

PROPOSED LEASE AND DEVELOPMENT OF A TRIBAL AND CULTURAL USE AREA AT THE CORPS OF ENGINEERS LAKE SONOMA RECREATION AREA, SONOMA COUNTY, CALIFORNIA

Environmental Assessment and
Draft Finding of No Significant Impact

Prepared for
U.S. Army Corps of Engineers
San Francisco District

February 8, 2012



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TABLE OF CONTENTS

Lake Sonoma Proposed Tribal and Cultural Use Area Environmental Assessment

	<u>Page</u>
1.0 Introduction	1-1
1.1 Summary	1-1
1.2 Document Structure	1-1
1.3 Document Contact Information	1-2
2.0 Proposed Project	2-1
2.1 Project Overview	2-1
2.2 Project Location	2-1
2.3 Authority	2-4
2.4 Purpose and Need for Proposed Action	2-4
3.0 Scope of the Analysis	3-1
4.0 Proposed Action and Alternatives	4-1
4.1 Proposed Action (Agency-Preferred Alternative)	4-1
4.2 No Action Alternative	4-2
4.3 Comparison of Alternatives	4-2
5. Affected Environment and Consequences	5-1
5.1 Water	5-1
5.2 Habitat	5-5
5.3 Biological Resources	5-7
5.4 Air Quality	5-8
5.5 Geology and Soils	5-9
5.6 Noise	5-10
5.7 Recreation	5-11
5.8 Transportation	5-11
5.9 Aesthetics	5-12
5.10 Land Use	5-12
5.11 Utilities	5-13
5.12 Safety and Hazardous Materials	5-14
5.13 Cultural and Historic Resources	5-15
5.14 Irreversible Changes and Cumulative Effects	5-17
6.0 Summary of Indirect and Cumulative Effects from the Proposed Action	6-1
7.0 Environmental Compliance	7-1
8.0 Agencies Consulted and Public Notification	8-1

	<u>Page</u>
9.0 Mitigation Measures	9-1
10.0 Determinations and Statement of Findings	10-1
11.0 References	11-1
Appendices	
A. U.S. Fish and Wildlife Service Species List	
B. Draft Findings of No Significant Impact	
List of Figures	
1 Regional Location Map	2-2
2 Project Site and Vicinity	2-3
3a Proposed Facilities	4-3
3b Proposed Facilities	4-4
4 Floodplain	5-4
List of Tables	
1 Regionally Occurring Species with Federal Status	5-8
2 Summary of Environmental Compliance	7-1

SECTION 1

Introduction

1.1 Summary

A request by the Dry Creek Rancheria Band of Pomo Indians (“Tribe”) to use Federal land to build a cultural site at Lake Sonoma is under review by the U.S. Army Corps of Engineers, San Francisco District (USACE). USACE has determined that issuing a lease to the Tribe is the appropriate method to allow use of government land at Lake Sonoma. The purpose of the Proposed Action is to facilitate the development and use of a cultural site for the Tribe on their historical aboriginal lands. The Tribe will invite other local tribes to use the property. The Proposed Action is needed to allow traditional tribal uses of the area to occur as well as allow for educational outreach of tribal history and traditions.

USACE has determined that an Environmental Assessment (EA) for the Proposed Action is required. This EA presents an evaluation of the potential impacts associated with the proposed lease action, proposed cultural facilities and infrastructure, and reasonable alternatives to the Proposed Action. This EA was prepared in compliance with the National Environmental Policy Act (NEPA) of 1969 (42 USC § 4321 et seq.) as amended, the Council on Environmental Quality (CEQ) Regulations for Implementing NEPA (40 CFR Parts 1500-1508), and USACE Planning Regulations (Engineering Regulation [ER] 200-2-2).

1.2 Document Structure

Section 1 introduces the purpose and structure of this EA. **Section 2** provides an overview of the Proposed Action, project location, and purpose and need. **Section 3** describes the scope of the analysis in terms of space and time. **Section 4** presents a detailed description of the Proposed Action and No Action Alternative. **Section 5** contains the impact assessment for the Proposed Action and No Action Alternative. **Section 6** summarizes the indirect and cumulative effects of the Proposed Action. **Section 7** details additional environmental compliance requirements and actions associated with the Proposed Action. **Section 8** identifies agencies and interested public that have been notified of the availability of this EA for review and comment. **Section 9** describes mitigation measures associated with the Proposed Action and **Section 10** summarizes USACE’s findings with regard to the potential level of impact of the Proposed Action. **Section 11** contains document references.

1.3 Document Contact Information

Questions and inquiries regarding this EA may be directed to the following contact:

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SECTION 2

Proposed Project

2.1 Project Overview

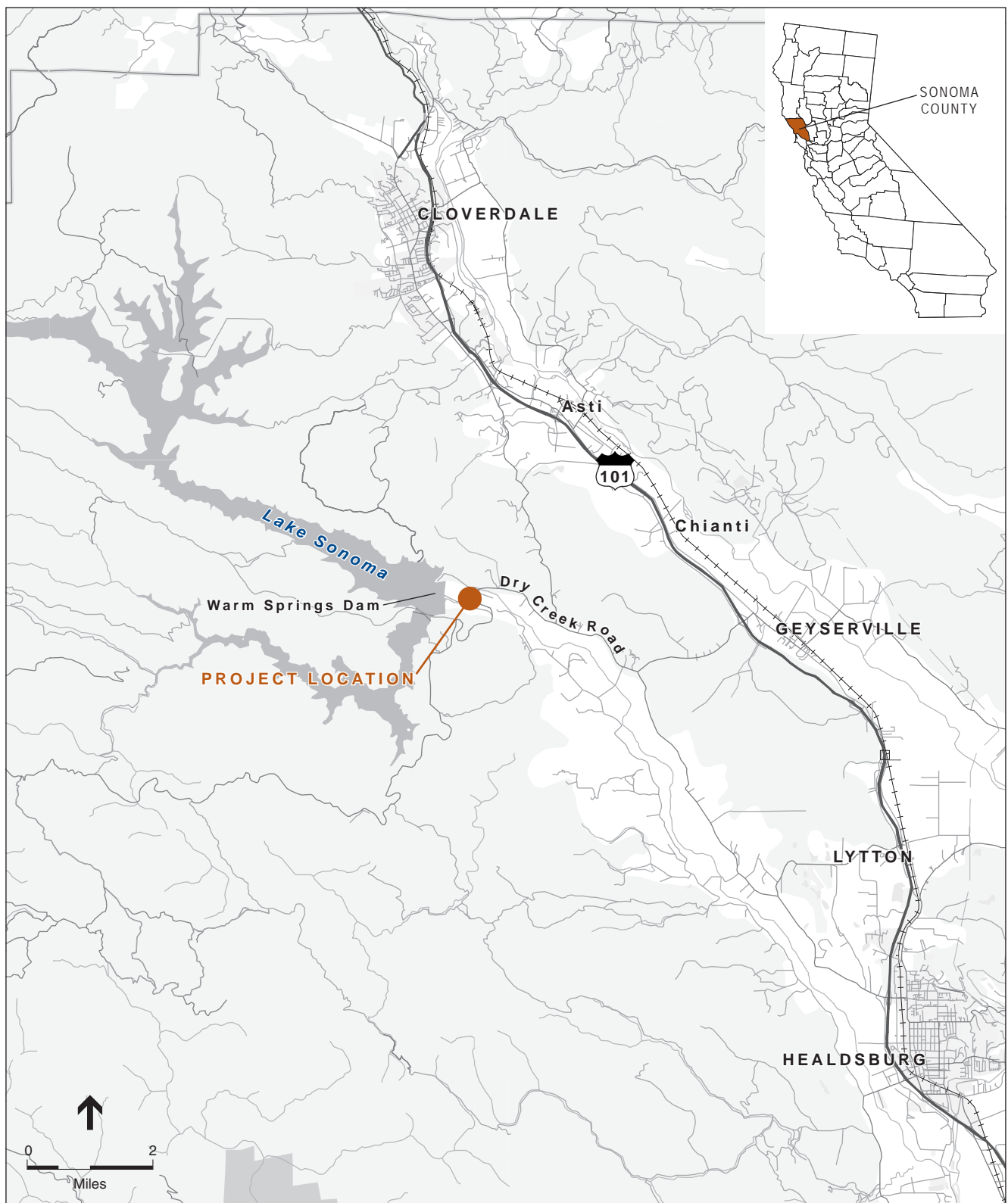
The Flood Control Act of 1962 (Public Law 87-874) authorized the development of Lake Sonoma for flood control, water supply and recreation purposes. The Lake Sonoma Recreation Area was developed by USACE during the late 1970s and early 1980s. Prior to completion of the Warm Springs Dam in 1983, cultural resources studies were conducted for the area that documented archaeological sites and important cultural plant species still used by local tribes. A Native American Advisory Council was also established, which among other functions, documented and preserved information about the plants found in the project area.

The proposed project is an initiative of the Tribe, who approached the USACE with a request to develop a site for cultural events and education at Lake Sonoma as this area was historically used by the Dry Creek Rancheria Band of Pomo Indians ("Tribe") as well as other local tribes for social activities, traditional gathering, and hunting. The USACE has authority to issue a lease to approve the proposed project in the area that the Tribe has delineated, which totals approximately 24 acres. In the initial planning documents prepared by USACE, the proposed lease area was designated as an "Ethnobotanical and Riparian Interpretive Preserve". The lease area contains several locations along Dry Creek which were used to transplant basketry sedge plants to mitigate for the loss of natural sedge beds inundated by Lake Sonoma. Issuance of the proposed lease from the USACE Real Estate Division requires compliance with the National Environmental Policy Act, hence this Environmental Assessment has been prepared.

The Proposed Action is further described in **Section 4**. Construction of the initial project elements of the cultural site, including roadway improvements, is scheduled to begin in 2012 during the dry season. The remaining project elements would be phased in over the next five years.

2.2 Project Location

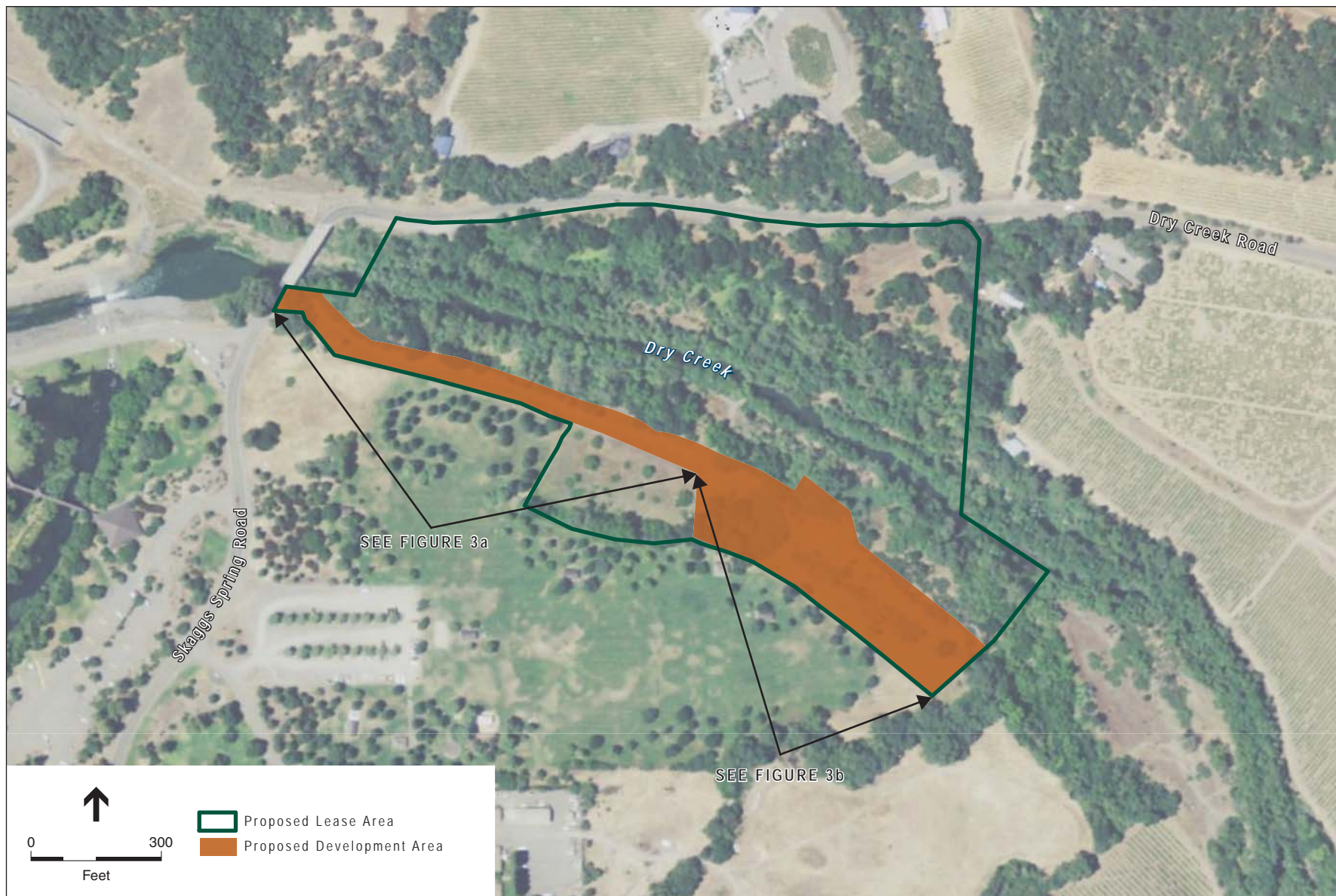
The proposed lease area, or project site, is located in Sonoma County, California, approximately 0.5 miles east of Warm Springs Dam at Lake Sonoma. **Figure 1** shows the regional location of the project site. **Figure 2** shows the proposed lease area, development area and vicinity. The entire lease area encompasses approximately 24 acres; however, development activities would be limited to an approximately 5 acre project site where the proposed access road and cultural facilities would be developed. Dry Creek runs through the central portion of the project site, north



SOURCE: DeLorme Street Atlas, 2000; and ESA, 2011

Lake Sonoma Proposed Tribal and Cultural Use Area . 211256

Figure 1
Regional Location



SOURCE: NAIP, 2009; and ESA, 2011

Lake Sonoma Proposed Tribal and Cultural Use Area . 211256

Figure 2
Project Study Area

of the proposed development area, as shown on **Figure 2**. The project site contains several wells and an unpaved access road. To the north of the project site are Dry Creek Road and the Sbragia Family Vineyards; to the east are vineyards and farmland, including associated rural residences; to the south are open space recreational areas, a paved parking area, and USACE offices; to the west are Skaggs Springs Road, the Lake Sonoma Fish Hatchery, Milt Brandt Visitor's Center, as well as Warm Springs Dam.

2.3 Authority

The proposed lease would be processed under the guidance of the Non-Recreational Outgrants Policy by USACE HQ (30 March 2009). A lease under this policy is "generally authorized by 16 USC 460d, 10 USC 2667 or 10 USC 2668, and the general administrative authority of the Secretary of the Army" (Engineering Regulation 405-1-12, Chapter 8).

2.4 Purpose and Need for the Proposed Action

The purpose of the Proposed Action is to facilitate the development and use of a cultural site for the Tribe on their historical aboriginal lands. The Tribe will invite other local tribes to use the property. The Proposed Action is needed to allow traditional tribal uses of the area to occur as well as allow for educational outreach of tribal history and traditions.

The Lake Sonoma area is part of the ancestral lands for the Tribe and other Pomo tribes. The area was used for villages, gravesites, hunting and gathering, and communal events such as harvest festivals and other social gatherings. The Proposed Action would offer the Tribe and other tribes a continuing tradition of gatherings at Lake Sonoma. The site would aid in reinforcing tribal cultural practices, including native dance events. The development of native structures, including arbors and dwellings, would facilitate education of the tribal historical presence in the area.

SECTION 3

Scope of the Analysis

The scope of this analysis is limited in time and space by the reasonably foreseeable direct, indirect, and cumulative impacts of the Proposed Action. The study area for the Proposed Action is the 24-acre lease area. Where appropriate, the analysis focuses on the proposed development area, which occupies five acres of the lease area. For certain potential impacts, such as construction-related noise, the scope of analysis also includes off-site properties. Additionally, the scope of analysis incorporates evaluation of potential cumulative impacts associated with past, present and reasonably foreseeable future projects that occur within the vicinity of the action area as of August 2011.

SECTION 4

Proposed Action and Alternatives

4.1 Proposed Action

The Proposed Action consists of a lease approval for 24 acres and the subsequent land development within approximately 5 acres of the lease area. The lease agreement would be between the USACE and the Dry Creek Rancheria Band of Pomo Indians (the “Tribe”). USACE has indicated plans to lease the land, with the lease duration to be decided in consultation with the Tribe. Subsequent to approval of the lease agreement, the Tribe would develop cultural facilities and associated infrastructure within the lease area, hereafter referred to as the project site. The current development plans proposed by the Tribe include a native village site, various cultural arbors and native structures, a food preparation area, parking areas, access roadway improvements and various infrastructure improvements as shown in **Figure 3a** and **Figure 3b**.

The Tribe is committed to shared use of the site with other Native American tribes, particularly local tribes. To this extent, the Tribe¹ has contacted other local tribes regarding the Proposed Action and will continue to coordinate with local tribes.

The proposed project would include several distinct areas connected by pedestrian pathways. Areas would include a native village, cultural/learning arbor, 60-foot diameter brush arbor, dressing rooms, two dining arbors and a food preparation area. All arbor areas and structures would be constructed from traditional native materials (wood, stone, and mortar construction) and would have dirt floors. Arbor areas would be supported through poles that would be drilled into the ground and further supported with concrete. The maximum height of arbors would be 18 feet and the maximum height of native villages and other structures would be 15 feet. The 60-foot diameter brush arbor would contain a fire pit surrounded by stone for Tribal ceremonies. The food preparation area would include tables and chairs. Food preparation would typically include reheating food with propane stoves.

The Tribe proposes to use the site for dance group practices and tribal events. Dance group practices would occur approximately once to twice per month with attendance of up to 50 people. Tribal events would include, but are not limited to picnics, the Strawberry Festival and the Big Time Event. Tribal events like picnics with up to 100 people would occur approximately two to four times per year. The Strawberry Festival and Big Time Event would each occur once per year with attendance of approximately 200 people per event.

Associated infrastructure improvements include access road improvements and parking areas. There is an existing unpaved access road of approximately 1,000 feet in length within the project site which would be paved and extended to approximately 1,500 feet in length. Minor grading of the existing access road would occur followed by paving of the road with asphalt. The parking area would include

¹ Personal communication by Dry Creek Rancheria Band of Pomo Indians Tribal Chairman Harvey Hopkins.

a 30-space general parking area and a nearby 6-space parking area specifically for disabled/elder visitors. The project description assumes asphalt paving. An alternative under consideration is the use of natural resin pavement or pervious materials. The material used for surface application would be determined at a later date. Overflow parking would be accommodated in the existing off-site paved parking area approximately 650 feet south of the project entrance on Skaggs Springs Road.

Electrical power for the project site would be obtained through a tie-in at either the existing off-site restrooms to the south of the proposed cultural area or the inactive wells south of the existing access road. An underground utility corridor would run from the tie-in to the cultural site. Minimal lighting would be utilized along pedestrian pathways. Lights and outlets would be installed at the food preparation area. Small portable propane tanks would be used during events for heating or cooking onsite and would be removed from the project site after the respective event. There would be no permanent storage of propane tanks on the project site. Water service would be obtained from a tie-in to the existing off-site restrooms. An underground utility line would provide water to the food preparation area. Water would also be used to control dust. No wastewater service would be necessary for the proposed project, as existing off-site restrooms would be used. At this time the USACE believes that there is sufficient capacity in existing utility systems to meet the needs of the proposed project. If for any reason the development of water and/or electrical connections becomes infeasible, the project site could still be used as a cultural site. Portable lighting and water sources would be obtained and used during events instead.

The cultural site would be used intermittently during the year for tribal events. The Tribe and the USACE would manage site access. Construction of a portion of the cultural site and roadway improvements is scheduled to begin in June 2012. The remainder of construction is anticipated to be phased in over the next five years. The project does not require major grading, and cut and fill would be balanced onsite.

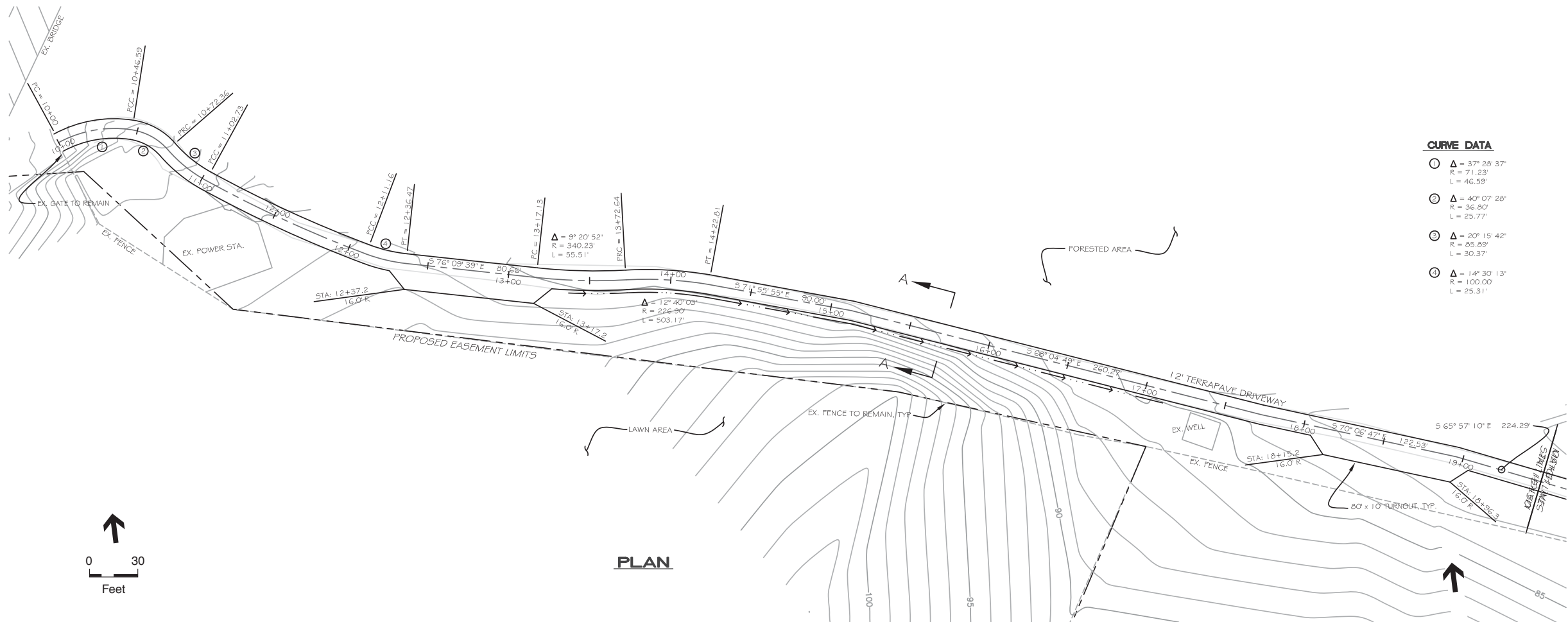
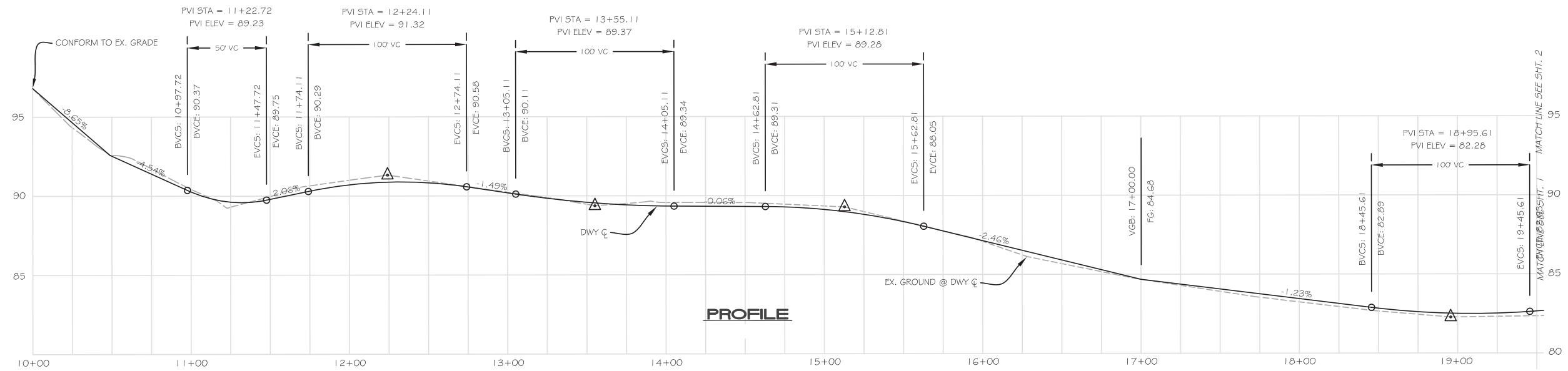
4.2 No Action Alternative

Under the No Action Alternative, the lease agreement would not be approved by the USACE and the cultural facilities would not be constructed. The project site would continue to be used for USACE maintenance purposes. The existing sedge beds would continue to be accessed under the current agreement and there would be vegetation management to keep the beds clean.

4.3 Comparison of Alternatives

The Proposed Action would best meet the purpose and need outlined in **Section 2.4** by providing cultural sites near Lake Sonoma for Tribal use. Impacts from the Proposed Action would not be significant and the incorporation of the mitigation measures listed in **Section 9** would ensure that impacts remain less than significant. Therefore, the Proposed Action alternative provides the overall best balance between meeting the purpose and need and avoiding significant impacts to the environment.

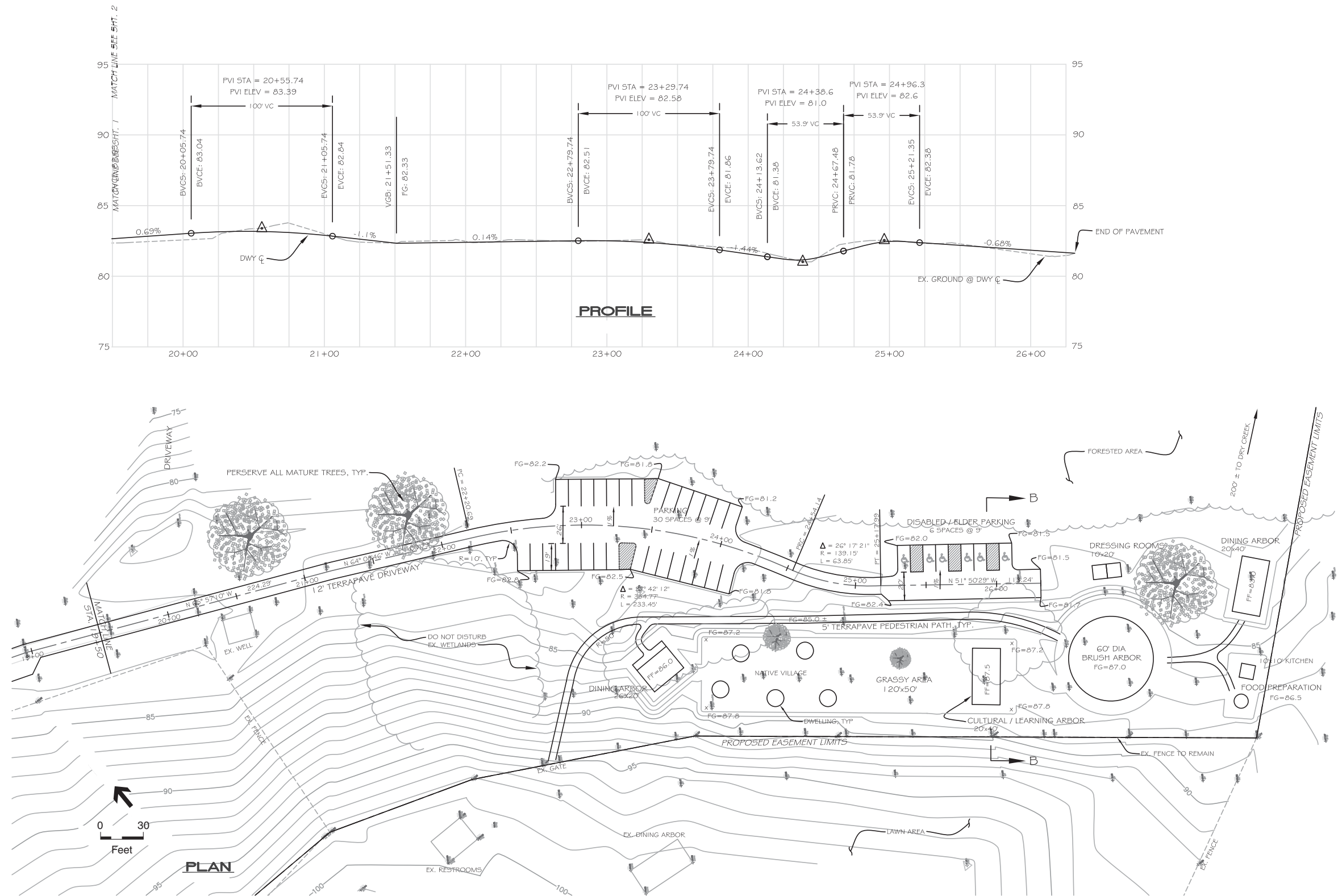
The No Action Alternative would not result in any significant impacts to environmental resources; however, selection of the No Action Alternative would not meet the purpose and need described in **Section 2.4**. The No Action Alternative would not provide beneficial impacts to local tribes.



SOURCE: Dry Creek Rancheria Band of Pomo Indians, 2010; and ESA, 2011

Lake Sonoma Proposed Tribal and Cultural Use Area . 211256

Figure 3a
Proposed Facilities



SECTION 5

Affected Environment and Consequences

This section provides an assessment of potential impacts of the Proposed Action. Potential impacts are evaluated in comparison to the No Action Alternative. Biological, Cultural and Hazards impacts are informed by site visits which took place on August 12, 2011 (Bob Jones, Biologist and Michael Burns, Registered Environmental Assessor) and August 16, 2011 (Heidi Koenig, Registered Professional Archaeologist). For potentially significant impacts, mitigation measures are recommended and discussed further in **Section 9**. If an environmental factor is considered applicable to the Proposed Action and alternatives, it is preceded by a checked box. If an environmental factor is considered not applicable to the Proposed Action and alternatives, the box is not checked and the factor is followed by N/A.

5.1 Water

- ☒ **Surface water or drainages:** Proposed impervious surfaces include the proposed roadway improvements and two parking areas, which would not permit infiltration of stormwater into the underlying soils/sediments. The proposed arbors and other structures would be made from natural materials and would have dirt floors allowing for infiltration of stormwater. The construction of new impervious surfaces can result in a net increase in stormwater runoff from a site or area during a storm event, in comparison to existing pervious surfaces that support infiltration. Increases in stormwater runoff can result in a variety of potential deleterious effects, including increases in on-site or downstream flooding, changes in drainages and drainage patterns, and erosion and water quality impacts. In addition, grading has the potential to change existing drainage patterns and stormwater flows. Implementation of **Mitigation Measure HYD-1** is recommended to reduce impacts to a less-than significant level (see **Section 9** for additional information).

Under the No Action Alternative there would be no change to surface water or drainages.

- ☒ **Quality - temperature, salinity patterns, and other parameters:** During construction of the Proposed Action, bulldozers, semi-trucks, excavators, and other heavy machinery would be used for the construction of paved areas, laying of pipe, and installation of wooden poles for structures. The use of this machinery could result in the temporary release of water quality pollutants during construction. Potential chemicals associated with machinery could include, but may not be limited to, fuels, oil, lubricants, antifreeze, hydraulic fluid, or cleaning solvents. The use of heavy machinery would also disturb surface soils. During storm events, stormwater could mobilize disturbed soils and/or release residual chemicals that

could become entrained in stormwater runoff and be transported into waterways such as Dry Creek. Construction is not likely to be conducted during periods of high rainfall.

The project would be permitted under the National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (General Permit effective July 1, 2010) and would meet the conditions/requirements of the permit. During the EA review period, the Corps will coordinate with the North Coast Regional Water Quality Control Board (NCRWQCB). Permit requirements would include:

- Preparation of hazardous materials spill control and countermeasure programs;
- Stormwater quality sampling, monitoring, and compliance reporting;
- Development and adherence to a Rain Event Action Plan;
- Adherence to numeric action levels and effluent limits for pH and turbidity;
- Monitoring of soil characteristics on site;
- Mandatory training under a specific curriculum; and
- Mandatory implementation of Best Management Practices (BMP), which may include, but would not be limited to:
 - Physical barriers to prevent erosion and sedimentation including setbacks and buffers, rooftop and impervious surface disconnection, rain gardens and cisterns, and other installations;
 - Construction and maintenance of sedimentation basins;
 - Limitations on construction work during storm events;
 - Use of swales, mechanical, or chemical means of stormwater treatment during construction, including vegetated swales, bioretention cells, chemical treatments, and mechanical stormwater filters; and
 - Implementation of spill control, sediment control, and pollution control plans and training.

The specific BMPs to be implemented would be determined prior to issuance of the NPDES General Permit, in coordination with the NCRWQCB. Adherence to these BMPs would be required as a condition of the permit, and would substantially reduce or prevent sediments or chemicals from entering waters, per NCRWQCB standards. Adherence to these requirements would result in less-than-significant impacts to water quality pollution during both construction and operation phases.

Under the No Action Alternative there would be no change to water quality.



Turbidity, suspended particulates: N/A. Refer to **Quality - temperature, salinity patterns, and other parameters**, above.

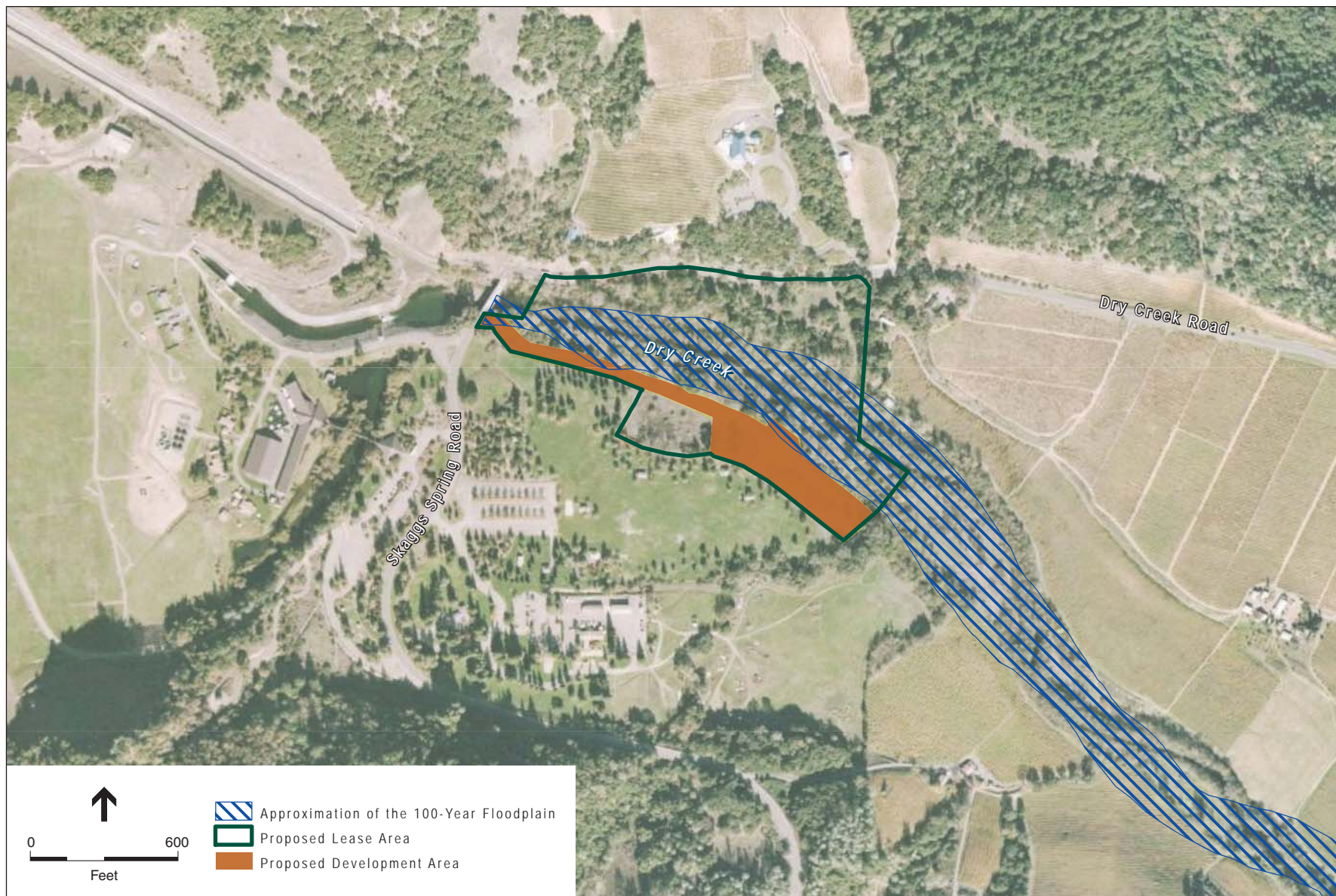
- ☐ **Substrate:** N/A. The Proposed Action would not result in any changes or alteration of substrates on site.
- ☐ **Currents, circulation, or drainage patterns:** N/A. Refer to **Surface water or drainages**, above. No in-water facilities would be installed such that potential changes to currents or circulation would occur.
- ☐ **Mixing zone (in light of the depth of water at the disposal site; current velocity, direction and variability at the disposal site; degree of turbulence; water column stratification; discharge vessel speed and direction; rate of discharge; dredged material characteristics; number of discharges per unit of time; and any other relevant factors affecting rates and patterns of mixing):** N/A. The Proposed Action would not involve construction or other actions within Dry Creek, Lake Sonoma, or any other water body. The Proposed Action would not require or result in dredging, and would not otherwise alter mixing zones along any water body.

- ☒ **Flood control functions:** The Proposed Action would be located immediately adjacent to the southwestern edge of Dry Creek, approximately 0.5 mile west of Warm Springs Dam, which forms Lake Sonoma. As shown in **Figure 4**, the Federal Emergency Management Agency-defined 100-year flood zone is located within the banks of Dry Creek.

As shown, the 100-year flood zone abuts the proposed development area, and may encroach onto very limited portions of the proposed development area where the proposed parking areas would be located. However, 100-year flooding would be very limited on site, and would not affect the proposed road, arbor, dressing rooms, native village, or other facilities proposed on site. The proposed facilities would not interfere with flood flows or other flood control functions of Dry Creek. Therefore, no increase in flooding or flood related hazards would occur, nor would any loss of flood control function within the proposed development area. As such, this impact would be less than significant

Under the No Action Alternative there would be no impacts to flood control functions.

- ☐ **Storm, wave, and erosion buffers:** N/A. The Proposed Action would not be installed in an area that would be susceptible to storm erosion or wave erosion, and would not require installation of erosion buffers.
- ☐ **Erosion and accretion patterns:** N/A. Refer to **Quality - temperature, salinity patterns, and other parameters** for a discussion of on-site erosion potential. Erosion and accretion associated with a large water body are not relevant to the Proposed Action.



SOURCE: FEMA, 2009; NAIP, 2009; and ESA, 2011

Lake Sonoma Proposed Tribal and Cultural Use Area . 211256

Figure 4
FEMA Approximation of Floodplain in Project Study Area

- ☒ **Aquifer recharge:** Installation of new impervious surfaces can restrict infiltration to groundwater, which can in some cases result in a net reduction in groundwater recharge. However, the extent of proposed impervious surfaces on site is very limited. Approximately 0.75 acres would be paved with impervious surfaces including the roadway and parking areas. Given that most of the proposed development area would remain pervious, and the predominantly pervious nature of adjacent/surrounding areas, no noticeable reduction in aquifer recharge is anticipated. Additionally, the use of water for events would be minimal and is not anticipated to present a significant impact to aquifer recharge.

Under the No Action Alternative there would be no impacts to aquifer recharge.

- ☐ **Base flow:** N/A. The Proposed Action would not alter flows emanating from Lake Sonoma, nor would it alter any other source of base flows on site, including groundwater levels. See also prior discussion of aquifer recharge.

- ☒ **Water supplies, conservation:** During construction, water would be used for dust control and other on-site construction activities. However, major grading and earthwork would not be required on site, and construction related water use would be temporary and limited. Water would be supplied to the Proposed Action via a pipeline tie-in to existing off-site restrooms. Water use on site would be limited to food preparation use, and for limited dust control activities. Therefore, anticipated water use on site, during construction and operation, would be minor.

Under the No Action Alternative there would be no impacts on water supplies.

5.2 Habitat

- ☒ **Aquatic Habitat:** There is no aquatic habitat located within the boundaries of the development area. The development area is adjacent to Dry Creek, a perennial stream.

The Proposed Action has the potential to indirectly impact aquatic habitat within Dry Creek during the construction phase. As discussed in **Section 5.1**, construction activities would be required to comply with the BMPs adopted for the NPDES General Stormwater Permit which would address potential water quality impacts and hazardous materials spills during construction. With implementation of BMPs and avoidance measures as required under the NPDES General Stormwater Permit, the Proposed Action would have a less-than-significant impact on aquatic habitat.

Under the No Action Alternative there would be no change in existing conditions and therefore no potential for impacts to aquatic habitats.

- ☒ **Special aquatic sites (wetlands, mudflats, coral reefs, pool and riffle areas, shallows, sanctuaries and refuges, other):** The project site contains a single freshwater emergent wetland (0.17 acre) near the center of the development area. This wetland was formally delineated by the U.S. Army Corps of Engineers (USACE) Regulatory with the Preliminary

Jurisdictional Determination signed by the USACE and the Tribe (USACE File No. 2010-00366N; USACE, 2010). The wetland contains a dense thicket of willows (*Salix* sp.) and Himalayan blackberry (*Rubus discolor*). A scattering of broad-leaved cattails (*Typha latifolia*) and curly dock (*Rumex crispus*) grow around the periphery of the wetland. No other special aquatic features occur within the development area.

Construction activities under the Proposed Action would occur outside of the jurisdictional boundaries of this wetland and thus no direct impacts are anticipated to aquatic sites. As discussed in **Section 5.1**, construction activities would be required to comply with the BMPs adopted for the NPDES General Stormwater Permit which would address potential indirect water quality impacts and hazardous materials spills during construction.

Under the No Action Alternative there would be no change in existing conditions and therefore no potential for impacts to aquatic habitats.

☒ **Terrestrial Habitat:** The majority of the development area is composed of annual grassland habitat. The western half of the development area includes a dirt road somewhat overgrown by grass. This section contains typical non-native annual grassland species, namely, ripgut brome (*Bromus diandrus*), rabbits foot grass (*Polypogon elongatus*), wild oats (*Avena* sp.), and a few small patches of yellow star thistle (*Centaurea solstitialis*). Coast live oak (*Quercus agrifolia*) and coyote brush (*Baccharis pilularis*) also occur along the fringe of the western portion of the development area.

The eastern portion of the development area is wider and more open. It contains the same species composition as the western half, but rabbits foot grass is more dominant. This portion of the site is also fringed by coast live oak and valley oak (*Q. lobata*). Patches of Himalayan blackberry and poison oak (*Toxicodendron diversilobum*) occur in several places. The central part of the development area contains a single wetland as described above. To the south of the development area are the remnants of an old orchard. The orchard contains plum trees (*Prunus* sp.), northern California walnut (*Juglans hindsii*), and English walnut (*J. regia*). To the north of the development area is Dry Creek and its associated riparian zone. The riparian zone is dense and contains mature valley oaks and Fremont cottonwoods (*Populus fremontii*).

Annual grassland habitat is plentiful in the region and not considered a sensitive habitat. Given the small amount of area that would be disturbed by the Proposed Action, impacts to this habitat type would be less than significant. With implementation of BMPs and avoidance measures associated with the NPDES General Stormwater Permit, the Proposed Action is not anticipated to have a significant impact on the riparian habitat north of the development area.

Under the No Action Alternative there would be no change in existing terrestrial habitat conditions.

5.3 Biological Resources

- ☒ **Organisms (Terrestrial):** As described above, terrestrial habitats within the project site include annual grasslands, freshwater emergent wetland, riparian, and aquatic habitat (Dry Creek). Organisms that could occupy the site include species more commonly associated with human-dominated or disturbed landscapes. Most species would likely confine their activities to the riparian corridor where there is more food and cover. Species observed during the site visit included: ring-necked pheasant (*Phasianus colchicus*), turkey vulture (*Cathartes aura*), western scrub-jay (*Aphelocoma californica*), American crow (*Corvus brachyrhynchos*), spotted towhee (*Pipilo maculatus*), and Pacific chorus frog (*Pseudacris regilla*).

The Proposed Action has the potential to result in impacts to raptors or special-status bird species occupying the site during construction. **Mitigation Measure BIO-1** is recommended to reduce impacts to a less-than-significant level (see **Section 9** for additional information).

Under the No Action Alternative, there would be no impact to any of these organisms occupying the project site.

- ☒ **Organisms (Aquatic):** There is no aquatic habitat located within the boundaries of the development area and as such there would be no direct impacts to any aquatic organisms under either the Proposed Action or No Action Alternatives. Any potential indirect effects to aquatic organisms, such as salmonids in Dry Creek, would be minimized or avoided through the BMPs described previously.

- ☒ **Endangered or Threatened Species and Critical Habitat:** Project biologists conducted a literature review and obtained an official species list from the U.S. Fish and Wildlife Service (USFWS) prior to visiting the site. This information was used to generate a list of species potentially occurring on the Warm Springs Dam and Geyserville U.S. Geological Survey (USGS) 7.5-minute quadrangle maps (**Table 1, Appendix A**). None of these species are expected to occur within the development area. While the project site contains suitable habitat for federally listed salmonids within Dry Creek, including Coho, steelhead, and Chinook, potential indirect impacts to these species would be avoided through the use of BMPs during construction.

Under the No Action Alternative, there would be no impact endangered or threatened species or critical habitat.

TABLE 1
REGIONALLY OCCURRING SPECIES WITH FEDERAL STATUS

Species	Federal Status	General Habitat	Potential to be Affected
Invertebrates			
<i>Syncaris pacifica</i> California freshwater shrimp	Endangered	Found in coastal streams in Marin, Sonoma, and Napa Counties of California.	No effect. Suitable habitat does not occur within the project boundaries.
Fish			
<i>Oncorhynchus kisutch</i> Coho salmon	Threatened	This species' range includes coastal rivers and large streams from northern California north to Canada.	May affect, not likely to adversely affect. Species occurs in the region, but BMPs would avoid impacts.
<i>Oncorhynchus mykiss</i> Northern California steelhead	Threatened	Occurs in cold headwaters, creeks, river, and lakes throughout North America.	May affect, not likely to adversely affect. Species occur in the region, but BMPs would avoid impacts.
<i>Oncorhynchus tshawytscha</i> California coastal Chinook salmon	Threatened	This species' range includes coastal rivers and large streams from northern California north to Canada.	May affect, not likely to adversely affect. Species occur in the region, but BMPs would avoid impacts.
Amphibians			
<i>Rana draytonii</i> California red-legged frog	Threatened	Breeds in slow moving streams, ponds, and marshes with emergent vegetation and an absence or low occurrence of predators.	No effect. Suitable habitat does not occur within the project boundaries.
Birds			
<i>Brachyramphus marmoratus</i> Marbled murrelet	Threatened	Breeds inland (< 10 miles) in mountains near the coast. Typically nests in large, mature coniferous trees.	No effect. Project site is outside of preferred range.
<i>Strix occidentalis caurina</i> Northern spotted owl	Threatened	Old growth forests with high canopy closure or multiple canopy layers. Habitat includes large trees and snags, large woody debris, and large hardwoods.	No effect. Suitable habitat does not occur within the project boundaries.
Plants			
<i>Cordylanthus brunneus</i> ssp. <i>capillaris</i> Pennell's bird's-beak	Endangered	Grows in coniferous forests and in north Coast Ranges chaparral. Associated with serpentinite.	No effect. Suitable habitat does not occur within the project boundaries.

SOURCE: USFWS, 2011

5.4 Air Quality



Pollutants and Greenhouse Gases: The Proposed Action falls within the North Coast Air Basin (NCAB), which includes the northern part of Sonoma, Mendocino, Humboldt, Trinity, and Del Norte Counties. The Northern Sonoma County Air Pollution Control District (NSCAPCD) has jurisdiction over the project site.

Construction activities associated with the Proposed Action involve the use of equipment and vehicles that would generate air-quality pollutants. Such pollutants may include exhaust emissions of coarse particulate matter (PM₁₀), fine particulate matter (PM_{2.5}), nitrogen oxides (NO_x), reactive organic gases (ROG), carbon dioxide (CO₂), carbon monoxide (CO), and sulfur dioxide (SO₂) from fuel combustion for diesel and gasoline-powered equipment as well as haul trucks and worker commute vehicles. In addition, evaporative emissions of ROG from asphalt paving and fugitive dust would also be generated during construction.

The federal and California Clean Air Acts (CAAs) have established health-based ambient air quality standards for ozone, CO, coarse and fine PM, NO₂, SO₂, and lead that specify the concentration of these pollutants to which the public can be exposed without potential for adverse health effects. The state ambient air quality standards are more stringent than the federal standards for most pollutants, and both CAAs require plans to be developed for areas designated as “nonattainment” for any of the ambient air quality standards. The NSCAPCD area is designated as nonattainment for the state 1-hour ozone standard and designated attainment or unclassified for all other state and federal ambient air quality standards.

The NSCAPCD has not formally adopted thresholds of significance for project evaluation. In addition, pollutant emissions generated in the NSCAPCD would not require review under the federal General Conformity Rule because the district is designated attainment or unclassified for all federal criteria pollutants. However, based on the minimal construction activities of the project (development of several cultural facilities and infrastructure on five acres over a period of five years) and infrequent operational use, the Proposed Action would not contribute to the potential for the NCAB to exceed ambient air quality standards. Thus, this would be a less-than-significant air quality impact on an individual project and cumulative basis.

The No Action Alternative would not involve any construction and thus no change to existing air quality conditions would occur.

5.5 Geology and Soils



Seismicity: The project site is not within an Earthquake Fault Zone as defined by the Alquist-Priolo Earthquake Fault Zoning Act (Department of Conservation, 2010a). The nearest mapped active faults are the Maacama fault approximately 6 miles northeast of the project area, the Rodgers Creek fault approximately 15 miles southeast of the project area, and the San Andreas Fault over 18 miles southwest of the project area. The project site is subject to moderate to high groundshaking during an earthquake.

The risks associated with a seismic event are similar to that in most areas of Sonoma County. Thus, the Proposed Action is not anticipated to create unsafe seismic conditions and the impact would be less than significant.

The No Action Alternative would not result in a change in seismic conditions.

- ☒ **Soil and Sediment Quality:** Two soil mapping units (soil series) are present within the proposed development area. The western portion of the development area, near Skaggs Springs Road and the western well and power station contains Los Gatos Loam (30 to 75 percent slopes). The soil within the remainder of the development area is characterized as Riverwash (NRCS, 2011).

The Proposed Action does not propose major structures which would be sensitive to soil conditions. Section 5.1 discusses the use of water quality and erosion control BMPs during construction. No detrimental impacts to soil or sediment quality are expected from the Proposed Action or No Action Alternative.

- ☒ **Mineral resources:** According to the USGS Mineral Resources Data System there are no known mineral resources within the project site, and therefore neither the Proposed Action nor the No Action Alternative would have an impact on mineral resources (USGS, 2011).

5.6 Noise

- ☒ **Construction Noise:** Proposed construction of the Proposed Action would begin in 2012. Construction of the proposed road and a portion of the cultural sites would commence at this time. Development of the remainder of the cultural sites would continue through 2017. Ambient noise levels in the project vicinity are consistent with those typically found in rural residential and rural residential/agricultural settings, and are dominated by natural sounds and intermittent traffic (Dry Creek Road and Skaggs Springs Road). Construction of the project would generate temporary and intermittent noise level increases in the project vicinity. This noise exposure would be a result of on-site construction equipment/operations and construction-related vehicle traffic to and from the project site and on Dry Creek Road and Skaggs Springs Road.

Sonoma County has not adopted a Noise Ordinance; however, the County General Plan goals and objectives use a maximum exterior noise level standard of 50 dB L_{50} maximum for this category of noise (Sonoma County, 2008). The closest noise-sensitive, residential uses are located approximately 1,100 feet south-southeast and 750 feet north-northeast of the project site. It is expected that site excavations/grading and paving would yield the highest construction-related noise exposure in the surrounding areas. Noise produced by these activities would likely be dominated by dozer, front-end loader, dump truck, scraper, paver, compactor, and roller equipment. Using the Federal Highway Administration's (FHWA) Roadway Construction Noise Model (RCNM) V. 1.1, and the construction equipment presented above for the specific construction activities (excavation/grading and paving), worst-case construction noise exposure at the closest existing residences to the south-southeast and north-northeast would be approximately 42-44 dB L_{eq}/L_{50} and 45-48 dB L_{eq}/L_{50} , respectively. This noise exposure includes 10 dB of noise attenuation provided by relatively dense forest (trees and shrubs) separating the project site and closest existing residences. As construction noise is estimated to be below the County's standard of 50 dB L_{50} maximum, this impact would be less than significant.

Under the No Action Alternative, noise levels in the project vicinity would be unchanged.

- ☒ **Operation Noise:** Operational noise associated with the Proposed Action would include tribal events such as festivals, cookouts, dances, and educational meetings. These events could include music/singing and conversation. Music at these events would be acoustic (not amplified). Noise exposure would not be expected to exceed 70 dB (L_{50}/L_{eq}) at a distance of 100 feet from the center of the proposed Cultural Learning Arbor (approximate center of development area). Events are proposed to end by 10 p.m.

The County General Plan goals and objectives use a maximum exterior noise level standard of 45 dB L_{50} maximum for this category of noise from 7 a.m. to 10 p.m. and a standard of 40 dB L_{50} maximum for this category of noise from 10 p.m. to 7 a.m. (Sonoma County, 2008). This includes the County's standard reduction by 5 dB due to the speech/music character of the project noise source. Assuming standard spherical spreading loss (-6 dB per doubling of distance) and additional attenuation of 10 dB due to the intervening forest, operational noise associated with the project would be approximately 39 dB L_{50}/L_{eq} and 42 dB L_{50}/L_{eq} at the closest existing residences to the south-southeast and north-northeast, respectively. This noise exposure would not be expected to exceed the applicable Sonoma County General Plan 2020 daytime noise level criterion (Sonoma County, 2008) of 45 dB L_{50} , thus operational noise impacts would be less than significant.

Under the No Action Alternative, noise levels in the project vicinity would be unchanged.

5.7 Recreation

- ☒ **Recreation (boating, fisheries, other):** There are currently no public recreational uses on the project site. Recreational users of Lake Sonoma utilize the visitor's center parking lot west of the project site, and the picnic areas and parking area south of the project site.

Larger events proposed by the project could potentially affect recreational use of other areas of Lake Sonoma by affecting available parking for these uses. Traffic impacts are discussed in **Section 5.8** and significant impacts are not anticipated.

5.8 Transportation

- ☒ **Traffic and Transportation:** During construction, the Proposed Action would result in minor increases in vehicular traffic on the surrounding roadways due to transportation of construction equipment and materials. Storage of construction equipment and materials would be located at a dedicated staging area, so as not to impede local roadways. This could be either on site or in a portion of the paved parking area just south of the project site.

The roadways surrounding the project site do not typically have high traffic volumes. The Proposed Action would not result in daily trips to the project site. Traffic to the project site would be intermittent and limited typically to less than 50 visitors. Due to the small scale and intermittent use of the Proposed Action, significant traffic volumes are not expected on local roadways.

Larger events would occur periodically throughout the year. As discussed in **Section 4.1:**

“Tribal events like picnics with up to 100 people would occur approximately two to four times per year. The Strawberry Festival and Big Time Event would each occur once per year with attendance of approximately 200 people per event.”

For events of over 100 visitors, it is anticipated that overflow parking would be accommodating in the existing parking area south of the project site, with adequate capacity in the visitor center parking for recreational users of the visitor’s center and picnic areas south of the project site. **Mitigation Measure TRA-1** is recommended to ensure adequate on-site parking.

Under the No Action Alternative there would be no impact to traffic volumes.

- ☐ **Non-motorized transportation:** N/A. The Proposed Action is not anticipated to affect pedestrian or bicycle traffic.
- ☐ **Navigation:** N/A. The Proposed Action does not affect water transportation.
- ☐ **Air Traffic:** N/A. The Proposed Action does not affect air transportation.

5.9 Aesthetics

- ☒ **Visual impacts:** The project site is undeveloped with the exception of the dirt access road and three well sites. Due to topography and forested areas, views of the project site from off-site areas are limited from the north, east and west. Recreational uses may have views of the project site from the south.

The Proposed Action is designed to minimize visual impacts, including the preservation of mature trees where feasible. The proposed structures would consist of native materials including wood and stone. While the Proposed Action would result in changes to the existing landscape, the new features are relatively small in scale and would not constitute a significant and adverse visual impact.

The No-Action Alternative would result in no visual change to the project site.

5.10 Land Use

- ☒ **Land use classification:** The Proposed Action is located on land which is currently classified as public/quasi-public land according to the Sonoma County General Plan (Sonoma, 2008). The public/quasi-public classification is for land intended to serve the community or public need and may or may not be publically owned.

Neither the Proposed Action nor the No Action Alternative would have an impact on this classification.

- ☐ **Prime and unique farmland:** N/A. The project site is not located on prime or unique farmland (Department of Conservation, 2010b).

- ☒ **Community Structure and Growth-inducing impacts - community growth, regional growth:** The Proposed Action would result in a slight increase in use of the project site; however the use is not considered growth inducing. The Proposed Action would not displace people or housing and would not create new housing. Proposed traditional dwelling units associated with the Native Village (described on page 4-1) would not be occupied and would be used only for tribal events and education.

Community and regional growth in Sonoma County would remain unchanged under the Proposed Action and No Action Alternatives.

- ☒ **Conflict with land use plans, policies or controls:** The project is a low-intensity use on land that is designated as public/quasi-public land according to the County General Plan. Land uses are also governed by USACE policies. The Tribe will continue to work with USACE in order to develop the site in a manner consistent with USACE policy.

Thus, under the Proposed Action and No Action Alternative there would be no conflict with land use plans, policies or controls.

- ☐ **Socio-economic:** N/A. The Proposed Action would not result in socio-economic changes (population, employment, housing) in the region.
- ☐ **Environmental justice:** N/A. The Proposed Action would not affect environmental low-income or minority communities.

5.11 Utilities

- ☒ **Public facilities, utilities, and services:** The project site is currently used only for maintenance purposes. There is existing infrastructure, including three wells (one active) and a power connection to the wells. The nearest water and wastewater facilities are located just south of the project site at a public restroom facility.

The Tribe proposes to use this facility for the wastewater needs of special events. Wastewater is pumped to the park's sewage treatment facility located to the south, past the off-site paved parking area. This limited use is considered a minor contribution to wastewater flows and would not have a significant effect upon utilities.

The Proposed Action could include the development of electrical and water infrastructure to the eastern portion of the project site. Electrical power and water would be obtained through a tie-in at the existing off-site restrooms to the south. A connection would involve placement of electrical and water lines within a trench from the existing restrooms to the proposed food preparation area. Alternatively, electrical power could potentially be obtained from a tie-in to the electrical infrastructure at the existing wells with a utility corridor along the roadway. Based on site surveys and literature review, an alignment for utilities is feasible without significant impacts to sensitive resources (biological and cultural/historical resources). If development of the water and/or electrical connection is infeasible the project site could still be used as a cultural site. Portable lighting and water sources could be obtained and used during events. Due to the limited demand for water, wastewater and

electricity; ability to avoid sensitive resources for a utility alignment; and option for portable sources of lighting and water, this impact is considered less than significant.

Under the No Action Alternative there would be no impact to the existing public facilities, utilities, and services.

- ☒ **Energy consumption or generation:** The only existing use served by electricity on the project site is the operating well in the western portion of the project site. Minimal use of electricity is proposed for lighting of pathways and the food preparation area. Cooking would utilize portable propane tanks which would be removed from the site after each event. Use of the site would primarily take place during daylight hours and thus minimal energy consumption is anticipated. Due to the intermittent and limited nature of energy usage, this impact is considered less than significant.

Under the No Action Alternative there would be no impact due to energy consumption or generation.

5.12 Safety and Hazardous Materials

- ☒ **Public health and safety:** If needed, the project site would receive emergency services from the Geyserville Fire Protection District at 20975 Geyserville Avenue in Geyserville, the Lake Sonoma/Boating Safety Unit at 3333 Skaggs Springs Road in Geyserville, and the Windsor Police Department at 9291 Old Redwood Highway, Building 300 in Windsor. Similar to the campsites at Lake Sonoma, the brush arbor would contain a fire pit surrounded by stone for tribal ceremonies. The fire pit would be similar in use to those permitted at off-site camping areas at Lake Sonoma. The brush arbor is proposed to have dirt floors with no vegetation which could present wildfire concerns. The Tribe would ensure that emergency water for fire suppression is available onsite. The Proposed Action would create minimal additional demand for fire suppression and police service in the area as it includes only low impact cultural activities.

Thus, neither the Proposed Action nor the No Action Alternative would alter existing emergency service levels.

- ☒ **Hazardous and toxic materials:** The proposed development area and proposed lease area south of the development area were inspected on August 12, 2011 by Michael Burns, Registered Environmental Assessor. No signs of underground or above-ground storage tanks, drums, vaults, burned or buried debris, discolored soil staining, stressed vegetation, unusual trash, or unusual odors were noted in either area. Three water wells are located in the development area on concrete pads with associated pumps, piping, and electrical equipment. The park rangers estimated the wells were installed when the Warm Springs Dam facility was constructed between 1975 and 1983. The western well is active and provides potable water through subsurface pipes to the Warm Springs Recreation Area park facility and the USACE Warm Springs Dam headquarters. The middle and east wells are inactive. No overhead power lines were observed to any of the wells; the power supply to the western well is underground. The middle and eastern wells are inactive and the

pressure gauges read zero. The equipment for all three wells appeared to be in good condition with no observed oil or lubricant leaks on the equipment or the concrete pads. The piping did not have insulation materials. The park rangers noted that various fruit trees from the former homestead are present in the project site south of the development area, indicating some historical activity in that area. No other evidence of previous development activity was observed.

The following information was obtained from a review of the Geotracker and EnviroStor databases (SWRCB, 2011; DTSC, 2011). Three fuel underground storage tanks (USTs) were previously located on the south side of the Warm Springs Recreation Area at the USACE Warm Springs Dam headquarters approximately 800 feet southwest of the proposed development area. These three USTs and contaminated soil were removed in 2003. Fuel was released to the groundwater beneath that site and forms a plume that is limited to the southern portion of the park property; the plume does not extend to the Proposed Development Area. In addition, long-term monitoring indicates that the plume is shrinking in lateral extent and concentrations through natural attenuation. Three fuel USTs were previously removed in 1994 from the Warm Springs National Fish Hatchery site located west of the proposed development area across Skaggs Springs Road, 1,000 feet southwest of the west entrance to the proposed development area. Groundwater was not affected. The regulatory agency determined that no further action was needed and granted the site case closure. One active fuel UST is located 600 feet north of the Proposed Development Area across Dry Creek to the north at the Sbragia Family Vineyards, 9990 Dry Creek Road, Geyserville. No environmental issues were noted in the regulatory agency database search for this UST.

Under the Proposed Action, small amounts of hazardous and/or toxic materials such as diesel fuel, lubricants and solvents could be used during construction activities and during the maintenance of heavy equipment. The NPDES General Permit (as discussed in **Section 5.1**) would include preparation of a hazardous materials spill control and countermeasure program. In the event of any spillage to soil or surface water bodies, the site-specific program would be adhered to, and containment and clean-up activities would be implemented, among other activities identified in the program. Thus, impacts from the Proposed Action would be less than significant.

The investigations to document potential hazardous substances did not identify substances on lands required for construction that are regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S. C. § 9601-9675).

Under the No Action Alternative, hazardous and toxic material conditions at the proposed development area would remain unchanged.

5.13 Cultural and Historic Resources

- ☐ **Cultural and Historic Properties:** N/A. The Proposed Action would not affect existing historic properties. The Dry Creek and Warm Springs Valley Archaeological District is located in the vicinity of the Proposed Action.

- ☐ **Historic monuments, parks, national seashores, wild and scenic rivers, wilderness area, research sites, etc:** N/A. The Proposed Action would not affect existing historic monuments, parks, national seashores, wild and scenic rivers, wilderness area, or research sites. There are no existing sites of these types of in the project site.
- ☒ **Archaeological sites:** Previous cultural resources investigations in the vicinity of Lake Sonoma and the project site include numerous investigations conducted in response to the construction and maintenance of Warm Springs Dam/Lake Sonoma and other infrastructure related to the Lake Sonoma Recreation Area. The Warm Springs Dam/Lake Sonoma project was one of the first large-scale projects conducted under federal historic preservation laws and regulations enacted in the 1960s. Prior to the filling of Lake Sonoma, the area was intensively studied by archaeologists, cultural anthropologists, architectural historians, ethnobotanists, historians, and Native American traditional scholars. A comprehensive overview of the Warm Springs Dam/Lake Sonoma projects is provided in *Before Warm Springs Dam – A History of the Lake Sonoma Area* (Praetzell et al., 1985). This publication details the project's history, the regional history, and summarizes the cultural resources investigations.

One archaeological resource has been recorded in the vicinity of the project site. CA-SON-614/H was originally recorded by Roberts and Tamez (1975). The site was recorded as a sparse lithic scatter, consisting primarily of red chert flakes, in an area of non-midden soils. The site is a contributor to the Dry Creek and Warm Springs Valley Archaeological District. No subsequent recordings of the site have been accomplished; development of the vicinity including a parking lot and landscaping has likely obscured/disturbed the cultural materials (Stradford, 1983). In addition, development around SON-614/H included the historic residential site that was demolished and cleared and that the dam construction contractors utilized this general area, thus, SON-614/H is considered highly disturbed and likely totally destroyed.

The proposed development area and proposed lease area south of the development area (or Area of Potential Effect [APE]) were surveyed by ESA Registered Professional Archaeologist Heidi Koenig on August 16, 2011. The APE was surveyed in zigzag transects spaced approximately 10 meters apart. Visibility in the southeastern portion of the project site was obscured by dense grasses and other vegetation; visibility was approximately 10 percent, however vegetation was periodically scraped back to reveal ground surface. Soils consisted of light brown, sandy silt with gravel inclusions. Visibility along the access road was approximately 50 percent. The road had been previously graded and graveled. No cultural materials or other evidence of past human use or occupation were observed in the development area.

Based on the site survey and literature review, the Proposed Action is not anticipated to adversely affect historic properties, including archaeological resources.

While there appears to be a low potential for undocumented archaeological resources to be uncovered during project implementation, the possibility of uncovering unknown archaeological resources or human remains cannot be discounted. This impact during

construction is potentially significant. **Mitigation Measure CUL-1** is recommended to reduce impacts to a less-than-significant level (see **Section 9** for additional information).

Under the No Action Alternative there would be no impact to archeological resources.

5.14 Irreversible Changes and Cumulative Effects

- ☒ **Irreversible changes, irretrievable commitment of resources:** The use of fossil fuels and materials for construction activities associated with the Proposed Action would be an irretrievable commitment of resources but would be limited and minor.

Under the No Action Alternative there would be no irreversible changes to the proposed development area and no change in the existing irretrievable commitment of resources.

- ☒ **Other Cumulative effects not related to the Proposed Action:**
1. Occurred on-site historically: There are no previous uses of the project site which contribute to the cumulative discussion. The project site has remained undeveloped and has been used to date only for development and maintenance of three wells.
 2. Likely to occur within the foreseeable future: Within the foreseeable future, the project site would continue to function as use for maintenance only. Off-site projects include the renovation of the visitor's center and fish hatchery to the west of the project site. Renovation of these existing facilities when considered with the Proposed Action are not anticipated to create significant, adverse cumulative impacts.
 3. Contextual relationship between the Proposed Action and (1) and (2) above: Given the lack of development, plans for development, or significant new off-site developments, the Proposed Action is not anticipated to create cumulative adverse impacts.

SECTION 6

Summary of Direct and Indirect Impacts and Cumulative Effects from the Proposed Action

The Proposed Action would involve the development of cultural facilities and infrastructure within the 24-acre proposed lease site. The Proposed Action is expected to result in beneficial cultural and education impacts for the Tribe and improved maintenance facilities (access road) for USACE. The Proposed Action could result in potentially significant direct or indirect impacts related to water quality, nesting raptors and songbird species, traffic circulation for large events, and unknown cultural resources (**Section 5**). These effects would be minimized to the maximum extent practicable through proposed avoidance, adherence to BMPs associated with required approvals and implementation of mitigation measures (**Section 9**).

In the context of what has occurred on-site historically and what is reasonably foreseeable in the future on-site and in the immediate vicinity, the Proposed Action would not have significant adverse cumulative impacts on the physical, biological, and human environment (**Section 5.14**).

SECTION 7

Environmental Compliance

Table 2 provides a summary of the environmental compliance status for statutes relevant to the Proposed Action.

**TABLE 2
SUMMARY OF ENVIRONMENTAL COMPLIANCE**

Statute	Status of Compliance
National Environmental Policy Act (NEPA) of 1969 (42 USC § 4321 et seq.)	This EA has been prepared in compliance with NEPA, CEQ, and USACE Planning regulations. All agency and public comments will be considered and evaluated. If appropriate, a Finding of No Significant Impact (FONSI) will be signed with a conclusion of no significant impacts from this Proposed Action.
Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of the NEPA (40 CFR §§ 1500-1508) dated July 1986	
U.S. Army Corps of Engineers (USACE) Planning Regulations (Engineering Regulation (ER) 200-2-2)	
Clean Air Act, as amended (42 USC § 7401 et seq.)	The Proposed Action is not expected to exceed de minimus thresholds for pollutant emissions or adversely impact air quality.
Clean Water Act, as amended (33 USC § 1251 et seq.)	As a condition of construction permitting, a National Pollutant Discharge Elimination System (NPDES) General Construction Permit for Discharges of Stormwater Associated with Construction Activities (NPDES General Stormwater Permit) would be required from the North Coast Regional Water Quality Control Board (NCRWQCB). Conditions of this permit would include adherence to requirements of the revised NPDES General Permit, effective July 1, 2010.
Rivers and Harbors Act of 1899 (33 USC § 403)	
Executive Order 11990, Protection of Wetlands, (42 FR 26961, 1977)	Construction activities under the Proposed Action would occur outside of the jurisdictional boundaries of wetlands.
National Oceanic and Atmospheric Administration Federal Consistency Regulation (15 CFR part 930)	Not applicable. The project is not located in the Coastal Zone.
Coastal Zone Management Act of 1972 (16 USC § 1451 et seq.)	
California Coastal Act of 1976	
Endangered Species Act (ESA) as amended (16 USC § 1531 et seq.)	An inventory of listed and proposed endangered and threatened special status species that may occur in the action area is provided in Table 1 (page 5-8 of this EA). USACE determined that the Proposed Action would have no effect on ESA-listed species under U.S. Fish and Wildlife Service's purview. USACE determined that the Proposed Action may affect, but was not likely to adversely affect ESA-listed species under National Marine Fisheries Service's purview. USACE will submit a letter to NMFS for concurrence with this finding.
Fish and Wildlife Coordination Act (16 USC § 661 et seq.)	
Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) – Fishery Conservation Amendments of 1996, (16 USC § 1801 et seq.) – Essential Fish Habitat (EFH)	

TABLE 2
SUMMARY OF ENVIRONMENTAL COMPLIANCE

Statute	Status of Compliance
Migratory Bird Treaty Act (16 USC 703-711)	The Proposed Action would avoid impacts to migratory birds through preconstruction surveys.
Marine Mammal Protection Act (16 USC § 1361 et seq.)	Not applicable. The Proposed Action will not take place in or near a national marine sanctuary or otherwise impact marine mammals.
National Marine Sanctuaries Act (16 USC 1§ 431 et seq.)	
Marine Protection Research and Sanctuaries Act of 1972 (33 USC § 1401 et seq.)	
National Historic Preservation Act (16 USC § 470 and 36 CFR part 800): Protection of Historic Properties	The Proposed Action would not affect known historical or archaeological resources. USACE will submit a letter to the State Historic Preservation Officer for concurrence with this finding.
Executive Order 11593: Protection and Enhancement of the Cultural Environment Archaeological and Historic Preservation Act of 1974, (16 USC § 469 et seq.)	
Abandoned Shipwreck Act of 1987, (43 USC § 2101 et seq.)	Not applicable. The Proposed Action does not impact shipwrecks or submerged lands.
Submerged Lands Act, (Public Law 82-3167; 43 USC § 1301 et seq.)	

SECTION 8

Agencies Consulted and Public Notification

The following federal, state, and local agencies will be notified of the availability of this EA for review and comment. USACE will publish a Public Notice of Availability of this EA to reach interested parties, organizations, individuals.

A. Federal agencies:

1. U.S. Environmental Protection Agency (USEPA, Region 9)
2. U.S. Fish and Wildlife Service (USFWS, Sacramento Office)
3. National Marine Fisheries Service (NMFS, Santa Rosa Office)

B. State and local agencies:

1. California Department of Fish and Game
2. California State Historic Preservation Officer (SHPO)
3. California State Lands Commission
4. North Coast Regional Water Quality Control Board (NCRWQCB)
5. Northern Sonoma County Air Pollution Control District (NSCAPCD)
6. Sonoma County Planning Department
7. Sonoma County Water Agency

Questions and inquiries regarding this EA may be directed to the following contact:

Richard Stradford
U.S. Army Corps of Engineers
1455 Market Street
San Francisco, CA 94103
(415) 503-6845

SECTION 9

Mitigation Measures

Mitigation measures for potential impacts associated with the Proposed Action are described in this section. With implementation of Best Management Practices discussed in **Section 5** and the following mitigation measures, no significant adverse impacts to environmental resources are expected to result from the Proposed Action.

Measure HYD-1: Comprehensive Drainage Plan

A preliminary drainage plan was completed for the site. In order to ensure that the Proposed Action would not result in deleterious changes to on-site stormwater flows, undesired ponding, erosion, and other drainage related issues, a finalized Comprehensive Drainage Plan shall be prepared for USACE approval. The final Comprehensive Drainage Plan shall implement measures to infiltrate, contain, and otherwise manage anticipated stormwater runoff on site, and where applicable, shall ensure that drainages and discharges are designed and sized appropriately so as to ensure that no increases in on-site or downstream ponding, erosion, sedimentation, or other related drainage effects would occur. Applicable measures may include, but would not be limited to, the use of swales, pervious pavement, energy dissipaters, and other drainage, retention, and/or infiltration facilities sufficient to avoid increases in stormwater runoff from the action area. Proposed facilities shall be planned to the engineering/design level.

Measure BIO-1: Pre-Construction Bird Surveys

If construction or clearing operations are initiated during bird nesting season (February 1 through September 15), then pre-construction surveys for nesting birds shall be conducted no less than 14 days prior to construction. If raptors are observed nesting within 500 feet of the proposed construction, or if other special-status bird species are observed nesting within 200 feet of construction activities, then work shall be halted or postponed until the nest is vacated and juveniles have fledged. As referenced in **Appendix A**, the species database must be updated before construction begins.

Measure TRA-1: Parking for Large Events

For events where attendance would exceed 100 people, the project proponent(s) shall coordinate with USACE regarding event parking to avoid use of the visitor center parking lot, unless approved by USACE. The project proponent(s) and guests of the event would be encouraged to use the parking area on the project site or the paved lot south of the project site through the use of temporary signage and parking guides. For events where attendance would exceed 150 people, shuttles from an off-site parking area shall be considered.

Measure CUL-1: Unanticipated Cultural Resources Discoveries

It is the USACE's policy to avoid cultural resources whenever possible. If buried cultural materials are encountered during construction, work shall stop within 100 feet of the find until a qualified archaeologist can evaluate the nature and significance of the find. Construction contractors must be alerted of the potential to unearth stone flakes like those discovered at SON-614/H. The project proponent(s) shall appoint a monitor to oversee the disturbance of soils during project construction.

If potential human remains are encountered, all work shall halt and the USACE will be contacted. The USACE will contact the Sonoma County Coroner in accordance with Public Resources Code Section 5097.98 and Health and Safety Code Section 7050.5. If the Coroner determines the remains are Native American, the Coroner will contact the Native American Heritage Commission (NAHC). As provided in Public Resources Code Section 5097.98, the NAHC will identify the person or persons believed to be most likely descended from the deceased Native American. The most likely descendent will make recommendations for means of treating, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98.

SECTION 10

Determinations and Statement of Findings

The proposed lease and development of a cultural facilities and associated infrastructure would meet the purpose and need by allowing the continuation of the Tribe's traditional uses of the area as well as allowing for educational outreach of the Tribe's history and traditions. The improved access road would also facilitate access for USACE to the existing on-site wells.

No significant direct, indirect, or cumulative adverse impacts to the physical, biological, or human environment are expected, after implementation of mitigation, from either the Proposed Action or the No Action Alternative. The No Action Alternative would result in no change to the existing condition of environmental resources in and around the action area.

It is expected that a Finding of No Significant Impact (FONSI) will be executed by the District Commander following the review period and evaluating the comments received. A draft FONSI is included with this document (**Appendix B**).

SECTION 11

References

The following references were used in the preparation of this Environmental Assessment. Documents produced by USACE can be obtained by requesting copies from the agency.

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Roberts, P., and S. Tamez, Site Record for CA-SON-614/H. On file, U.S. Army Corps of Engineers, San Francisco Office, 1975.

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U.S. Army Corps of Engineers (USACE), 2010. Dry Creek Jurisdictional Delineation. Correspondence from Cameron Johnson, Acting Chief South Branch (USACE for Jane Hicks) to Connie Munger-Barton (Sonoma County Water Agency). File No. 2010-00349N.

- U.S. Fish and Wildlife Service (USFWS). 2011. USFWS List of Federal Endangered and Threatened Species that may be Affected by Projects in “Warm Springs Dam” and “Geyserville” 7.5’ USGS Quadrangles.
- U.S. Geological Survey (USGS), 2011. Mineral Resources Data System. Online Spatial Data Web Application. Available online at: <http://tin.er.usgs.gov/mrds/>. Accessed August 18, 2011.

Appendix A

U.S. Fish and Wildlife Service Species List





United States Department of the Interior
FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825



August 16, 2011

Document Number: 110816120034

ESA Biological Resources
Sacramento, CA 95816

Subject: Species List for Dry Creek / Lake Sonoma Cultural Site

Dear: Interested party

We are sending this official species list in response to your August 16, 2011 request for information about endangered and threatened species. The list covers the California counties and/or U.S. Geological Survey 7½ minute quad or quads you requested.

Our database was developed primarily to assist Federal agencies that are consulting with us. Therefore, our lists include all of the sensitive species that have been found in a certain area *and also ones that may be affected by projects in the area*. For example, a fish may be on the list for a quad if it lives somewhere downstream from that quad. Birds are included even if they only migrate through an area. In other words, we include all of the species we want people to consider when they do something that affects the environment.

Please read Important Information About Your Species List (below). It explains how we made the list and describes your responsibilities under the Endangered Species Act.

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be November 14, 2011.

Please contact us if your project may affect endangered or threatened species or if you have any questions about the attached list or your responsibilities under the Endangered Species Act. A list of Endangered Species Program contacts can be found at www.fws.gov/sacramento/es/branches.htm.

Endangered Species Division



U.S. Fish & Wildlife Service
Sacramento Fish & Wildlife Office
Federal Endangered and Threatened Species that Occur in
or may be Affected by Projects in the Counties and/or
U.S.G.S. 7 1/2 Minute Quads you requested

Document Number: 110816120034

Database Last Updated: April 29, 2010

Quad Lists

Listed Species

Invertebrates

Syncaris pacifica

California freshwater shrimp (E)

Fish

Oncorhynchus kisutch

coho salmon - central CA coast (E) (NMFS)

Critical habitat, coho salmon - central CA coast (X) (NMFS)

Oncorhynchus mykiss

Central California Coastal steelhead (T) (NMFS)

Central Valley steelhead (T) (NMFS)

Critical habitat, Central California coastal steelhead (X) (NMFS)

Critical habitat, Northern California steelhead (X) (NMFS)

Northern California steelhead (T) (NMFS)

Oncorhynchus tshawytscha

California coastal chinook salmon (T) (NMFS)

Critical habitat, California coastal chinook salmon (X) (NMFS)

Amphibians

Rana draytonii

California red-legged frog (T)

Birds

Brachyramphus marmoratus

marbled murrelet (T)

Strix occidentalis caurina

northern spotted owl (T)

Plants

Cordylanthus tenuis ssp. capillaris

Pennell's bird's-beak (E)

Quads Containing Listed, Proposed or Candidate Species:

GEYSERVILLE (518B)

WARM SPRINGS DAM (519A)

County Lists

No county species lists requested.

Key:

- (E) *Endangered* - Listed as being in danger of extinction.
- (T) *Threatened* - Listed as likely to become endangered within the foreseeable future.
- (P) *Proposed* - Officially proposed in the Federal Register for listing as endangered or threatened.
- (NMFS) Species under the Jurisdiction of the [National Oceanic & Atmospheric Administration Fisheries Service](#). Consult with them directly about these species.
- Critical Habitat* - Area essential to the conservation of a species.
- (PX) *Proposed Critical Habitat* - The species is already listed. Critical habitat is being proposed for it.
- (C) *Candidate* - Candidate to become a proposed species.
- (V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.
- (X) *Critical Habitat* designated for this species

Important Information About Your Species List

How We Make Species Lists

We store information about endangered and threatened species lists by U.S. Geological Survey 7½ minute quads. The United States is divided into these quads, which are about the size of San Francisco.

The animals on your species list are ones that occur within, **or may be affected by** projects within, the quads covered by the list.

- Fish and other aquatic species appear on your list if they are in the same watershed as your quad or if water use in your quad might affect them.
- Amphibians will be on the list for a quad or county if pesticides applied in that area may be carried to their habitat by air currents.
- Birds are shown regardless of whether they are resident or migratory. Relevant birds on the county list should be considered regardless of whether they appear on a quad list.

Plants

Any plants on your list are ones that have actually been observed in the area covered by the list. Plants may exist in an area without ever having been detected there. You can find out what's in the surrounding quads through the California Native Plant Society's online [Inventory of Rare and Endangered Plants](#).

Surveying

Some of the species on your list may not be affected by your project. A trained biologist and/or botanist, familiar with the habitat requirements of the species on your list, should determine whether they or habitats suitable for them may be affected by your project. We recommend that your surveys include any proposed and candidate species on your list. See our [Protocol](#) and [Recovery Permits](#) pages.

For plant surveys, we recommend using the [Guidelines for Conducting and Reporting Botanical Inventories](#). The results of your surveys should be published in any environmental documents prepared for your project.

Your Responsibilities Under the Endangered Species Act

All animals identified as listed above are fully protected under the Endangered Species Act of 1973, as amended. Section 9 of the Act and its implementing regulations prohibit the take of a federally listed wildlife species. Take is defined by the Act as "to harass, harm, pursue,

hunt, shoot, wound, kill, trap, capture, or collect" any such animal.

Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR §17.3).

Take incidental to an otherwise lawful activity may be authorized by one of two procedures:

- If a Federal agency is involved with the permitting, funding, or carrying out of a project that may result in take, then that agency must engage in a formal consultation with the Service.

During formal consultation, the Federal agency, the applicant and the Service work together to avoid or minimize the impact on listed species and their habitat. Such consultation would result in a biological opinion by the Service addressing the anticipated effect of the project on listed and proposed species. The opinion may authorize a limited level of incidental take.

- If no Federal agency is involved with the project, and federally listed species may be taken as part of the project, then you, the applicant, should apply for an incidental take permit. The Service may issue such a permit if you submit a satisfactory conservation plan for the species that would be affected by your project.

Should your survey determine that federally listed or proposed species occur in the area and are likely to be affected by the project, we recommend that you work with this office and the California Department of Fish and Game to develop a plan that minimizes the project's direct and indirect impacts to listed species and compensates for project-related loss of habitat. You should include the plan in any environmental documents you file.

Critical Habitat

When a species is listed as endangered or threatened, areas of habitat considered essential to its conservation may be designated as critical habitat. These areas may require special management considerations or protection. They provide needed space for growth and normal behavior; food, water, air, light, other nutritional or physiological requirements; cover or shelter; and sites for breeding, reproduction, rearing of offspring, germination or seed dispersal.

Although critical habitat may be designated on private or State lands, activities on these lands are not restricted unless there is Federal involvement in the activities or direct harm to listed wildlife.

If any species has proposed or designated critical habitat within a quad, there will be a separate line for this on the species list. Boundary descriptions of the critical habitat may be found in the Federal Register. The information is also reprinted in the Code of Federal Regulations (50 CFR 17.95). See our [Map Room](#) page.

Candidate Species

We recommend that you address impacts to candidate species. We put plants and animals on our candidate list when we have enough scientific information to eventually propose them for listing as threatened or endangered. By considering these species early in your planning process you may be able to avoid the problems that could develop if one of these candidates was listed before the end of your project.

Species of Concern

The Sacramento Fish & Wildlife Office no longer maintains a list of species of concern. However, various other agencies and organizations maintain lists of at-risk species. These lists provide essential information for land management planning and conservation efforts. [More info](#)

Wetlands

If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defined by section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, you will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigation and monitoring. For questions regarding wetlands, please contact Mark Littlefield of this office at (916) 414-6520.

Updates

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be November 14, 2011.

Appendix B

Draft Finding of No Significant Impact



DRAFT
FINDING OF NO SIGNIFICANT IMPACT (FONSI)
(33 CFR Part 230-325)

Tribal and Cultural Use Area

Lake Sonoma Recreation Area
Sonoma County, California

1. Action: The U.S. Army Corps of Engineers (USACE), San Francisco District proposes to lease 24 acres to the Dry Creek Rancheria Band of Pomo Indians (Tribe) for development of a cultural site approximately 0.5 miles east of Warm Springs Dam at Lake Sonoma. The Tribe is committed to shared use of the site with other Native American tribes, particularly local tribes.

The proposed project would include several distinct areas connected by pedestrian pathways. Areas would include a native village, cultural/learning arbor, 60-foot diameter brush arbor, dressing rooms, two dining arbors and a food preparation area. All arbor areas and structures would be constructed from traditional native materials (wood, stone, and mortar construction) and would have dirt floors. Arbor areas would be supported through poles that would be drilled into the ground and further supported with concrete. The maximum height of arbors would be 18 feet and the maximum height of native villages and other structures would be 15 feet. The 60-foot diameter brush arbor would contain a fire pit surrounded by stone for Tribal ceremonies. The food preparation area would typically be used for reheating food with propane stoves. The existing unpaved access road of approximately 1,000 feet in length would be paved and extended to approximately 1,500 feet in length. Minor grading of the existing access road would occur followed by paving of the road with asphalt. The parking area would include a 30-space general parking area and a nearby 6-space parking area specifically for disabled/elder visitors. An underground utility corridor to existing electrical and water lines is proposed.

2. Factors Considered: Factors considered for this FONSI were direct, indirect, and cumulative impacts to water resources, aquatic and terrestrial habitat, biologic resources, air quality, geology and soils, noise, recreation, transportation, aesthetics, land use, utilities, safety and hazardous materials, and cultural and historic resources.

3. Conclusion: Based on a review of information incorporated in the Environmental Assessment, including views of the Corps, general public, and resource agencies having special expertise or jurisdiction by law, the Corps concludes the permitted activity would not significantly affect the quality of the human environment. Pursuant to the provisions of the National Environmental Policy Act of 1969, the preparation of an additional Environmental Impact Statement (EIS) will therefore, not be required.

Approved by:

Torrey A. DiCiro
Lieutenant Colonel, U.S. Army
Commanding

Date