

Draft

Environmental Assessment
for Hazardous Material and Hazardous Waste Storage
at Sierra Army Depot, California



Prepared by
Sierra Army Depot, CA

June 2019

Draft
Finding of No Significant Impact
for the Environmental Assessment
of Hazardous Material and Hazardous Waste Storage Facility
at Sierra Army Depot, California

1. Introduction. Pursuant to the Council on Environmental Quality (CEQ) regulations in Title 40 of the Code of Federal Regulations (CFR) parts 1500-1508 for implementing the procedural provisions of the National Environmental Policy Act (NEPA) (Title 42 of the United States Code 4321 et seq.) and 32 CFR part 651 (Environmental Analysis of Army Actions), Sierra Army Depot (SIAD) conducted an Environmental Assessment (EA) of the potential environmental and socioeconomic effects of the proposed expansion of the existing Hazardous Material/Hazardous Waste (HM/HW) Facility. Regulations in 32 CFR part 651 provide Army guidance and procedures for complying with NEPA and establish policy, procedures, and responsibilities for assessing environmental effects of proposed Army actions. The purpose of the proposed action is to meet present and future needs for HM/HW management and storage. SIAD is a major recipient of cargo containers returning from overseas, some of which include hazardous materials, and the existing HM/HW Storage Facility located at SIAD [REDACTED] does not have adequate capacity to meet current and/or projected HM/HW throughput.

2. Proposed Action. SIAD proposes the expansion of its current HM/HW storage facility to accommodate HM/HW storage needs; the proposal includes an additional 3 acres of impermeable and bermed hardstand for outdoor storage and an additional 2400 square feet pre-engineered building (PEB) for indoor storage

3. Alternative Eliminated from Further Consideration. Building a new HM/HW facility was considered, but was eliminated because of the greater expense and additional time to construct before known existing deficiencies could be corrected. It would also: create an excess of building square footage; require the demolition of the existing structure; and generate a greater amount of solid waste. The existing facility is fully functional, but simply lacks the capacity to operate at higher volumes.

4. No Action Alternative. CEQ regulations require analysis of a no action alternative to provide a benchmark, enabling decision makers to compare the magnitude of the potential environmental effects caused by the proposed action and any alternative actions. The no action alternative is not required to be reasonable or to meet the purpose and need of the proposed action. The EA will refer to the no action alternative as the existing (baseline) condition of the affected environment without implementing the proposed action. Given the inadequacy of existing facilities and anticipated increases in volume of HM/HW, the no action alternative will not achieve the purpose and need of the proposed action.

5. Factors Considered in the Finding of No Significant Impact (FONSI). The EA, which is attached and incorporated herein by reference, examines the potential effects of the proposed action and the no action alternative on the following resource areas of environmental and socioeconomic concern: Biological Resource, Utilities, Land Use, Hazardous and Toxic

Substances, Cultural Resources, and Water Resources. No mitigation measures will be necessary. Best Management Practices for reduction of potential effects to air quality, water quality, traffic and transportation, and noise generation will be implemented during construction and operation of the proposed action.

6. Public Review and Comment. The Draft EA and FONSI will be made available for public review and comments for 30 days, beginning with publication of a Notice of Availability (NOA) in the Reno Gazette Journal and Lassen County Times newspapers. Documents will be available at the Herlong, Lassen County Public, and Washoe County Main Libraries. All documents are posted on SIAD's website, <https://www.sierra.army.mil/Public/>. Comments can be sent to Mr. Zygmunt Osiecki, NEPA Coordinator at SIAD, ATTN: TASI-GRE, 74 Currant Street, Building 63, Herlong, California 96113, by phone at (530) 827-5068, or by email at zygmunt.v.osiecki.civ@mail.mil. Comments received within the 30-day public review period will be made part of the Administrative Record. The Army will make revisions as appropriate to the EA and FONSI based on the comments received.

7. Conclusion. On the basis of the EA, the Army has determined that implementing the proposed action would have no significant direct, indirect, or cumulative adverse effects on the quality of human life or the natural environment at SIAD. Preparation of an Environmental Impact Statement is not required before implementing the proposed action.

Benjamin G. Johnson
Lieutenant Colonel, U.S. Army
Commanding

Date

Table of Contents

Finding of No Significant Impact	ii
Acronyms and Abbreviations	vii
Section 1.0 Purpose and Need of the Proposed Action	1
1.1 Introduction	1
1.2 Purpose and Need	1
Section 2.0 Description of Proposed Action and Alternative	2
2.1 Proposed Action (Preferred Alternative)	2
Figure 1	3
Figure 2	4
2.2 Alternative Eliminated From Further Consideration	5
2.3 No Action Alternative	5
2.4 Decision to be Made	5
2.5 Regulatory Compliance	5
2.6 Public Participation	6
Section 3.0 Affected Environment/Environmental Consequences	8
3.1 Resources Not Carried Forward for Detailed Analysis	9
3.2 Resources Carried Forward for Detailed Analysis	11
Section 4.0 Conclusions	24
Section 5.0 References	25
Section 6.0 Agencies and Persons Consulted	28
Section 7.0 List of Preparers	29
Section 8.0 Distribution List	29

ACRONYMS AND ABBREVIATIONS

APCD	Air Pollution Control District
AR	Army Regulation
BGEPA	Bald and Golden Eagle Protection Act
BMP	Best Management Practice
CAA	Clean Air Act
CARB	California Air Resources Board
CCR	California Code of Regulations
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CHRIS	California Historical Resources Information System
DoDI	Department of Defense Instruction
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
FNSI	Finding of No Significant Impact
HFE	Hazardous Materials Hazardous Waste Storage Facility Expansion
HM	Hazardous Material
HW	Hazardous Waste
ICRMP	Integrated Cultural Resources Management Plan
INRMP	Integrated Natural Resources Management Plan
IRP	Installation Restoration Program
IWFMP	Integrated Wildland Fire Management Plan
MBTA	Migratory Bird Treaty Act
MMRP	Military Munitions Response Program
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NOI	Notice of Intent
NWCG	National Wildfire Coordinating Group
OSHA	Occupational Safety and Health Administration
PEB	Pre-engineered Building
PM10	Particulate Matter Less Than 10 Microns in Diameter
PM2.5	Particulate Matter Less Than 2.5 Microns in Diameter
PMS	Publication Management System
SIAD	Sierra Army Depot
SIP	State Implementation Plan
SOP	Standard Operating Procedure
SPCC	Spill Prevention, Control, and Countermeasure Plan
TCE	Trichloroethylene
U.S.C.	United States Code

SECTION 1.0 PURPOSE AND NEED OF THE PROPOSED ACTION

1.1 INTRODUCTION

This Environmental Assessment (EA) evaluates the environmental and socioeconomic effects of the proposed expansion of the existing Hazardous Materials/Hazardous Waste (HM/HW) Storage Facility at Sierra Army Depot (SIAD). This EA has been prepared in accordance with Title 42 of the United States Code (U.S.C.) sections 4321-4347, the National Environmental Policy Act (NEPA); Title 40 of the Code of Federal Regulations (CFR) parts 1500-1508, Regulations for Implementing the Procedural Provisions of NEPA; and 32 CFR part 651, Environmental Analysis of Army Actions.

SIAD is under the command structure of the U.S. Army Tank-automotive and Armaments Command (TACOM), which is subordinate to Army Material Command (AMC). It was established in 1942 and is located in Lassen County, California. SIAD's mission is to provide rapid, expeditionary logistics support and long-term sustainment solutions to enhance readiness for the Total Army and Joint Force (SIAD 2017).

1.2 PURPOSE AND NEED FOR THE PROPOSED ACTION

SIAD is a major recipient of cargo containers returning from overseas, some of which include HM/HW. The existing HM/HW Storage Facility located at SIAD [REDACTED] does not have adequate capacity to meet current and anticipated HM/HW throughput. There is no available storage space to comply with Federal and/or State secondary containment requirements when larger volumes or shipping delays occur. The purpose is to have adequate HM/HW operational and storage capacity to meet current and anticipated future needs for HM/HW management.

SECTION 2.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

2.1 PROPOSED ACTION:

The existing facility is fully functioning and its inherent building design is compatible with its current use for storage and handling of HM/HW; it simply is not adequate in size. Current operations require use of temporary holding facilities that lack impermeable surfaces or berms, requiring additional transportation and handling of HM/HW resulting in vehicle wear and tear, additional man hours and expenditure of fuels. It also elevates the risk of spills and releases into the environment. SIAD requires a central point of HM/HW management with adequate secondary containment to prevent releases to the environment. The proposed action is the preferred alternative. It is the expansion of the current HM/HW storage facility to the extent necessary to accommodate the projected HM/HW storage needs of SIAD. SIAD proposes to add an additional 3 acres of impermeable and bermed hardstand for outdoor storage and an additional 2400 square feet pre-engineered building (PEB) for indoor storage. (See Figure 2)

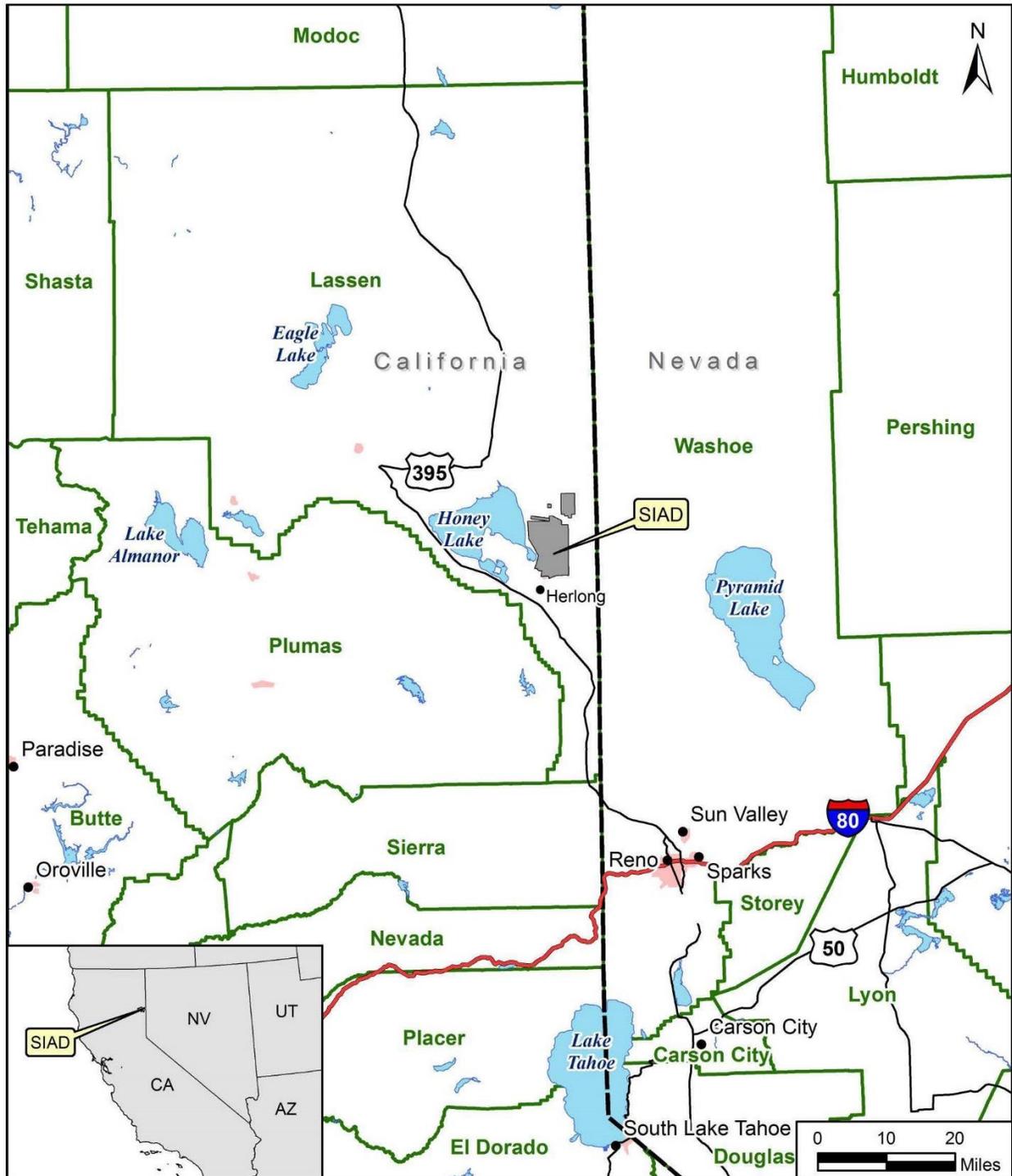


Figure 1



This document was prepared for use only by the client, only for the purposes stated, and within a reasonable time from issuance. Not-commercial, educational, and scientific use of this document by regulatory agencies is regarded as a "fair use" and not a violation of copyright. Regulatory agencies may make additional copies of this document for internal use.

Figure 2

2.2 ALTERNATIVE ELIMINATED FROM FURTHER CONSIDERATION

Building a new HM/HW Storage Facility was eliminated from consideration because it would require additional funding and delays. It would also: create an excess of building square footage; require the demolition of the existing structure; and generate a greater amount of solid waste. The existing facility is fully functional, but simply lacks the capacity to operate at higher volumes.

2.3 NO ACTION ALTERNATIVE:

CEQ regulations require analysis of a no action alternative to provide a benchmark, enabling decision makers to compare the magnitude of the potential environmental effects caused by the proposed action and any alternative actions. The no action alternative is not required to be reasonable or to meet the purpose and need of the proposed action. The EA will refer to the no action alternative as the existing (baseline) condition of the affected environment without implementing the proposed action. Given the inadequacy of existing facilities and anticipated increases in volume of HM/HW, the no action alternative will not achieve the purpose and need of the proposed action.

2.4 DECISION TO BE MADE

The SIAD Commander must decide whether the environmental or socioeconomic effects of the selected alternative that best meets the purpose and need for the proposed action would support a finding of no significant impact (FONSI) or would require publishing in the Federal Register a notice of intent (NOI) to prepare an environmental impact statement (EIS). Publication of an NOI would be necessary if the potential adverse environmental impacts associated with the selected alternative would remain significant even after implementation of reasonable mitigation measures.

2.5 REGULATORY COMPLIANCE

NEPA requires that Federal Agencies consider the environmental consequences of proposed actions during the decision-making process. The intent of NEPA is to protect, restore, and enhance the environment through well-informed decision-making. The Council on Environmental Quality (CEQ) was established under NEPA to implement and oversee Federal Policy in that process. To this end, the CEQ issued regulations to implement the procedural provision of NEPA (40 CFR parts 1500–1508). The U.S. Army has supplemented CEQ NEPA regulations by promulgating its own NEPA-implementing regulations (32 CFR part 651).

The regulations in 32 CFR part 651 provide Army guidance and procedures for complying with NEPA and establish policy, procedures, and responsibilities for assessing environmental effects of Army actions. According to 32 CFR 651.10(c), projects involving facilities construction requires environmental impact analysis under NEPA. Consistent with this Army regulation, this EA assesses the environmental and socioeconomic impacts of implementing this expansion project. Applicable Federal and State Regulations were considered for this EA analysis of the proposed action's effects on environmental and socioeconomic resources.

Applicable Federal and State Regulations were considered for this EA analysis of the proposed action's effects on environmental and socioeconomic resources. The following legislation was given particular consideration:

- Archaeological Resources Protection Act (16 U.S.C. 470aa – 470mm)
- Bald and Golden Eagle Protection Act (16 U.S.C. 668–668d)
- Clean Air Act (42 U.S.C. 7401 *et seq.*)
- Clean Water Act (33 U.S.C. 1251 *et seq.*)
- Endangered Species Act (16 U.S.C. 1531 *et seq.*)
- Migratory Bird Treaty Act (16 U.S.C. 703-712)
- National Historic Preservation Act (54 U.S.C. 300101 *et seq.*)
- Resource Conservation and Recovery Act (42 U.S.C. 6901 *et seq.*)
- Comprehensive Environmental Response, Compensation and Liability Act (42 U.S.C. 9601 *et seq.*)

2.6 PUBLIC PARTICIPATION

Public involvement in the EA process is conducted in accordance with NEPA, and CEQ and Army implementing regulations. This EA, along with a draft FONSI, will be available to the public for review for 30 days. A notice of availability of the EA and draft FONSI will be published in the *Reno Gazette Journal* and the *Lassen County Times*. At the end of the 30-day public review period the Army will consider any comments submitted by individuals, agencies, or organizations on the EA and the draft FONSI. As appropriate, the Army will then either execute a final FONSI and proceed with implementing the proposed action, or publish an NOI to prepare an EIS.

Consideration of the views and information of all interested parties promotes open communication and enables more-informed decision-making. Agencies, organizations, and members of the public having a potential interest in the proposed action—including Native American groups, minority, low-income, and disadvantaged persons—can participate in the decision-making process through public review of the EA and FONSI.

The U.S. Fish and Wildlife Service (USFWS) and California State natural and cultural resources Agencies were contacted at the outset of this EA concerning the proposed action.

SECTION 3.0 AFFECTED ENVIRONMENT/ENVIRONMENTAL CONSEQUENCES

This EA addresses environmental, cultural and socioeconomic effects associated with the HFE. Effects on each resource can vary in degree or magnitude from a slightly noticeable change to a total change in the environment. For the purpose of this analysis, the intensity of effects will be classified as no effect, negligible, minor, moderate, significant, or beneficial. The intensity thresholds are defined as follows:

- **No Effect:** A resource would not be affected by the action being evaluated when compared to the forecasted future without project condition.
- **Negligible:** A resource would not be affected or the effects would be at or below the level of detection, and changes would not result in any measurable or perceptible consequences when compared to the forecasted future without project condition.
- **Minor:** Effects on a resource would be detectable, although the effects would be localized, small, and of little consequence to the sustainability of the resource when compared to the forecasted future without project condition. Mitigation measures, if needed to offset adverse effects, would be simple and achievable.
- **Moderate:** Effects on a resource would be readily detectable, long-term, localized, and measurable when compared to the forecasted future without project condition. Mitigation measures, if needed to offset adverse effects, would be extensive and likely achievable.
- **Significant:** Effects on a resource would be obvious, long-term, and would have substantial consequences on a regional scale when compared to the forecasted future without project condition. Extensive mitigation measures to offset the adverse effects would be required and success of the mitigation measures would not be guaranteed.
- **Beneficial:** Effects on a resource would be beneficial when compared to the forecasted future without project condition.

The CEQ defines *cumulative effects* as the: "... impacts on the environment which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or nonfederal) or person undertakes such other actions" (40 CFR § 1508.7). A discussion of cumulative effects is included for each resource evaluated.

3.1 AREAS NOT CARRIED FORWARD FOR DETAILED ANALYSIS

Per the CEQ regulations (40 CFR § 1500), Federal Agencies may focus their NEPA analysis on resource areas that could be affected by a proposed action and omit discussing resource areas that would not be affected (see 32 CFR § 651.34[e]). SIAD has reviewed all the resource areas

that could potentially be affected by implementing the proposed action and determined that the proposed action either would have no effects or negligible effects on the following resources: Aesthetic and Visual Resources; Socioeconomics; Geology and Soils; Land Use; Surface Water Resources; and Air Quality as explained below.

3.1.1 Aesthetic and Visual Resources

Implementing the proposed action would not adversely affect aesthetic or visual resources, as implementing the HFE would not adversely alter the area's visual character or scenic quality and would not block or disrupt existing views. Facilities would be confined within SIAD and not visible from areas outside the installation.

3.1.2 Socioeconomics

Implementing the proposed action would not adversely affect socioeconomics (e.g., population, economic activity, and environmental justice). Implementation would not cause changes in population, local employment levels, personal income, or regional industrial or commercial growth. It would not result in disproportionate adverse environmental or health effects on low-income or minority populations or children. Implementation of this expansion is not an action with the potential to substantially affect human health or the environment by excluding anyone, denying anyone's benefits, or subjecting anyone to discrimination or disproportionately high and adverse environmental health or safety risks.

3.1.3 Geology and Soils

Construction and operation of the HFE are expected to have negligible effects on current soil and geology conditions. Ground disturbance would be minimal and would occur in areas of the installation that have already been previously highly disturbed. Best Management Practices (BMPs) to be implemented during construction, such as regular watering of disturbed ground, would minimize soil erosion.

3.1.4 Land Use

SIAD occupies approximately 36,000 acres in Herlong, California, located in Lassen County just east of the Sierra Nevada Mountains in the northeast portion of California near the Nevada border. Currently, the HW/HM Facility site occupies 0.5 acres, the HFE is about 3 acres.

3.1.5 Surface Water Resources

SIAD has no permanent surface waterbodies (Tetra Tech, 2018). One small wetland is located in the northwestern portion of SIAD's main parcel and several ephemeral streams are found on the demolition ground. The main parcel and airfield also have multiple playas, or undrained desert basins that may become inundated following rain but dry out quickly. SIAD's surface water features are shown in Figure 3-1. There are no surface water resources within or in the vicinity of the proposed project or alternative project areas, therefore, the proposed action would have no effects on surface water resources.

3.1.6 Air Quality

Federal and most State Agencies segregate air sheds by county boundaries. In Lassen County, the state of California has classified the air quality as Attainment for PM_{2.5}, PM₁₀, NO₂, SO₂, O₃ 8-hour, CO, and lead. Lassen County is an attainment area for all criteria pollutants. SIAD's emissions are well within the limitations of their current air quality permit.

3.2 AREAS CARRIED FORWARD FOR DETAILED ANALYSIS

This Section focuses its NEPA analysis on those resource areas that could be affected by the Proposed Action and Alternatives, they include: Groundwater; Cultural Resources; Natural Resources; Hazardous and Toxic Substances; Traffic and Transportation; and Noise.

3.2.1 GROUNDWATER

3.2.1.1 Affected Environment

SIAD is located in the Honey Lake Valley groundwater basin, a 487-square-mile basin that stores an estimated 10 million acre-feet of water in the upper 100 feet of its aquifers. Groundwater quality varies and some groundwater in the basin is not suitable for drinking water because of high levels of dissolved solids, sulfate, or other impairments (Tetra Tech 2018).

Groundwater flow typically follows the surface topography; however, localized and temporal variations may exist. Groundwater flow is generally to the northwest in the southern portion of the main parcel, and generally to the southwest in the northern portion of the main parcel. In much of the central and western portions of the Main Depot, the hydraulic gradient is relatively flat and flow appears to be to the west. Local variations in the potentiometric surface also occur in the vicinity of (1) industrial areas where leaks in the water supply and sewage systems cause mounding, and (2) the potable supply wells located in the southern portion of the Main Depot. These wells cause seasonal variations in groundwater flow because of differing water usage requirements during the wet and dry seasons (Tetra Tech 2018). At the demolition ground and gravel extraction area, groundwater flow is generally to the south toward lower elevations.

Holocene sedimentary deposits, Pleistocene lake and near-shore deposits, and Pleistocene and Plio-Pleistocene volcanic rocks comprise the Honey Lake Valley groundwater basin aquifer system. These deposits range from low-to-high permeability and yield low-to-high amounts of water (Tetra Tech 2018).

The major sources of groundwater recharge are direct infiltration of precipitation in upland areas and infiltration of streamflow in alluvial-fan areas, accounting for approximately 80 percent of total recharge. The remaining 20 percent of recharge consists of infiltration of surface water and irrigation flow on the valley floor (Tetra Tech 2018).

SIAD has on-depot groundwater wells and withdraws water to support drinking, irrigation, dust suppression, and industrial purposes. SIAD has three operational groundwater wells producing potable water that range in depth from approximately 350 to 500 feet and have an average static depth of 105 to 121 feet below ground surface. The wells currently undergo treatment for uranium, manganese and iron removal because the untreated levels exceed the primary drinking water levels. Recently, one of the wells was identified as having *per- and poly-fluoroalkyl*

substances or “*PFAS*” above the Health Advisory and additional treatment measures are being added to address those concerns. Groundwater also has elevated nitrate levels that appear to be caused by natural background levels. Construction and operations activities within the scope of this project are expected to have negligible to no effect on groundwater due to physical controls to eliminate any discharge or runoff that would impact groundwater.

Other areas of groundwater contamination exist at SIAD and are being addressed by the depot’s Installation Restoration Program (IRP) with regulatory oversight by the California Department of Toxic Substances Control (Tetra Tech 2018).

3.2.1.2 Environmental Consequences

No Action Alternative: Under the No Action Alternative, current effects to water resources from ongoing activities would persist within the installation, as identified in SIAD’s Final Integrated Natural Resources Management Plan 2018-2023 (Tetra Tech 2018). SIAD’s current operational effects on water resources include using groundwater for drinking water, irrigation, and other mission activities; generating and treating wastewater on-depot; using equipment wash racks; and managing stormwater runoff. The HM/HW Storage Facility would remain the same and the risk of HM/HW spills that could contaminate the groundwater would not be decreased.

Preferred Alternative: The Proposed Action would not have an impact on the groundwater by changes to the volume used. Rather, the expansion would provide additional protections for the groundwater by having the proper facilities to control and contain any spills or releases.

3.2.1.3 Cumulative Effects

No large-scale projects or proposals at SIAD have been identified that, when combined with the Proposed Action, would contribute significantly to groundwater cumulative effects.

3.2.1.4 Mitigation

The BMPs for construction and operations would include measures to prevent spills and possible contamination of surface and ground waters. These would involve proper storage of fuels in fueling stations that are far from water resources. Contractors carrying out the expansion would be required to follow spill prevention, containment, and countermeasure plans approved by SIAD.

3.2.2 BIOLOGICAL RESOURCES

3.2.2.1 Affected Environment

Flora

90 plant species typical of those found in the semiarid Honey Lake Valley have been observed on SIAD (Tetra Tech 2018). They form six vegetation communities—four shrubland communities and two grassland communities. Developed and disturbed areas have little or no vegetation. Most acreage at SIAD is shrublands. Big sagebrush (*Artemisia tridentata*) is the most common shrubland community with 11,125 acres. Greasewood (*Sarcobatus vermiculatus*) and shadscale (*Atriplex confertifolia*) scrub cover 7,871 acres and 7,255 acres, respectively. Rubber rabbitbrush (*Ericameria nauseosa*) covers only 357 acres. Cheatgrass (*Bromus tectorum*) grassland is the most common grassland vegetation community at 1,550 acres. Cheatgrass is a nonnative species. It typically occupies previously cleared or disturbed areas such as road margins, around the airstrip, and in areas that have been previously cleared or mowed. Cheatgrass outcompetes and displaces native vegetation, reducing the presence of native species at SIAD over time, and can result in increased frequency and extent of wildfires.

In general, the native vegetative communities at SIAD are healthy. Species diversity is in line with what would be expected in SIAD's arid climate. Trees at SIAD are limited to the cantonment area, where they were planted to enhance the landscaping. Because of the limited amount of precipitation at SIAD, disturbed areas revegetate slowly. If not actively revegetated with native species, those areas are dominated by fast-growing invasive species such as cheatgrass or remain bare and subject to erosion.

Greasewood and big sagebrush are predominant in all the alternative locations, with sparse intermittent pockets of the other mentioned species.

Fauna

Mammals. 25 mammal species have been observed on SIAD (Tetra Tech 2018). Common mammal species are black-tailed jack rabbit (*Lepus californicus*), cottontail rabbit (*Sylvilagus* sp.), coyote (*Canis latrans*), ground squirrel (*Spermophilus lateralis*), kangaroo rats (*Dipodomys* sp.), mule deer (*Odocoileus hemionus*), and pronghorn antelope (*Antilocapra americana*). Four species of bats have been observed on SIAD: big brown bat (*Eptesicus fuscus*), Yuma myotis (*Myotis yumanensis*), hoary bat (*Lasiurus cinereus*), and silver-haired bat (*Lasionycteris noctivagans*).

Birds. More than 60 bird species have been observed on SIAD (Tetra Tech 2018). Common bird species include the black-billed magpie (*Pica hudsonia*), common raven (*Corvus corax*), and white-crowned sparrow (*Zonotrichia leucophrys*). Overall, habitat quality for birds at SIAD

is medium to low; however, habitat quality is high for shrubland species. Some microhabitats occur at SIAD, including large ornamental trees such as Siberian elm and western sycamore located in the cantonment area that are suitable for raptor perching and nesting. Raptors have been observed perching or nesting in trees in the cantonment area, and perching on poles throughout the facility.

Reptiles and Amphibians. Eight reptile and amphibian species are known to occur on SIAD (Tetra Tech 2018). Common reptiles on SIAD are the desert horned lizard (*Phrynosoma platyrhinos*), Great Basin fence lizard (*Sceloporus occidentalis biseriatus*), Great Basin gopher snake (*Pituophus catenifer*), and long-nosed leopard lizard (*Gambelia wislizenii*). The only amphibian species common on SIAD is the pacific chorus frog (*Pseudacris regilla*).

Insects. There is potential habitat for the Carson Wandering Skipper (*Pseudocopaeodes eunus obscurus*) located to the north and south of the installation. Cicadas (*Okanagana* sp.) are abundant along the SIAD western boundary fence near Chewing Gum Road. Bee flies (*Bombyliidae*), true flies (probably the *Tachinidae* family), and a European yellow underwing moth (*Noctua pronuba*) have been observed in greasewood shrubland on the northwestern portion of SIAD's main parcel (Tetra Tech 2018). A flower moth (*Schinia* sp.) and a pyralid moth (*Pyralidae* sp.) have been observed at the airfield, and western pygmy blue butterflies (*Brephidium exilis*) have been observed at multiple sites.

The fauna are transient species; moving in and out of areas depending on food and shelter availability, and may use the alternative locations at various times throughout the year. Those species with smaller home ranges, such as rabbits, fox, and lizards will be more likely to be in these areas than larger mammal species like wolves and deer. The smaller species make or use burrows for shelter and tend to move frequently throughout the landscape and are able to easily remove themselves away from construction activities to equally suitable habitats.

Special Status Species

No Federally-listed threatened or endangered species have been documented at SIAD (Tetra Tech 2018). SIAD does not have potential nesting habitat for Bald or Golden Eagles, however Golden Eagles have been observed migrating through the portion of Honey Lake Valley in which SIAD is located. Raptor anti-perching devices have been implemented at SIAD to deter birds of prey from encountering telephone poles and electrical wiring.

3.2.2.2 Environmental Consequences

No Action Alternative: There would be no effect on the biological resources.

Preferred Action: The Proposed Action will have a minor effect, if any, on biological resources. The property at the existing HM/HW site is paved and contains no wildlife or habitat.

Additional real property identified for the Proposed Action is highly disturbed, consisting of two unpaved dirt roads and minimal vegetation. The construction and operation of the site would not pose a threat to eagles or migratory birds which would increase the level of take, as defined by the Bald and Golden Eagle protection Act (BGEPA) and the Migratory Bird Treaty Act (MBTA).

The amount of shrub/scrub habitat loss will be minor. The location of the site is near a heavily used roadway (Main Magazine Rd.) and the disturbance from construction is expected to result in minor displacement of common species of small mammals, reptiles, and birds that are prevalent across the 26,608 acres of scrub/shrub habitat currently on the installation.

3.2.2.3 Cumulative Effects

Neither the No Action Alternative nor the Preferred Alternative would have any significant cumulative effects on biological resources.

3.2.2.4 Mitigation

No mitigation measures would be required since effects to biological resources would be considered minor and no special status species are expected to be present in the project area. Having said that, anti-raptor perching mechanisms have been installed on nearby telephone poles by Lassen County Rural Electric, in cooperation with SIAD Environmental and the Natural Resources program.

3.2.3 CULTURAL RESOURCES

3.2.3.1 Affected Environment

A records search was completed by staff of the California Historical Resources Information System (CHRIS) Northeast Center on February 11, 2019. The records search revealed no cultural resources within the project area or within ½ mile project vicinity. Pursuant to Section 106 and 110 of the National Historic Preservation Act and 36 CFR, the California State Historic Preservation Officer and all Federally recognized tribes with interest in this area were sent consultation packages notifying them of the project in the preparation of this EA. Consultation is ongoing and will be complete prior to the FNSI being signed. In addition, as part of an update to the ICRMP, a total of 6,000 acres, including the preferred alternative, will undergo a full archaeological survey, in the winter of 2019.

3.2.3.2 Environmental Consequences

Cultural resources have been included for further analysis because of the interest expressed by some Native American tribes, as well as an upcoming archaeological survey which has the potential to uncover undocumented cultural artifacts/resources.

The interested parties were provided the information they requested and no further contact has been received as of March 6, 2019. Consultation is complete and the emails received from these tribes will be included in the Administrative Record. An archaeological survey covering a total of 6,000 acres, including the project location, began Phase I on April 22, 2019 and is in final stages of completion. No culturally significant resources were discovered in the project area during this survey performed by Garcia and Associates (GANDA) and in partnership with Tetra Tech. At the completion of this survey a report will be drafted and included in the Administrative Record of this EA for reference.

No Action Alternative: There would be no effect on cultural resources.

Preferred Alternative: The Proposed Action will have no effect on cultural resources.

3.2.2.3 Cumulative Effects

Neither the No Action Alternative nor the Preferred Alternative would have any significant cumulative effects on cultural resources.

3.2.2.4 Mitigation

While no cultural resources are known or anticipated, should any subsequently be discovered the project will stop until coordination with appropriate State and Federal entities are completed.

3.2.4 UTILITIES

3.2.4.1 Affected Environment

Utilities on SIAD include potable water supply, wastewater systems, and storm water systems, energy sources such as electricity and natural gas, and solid waste handling systems. SIAD owns and operates its own on-depot potable water sources, wastewater treatment facilities, and solid waste landfill. SIAD has on-depot infrastructure for its electricity, natural gas, fuels, communications service, and off-site disposal of hazardous waste. SIAD's utility infrastructure is concentrated in the southern portion of the main parcel. SIAD's water distribution system consists of more than 30 miles of water mains with associated valves, fire hydrants, and related equipment. SIAD's groundwater wells supply enough water to support wildland fire operations as needed without affecting other on-depot water uses. SIAD's water infrastructure is concentrated in the cantonment and warehouse areas. All electric, communications, water and natural gas lines area within close proximity to the preferred alternative. The existing HM/HW Facility is currently connected to these utilities.

3.2.4.2 Environmental Consequences

No Action Alternative: The No Action Alternative would have no effect on utilities.

Preferred Alternative: The environmental consequences of adding utilities to the PEB will be minor because the utilities are already present in the existing facility.

3.2.4.3 Cumulative Effects

No Action Alternative: The No Action Alternative has no cumulative effects.

Preferred Alternative: The Preferred Alternative has a minor cumulative effect (i.e., a minor increase in utility usage). Minor additional use of utilities is expected during the construction phase and electrical demand is anticipated to increase in the completion of the project with the addition of four security lights and a PEB storage building. The effect is expected to be well within current system capabilities and would not require changes to the utility infrastructure at SIAD. The proposed expansion will not serve additional restroom facilities and, therefore, has no effect to the current septic system.

3.2.4.4 Mitigation

Mitigation would include precautions for overuse of any utilities by upgrading, expanding, and monitoring utility performance prior to and after construction. Use of energy efficient selection will be used when selecting heating, cooling, lighting and plumbing fixtures.

3.2.5 HAZARDOUS AND TOXIC SUBSTANCES

3.2.5.1 Affected Environment

Hazardous materials are chemicals that pose an immediate threat to health and/or the environment. Materials that are physically hazardous include combustible and flammable substances, compressed gases, oxidizers, etc. Health hazards are associated with materials that cause acute or chronic reactions, including toxic agents, carcinogens, and irritants.

SIAD currently manages hazardous and toxic materials in compliance with Federal, States, and Local laws and regulations. A majority of the hazardous chemicals that are stored at the depot occur in small quantities including pesticides, cleaners, janitorial supplies, paints, bleaches, and photographic chemicals. In its efforts to effectively manage hazardous and toxic materials at the depot, SIAD implements a spill prevention, control, and countermeasure (SPCC) plan to respond to emergencies and spills. No major chemical spills have occurred at SIAD, and minor spills were properly remedied within 24 hours.

3.2.5.2 Environmental Consequences

No Action Alternative: If the Proposed Action was cancelled, there would be minor additional effects on hazardous and toxic substances at SIAD because of the movement and handling of these substances from temporary storage to the HM/HW Facility and the risk of a spill, release or accident from the additional handling and transportation.

Preferred Alternative: The Proposed Action will have a beneficial effect by reducing the movement and handling thereby reducing the risk of a spill, release or accident.

3.2.5.3 Cumulative Effects

No Action Alternative: The No Action Alternative has no cumulative effects.

Preferred Alternative: No new large-scale projects or proposals at SIAD have been identified that when combined with the Proposed Alternative, would contribute to increases to hazardous substances.

3.2.5.4 Mitigation

The BMPs for construction and operations include measures to prevent spills and possible contamination of surface and ground waters. These would involve proper storage of fuels in fueling stations that are far from water resources. Contractors carrying out construction operations are required to follow spill prevention, containment, and countermeasure plans approved by SIAD. Construction and operation would not occur during adverse weather conditions.

3.2.6 TRAFFIC AND TRANSPORTATION

3.2.6.1 Affected Environment

SIAD is bounded by Honey Lake and Pole Line Road to the west, Duck Lake Road to the east, Wendel Road and railroad tracks to the north, and Herlong Access Road/Susanville Road to the south. The closest major metropolitan area is Reno, Nevada, approximately 62 miles southeast of SIAD, accessible by U.S. Route 395, Garnier Road, and Herlong Access Road/Susanville Road. The main gate is located along Herlong Access Road/Susanville Road. The existing roadways used to access the alternative locations in this area are Chewing Gum Road traveling south to north and Magazine traveling east to west (Figure 3-3).

There are over 200 miles of roadway on SIAD, including about 40 miles of asphalt concrete, 100 miles of medium bituminous, and 60 miles of gravel or other surfaces (SIAD, 1994).

At the north end of SIAD, there are Government-owned railroad tracks that connect with the Union Pacific Railroad, Batten Station (SIAD, 1995). The Union Pacific Railroad connects with the Herlong Station at the south end of the depot. The railways at SIAD provide approximately 60 miles of track, 34 miles of main line, 15 miles of siding, and 11 miles of classification yard trackage (SIAD, 1994).

Amedee Army Airfield runway, in the north portion of the installation, is 10,000 feet long. It was expanded to its current size in 2005 and includes visual approach lights (SIAD, 2009).

3.2.6.2 Environmental Consequences

No Action Alternative: Traffic and transportation would maintain a minor increase from current levels under the existing HM/HW Facility, resulting from the need to transport materials being stored at other locations on SIAD because of lack of capacity. Traffic levels resulting from construction of the proposed project would not occur.

Preferred Alternative: Traffic would be reduced by having to only move materials directly to the site rather than storing them and moving them again to the HM/HW Facility. Minor traffic is expected to increase on SIAD from construction. Public traffic off the installation is expected to be negligible and have no impacts to traffic volumes or patterns.

3.2.6.3 Cumulative Effects

No Action Alternative: The No Action Alternative has no cumulative effects.

Preferred Alternative: No new large-scale projects or proposals at SIAD have been identified that, when combined with the Preferred Alternative, would contribute to increases in traffic and transportation. SIAD roads and infrastructure are capable of handling any increased traffic patterns and the increase in transportation to and from SIAD during the construction; therefore, cumulative effects to traffic and transportation are anticipated to be negligible.

3.2.6.4 Mitigation

There are no mitigation measures planned for the traffic and transportation resources; however, BMPs during construction and operations would be anticipated to include signage and alternative routes if and when needed.

3.2.7 NOISE

3.2.7.1 Affected Environment

Noise is generally described as unwanted sound, which can be based either on objective effects (i.e., hearing loss, damage to structures, etc.) or subjective judgments (e.g., community annoyance). Sound is usually represented on a logarithmic scale with a unit called the decibel (dB). Sound on the decibel scale is referred to as sound level.

The threshold of human hearing is approximately three dB, and the threshold of discomfort or pain is around 120 dB. Some statistical noise levels are stated in terms of decibels on the A-weighted scale (dBA). Noise levels stated in terms of dBA reflect the response of the human ear by filtering out some of the noise in the low and high frequency ranges that the ear does not detect well. The A-weighted scale is used in most ordinances and standards.

Onsite noise levels are regulated, in a sense, through the Occupational Safety and Health Administration (OSHA). The noise exposure level of workers is regulated at 90 dBA, over an eight-hour work shift to protect hearing (29 CFR § 1910.95). Onsite noise levels are anticipated to be in the 70 to 85 dBA range. Areas above 85 dBA would be posted as high noise level areas and hearing protection would be required.

SIAD is within the Wendel Planning Area, under the Lassen County zoning district, which has established natural resources and noise policies. SIAD's primary noise-generating activities are railroad and airfield operations, vehicle traffic, and warehousing. SAID's activities (including DEMIL operations) do not generate incompatible noise levels and are a considerable distance from the installation perimeter (HDR 2018).

3.2.7.2 Environmental Consequences

No Action Alternative: Noise levels would remain the same.

Preferred Alternative: Traffic noise levels will be beneficial because the material will only be moved once, so any noise associated with a second movement will be eliminated.

3.2.7.3 Cumulative Effects

No large-scale projects or proposals at SIAD have been identified that, when combined with the Proposed Action, would contribute to significant increases in noise levels.

3.2.7.4 Mitigation

BMPs that are currently used for noise attenuation on SIAD property would be used during construction and operation. Expected BMPs to be applied include: monitoring sound levels; operation hours; and modifications to loud equipment with muffling devices as necessary.

SECTION 4.0 CONCLUSIONS

This EA identifies, documents, and evaluates the effects of implementing the Proposed Action, i.e., expansion of its current HM/HW storage facility, as well as the No Action Alternative. SIAD does not anticipate that implementing the Proposed Action will result in any significant environmental effects.

The construction of a new Facility was eliminated from further consideration because of the greater expense and additional time to construct before known existing deficiencies could be corrected, as well as the excess building square footage which would require demolition of the existing structure, and generate a greater amount of solid waste.

Implementation of the No Action Alternative would have potential negative effects on the environment because, given the inadequacy of existing facilities and anticipated increases in volume of HM/HW, the no action alternative will not achieve the purpose and need of the Proposed Action

The increased security and control of HM/HW management to be achieved in implementing the Proposed Action will provide benefits, i.e., proper containment measures for possible spills in compliance with Federal and State environmental regulations.

SECTION 5.0 REFERENCES

Delineation of Wetlands, Playas, and Other Waters of the United States on Sierra Army Depot, Herlong, California. Brown & Root Environmental (BRE). 1996.

Environmental Analysis of Army Actions (AR 200-2). 32 CFR § 651.

Occupational Noise Exposure, Occupational Health and Environmental Control. 29 CFR §1910.95, Subpart G.

Requirements for Preparation, Adoption, and Submittal of Implementation Plans. 40 CFR § 51.

Determining Conformity of Federal Actions to State or Federal Implementation Plans. 40 CFR § 93.

Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (NEPA). 40 CFR §1500–1508.

Regulations for the Resource Conservation and Recovery Act (RCRA). 40 CFR § 239-282.

Regulation for the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). 40 CFR § Part 307

Mandatory Procedures for Major Defense Acquisition Programs and Major Automated Information Systems (DoD 5000.2-R). Department of Defense. 2002.

Area Development Plan. DLA Disposition Services Sierra Army Depot, Herlong California. HDR. 2018.

Custom Soil Resource Report for Susanville Area, Parts of Lassen and Plumas Counties, California. Natural Resources Conservation Service (NRCS). 2017.
<https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>.

Integrated Natural Resources Management Plan. Sierra Army Depot, Herlong, California. 2001.

Comprehensive Master Plan, Environmental Management Division, Sierra Army Depot, Herlong, California. 1994.

Sierra Army Depot website. Accessed May 2018. <https://www.sierra.army.mil>.

Final Integrated Wildland Fire Management Plan 2017-2022, Sierra Army Depot. Tetra Tech. 2017.

Environmental Assessment for the Disposal and Reuse of the BRAC Parcels at Sierra Army Depot, California. U.S. Army Corps of Engineers. 1998. Final Land Use Control Implementation Plan for Sierra Army Depot, Herlong, California. U.S. Army Corps of Engineers. 2016.

Archaeological Resources Protection Act (16 USC Chapter 1B, §470aa – 470mm).

Protection of Bald and Golden Eagles Act (16 USC Chapter 5A, Subchapter II, §668a – 668d).

Migratory Bird Treaty Act (16 U.S.C. 703-712).

Endangered Species (16 USC Chapter 35, §1531 – 1543).

Clean Water Act (33 U.S.C. 1251 *et seq.*).

Council on Environmental Quality (42 USC Chapter 55, Subchapter II, §4342 – 4347).

Clean Air Act (42 U.S.C. 7401 *et seq.*)

Air Quality Management Process. U.S. Environmental Protection Agency. 2018.
<https://www.epa.gov/air-quality-management-process/managing-air-quality-setting-air-quality-goals>

Use of Environmental Isotopes to Investigate Hydrologic Processes at Honey Lake Basin, Lassen County, California and Washoe County, Nevada. Varian, Angela Resella, University of Nevada, Reno. 1997

Real Property Master Plan. Sierra Army Depot, Herlong, California. Woolpert, Inc. 2009

SECTION 6.0 AGENCIES AND PERSONS CONSULTED

Blanchard, Katherine. October 2018. Pers. Comm. Environmental Specialist, California Department of Fish and Wildlife – Region 1 Northern, 601 Locust Street, Redding, California, 96001.

Gordon, Carol. SIAD RPAO *pers. com.* 2018. Real Property Manager/RPAO Sierra Army Depot. Herlong, CA 96113
Comm: 530-827-4806

Haworth, Marcy. October 2018. Pers. Comm. United States Fish and Wildlife Service, Wildlife Biologist.

Tucker, Rob. September 2018. Pers. Comm. Lahontan Region Water Quality Control Board, Senior Water Resource Control Engineer.

SECTION 7.0 List of Preparers:

Scott Olsen, Sierra Army Depot, CA
BS, Wildlife Biology, University of Wisconsin, Stevens Point
Years of Experience: 30

Zygmunt Osiecki, Sierra Army Depot, CA
MS, Environmental Sustainability, Chatham University
BA, History (Environmental), La Roche College
Years of Experience: 11

SECTION 8.0 Distribution List

California Historical Resources Information System

Adrienne Springsteen
Research Associate
Northeast Center of the California Historical Resources Information System
123 West 6th Street, Suite 100
Chico, CA 95928

Department of Fish and Wildlife

Amy Henderson
Environmental Scientist
Interior Conservation Planning
California Department of Fish and Wildlife Northern Region
601 Locust St.
Redding, CA 96001

Garcia and Associates (GANDA)

Mike Lenzi, M.A., RPA
Senior Archaeologist/Project Manager
Garcia and Associates
813 D Street, San Rafael, CA 94901

Libraries (to be distributed upon approval of EA)

Herlong Public Library
P.O. Box 775
Herlong, CA

Susanville District Library
Central Library
1618 Main Street
Susanville, CA 96130

Washoe County Main Library
301 South Center Street
Reno, NV 89501

Native American Tribes

James Edwards
Chairman
Berry Creek Rancheria of the Maidu Indians
5 Tyne Way
Oroville, CA 95966

Bernold Pollard
Chairman
Fort Bidwell Indian Community of the Fort Bidwell Reservation
P.O. Box 129
Fort Bidwell, CA 96112

Tildon Smart
Chairman
Fort McDermitt Paiute and Shoshone Tribes of the Fort McDermitt Indian Reservation
P.O. Box 457
McDermitt, NV 89421

Kyle Self
Chairperson
Greenville Rancheria of Maidu Indians
P.O. Box 279
Greenville, CA 95947

Paul Garcia
Chairperson
Honey Lake Maidu
7029 Polvadero Drive
San Jose, CA 95119

Ron Morales
Chairperson
Honey Lake Maidu
1101 Arnold Street
Susanville, CA 96130

Len George
Chairman
Paiute-Shoshone Tribe of the Fallon Reservation and Colony
565 Rio Vista Drive
Fallon, NV 89406

Morning Star Gali
Tribal Historic Preservation Officer
Pit River Tribe of California
36970 Park Ave.
Burney, CA 96013

Mickey Gemmill
Chairperson
Pit River Tribe of California
36970 Park Ave.
Burney, CA 96013

Charles White
Tribal Administrator
Pit River Tribe of California
36970 Park Ave.
Burney, CA 96013

Vinton Hawley
Chairman
Pyramid Lake Paiute Tribe of the Pyramid Lake Reservation
P.O. Box 256
Nixon, NV 89424

Arlan D. Melendez
Chairman
Reno-Sparks Indian Colony
98 Colony Rd.
Reno, NV 89502

Julianne Polanco
State Historic Preservation Officer
Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, CA 95816

Deana Bovee
Chairperson
Susanville Indian Rancheria
745 San Joaquin Street
Susanville, CA 96130

Grayson Coney
Cultural Director
Tsi Akim Maidu
P.O. Box 510
Browns Valley, CA 95918

Don Ryberg
Chairperson
Tsi Akim Maidu
P.O. Box 510
Browns Valley, CA 95918

Bobby Sanchez
Chairman
Walker River Paiute Tribe of the Walker River Reservation
PO Box 220
Schurz, NV 89427

Darrell Cruz
Cultural Resources Department
Washoe Tribe of Nevada and California
919 Highway 395 South
Gardnerville, NV 89410

Neil Mortimer
Chairman
Washoe Tribe of Nevada and California
919 Highway 395 South
Gardnerville, NV 89410

Linda L. Howard
Chairman
Yerington Paiute Tribe of the Yerington Colony and Campbell Ranch
171 Campbell Lane
Yerington, NV 89447

State Historic Preservation Office

Julianne Polanco
State Historic Preservation Officer
Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, CA 95816