Beds and the CRF recognize the highly sensitive nature of cave based research data. For this reason both parties will strictly adhere to the restrictions and principles of the 1988 FCRPA in managing such data.

Exclusive rights of distribution of data gathered by the CRF outside the LBNM boundaries under other agreements remains with the CRF. The exclusive rights of distribution pertain to the release and publication of data, maps, location information and derivative products. The distribution of these data to the NPS does not extend the rights of distribution to Lava Beds.

The release of information obtained through the CRF operations within LBNM to outside entities will be by mutual agreement of the CRF and Lava Beds. The CRF will consult with Lava Beds on all issues pertaining to the distribution and publication of survey and resource data, maps, and

derivative products that provide location information. This consultation process also includes scientific and technical interpretation or descriptions of resources. Lava Beds will consult with the CRF on all issues pertaining to the distribution and publication of survey and resource data, maps, and derivative products that provide location information.

Prior to the release of location information (16 USCA 5 4304, 43 CFR 5 37.12) obtained through CRF operations within LBNM to outside entities, other federal agencies, or state agencies, the CRF will obtain permission from the Chief of Resource Management.

While the preceding conditions apply equally to hardcopy materials, verbal communications, and digitally based data, it is recognized that digital technology has made the exchange of data extremely easy. Therefore, both Lava Beds and the CRF will strictly limit the number of computers storing or operating databases containing digital data, maps, or other sensitive location information. They will also limit the internal distribution of hardcopy information such as survey data, documents, and maps, which can be converted to digitally based formats or otherwise exploited. Responsibility for internal distribution within Lava Beds will be with the Chief of Resource Management; and within the CRF will be with the individual PI for each current RP.

The CRF Lava Beds Operations Manager will ensure that each PI is aware of their obligations and responsibilities for data management, security, and control under the terms of this MOU, the FCRPA, and their specific RP.

Data Archiving

The archiving, or more specifically the secure storage of data and documents produced under the auspices of this MOU, shall be covered in individual RPs.

The CRF, in recognition of the history of collaborative cave research and management at LBNM, will continue to work with Lava Beds to archive data and documents gathered prior to this MOU.

ARTICLE VIII – PROPERTY UTILIZATION

The CRF will have access to appropriate Lava Beds facilities when research projects are in process or other associated project work is going on. NPS property in the CRF's possession will be used and disposed as set forth in NPS Property Management Regulations.

NPS property associated with cave locations, cave maps and files will be provided to the CRF as per approved RPs or NPS requested activities.

Facilities

The CRF may use the RC or other administrative facilities to pursue approved research projects. Use of these facilities will be during regular business hours and coordinated in advance with Cave Specialist, who will obtain approval from the Chief of Resource Management.

Keys

Keys to road gates and cave entrances may be made available to the CRF to support activities associated with approved research projects. These keys will be issued through the Lava Beds Division of Resource Management. The CRF will be liable for the cost of any lock replacement required due to the loss of any keys for which the CRF is responsible.

Handheld Radios

Lava Beds radio(s) may be issued to PIs, through the Division of Resource Management. Radio procedures and use will be reviewed upon issue. The CRF assumes financial responsibility for replacement or repair of lost or damaged NPS radio equipment from negligent use.

Road Access

The CRF will be allowed to access administrative roads within LBNM that are specifically identified within approved RPs.

Government Vehicles

The CRF personnel will not operate government vehicles.

ARTICLE IX – MODIFICATION AND TERMINATION

- A. This Agreement may be modified only by a written instrument executed by the parties.
- B. Either party may terminate this Agreement by providing the other party with thirty (30) days advance written notice. In the event that one party provides the other party with notice of its intention to terminate, the parties will meet promptly to discuss the reasons for the notice and to try to resolve their differences. The parties commit to using every reasonable means available, including the use of a neutral mediator if necessary, to try to avoid terminating this agreement.
- C. Upon termination of this Agreement the CRF will return all NPS property in its possession to the Chief of Natural Resources.

ARTICLE X – <u>SAFETY AND EMERGENCY OPERATIONS</u>

The CRF agrees to adhere to all basic cave safety procedures while involved with project related activities, and will emphasize this to all personnel prior to each such activity.

The CRF will develop a Safety and Emergency Operations Plan in consultation with the NPS. Safety and rescue protocols will be reviewed jointly by the NPS and CRF on an annual basis. This plan will serve as a guideline for emergency precautions, safe caving practices, and emergency actions related to the CRF activities within the Lava Beds. The CRF will inform all of its personnel of the safety and rescue policies, procedures, and protocols. CRF trip leaders will provide a safety briefing to crew members prior to each trip.

All emergency operations pertaining to the CRF within LBNM will be under the direction of the NPS in cooperation with the CRF. Such operations will be based on and utilize the National Interagency Incident Management System. A call-out list of the CRF members' emergency points of contact will be maintained as part of the CRF's personnel roster submitted annually to Lava Beds. CRF members with training and experience in medical, cave rescue, and emergency operations will be specifically identified.

The CRF will notify the Protection and Resource Management Divisions immediately of any significant injury or incident that occurs within LBNM or related to NPS sponsored CRF activities. Any CRF party that encounters a hazardous situation, unsecured cave gate, apparent break-in, unauthorized cave entry, resource damage, or other illegal or abnormal developments shall immediately report the incident to a Park Ranger, and will suspend the party's activities until authorized to proceed by the investigating Ranger.

ARTICLE XI - STANDARD CLAUSES

A. Civil Rights

During the performance of this Agreement, the participants agree to abide by the terms of U.S. Department of the Interior - Civil Rights Assurance Certification, non-discrimination and will not discriminate against any person because of race, color, religion, sex, sexual orientation, or national origin. The participants will take affirmative action to ensure that applicants are employed without regard to their race, color, sexual orientation, national origin, disabilities, religion, age, or sex. (NOTE: At this time the CRF has no employees. All those affiliated with the CRF are considered Members / Joint Venturers and as such shall be considered as employees of the CRF in matters pertaining to the clauses in this section.)

B. Promotions

The CRF will not publicize, or otherwise circulate, promotional material (such as press releases, speeches, still and motion pictures, articles, manuscripts or other publications) which states or implies Governmental, Departmental, bureau, or Government employee endorsement of a product, service, or position which the CRF represents. No release of information relating to this Agreement may state or imply that the Government approves of the CRF's work product, or considers the CRF's work product to be superior to other products or services.

C. Public Information Release

1. Public Information

(a) The CRF will ensure that all information submitted for publication or other public releases of information regarding this project will carry the following disclaimer:

"The views and conclusions contained in this document are those of the authors and should not be interpreted as representing the opinions or policies of the U.S. Government. Mention of trade names or commercial products does not constitute their endorsement by the U.S. Government."

- (b) The CRF will obtain prior NPS approval from the regional public affairs office for any public information release that refers to the Department of the Interior, any bureau or employee (by name or title), or to this Agreement. The specific text, layout, photographs, etc., of the proposed release must be submitted to the key official, who will forward such materials to the public affairs office, along with the request for approval.
- (c) The CRF agrees to include the above provisions of this Article in any sub-award to any sub-recipient, except for a sub-award to a state government, a local government, or to a federally recognized Indian tribal government.

2. Publications of Results of Studies

No party will unilaterally publish a joint publication without consulting the other party. Publications pursuant to this Agreement may be produced independently or in collaboration with others; however, in all cases proper credit will be given to the efforts of those parties contributing to the publication. In the event no agreement is reached concerning the manner of publication or interpretation of results, either party may publish data after due notice and submission of the proposed manuscripts to the other. In such instances, the party publishing the data will give due credit to the cooperation but assume full responsibility for any statements on which there is a difference of opinion.

D. Liability:

The CRF assumes liability for and does hereby agree to, save, hold harmless, defend and indemnify the United States of America, its agents and employees from and against any and all liabilities, obligations, losses, damages or judgments (including without limitation penalties and fines), claims, actions, suits, costs and expenses (including without limitation attorneys' fees and experts' fees) of any kind and nature whatsoever on account of fire or other peril, bodily injury, death or property damage, or claims for bodily injury, death or property damage of any nature whatsoever, and by whomsoever made, in any way arising out of the activities of the CRF, its employees, agents or contractors under this MOU. This indemnification shall survive the termination or expiration of this MOU.

E. NPS Appropriations:

Pursuant to 31 U.S.C. § 1341, nothing contained in this MOU shall be construed to obligate the Department of the Interior or the United States to any current or future expenditure of funds in advance of the availability of appropriations from Congress. Nor does this MOU obligate the

Department of the Interior or the United States to spend funds on any particular project or purpose, even if funds are available.

ARTICLE XII – <u>SIGNATURES</u>

IN WITNESS HEREOF, the parties hereto have executed this Agreement on the date(s) set forth below.

FOR THE NATIONAL PARK SERVICE:	
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Signature	e: Louruse f. Wholom j
Name:	Lawrence J. Whalon, Jr.
Title:	Superintendent
Date:	7/29/16
FOR THE CAVE RESEARCH FOUNDATION:	
Signature	e: El Mangne
Name:	Ed Klausner
Title:	President
Date:	7/27/16