

**PROGRAMMATIC AGREEMENT  
AMONG  
THE DEPARTMENT OF THE ARMY NATIONAL TRAINING CENTER AND FORT IRWIN,  
THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER, AND  
THE ADVISORY COUNCIL ON HISTORIC PRESERVATION  
REGARDING  
MILITARY TRAINING ACTIVITIES AND SUPPORT OPERATIONS  
AT FORT IRWIN AND THE MANIX TRAIL, SAN BERNARDINO COUNTY, CALIFORNIA**

**WHEREAS**, Fort Irwin is home to the Department of the Army (Army) National Training Center, located on approximately 753,537 acres in the Mojave Desert lying approximately 37 miles northeast of Barstow, San Bernardino County, California; and,

**WHEREAS**, the primary mission of Fort Irwin is to design and execute training that prepares the United States military and its multinational partners for successful operational deployments, on a worldwide scale, against opposing forces; and

**WHEREAS**, the Army, as the lead federal agency, proposes to continue this military training, making specific increases in training activities and support operations, and improvements to training infrastructure, to ensure the mission of Fort Irwin; and

**WHEREAS**, to ensure the mission of Fort Irwin, undertakings may be implemented under this PA as described in Attachment A and Attachment B and include: military and civilian training; operating, managing, and maintaining multiple training areas, ranges, and related infrastructure; and conducting activities to support military and civilian training; and

**WHEREAS**, Fort Irwin is a federally owned and operated facility, and the Army plans to carry out federally funded actions, making the undertakings subject to Section 106 of the National Historic Preservation Act (NHPA), U.S. Code Title 54, Sections 300101-300308, and its implementing regulations, 36 Code of Federal Regulations (CFR) Part 800, and Executive Orders 13007 and 13175; and

**WHEREAS**, the Army has determined the Area of Potential Effects (APE) to include all land used by Fort Irwin for training activities and support operations, including the potential well location, within the boundaries of Fort Irwin, in addition to the existing right-of-way for the Manix Trail from Fort Irwin to Interstate 15, as depicted in Attachment C (Figure 1); and

**WHEREAS**, the Army is also renewing the withdrawal of approximately 70,620 acres of Fort Irwin training lands within the Western Training Area (WTA) that are not yet open for full training and that are included within Fort Irwin's approximately 753,537 total acres, and which the approximately 70,620 acres were publicly withdrawn from all types of appropriation under Public Law (P.L.) 107-107 (2001), which is a type of administrative activity that does not have the potential to cause effects to historic properties, pursuant to 36 CFR Part 800.3(a)(1), and is not subject to further review under Section 106 of the NHPA; and

**WHEREAS**, the Army has determined that military training and support operations that shall occur within the WTA and land withdrawal once open for full training are considered undertakings; and

**WHEREAS**, the Army has determined that the undertakings noted above may have adverse effects on historic properties, as defined in 36 CFR Part 800.16(l)(1) and Army Regulation 200-1; and

**WHEREAS**, the Army has determined that the development of a Programmatic Agreement (PA), in accordance with 36 CFR Part 800.14(b)(2), is warranted because it involves recurring, consistent, and frequent military training and support operations activities as detailed in Attachment A and Attachment B, and is implementing a process that differs from the standard review process in Subpart B of the 36 CFR Part 800; and

**WHEREAS**, the Army has invited eleven federally-recognized and one state-recognized Indian Tribes (Tribes)—consisting of the Bishop Paiute Tribe, Colorado River Indian Tribes, Timbisha Shoshone Tribe, Morongo Band of Mission Indians, Big Pine Paiute Tribe of Owens Valley, Fort Independence Reservation, Yuhaaviatam of San Manuel Nation (formerly known as San Manuel Band of Mission Indians), Cabazon Band of Mission Indians, Chemehuevi Indian Tribe, Fort Mojave Indian Tribe, Lone Pine Paiute Shoshone Reservation, and Kern Valley Indian Council—who may attach traditional religious and cultural importance to Fort Irwin lands or historic properties therein that may be affected by the undertakings—to participate in the development of the PA in accordance with 36 CFR Part 800.14(b)(2)(i); and

**WHEREAS**, the Cahuilla Band of Mission Indians were not consulted with since they indicated prior to the development of the draft PA that Fort Irwin is not located within an area of interest for their Tribe; and

**WHEREAS**, the Cabazon Band of Mission Indians indicated on May 25, 2021 that Fort Irwin is not located within the area of interest for their Tribe; and

**WHEREAS**, Fort Irwin respectfully acknowledges that the Fort Mojave Indian Tribe (FMIT), whose traditional name is AhaMakav, meaning, “People of the River,” has, due to a continued spiritual connection with the Mojave desert environs in which Fort Irwin resides, chosen to participate in the development of the PA as an Invited Signatory; and

**WHEREAS**, in addition, Fort Irwin respectfully acknowledges the tribal statement provided by FMIT that *from the FMIT Tribe’s perspective, physical and cultural landscapes within Fort Irwin provide a sense of place and identity to their relationship to such homelands; and FMIT history and what they experienced as a people from the time of first contact, did not take from them the spirit of who they always have been and; Mojave’s resilience and deep cultural identity prevail because their ancestral homelands, the essence of who they are, was given to them by their Creator, Matavilya, which cannot be taken away or assimilated; and while these homelands are currently in the stewardship of Fort Irwin, the Aha Makav are also stewards of these lands; to protect their traditions, cultural values, and spiritual ways, and be it known that, all Aha Makav carry this knowledge from the past, and it is acknowledged here that they will continue to pass on this knowledge to their children ensuring their rights and responsibilities as their ancestors have done from time immemorial and; therefore they remain to this present day, AhaMakav, the People of the River;* and

**WHEREAS**, the Yuhaaviatam of San Manuel Nation have indicated they would like to consult only on undertakings within the WTA, Goldstone Complex, Central Corridor, Southern Corridor, and Eastern Training Area which are located within the boundaries of the Serrano ancestral territory, and chose to participate as an Invited Signatory; and

**WHEREAS**, the Timbisha Shoshone Tribe chose to participate in the development of the PA as an Invited Signatory; and

**WHEREAS**, the other tribes, consisting of the Bishop Paiute Tribe, Colorado River Indian Tribes, Morongo Band of Mission Indians, Big Pine Paiute Tribe of Owens Valley, Fort Independence

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Reservation, Chemehuevi Indian Tribe, Lone Pine Paiute Shoshone Reservation, and Kern Valley Indian Council, that the Army consulted with chose not to participate as Invited Signatories and participated instead as Consulting Parties; and

**WHEREAS**, the Army invited the Bureau of Land Management (BLM) Barstow Field Office to participate in the development of the PA because Fort Irwin maintains a segment of the Manix Trail, an unpaved road on BLM-administered land used to transport military equipment to Fort Irwin (the BLM is the lead agency for actions on BLM-administrated lands), and because the BLM is also a cooperating agency for the project's Environmental Impact Statement, and they declined to participate as a Concurring Party or a Consulting Party (see Abbreviations, Acronyms, and Definitions for explanations of these terms); and

**WHEREAS**, the Army invited the National Park Service (NPS), National Trails Office, to participate in the development of the PA due to the presence of the Old Spanish National Historic Trail (part of the National Trails System) corridor within the APE, in accordance with P.L. 90-453, as amended through P.L. 116-9, and they agreed to participate as a Concurring Party; and

**WHEREAS**, the Army invited Naval Air Weapons Station (NAWS) China Lake and National Aeronautics and Space Administration (NASA) Goldstone Deep Space Communications Complex to participate in the development of the PA and they declined to participate as a Concurring Party and participated instead as a Consulting Party; and

**WHEREAS**, the Army invited Death Valley National Park, Nellis Air Force Base, County of San Bernardino, and Desert Managers Group to participate in the development of this PA and each has declined to participate as a Concurring Party or Consulting Party; and

**WHEREAS**, in summary, there are three (3) Invited Signatories, consisting of the Fort Mojave Indian Tribe, the Yuhaaviatam of San Manuel Nation, and the Timbisha Shoshone; one (1) Concurring Party, which is NPS, National Trails Office; and, ten (10) Consulting Parties consisting of the Bishop Paiute Tribe, Colorado River Indian Tribes, Morongo Band of Mission Indians, Big Pine Paiute Tribe of Owens Valley, Fort Independence Reservation, Chemehuevi Indian Tribe, Lone Pine Paiute Shoshone Reservation, Kern Valley Indian Council, NAWS China Lake and NASA Goldstone Deep Space Communications Complex; and

**WHEREAS**, the Army held six (6) consultation meetings—on February 5, 2021; March 11, 2021; April 16, 2021, May 20, 2021, June 30, 2021, and March 28, 2022—as part of the Section 106 of the NHPA consultation process, to review the development and content of the PA; and

**WHEREAS**, Attachment D includes a list of invited participants and attendees for the six (6) consultation meetings; and

**WHEREAS**, the Army invited the public to participate in both the Section 106 of the NHPA consultation process and the public scoping for the Draft Environmental Impact Statement for the undertakings through placing notifications in the *High Desert Warrior* newspaper on August 12, 2020 (Fort Irwin circulation), the *San Bernardino Sun* newspaper on August 14, 2020 (San Bernardino County and Riverside County circulation), and *The Desert Dispatch* newspaper on August 18, 2020 (San Bernardino County circulation), and by holding public scoping meetings on August 25 and 27, 2020, and no comments were received; and

**WHEREAS**, in accordance with 36 CFR Part 800.6(a)(1)(i)(C), the Army has notified the Advisory Council on Historic Preservation (ACHP) of its decision to prepare an agency program PA as described in Programmatic Agreement Among the Department of the Army National Training Center and Fort Irwin, the California State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding Military Training Activities and Support Operations at Fort Irwin and the Manix Trail, San Bernardino County, California

36 CFR Part 800.14(b)(2) and provided the required documentation and invited them to participate in the PA, and the ACHP has chosen to participate in accordance with 36 CFR Part 800.6(a)(1)(iii); and

**WHEREAS**, the Army conducted cultural resource surveys of approximately 360,796 acres within the APE from 1979 to 2020 (Attachment C, Figure 2) and identified 158 historic properties, comprised of two properties listed in the National Register of Historic Places (NRHP), one of which is a National Historic Landmark (NHL); 48 additional historic properties determined eligible for listing in the NRHP through SHPO consultation (with concurrence generally received in 2002 and later); and 108 recommended historic properties found eligible for listing in the NRHP for which the SHPO has not yet provided concurrence and for which the Tribes will be asked to provide input when SHPO concurrence is sought(Attachment E); and

**WHEREAS**, the NHL is the Pioneer Deep Space Station, which is part of the Goldstone Deep Space Communication Complex (complex) and is located on land owned by Fort Irwin but the NHL, consisting only of the antenna, the tower, and the base, is owned by NASA, which is responsible for NHPA compliance and is covered by NASA's 1989 *Nationwide Programmatic Agreement among the National Aeronautics and Space Administration, the National Conference of State Historic Preservation Officers, and the Advisory Council on Historic Preservation* and its management will not be covered by this PA; and

**WHEREAS**, the Army is responsible for management of the site (land) on which the complex is located and ancillary buildings and supporting structures to the antenna located at the site, but neither the site nor any of the ancillary buildings or structures are part of the NHL, nor are these other components individually eligible for the NRHP or contributing elements to any NRHP-listed or eligible historic district and management actions involving this site and ancillary buildings and support structures are covered by this PA; and

**WHEREAS**, the Army will not conduct training within off-limits/non-maneuver areas, including certain areas with sensitive natural resources or historic properties managed by Fort Irwin, desert tortoise mitigation lands, a potential well location, or playas (dry lake beds) or other areas of high dust potential, as depicted in Attachment C (Figure 2); therefore, training- and support operations-related cultural resources surveys in these areas are not anticipated; and

**WHEREAS**, the density of military training activities at Fort Irwin is also limited by other factors, such as terrain and proximity to cantonment areas not used for training (e.g., housing), and can be sub-divided into areas that have high, medium, low, or restricted/limited maneuver intensity uses as further described and depicted in Attachment C (Figure 3), based on Fort Irwin's increases and changes in military training activities; and

**WHEREAS**, the Army is currently conducting and plans to continue conducting annual large-scale cultural resource surveys (see SOP 9), as depicted in Attachment C (Figure 2) with other surveys, including surveys to provide for opening the WTA to full training, with needed historic property protection measures to be put in place prior to opening the WTA to full training; therefore, the Army will continue to complete Section 106 consultation with the SHPO and the Tribes, as surveys are completed and/or concurrence is needed regarding NRHP eligibility in accordance with this PA; and

**WHEREAS**, SHPO concurrence is needed for NRHP eligibility determinations completed for properties within the APE, the SHPO will work with the Army to achieve consensus determinations of NRHP eligibility (where possible; if no consensus can be reached Fort Irwin will request a determination from the Keeper of the National Register) in accordance with the regulatory responsibilities under 36 CFR 800.4(c)(2); and

**WHEREAS**, the potential historic properties mentioned in the previous clause may include properties of traditional religious and cultural importance to Tribes, and this information or other tribal input may identify the NRHP criteria under which these properties qualify as historic properties, and the Army therefore requests that the Tribes provide input, if desired, to inform eligibility determinations for sites that have not previously received SHPO concurrence or where new information indicates that past concurrences must be revisited; and

**WHEREAS**, undertakings on properties for which effects have been taken into account through the Programmatic Memorandum of Agreement among the United States Department of Defense, the ACHP, National Conference of State Historic Preservation Officers, and the Historic American Buildings Survey/Historic American Engineering Record, regarding Demolition of World War II Temporary Buildings; the Program Comment for Capehart and Wherry Era Army Family Housing and Associated Structures and Landscape Features (1949–1962); the Program Comment for World War II and Cold War Era (1939–1974) Ammunition Storage Facilities; the Program Comment for Cold War Era Unaccompanied Personnel Housing (1946–1947); the Program Comment for Army Inter-War Era Historic Housing, Associated Buildings and Structures, and Landscape Features (1919–1940); the Program Comment to Exempt Consideration of Effects to Rail Properties within Rail Rights-of-Way; and any other applicable Program Comment that is issued by the ACHP subsequent to this PA, are excluded from further consideration under this PA

**NOW, THEREFORE**, the Army, the SHPO, and the ACHP agree that this PA shall be implemented in accordance with the following stipulations in order to take into account the effects of undertakings on historic properties, and that these stipulations shall govern the undertakings until this PA expires or is terminated.

## **STIPULATIONS**

The Army shall ensure that the following measures are carried out:

### **I. Applicability of the PA**

- A. The Army shall utilize this PA to fulfill its Section 106 of the NHPA responsibilities, including responsibilities for multi-agency undertakings for which the Army is the lead Federal agency, pursuant to 36 Part CFR 800.2(a)(2).
- B. This PA shall only apply to training activities or support operations, per the examples in Attachment A, that qualify as potential undertakings, as defined in Stipulation III.A.1, within the Northern, Central, and Southern Corridors; Eastern and Western Training Areas; Range Complex; Cantonment; Leach Lake, limited to targetry for aircraft operations and indirect fire activities (no ground maneuver activities shall occur at Leach Lake); Goldstone Complex, limited to the Goldstone Airstrip and areas used to support the Gray Eagle Unmanned Aerial Vehicle mission; the potential well area; and the Manix Trail right-of-way between Fort Irwin and Interstate 15. Non-training-related activities or non-support operations are not subject to this PA, and Section 106 of the NHPA responsibilities for these activities shall be fulfilled through compliance with Subpart B of 36 CFR Part 800 by the Army or other Federal agencies or through development of another NHPA Section 106 agreement document, pursuant to 36 CFR Part 800.6 and 36 CFR Part 800.14(b).

## II. Roles and Responsibilities of Participating Parties

### A. Signatories

#### 1. Army

- a. The Fort Irwin Garrison Commander is responsible for all decisions regarding the applicability of this PA to undertakings within the APE pursuant to *Army Regulation 200-1: Environmental Protection and Enhancement*.
- b. The Fort Irwin Garrison Commander shall designate a Cultural Resources Program Manager (CRPM) and Cultural Resources Manager (CRM) at Fort Irwin to implement this PA and conduct the stipulated coordination and consultation with the Signatories, as well as other concerned Tribes, agencies, organizations, and the public. The implementation of this agreement shall be primarily executed on a day-to-day basis by the CRM, under the authority of the Garrison Commander, who is ultimately responsible for ensuring that the stipulations herein are met. Given the CRM's responsibilities, only individuals who meet the Secretary of the Interior's standards in either archaeology or history shall be designated.
- c. As the CRM would not be expected to possess professional expertise in all of the listed fields, the CRM shall provide or Fort Irwin shall employ, maintain a contract with, or obtain through other means professional expertise that meets the Secretary of the Interior's Professional Qualification Standards for archaeology, history, architecture, historic architecture, or architectural history, pursuant to 36 CFR Part 61, Appendix A, as appropriate for each of the undertakings.
- d. The CRM shall ensure that efforts to identify, evaluate, and treat historic properties under the stipulations of this PA meet the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation.
- e. For non-linear resources that extend onto land occupied or administered by BLM Barstow Field Office, NAWS China Lake, Death Valley National Park, or other federal agencies, the Army shall consult with the appropriate agency regarding NRHP eligibility determinations and shall provide the SHPO with documentation of the consultation regarding the determinations of eligibility, and shall seek a consensus on NRHP eligibility. In the event consensus can be not be reached on an eligibility determination, the Army shall follow the processes outlined in Standard Operating Procedure (SOP) 2 within Attachment F.
- f. For linear resources, the Army shall consider available information regarding the resource as a whole and shall consider whether a given segment has potential to be a contributing element to the resource as a whole. Also, the Army shall consult with the NPS and BLM (as the co-administrators for the Old Spanish National Historic Trail) regarding NRHP eligibility determinations and treatment for the congressionally designated alignment of the Old Spanish National Historic Trail located within the Bitter Spring area of Fort Irwin, as appropriate. Bitter Spring, which is listed in the NRHP, has been previously identified by NPS and BLM as a *high potential site*, and the Red Pass area has been previously identified as a *high potential segment* within a National Historic Trail as defined by the National Trails System Act, pursuant to P.L. 90-543, as amended through P.L. 116-9. Portions of the Old Spanish Trail in Nevada and Utah have been listed in the NRHP. However,

no contributing elements or visible surface evidence of the historic trail (although Bitter Spring remains an active spring) have been identified within the APE to date, and neither of the identified high potential areas are currently suited to public interpretation due to restricted access. Off-site interpretation, including virtual interpretation, will be further explored as part of the Army's ongoing public interpretation efforts, and may include participation by NPS and BLM, Tribes, and other interested groups, as necessary.

- g. This PA specifies how the Army shall provide notification to the SHPO, Tribes, ACHP, or other Concurring and Consulting Parties according to the event, such as recognition of an emergency, and in accordance with SOPs 6 and 8, included in Attachment F. For urgent notifications, multiple methods of contact may be used in an attempt to reach the parties to be notified as quickly as possible.

## 2. California State Historic Preservation Officer

- a. The SHPO may raise objections according to Stipulation XII, may amend this agreement according to Stipulation XIII, or may terminate this agreement according to Stipulation XIV.
- b. The SHPO shall respond within the timeframes of this agreement after notifications are received.
- c. The SHPO shall review findings of NRHP eligibility determinations, as part of their regulatory responsibilities under 36 CFR 800.4(c).
- d. A full list of SHPO roles and responsibilities pertaining to Section 106 can be found in 36 CFR 800 Subpart B; these also apply unless alternative processes have been specified in this PA.

## 3. Advisory Council on Historic Preservation

- a. The ACHP may raise objections and/or resolve objections according to Stipulation XII, may amend this agreement according to Stipulation XIII, or may terminate this agreement according to Stipulation XIV.
- b. The ACHP shall not participate in identifications, evaluations, or reviews described under Stipulations III, IV, and V unless requested in writing from the Army, the SHPO, Invited Signatories or the other Concurring or Consulting Parties.

## 4. Invited Signatories

- a. The Fort Mojave Indian Tribe, the Yuhaaviatam of San Manuel Nation, and the Timbisha Shoshone as Invited Signatories, recognizing the important partnership developed between the Army and each of these tribes (the "Tribes") through consultation to develop the PA, may raise objections according to Stipulation XI, may amend this agreement according to Stipulation XIII, or may terminate the agreement according to Stipulation XIV.
- b. Invited Signatories shall participate in identification of historic properties (of traditional, religious, and cultural importance) as requested, and participate in reviews for activities described in Stipulations III, IV, and V.

## B. Concurring Parties

1. NPS as a Concurring Party may raise objections according to Stipulation XII.

## C. Consulting Parties

1. Bishop Paiute Tribe, Colorado River Indian Tribes, Morongo Band of Mission Indians, Big Pine Paiute Tribe of Owens Valley, Fort Independence Reservation, Chemehuevi Indian Tribe, Lone Pine Paiute Shoshone Reservation, Kern Valley Indian Council, NAWS China Lake and NASA Goldstone Deep Space Communications Complex may raise objections according to Stipulation XII.

# III. Historic Property Identification and Evaluation for Undertakings

## A. Determine the Undertaking

1. The Army (the CRPM if authority is so delegated) shall determine if the proposed activity is an undertaking as defined in 36 CFR Part 800.16(y) and SOP 1, included in Attachment F.
  - a. If the Army determines the proposed activity is not an undertaking, as defined in 36 CFR Part 800.16(y) and SOP 1, the Army shall document this determination for inclusion in the Annual Report, which will be shared as described in Stipulation X; the Army has no further obligations under this stipulation.
  - b. If the Army determines that the proposed activity is an undertaking listed in Attachment B as an activity that has no effect on historic properties, the Army shall document this determination for inclusion in the Annual Report and the Army has no further obligations under this stipulation.
  - c. If the Army determines the proposed activity is an undertaking not listed in Attachment B, the Army shall continue the Section 106 of the NHPA process following the streamlined procedures detailed in Stipulations III.B and III.C.

## B. Define the Area of Potential Effects and Identify Historic Properties

1. The CRM shall determine and document the project APE for each specific undertaking, appropriate to the scope and scale of the undertaking, and consider direct, indirect, and cumulative effects, pursuant to 36 Part CFR 800.4(a)(1) and SOP 1, included in Attachment F.
  - a. For purposes of the PA and pursuant to SOP 1, direct effects are defined as those effects resulting from an action, without separation in space or time, and include effects such as physical, visual or atmospheric, or auditory effects that may affect the setting, feeling, or character of a historic property; indirect effects are defined as those effects resulting from an action, but separated from it by time or distance; and



cumulative effects are defined as incremental effects resulting from past, present, and reasonably foreseeable future projects, regardless of the agency or person involved.

2. Background research regarding the APE shall include a review of previously conducted investigations, site records, geological information (including soils, geomorphological, geoarchaeological, geochronological, and other applicable data), information provided by the Tribes, historic maps, and similar information, as detailed in SOP 2, included in Attachment F. Professionals who meet the qualifications included in Stipulation II.A.3 shall determine the level and type of background research necessary for each undertaking, based on their expertise.
3. The CRM shall determine if cultural resource surveys and investigations are required, and if so, the type and level of analyses that are necessary, depending on the location of the APE and nature of the proposed activity, using the following parameters as well as guidance detailed in SOP 2, included in Attachment F.
  - a. Determine whether the APE has been completely and adequately previously surveyed in accordance with SOP 2, or is within an area that cannot be surveyed due to safety considerations (see Attachment C, Figure 2—the major area of safety concerns is Leach Lake).
    - i. The Army shall take into account tribal input regarding the identification of properties of religious and cultural importance and other relevant historic properties, including a review of testing methods and plans. Such reviews may be categorical (based on general concerns) rather than being project-specific.
    - ii. Whether or not the SHPO has commented on the adequacy of the survey efforts, if the APE has been completely and adequately previously surveyed, as described in SOP 2 and based on the CRM's determination, then no further survey shall be required and the CRM shall proceed to Stipulation IV.
4. If determined necessary by the CRM, cultural resource surveys and investigations shall be conducted pursuant to 36 Part CFR 800.4(b) and SOP 2. Such surveys may include participation by representatives of Invited Signatory and/or Consulting tribes who can provide assistance in identifying properties of traditional religious and cultural importance. Identified properties shall be recorded on the appropriate Department of Parks and Recreation 523 series forms. Recordation shall be completed in accordance with SOPs 2 and 3. Locational data shall be collected and added to the Fort Irwin Cultural Resources Database and shall comply with the Spatial Data Standards for Facilities, Infrastructure, and Environment as detailed in SOP 4. Refer to Attachment F for SOPs 2, 3, and 4.
  - a. Identified archaeological resources shall be recorded based on the definitions of a “site” and “isolate” provided in SOP 2, included in Attachment F.
  - b. Properties of traditional religious and cultural importance may or may not include an archaeological component. Definitions will follow guidance put forth in National

Register Bulletin 38: *Guidelines for Evaluating and Documenting Traditional Cultural Properties*, and will take into account any input regarding property identification from the affiliated cultural group(s), such as the definition of Tribal Cultural Values included in SOP 2 (provided by the Fort Mojave Indian Tribe).

5. In some situations, it may not be feasible to complete an archaeological survey due to access restrictions, operational constraints, human life and safety issues as determined by the Fort Irwin Garrison Commander, or environmental protection/avoidance restrictions; therefore, under the direction of the CRM, additional analysis, such as the research discussed in Stipulation III.B.2, may be completed that determines the potential for buried or otherwise unidentified cultural resources having the potential to qualify as historic properties to exist in the APE. In accordance with the specific circumstances, alternatives to standard survey methods may apply. Following completion of the additional analysis, NRHP eligibility evaluations shall occur under Stipulation III.C.

#### C. NRHP Eligibility Evaluations

1. Evaluations shall be conducted in accordance with the NRHP eligibility criteria, pursuant to 36 CFR Part 63; the bulletins, guidance, and documents produced by NPS; and SOP 2, included in Attachment F. In some instances, the CRM may, as part of the eligibility evaluation, determine sub-surface testing or additional analyses of a property's geological context is necessary to assess the potential for significant buried deposits to be present. The CRM shall approve testing methods and plans prior to completion of any type of sub-surface investigation.

Testing methods and plans may, time permitting, be provided to the Tribes for comment. The Tribes shall provide comments within five (5) calendar days of receiving the testing methods and plans. The testing methods and plans shall be provided electronically and shall specify the due date for comments. Where possible, a longer time period may be provided for larger testing efforts. The Army shall take into consideration any comments received by the Tribes. The SHPO may also be asked to provide input. (See SOP 2 for further information.)

2. The CRM shall seek input regarding eligibility considerations from Tribes and, as applicable, other groups that consider particular historic properties to be of traditional religious and cultural importance. The Army shall take into consideration any input received by the affiliated group(s) regarding such properties.
3. Following the completion of NRHP eligibility determinations for properties within the APE, the Army shall as needed (see Stipulation IV) seek concurrence on the eligibility determinations.

#### IV. Assessment of Effects

- A. Following the identification and evaluation efforts described in Stipulation III, the CRM shall assess the effects of the undertaking to historic properties using the criteria of adverse effects in 36 CFR Part 800.5(a)(1) and SOP 5, included in Attachment F, and shall make one of the following findings. Results will be documented in the Annual Report to be shared with the

Concurring and Consulting Parties. Fort Irwin acknowledges that the 30-day consultation periods specified below are initial consultation periods. If the information provided for consultation does not support the agency's findings in accordance with 36 CFR 800.11, the SHPO, or any Tribe that attaches religious and cultural significance to the historic property, may request additional information. Receipt of adequate information then initiates a new 30-day consultation period.

*1. No Historic Properties Affected*

- a. A finding of "No Historic Properties Affected" shall be used by the CRM under the following circumstances.
  - i. *Previous or new survey, only isolates present.* The APE has been completely and adequately previously surveyed or the Army completes a new survey, and the only properties identified in the APE are limited to those that meet the definition of an isolate, as described in Stipulation III.B.4.a and SOP 2, included in Attachment F and considered not eligible for listing in the NRHP. The Army shall document this finding for inclusion in the Annual Report, and the Army has no further obligations under this circumstance. Appropriate documentation shall be provided to the SHPO, Tribes, and the California Historical Resources Information System, as necessary.
  - ii. *Previous survey with SHPO consultation, no properties present or those present do not qualify as historic properties.* The APE has been completely and adequately previously surveyed and no properties were identified, or properties were present but did not qualify as historic properties per previous consultation with the SHPO and the Tribes. The Army shall document this finding for inclusion in the Annual Report, and the Army has no further obligations under this circumstance. Appropriate documentation shall be provided to the SHPO, Tribes, and the California Historical Resources Information System, as necessary. Fort Irwin has a very limited number of eligibility determinations completed prior to 2002, and the current tribal role in providing input regarding properties of traditional religious and cultural importance was defined in an amendment to Section 106 in 1992. Given this, in theory almost of the past eligibility concurrences on Fort Irwin should reflect tribal input in accordance with the amended Section 106 process. However, Fort Irwin recognizes that exceptions may have occurred. Given this, Army personnel will review past eligibility determinations having SHPO concurrence to explore whether or not there is documentation of tribal consultation and will summarize the results in the Annual report for further discussion during the first Annual Meeting.
  - iii. *Previous survey, properties present within the APE do not qualify as historic properties but the SHPO has not provided concurrence regarding eligibility, or the SHPO previously provided comments expressing concern regarding the adequacy of the survey and those concerns have not been resolved by previous consultation.* The Army will conduct new survey as needed and submit all pertinent documentation to the SHPO and the Tribes, as described in Stipulation

IV.B. The SHPO shall provide a response to the Army finding within thirty (30) calendar days of receipt of said documentation. Tribes choosing to provide input should also respond within thirty (30) calendar days.

- iv. *New survey or investigation (a literature search is one example), no properties present or those present do not qualify as historic properties.* The Army completes a new survey or investigation for the APE and no properties were identified or properties were present but found not to qualify as historic properties. The Army shall submit all pertinent documentation to the SHPO and Tribes, as described in Stipulation IV.B. The SHPO shall provide a response to the Army finding within thirty (30) calendar days of receipt of said documentation. Tribes choosing to provide input should also respond within thirty (30) calendar days.
- v. *New survey or investigation (a literature search is one example), historic properties present but not affected.* The Army completes a new survey or investigation for the APE and historic properties are present within the APE but will not be affected by the undertaking. The Army shall determine if further consultation is necessary, per 36 CFR Part 800.3(a)(1).
  - A. To aid this determination, the Army may propose—in consultation with the SHPO, Invited Signatories, Consulting Parties, and (regarding the Old Spanish Trail) Concurring Party—that no indirect effects (as defined elsewhere in this PA) to specific property types are reasonably anticipated under specific circumstances.
  - B. Otherwise, the Army shall submit all pertinent documentation to the SHPO and Tribes, as described in Stipulation IV.B. The SHPO shall provide a response to the Army finding within thirty (30) calendar days of receipt of said documentation. Tribes choosing to provide input should also respond within thirty (30) calendar days.

## 2. *No Adverse Effect*

- a. A finding of “No Adverse Effect” shall be used by the CRM if the undertaking's effects do not alter or diminish, directly or indirectly, any of the characteristics of a historic property that qualify it for inclusion in the NRHP. The Army shall submit all pertinent documentation to the SHPO, as described in Stipulation IV.B. The SHPO shall provide a response to the finding made by the Fort Irwin CRMP within thirty (30) calendar days of receipt of said documentation.
- i. The Army shall also provide all pertinent documentation describing the finding to the Tribes. The Tribes also have thirty (30) calendar days to provide input.
  - A. The Tribes are under no obligation to provide comments on the effect determination; however, if they wish the Army to consider their comments regarding the effect determination, Tribes should submit comments in writing within thirty (30) calendar days of receipt. The Army shall take any tribal comments received into consideration before concluding the

consultation and shall notify the SHPO of any tribal concerns and the Army's response to those concerns.

- B. If the SHPO does not respond to the finding of "No Adverse Effect" within thirty (30) calendar days of receipt of all pertinent documentation, the CRM shall make a second attempt to contact the SHPO (via telephone or email) before proceeding to the next step in the process based on the finding.
  - C. If the SHPO does not concur with the finding of "No Adverse Effect," the CRM shall consult with the SHPO for no more than a total of thirty (30) calendar days (or other timeframe as agreed to between the SHPO and the CRM) from receipt of the SHPO notification of non-concurrence, to attempt to resolve the concerns identified by the SHPO.
- ii. If, at the end of the thirty (30) calendar days, or the time agreed upon, the SHPO concurs with the finding of "No Adverse Effect," the CRM shall document this concurrence for inclusion in the Annual Report, and the Army has no further obligations under this finding.
  - iii. If, at the end of the thirty (30) calendar days, or the time agreed upon, the SHPO does not concur with the finding of "No Adverse Effect," the CRM shall notify the ACHP, pursuant to 36 CFR Part 800.4(d)(1)(iv), and in accordance with Stipulation XII.

### *3. Adverse Effect*

- a. It is the Army's preference to avoid effects to historic properties whenever feasible; however, a finding of "Adverse Effect" shall be used by the CRM if the undertaking may alter or diminish, directly or indirectly, any of the characteristics of a historic property that qualify it for inclusion in the NRHP. The Army shall submit all pertinent documentation to the SHPO, as described in Stipulation IV.B. The SHPO shall provide a response to the Army finding within sixty (60) calendar days of receipt of said documentation.
  - i. The Army shall also provide a all pertinent documentation to the Tribes describing the finding. The Tribes are under no obligation to provide comments on the effect determination; however, if they wish the Army to consider their comments regarding the effect determination, the Tribes should submit comments in writing within thirty (30) calendar days of receipt.
  - ii. The Army shall take any tribal comments received, including recommendations for resolving adverse effects in a culturally appropriate manner, into consideration before concluding the consultation and shall notify the SHPO of any tribal concerns, or concerns from other interested Consulting Parties, and the Army's response to those concerns. If no response is received after thirty (30) calendar days of providing said documentation to SHPO, then the Army may conclude consultation.

- b. If the SHPO does not concur with the finding of “Adverse Effect,” the CRM shall consult with the SHPO to attempt to resolve the concerns identified by the SHPO.
      - i. If the SHPO concurs with the finding of “Adverse Effect,” the CRM shall document this concurrence for inclusion in the Annual Report, and follow the process included in Stipulation V. The Army has no further obligations under this finding.
      - ii. If the SHPO does not concur with the finding of “Adverse Effect,” the CRM shall notify the ACHP, pursuant to 36 CFR Part 800.4(d)(1)(iv), and in accordance with Stipulation XII.
      - iii. If the SHPO conclusions or recommendations differ from those provided by the Tribes, the Army will share the conclusions and recommendations with the Tribes for their reference (if desired).
- B. To initiate consultation, the Army shall submit the following documentation to the SHPO and the Tribes under Stipulations IV.A.1, IV.A.2, and IV.A.3.
  - 1. A project description, including the depth, horizontal extent, and type of ground disturbance anticipated.
  - 2. An APE map showing the project location, survey boundaries, and locations of historic properties.
  - 3. Descriptions of historic properties affected and summaries of their NRHP eligibility (under all criteria) and historic integrity.
  - 4. A summary of effects and explanation of why the effects are adverse or not adverse.
    - a. For “Adverse Effect” findings, the Army shall provide documentation of alternatives considered to avoid or minimize the adverse effect and why they could not be accomplished.
  - 5. Photographs of the APE and historic properties.
  - 6. Additional information as appropriate, including site forms, results of sub-surface testing, historic maps, background information, geographic information system data, and geological and soil information.

## **V. Resolution of Adverse Effects**

- A. Using the following process, the CRM shall notify the other Concurring and Consulting Parties and the public within fifteen (15) calendar days of notifying the SHPO and Tribes of an adverse effect finding for an undertaking:
  - 1. The CRM shall prepare and send a notification package to the Concurring and Consulting Parties that includes the documentation specified in Stipulation IV.B., as well as the SHPO and Tribes’ comments received by the Army regarding the undertaking, an invitation to participate in consultation to resolve adverse effects, and proposed dates for a consultation meeting. Confidential information provided by the Tribes shall not be distributed to parties outside Fort Irwin without prior consent from the relevant Tribe(s).

The Concurring and Consulting Parties shall respond to the consultation invitation within thirty (30) calendar days of receipt.

- a. The Concurring and Consulting Parties may choose to not participate in the consultation regarding the assessment of effects but may want to provide comments on the resolution of adverse effects. The Army shall take into consideration any comments received in writing within thirty (30) calendar days of the Concurring and Consulting Parties receiving the notification package before concluding the consultation, and shall notify the SHPO of any concerns and the Army's response to those concerns.
2. The CRM shall invite the Tribes to participate in consultation to resolve adverse effects. The Tribes are under no obligation to provide comments; however, if they wish the Army to consider their comments regarding the resolution of adverse effects, the Tribes should submit comments in writing within thirty (30) calendar days of receipt. The Army shall take any tribal comments received, including recommendations for resolving adverse effects in a culturally appropriate manner, into consideration before proceeding with consultation.
  - a. All tribal comments will receive a response from the Army, with consultation on a case-by-case basis, if needed, regarding the incorporation of the comments into the resolution. If no response is received within the 30-day timeframe, then the Army may proceed with the consultation without additional involvement from that Tribe.
  - b. Fort Irwin will track tribal (and other received) comments and concerns in comments matrices and summaries, addressing all comments/concerns received, the source, and the response.
  - c. Comments and responses will be summarized in the annual report documenting the results of the PA.
3. The ACHP will only participate in the resolution of adverse effects for individual undertakings if a written request is received from the Army, the SHPO, a Tribe, a Concurring Party, or another Consulting Party.
4. The CRM shall post a notice of the adverse effect finding on the official Fort Irwin and AEC websites, to include a description of the undertaking, a list of identified historic properties, an explanation for the finding of adverse effect, steps taken or considered by the Army to avoid or minimize the adverse effect, any SHPO comments received by the Army regarding the undertaking, and an invitation to provide written comments within thirty (30) calendar days. Confidentiality of historic properties will be maintained such that the locations and nature of the historic properties will not be included as part of the notice, in accordance with Section 304 of the NHPA and to preserve Controlled Unclassified Information.

- B. The CRM shall organize a consultation meeting, to include the SHPO, Tribes, and other Concurring and Consulting Parties that responded under Stipulations V.A.1 and V.A.2, to be

- held no later than sixty (60) calendar days after notifying the Concurring and Consulting Parties of the adverse effect. The meeting will discuss avoidance, minimization, and mitigation of the adverse effect. Additional meetings shall be scheduled as needed.
- C. If, through consultation with the SHPO, Tribes, or other Concurring and Consulting Parties that responded under Stipulations V.A.1 and V.A.2, the undertaking avoids an adverse effect, the CRM shall document the alternatives utilized to reduce the effects of the undertaking to a “No Adverse Effect” finding and include this documentation in the Annual Report. The Army has no further obligations under this stipulation.
  - D. When avoidance of an adverse effect is not feasible, the Army shall resolve the adverse effect through one of the following processes.
    - 1. The Army shall prepare for the SHPO, Tribes, and other Concurring and Consulting Parties that responded under Stipulations V.A.1 and V.A.2 a treatment plan to reduce or resolve adverse effects. The treatment plan shall be submitted within thirty (30) calendar days of the last consultation meeting described in Stipulation V.B. The treatment plan shall include one or more of the treatment measures included in Attachment G, depending on the nature and severity of the adverse effect, and will provide sufficient detail on the treatment measures proposed.
      - a. Unless the SHPO, Tribes, or other Concurring and Consulting Parties that responded under Stipulations V.A.1 and V.A.2 object in writing to the treatment measures plan, the Army shall proceed with implementation of the treatment measure(s), and Section 106 of the NHPA consultation is considered completed.
      - i. If the SHPO, Tribes, or other Concurring and Consulting Parties that responded under Stipulations V.A.1 and V.A.2 object in writing, then the Army shall resolve adverse effects using the procedures outlined in Stipulation V.D.2.
      - b. The Army shall provide written notification to the SHPO, Tribes, or other Concurring and Consulting Parties that responded under Stipulations V.A.1 and V.A.2 that the treatment measures for the undertaking have been implemented and completed. This notification shall be provided within sixty (60) calendar days of completion of the treatment measure(s). The Army shall also include this information in the Annual Report.
    - 2. The Army, in consultation with the SHPO, Tribes, or other Concurring and Consulting Parties that responded under Stipulations V.A.1 and V.A.2, may choose to resolve adverse effects through development of a memorandum of agreement, pursuant to 36 CFR 800.6(c) and filed with the ACHP upon execution, per 36 CFR 800.6(b)(1)(iv).
      - a. If the Army and the SHPO, Tribes, or Concurring and Consulting Parties that responded under Stipulations V.A.1 and V.A. fail to agree on the terms of a memorandum of agreement (or, if mutually agreed upon, a project-level PA), the CRM shall notify the ACHP in accordance with Stipulation XII.



## **VI. Native American Consultation**

The Army shall continue conducting government-to-government consultation with the 10 federally recognized Tribes who attach traditional, religious, and/or cultural significance to Fort Irwin lands, or historic properties, in accordance with 36 CFR Part 800 and the processes outlined in SOP 6 (included in Attachment F). For purposes of this PA, consultation refers to the process of seeking, discussing, and considering the views of others, and, where feasible, seeking agreements on how cultural resources should be identified and how historic properties should be considered and managed.

## **VII. Treatment of Human Remains and Funerary Objects**

The Army shall treat all Native American human remains and funerary objects, sacred objects, and/or objects of cultural patrimony encountered during any activities covered by the PA in accordance with the Native American Graves Protection and Repatriation Act (NAGPRA) and its implementing regulations, 43 CFR Part 10, and SOP 7, included in Attachment F.

- A. Following a potential discovery, the Army shall immediately stop all activity in the area to protect the discovery and take every effort to avoid disturbing known burial sites or locations where funerary objects or sacred objects have been encountered. A minimum buffer of 30 meters around the potential discovery shall be established and demarcated with flagging tape or other appropriate materials.
- B. The CRM, with qualified professionals such as an osteologist, the San Bernardino County Coroner, or law enforcement personnel, shall determine if the remains are human, and if so, whether they are recent and whether they are Native American.
  1. If recent human remains are discovered, then the CRM shall contact the appropriate authorities (military law enforcement, the San Bernardino County Sheriff, or the medical examiner) to determine if the remains should be considered part of a crime scene or police investigation.
  2. In the event that the remains are not part of a crime scene or police investigation and the discovery yields Native American remains or funerary objects, sacred objects, and/or objects of cultural patrimony, The Army shall continue following the processes outlined in 43 CFR Part 10.3 through 10.6, and SOP 7, including contacting consulting Tribes as soon as possible, as detailed in Attachment F
  3. No photographs for purposes of archaeological documentation shall be taken of Native American human remains or associated funerary objects. No type of destructive analysis shall occur, and no soil or residue sampling (e.g., flotation or pollen) from burial pits or cremation vessels shall occur without tribal consultation.
  4. Fort Irwin will provide a copy of our standard operating procedures for responding to inadvertent discoveries to the San Bernardino County Coroner's Office.
- C. A summary of any discoveries of human remains or NAGPRA items shall be included in the Annual Report per Stipulation X.

### **VIII. Post-Review Discoveries**

- A. For purposes of this PA and pursuant to 36 CFR 800.13 and SOP 8, included in Attachment F, post-review discoveries are defined as the following:
  1. Discovery of a potential historic property not previously identified in project review, after project approval and initiation.
  2. Discovery of an effect (using the language of 36 CFR 800.13(b) , not previously identified in project review, that occurs to a previously known historic property after project approval and initiation.
- B. In the event of discovery of a potential historic property not previously identified in project review after project approval and initiation, the following actions shall be taken, in accordance with SOP 8, included in Attachment F:
  1. Avoid further direct effects and develop a suitable buffer area (to be determined on a case-by-case basis with 30 meters a commonly used minimum distance) around the discovery, demarcated with flagging tape or other suitable materials.
  2. Contact the CRPM, who shall notify the CRM and the Garrison Commander.
  3. Upon notification or as soon as possible, the CRM shall perform a National Register of Historic Places evaluation, as well as an analysis of the effects and identification of any necessary protection or treatment measures. This information, along with a report of findings prepared in conformance to Stipulation IV.B, shall be provided to the SHPO, Tribes, and other Concurring and Consulting Parties for comment within thirty (30) calendar days from the notification of the discovery.
    - a. If Fort Irwin determines the discovery is not a historic property, the SHPO, Tribes, and other Concurring and Consulting Parties shall have ten (10) business days from receipt of the report to comment on the findings; however, this period may be shortened depending on the urgency of the undertaking. The available period will be clearly identified in the notification. If the discovery is not a historic property and no objections are received, the Army has no further obligations under this stipulation. If the discovery is a historic property and no objections are received, then the Army may proceed with implementing any necessary protection or treatment measures included in Attachment G, depending on the nature and severity of the adverse effect. Following completion of the protection or treatment measures, the Army has no further obligations under this stipulation.
    - b. If the SHPO, other Signatory, or a Consulting Party objects or does not concur with the Army's findings, the Army shall proceed to Stipulation XII.
  4. Any post-review discoveries shall be summarized in the Annual Report.
- C. In the event of a post-review discovery of an effect to previously known historic property that was not previously identified in project review, and that occurs to the historic property after project approval and initiation, the following actions shall be taken, in accordance with SOP 8, included in Attachment F:

1. Avoid further direct effects and develop a suitable buffer area (to be determined on a case-by-case basis with 30 meters a commonly used minimum distance) around the historic property and/or portion of the historic property that was affected, demarcated with flagging tape or other suitable materials.
2. Contact the CRPM, who shall notify the CRM. The CRM shall then immediately notify the Garrison Commander.
3. The CRM shall determine if the effects are adverse or not adverse.
  - a. If the CRM determines the effect is not adverse, the SHPO, Tribes, and other Concurring and Consulting Parties shall receive a written notification within three (3) calendar days of the discovery, summarizing the historic property and effects determination. All parties shall have ten (10) calendar days from receipt of the notification to object to the findings. If no objections are received, the Army has no further obligations under this stipulation.
  - b. If the effect is determined to be adverse, in consultation with the SHPO, the CRM shall prepare and send a notification package to the SHPO, Tribes, and other Concurring and Consulting Parties within five (5) calendar days of the discovery. Notification shall include a summary of the undertaking and how it was previously reviewed under this PA, an illustration of the buffer established, a list of identified historic properties within the buffer, and the treatment plan to address effects.
    - i. The SHPO, Tribes, and other Concurring and Consulting Parties shall have ten (10) business days to comment on the finding. If no response is received, then the Army may proceed with implementing the treatment measures it has identified, in conformance with the measures included in Attachment G, depending on the nature and severity of the adverse effect. Following completion of the treatment measures, the Army has no further obligations under this stipulation.
    - ii. If Tribes (or other culturally affiliated parties) choose to respond regarding culturally appropriate measures to resolve adverse effects to Traditional Cultural Properties (defined as properties eligible for inclusion in the National Register based on association with cultural practices or beliefs of a living community that are rooted in the community's history, and that are important in maintaining the community's cultural identity), the Army shall seek to accommodate such measures where possible.
  - c. If the SHPO, a Tribe, or another Signatory or Consulting Party objects or does not concur with the Army's findings, the Army shall proceed to Stipulation XII.
3. The post-review discovery of an effect and the Army's response, including any protection or treatment measures, shall be summarized in the Annual Report.

## **IX. Emergency Undertakings**

- A. Emergency undertakings are those deemed necessary by the Army as an immediate and direct response to a disaster or emergency declared by the President of the United States or Governor of California. They may also include responses to National Security threats, as

Programmatic Agreement Among the Department of the Army National Training Center and Fort Irwin, the California State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding Military Training Activities and Support Operations at Fort Irwin and the Manix Trail, San Bernardino County, California

discussed in SOP 8. Emergency undertakings pursuant to a response to a declared disaster or emergency include only such actions implemented within thirty (30) calendar days from the declared disaster or emergency unless an extension, in accordance with SOP 8, included in Attachment F, is granted.

- B. Immediate rescue and salvage operations to preserve life or property are exempt from Section 106 of the NHPA and are outside the scope of this PA. (However, Section 110 of the NHPA, and other laws, including the Archaeological Resources Protection Act and the Native American Graves Protection and Repatriation Act, may apply.)
- C. The CRM shall notify the SHPO and the Tribes via telephone or email, followed by written confirmation, of a declared emergency as soon as practicable after the emergency has been declared.
- D. Emergency undertakings shall take into consideration that historic properties may be affected by recovery or emergency repair efforts. (See SOP 8.)
- E. When possible, such emergency actions will be conducted in a manner that does not foreclose future preservation of historic properties.
- F. As soon as practicable after the emergency, the Army shall notify the SHPO and the Tribes via email and will follow up with written documentation if any historic properties were discovered or disturbed as a result of emergency response actions. This information shall also be included in the Annual Report. If necessary, consultation with the SHPO and the Tribes will be conducted thereafter.

## **X. Annual Reporting**

- A. The Army shall prepare an annual report, covering the previous calendar year, and distribute it to SHPO, the Tribes, and other Concurring and Consulting Parties prior to March 16<sup>th</sup> each year during the life of this PA. The report shall include the following:
  - 1. Actions reviewed but not considered undertakings.
  - 2. Actions that were reviewed but had no potential to affect historic properties.
  - 3. Project descriptions for actions falling within the categories identified in Attachment B.
  - 4. Actions that were reviewed but had no adverse effect on historic properties.
  - 5. Actions that had an adverse effect on historic properties; steps taken to avoid, reduce, or resolve adverse effects; and, the results of those steps.
  - 6. A list of surveys completed and a map showing these areas and operational constraints and environmental avoidance/protection areas.
  - 7. A summary of newly identified sites and isolates, revisited previously identified sites (and isolates if applicable), and monitored historic properties located within off-limits areas.
  - 8. A summary of NRHP evaluations completed and the results of project monitoring (see SOP 10).

9. A summary of any emergency undertakings, actions taken, and effects that may have occurred to historic properties.
  10. A list/summary of all post-review discoveries.
  11. A list of memoranda of agreement and treatment plans developed, including progress reports on the completion of mitigation measures and treatment measures.
  12. Any changes the Army might consider toward improvement in implementation of any stipulations.
  13. Issues or objections raised, and how they were addressed (with the provision that confidentiality will be respected).
  14. Other information identified as useful or necessary in our ongoing discussions of the PA.
- B. The Army requests SHPO, Tribes, and other Concurring and Consulting Parties provide comments to the Army regarding the Annual Report within thirty (30) calendar days of receipt.
- C. The Army shall post the Annual Report (redacted as necessary to preserve Controlled Unclassified Information) on the Fort Irwin and AEC websites, indicating that interested members of the public are invited to provide comments within thirty (30) calendar days of the report being made available.

## **XI. Annual Meeting**

The Army shall hold an Annual Meeting with the SHPO, Tribes, and other Concurring and Consulting Parties to review the implementation of this PA and any amendments that may be proposed no earlier than April 15<sup>th</sup> each year for the duration of this PA. The meeting shall provide an opportunity to discuss the successes and shortcomings of the PA, its general implementation, and any proposed changes, including consideration of exempting activities that result in a finding of no adverse effect. In addition, the meeting may also include information-gathering discussions. The meeting may be held in-person, via teleconference, and/or via web conference. Personnel from the Fort Irwin G3 Force Integration office shall participate in the annual meeting at their discretion.

## **XII. Dispute Resolution**

- A. Should any Signatories to this PA object at any time to any actions proposed or the manner in which the terms of this PA are implemented, the Army shall consult with such parties to attempt to resolve the objection. If the Army determines that such objection cannot be resolved, the Army shall:
1. Forward all documentation relevant to the dispute, including the Army's proposed resolution, to the ACHP. The ACHP shall advise the Army within thirty (30) calendar days of receipt of adequate documentation. Prior to reaching a final decision on the dispute, the Army shall prepare a written response that takes into account any timely opinion or comments regarding the dispute from the ACHP or Concurring and Consulting Parties, and provide them with a copy of this written response. The Army will then proceed according to its final decision.

2. If the ACHP does not provide its comments regarding the dispute within the 30-day time period, the Army may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, the Army shall prepare a written response that takes into account any timely comments regarding the dispute from the Concurring and Consulting Parties, and provide them and the ACHP with a copy of such written response.
- B. The responsibilities of the Army to carry out all actions subject to the terms of this PA that are not the subject of the dispute remain unchanged.

### **XIII. Amendments**

- A. Any Signatory to this PA may propose an amendment in writing to the Army, including the extension of this PA and changes to the SOPs.
- B. The Army shall consult with the Signatories to this PA to consider the proposed amendment. If there is no objection to the proposed amendment, the document shall be amended accordingly and the amendment shall be effective on the date of the last authorizing signature and is filed with the ACHP.
- D. Proposed updates reflecting changes to the information included in Attachment C (Maps) and Attachment E (Historic Properties within Fort Irwin) will be amended in accordance with XIII(B) and as dated additions rather than changes.

### **XIV. Termination**

- A. If a Signatory to this PA determines it is not being implemented in accordance with its terms, that party may propose that the agreement be terminated.
- B. The party proposing termination shall notify all Signatories, explain the reasons for the proposed termination, and afford all Signatories thirty (30) calendar days from receipt of the notification to recommend alternatives to termination. The consultation shall include all other Concurring and Consulting Parties and other parties that may be affected by the termination.
- C. If the consultation fails to find alternatives to termination, then any Signatory may terminate the PA upon written notification to the other Concurring and Consulting Parties, and to other parties that may be affected that this PA is terminated.
- D. Once the PA is terminated, and prior to work continuing on any undertaking, the Secretary of the Army must take into account, and respond to the comments of the ACHP under 36 CFR Part 800.7(c)(4), in accordance with the *Army Procedures and Responsibilities for Adverse Effect Determinations and Termination of Consultation under the National Historic Preservation Act*, dated October 5, 2020. The Army shall notify the Signatories in writing as to the course of action it shall pursue. Pursuant to Section 110 of the NHPA, the Secretary of the Army, as the agency head, cannot delegate this responsibility to another agency or party. Following the termination of the PA, the Army shall follow the procedures outlined in 36 CFR 800 and 43 CFR 10 for undertakings.

## **XV. Programmatic Agreement Monitoring**

The SHPO, ACHP, and any other Signatories may monitor the manner in which this PA is carried out, and the ACHP shall review any activities if so requested. (Monitoring as used here refers to review of project files and correspondence records.) The Garrison Commander shall cooperate with the SHPO, the ACHP, and any other Signatories should they request to monitor or to review project files for activities carried out pursuant to this PA. Any concerns regarding the manner in which this PA is being carried out will be addressed in accordance with the dispute resolution process discussed in Stipulation XII.

## **XVI. Duration**

- A. This PA shall become effective on the date of the final signature and continue in force for five (5) years.
- B. At least one year prior to the end of the five (5)-year period, the Signatories shall consult to determine whether this PA remains satisfactory. If there is agreement, the Army shall revise and update the PA as needed through development of an amendment that adds, removes, or revises the stipulations of the PA, and consult with all Concurring and Consulting Parties, and any parties that may become additional Concurring Parties. The amended agreement shall be signed and executed by all Signatories prior to the expiration of the five (5)-year period.
- C. If an extension of time is warranted, all Signatories shall agree in writing until such time as this PA may be revised and updated.

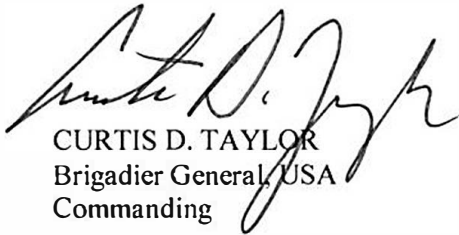
## **XVII. Anti-Deficiency Act**

The Army's obligations and stipulations under this PA are subject to the availability of funds and the provisions of the Anti-Deficiency Act, pursuant to 31 U.S. Code 1341. The Army shall make reasonable and good faith efforts to secure the necessary funds to implement this PA in its entirety. If compliance with the Anti-Deficiency Act alters or impairs the Army's ability to implement the stipulations of this PA, the Army shall consult with the SHPO and the ACHP in accordance with the amendment and termination procedures in Stipulations XIII and XIV.

**EXECUTION** of this PA by the Army, the SHPO, and the ACHP and implementation of its terms evidence that the Army has taken into account the effects of these undertakings on historic properties and afforded the ACHP a reasonable opportunity to comment.

## SIGNATORIES

### DEPARTMENT OF THE ARMY:



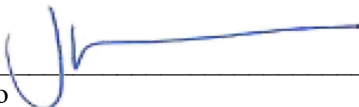
CURTIS D. TAYLOR  
Brigadier General, USA  
Commanding



JASON A. CLARKE  
COL, SF  
Commanding



**SIGNATORIES****CALIFORNIA STATE HISTORIC PRESERVATION OFFICER:**

  
\_\_\_\_\_  
Julianne Polanco  
State Historic Preservation Officer

Date: 12/6/2022

**SIGNATORIES****ADVISORY COUNCIL ON HISTORIC PRESERVATION:**

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Jordan E. Tannenbaum  
Vice Chairman

Date: 12/15/2022

**INVITED SIGNATORIES**

**FORT MOJAVE INDIAN TRIBE:**

  
\_\_\_\_\_  
Timothy Williams  
Chairman

Date: 6-30-22

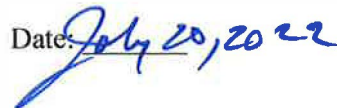
**INVITED SIGNATORIES****YUHA AVIATAM OF SAN MANUEL NATION:**

Lynn Valbuena  
Chairwoman

Date: 7/11/2022

**INVITED SIGNATORIES****TIMBISHA SHOSHONE TRIBE:**

  
Jimmy John Thompson  
Chairman

Date: 

**CONCURRING PARTY****NATIONAL PARK SERVICE, NATIONAL TRAILS:**

**CAROLE  
WENDLER**

Digitally signed by CAROLE  
WENDLER

Date: 2022.07.22 13:24:13  
-06'00'

Carole Wendler  
Acting Superintendent

Date: \_\_\_\_\_

Attachments:

List of abbreviations, acronyms, and definitions.

Attachment A:

Examples of Military Training Activities and Support Operations

Attachment B:

Activities Determined to Have No Effect to Historic Properties

Attachment C:

Figure 1, APE Map

Figure 2, Previously Conducted Cultural Resources Survey and Off-Limits/Non-Maneuver Areas

Figure 3, Maneuver Intensity Areas and Survey Areas

Figure 4, Setting

Attachment D:

Consulting Party Meeting Participants

Attachment E:

Historic Properties within Fort Irwin

Attachment F:

SOPs:

SOP 1: Identifying Undertakings and Defining Areas of Potential Effect

SOP 2: Identifying and Evaluating Historic Properties

SOP 3: Site and Isolate Field Data Collection

SOP 4: GIS Data Collection and Processing

SOP 5: Assessing Effects of Undertakings on Historic Properties

SOP 6: Government-to-Government Consultation with Tribes

SOP 7: Procedures Applicable to the Inadvertent Discovery of Native American Human Remains and Related Cultural Items

SOP 8: Inadvertent Discoveries and Emergency Action

SOP 9: Assessing Risk and Identifying Large-Scale Survey Priorities

SOP 10: Project Monitoring\*

\*Denotes archaeological monitoring.

Attachment G:

Protection and Treatment Measures

## **Abbreviations, Acronyms, and Definitions**

The following presents abbreviations, acronyms, and definitions used in the Programmatic Agreement.

|         |  |
|---------|--|
| ACHP    | Advisory Council on Historic Preservation              |
| APE     | Area of Potential Effects                              |
| BLM     | Bureau of Land Management                              |
| CBRN    | Chemical, Biological, Radiological, and Nuclear        |
| CFR     | Code of Federal Regulations                            |
| Complex | Goldstone Deep Space Communication Complex             |
| CRM     | Cultural Resources Manager                             |
| CRPM    | Cultural Resources Program Manager                     |
| DoD     | Department of Defense                                  |
| EOD     | Explosive Ordnance Disposal (Attachment A)             |
| IAW     | In Accordance With                                     |
| ICRMP   | Integrated Cultural Resources Management Plan          |
| JPADS   | Joint Precision Air Drop System (Attachment A)         |
| NAGPRA  | Native American Graves Protection and Repatriation Act |
| NASA    | National Aeronautics and Space Administration          |
| NAWS    | Naval Air Weapons Station                              |
| NHL     | National Historic Landmark                             |
| NHPA    | National Historic Preservation Act                     |
| NPS     | National Park Service                                  |
| NRB     | National Register Bulletin                             |
| NRHP    | National Register of Historic Places                   |
| NTC     | National Training Center (at Fort Irwin)               |
| PA      | Programmatic Agreement                                 |
| P.L.    | Public Law   |



|        |   |
|--------|---|
| playa  | dry lake bed  |
| PRTCI  | Properties of traditional religious and cultural importance; Traditional Cultural Property                                      |
| SF     | Special Forces  |
| SHPO   | California State Historic Preservation Officer  |
| SOP    | Standard Operating Procedure  |
| TCP    | Traditional Cultural Property; properties of traditional religious and cultural importance (Attachments B and F, and see below) |
| Tribes | Native American Tribes  |
| UAS    | Unmanned Aircraft Systems (Attachment A)  |
| USAF   | United States Air Force (Attachment A)  |
| USAEC  | United States Army Environmental Center   |
| U.S.   | United States   |
| WTA    | Western Training Area   |

### **Selected Cultural Resource Definitions**

The following definitions are provided to distinguish among key terms that are sometimes conflated in cultural resources management literature.

### **Consultation Terms**

**Concurring Party** – A concurring party is a consulting party invited to concur in the agreement document but who does not have the authority to amend or terminate the agreement, in accordance with 36 CFR 800.6(c)(3). All consulting parties were invited to sign as concurring parties.

**Consulting Party** – For purposes of this PA, a consulting party is an agency, tribal group, or individual that participated in the development of the PA through attendance at consulting party meetings, provided input and comments on the PA, and/or has expressed an interest in continuing to participate in Section 106 consultations with Fort Irwin.

**In Consultation** – For the purposes of this PA, “in consultation” in consultation with the SHPO, culturally affiliated federally recognized Tribes, and other interested consulting parties.

### **Types of Cultural Resources**

**Cultural Resources** – Under AR 200-1, the Army defines cultural resources as historic properties as defined by the NHPA, cultural items as defined by NAGPRA, archaeological resources as defined by ARPA, sacred sites as defined in EO 13007 to which access is afforded under AIRFA, significant

paleontological items as described by 16 USC 431-433 (Antiquities Act of 1906), and collections and associated records as defined in 36 CFR 79.

**Historic Properties** – Any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places (NRHP) maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties.

**Properties of Traditional Religious and Cultural Importance/Significance (PRTCI)** – a subset of Traditional Cultural Properties, associated specifically with Tribes.

**Traditional Cultural Property (TCP)** – the National Park Service defines a TCP as “a property that is eligible for inclusion in the NRHP based on its associations with the cultural practices, traditions, beliefs, lifeways, arts, crafts, or social institutions of a living community. TCPs are rooted in a traditional community’s history and are important in maintaining the continuing cultural identity of the community” (see also National Register Bulletin 38). While often associated with Tribes, TCPs may also be associated with other cultural groups.

**Tribal Cultural Resources (TCR)** – the California Environmental Quality Act (Section 21074) defines these resources as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe” that are listed in or determined eligible for the California Register of Historical Resources or a local historical resources register. The category also includes resources determined by the lead agency at its discretion and supported by substantial evidence to meet at least one of the National Register of Historic Places criteria (PRC 5024.1(c)).

### **Monitoring and Related Topics**

**Monitoring (Archaeological)** – project monitoring conducted during project implementation by Fort Irwin employees or contractors to fulfill the following purposes, in accordance with SOP 10:

1. Identifying (and documenting and protecting) potential historic properties where pre-implementation survey could not be completed effectively.
2. Ensuring that protection measures for historic properties are carried out.
3. Evaluating the effectiveness of a subsurface testing strategy applied to a site that was determined ineligible.
4. Evaluating the effectiveness of a subsurface testing strategy applied to a project area, where no subsurface resources were identified despite an unusually high potential.

**Off-Limits Monitoring** – Fort Irwin conducts Off-Limits Monitoring of historic properties on a regular schedule. The frequency is set depending upon the degree to which the site is at risk of damage from human activities, with most of the sites monitored annually or twice per year. The monitoring interval is re-evaluated during each monitoring cycle for the site, and adjusted as needed according to changing risk levels. Historic properties that are not considered to be at risk at a given time may not receive monitoring on a regular schedule.

**Project Monitoring (Tribal)** – project monitoring conducted during project implementation by tribal monitors to identify and communicate tribal concerns/assist with the identification of cultural resources important to Tribes. It should be noted that the Army does not currently provide funding for tribal monitors, and Fort Irwin prefers (in keeping with written tribal comments regarding this PA) to identify and address concerns prior to project implementation. The latter approach recognizes that Tribal representatives can

offer traditional knowledge not available from other sources, and that it is important to incorporate it at the earliest possible stage in project planning.

**Site Monitoring** – monitoring associated with specific projects (e.g., to determine site condition, fill in apparent gaps in the site record) or for cultural resources purposes.

**Tribal Participation** – based on tribal consultation conducted for this Programmatic Agreement, tribal participation is defined as activities that allow the Tribes to learn more about potential historic properties managed by Fort Irwin, and for Fort Irwin to learn about these properties from the Tribes.

## Attachment A

### Examples of Military Training Activities and Support Operations

Tables 1 and 2 include examples of the military training activities and civilian support operations that may occur at Fort Irwin and are consistent to the activities and operations analyzed in the Environmental Impact Statement for Military Training and Public Land Withdrawal Extension. This attachment covers the activities and infrastructure associated with military training at Fort Irwin, and the associated support operations. The amount of disturbance that may occur varies based on the activities and operations location, intensity, and extent.

**Table 1. Examples of Military Training Activities at Fort Irwin**

| <b>Maneuver Training</b>   |   |  |
|--|---|--|
| <i>Tactical exercise that is carried out in the air or on the ground to imitate combat.</i>    |   |  |
| <b>Activity</b>  | <b>Description</b>  | <b>Location</b>  |
| Mounted Maneuver   | Includes the movement of troops and the use of heavy mechanized vehicles, such as tanks, High Mobility Multipurpose Wheeled Vehicles, and paladins. | <ul style="list-style-type: none"> <li>• Northern Corridor</li> <li>• Central Corridor</li> <li>• Southern Corridor</li> <li>• Eastern Training Area</li> <li>• Western Training Area</li> </ul>                       |
| Aviation   | Aviation operations include the use of drop zones and landing zones, aerial supply, and evacuation.   | <ul style="list-style-type: none"> <li>• Northern Corridor</li> <li>• Central Corridor</li> <li>• Southern Corridor</li> <li>• Eastern Training Area</li> <li>• Western Training Area</li> </ul>                       |
| Fire and Movement  | Activities involving mortars, field artillery, close combat attack and close air support integration and the tactical movement of combat forces.    | <ul style="list-style-type: none"> <li>• Northern Corridor</li> <li>• Central Corridor</li> <li>• Southern Corridor</li> <li>• Eastern Training Area</li> <li>• Western Training Area</li> <li>• Leach Lake</li> </ul> |
| <b>Maneuver Support Operations</b>   |   |  |
| <i>Integrates the reinforcing capabilities of mobility, protection, and sustainment tasks.</i> |   |  |
| <b>Activity</b>  | <b>Description</b>  | <b>Location</b>  |
| Engineer Support   | Engineer units construct roadways, berm obstacles, anti-tank ditches, or runways in support of the larger unit mission.                             | <ul style="list-style-type: none"> <li>• Northern Corridor</li> <li>• Central Corridor</li> <li>• Southern Corridor</li> <li>• Eastern Training Area</li> <li>• Western Training Area</li> </ul>                       |

|   |  |  |
|---|--|--|
| Explosive Ordnance Disposal (EOD)   | Specially trained EOD units detect, identify, evaluate, and render safe unexploded ordnance.   | <ul style="list-style-type: none"> <li>Northern Corridor</li> <li>Central Corridor</li> <li>Southern Corridor</li> <li>Eastern Training Area</li> <li>Western Training Area</li> </ul>                           |
| Chemical, Biological, Radiological, and Nuclear (CBRN)  | Operations that employ tactical capabilities to counter the entire range of CBRN threats and hazards through weapons of mass destruction proliferation prevention, weapons of mass destruction counterforce, CBRN defense, and CBRN consequence management activities. Training does not involve viable CBRN agents. | <ul style="list-style-type: none"> <li>Northern Corridor</li> <li>Central Corridor</li> <li>Southern Corridor</li> <li>Eastern Training Area</li> <li>Western Training Area</li> </ul>                           |
| Cyber   | These activities occur in cyberspace, which includes the Internet, telecommunications networks, computer systems, and embedded processors and controllers.   | <ul style="list-style-type: none"> <li>Northern Corridor</li> <li>Central Corridor</li> <li>Southern Corridor</li> <li>Eastern Training Area</li> <li>Western Training Area</li> <li>Cantonment</li> </ul>       |
| Unmanned Aircraft Systems (UAS)   | Training activities involving an aircraft that does not carry a human operator and is capable of flight with or without human remote.  | <ul style="list-style-type: none"> <li>Northern Corridor</li> <li>Central Corridor</li> <li>Southern Corridor</li> <li>Eastern Training Area</li> <li>Western Training Area</li> <li>NASA Goldstone</li> </ul>   |
| <p style="text-align: center;"><b>Sustainment</b></p> <p><i>Sustainment training replicates the various challenges faced when deployed, including the provisions of logistics, personnel services, and health services necessary to maintain operations until successful mission completion. Sustainment units provide support to local units located in, or passing through, their assigned areas.</i></p> |  |  |
|   | Description  | Location   |
| Rearming  | Replenishing ammunition supplies to support combat operations.   | <ul style="list-style-type: none"> <li>Northern Corridor</li> <li>Central Corridor</li> <li>Southern Corridor</li> <li>Eastern Training Area</li> <li>Western Training Area</li> </ul>                           |
| Refueling   | Replenishing fuel supplies, which is a temporary facility organized, equipped, and deployed as a far forward or widely dispersed, as tactically feasible to provide fuel and ammunition necessary for the sustainment of aviation maneuver units in combat.  | <ul style="list-style-type: none"> <li>Northern Corridor</li> <li>Central Corridor</li> <li>Southern Corridor</li> <li>Eastern Training Area</li> <li>Western Training Area</li> <li>Eastern Corridor</li> </ul> |
| Field Maintenance   | System maintenance and repair.   | <ul style="list-style-type: none"> <li>Northern Corridor</li> <li>Central Corridor</li> </ul>  |

|   |  |  |
|---|--|--|
|   |  | <ul style="list-style-type: none"> <li>• Southern Corridor</li> <li>• Eastern Training Area</li> <li>• Western Training Area</li> <li>• Eastern Corridor</li> </ul>                              |
| Medical   | Army Health System support provided across the range of military operations and various types of missions.   | <ul style="list-style-type: none"> <li>• Northern Corridor</li> <li>• Central Corridor</li> <li>• Southern Corridor</li> <li>• Eastern Training Area</li> <li>• Western Training Area</li> </ul> |
| Military Working Dogs   | Working dog teams are used in garrison and combat support missions including area security; movement and mobility support operations; law and order; and force protection, including narcotic, human, landmine, firearm, ammunition, and explosive detection | <ul style="list-style-type: none"> <li>• Northern Corridor</li> <li>• Central Corridor</li> <li>• Southern Corridor</li> <li>• Eastern Training Area</li> <li>• Western Training Area</li> </ul> |
| <p style="text-align: center;"><b>Special Forces Operations</b></p> <p><i>Require unique modes of employment, tactical techniques, equipment and training. Often these operations are time sensitive, clandestine, low visibility, and conducted with and/or through indigenous forces, which require forces who are organized, trained, and equipped to conduct and/or support special operations.</i></p> |  |  |
| Airborne Operations   | Involves the movement of Special Forces (SF) units by air.   | <ul style="list-style-type: none"> <li>• Northern Corridor</li> <li>• Central Corridor</li> <li>• Southern Corridor</li> <li>• Eastern Training Area</li> <li>• Western Training Area</li> </ul> |
| Joint Precision Air Drop System (JPADS)   | Provides rapid, precise, high-altitude delivery capabilities that do not rely on ground transportation.  | <ul style="list-style-type: none"> <li>• Northern Corridor</li> <li>• Central Corridor</li> <li>• Southern Corridor</li> <li>• Eastern Training Area</li> <li>• Western Training Area</li> </ul> |
| High angle movement   | A form of dismounted movement used to operate across steep and complex mountainous terrain and may involve technical climbing and repelling.   | <ul style="list-style-type: none"> <li>• Northern Corridor</li> <li>• Central Corridor</li> <li>• Southern Corridor</li> <li>• Eastern Training Area</li> <li>• Western Training Area</li> </ul> |
| <p style="text-align: center;"><b>Non-Rotational Training</b></p> <p><i>Home station units, other DoD organizations (Marine Corps, Navy, Air Force, National Guard, and Reserve Component) and law enforcement may also use the training areas to accomplish mission essential training when not being occupied for rotational training.</i></p>  |  |  |
| USAF Task Force Operations  | USAF Task Force Operations involves combat aircraft engaged in close air support and other offensive air operations.   | <ul style="list-style-type: none"> <li>• Northern Corridor</li> <li>• Central Corridor</li> <li>• Southern Corridor</li> <li>• Eastern Training Area</li> </ul>                                  |

|  |  |  |
|--|--|--|
|  |  | <ul style="list-style-type: none"> <li>• Western Training Area</li> </ul>  |
| Personnel Recovery Operations                    | Combat search and rescue and civil efforts to prepare for, and execute, the recovery of isolated personnel.  | <ul style="list-style-type: none"> <li>• Northern Corridor</li> <li>• Central Corridor</li> <li>• Southern Corridor</li> <li>• Eastern Training Area</li> <li>• Western Training Area</li> </ul> |
| Home Station Off-rotation Training               | These activities include other Fort Irwin units using the training areas when they are not being used for rotational training.   | <ul style="list-style-type: none"> <li>• Northern Corridor</li> <li>• Central Corridor</li> <li>• Southern Corridor</li> <li>• Eastern Training Area</li> <li>• Western Training Area</li> </ul> |
| Other Organization Austere Training Requirements | Joint military branches, Army Reserve, National Guard units, regular and transitional law enforcement units use the training areas when they are not being used for rotational training. | <ul style="list-style-type: none"> <li>• Northern Corridor</li> <li>• Central Corridor</li> <li>• Southern Corridor</li> <li>• Eastern Training Area</li> <li>• Western Training Area</li> </ul> |

**Table 2. Examples of Civilian Support Operations at Fort Irwin**

| <b>Civilian Maneuver Support Operations: Integrated Training Area Management</b><br><i>Provides land maintenance support that allows training activities to continue.</i> |   |  |
|---|---|--|
| Activity  | Description   | Location   |
| Range and Training Land Assessment  | Personnel monitor permanent plots, map heavy use areas, monitor trails and culverts, and assess fire risk, in order to track training land conditions. Actions include driving trail networks, driving around the perimeter of heavy use sites, and walking transects (currently at 100-meter spacing) to collect small soil samples.   | <ul style="list-style-type: none"> <li>• Northern Corridor</li> <li>• Central Corridor</li> <li>• Southern Corridor</li> <li>• Eastern Training Area</li> <li>• Western Training Area</li> </ul> |
| Off Limits Marking  | Completed to install and maintain markings at off limits areas, hazardous sites, and similar areas. Activities include installing, repairing (as applicable), and removing metal pickets, with or without barbed wire; “dragon’s teeth” (angle iron obstacles set on the ground surface; sometimes called tank jacks); Seibert stakes and signs; and boulders and other surface barriers (to block trails). Actions include driving around sensitive areas; however, off limit areas are designed to avoid disturbances to historic properties. | <ul style="list-style-type: none"> <li>• Northern Corridor</li> <li>• Central Corridor</li> <li>• Southern Corridor</li> <li>• Eastern Training Area</li> <li>• Western Training Area</li> </ul> |
| Maneuver Area Clearance   | Involves removal of old obstacles and debris to facilitate maneuvers. Activities may consist of picking up and hauling off flattened cars, old pickets, wire, scrap metal, etc. Activities involve vehicle operation/road use and shallow disturbance (such as not to exceed six (6) inches) typically in previously disturbed areas.   | <ul style="list-style-type: none"> <li>• Northern Corridor</li> <li>• Central Corridor</li> <li>• Southern Corridor</li> <li>• Eastern Training Area</li> <li>• Western Training Area</li> </ul> |

Programmatic Agreement Among the Department of the Army National Training Center and Fort Irwin, the California State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding Military Training Activities and Support Operations at Fort Irwin and the Manix Trail, San Bernardino County, California

|                      |  |  |
|----------------------|--|--|
| Training Land Repair | Fix maneuver damage that creates safety or environmental hazards or limits training. Personnel may plant vegetation, construct v-shaped catchments, construct erosion-control features (such as rock wattles, straw wattles, rock check dams, and detention basins), create berms, sand fencing (such as wooden slat or construction fencing, placed on the surface with t-posts placed for support), ripping/disking, leveling, and amendment. Amendment involves adding materials—such as rice hulls or perlite—to make the soil more friable.     | <ul style="list-style-type: none"> <li>• Northern Corridor</li> <li>• Central Corridor</li> <li>• Southern Corridor</li> <li>• Eastern Training Area</li> <li>• Western Training Area</li> </ul> |
| Site Stabilization   | Maintenance of training lands to prevent deterioration to unsafe conditions. Personnel complete seeding, application of straw or gravel mulch, and watering of the root crowns of damaged shrubs. May involve shallow disturbances associated with heavy equipment operation in previously disturbed areas.  | <ul style="list-style-type: none"> <li>• Northern Corridor</li> <li>• Central Corridor</li> <li>• Southern Corridor</li> <li>• Eastern Training Area</li> <li>• Western Training Area</li> </ul> |
| Site Improvement     | Reconfigure and improve frequently used sites to encourage and support future training use. Activities may include leveling, erosion control, application of gravel mulch, dust control, installation of berms, and perimeter control (using signs, rocks, berms, misc.).  | <ul style="list-style-type: none"> <li>• Northern Corridor</li> <li>• Central Corridor</li> <li>• Southern Corridor</li> <li>• Eastern Training Area</li> <li>• Western Training Area</li> </ul> |
| Site Maintenance     | Maintenance of previously implemented work. Activities may include monitoring plant survival, maintenance watering, repair to erosion control structures, removal of plant cages, and removal of site markings. Limited to disturbed areas.  | <ul style="list-style-type: none"> <li>• Northern Corridor</li> <li>• Central Corridor</li> <li>• Southern Corridor</li> <li>• Eastern Training Area</li> <li>• Western Training Area</li> </ul> |
| Trail Improvement    | Involves upgrades, improvements, and repair to secondary trails to support continued use. May include grading; installation of check dams, level spreaders, gabions (at washouts); filling and capping rough spots; and installation of low-water crossings, culverts, geoweb (mesh which will have local or non-local sediments placed within its cells), or wood chips. Improvements typically limited to the footprint of established trails with a buffer to account for features such as upslope erosion control and downslope water diversion. | <ul style="list-style-type: none"> <li>• Northern Corridor</li> <li>• Central Corridor</li> <li>• Southern Corridor</li> <li>• Eastern Training Area</li> <li>• Western Training Area</li> </ul> |
| Trail Maintenance    | Maintenance of secondary trails in safe condition for training use. Includes light grading, small erosion control repairs, watering, and dust control. Generally limited to areas already disturbed.   | <ul style="list-style-type: none"> <li>• Northern Corridor</li> <li>• Central Corridor</li> <li>• Southern Corridor</li> <li>• Eastern Training Area</li> <li>• Western Training Area</li> </ul> |



| <b>Civilian Maneuver Support Operations: Range</b><br><i>Associated with ongoing maintenance of training areas.</i> |  |  |
|---|--|--|
| <b>Activity</b>   | <b>Description</b>   | <b>Location</b>  |
| Unexploded Ordnance Detection, Detonation, and Removal (Surface)  | This activity is removal of surface/shallowly buried unexploded ordnance throughout the base. If it is safe to do so, munitions may be detonated in place. If not, they will be removed and shipped off-base, in accordance with federal safety guidelines.  | <ul style="list-style-type: none"> <li>• Northern Corridor</li> <li>• Central Corridor</li> <li>• Southern Corridor</li> <li>• Eastern Training Area</li> <li>• Western Training Area</li> </ul>                             |
| Unexploded Ordnance Detection, Detonation, and Removal  | Intended to maintain safety for range use. This activity is removal of ordnance from existing ranges. Limited areas (may walk a grid). May reach a depth of several feet.  | <ul style="list-style-type: none"> <li>• Northern Corridor</li> <li>• Central Corridor</li> <li>• Southern Corridor</li> <li>• Eastern Training Area</li> <li>• Western Training Area</li> </ul>                             |
| Main Route Repair and Maintenance   | Work necessary to repair or maintain approximately 440 miles of roads. Work is generally limited to existing corridors.  | <ul style="list-style-type: none"> <li>• Northern Corridor</li> <li>• Central Corridor</li> <li>• Southern Corridor</li> <li>• Eastern Training Area</li> <li>• Western Training Area</li> <li>• Eastern Corridor</li> </ul> |
| Town and Logistical Staging Area Structure Relocations  | Providing structures for logistical facilities as training scenarios change. Removal, transportation, and/or relocation of structures, including storage containers and tents, and associated ground preparation. Generally limited to areas within or in the immediate vicinity of mock towns, logistical areas, and bivouac (temporary camp) areas, which may include airfields and machine shops. | <ul style="list-style-type: none"> <li>• Northern Corridor</li> <li>• Central Corridor</li> <li>• Southern Corridor</li> <li>• Eastern Training Area</li> <li>• Western Training Area</li> <li>• Eastern Corridor</li> </ul> |
| Berm Construction, Maintenance, and Removal   | Construct, maintain, and remove berms at site-specific locations. Intended to control water, protect targets, etc.   | <ul style="list-style-type: none"> <li>• Northern Corridor</li> <li>• Central Corridor</li> <li>• Southern Corridor</li> <li>• Eastern Training Area</li> <li>• Western Training Area</li> </ul>                             |
| Obstacle Removal  | Assist with filling in tank traps when a training unit departs to prepare training areas for future use. Involves limited areas having previous disturbances.  | <ul style="list-style-type: none"> <li>• Northern Corridor</li> <li>• Central Corridor</li> <li>• Southern Corridor</li> <li>• Eastern Training Area</li> <li>• Western Training Area</li> </ul>                             |
| Barrier Movement  | Intended to protect infrastructure, provide for safety by restricting access to training areas, adapt to changing training scenarios. Moving fences and other barriers; sign installation. Typically placed  | <ul style="list-style-type: none"> <li>• Northern Corridor</li> <li>• Central Corridor</li> <li>• Southern Corridor</li> </ul>   |

Programmatic Agreement Among the Department of the Army National Training Center and Fort Irwin, the California State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding Military Training Activities and Support Operations at Fort Irwin and the Manix Trail, San Bernardino County, California

|   |  |   |
|---|--|---|
|   | in existing locations or may have minor disturbance.   | <ul style="list-style-type: none"> <li>• Eastern Training Area</li> <li>• Western Training Area</li> </ul>  |
| Flood Mitigation  | Prevent future flooding of towns and logistical staging areas. Activities may include grading to redirect water; typically limited to small areas.   | <ul style="list-style-type: none"> <li>• Northern Corridor</li> <li>• Central Corridor</li> <li>• Southern Corridor</li> <li>• Eastern Training Area</li> <li>• Western Training Area</li> </ul>                      |
| <p align="center"><b>Civilian Maneuver Support Operations: Communications</b><br/> <i>Management of communication infrastructure in support of training.</i></p> <p><i>(Other towers are maintained on base, by various agencies, for other purposes. Currently, 19 are directly related to training. Additional towers may be added within the Western Training Area.)</i></p> |  |   |
| Tower Maintenance   | Maintain towers in functional condition. Includes modifications, painting, and reinforcement of existing towers.   | <ul style="list-style-type: none"> <li>• Northern Corridor</li> <li>• Central Corridor</li> <li>• Southern Corridor</li> <li>• Eastern Training Area</li> <li>• Western Training Area</li> <li>• Goldstone</li> </ul> |
| Fiber Optic Lines   | Maintain approximately 500 miles of buried fiber optic line associated with training. Repairs could result in ground disturbance in the footprint of the previous disturbance. Vaults are accessed for maintenance, which may require removal of sediments covering the vaults. (New lines would require new trenching.) | <ul style="list-style-type: none"> <li>• Northern Corridor</li> <li>• Central Corridor</li> <li>• Southern Corridor</li> <li>• Eastern Training Area</li> <li>• Western Training Area</li> <li>• Goldstone</li> </ul> |

## **Attachment B**

### **Activities Determined to Have No Effect to Historic Properties**

As defined for Section 106 purposes, historic properties include prehistoric and historic-era buildings, structures, objects, sites, and districts, that are listed in or eligible for inclusion in the National Register of Historic Places (NRHP). For purposes of this attachment, non-historic-era refers to buildings, structures, and objects less than 45 years of age. While Section 106 applies specifically to historic properties, Fort Irwin recognizes that Tribes may define their cultural heritage more broadly. For example, the Fort Mojave Indian Tribe provided the following definition:

Cultural resources and properties of traditional religious and cultural importance include both tribal values and archaeological, historical, cultural, and sacred sites. These elements involve tribal cultural values embodied within both tangible and intangible domains. Traditional Cultural Properties (TCPs), Ethnographic Landscapes, cultural landscapes, archaeological sites and districts, objects, and places of natural and spiritual sacred significance, are the main components of Native American cultural heritage.

While other laws and regulations may be pertinent to some of these concepts, Section 106 articulates with the definition above in several ways, although its focus remains on tangible domains and locations.

The activities listed below have been determined by Fort Irwin, the State Historic Preservation Officer (SHPO), the Fort Mojave Indian Tribe, the Yuhaaviatam of San Manuel Nation, the Timbisha Shoshone Tribe, and the Advisory Council on Historic Preservation to have no effect to historic properties, pursuant to 36 Code of Federal Regulations Part 800.3(a)(1), and do not require further Section 106 of the National Historic Preservation Act (Section 106) review, so long as the activity is limited to the types listed below and is not a part of a larger undertaking that requires Section 106 review. If at any time in the course of the activity information becomes available that would make this procedure inapplicable, including but not limited to inadvertent (referring to human remains or funerary objects) or post-review discoveries, Fort Irwin shall initiate Section 106 review or the Native American Graves Protection and Repatriation Act protocol in accordance with Stipulations VII and VIII and SOPs 7 and 8 of the Programmatic Agreement.

Generally, considerations in defining these activities include whether (1) the area of potential effects (APE) has been completely and adequately surveyed (limited areas cannot be surveyed for human health and safety reasons); (2) there is a low potential for intact buried cultural resources to exist based on a review of previously conducted investigations, site records, or geological information (including but not limited to soils, geomorphology, geoarchaeological, and geochronological data); (3) no concerns are raised by information previously provided by the Tribes, or by historic maps, and similar information; and (4) no known historic properties are present, or effects to historic properties can be avoided with project design, as needed. Discussions of historic buildings and infrastructure apply mainly to the greater cantonment area of Fort Irwin.

Additionally, training will not occur in certain areas. (Other activities may occur and will be covered by standard Section 106 consultation until a PA covering them is in place.) These areas include sensitive natural resource areas and historic properties, desert tortoise mitigation lands outside the main boundary of Fort Irwin, a potential well location south of Fort Irwin (this location could be associated with training support activities at some future date), and playas or dry lake beds/other areas of high dust potential. The areas that have been previously surveyed along with the areas off-limits to training are depicted in Attachment C (Figure 2). Fort Irwin will continue to update this map as part of the Annual Report, in accordance with Stipulation X of the PA.

Programmatic Agreement Among the Department of the Army National Training Center and Fort Irwin, the California State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding Military Training Activities and Support Operations at Fort Irwin and the Manix Trail, San Bernardino County, California

**A. General**

**Activities that do not require review by the CRM:**

1. Actions that are a continuation or an extension of existing training activities without changes in areas used or increases in the intensity of use. This does NOT apply if there are changes in maneuver intensity or in the types of equipment/machinery employed.
2. Installation of stormwater sampling equipment in the floors of active washes or arroyos.
3. Continued use of existing roads, test courses, gun positions, and test sites for routine test activities where operations are limited to existing facilities and no new ground disturbance will occur.
4. Tours of Fort Irwin offered to visitors, military, and non-military personnel, provided no ground disturbance occurs and vehicle use is limited to existing roads and trails and the tours do not involve revealing Controlled Unclassified Information (involving locations and site components) pertinent to cultural resources.

**Activities that require review by the CRM (to determine whether the qualifying conditions apply):**

**The following apply only in areas where complete survey coverage of the APE has occurred at an interval reasonably expected to identify any historic properties that may be present (not greater than 30 meters) with no historic properties or unevaluated cultural resources (other than isolates), present. Newly created access routes and staging areas are a part of the APE.**

1. Removal or in-place disposal of unexploded ordinance.
2. Activities required and regulated by the California Department of Toxic Substances Control and the Department of the Army's Defense Environmental Restoration Program. These include background research; geophysical characterization; and remediation of Solid Waste Management Units, Military Munitions Response Program locations, and Comprehensive Environmental Response, Compensation, and Liability Act locations. May include ground-disturbing activities such as installation of monitoring equipment, soil sampling, coring, or boring
3. Operations within currently permitted landfills that are in active use, dump and disposal areas, and borrow pits, provided there is no horizontal or subsurface vertical expansion, or, for subsurface expansion, the material is rock or is too old to contain in situ cultural deposits. If soils from a location on Fort Irwin (e.g., from a borrow pit) are to be used for capping an archaeological site, then those soils shall require archaeological survey prior to their use unless the soils come from a permitted borrow pit that has been previously adequately surveyed with no site deposits identified. (Does not apply to historic-era landfills, dumps, and disposal areas that are not in current use.)
4. Continued use of small arms impact areas for small arms range activities, including repair and maintenance of existing targets. New uses within existing dig restriction areas or changes in the range boundaries or firing direction require survey and cultural resources investigations, and the APE includes any potential backstop locations. Does not apply to historic-era ranges that qualify as historic properties, based on previous SHPO consultation.
5. Continued use of dedicated impact areas for routine military weapons testing and training. Does not apply to remediation or clean-up actions, or the relocation of existing targets or addition of new ones, unless relocation or addition of targets occur within the existing footprint of a target area. New uses within existing dig restriction areas. Does not apply to new uses within existing dig restriction areas.
6. Routine maintenance in-kind improvements and continued use of existing non-historic-era improved or unimproved roads, tank trails, or similar infrastructure where ground disturbance is limited to the existing previously maintained road and shoulders
7. Routine maintenance, including but not limited to sediment and debris removal or clean-outs, and minor repairs to non-historic-era ditches, culverts, or other water conveyance structures.

8. Studies, data collection, and monitoring (not associated with cultural resources activities, e.g. biological or geological), provided any ground disturbance is limited to completely and adequately surveyed areas and no historic properties have been previously identified.
9. Installation, replacement, and operation of above-ground and buried non-historic-era utility and communication systems such as fiber optics, natural gas, and single pole electric lines in existing Fort Irwin rights-of-way, easements, distribution systems, or facilities' footprints. Buried components shall be located within completely and adequately surveyed areas and outside the boundaries of any known historic properties. Access roads and staging areas must remain within completely and adequately surveyed areas or within existing staging and road surfaces.
10. Removal of dead, diseased, or damaged ornamental trees and shrubs, and trees and shrubs in the cantonment areas, with the following provisions. First, that the trees and shrubs are not a related feature in or a contributing element to a historic property based on previous SHPO consultation. Second, that they are either located in completely and adequately surveyed areas where no historic properties are present or effects to known historic properties can be avoided, or are within a developed area covered with hardscape or landscape materials, or that has been previously graded, or is used as an existing staging area.
11. Non-ground disturbing treatment for insect-infested plants and invasive species, provided the plants and invasive species are not a related feature in or a contributing element to a historic property based on previous SHPO consultation, with the following provisions. First, that the plants are not a related feature in or a contributing element to a historic property based on previous SHPO consultation. Second, that they are either located in completely and adequately surveyed areas where no historic properties are present or effects to known historic properties can be avoided, or are within a developed area covered with hardscape or landscape materials, or that has been previously graded, or is used as an existing staging area.

**B. Maintenance, Repair, Renovation, Replacement, New Construction, and Demolition**

**Activities that do not require review by the CRM:**

1. Removal of animals, birds, insects, and their associated debris from a component of the built environment, when there is no ground disturbance and the building or structure is not affected.
2. Routine debris removal and collection, including removal of snow, uprooted trees, and limbs and branches from Fort Irwin right-of-way areas, as well as the transport and disposal of such waste to landfills in current use. Does not apply to historic-era landfills that are not in continued use.
3. Tree and shrubbery trimming and mowing within the cantonment areas.

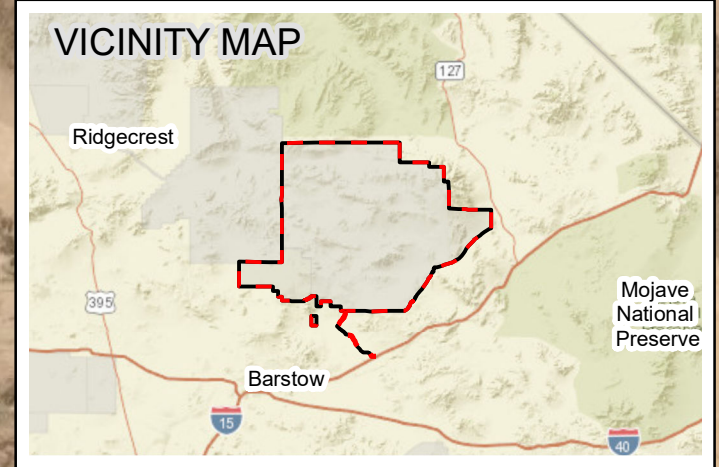
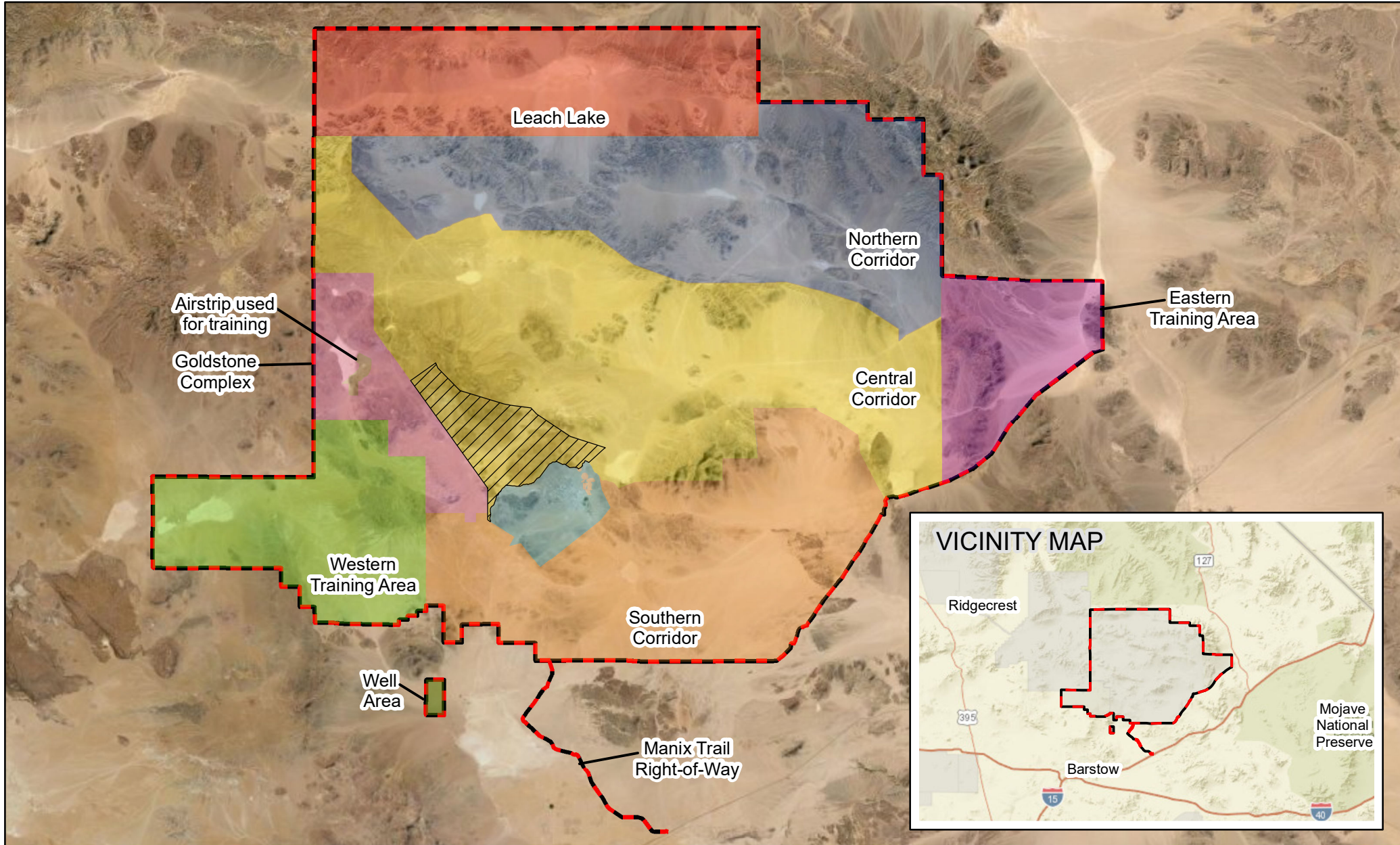
**Activities that require review by the CRM (to determine whether the qualifying conditions apply):**

**The following apply only in areas with complete previous survey of the area of potential effects (APE), at an interval (not greater than 30 meters) reasonably expected to identify any historic properties that may be present with no historic properties, or cultural resources that are not isolates and that still require SHPO concurrence and/or tribal consultation present. Newly created access routes and staging areas are a part of the APE.**

1. Repair or replacement of existing site improvements within developed areas of the cantonment and within the existing footprint of a facility. This includes but is not limited to roads, parking areas, fences, and signs.
2. Repair or replacement of existing water, electric, gas, sanitary, cable, and underground or surveyed areas or within existing footprints where the structures are not greater than 45 years old or have previously and in consultation with the SHPO been determined not eligible for the NRHP.
3. Disturbance involving a total area of less than one square meter, such as placement of fence posts.

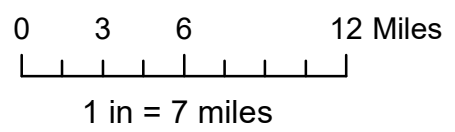
4. New construction or alterations to buildings and other above and below ground infrastructure, and related activities.
5. Maintenance, renovation, repair, and related activities to existing facilities and infrastructure not greater than 45 years old, and to those facilities older than 45 years but previously determined, in consultation with the SHPO, not eligible for listing in the NRHP.
6. Demolition of buildings and other infrastructure not greater than 45 years old or older than 45 years but previously determined not eligible for listing in the NRHP in consultation with the SHPO.
7. Stockpiling and staging of construction, road repair, and paving materials in completely and adequately surveyed areas where no historic properties are present or effects to known cultural resources will be avoided, or within a paved area.
8. Landscape activities and improvements within the main cantonment and associated with tree and shrubbery planting or removal; sod or artificial turf installation; irrigation installation and maintenance; rip rap, gravel, cobble, and boulder installation and removal; and pathway and trail construction and maintenance, in completely and adequately surveyed areas, within a developed area covered with hardscape or landscape materials, or in an area that has been previously graded, or used as an existing staging area, and in an area where no historic properties are present or effects to known historic properties will be avoided.
9. In-kind replacement of culvert systems beneath roads or within associated drainage systems, including provision of headwalls, riprap, and any modest increase in capacity, provided that the work substantially conforms to the existing footprint, is in completely and adequately surveyed areas, and is in an area where no historic properties are present (including the culvert system) or effects to known historic properties can be avoided.
10. Routine repair and maintenance of airfields and associated equipment, provided the relevant portion of the airfield has been completely and adequately surveyed, and is in an area where no historic properties are present or effects to known historic properties can be avoided.
11. Maintenance and repair to existing communications towers, provided that the tower does not qualify as a historic property, based on previous SHPO consultation, and the work does not diminish the setting, feeling, and association of a historic property. Additions to towers that meet the stated conditions, as long as they do not change the height or established footprint of the tower.





**Legend**

- Area of Potential Effects
- Fort Irwin Boundary
- Cantonment
- Range Complex








Service Layer Credits: ESRI Imagery and Street Map

Attachment C:  
**FIGURE 1**  
 Area of Potential Effects  
*Fort Irwin, CA*



## Legend

-  Area of Potential Effects
-  2021 Completed Survey (report pending)
-  Previously Conducted Survey Areas
-  Previously Conducted Survey Areas (report pending)
-  Off-Limits/Non-Maneuver Areas

*Off-Limits/Non-Maneuver Areas consist of portions of Fort Irwin that are not available for training, and typically include sensitive natural resources or historic properties, desert tortoise mitigation lands, a potential well location, or playas (dry lake beds) or other areas of high dust potential.*

Outlines thickened slightly to show more survey details.



0 2 4 8 Miles

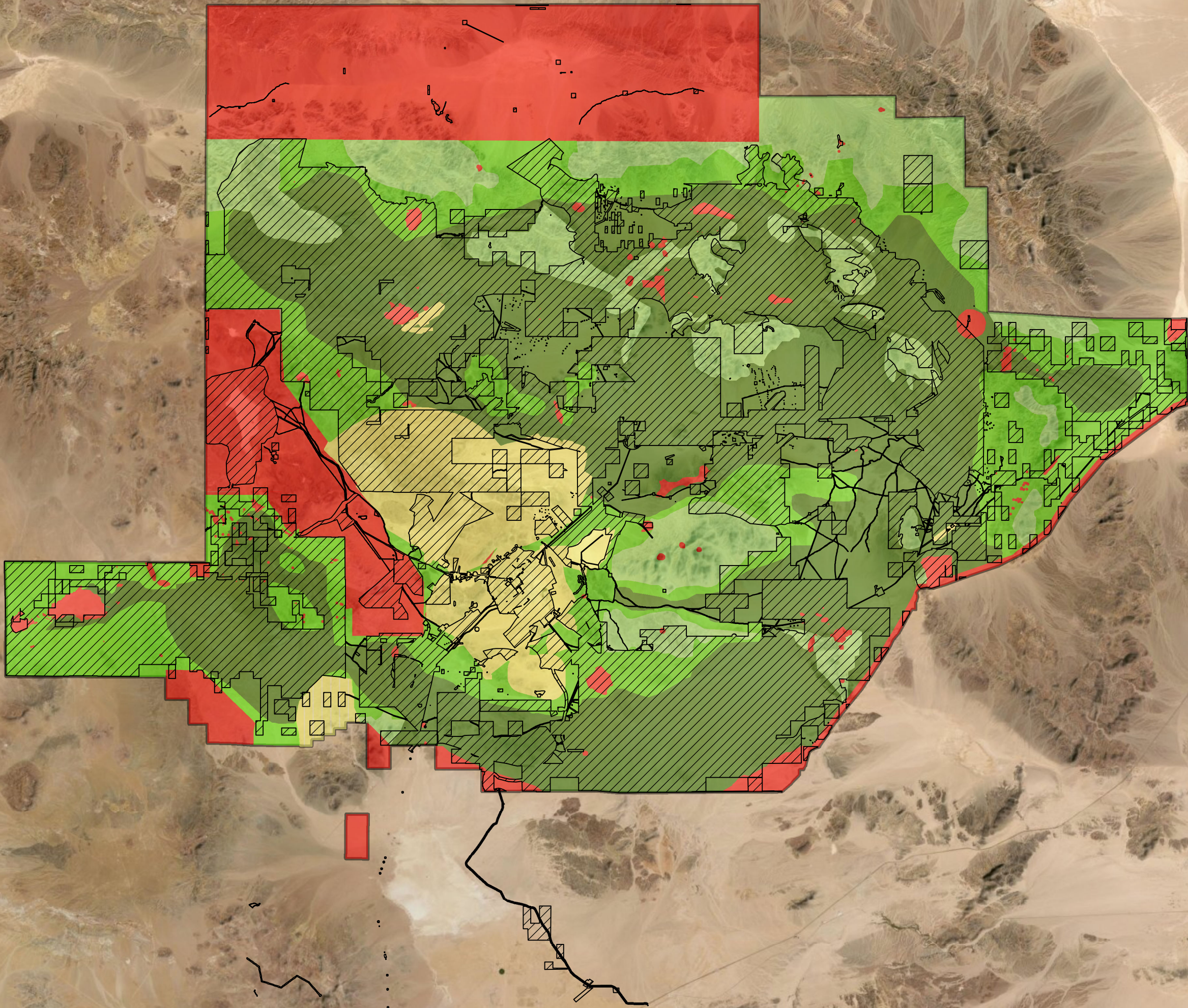
1 in = 4 miles

Attachment C:


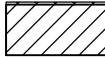


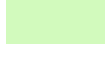


### FIGURE 2

Previously Conducted Cultural Resources Survey and Off-Limits/Non-Maneuver Areas  
Fort Irwin, CA

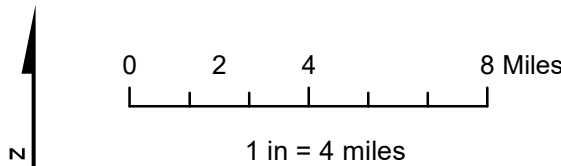




## Legend

-  Area of Potential Effects
-  Previously Conducted Survey Areas
-  High Maneuver Intensity
-  Medium Maneuver Intensity
-  Low Maneuver Intensity
-  Restricted/Limited-Maneuver
-  Off-Limits/Non-Maneuver Areas

**High-Maneuver Intensity:** Unlimited cross-country movement by all vehicle types;  
**Medium-Maneuver Intensity:** Movement by all vehicle types restricted to roads, staging or assembly areas;  
**Low-Maneuver Intensity:** All vehicle types on roads, dismounted traffic (e.g., foot soliders) off roads, and no staging areas. Restrictions due to terrain constraints;  
**Restricted/Limited-Maneuver:** All vehicle types on roads, dismounted traffic off roads, and no staging areas. Restrictions due to administrative constraints.  
**Off-Limits/Non-Maneuver Areas:** No entry to vehicles except as authorized. Includes desert tortoise mitigation lands.



Attachment C:  
**FIGURE 3**  
Maneuver Intensity Areas and Survey Areas  
Fort Irwin, CA





## Legend

 Area of Potential Effects

 Fort Irwin Boundary

Note: all lakes are currently playas.



0 3 6 12 Miles

1 in = 7 miles

Service Layer Credits: ESRI Imagery and Street Map

Attachment C:  
**FIGURE 4**  
Setting  
*Fort Irwin, CA*

**Attachment D**  
**Consulting Party Participant Lists**

The following presents the invited participants for the six (6) consulting party meetings that were held on February 5, 2021; March 11, 2021; April 16, 2021; May 20, 2021; June 30, 2021; and March 28, 2022. Names that are included in **bold** indicate attendance at each meeting. Due to COVID-19, these meetings were virtually via Microsoft Teams and telephone.

February 5, 2021 meeting, 12:30 PM to 2:00 PM, PST

- **Jessica Mauck, San Manuel Band of Mission Indians**
- **Ryan Nordness, San Manuel Band of Mission Indians**
- **Dawn Duncan-Hubbs, Fort Mojave Indian Tribe**
- Linda Otero, Fort Mojave Indian Tribe
- **Ann Brierty, Morongo Band of Mission Indians**
- **Kathy Jefferson Bancroft, Lone Pine Paiute Tribe**
- Danelle Gutierrez, Big Pine Paiute Tribe of the Owens Valley
- **Sean Scruggs, Fort Independence Indian Reservation**
- Judy Stapp, Cabazon Band of Mission Indians
- Bridget Sandate, Chemehuevi Indian Tribe
- Brian Etsitty, Colorado River Indian Tribe
- Barbara Durham, Timbisha Shoshone Tribe
- Monty Bengochia, Bishop Paiute Tribe
- Robert Robinson, Kern Valley Indian Community
- **Rachael Mangum, Advisory Council on Historic Property**
- **Tristan Tozer, California Office of Historic Preservation**
- Duane Marti, California Office of Historic Preservation
- **Meg Frisbie, National Park Service**
- **Steve Slaten, NASA**
- **Christian Benitez, NASA Contractor**
- James Shearer, Bureau of Land Management
- Nancy Pahr, NAWA China Lake
- Kish LaPierre, Nellis Air Force Base
- Lynn Wulf, IMCOM
- **Kelly Norwood, USAEC**
- **Karl Kleinbach, USAEC**
- **Jennifer Aaron, USAEC**
- **Colonel Jeanette Martin, Fort Irwin**
- **Colonel Carl Michaud, NTC**
- **Derrick Pace, Fort Irwin**
- **Chris Woodruff, Fort Irwin**
- **Penn Craig, Fort Irwin**
- **Brenda Reed, Fort Irwin**
- **Ron Gardner, Fort Irwin (G3)**

- **Eric Negrete, Fort Irwin (G3)**
- Irene Arregui, Fort Irwin
- **Dave Davis, Fort Irwin**
- **Dave Housman, Fort Irwin**
- **Crystal Darnell, USACE**
- **Kira Zender, Jacobs Engineering Group**
- **Michelle Rau, Jacobs Engineering Group**
- **Jeremy Hollins, Jacobs Engineering Group**
- **Emily Gulick, Jacobs Engineering Group**

March 11, 2021 meeting, 1:30 PM to 3:00 PM, PST

- Jessica Mauck, San Manuel Band of Mission Indians
- **Ryan Nordness, San Manuel Band of Mission Indians**
- **Dawn Duncan-Hubbs, Fort Mojave Indian Tribe**
- **Linda Otero, Fort Mojave Indian Tribe**
- **Ann Brierty, Morongo Band of Mission Indians**
- Kathy Jefferson Bancroft, Lone Pine Paiute Tribe
- Danelle Gutierrez, Big Pine Paiute Tribe of the Owens Valley
- **Sean Scruggs, Fort Independence Indian Tribe**
- Judy Stapp, Cabazon Band of Mission Indians
- Bridget Sandate, Chemehuevi Indian Tribe
- Brian Etsitty, Colorado River Indian Tribe
- Barbara Durham, Timbisha Shoshone Tribe
- Monty Bengochia, Bishop Paiute Tribe
- **Robert Robinson, Kern Valley Indian Council**
- **Rachael Mangum, Advisory Council on Historic Preservation**
- **Tristan Tozer, California State Office of Historic Preservation**
- Duane Marti, California State Office of Historic Preservation
- **Meg Frisbie, National Park Service, National Trails**
- Steve Slaten, NASA
- **Christian Benitez, Jet Propulsion Laboratory**
- James Shearer, Bureau of Land Management
- Nancy Pahr, NAWA China Lake
- Lynn Wulf, IMCOM
- **Kelly Norwood, USAEC**
- **Karl Kleinbach, USAEC**
- Jennifer Aaron, USAEC
- Colonel Jeanette Martin, Fort Irwin
- **Colonel Carl Michaud, NTC**
- **Steven Ryan, Fort Irwin**
- **Derrick Pace, Fort Irwin**
- **Chris Woodruff, Fort Irwin**
- **Penn Craig, Fort Irwin**
- **Brenda Reed, Fort Irwin**
- **Ron Gardner, G3**
- **Eric Negrete, G3**
- **Dave Davis, Fort Irwin**

- **Dave Housman, Fort Irwin**
- **Ruth Sparks, Fort Irwin**
- **Kira Zender, Jacobs Engineering Group**
- Michelle Rau, Jacobs Engineering Group
- **Jeremy Hollins, Jacobs Engineering Group**
- **Emily Gulick, Jacobs Engineering Group**
- **Steve Petron, Jacobs Engineering Group**

April 16, 2021 meeting, 10:30 AM to 12:00 PM, PST

- Jessica Mauck, San Manuel Band of Mission Indians
- **Ryan Nordness, San Manuel Band of Mission Indians**
- **Dawn Duncan-Hubbs, Fort Mojave Indian Tribe**
- **Linda Otero, Fort Mojave Indian Tribe**
- **Ann Brierty, Morongo Band of Mission Indians**
- **Molly Earp, Morongo Band of Mission Indians**
- Kathy Jefferson Bancroft, Lone Pine Paiute Tribe
- Danelle Gutierrez, Big Pine Paiute Tribe of the Owens Valley
- Sean Scruggs, Fort Independence Indian Tribe
- Judy Stapp, Cabazon Band of Mission Indians
- Bridget Sandate, Chemehuevi Indian Tribe
- Brian Etsitty, Colorado River Indian Tribes
- **Rena Van Fleet, Colorado River Indian Tribes**
- Barbara Durham, Timbisha Shoshone Tribe
- Monty Bengochia, Bishop Paiute Tribe
- **Robert Robinson, Kern Valley Indian Council**
- **Rachael Mangum, Advisory Council on Historic Preservation**
- **Tristan Tozer, California State Office of Historic Preservation**
- Duane Marti, California State Office of Historic Preservation
- **Meg Frisbie, National Park Service, National Trails**
- Steve Slaten, NASA
- **Christian Benitez, Jet Propulsion Laboratory (Contractor)**
- James Shearer, Bureau of Land Management
- Nancy Pahr, NAWA China Lake
- **Michael Chodoronek, USAF (Nellis)**
- Lynn Wulf, IMCOM
- Kelly Norwood, USAEC
- **Karl Kleinbach, USAEC**
- Jennifer Aaron, USAEC
- Colonel Jeanette Martin, Fort Irwin
- Colonel Carl Michaud, NTC
- Steven Ryan, Fort Irwin
- Derrick Pace, Fort Irwin
- Chris Woodruff, Fort Irwin
- **Penn Craig, Fort Irwin**
- **Brenda Reed, Fort Irwin**
- **Irene Arregui, Fort Irwin**
- Ron Gardner, G3

- **Mary Aguilar, G3 (for Ron Gardner)**
- Eric Negrete, G3
- Dave Davis, Fort Irwin
- **Dave Housman, Fort Irwin**
- **Ruth Sparks, Fort Irwin**
- **Kira Zender, Jacobs Engineering Group**
- Michelle Rau, Jacobs Engineering Group
- **Jeremy Hollins, Jacobs Engineering Group**
- Emily Gulick, Jacobs Engineering Group
- Steve Petron, Jacobs Engineering Group
- **Christina McDonough, Jacobs Engineering Group**

May 20, 2021 meeting, 1:00 PM to 2:30 PM, PST

- Jessica Mauck, San Manuel Band of Mission Indians
- **Ryan Nordness, San Manuel Band of Mission Indians**
- **Dawn Duncan-Hubbs, Fort Mojave Indian Tribe**
- Linda Otero, Fort Mojave Indian Tribe
- **Ann Brierty, Morongo Band of Mission Indians**
- **Molly Earp, Morongo Band of Mission Indians**
- Kathy Jefferson Bancroft, Lone Pine Paiute Tribe
- Danelle Gutierrez, Big Pine Paiute Tribe of the Owens Valley
- **Sean Scruggs, Fort Independence Indian Tribe**
- Judy Stapp, Cabazon Band of Mission Indians
- Bridget Sandate, Chemehuevi Indian Tribe
- Brian Etsitty, Colorado River Indian Tribe
- **Barbara Durham, Timbisha Shoshone Tribe**
- Monty Bengochia, Bishop Paiute Tribe
- Robert Robinson, Kern Valley Indian Council
- **Rachael Mangum, Advisory Council on Historic Preservation**
- **Tristan Tozer, California State Office of Historic Preservation**
- Duane Marti, California State Office of Historic Preservation
- Meg Frisbie, National Park Service, National Trails
- Steve Slaten, NASA Jet Propulsion Laboratory
- **Christian Benitez, NASA Jet Propulsion Laboratory (Contractor)**
- James Shearer, Bureau of Land Management
- Nancy Pahr, NAWA China Lake
- Lynn Wulf, IMCOM
- **Kelly Norwood, USAEC**
- Karl Kleinbach, USAEC
- Jennifer Aaron, USAEC
- Colonel Jeanette Martin, Fort Irwin
- **Colonel Carl Michaud, NTC**
- Steven Ryan, Fort Irwin
- Derrick Pace, Fort Irwin
- Brenda Reed, Fort Irwin
- **Chris Woodruff, Fort Irwin**
- **Irene Arregui, Fort Irwin**

- Penn Craig, Fort Irwin
- Ron Gardner, G3
- Eric Negrete, G3
- **Dave Davis, Fort Irwin**
- **Dave Housman, Fort Irwin**
- **Ruth Sparks, Fort Irwin**
- **Kira Zender, Jacobs Engineering Group**
- Michelle Rau, Jacobs Engineering Group
- **Jeremy Hollins, Jacobs Engineering Group**
- **Emily Gulick, Jacobs Engineering Group**
- Steve Petron, Jacobs Engineering Group

June 30, 2021, 11:00 AM to 12:30 PM, PST

- Jessica Mauck, San Manuel Band of Mission Indians
- Ryan Nordness, San Manuel Band of Mission Indians
- **Dawn Duncan-Hubbs, Fort Mojave Indian Tribe**
- Linda Otero, Fort Mojave Indian Tribe
- **Ann Brierty, Morongo Band of Mission Indians**
- **Molly Earp, Morongo Band of Mission Indians**
- Kathy Jefferson Bancroft, Lone Pine Paiute Tribe
- **Danelle Gutierrez, Big Pine Paiute Tribe of the Owens Valley**
- Sean Scruggs, Fort Independence Indian Tribe
- Judy Stapp, Cabazon Band of Mission Indians
- Bridget Sandate, Chemehuevi Indian Tribe
- Brian Etsitty, Colorado River Indian Tribe
- Barbara Durham, Timbisha Shoshone Tribe
- Monty Bengochia, Bishop Paiute Tribe
- **Robert Robinson, Kern Valley Indian Council**
- **Rachael Mangum, Advisory Council on Historic Preservation**
- **Tristan Tozer, California State Office of Historic Preservation**
- Duane Marti, California State Office of Historic Preservation
- **Meg Frisbie, National Park Service, National Trails**
- Steve Slaten, NASA
- Christian Benitez, Jet Propulsion Laboratory
- James Shearer, Bureau of Land Management
- Nancy Pahr, NAWS China Lake
- Lynn Wulf, IMCOM
- **Kelly Norwood, USAEC**
- Karl Kleinbach, USAEC
- Jennifer Aaron, USAEC
- Colonel Jeanette Martin, Fort Irwin (new Garrison Commander is Colonel Jason A. Clarke)
- **Colonel Carl Michaud, NTC**
- Steven Ryan, Fort Irwin
- Derrick Pace, Fort Irwin
- **Chris Woodruff, Fort Irwin**
- **Penn Craig, Fort Irwin**
- **Brenda Reed, Fort Irwin**

- Ron Gardner, G3
- Eric Negrete, G3
- **Dave Davis, Fort Irwin**
- Dave Housman, Fort Irwin
- Ruth Sparks, Fort Irwin
- **Kira Zender, Jacobs Engineering Group**
- Michelle Rau, Jacobs Engineering Group
- **Jeremy Hollins, Jacobs Engineering Group**
- **Emily Gulick, Jacobs Engineering Group**

March 28, 2022, 3:30 PM to 4:30 PM, PST

- Jessica Mauck, San Manuel Band of Mission Indians
- **Ryan Nordness, San Manuel Band of Mission Indians**
- **Dawn Duncan-Hubbs, Fort Mojave Indian Tribe**
- Linda Otero, Fort Mojave Indian Tribe
- **Ann Brierty, Morongo Band of Mission Indians**
- **Laura Chatterton, Morongo Band of Mission Indians**
- Kathy Bancroft, Lone Pine Paiute Tribe
- Danelle Gutierrez, Big Pine Paiute Tribe of the Owens Valley
- Sean Scruggs, Fort Independence Indian Tribe
- Kaitlyn Snodgrass, Chemehuevi Indian Tribe
- Steven Escobar, Chemehuevi Indian Tribe
- Brian Etsitty, Colorado River Indian Tribe
- **Barbara Durham, Timbisha Shoshone Tribe**
- Monty Bengochia, Bishop Paiute Tribe
- Robert Robinson, Kern Valley Indian Council
- **Rachel Mangum, Advisory Council on Historic Preservation**
- Lucinda Woodward, California State Office of Historic Preservation
- **Tristan Tozer, California State Office of Historic Preservation**
- **Alicia Perez, California State Office of Historic Preservation**
- **Lee Kreutzer, National Park Service, National Trails**
- Christian Benitez, Jet Propulsion Laboratory
- Nancy Pahr, NAWA China Lake
- **Colonel Carl Michaud, NTC**
- **Command Sergeant Major Justin Larson, NTC, Fort Irwin**
- **Irene Arregui, NTC**
- **Chad Utz, NTC**
- **Don Ross, NTC**
- **Brenda Reed, NTC**
- Chris Woodruff, NTC
- Penn Craig, NTC
- **Kira Zender, Jacobs Engineering Group**
- **Jeremy Hollins, Jacobs Engineering Group**
- **Emily Gulick, Jacobs Engineering Group**





















**Attachment F**  
**Standard Operating Procedures**

**INTRODUCTION**

Fort Irwin has previously included Standard Operating Procedures (SOPs) as part of the Installation's Integrated Cultural Resources Management Plan (ICRMP). In the interests of providing a more complete PA, the SOPs initially developed for the updated ICRMP, but most directly related to the Section 106 process, have been moved to the current document. Additional SOPs are anticipated to address other program aspects, and may be consulted upon either individually (as needed) or as part of an ICRMP.

The current document is designed to be incorporated as part of an ICRMP, with the ICRMP extending the contents of these SOPs to all activities on Fort Irwin. We therefore anticipate that the contents of any future ICRMP and the contents of the SOPs will be in accordance with each other. If initial consultation for an ICRMP or for subsequent changes to that ICRMP result in the conclusion that changes to these (Attachment F) SOPs are needed, Fort Irwin (or, if they so desire, another Signatory or Invited Signatory) will propose the changes as an amendment to the PA, in accordance with the amendment process set forth in the PA.

## **SOP 1: IDENTIFYING UNDERTAKINGS AND DEFINING AREAS OF POTENTIAL EFFECT**

The Army shall determine whether a project or activity qualifies as an undertaking. If the project qualifies as an undertaking, then the Cultural Resources Manager (the CRM is a subject matter expert) will determine whether the undertaking is the type that has the potential to affect historic properties and will define the area(s) of potential effect (APE). The results of the undertaking determination and definition of the APE will be maintained in an electronic database. Supporting documentation and the rationale used in making determinations will be retained by the CRM.

### **1.1 Identify the Undertaking**

An undertaking may be defined as a project, activity, or program that is funded in whole or in part by the Army, or is under the direct or indirect jurisdiction of the Army (whether carried out by or on behalf of the Army), or is carried out in whole or in part with Army funds, or requires Army approval.

- ◆ If a project or activity is transmitted to the CRM but found upon further review not to qualify as an undertaking, the finding will be documented for program records and included in the Section 106 Annual Report, or other program review documents as appropriate.
- ◆ If a project or activity is transmitted to the CRM but is related to training or training support and exempt from project-specific consultation under Attachment B of the 2022 Section 106 Programmatic Agreement, the finding will be documented for program records and included in the Section 106 Annual Report.
- ◆ The next step is the definition of the Area of Potential Effect.

### **1.2 Define the Area of Potential Effect (APE)**

The APE is the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of any historic properties present. The size of the APE is determined on a case-by-case basis and includes in its calculation the scale and nature of the undertaking. Generally, the size of the APE will be commensurate with the size of the project, plus an additional buffer to account for maneuvering of personnel and equipment.

Definition of the APE must take into account effects that are direct (resulting from an action, without separation in space or time), indirect (resulting from an action, but separated from it by time or distance), and cumulative (incremental effects resulting from past, present, and reasonably foreseeable future projects, regardless of the agency or person involved).

To determine the project area, the Project Manager shall:

- ◆ Include staging areas and access routes that are newly constructed or that will be substantively modified for the project.
- ◆ Identify the materials sources (specifically if the area(s) are on base, otherwise “imported materials” may be used).

To determine the project area of potential effects, the CRM shall:

- ◆ Categorize the undertaking by considering the type of activity.
- ◆ Determine whether the effects typically associated with this category of undertaking are expected effects for the project.
- ◆ Based on anticipated effect(s), determine where those effects might occur in relation to the project. Account for an additional buffer, generally 10 to 50 m in width depending on the size and complexity of the undertaking and proposed equipment, to accommodate the maneuvering of personnel and equipment. The areas where these effects might occur constitute the APE.
- ◆ Examine the APE with respect to the anticipated possible effects to determine whether the undertaking activities are likely to affect historic properties.
- ◆ Complete this process for all potential project locations.
- ◆ Include all APE definitions on a project map, delineating the areas of direct and indirect effect.
- ◆ Determine whether the scope and/or nature of the project might result in additional effects.
- ◆ Consider potential visual effects to historic districts or sites for which the viewshed contributes to eligibility. Note that these resources may be outside the project area.
- ◆ Consider that properties of traditional religious and cultural importance (referring specifically to properties important to Tribes) or Traditional Cultural Properties may involve additional considerations, such as noise or atmospheric effects. (Indian Sacred Sites may also involve specific considerations.)
- ◆ Consider, as needed, direct effects (such as the effects of helicopter downdraft on petroglyph/pictograph sites or buildings) and indirect effects (such as the effects vibrations from nearby munitions impacts to petroglyphs or rockshelters) that may not be well-defined for historic properties.
- ◆ Take the depth of the proposed disturbances into account, since an APE has a vertical as well as a horizontal component.

Upon determination of the APE, the APE shall be documented by the CRM and retained for program review. The next step is identifying and evaluating historic properties.

## **SOP 2: IDENTIFYING AND EVALUATING HISTORIC PROPERTIES\***

Once an undertaking has been determined under SOP 1, and the Cultural Resources Manager (CRM) has determined the undertaking is not an activity determined to have no effect in accordance with Attachment E of the Section 106 Programmatic Agreement, the CRM must identify any historic properties within the APE and document findings derived from background research and inventory surveys. The CRM performs the procedures in this SOP in consultation with the SHPO (as delegated by the ACHP) and affiliated federally recognized Tribes.

### **2.1 Identification and Recordation of Historic Properties within the Area of Potential Effect**

#### **2.1.1 Identification**

The CRM uses existing historic contexts, predictive models (where developed and consulted upon), geological data, and site and survey records and reports to identify potential historic properties within an APE. Background research should also include other resources, such as available historic maps (e.g., General Land Office plats, historic topographic maps) and aerial photographs, in addition to other reference materials. (As of 2022, Fort Irwin is in the process of acquiring on-line historic maps so that they can be georeferenced for easy use as GIS layers.) The environmental context, including geological aspects of the setting, may have implications for the potential for buried deposits and the need for subsurface site testing.

The steps are as follow.

1. Determine whether the area has been previously, completely surveyed for cultural resources in a manner sufficient to identify any reasonably anticipated historic properties. This includes determining that the report clearly identifies the transect intervals used, the coordinate system employed, and information sufficient to identify on a map any areas that were not systematically surveyed or that were surveyed at an interval differing from the rest of the project area.
2. Employ a suitable records search area (RSA) to provide a context for expected (or identified) resources in the project area(s), and to consider indirect effects. Fort Irwin typically uses 200m due in part to the degree of local variation based upon topography, the presence of playas, and other factors.
3. Determine whether additional investigations are required, considering (1) whether new survey has the potential to yield information not available from the previous survey(s); (2) whether other types of investigation might yield information not available from the previous work; (3) whether any applicable historic contexts or program comments have been developed in the interim; and (4) whether the transect interval used was sufficient to identify historic properties likely to be present (considerations may include the types of cultural resources identified in the records search area).

Fort Irwin currently uses transect spacing of 15m as standard; exceptions may be made based on factors such as slope. Previous survey intervals generally do not exceed 30m, potentially with exceptions made based on factors such as slope.

Information not available from the previous work may reflect a variety of conditions. For example, the study type may not have been focused on identifying all types of resources (e.g., an inventory of the built environment would not necessarily identify a prehistoric archaeological site), resources may be present that reached the 50-year mark in the interim, or disturbances may have increased the potential to identify buried site deposits in areas considered likely to have them. If potential historic

properties are reasonably likely to have been missed by the previous survey, and survey can safely be completed, the relevant areas will be re-surveyed.

4. Additional investigations may also include preliminary tribal consultations to identify Properties of Traditional Religious and Cultural Importance (PTRCI), considered herein as a subset of Traditional Cultural Properties (TCP) as defined by the National Park Service (NPS).
  - a. The Fort Mojave Indian Tribe has provided the following definition of Tribal Cultural Resources (defined within the California Environmental Quality Act; Section 106 or other cultural resources legislation may apply):

Tribal cultural resources and properties of traditional religious and cultural importance include both tribal values and archaeological, historical, cultural, and sacred sites. These elements involve tribal cultural values embodied within both tangible and intangible domains. Traditional Cultural Properties (TCPs), Ethnographic Landscapes, archaeological sites and districts, objects, and places of natural and spiritual sacred significance are the main components of Native American cultural heritage.
  - b. For Section 106 purposes, the definition provided immediately above will be taken into account in attempting to identify potential historic properties. (For training and training support activities, see also the discussion of Tribal Cultural Resources in the Abbreviations, Acronyms, and Attachments section of the 2022 Section 106 PA.)
  - c. Laws and regulations other than Section 106/the National Historic Preservation Act (e.g., Indian Sacred Sites, the Archaeological Resources Protection Act, and the Native American Graves Protection and Repatriation Act may also apply, and ), and other opportunities to address tribal concerns (such as project modification that does not impact the mission) should be considered if relevant.
5. The Installation Archaeologist will need to make periodic contact with the Advisory Council on Historic Preservation and US Army Environmental Center (USAEC) to determine whether any applicable nationwide historic contexts or program comments have been developed.
6. If the APE has not been previously and adequately inventoried, the area not covered will be inventoried in accordance with Fort Irwin's standards.
7. Areas having a high potential for subsurface deposits may require subsurface testing to be considered adequately surveyed. However, it should be remembered that subsurface testing, even within a known site, may only (as a function of artifact/feature distribution relative to sampling) serve to better characterize the geological potential to serve as a matrix for archaeological deposits. Thus, areas for which adequate previous survey has been conducted may still warrant targeted project monitoring.
8. Any previously recorded cultural resources must also be reviewed for adequate documentation and the potential for changed conditions as related to National Register eligibility/any other applicable management considerations. Currently, the majority of eligible and potentially eligible sites are monitored, so current data will generally be available. (Note that the number changes annually, or more frequently, as a result of program review and the identification of previously unrecorded sites.)

For sites previously deemed not eligible, determine whether the horizontal site extent has been completely documented (moving sand sheets can make this task especially difficult, such that

boundaries for relevant sites may change over time); whether the geological context is adequately described to determine whether or not buried deposits are likely; whether, in light of geological factors, subsurface testing sufficient (in extent, including depth and placement) to identify the site's potential for significant buried deposits has been conducted; whether the interpretation of the site is inconsistent with the description (e.g., if the site is interpreted as a hunting camp but has pottery); and whether site constituents were adequately documented. Eligibility should also be considered in light of current contexts, recent developments in technology and methods, and whether tribal consultation has been completed.

9. For previously recorded isolates, consider whether the designation is the appropriate one (For example, is there potential for them be surface representatives of a subsurface site, or should they be regarded as secondary deposits of a site?). Also, consider their potential for eligibility under all four criteria.
10. When SHPO concurrence regarding eligibility for previously recorded sites has not been received, it will be requested. Tribal input shall also be requested (with the documentation provided at least equivalent to that provided to the SHPO) and taken into account, unless the resource type is one that is determined in consultation not to have the potential to be of interest to the Tribes.

These actions will be conducted in accordance with (IAW) SOP 6; the mining Historic Context developed for Fort Irwin; and, once consulted upon and accepted, any future historic contexts developed for Fort Irwin.

### **2.1.2 Recordation**

Cultural resources will be recorded on the appropriate DPR forms, and in accordance with the historic preservation review process mandated by Section 106 as outlined in regulations issued by the ACHP ("Protection of Historic Properties" (36 CFR Part 800)). Details included in recordation are subject to justifiable decisions of the field professional and the nature of the resource in question. Fort Irwin will record archaeological sites as follows:

- ◆ Site: A site is constituted by the presence of midden soils or features, or at least three classes of prehistoric artifacts, e.g., flakes, modified flakes, bifaces, projectile points, cores, ceramics, and/or historic artifact classes, e.g., domestic, military, and architecture, or the presence of at least 20 cultural items within a 10 meter radius (these can all be of a single class of artifact, but not from the same object, such as the results of a pot drop).. Significant features are features reasonably considered to be at least 50 years of age and of cultural origin.
- ◆ Sites will be recorded on the appropriate DPR form sets, to include, at minimum: a Primary Record (DPR 523A); a Building, Structure, Object (DPR 523B) for historic resources or an Archaeological Site Record (DPR 523C) for prehistoric resources; and a Location Map (DPR 523J).
- ◆ Additional forms, such as specific artifact-type records or continuation sheets, will be utilized as needed to document the site.
- ◆ National Register Bulletin 38 guidance will be used in documenting Traditional Cultural Properties.

Use of the above definition provides for consistent site identification. However, it is recognized that, in certain cases, low-density sites provide information about an aspect of area archaeology, such as an activity type, cultural group, or time period that is poorly known for the area. In such cases, the recorder must

provide an explicit justification for documenting the resource as a site.

- ◆ Isolate: An isolate is defined as the occurrence of less than 20 artifacts within a 30-meter radius, assuming that the artifact types do not qualify the resource under the above definition of a site. Individual pieces that were part of the same item (sherds from a pot drop, pieces of a single glass bottle) will be treated as a single artifact.
- ◆ An individual Primary Record form will be completed for each noteworthy prehistoric isolate, e.g., those including time-diagnostic, rare, or culturally or functionally diagnostic artifacts.
- ◆ Other prehistorical isolates may be grouped by type (e.g., groundstone; fine-grained volcanic debitage; crypto- to microcrystalline sedimentary debitage; obsidian debitage; other debitage; formal tools, use-modified tools). The information included will be as for the combined Primary Record.
- ◆ Historic isolates that are associated with the same theme (such as mining or military activities) may be documented together on a single Primary Record form where doing so facilitates contextual discussions. The information included will be as for the combined Primary Record.
- ◆ A combined Primary Record form with a map and table will be completed for all other isolates within a discrete survey area, e.g., a project APE, a survey area, a drainage basin (potentially archaeologically meaningful divisions are preferred for larger-scale surveys), or a square kilometer of a large area. The table will minimally include the following: isolate type, UTM's, setting (landform, soils, vegetation), and a brief description. Attachments will include photographs of each isolate.
- ◆ The project report shall summarize the number and types of isolates found and discuss any conclusions suggested by the presence and distribution of the materials.
- ◆ The potential for isolates to be eligible will be considered under all four criteria and will be explicitly discussed.

If cultural resources are identified in the APE, this finding shall be documented and retained for future program review of the undertaking. Potential historic properties are not considered to be actual historic properties until they have been evaluated and recommended for inclusion in the NRHP. Cultural resources awaiting evaluation will be treated as historic properties until official eligibility determinations (see 2.2 below) have been made.

## **2.2 Evaluation of Historic Properties and Eligibility Determinations**

Once cultural resources have been identified in an APE, the CRM will evaluate previously unevaluated properties for NRHP eligibility. Previously evaluated properties (meaning those for which SHPO concurrence has been received) will be reviewed to determine whether there has been any change in relevant circumstances. A few examples are the development of techniques or applications that increase a site's information potential, the determination that a resource should be considered as part of a larger whole, a substantive loss of integrity, or the potential for use of absolute dating methods not previously considered) that could affect their eligibility recommendations. They will also be reviewed to determine whether

documented tribal consultation has occurred.

The CRM shall use the National Register criteria (36 CFR 60.4), National Register Bulletins (including NRB 15, 36, 38, 41, and 42), historic contexts, other assessment documentation, models, and reports as the basis for recommendations of eligibility. If information regarding the potential property is found to be non-existent, insufficient, or inaccurate, the CRM shall evaluate the property using, as appropriate, the mining Historic Context developed for Fort Irwin, or any future Historic Contexts developed, consulted upon, and approved for Fort Irwin.

- ◆ All four criteria shall be considered and discussed for all resources. If the geological context and cultural resources type warrants it, subsurface testing may be applied in evaluating cultural resources.
- ◆ Such testing will consider the number/size of tests needed to characterize the geological setting as it pertains to the potential for buried cultural deposits.
- ◆ Such testing will consider the potential of all subareas of the site in identifying areas for testing to identify subsurface archaeological deposits no.
- ◆ It will also take into account both potential surface indicators of subsurface deposits and the potential for buried cultural deposits to have different spatial patterning than surface deposits.
- ◆ Tribal and SHPO input regarding the testing strategy may be requested prior to testing.

The CRM will notify the SHPO and affiliated federally recognized Tribes of any newly proposed or updated eligibility recommendations. Once any Tribal input is taken into account and the SHPO has concurred with Fort Irwin's recommendation, the site will be recorded as officially determined ineligible or eligible and managed accordingly. If the SHPO or a Tribe does not agree with the recommendation, dispute resolution may be necessary.

- ◆ Where applicable, see Stipulation IV of the 2022 Section 106 PA. Otherwise, the process described in Section 2.3 will be followed.

### **2.3 Determination of Eligibility Dispute Resolution with no Applicable Agreement**

If the SHPO or a Tribe expresses disagreement, within the 30-day NHPA review period, with the recommendation made by the CRM for historic property eligibility, or if the parties are unable to reach concurrence after consultation, the recommendation of eligibility will be forwarded to the Secretary of the Interior for additional information and a request will be made by Fort Irwin directly to the Keeper of the National Register for a final determination. The Secretary/Keeper will respond to a request for a formal determination of eligibility within 45 days of receipt of the request. If there is no response within the allotted time, Fort Irwin will manage the property according to the CRM's eligibility determination. . Determination of eligibility disputes and the process for requesting resolution are addressed in 36 CFR 63.

### **2.4 Documenting the Decision**

If no historic properties are located within the APE, this determination shall be documented and retained for future program review.



If historic properties are located within the APE, this determination shall be documented and the CRM shall proceed to SOP 5: Assessing Effects of Undertakings on Historic Properties.

\*Although none have currently been identified on Fort Irwin, another type of cultural resource that could require consideration is Indian Sacred Sites. These are considered under the American Indian Religious Freedom Act and EO 13007 rather than the NHPA, and thus would be considered separately from historic properties. Note that SOPs 6 and 7 may apply. Such resources would typically be identified via tribal input stemming from tribal participation, such as project review or field visits.

### SOP 3: SITE AND ISOLATE FIELD DATA COLLECTION

Adequate, consistent field data provides information necessary for making accurate eligibility determinations. Fort Irwin's limited artifact collection policy must be taken into account in determining the data to collect and how to collect it, keeping in mind that field personnel may not have expertise in documenting certain types of artifacts and that some types of data require specialized analyses. Adequate field data also provides for what may be the only documentation of ineligible/non-contributing sites in a manner that helps clarify the overall use of the landscape at varying spatial scales.

Older reports sometimes inaccurately stated that a site's data potential had been completely exhausted. Archaeologists do not collect all the available information from sites, instead using professional judgment and standard practices to determine what is important (and feasible) to record. Examples of traits not typically recorded include sources for ubiquitous lithic raw materials or platform types for individual flakes.

New analytical techniques (or applications thereof), recognition of new patterns, and development of specific questions that may shed light on major themes could all result in changed understanding of a site's data potential. Therefore, the following specifications are intended to be flexible as information needs may change, yet provide a baseline for documenting the most common artifact types on Fort Irwin.

Details regarding the site and isolate data collection policy are provided to contractors verbally and through written documents. In general, the following parameters apply.

#### 3.1 Debitage (photograph distinctive materials and a sample for #4-#6.)

For larger Fort Irwin sites (potentially with hundreds of single reduction loci) it may be appropriate to record only a statistically significant sample of thedebitage at the level of detail noted below. The type of sample and an archaeological justification for the type and size of the sample are required, including a statement of why the sample is considered representative of the whole. In counting flake types (and noting specialized flakes such as notching flakes), **identify the source of the terms used for classes such as primary, secondary, tertiary, and shatter, or define the terms.**

- ◆ Documentation must include the following.
  - Numbers, sizes, and material types for SRLS and concentrations.
  - Maximum density per square meter of background materials.
  - Visually identified material types, noting the distinctive materials that might benefit from chemical (or other geological) source analysis.
  - Potential technological markers (for example, possible indicators of heat-treatment, bipolar flaking, or the use of indirect percussion), as related to raw materials.
  - Potential indicators of exposure to fire other than that associated with heat-treatment, where the raw material type is suitable for thermoluminescence dating.
  - Potential indicators of post-depositional effects (potlid fractures, breaks).

- Manufacturing characteristics such as unexpectedly high percentages of manufacturing errors or flakes in a particular size class in the assemblage, or other distinctive characteristics.
- Whether further analysis would provide any significant information.

### 3.2 Flaked Stone Tools (photograph; see 3.3 for cores and indeterminate bifaces)

- ◆ The following are to be recorded (for isolates, in background scatters, and in SRLs and concentrations):
  - Inferred functional type (point, scraper, utilized flake).
  - Cortex (amount, locations).
  - Visually identified material type.
  - Potential macroscopic indicators of use-wear, including the location, type (such as step fractures, polish, or striations), dimensions, and the shape of the working edge (concave, convex, straight, other).
  - Dimensions (length, width, thickness, edge angle for cutting or scraping margins).
  - Projectile point attributes in addition (use current guide): completeness and locations of damage; type(s) of damage, type(s) of use wear, flaking style, long section, cross section, shoulder width, neck width, base width and height; beveling fluting, serrations, or spurs; tip type, blade characteristics, shoulder form(s) with length of barbs if present, notch placement and type with opening width and notch orientation.

### 3.3 Bifaces and Cores (no evidence of use-wear; otherwise, treat as a tool. Photograph.)

- ◆ The following are to be recorded (for isolates, in background scatters, and in SRLs and concentrations):
  - Stage (biface) or type (core). Core types are unidirectional, multidirectional, bidirectional, bipolar, unpatterned, or other (specify). Where Stage 1 and 2 bifaces are considered bifacial cores; document as a biface but note use as a core.
  - Dimensions (length, width, thickness.)
  - Visually identified raw material type.
  - Cortex type (water-worn, primary geological, none).
  - Potential manufacturing errors or breaks; whether exhausted (core).

### **3.4 Tested Cobbles (Photograph)**

- ◆ Document:
  - Dimensions.
  - Visually identified material type.
  - Number of flakes removed.

### **3.5 Hammerstones (Photograph)**

- ◆ Document:
  - Visually identified material type.
  - Type and location(s) of use damage. (Photograph.)

### **3.6 Groundstone (photograph to show overall shape and areas of use wear)**

- ◆ Document:
  - Whether shaped and, if shaped, technique (for example, percussion or grinding).
  - Visually determined material type.
  - Whether the rock is vesicular or has large phenocrysts.
  - Evidence of resharpening.
  - Other use-wear (note size of area, placement, type (e.g., grain shear), and photograph).
  - Dimensions (length, width, thickness).

### **3.7 Bone**

- ◆ Document:
  - Type (minimally bird or other).
  - Size (e.g., small mammal, deer-sized mammal).
  - Evidence of burning and associated color (such as blue, white, black).
  - Other damage (breaks, weathering, gnawing marks).
  - Deliberate modifications.

- ◆ For faunal materials identified as such, photographs should be used to document modifications and potentially condition. However, bone (including burned bone, given that cremation was practiced in the area) that cannot be identified as non-human is not to be photographed. An osteologist will need to visit the site.

### 3.8 **Historic Debris** (photograph a general sample and distinctive/time-diagnostic artifacts)

- ◆ Document:
  - Grouping (multiple piles, a single concentration, a background scatter) and size (including depth) of each grouping.
  - Context (for example, near a former dwelling—indicate the distance and direction, along a road, in a drainage cut).
  - Material categories (glass, ceramics, metal, and so forth) and functional categories (bottles, plates, cans). Provide actual ( $\leq 100$ ) or estimated counts of each.
  - Functional subcategories, where evident (food cans, milk cans, beer bottles). Describe the evidence (labels, embossing, opening or closure types, and so forth).
  - Record potentially time-diagnostic attributes (for example glass color, maker's marks, recessed panels, embossed lettering, manufacturing attributes, and designs for bottle glass; ware, patterns, and maker's marks for ceramics; technological attributes and a sample of sizes for milk cans that have solder; patent dates).

## **SOP 4: GIS DATA COLLECTION AND PROCESSING**

This SOP provides data standards and practices.

### **4.1 General Data Requirements**

- ◆ The data must comply with the Spatial Data Standards for Facilities, Infrastructure, and Environment (SDSFIE).
- ◆ The projection and datum to be used are those in general use by Fort Irwin, currently Universal Transverse Mercator (Zone 11N) and World Geodetic Survey 1984 (WGS84).
- ◆ Each feature class requires metadata conforming to the Federal Geographic Data Committee (FGDC) Content Standards for Digital Geospatial Metadata (CSDGM) and the current Army Metadata Standard.

### **4.2 Site and Isolate Data**

- ◆ For sites, separate layers must be maintained for (1) site boundaries, (2) features/ diagnostic artifacts/samples, and (3) the locations of shovel tests/test units. Photo points may be included as an additional layer.
- ◆ Attribute tables will be provided for site boundaries and will include the associated Fort Irwin project number, site location information, any temporary site numbers, the permanent trinomial (when available), the DPR primary record number, the date recorded, the name of the recorder, the resource attributes (California codes), the site type (Fort Irwin), the site condition, the period of use, and any additional useful information.
- ◆ For features, diagnostic artifacts, and samples in a site, or for isolates, each location will correspond to an entry in the attribute table that includes the artifact/feature/sample number, the artifact/feature/sample type, the materials, and any additional useful information. For artifacts, the collection status is to be indicated. If appropriate, the layer will be cross-referenced with the entries in #3.
- ◆ For shovel test and test unit locations, the attribute table must indicate the type of test (rarely, with justification, techniques such as surface scrapes or auger tests might also be applied), and dimensions (including depth).

## **SOP 5: ASSESSING EFFECTS OF UNDERTAKINGS ON HISTORIC PROPERTIES**

If the CRM, in consultation with the SHPO and affiliated Native American Tribes, determines that historic properties are present within an APE (SOP 2), it must be determined if the undertaking will have an effect upon those historic properties. Effect is defined as alterations to the characteristics of a historic property that qualify it for inclusion in, or make it eligible for, the National Register. Based on the evaluation of effect, the CRM will make one of the following determinations.

### **5.1 No Historic Properties Affected**

If the CRM finds that either there are no historic properties present or there are historic properties present but the undertaking will have no effect upon them, the CRM will determine that there will be no historic properties affected.

If no historic properties are affected, this determination shall be documented and retained for future program review.

### **5.2 Historic Properties Affected**

If the CRM finds that historic properties are present in an APE and may be affected by the undertaking, the CRM shall determine if these effects are adverse. Adverse effects are those effects of an undertaking that may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the NRHP in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association (36 CFR 800.5(1)). The criteria of adverse effect also require consideration of all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the NRHP. Adverse effects include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance, or be cumulative. In keeping with legal requirements, the public will also be consulted regarding potential effects to historic properties. Confidentiality of information supplied during tribal consultation would be preserved in keeping with Section 304 of the NHPA.

#### **5.2.1 Finding of No Adverse Effect**

The CRM shall make a finding of no adverse effect when the undertaking's effects do not alter or diminish, directly or indirectly, any of the characteristics of a historic property that qualify it for inclusion in the National Register. If there is a finding of no adverse effect, this determination shall be documented and retained for future program review. The CRM will consult regarding this determination with affiliated federally recognized Native American Tribes, and will request SHPO concurrence.

#### **5.2.2 Finding of Adverse Effect**

The CRM shall find an adverse effect when the undertaking may alter or diminish, directly or indirectly, any of the characteristics of a historic property that qualify it for inclusion in the NRHP. Adverse effects may include reasonably foreseeable effects caused by the undertaking that (1) may occur later, (2) be outside of the current APE, or (3) be cumulative.

The findings of adverse effect shall be documented and provided to the proponent. The proponent will then work with the CRM through the procedures set forth in the Section 106 Programmatic Agreement.

## **SOP 6: GOVERNMENT-TO-GOVERNMENT CONSULTATION WITH TRIBES**

The federally recognized Native American Tribes with historic ties to the Fort Irwin region are recognized by the U.S. government as sovereign nations with status as unique political entities in a government-to-government relationship with the United States. Fort Irwin is involved in consultations and decision-making regarding tribal interests. Formal government-to-government consultation with Tribes occurs at the Garrison Commander level. At present, Fort Irwin consults with the 10 Tribes listed below. However, preliminary discussions with the current contacts have indicated that not all of these Tribes may have an interest in the entire Fort Irwin area. (Maps and/or shapefiles provided by the Tribes are anticipated to provide guidance.) In addition, other contact lists (for example, those used by neighboring installations) for the area include Tribes not listed below. It is possible that such Tribes may request addition to the consultation list. Review and outreach should be conducted as appropriate.

- Big Pine Paiute Tribe of the Owens Valley
- Bishop Paiute Tribe
- Chemehuevi Indian Tribes of the Chemehuevi Reservation, California
- Colorado River Indian Tribes
- Death Valley Timbisha Shoshone Tribe
- Fort Independence Community of Paiute Indians of the Fort Independence Reservation, California
- Fort Mojave Indian Tribe of Arizona, California and Nevada
- Lone Pine Paiute-Shoshone Reservation
- Morongo Band of Mission Indians
- Yuhaaviatam of San Manuel Nation (formerly San Manuel Band of Mission Indians)

Prior to 2020, Fort Irwin also consulted with the Cahuilla Band of Mission Indians. No responses to consultation letters were being received. The Installation Archaeologist contacted the tribal specialist, who indicated that Fort Irwin is not currently within the Tribe's area of interest. The Cabazon Band of Mission Indians similarly indicated that Fort Irwin is not within the Tribe's current area of interest.

### **6.1 Government to Government Communication**

See also SOP 25 (Hosting Tribal Representatives).

#### **6.1.1 Written Communication**

Each federally recognized Native American Tribe is a separate nation and is treated as such. All communications with the Tribes (with the exception of responses to individual communications from the Tribes) shall occur between Fort Irwin and each individual Tribe. Written communications shall be as follows:

- ◆ Correspondence sent to the tribal government head (e.g., Chief, Governor, or Chair) is signed by the Garrison Commander or his/her designated representative upon agreement with the Tribe;
- ◆ Correspondence sent to the tribal cultural resource coordinator/representative is signed by the Garrison Commander's appointed representative, the CRM;
- ◆ Copies of any document intended for review during face-to-face consultation will be provided to the tribal government head (e.g., Chief, Governor, Chair) and designated tribal cultural resources representatives in advance of the consultation meetings, with the goal of providing sufficient time for review.



### **6.1.2 Telephonic or Electronic Communication**

The following guidance addresses telephonic and electronic communication. Fort Irwin will:

- ◆ Document telephonic or other informal consultation communication in order to maintain a record of the consultation process. Such documentation shall include the date of the communication, the names and titles of the participants, and the topic(s) discussed. Once completed, it will be provided to the participating tribal representatives for review and input. Any comments will be addressed and a copy of the document will be provided to all participating Tribes and placed on file at Fort Irwin.

### **6.1.3 Face-to-Face Meetings**

Face-to-face meetings may involve one, some, or all of the Tribes with which Fort Irwin consults.

#### **6.1.3.1 Participation**

Face-to-face meetings will involve government-to-government participation between Fort Irwin and federally recognized Tribes. The Cultural Resources Manager/Installation Archaeologist may provide support.

#### **6.1.3.2 Scheduling**

Fort Irwin will work to achieve consensus regarding meeting dates, to provide the greatest opportunity for full representation by all Tribes that wish to participate. If possible, scheduling discussions will begin least two months prior to the meeting to allow time for maximum representation.

#### **6.1.3.3 Coordination**

Fort Irwin will solicit topics important to the Tribes in order to facilitate dialogs, limit the number of items discussed in face-to-face consultation meetings, and program sufficient time to allow for adequate coverage of each item of concern. Fort Irwin will, when possible, publish a proposed agenda and itinerary for the meeting/visit at least three weeks in advance so that all parties have an opportunity to edit/add to the agenda before its finalization (which shall occur no less than 7 calendar days prior to the scheduled meeting) and so that all parties arrive informed of the purpose and subject of the meetings.

#### **6.1.3.4 Attendance**

Whenever possible, Fort Irwin will open or close the meeting with appropriate comments from the Garrison Commander or his/her designee. The Garrison Commander or his/her designee may chair the meetings and may facilitate the discussions during the meeting. Tribal representatives may wish to offer opening and closing remarks also, and if so Fort Irwin will coordinate participation prior to the meeting.

#### **6.1.3.5 Site Visits**

In advance, Fort Irwin will determine whether attendees wish to participate in a site visit during the consultation meeting. Any site visits must be scheduled well in advance. Knowledgeable Fort Irwin staff representatives will accompany tribal representatives and make appropriate logistical arrangements including the provision of appropriate transportation, maps, and background data.

#### **6.1.3.6 Documentation**

A written summary providing a detailed overview of the meeting will be prepared following each face-to-face consultation. If appropriate, due to the nature of the discussion, a verbatim transcript of the meeting may be prepared, as long as no tribal representatives object to such a transcription. Regardless of tribal participation in the face-to-face meetings, a meeting summary/transcript and copies of meeting handouts prepared by Fort Irwin will be sent to each affiliated Tribe for multi-Tribal meetings. Meetings held between Fort Irwin staff and individual Tribes will be held as confidential and any summaries, transcripts, handouts, etc. shared during that meeting will only be provided to the Tribe who was party to that conversation, field visit, meeting, etc.

## **SOP 7: PROCEDURES APPLICABLE TO THE INADVERTENT DISCOVERY OF NATIVE AMERICAN HUMAN REMAINS AND RELATED CULTURAL ITEMS**

Fort Irwin shall treat all Native American human remains and associated funerary objects, sacred objects, and/or objects of cultural patrimony discovered on lands under Fort Irwin management with respect and in accordance with the Native American Graves Protection and Repatriation Act (NAGPRA) and its implementing regulations (43 CFR 10). When such items are encountered inadvertently, all use of the immediate area (including an appropriate buffer, a minimum of 30 meters) by Fort Irwin shall be suspended.

The remains and associated cultural items will be protected in place to the greatest extent possible, and the immediate area will be secured until the potentially affiliated, federally recognized Tribes are contacted and consultation is undertaken to determine appropriate methods for the disposition of the human remains and associated cultural items. All such consultation and subsequent actions shall be conducted in full accordance with the provisions of 43 CFR 10 and this SOP. A flow chart, produced by the ACHP and detailing the overall process, follows this SOP.

### **7.1 Initial Discovery**

Any person who knows, or has reason to believe, that he or she has inadvertently discovered potential NAGPRA items—bone material and or human remains, funerary objects, sacred objects, or objects of cultural patrimony—on Fort Irwin lands must provide immediate telephone notification of the inadvertent discovery, with written confirmation, to the Fort Irwin Cultural Resources Program Manager, who will notify the Garrison Commander and the Cultural Resources Manager (CRM). The CRM will immediately notify NTC G3 and, if the CRM is not the Installation Archaeologist (IA), will also notify the IA. The requirements of 43 CFR 10.4 regarding inadvertent discoveries apply whether or not an inadvertent discovery is duly reported. If written confirmation is provided by certified mail, the return receipt constitutes evidence of the receipt of the written notification by the Fort Irwin CRPM.

If the inadvertent discovery occurred in connection with an on-going activity on Fort Irwin, the finder, in addition to providing the notice described above, must stop the activity in the area of the inadvertent discovery and make a reasonable effort to protect the human remains, funerary objects, sacred objects, or objects of cultural patrimony in place. This may include placing barriers to deter access or visual screens to limit the visibility of the discovery.

The CRM and IA will make every effort to visit the site as soon as possible after initial notification by the discoverer, but they or their qualified representative shall do so no later than 72 hours after receipt of the written confirmation of notification. Further, the CRPM shall:

- ◆ Certify receipt of the notification; and
- ◆ Take immediate steps, if necessary, to further secure and protect inadvertently discovered human remains, funerary objects, sacred objects, or objects of cultural patrimony, including, as appropriate, providing stabilization or covering;

The CRM, with qualified professional assistance such as IA, a professional osteologist, and if needed law enforcement personnel, will (when bone is present) determine:

- ◆ Whether the remains are human.\*
  - If human, whether the remains are recent (i.e., less than 50 years) and, in coordination with

installation law enforcement personnel, whether a crime scene is involved;\* and

- Whether the remains are Native American.

*[Note: Fort Irwin shall arrange for a qualified professional, such as the IA or the county coroner, to perform in situ identifications in assistance to the CRM.]*

The results of these identification procedures will determine whether NAGPRA provisions apply to the discovered remains. With regard to Native American human remains discovered on federal lands, NAGPRA and 43 CFR 10 make no distinction concerning their temporal context (i.e., recent or archaeological in nature) or whether a potential crime scene exists. This provision of the SOP combines the affirmative provisions of NAGPRA concerning tribal consultation with conventional Installation law enforcement mandates. The following results are thus possible:

- ◆ Result 1: Remains are non-human and no funerary objects, sacred objects or objects of cultural patrimony are present.
- ◆ Result 2: Recent human remains are present, meaning that the potential for a crime scene needs consideration.
- ◆ Result 3: Archaeological but non-Native American human remains are present.
- ◆ Result 4: Archaeological and Native American human remains and/or funerary objects, sacred objects, or objects of cultural patrimony are present.

If Result 4 is determined, neither the remains nor funerary objects will be photographed. Sketches will be completed instead, only where needed to aid in necessary documentation.

## **7.2 Notification, Consultation, Treatment, and Disposition Procedures**

In the event that the discovery yields Result 1 (non-human remains), Result 2 (modern human remains), or Result 3 (archaeological non-native human remains) above, the following actions will be taken:

- ◆ Result 1: Within three (3) working days of this determination, the CRM shall notify the NAGPRA Coordinator (or other tribally designated representative) of each affiliated federally recognized Native American Tribe, via telephone or email, that a reported inadvertent discovery of bone was non-human and that no funerary objects, sacred objects or objects of cultural patrimony were present. See paragraph 7.4 regarding resumption of activities.
- ◆ Result 2: If the discovery results in the identification of recent human remains, then the CRPM shall notify the Installation's Directorate of Emergency Services (DES), which assumes jurisdiction and responsibility. DES personnel will ensure that all installation activities cease within a 30-meter radius of the site and declare the site off limits to everyone except authorized personnel. DES personnel will investigate any potential criminal wrongdoing and carry the case to closure. Forensic examination of the remains will be conducted in accordance with local criminal investigative procedures. If evidence is present that the recent human remains are Native American, then the Tribes will be notified by the DES following appropriate next-of-kin notification. Final disposition of the remains will be arranged by the next-of-kin. Otherwise, final disposition of the remains will be arranged in accordance with 43 CFR 10.5 and 10.6.
- ◆ Result 3: The CRM, through the IA and cultural resources staff, will take administrative measures to protect the discovery site, including entering the site into the Fort Irwin Cultural Resources

Programmatic Agreement Among the Department of the Army National Training Center and Fort Irwin, the California State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding Military Training Activities and Support Operations at Fort Irwin and the Manix Trail, San Bernardino County, California

Database and informing the SHPO and federally recognized affiliated Tribes of the discovery. The CRM will also assess the need for physical protection measures, such as barriers to exclude traffic from the burial location. Cultural resources personnel will also attempt to identify potential descendants and, if it is determined appropriate to leave the remains in place, elevate the potential for designating the location a cemetery to command.

### **7.3 Required Procedures when Native American Human Remains and/or Funerary Objects, Sacred Objects or Objects of Cultural Patrimony are Identified**

Fort Irwin's preference is to leave NAGPRA items in place, as long as protection can be provided for the foreseeable future. If such protection cannot be provided, Fort Irwin will explore options to provide for reburial in a location as close as reasonably possible to the original.

In the event that the discovery yields Result 4 (archaeological Native American human remains) above, the following actions will be taken:

- ◆ As noted above, no photographs will be taken.
- ◆ The CRM or, if the CRM is not available, an individual within the same chain of command shall, within three (3) working days, provide initial notification by telephone, with written confirmation, to each of the Native American Tribes regarding the discovery of human remains, funerary objects, sacred objects, or objects of cultural patrimony. This notification must include pertinent information as to kinds of human remains, funerary objects, sacred objects, or objects of cultural patrimony discovered inadvertently, their condition, and the circumstances of their inadvertent discovery;
- ◆ The CRM will then initiate consultation on the inadvertent discovery pursuant to 43 CFR 10.5 and this SOP;
- ◆ If the human remains, funerary objects, sacred objects, or objects of cultural patrimony must be excavated or removed, the CRM will ensure the requirements and procedures in 43 CFR 10.3(b) and the provisions of this SOP are followed; and
- ◆ The CRM will ensure that the disposition of all inadvertently discovered human remains, funerary objects, sacred objects, or objects of cultural patrimony is carried out following the provisions of 43 CFR 10.6.
- ◆ At least 30 days prior to transferring the human remains and other cultural items to the claimant entitled to custody, the responsible Federal agency must first publish a Notice of Intended Disposition. The Notice must:
  - be published two times (at least a week apart) in a newspaper of general circulation in the area in which the human remains and other cultural items were discovered;
  - be published two times (at least a week apart) in a newspaper of general circulation in the area or areas in which the affiliated Tribes now reside;
  - provide information as to the nature and affiliation of the human remains and other cultural items, in keeping with Section 304 of the NHPA and other pertinent laws; and
  - solicit further claims to custody.

- ◆ The Federal agency official must send a copy of the notice and information on when and where it was published to the National Park Service's National NAGPRA Program.

#### 7.4 Resumption of Activity

The activity that resulted in the inadvertent discovery may, if otherwise lawful, resume thirty (30) days after verification, through receipt of written confirmation or registered receipt, by the Garrison Commander and CRPM, of notification to the Tribes of the inadvertent discovery. "Otherwise lawful" requires fulfilling the provisions of NAGPRA as related to the area of the inadvertent discovery. Resolving treatment and disposition typically requires longer than 30 days.

The activity may also resume, if otherwise lawful, at any time that a written, binding agreement is executed, between Fort Irwin and the Native American Tribes, that authorizes a recovery plan for the excavation or removal of the human remains, funerary objects, sacred objects, or objects of cultural patrimony following 43 CFR 10.3 (b)(1). The disposition of all human remains, funerary objects, sacred objects, or objects of cultural patrimony must be carried out following 43 CFR 10.6.

Compliance with the provisions of this SOP does not relieve Fort Irwin of the requirement to comply with Title 54, 306108 (replaces 16 U.S.C. 470 (f) *et seq.*), and addresses taking into account the effects of an action upon historic properties and allowing the ACHP a reasonable opportunity to comment; 36 CFR 800.11 (addresses documentation standards); or Section 3 (a) of the Archaeological and Historic Preservation Act (16 U.S.C. 469 (a-c)), discussing the preservation of archaeological and historical data. The CRM shall ensure that all such compliance requirements are met.

Until control and custody have been transferred, Fort Irwin has responsibility for NAGPRA cultural items found on Fort Irwin lands. If NAGPRA items cannot be protected in place, Fort Irwin will follow NAGPRA and the procedures developed in the Plan of Action. If temporary storage is necessary, Fort Irwin will arrange for such storage, requesting tribal approval of the proposed facility, in a facility that meets 36 CFR 79 standards for security and protection. In keeping with 10.6(c), transfer of custody procedures will respect traditional customs and practices of affiliated Tribes.

#### 7.5 General Consultation Procedures

- ◆ **7.5 (b) (1)** - Upon receiving notice of, or otherwise becoming aware of, an inadvertent discovery or planned activity that has resulted or may result in the intentional excavation or inadvertent discovery of human remains, funerary objects, sacred objects, or objects of cultural patrimony on Fort Irwin lands, the CRPM must, as part of the procedures described in 10.3 and 10.4, take appropriate steps to identify the lineal descendant and Native American Tribe entitled to custody of the human remains, funerary objects, sacred objects, or objects of cultural patrimony pursuant to 10.6 and 10.14. The CRPM shall notify in writing the Tribes that have a demonstrated cultural relationship with the human remains, funerary objects, sacred objects, or objects of cultural patrimony that have been or are likely to be excavated intentionally or discovered inadvertently.
- ◆ **7.5 (b) (2)** - The notice must propose a time and place for meetings or consultation to further consider the intentional excavation or inadvertent discovery; Fort Irwin's proposed treatment of the human remains, funerary objects, sacred objects, or objects of cultural patrimony that may be excavated; and the proposed disposition of any intentionally excavated or inadvertently discovered human remains, funerary objects, sacred objects, or objects of cultural patrimony.

As appropriate during the consultation process, the Tribes will provide the CRM with the names, telephone numbers, and addresses of the Executive Council Chairperson, the Tribal NAGPRA Representative, and the Tribal Historic Preservation Officer and thereafter will notify the Installation when tribal officers and/or contact information changes. In turn, Fort Irwin will provide the same information regarding the CRPM, CRM, and IA.

Following consultation, the CRPM, through the CRM/IA, shall prepare a written plan of action in accordance with 43 CFR 10.5. The plan must be approved and signed by the Garrison Commander or his/her designee. It will establish provisions for the identification, treatment, and disposition of Native American human remains, funerary objects, sacred objects or objects of cultural patrimony recovered by intentional excavations or inadvertent discovery. The Tribes will receive a copy of this document and have the option to be signatories to this document, which can be developed pro forma to facilitate its use as needed. All subsequent actions will be in accordance with this plan. In accordance with 43 CFR 10.5 (e), the action plan must include:

- ◆ Any kinds of material to be considered as cultural items as defined in 43 CFR 10.2 (b).
- ◆ Specific information used to determine custody pursuant to 43 CFR 10.6.
- ◆ Treatment, care, and handling of human remains and other cultural items.
- ◆ Planned archaeological recording of human remains and other cultural items.
- ◆ Kinds of analyses planned for identification of human remains and other cultural items.
- ◆ Steps to be followed to contact tribal officials before any excavation.
- ◆ Steps to incorporate compliance with Section 106 of the National Historic Preservation Act and 36 CFR 800, as appropriate, including contact with California Office of Historic Preservation.
- ◆ Kind of traditional treatment to be afforded human remains or other cultural items.
- ◆ Nature of reports to be prepared.
- ◆ Disposition of human remains and other cultural items in accordance with 43 CFR 10.6.
- ◆ Fort Irwin will offer an invitation for involvement of a Native American representative during excavation and post-excavation, including reburial on site as applicable.
- ◆ Issuance of a permit pursuant to ARPA and 32 CFR 229, if applicable.

## **7.6 Other Consultation Procedures**

If more than one Tribe simultaneously claims affiliation with any Native American human remains and/or funerary objects, sacred objects or objects of cultural patrimony discovered on Fort Irwin lands, the installation shall follow dispute resolution procedures as stated in NAGPRA and 43 CFR 10.17, as required.

If no Tribe claims affiliation with any Native American human remains and/or funerary objects, sacred

objects or objects of cultural patrimony discovered on Fort Irwin lands within 30 days of notification of such discovery, the installation shall cause a public notice to be published for fifteen (15) days in a regional newspaper(s) of general circulation seeking such claim from the general public. If no claim is then received within fifteen (15) days of the completion of that notice period, Fort Irwin shall either: curate the materials in a manner compliant with provisions of NAGPRA, 43 CFR 10, and 36 CFR 79; leave the remains in place (if still in situ) and seek a cemetery designation; transfer the remains in keeping with 43 CFR 10.7; or reinter the remains in keeping with 43 CFR 10.7.

If remains must be exposed (which may be required by the Fort Irwin mission or the inability to protect the remains in place), removed, or reburied (including reburial in place), Fort Irwin will invite consulting Tribes to be present and make every effort to support a tribal presence. If remains cannot be left in place, the Army shall follow the procedures for NAGPRA, and its implementing regulations, 43 CFR Part 10, as well as the procedures in this SOP.

### **7.7 Reburial and Cemeteries (Army Regulation 290-5(3-14))**

Interpretation of the cemeteries-related guidance for inadvertent discoveries (and previously known burial locations) is still being developed as of May 2022. The points below are expected to apply to inadvertent discoveries and should be taken into account in the planning process.

- ◆ Reburial of remains on Army property can only be authorized if the remains were originally recovered from within the Army installation's boundaries, and have been repatriated in compliance with 25 USC 32 (the Native American Graves Protection and Repatriation Act). Garrison commanders must otherwise re-inter the remains in a local cemetery.
- ◆ Locations of remains not previously identified as a cemetery will, once reburial has occurred, be designated private cemeteries or plots.
- ◆ Documentation—including re-internment details, grave marker information, and the geospatial location—will, if the Army is responsible for the respective activities, be provided through the chain of command to the Executive Director, Office of Army Cemeteries.



## Inadvertent Discoveries on Federal Lands After November 16, 1990

An inadvertent discovery is one for which no plan of action was developed prior to the discovery.

### Notification

The person who makes the discovery must **immediately notify the responsible Federal official** by telephone and provide written confirmation to the responsible Federal official.

### Stop Work

If the inadvertent discovery occurred in connection with an on-going activity, the person must **cease the activity** in the area of the inadvertent discovery and **make a reasonable effort to protect the human remains and other cultural items**.



### Initiating Consultation

No later than three working days after receiving written confirmation of the notification, the responsible Federal agency official must **certify receipt of the notification**, and take immediate steps, if necessary, to **further secure and protect the human remains and other cultural items**. **NOTE:** activity that resulted in the discovery may resume thirty days after the Federal agency official certifies receipt of the notification.

The responsible Federal agency official must also **notify by telephone** (with written confirmation) and **initiate consultation** with **any known lineal descendant** and the **Indian tribes and Native Hawaiian organizations** –

- who are or are likely to be culturally affiliated with the human remains and other cultural items;
- on whose aboriginal lands the remains and cultural items were discovered; and
- who are reasonably known to have a cultural relationship to the human remains and other cultural items.

Consultation is initiated with a written notification. The written notification must propose a time and place for meetings or consultation.



### During Consultation

The **purpose** of consultation is to **help the Federal agency determine who is entitled to custody** of the human remains and other cultural items under NAGPRA so that the disposition process can be completed, and to **discuss the Federal agency's proposed treatment** of the human remains and other cultural items pending disposition.

The Federal agency official must **provide in writing** –

- a list of all lineal descendants, Indian tribes, or Native Hawaiian organizations that are being, or have been, consulted; and
- an indication that additional documentation will be provided on request.

The Federal agency official **must request, as appropriate** –

- names and addresses of the Indian tribe official who will act as the tribe's representative in consultation;
- names and appropriate methods to contact lineal descendants;
- recommendations on how consultation should be conducted; and
- the kinds of cultural items that are considered to be unassociated funerary objects, sacred objects, or objects of cultural patrimony.



### After Consultation – Written Plan of Action

The Federal agency official must prepare, approve, and sign a written plan of action. The plan of action must document the kinds of objects to be considered as cultural items; the planned treatment, care, and handling, including traditional treatment, of human remains and other cultural items; the planned archeological recording of the human remains and other cultural items; the kinds of analysis planned for each kind of object; and the nature of reports to be prepared.

The written plan of action must also include --

- the **specific information used to determine custody** of the human remains and other cultural items; and
- the **planned disposition** of the human remains and other cultural items.

**Custody must be determined in accordance with 25 USC 3002 (a), "Priority of Ownership," and 43 CFR 10.6, "Priority of Custody."**



(over)

## **SOP 8: POST-REVIEW DISCOVERIES AND EMERGENCY ACTIONS**

This SOP sets forth a process for addressing both post-review discoveries and emergency actions that could affect historic properties. While emergency actions require an expedited process to address undertakings that respond to an emergency, post-review discoveries can be associated with both emergency and non-emergency actions.

### **8.1 Post-Review Discoveries**

Post-review discoveries, as defined in 36 CFR 800.13, may involve either discoveries of historic properties that were not identified prior to completion of the Section 106 process, or unanticipated effects to a historic property that were not identified prior to completion of the Section 106 process. Post-review discoveries typically involve archaeological remains rather than historic buildings because archaeological sites may not be readily apparent prior to project commencement.

While archaeological investigation methods are designed to identify material evidence of past cultural activities, it is always possible that deeply buried archaeological deposits may remain undetected during the inventory process and may come to light during construction and/or other ground disturbing activities. This SOP will be coordinated with all other installation staff offices responsible for carrying out ground-disturbing activities.

In the event that previously unidentified, potential historic properties are encountered, work in the area of discovery will cease immediately and the following actions will be taken:

- ◆ Further direct effects to the vicinity of the site or deposits will be avoided by halting all project work within the discovery area and a suitable buffer area (to be determined on a case-by-case basis, with 30 meters a commonly used minimum). The area will be demarcated with flagging tape or other suitable materials.
- ◆ At the time of discovery, the project proponent will immediately contact the Directorate of Public Works in order to notify the Cultural Resources Program Manager (CRPM), who will notify the Cultural Resources Manager (if not the CRPM, who is the person with delegated authority from the Garrison Commander) and (if different) the Installation Archaeologist.
- ◆ The CRPM shall immediately notify, in writing, the Garrison Commander, or his/her official designee and NTC G3. The CRPM shall also notify the Installation Directorate of Emergency Services (DES) that NHPA and/or NAGPRA compliance procedures are in effect per this SOP and 43 CFR 10.

Upon notification, or at the soonest possible time, the Cultural Resources Manager (CRM) and the IA will make a field evaluation of the context of the site, deposit, or PRTCI to ascertain its probable age and significance, record the findings in writing, and document the resource with appropriate photographs and drawings. The result of this field evaluation, for which the timeframe will be in keeping with 36 CFR 800.13, will be a recommendation or provisional determination of National Register eligibility.

- ◆ Following the evaluation by the CRM, all consulting parties including SHPO, affiliated federally recognized Tribes, and appropriate stakeholders will be notified, in keeping with 36 CFR 800.13, and provided an opportunity to comment on the content of the evaluation and the resulting recommendations/provisional determinations. The standard comment period provided to all parties for post-review discoveries is ten calendar days, although it may be necessary in limited cases to

shorten this period due to the urgency of the undertaking. The comment period will be clearly identified in the notification.

- ◆ If bone is present within the deposit, the CRM will ensure that a qualified professional accompanies him/her to the work site to assist in determining whether any of the bone is human. If human remains or other cultural materials that may fall under the provisions of NAGPRA are present, the CRPM will complete the NAGPRA process (SOP 7).
- ◆ If disturbance to the site or deposit is minimal (meaning that there is no substantive damage to any reasonably anticipated NHPA values) and further project work can be relocated to avoid the cultural resource, the cultural resource will be avoided and the CRM will conclude this procedure and notify the consulting parties.
- ◆ If, following consultation, the site is determined eligible for the National Register and the activity cannot be relocated, the CRM will apply the provisions of the 2022 Section 106 Programmatic Agreement to review alternative treatments and treat adverse effects in the most expeditious manner, providing for timely completion of the undertaking with impacts to the resource minimized to the extent possible, and with cultural protocols recommended by the affiliated consulting Tribes incorporated to the extent possible.
- ◆ Fort Irwin will consult with appropriate consulting parties in all actions during the review process.
- ◆ Documentation of post-review discoveries will occur and be retained in the file for the subject project.

The same steps will be followed for the discovery of unanticipated effects, except that the effects will be documented and consulted upon.

## **8.2 Emergency Actions and Historic Properties**

There may be times when Fort Irwin must respond to disasters or emergencies that affect the operations and missions of the Installation. Activities and actions undertaken to respond to disasters and emergencies can have an adverse effect on documented or undocumented historic properties located on the Installation. Immediate rescue and salvage operations conducted to preserve life or property are exempt from the provisions of Section 106. Section 110 still applies, unless a waiver is requested and received under 36 CFR 78.3(a), and other cultural resources laws, such as NAGPRA and ARPA, still apply.

Emergencies can be natural, or in response to situations that result from human events. Under 36 CFR 800.12(a), a disaster or emergency under Section 106 is declared by the President, a tribal government, or the governor of a state, or involves an immediate threat to human life or property. They may also include those actions necessary to respond to a threat to national security, including short-term mission-essential activities for deployable troops. The emergency situations section of the Section 106 regulations applies only to undertakings that will be implemented in response to the disaster or emergency within 30 days after the disaster or emergency has been formally declared by the appropriate authority or, in the case of an immediate threat to life or property, within 30 days after such an event occurs.

As with inadvertent discoveries, emergency actions require an expedited process for handling historic properties, including properties of traditional religious and cultural importance, which may be affected. After an unanticipated disaster or emergency has been declared, the CRM will consult with the ACHP, SHPO, and affiliated federally recognized Tribes for undertakings that will be implemented within 30 days.

A reasonable extension may be requested from the ACHP within the original 30-day timeframe. It is

generally expected not to last longer than six months.

### **8.2.1 Notification to Tribes and SHPO**

- ◆ The CRM shall notify the SHPO and the Tribes, via telephone or email and followed by written confirmation, of a declared emergency as soon as practicable (meaning that the emergency has been confirmed and that the means of communication are available) after the emergency has been declared.
- ◆ In cases where an emergency can be anticipated but has not yet been declared, the CRM will invite the ACHP, SHPO, and affiliated federally recognized Tribes to comment on the undertaking at least seven days prior to the undertaking, if possible, or, if it is not possible to wait seven days, within the time available.
- ◆ As soon as practicable after the emergency, the Army will notify the SHPO and Tribes via email, and will follow up with written documentation if any historic properties were discovered or disturbed as a result of emergency response actions. Consultation will be completed as necessary.
- ◆ Each emergency undertaking, including its effects, will be summarized, as will consultation efforts, for external and upwards reporting, as well as Fort Irwin records.

### **8.2.2 Emergency Actions Affecting Historic Properties**

Where possible, emergency actions will avoid foreclosing future preservation of a historic property. If an emergency undertaking has damaged or will damage a historic property, Fort Irwin will take the following actions once it is feasible and safe to do so:

- ◆ Previously unrecorded sites will be recorded and their conditions documented; previously documented historic properties and potential historic properties will be monitored and their conditions documented. Results would be included, minimally, in the annual PA report.
- ◆ If a known historic property has minor damage (minor meaning that the National Register values are not substantively diminished), the CRM and the IA will determine whether measures to prevent further degradation are needed. Such measures could include the application of ground cloth, straw bales or “snakes,” or mulch to prevent erosion in disturbed areas; or application or re-application of signage, markers, or barriers to prevent vehicle access to the property.

### **8.2.3 Emergency Stabilization of Historic Properties**

- ◆ In the event the damage to a historic property is severe and the property is eligible under criterion d, a report will be prepared documenting the damage and the potential for salvage of data that cannot otherwise be conserved. If the potential for salvage is high, a research design will be prepared and provided to the Tribes and SHPO for review and input prior to implementation. Salvage or rehabilitation may proceed when normal conditions are restored (subject to availability of funds). If there is little or no potential for salvage or if salvage is not possible, the damage will be documented in photographs, and artifacts at the site may be documented and collected. Where other criteria apply, these will be treated on a case-by-case basis, and taken into account in developing the research design;
- ◆ If destruction of a National Register-listed or eligible historic property is necessary due to life/safety issues resulting from a disaster or emergency, recordation may be limited to photographs of all exterior surfaces and features. Only those interior features that may be safely accessed will be documented with photographs;

- ◆ Fort Irwin will consult with appropriate Consulting Parties (excepting those who have indicated that they do not want to hear about any actions in the area, or that they have no interest in the resource type) in all actions during the review process; and
- ◆ The occurrence of all emergencies will be documented and retained in the files, and described as appropriate in upwards reporting, the 2022 Programmatic Agreements' annual report, and so forth. The annual report will also discuss any stabilization or rehabilitation efforts and their results.

## **SOP 9: ASSESSING RISK AND IDENTIFYING LARGE-SCALE SURVEY PRIORITIES**

For the Western Training Area (WTA), not yet open to full training as of 2022, risk management emphasizes the early identification of historic properties and the application of protection measures prior to opening the area to full training. For other areas associated with training, risk is considered in terms of the potential for one or more undocumented or incompletely documented historic properties to be present.

Some areas, such as the desert tortoise mitigation areas, are not expected to have training-related activities (except perhaps in general terms of water supply and utility lines, with associated projects likely to be surveyed and consulted upon on an individual basis) occurring within their boundaries.

For large-scale surveys in the remaining areas of Fort Irwin, risk analysis is somewhat more complex, with factors including the potential for historic properties to be or have been present, the geological setting, and training activity intensity and types. These factors are, as noted below, not independent of each other.

The annual target is 10,000 acres, in keeping with past survey efforts on Fort Irwin, subject to the availability of funding. Survey will be conducted according to the methods detailed in SOP 2.

### **9.1 Cultural Resource/Historic Property Potential**

Fort Irwin has considered various approaches to considering site potential and patterning on Fort Irwin, including the use of predictive modeling; a predictive model was developed in 2003 (Ruiz 2003). Conclusions from the 2003 modeling effort included that landform and geological data, better fault maps (to help understand differences in microenvironments), and other types of data were needed to better portray the area.

While the model used four site types—lithic, habitation, petroglyph and pictograph/rockshelter, and historic—Ruiz also noted that other forms of breakdown might be useful. Her geological emphasis and recognition that different factors would be expected to condition the locations of different site types found on Fort Irwin suggest that a landscape-level geoarchaeological perspective should be helpful in understanding observed site patterning. This may in turn have the potential to contribute to a better understanding of site interrelationships.

Subsurface sampling and project monitoring in selected areas may also help clarify the potential for buried deposits (even in areas where no previously known sites are present). Fort Irwin is currently employing a heuristic approach, emphasizing geological factors, to determine how these tools can most effectively and efficiently be applied.

- ◆ Ensure accurate locational data for new (and, when revisited, previously recorded) sites and isolates.
- ◆ Consider sampling underrepresented environments to obtain a more complete understanding of spatial patterning.
- ◆ Examine what is expected for areas in light of what is actually found.
- ◆ Employ limited subsurface testing, followed by project monitoring as needed, to better understand geological contexts and the potential for associated cultural deposits in given settings.
- ◆ Where past surveys provide a geological assessment pertinent to the project area (see R-130 for an example), use this information in assessing the subsurface potential of relevant project areas.

## 9.2 Geological Setting

Fort Irwin's geological setting can interact with the other factors in several ways. A review of available geological and geoarchaeological data indicates, at a minimum, the following considerations.

- ◆ Identify and take into account geological resource locations/geological data regarding the past presence of resources. Examples include the locations and quality of potential lithic raw materials and minerals/ores, the availability of rock formations suitable for use as rockshelters and images, and the availability of water in springs and playas at given points in time.
- ◆ Identify geomorphological constraints that may have affected landscape use (for example, obstacles to travel).
- ◆ Where possible, take into account whether given landforms are erosional, stable, or depositional; soil types (including the chemical composition and erodibility); and other factors related to the geological potential for the presence and preservation of buried deposits, considered in terms of information potential and/or site integrity.
- ◆ Consider the potential relationships between each of the above and the various types of training activities.

## 9.3 Training Type and Intensity

The Section 106 PA for training and support activities, and the associated Environmental Impact Statement, describe various activities. In addition, the various training areas are broken into the following use intensity categories:

1. **High use:** unlimited cross-county use by all vehicle types.
2. **Medium use:** movement by all vehicle types restricted to roads, staging, or assembly areas. These features may be located throughout the area.
3. **Low use:** all vehicle types on roads, with no staging areas, and dismounted (e.g., foot soldier) traffic off roads.
4. **No use:** off-limits (no entry to vehicles involved in the rotation except as authorized).

Although specific areas have been given the applicable designations, it may not always be the case that the actual use is as intensive as the designation. Use of current aerial photographs should provide for considering actual as opposed to designated uses. The Range and Training Land Assessments completed by ITAM should also be taken into account.

## 9.4 Implications of Mentioned Factors for Survey Priorities

The categories provided below will continue to be evaluated as new information becomes available.

- ◆ Based on the previously noted considerations, high-risk areas to be prioritized for survey include (but are not limited to) locations within designated high use areas where historic properties may still be present; areas where higher levels of use may be expanded; areas offering resources that would have been present and desirable in the past; areas where environmental constraints would be

expected to focus activities in particular locations; and areas of known sites that may be incompletely recorded.

- ◆ Areas that currently appear to be at lower risk include steeper areas that have no good access routes to provide for training activities and that are not expected to serve as backstops; areas of intensive past disturbances coupled with shallow deposition; and consistently erosional environments such as washes.



## **SOP 10: PROJECT MONITORING\***

Program review, and recent requests by Tribes for project monitoring during ground-disturbing projects where there is a risk of inadvertent or unanticipated discoveries, demonstrate the need to conduct appropriate project monitoring. (Currently, this effort involves archaeological monitoring, as noted in the footnote.) Many geological contexts on Fort Irwin are not likely to have buried features or significant archaeological deposits, based on factors such as soil depth or presence in an erosional environment. Such factors may be examined on a case-by-case basis for areas having existing geoarchaeological or geological analysis that assesses the potential for buried deposits, or soils map data where it has been determined to be consistent with location-specific field observations.

Other contexts call for due consideration of project monitoring. Cases in which monitoring should be considered involve environments where the geological deposition is sufficiently recent and deep enough to allow for the presence of buried cultural materials, and where one of the following conditions is met:

### **10.1 Pre-Implementation Survey Is Not Possible**

In very limited cases, this form of project monitoring may be appropriate. **It is not to be used as a substitute for Section 106 survey.** However, it may apply in the following cases:

- ◆ The area has the potential for deeply buried cultural materials and the depth of project activities exceeds that which could be reached using standard subsurface testing procedures.
- ◆ Section 106 has been waived in an Emergency as defined in SOP 8, and one of the following applies:
  - Project monitoring can be conducted safely and may allow collection of information not otherwise available.
  - The presence of a monitor may help prevent or limit damage to previously unknown cultural materials if present; provides for avoidance of or limitation of damage to known historic properties; or may provide for avoidance of or limitation of damage to documented potential/known historic properties when the potential for project effects cannot be clearly identified in advance.
  - The need for immediate action was such that no archaeological monitor was present (due to immediate threat to human life and safety or to property, or because monitor could not be conducted safely), but post-implementation monitoring for effects can safely be conducted.

### **10.2 Known Historic Properties Are Present, but Are Not Expected to be Affected**

- ◆ Project monitoring may be used to ensure that projects occurring in close proximity to a known historic property avoid the property or, if activities extend into the property, do not affect the property's National Register values. An example would be having a monitor present to ensure that equipment avoids at-risk features during installation of safety grates over mine shafts.

### **10.3 The Effectiveness of the Subsurface Testing Strategy for a Site is Being Evaluated**

- ◆ Project monitoring may be used for sites that are not considered historic properties, as a check on the effectiveness of previously conducted, good faith subsurface testing. Selected sites must have the geological potential for buried features or substantial artifact deposits.

### **10.4 No Known Site is Present, but the Potential for Buried Sites is Unusually High**

- ◆ Project monitoring may be used where no known site is present if the potential for buried cultural materials is unusually high (but none were revealed during subsurface testing), as indicated by factors such as the presence of eligible sites with buried deposits in close proximity, settings which represent unexplained gaps among eligible sites, or settings in close proximity to a water source where any sites present would be buried.

Results of project monitoring will be documented in a Project Monitoring Report to include the dates of monitoring, the name of the monitor, a summary of the project monitored, and monitoring goals, observations, and conclusions. Accompanying data will include maps showing the area(s) monitored, photographs (with a scale) documenting the geological deposits observed and archaeological artifacts or features **other than human remains or funerary objects**.

\*Refers to archaeological monitoring as defined in the Abbreviations, Acronyms, and Definitions section.

**REFERENCE CITED**

Ruiz, Dr. Marilyn O.

- 2003 The Development and Testing of an Archaeological Predictive Model for Fort Irwin, California. Report provided to Mr. J. Tad Britt, United States Army Corps of Engineers. On file with the Fort Irwin Cultural Resources Program, Fort Irwin, California (R-122).

## **Attachment G**

### **Protection and Treatment Measures**

Fort Irwin's preference is to avoid effects to historic properties whenever feasible. This is typically accomplished through preservation in place, which may involve site protection measures. Such measures may include (but are not limited to):

1. Fencing to block access;
2. Tank jacks (angle iron obstacles set on the ground surface), boulders, or other obstacles used to block access points;
3. Signage indicating areas off-limits for training (without specifying that a site is present; these signs are also used to protect other resources);
4. Seibert stakes (the reflective markings increase visibility);
5. Inclusion on maps and in shapefiles as off-limits areas;
6. Designation as no-fire or restricted-fire areas;
7. Off-site or surface erosion control measures;
8. Covering sites with mulch or other culturally sterile materials. .

Additionally, project monitoring may be used to ensure that sites/sensitive site components are avoided, and annual condition monitoring may be employed to determine whether further efforts are needed.

If undertakings may or will result in adverse effects, Fort Irwin may develop a treatment plan that includes one or more of the following treatment measures, depending on the nature of historic properties affected and the severity of adverse effects, as detailed in Stipulation V.D.1. Other measures, including creative measures identified in consultation, may be developed and, as applicable, added to the list of standard measures or consulted upon on a case-by-case basis, per V.D.2. This Attachment may be amended in accordance with Stipulation XIII.

1. Historic American Buildings Survey (HABS)/Historic American Engineering Record (HAER)/Historic American Landscapes Survey (HALS) or Equivalent Documentation
2. Public Interpretation
3. Historic Context Statements
4. Oral History Documentation
5. National Register of Historic Places Nomination (in keeping with Army policy, this applies only when a historic property is transferred from Army ownership and listing in the National Register is considered likely to provide an additional layer of protection).
6. Capping and Hardening\*
7. Data Recovery

8. Archaeological Treatment Plan
9. Ethnographic Studies

\*This work will be designed to maintain the permeability of the layer above the site, but will also use measures—such as planting native vegetation—to help anchor the capping materials as needed.