Appendix G
Biological Reports

Appendix G-1

USFWS Biological Assessment

SEQUOIA
Ecological Consulting, Inc.

Biological Assessment
Proposed Shiloh Resort and Casino Project
Sonoma County, California

November 2022, updated April 2024

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1.0 INTRODUCTION

Sequoia Ecological Consulting, Inc. (Sequoia) has prepared this Biological Assessment (BA) on behalf of Acorn Environmental for the proposed Shiloh Resort and Casino Project (hereafter "the Project") located in the Larkfield-Wikiup area of unincorporated Sonoma County, California. The Koi Nation, owner of the Project site and one of California's Federally recognized Native American tribes, has applied to the U.S. Bureau of Indian Affairs (BIA) for a fee-to-trust land acquisition. The BIA's Proposed Action is to place approximately 68 acres of land into Federal trust. This BA has been prepared to facilitate Section 7 consultation between the federal Action Agency and the U.S. Fish and Wildlife Service (USFWS) pursuant to the Section 7 of the Federal Endangered Species Act (FESA).

This BA discusses the physical impacts from construction of the proposed Project and the effects of these impacts on Federally listed species protected pursuant to the FESA and under jurisdiction of USFWS. Please note that species within National Marines Fisheries Service (NMFS) jurisdiction are addressed in a separate document prepared by Sequoia in July 2022 (Sequoia Ecological Consulting 2022), and updated in April 2024 to reflect project refinements as well as address comments following review of the 2022 document. Similarly, a prior version of this BA was prepared in 2022 and submitted to USFWS for review. USFWS concurred with the No Effects determinations for listed species in the 2022 BA but did not concur with the Not Likely to Adversely Affect determination for the Federally threatened California red-legged frog (*Rana draytonii*; CRLF), and indicated that the Project would have No Effect on CRLF after incorporating Avoidance and Minimization Measures. Additionally, since the 2022 BA was authored, the northwestern pond turtle (*Actinemys marmorata*; NWPT) was proposed for listing as threatened under FESA on October 3, 2023. The USFWS requested that the BA be updated to include NWPT and also indicated that the Project would have No Effect on NWPT after incorporating Avoidance and Minimization Measures.

In this BA, we provide: (1) a description of the habitats that occur on the Project site; (2) a list of the Federally listed species that have potential to occur on or near the Project site; (3) avoidance and minimization measures for potentially affected listed species that will be implemented to reduce impacts to these species to the greatest extent practicable; and (4) all other necessary information that the USFWS will need to complete FESA Section 7 consultation with federal Action Agency for the proposed Project.

The proposed Project includes the development of Shiloh Resort and Casino and is located on the northeastern edge of the Santa Rosa Plain (Figure 1). The Santa Rosa Plain, located in Sonoma County, California, is characterized by seasonal wetlands, primarily vernal pools, and associated upland grassland habitat. This area is known to support the Federally endangered Sonoma Distinct Population Segment (DPS) of California tiger salamander (*Ambystoma californiense*; CTS) and three Federally endangered plant species: Sonoma sunshine (*Blennosperma bakeri*), Burke's goldfields (*Lasthenia burkei*), and Sebastopol meadowfoam (*Limnanthes vinculans*), all of which are included in in the Recovery Plan for

the Santa Rosa Plain (USFWS 2016). These plant species are found only in seasonal wetlands, while CTS use these wetlands during the winter-spring breeding season and surrounding uplands year-round (USFWS 2016). Although the Project site is within the Santa Rosa Plain, it does not occur within USFWS-designated critical habitat or Core and Management Areas outlined in the Recovery Plan for the Santa Rosa Plain (USFWS 2016) and is located within a Santa Rosa Plain Conservation Strategy designation of "presence of CTS is not likely and there are no listed plants in this area."

2.0 LOCATION AND SETTING

The Project is located at 222 East Shiloh Road (Assessor's Parcel Number 059-300-003) in the Larkfield-Wikiup area of unincorporated Sonoma County near Windsor, California (Figures 1 and 2). The Project site is located east of U.S. Highway 101 (US-101) and west of Shiloh Ranch Regional Park at Latitude 38.52389°, Longitude -122.77362° (Figure 1). The Project site is within the Healdsburg, CA U.S. Geological Survey (USGS) 7.5-minute quadrangle and is bordered by Shiloh Road on the north, existing vineyards on the east, scattered residences on the south, and Old Redwood Highway on the west. Pruitt Creek, a fourth-order tributary in the Russian River watershed, flows south/southwest through the center of the Project site (Figure 2). The Project site is surrounded by residential development, agricultural fields, and community centers such as a park and a church. Project activities will occur within the approximately 68-acre parcel.

This Project site is located within the Santa Rosa Plain, bordered on the north by the Russian River, on the east by Coast Range foothills, and on the south and west by the Laguna de Santa Rosa. The Santa Rosa Plain contains a combination of urban areas and rural land (USFWS 2016). The Project site is not located within USFWS-designated critical habitat or Core and Management Areas outlined in the Recovery Plan for the Santa Rosa Plain (USFWS 2016).

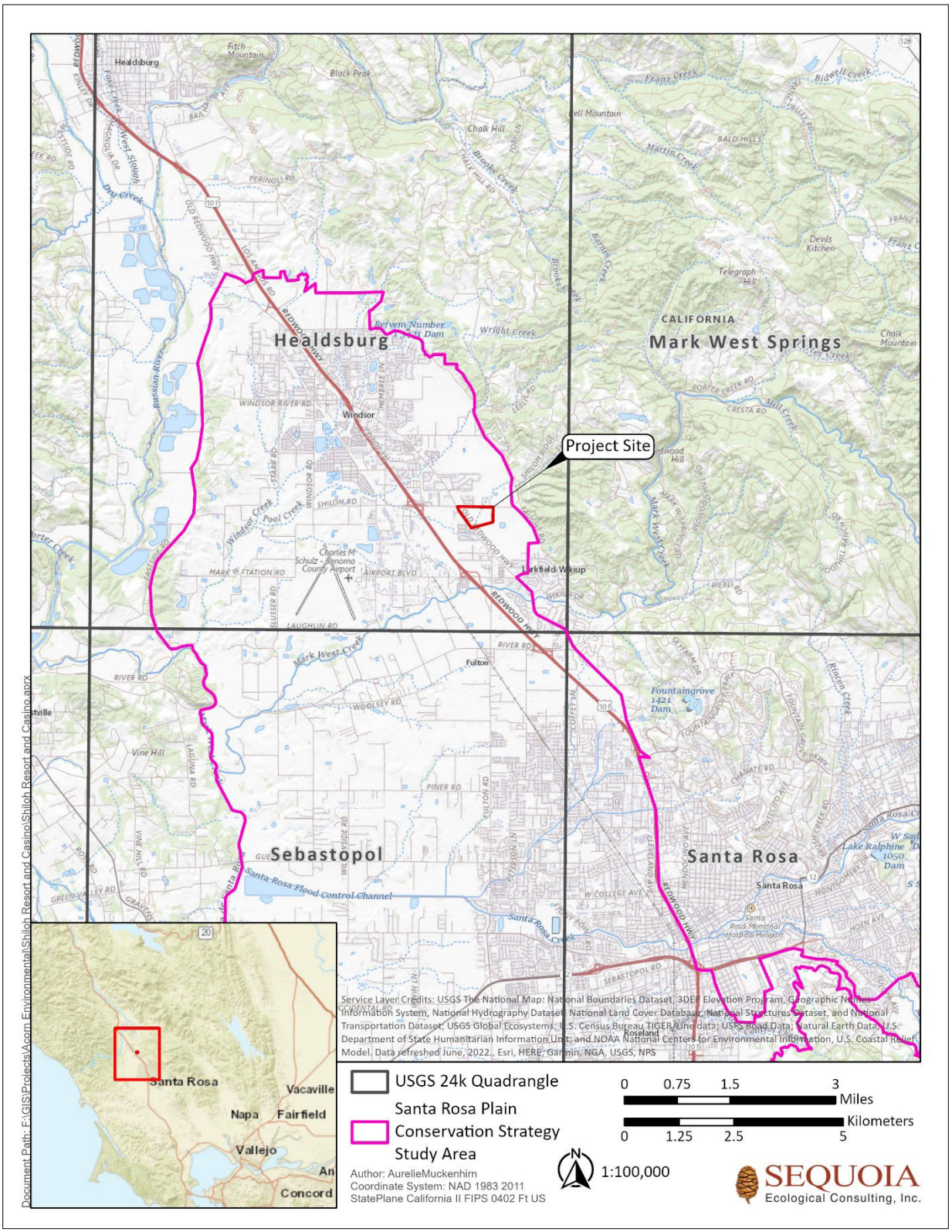

Figure 1. Regional Map of Proposed Shiloh Resort and Casino Project Site

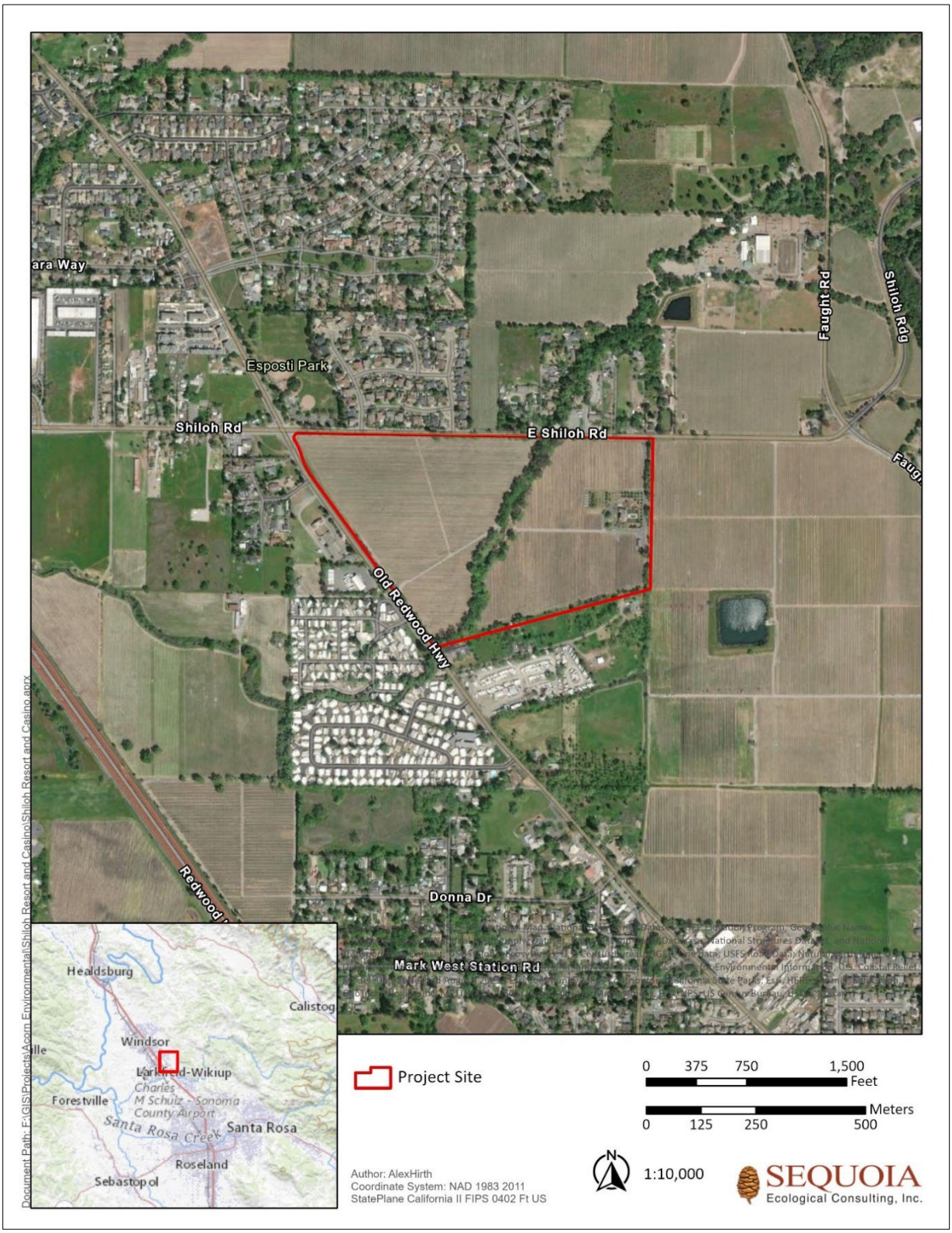

Figure 2. Location Map of Proposed Shiloh Resort and Casino Project Site

3.0 PROJECT DESCRIPTION

The Koi Nation purchased a 68-acre parcel at 222 East Shiloh Road in September 2021 and seeks approval from the BIA to take this land into trust. Development of this Project will occur at 222 East Shiloh Road and includes a Class III gaming facility, a five-story hotel, restaurants, a conference center, and a spa (Appendix A). The Koi Nation will build and operate the resort and casino under authority of the U.S. Indian Gaming Regulatory Act (IGRA).

The parcel is approximately 12 miles from the Koi Nation tribal headquarters located in Santa Rosa, California. Development of this Project will promote the general welfare of the Koi Nation and raise governmental revenues. The Project will create jobs for members of the Koi Nation and the greater Sonoma County community.

3.1 Project Footprint

Development activities are restricted to the 68-acre property boundary. As currently designed, the proposed Project will result in ground disturbance between approximately 42 and 53 acres of vineyards (depending on seasonal storage for treated effluent) with the riparian corridor of Pruitt Creek and large portions of existing vineyard left undeveloped/unimpacted. Riparian impacts are limited to two clear-span creek crossings and outfall structure improvements (Appendix A).

3.2 Site Preparation and Building

To prepare the Project site for development, staging areas will be designated and appropriate best management practices (BMPs) installed for avoidance and minimization of Project-related impacts to sensitive resources (e.g., Pruitt Creek). The property will then be cleared, grubbed, and graded.

Project construction will include installation of underground utilities and vertical construction of a five-story hotel and casino and a four-story parking garage, as well as the construction of concrete access roads, additional parking lots, and a swimming pool (Appendix A). Bioswales will be created to treat stormwater, including along Pruitt Creek near the south end of the Project site. Landscaping and riparian planting will occur once construction is complete.

3.3 Wastewater Treatment

The regulatory, technical, and engineering issues associated with supplying water and handling wastewater have been evaluated for four different buildout alternatives.

An on-site Wastewater Treatment Plant (WWTP) would treat wastewater from the resort and casino to a tertiary level, as defined by Title 22 of the California Code of Regulations. It would comply with the effluent quality requirements of the National Pollution Discharge Elimination System (NPDES) discharge permit issued by the U.S. Environmental Protection Agency (USEPA). Wastewater from the resort facilities would flow through sewer lines by gravity to a lift station. The gravity sewer main would be laid along planned roadways within the Project Site to facilitate access and maintenance. The gravity sewer main would be installed either beneath Pruitt Creek by horizontal directional drilling or other trenchless construction methods or over Pruitt Creek by attaching it to either the proposed pedestrian or vehicle bridge to avoid

impacts to the creek and riparian corridor. Wastewater would then be pumped from the lift station wet well through a sewer pipeline to the headworks of the WWTP. The lift station wet well would also be used to collect surface water runoff from the treatment site. The WWTP would include a course screening facility, headworks, immersed membrane bioreactor (MBR) system, ultraviolet (UV) disinfection, chlorine disinfection, effluent pump station, equalization tank, emergency storage tank, and associated operations and storage buildings. Any water discharged to surface waters would be non-chlorinated or fully de-chlorinated prior to discharge.

Effluent from the system would be disposed directly into Pruitt Creek and permitted by the EPA National Pollutant Discharge Elimination System (NPDES). The water quality of the discharge will follow the requirements of the NPDES permit, the California Regional Water Quality Control Board's Water Quality Control Plan for the North Coast Region (Basin Plan; NCRWQCB 2018), and State Water Resources Control Board's Title 22 of California's Code of Regulations Related to Recycled Water (Title 22; SWRCB 2018). The EPA issued NPDES for the proposed Project would follow Clean Water Act (CWA) standards and comply with the effluent limitations adopted for the receiving water. The Receiving Water standards are based on the requirements per the NCRWQCB Basin Plan.

Recycled water from the on-site WWTP would be utilized for toilet/urinal flushing, landscape irrigation, vineyard irrigation, cooling tower make-up and other approved non-potable uses consistent with EPA and California Title 22 regulations. Additionally, recycled water could be utilized to supply water for fire protection, such as the sprinkler systems and fire hydrants. Water would be pumped from the recycled water storage tank to the recycled water distribution system and seasonal storage reservoir/tank. The on-site recycled water reuse facilities would be designed to comply with California State Water Resources Control Board standards including, but not limited to, marking irrigation facilities in a purple color and installing recycled water pipelines in separate trenches away from other water pipelines. Recycled water would be pumped out of the seasonal storage ponds/tanks to the irrigated areas for re-use. These pumps would operate seasonally, typically between April and October, and would be sized to convey the entire volume of recycled water stored in the seasonal storage ponds/tanks plus a portion of the daily summertime wastewater flows.

Discharge to Pruitt Creek during the wet season (approximately October 1 to May 14) would be subject to the requirements of an NPDES discharge permit issued by the USEPA, which would allow discharges to surface water in accordance with the federal Clean Water Act (CWA) and applicable provisions of the Water Quality Control Plan for the North Coast Region (Basin Plan). Facilities associated with the seasonal surface water discharge would include a new discharge pipeline and outfall structure. The outfall structure would be designed to prevent erosion of the natural creek banks and erosion downstream. The outfall pipe outlet would include a duckbill check valve or similar component to protect against settlement/silting inside the pipe or nesting of small animals or rodents. The area around the outfall pipe would be covered with riprap or similar material to prevent natural erosion around the pipe from occurring and to protect the banks during periods of discharge. The pipe material would be suitable for permanent exposure to sunlight and creek water quality conditions.

Seasonal storage ponds or tanks would be used to seasonally store treated effluent until it can be reused on-site or discharged to Pruitt Creek. The size of the storage facilities would vary depending on the availability of recycled water use areas. Seasonal storage pond(s) would be constructed using semi-buried

ponds and berms and would be lined with an impermeable material, such as clay or concrete, to minimize percolation into the groundwater. Seasonal storage ponds would be located outside of the 100-year and 500-year floodplain and downgradient from any water supply well used for the proposed Project. Seasonal storage ponds would be sized according to the volume of disposal via irrigation and surface water discharge, as well as the remaining carry-over volume required from month to month.

3.4 Regulatory Setting

Regulatory authority over biological resources is shared by Federal, state, and local agencies under a variety of laws, ordinances, regulations, and statutes. The Project is unique in that it will be developed on the Koi Nation sovereign land base, pending Federal approval. Land held for trust on behalf of tribes is subject to Federal and tribal law exclusively; therefore, this Project does not fall under State or local jurisdictions. This BA is in support of National Environmental Policy Act (NEPA) compliance documentation for this Project, as well as consultation between the federal Action Agency and USFWS under Section 7 of FESA.

3.4.1 Recovery Plan for the Santa Rosa Plain

The Recovery Plan for Santa Rosa Plain was developed by the USFWS to describe the ecosystem and threats to native habitats, identify listed species covered under the Recovery Plan, and outline the elements of the recovery program. The Recovery Plan addresses the following federally-listed species endemic to the region: *Blennosperma bakeri, Lasthenia burkei, Limnanthes vinculans*, and the Sonoma County California tiger salamander, and incudes data on the distribution, abundance, habitat, reproduction and ecology, and critical habitat for plan species. This plan focuses on protecting these species from habitat loss and degradation by preserving high quality habitat. High quality habitat includes areas that are essential for connectivity, reduce fragmentation, and sufficiently buffer against encroaching development. This program has established core areas and management areas within Sonoma County. Core areas are defined as “the heart of a species historical (and current) range and represent central blocks of contiguously occupied habitat that function to allow for dispersal, genetic interchange between populations, and metapopulation dynamics” (USFWS 2016). Management areas are defined as “occupied habitat peripheral to species’ core range.”

4.0 ANALYSIS METHODS

4.1 Background Research

Prior to preparation of this BA, Sequoia researched the USFWS’ Information for Planning and Conservation (IPaC) database (USFWS 2022a, 2024), USFWS Designated Critical Habitat (USFWS 2022a), Recovery Plan for the Santa Rosa Plain (USFWS 2016), the California Department of Fish and Wildlife’s (CDFW) California Natural Diversity Database (CNDDB 2022a and 2022b), for all recorded occurrences of Federally listed species known from the region of the proposed Project. The IPaC report used in this analysis is provided as Appendix B. The potential for species occurrence was determined based on the results of literature reviews, field-based habitat assessments, and GIS-based remote sensing. All records of Federally listed species under USFWS jurisdiction are compiled and discussed in Table 1 and 2.

Sequoia examined all known recorded locations to determine if USFWS-jurisdictional listed species could occur on the Project site or within an area of affect.

4.2 Site Assessment

Sequoia biologists Ari Rogers and Claire Buchanan conducted surveys on the Project site on February 23 and 24, 2022, to record biological resources and to assess the limits of areas potentially regulated by resource agencies. Surveys involved searching all habitats on the site and recording all plant and wildlife species observed. Sequoia cross-referenced the habitats occurring on the Project site with the habitat requirements of regional special-status species to determine if the proposed Project could directly or indirectly impact these species. Any special-status species or suitable habitat was documented.

Tables 1 and 2 present the potential for occurrence of Federally listed plant and animal species known to occur in the vicinity of the Project site, along with their habitat requirements, potential to occur on the Project site, and basis for occurrence classification. Tables 3 and 4 at the end of this BA provide plant and wildlife species observed on the Project site.

5.0 EXISTING CONDITIONS

5.1 Project Site Topography and Hydrology

The Project site is located within the Santa Rosa Plain, and as such the topography is fairly uniform with elevation ranging from 135 feet above mean sea level (MSL) along the western property boundary to 160 feet MSL in the northeast corner of the property. Pruitt Creek flows southwesterly through the Project site and is a fourth order tributary to the Russian River. Pruitt Creek terminates at Pool Creek which flows into Windsor Creek, then into Mark West Creek, and finally into the Russian River. At the time of the February 2022 site visit, Pruitt Creek was wetted throughout. Flow was minimal (less than 1 ft^3/sec), with an average depth of eight inches and indicators of a high flow event (leaf litter and riparian vegetation scattered throughout). Water temperature was 52°F. Water temperature was measured at 1000 hours at a depth of approximately 5 inches in the shade. Comparing the observations from the Draft Constraints Report (ESA 2021) and observations from Sequoia's February 2022 survey, it is likely that Pruitt Creek is an intermittent stream that flows from late fall to spring and begins to dry up by early summer and remains dry through the fall.

5.2 Plant Communities and Wildlife Habitats

On February 23 and 24, 2022, Sequoia staff conducted a survey of the Project site and characterized vegetation present (Figure 3). During the survey, Sequoia biologists also documented plant and wildlife species observed on the Project site (Tables 3 and 4). Nomenclature used for plant names follows *The Jepson Manual, Second Edition* (Baldwin et al., eds. 2012), while nomenclature used for wildlife follows CDFW's Complete List of Amphibian, Reptile, Bird, and Mammal Species in California (2016). Three plant communities occur on the Project site (Sawyer, Keeler-Wolf, and Evens 2009) and are further described below.

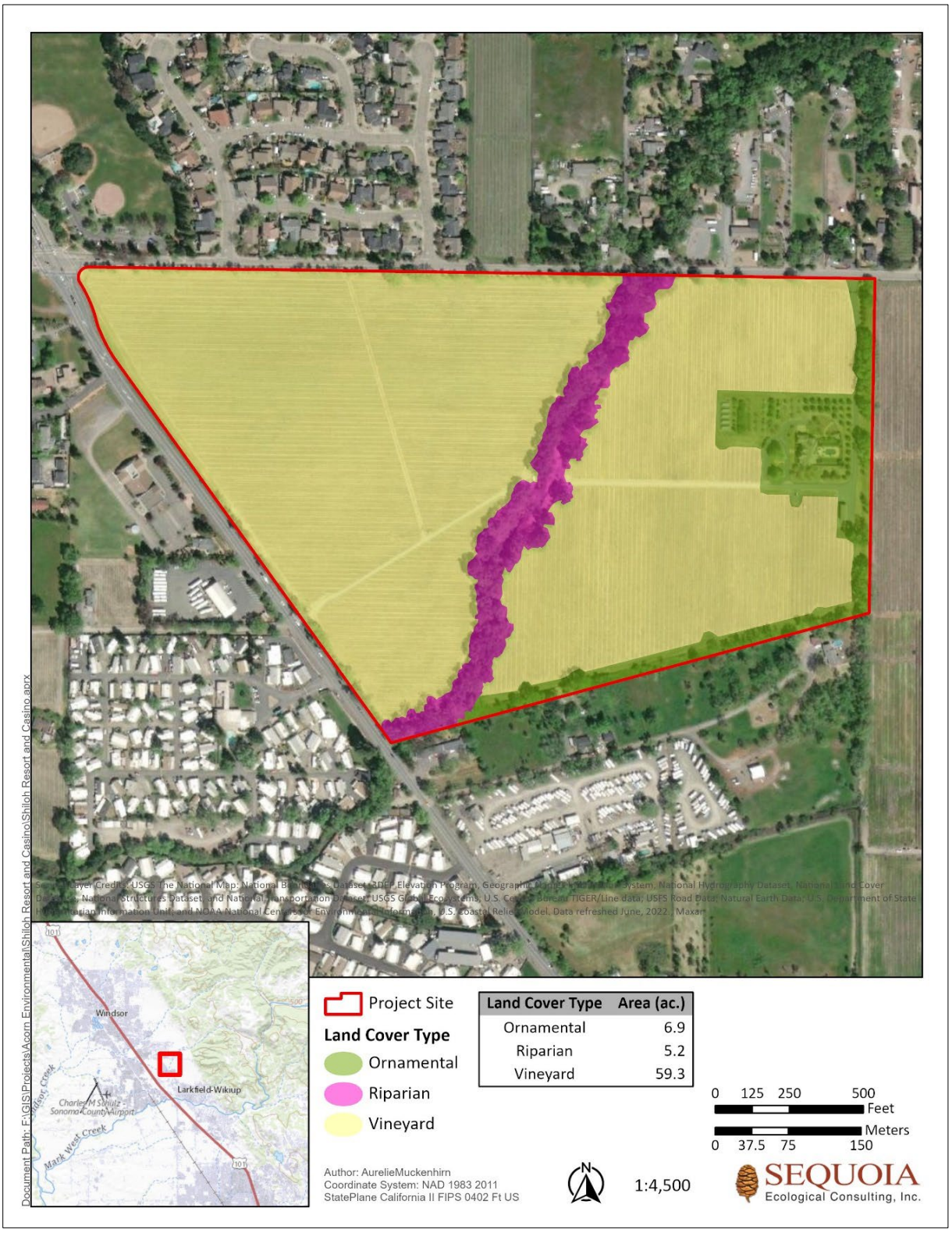

Figure 3. Land Cover Types within Proposed Shiloh Resort and Casino Project Site

5.2.1 Vineyards

The Project site is predominately an active vineyard with ruderal (weedy) vegetation growing in between the grape rows. Vineyard infrastructure is also present including dirt roads, piping, propane tanks, wash station, and electrical power poles. While the grape rows themselves are weeded and maintained, ruderal and annual vegetation grows between rows and around the vineyard perimeter; ruderal species are adapted to endure intense and/or long-term disturbance.

The vineyard land cover type occupies approximately 59.3 acres within the Project site (Figure 3).

5.2.2 Ornamental/Landscaping

Landscaped vegetation consisting of ornamental trees and shrubs surround the private residence and other structures on the Project site. There are olive trees and a variety of fruit trees on the north side of the private residence. Ruderal species occur between the landscape and orchard plantings. Large trees, primarily valley oaks (*Quercus lobata*), line the property boundary.

The ornamental land cover type occupies approximately 6.9 acres within the Project site (Figure 3).

5.2.3 Aquatic Features

A routine-level aquatic resource delineation was conducted on the Project site on February 23 and 24, 2022. A jurisdictional delineation report has been submitted to the U.S. Army Corps of Engineers (USACE) and is awaiting verification. The Project site was field-checked for indicators of hydrophytic vegetation, wetland hydrology, and hydric soils. During the aquatic resource delineation, six sample points (three pairs) were taken on the Project site and recorded on USACE data forms provided in the *Regional Supplement to the U.S. Army Corps of Engineers Wetland Delineation Manual: Arid West Region* (Version 2.0) (Arid West Manual; USACE 2008a). The draft aquatic resources jurisdictional delineation map has been provided as Appendix C of this BA.

This aquatic resource delineation was conducted in accordance with the *Arid West Manual* (Environmental Laboratory 2008) and the *Corps of Engineers Wetlands Delineation Manual* (USACE Manual; Environmental Laboratory 1987). Based on the presence or absence of field indicators (including vegetation, hydrology, and soils), the limits of potential jurisdictional wetlands and other waters of the United States were determined. Potential jurisdictional wetlands and other waters were mapped with a Trimble GPS unit (sub-meter accuracy) and overlain on a digital orthophoto using ArcGIS mapping software (Appendix C).

Seasonal wetlands are habitats that dry down in the summer and fall months, but generally in the rainy, winter months become saturated and inundated for several weeks to months. Seasonal wetlands often hold water due to soil permeability and/or the presence of topographically low, depressional areas. Soils with a high clay content or within depressional areas, or soils that have been compacted by human activities, often hold and trap seasonal rainfall over short to long durations of the winter and spring. These areas often become dominated by hydrophytic plant species that are reliant and/or dependent on

regular saturation or inundation. Roadside drainage ditches are man-made features that catch sheet flow or convey stormwater flows.

Four areas were delineated on the study area that have positive indicators of all three wetland parameters and seasonal hydrology (Appendix C). Seasonal Wetlands primarily occur on hillside seeps and adjacent swales, channels, and ditches that appear to receive hydrologic input from direct precipitation, groundwater discharge, and/or surface runoff from the adjacent slope or contributing drainages.

One Intermittent Drainage (i.e., Pruitt Creek) was delineated on the Project site (Appendix C). Intermittent Drainages are natural tributaries to downstream TNWs (either through direct discharge or culvert/storm drain networks) and support a bed, bank, and OHWM, but lack one or more wetland parameters. Pruitt Creek is mapped as "Riverine, Intermittent, Streambed, Seasonally Flooded (R4SBC)" and "Palustrine, Forested, Emergent, Persistent, Seasonally Flooded (PFO/EM1C) Freshwater Forested/Shrub Wetland" in the National Wetlands Inventory (NWI; USFWS 2022b). The NWI layer indicates a freshwater emergent wetland is present in the central northern portion of the Project site (Figure 4). Sequoia staff did not detect any wetted habitat or indications of wetland presence in that portion of the Project site while surveying for CESA-listed species

Two Roadside Drainage Ditches were delineated on the western edge of the Project site, along Old Redwood Highway (Appendix C). The roadside drainage ditches that flow along Old Redwood Highway is characterized by a mix of hydrophytic species, such as tall flatsedge (FACW), curly dock (FAC), and bog rush (FACW), and ruderal and non-native annual species consistent with the adjacent uplands, such as wild oat, ripgut brome, and common vetch.

5.2.4 Riparian Corridor

There is a narrow buffer of non-native annual grassland between the riparian corridor and the vineyards. Valley oaks dominate the riparian corridor with some smaller eucalyptus (*Eucalyptus* sp.) trees also present. Understory vegetation is composed of both native and non-native species of grasses and shrubs. The understory communities observed had distinct segments heavily dominated by native species alternating with areas dominated by non-native species. Some native species observed include California buckeye (*Aesculus californica*), California bay laurel (*Umbellularia californica*), willow (*Salix* sp.), poison oak (*Toxicodendron diversilobum*), valley oak, and coast live oak (*Quercus agrifolia*). Non-native species observed include Himalayan blackberry (*Rubus armeniacus*), eucalyptus, and black mustard (*Brassica nigra*), among others.

The riparian land cover type occupies approximately 5.2 acres within the Project site (Figure 3).

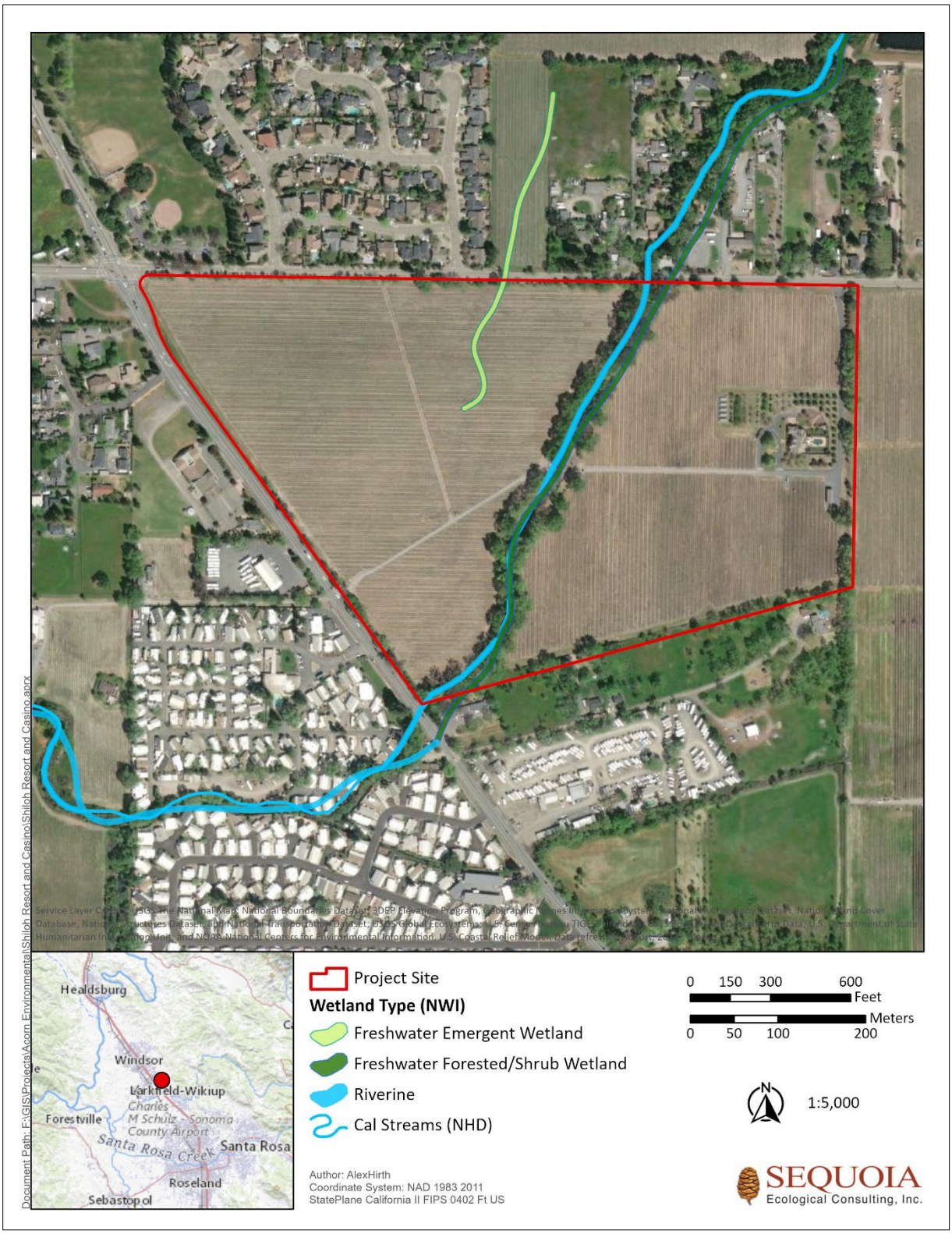

Figure 4. National Wetlands Inventory Map for the Proposed Shiloh Resort and Casino Project site

6.0 EVALUATION OF EFFECTS ON FEDERALLY LISTED SPECIES

The results of Sequoia's record search for Federally listed species occurrences within 3 miles of the Project site are discussed in the sections below. A graphical representation of the known records of Federally listed plant and wildlife species within 3 miles of the Project site is provided in Figures 5 and 6. USFWS-designated critical habitat within the vicinity of the Project site is shown in Figure 7.

6.1 Federally Listed Plants

Sequoia has determined that there are 4 Federally listed plant species known from the vicinity of the Project site based on a review of IPaC (USFWS 2022a). These four species have documented occurrences within 3 miles of the Project site (Figure 5): Burke's goldfields, Sebastopol meadowfoam, Sonoma sunshine, and many-flowered navarretia. All these species occur in specialized habitats, namely marshes and vernal pools, microhabitats, and or substrates (i.e., sand) which do not occur on or adjacent to the Project site; therefore, these 4 plants were dismissed from further consideration. Accordingly, the proposed Project will not affect Federally listed plants. Table 1 presents Federally listed plant species within the vicinity of the Project site, their legal status, habitat requirements, and probability of occurring on the Project site.

6.2 Federally Listed Wildlife

Sequoia determined that there are five Federally listed, proposed, or candidate wildlife species that are known from the vicinity of the Project site (USFWS 2024, Appendix B). Three of these species occur in specialized habitats such as mixed forests, coastal beaches, tropical waters, and perennial waterways, which do not occur on or adjacent to the Project site; therefore, green sea turtle, monarch butterfly, and northern spotted owl were dismissed from further consideration. The two remaining Federally listed or proposed species are discussed further below: northwestern pond turtle and California red-legged frog. The 2022 IPaC report included California tiger salamander as a listed species (USFWS 2022a); however, the 2024 IPaC report does not include California tiger salamander as a species with potential to occur in the project area (USFWS 2024). The Project site provides potentially suitable habitat for California red-legged frog and while no suitable habitat for California tiger salamander exists onsite, this species is still included in this analysis due to the Project site's location and the relative prevalence of California tiger salamander within the Santa Rosa Plain, as well as for purposes of consistency with prior submittals and the environmental documentation. Table 2 presents these Federally listed wildlife species, their legal status, habitat requirements, and probability of occurring on the Project site and Figure 6 shows CNDDB occurrences of special-status wildlife within 3 miles of the Project site.

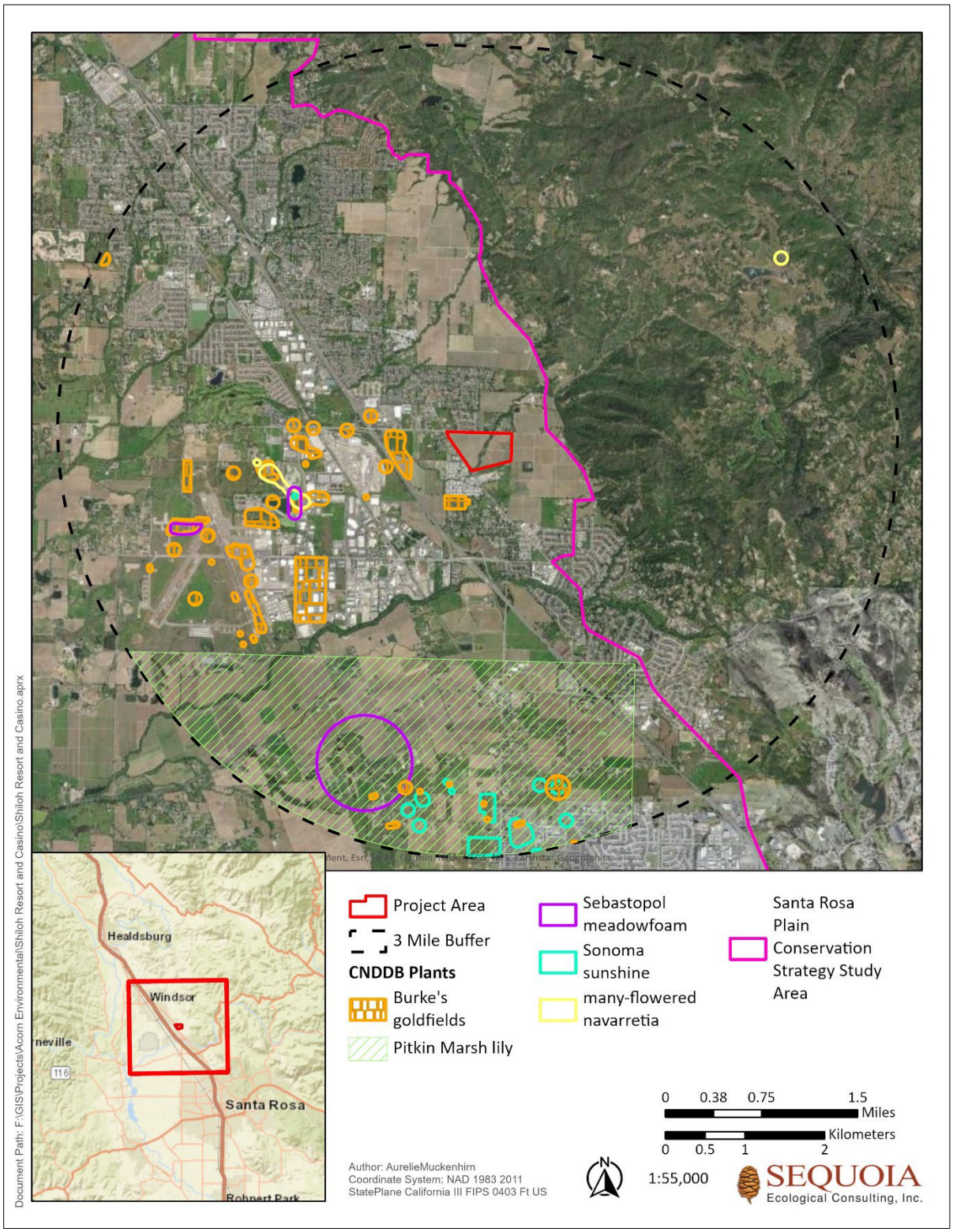

Figure 5. Closest Known Occurrences of Federally Listed Plant Species within 3 Miles of Proposed Shiloh Resort and Casino Project Site

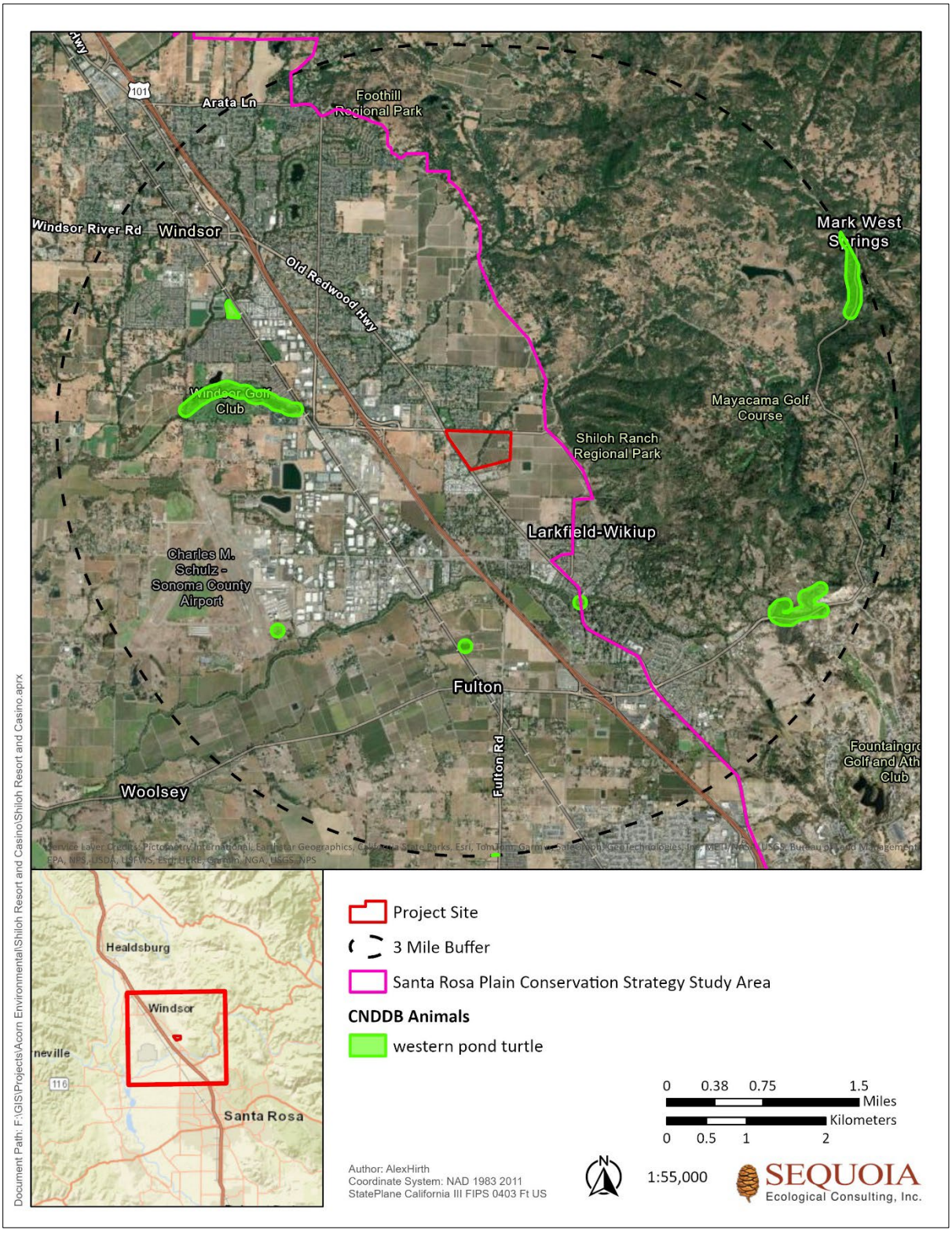

Figure 6. Closest Known Occurrences of Federally Listed Wildlife Species within 3 Miles of Proposed Shiloh Resort and Casino Project Site.

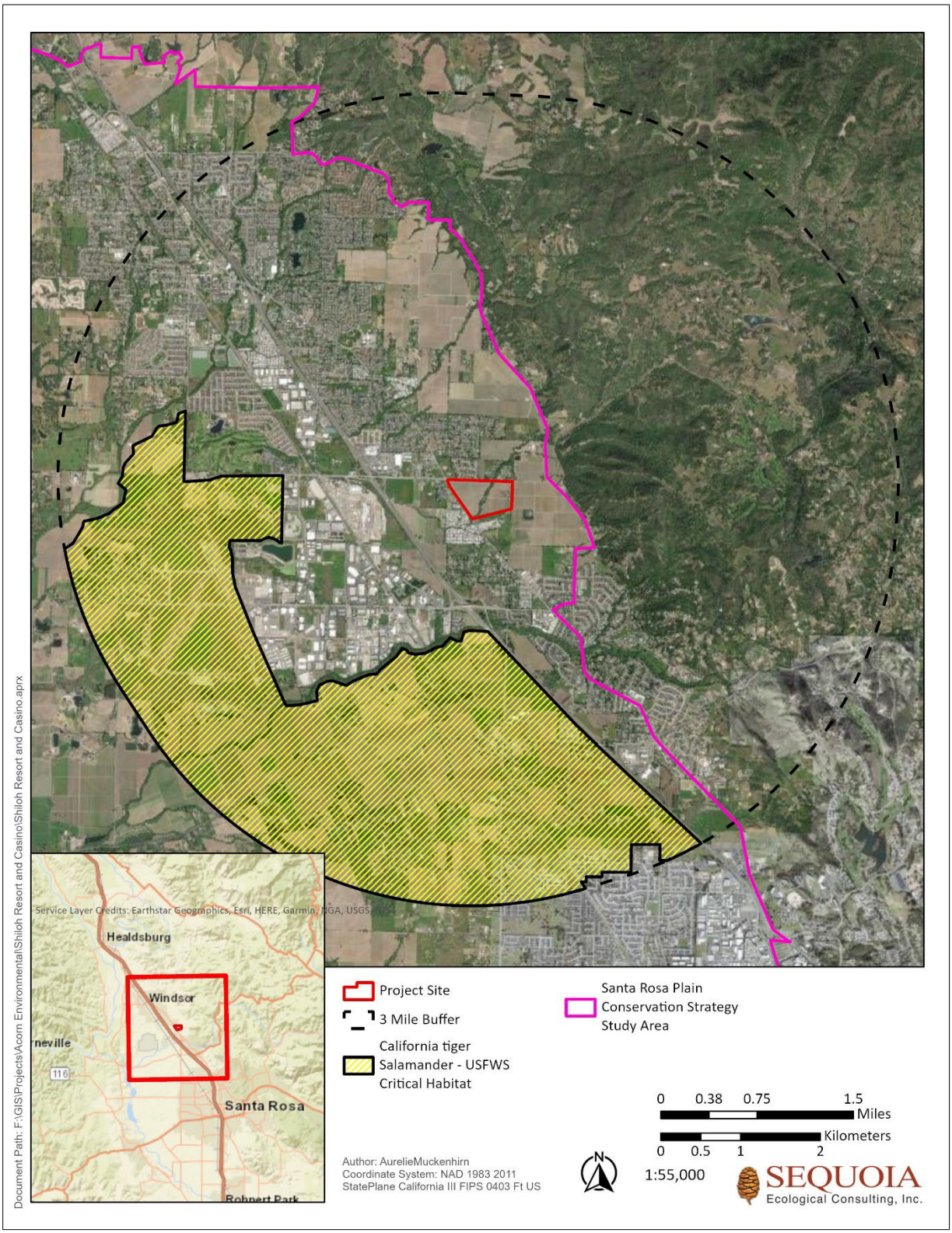

Figure 7. USFWS Critical Habitat in the Vicinity of Proposed Shiloh Resort and Casino Project Site.

6.2.1 Northwestern Pond Turtle

The western pond turtle was proposed as a Federally threatened species on September 29, 2023 (89 FR 23534) and is designated as a California Species of Special Concern (CNDDB 2022b). The comment period on the proposed rule that published October 3, 2023 (88 FR 68370) was reopened as of the writing of this document and will close May 6, 2024. No recovery plan or critical habitat has been designated for this species.

The western pond turtle is the only freshwater turtle native to greater California. It is distributed along much of the western coast from the Puget Sound in Washington south to the Baja Peninsula of Mexico (Storer 1930). The literature describes two subspecies of western pond turtle: the northwestern pond turtle (*Actinemys marmorata*) and the southwestern pond turtle (*Actinemys pallida*). Western pond turtle is vulnerable to disease, upland and aquatic habitat alterations and destruction, and the introduction of predators. The biggest threats to the species are bullfrog and introduced warm freshwater fish (e.g., bass), which prey on small juvenile turtles.

Overall, western pond turtles are habitat generalists, and have been observed in slow-moving rivers and streams (e.g., oxbows), lakes, reservoirs, permanent and ephemeral wetlands, stock ponds, and sewage treatment plants. They prefer aquatic habitat with refugia such as undercut banks and submerged vegetation (Holland 1994), and require emergent basking sites such as mud banks, rocks, logs, and root wads to thermoregulate their body temperature (Holland 1994; Bash 1999). Pond turtles are omnivorous and feed on a variety of aquatic and terrestrial invertebrates, fish, amphibians, and aquatic plants.

Western pond turtles regularly utilize upland terrestrial habitats, most often during the summer and winter, especially for oviposition (females), overwintering, seasonal terrestrial habitat use, and overland dispersal (Reese 1996, Holland 1994). Females have been reported ranging as far as 500 meters from a watercourse to find suitable nesting habitat (Reese and Welsh 1997), however they typically remain within 200 meters (Zargoza et al., 2015). Nest sites are most often situated on south- or west-facing slopes, are sparsely vegetated with short grasses or forbs, and are scraped in sands or hard-packed dry silt or clay soils (Holland 1994; Rathbun et al. 1992; Holte 1998; Reese and Welsh 1997). Western pond turtles exhibit high site fidelity, returning in sequential years to the same terrestrial site to nest or overwinter (Reese 1996).

In Southern and central California, females lay their clutch as early as late April to late July, although they predominantly lay in June and July. In the early morning or late afternoon, gravid females leave the water and move upland to nest (Holland 1994). Natural incubation times vary, ranging from 80-100+ days in California. In Northern California and Oregon, hatchlings remain in the nest after hatching and overwinter, emerging in the spring. In Southern and central California, those that do not overwinter emerge from the nest in the early fall (Holland 1994).

6.2.1.1 Potential to Occur on the Project Site

As described in Section 5.1 above, Sequoia has confirmed that Pruitt Creek is an intermittent stream that likely flows from late fall to spring and begins to dry up by early summer and remains dry through the fall. Pruitt Creek does not provide suitable aquatic features to support NWPT, as Pruitt Creek is wet and flowing during the aestivation season of NWPT and largely dry during NWPT active season. Although Pruitt Creek does not hold water year-round it contains small-scale habitat features that could provide potential oviposition and overwintering habitat in the riparian corridor. Though Pruitt Creek and adjacent riparian areas have some potential to be used by NWPT as nesting and overwintering habitat, the likelihood is diminished due to lack of connectivity to suitable aquatic habitat NWPTs use during the active season. Upland habitat within the Project site is limited to developed habitat such as vineyards and ornamental landscaping that lack ground squirrel burrows, and no burrows were observed during the reconnaissance survey. In addition, no suitable aquatic habitat occurs within 500 meters of the Project site from which NWPT would disperse through uplands.

Pruitt Creek is an intermittent stream that connects to other waterways via the large box culverts on the north and south ends. These connections could provide migration/riparian dispersal habitat for NWPT to and from other waterways. Accordingly, the Project site could provide riparian dispersal habitat. The Project site is in a developed area and residential and commercial developments likely serve as upland dispersal barriers to NWPT. Furthermore, human- and traffic-related disturbance along associated roadways likely preclude NWPT from dispersing onto the site within upland habitat. Given that NWPT typically disperses no more than 200 meters from perennial water, and the site is more than 200 meters from perennial aquatic feature, the Project site has low potential to provide suitable dispersal habitat.

There are seven recorded occurrences of western pond turtle in CNDDB within 3 miles of the Project site (Figure 6). The closest CNDDB occurrence 454 is less than one mile west of the Project site, in Mark West Creek, however the record is dated 1996. A 2008 CNDDB occurrence 431 dated 2008 is approximately four miles west of the Project site in the Russian River. The most recent CNDDB occurrence 1363 dated 2017 is approximately 1.75 miles south of the Project site in a perennial irrigation pond. Review of the aerial imagery in Figure 6 demonstrates a high degree of habitat fragmentation between the project site and mapped occurrences, as well as the association between NWPT and aquatic (perennial) habitat.

Due to the absence of suitable aquatic and upland NWPT habitat on and/or adjacent to the Project site and the extent of regular disturbance associated with the development that make up the proposed Project, this species has low potential occur on the Project site in an upland oviposition or overwintering capacity. Pruitt Creek is an intermittent aquatic feature that connects to other waterways and contains microhabitats suitable for foraging, cover, and dispersal consistent; however, there are no recent (within 5 years) documented occurrences of NWPT within the vicinity or the Project site. Therefore, the creek has low potential to be used aquatic habitat during wet years, and it has low potential to be used for dispersal, oviposition, and overwintering; northwestern pond turtle is not expected to occur within the Project site overall.

Accordingly, Sequoia has determined that the proposed project is not likely to adversely affect northwestern pond turtle and its habitat. Impacts to aquatic resources will be reduced to no effect by implementing Avoidance and Minimization Measures (AMMs) provided below.

6.2.2 California Red-Legged Frog

The California red-legged frog was listed as a Federally threatened species on May 23, 1996 (61 FR 25813) and is designated as a California Species of Special Concern (CNDDB 2022b). A recovery plan was published for the California red-legged frog (USFWS 2002), and critical habitat was designated for this species on April 13, 2006 (71 FR 19244), and revisions to the critical habitat designation were published on March 17, 2010 (75 FR 12816). Designated critical habitat for this species is defined as areas containing Primary Constituent Elements (PCEs) including breeding aquatic habitat, non-breeding aquatic habitat, upland habitat, and dispersal habitat. The Project site is located *outside* of USFWS-designated critical habitat for California red-legged frog (Figure 7).

The California red-legged frog is distributed throughout 26 counties in California but is most abundant in the San Francisco Bay Area (USFWS 2002). Populations have become isolated in the Sierra Nevada, northern coast, and northern Transverse Ranges (Thomson, Wright, and Shaffer 2016; Stebbins and McGinnis 2012). The species is believed to be extirpated from most locations in the southern Transverse and Peninsular Ranges but is still present in Baja California, Mexico (USFWS 2002). Preliminary reintroduction of the species recently occurred in 2020 and 2021 at two locations in Southern California, one at the Santa Rosa Plateau Ecological Reserve in Riverside County and one at the Wheatley Ranch in Mesa Grande, San Diego County (Heil 2021). California red-legged frogs predominantly inhabit permanent water sources such as streams, lakes, marshes, natural and man-made ponds, and ephemeral drainages in valley bottoms and foothills up to 4,900 feet in elevation (Thomson, Wright, and Shaffer 2016; Bulger, Scott, and Seymour 2003; Stebbins and McGinnis 2012). Adults breed in a variety of aquatic habitats, while larvae and metamorphs use streams, deep pools, backwaters of streams and creeks, ponds, marshes, sag ponds, dune ponds, and lagoons. Stock ponds are frequently used for breeding when they provide a suitable hydroperiod, pond structure, vegetative cover, and are managed to control non-native predators such as bullfrogs and exotic fish. Breeding occurs between November and April within still or slow-moving water with light to dense, riparian or emergent vegetation, such as cattails (*Typha* spp.), tules (*Scirpus* spp.) or overhanging willows (*Salix* spp.) (Hayes and Jennings 1988). Egg masses are attached to vegetation below the surface and hatch after 6 to 14 days (Storer 1925; Thomson, Wright, and Shaffer 2016). Larvae undergo metamorphosis 3.5 to 7 months following hatching and reach sexual maturity at 2 to 3 years of age (Thomson, Wright, and Shaffer 2016). During the dry season, California red-legged frogs may use refugia in upland habitat, such as small mammal burrows or adjacent moist vegetation (USFWS 2002).

Tatarian (2008) noted that 57 percent of frogs fitted with radio transmitters in the Round Valley of eastern Contra Costa County stayed at their breeding pools, whereas 43 percent moved into adjacent upland habitat or to other aquatic sites. This study reported a peak of seasonal terrestrial movement in the fall months corresponding to 0.2 inch of precipitation that tapered off into spring. Upland

movement activities ranged from 3 to 233 feet, averaging 80 feet, and were associated with a variety of refugia, including ground squirrel burrows at the bases of trees or rocks, logs, grass thatch, crevices, cow hoof prints, and a downed barn door; others were associated with upland sites lacking refugia (Tatarian 2008). The majority of terrestrial movements lasted from 1 to 4 days; however, one female was reported to remain in upland habitat for 50 days (Tatarian 2008). Uplands closer to aquatic sites were more often used and were more commonly associated with areas exhibiting higher object cover (e.g., small woody debris, rocks, and vegetative cover).

Most frogs move away from breeding ponds to upland areas. The distance moved is site dependent, though one recent study shows that only a few frogs move farther than the nearest suitable non-breeding habitat (Fellers and Kleeman 2007). In this Marin County study, the furthest distance traveled was 0.87 mile and most dispersing frogs moved through grazed pastures to reach the nearest riparian habitat (Fellers and Kleeman 2007). Bulger, Scott, and Seymour (2003) did not observe habitat preferences among frogs moving between ponds. They did note that when breeding ponds dry, California red-legged frogs use moist microhabitats of dense shrubs and herbaceous vegetation within approximately 330 feet of ponds.

6.2.2.1 Primary Constituent Elements (PCEs)

As part of the process for designating critical habitat for CRLF, USFWS developed and defined primary constituent elements (PCEs) consisting of four components: aquatic breeding habitat (PCE 1), non-breeding aquatic habitat (PCE 2), upland habitat (PCE 3), and dispersal habitat (PCE 4) (50 CFR 17.95(d)(2)). These PCEs are found within USFWS designated critical habitat and are used in this analysis to assess the suitability of the Project site for CRLF, as defined below.

PCE 1 – Aquatic Breeding Habitat

"Standing bodies of fresh water (with salinities less than 7.0 parts per thousand) including: natural and manmade (e.g., stock) ponds, slow moving streams or pools within streams, and other ephemeral or permanent water bodies that typically become inundated during winter rains and hold water for a minimum of 20 weeks in all but the driest of years" (50 CFR 17.95(d)(2)(i)).

PCE 2 – Non-Breeding Aquatic Habitat

"Fresh water habitats as described above, that may or may not hold water long enough for the subspecies to hatch and complete its aquatic life cycle but that do provide for shelter, foraging, predator avoidance, and aquatic dispersal for juvenile and adult California red-legged frogs" (50 CFR 17.95(d)(2)(ii)).

PCE 3 – Upland Habitat

"Upland areas within 200 ft (60 m) of the edge of the riparian vegetation or dripline surrounding aquatic and riparian habitat and comprised of various vegetational series such as grasslands, woodlands, and/or

wetland/riparian plant species that provides the frog shelter, forage, and predator avoidance" (50 CFR 17.95(d)(2)(iii)).

PCE 4 – Dispersal Habitat

"Accessible upland or riparian dispersal habitat within designated units and between occupied locations within 0.7 mi (1.2 km) of each other that allow for movement between such sites. Dispersal habitat includes various natural habitats and altered habitats such as agricultural fields, which also do not contain barriers to dispersal" (50 CFR 17.95(d)(2)(iv)).

6.2.2.2 Potential to Occur on the Project Site

As described in Section 5.1 above, Sequoia has confirmed that Pruitt Creek is an intermittent stream that likely flows from late fall to spring and begins to dry up by early summer and remains dry through the fall. While Pruitt Creek contains plunge pools that meet the depth requirement in PCE 1, it does not hold water long enough to support California red-legged frog breeding. Therefore, the Project site does not contain water bodies that would provide CRLF breeding habitat as defined by PCE 1.

Although Pruitt Creek does not hold water year-round it contains small-scale habitat features that could provide potential shelter, foraging, and aquatic dispersal habitat. Therefore, Pruitt Creek has some potential to be used by California red-legged frogs as non-breeding aquatic habitat as defined by PCE 2. That said, the lack of nearby (i.e., within 3 miles) occurrences of CRLF suggests that this species is not prevalent or present within the vicinity of the Project site, and accordingly there is a low potential for it to occur on site in a non-breeding aquatic capacity.

Upland habitat within the Project site is limited to developed habitat such as vineyards and ornamental landscaping that lacks ground squirrel burrows or other refugia. The Project site is in a developed area and residential and commercial developments likely serve as upland dispersal barriers to California red-legged frog. Furthermore, human- and traffic-related disturbance along associated roadways likely preclude California red-legged frog from dispersing onto the site within upland habitat. In addition, no suitable breeding habitat occurs within 2 km of the Project site from which CRLF would disperse through uplands. Therefore, the Project site does not contain suitable upland habitat for CRLF consistent with PCE 3.

Pruitt Creek an intermittent stream that connects to other waterways via the large box culverts on the north and south ends. These connections could provide migration/riparian dispersal habitat for California red-legged frog to and from other waterways. Accordingly, the Project site could provide riparian dispersal habitat consistent with PCE 4; however, the lack of nearby CNDDB occurrences makes it unlikely that CRLF are present in the vicinity and this species has a low potential to occur on the Project site in a riparian dispersal capacity.

There are no recorded occurrences of the California red-legged frog in CNDDB within 3 miles of the Project site (Figure 6). Due to the absence of suitable breeding and upland California red-legged frog

habitat on and/or immediately adjacent to the Project site and the extent of regular disturbance associated with the development that make up the proposed Project, this species has little to no potential occur on the Project site in an aquatic breeding and upland capacity. Pruitt Creek is an intermittent aquatic feature that connects to other waterways and contains microhabitats suitable for foraging, cover, and dispersal consistent with PCE 2 and 4; however, there are no documented occurrences of CRLF within the vicinity or the Project site or within the known dispersal distance for CRLF. Therefore, the creek has a low potential to be used by CRLF as migration/dispersal habitat (PCE 4) and/or aquatic non-breeding habitat (PCE 2) and CRLF is not likely to occur within the Project site overall.

Accordingly, Sequoia has determined that the proposed project is not likely to adversely affect California red-legged frog and its habitat. Impacts to aquatic resources will be reduced to no effect by implementing Avoidance and Minimization Measures (AMMs) provided below.

6.2.3 California Tiger Salamander

The Project site is located within the known range of the Sonoma County "Distinct Population Segment" (DPS) of the California tiger salamander. Under FESA, the USFWS emergency listed the Sonoma County DPS as endangered on July 22, 2002 (67 FR 47726). The USFWS formalized the listing of the Sonoma County DPS of California tiger salamander as endangered on March 19, 2003 (68 FR 13497). Critical habitat for the Sonoma, Central Valley, and Santa Barbara distinct populations were designated for this species on August 31, 2011; August 23, 2005; and November 24, 2004, respectively. Recovery plans for these distinct populations were published on May 31, 2016; June 6, 2017; and December 12, 2016 (USFWS 2017). The Project site is located outside of USFWS-designated critical habitat for California tiger salamander (Figure 7).

The California tiger salamander is a large, terrestrial salamander distributed throughout the Central Valley and Central Coast ranges, from Colusa County south to San Luis Obispo and Kern Counties and is found from sea level to 3,500 feet in elevation. Two disjunct populations are located within Sonoma County and Santa Barbara County, which are geographically isolated from the Central Valley population. Shaffer et al. (2004) identified six distinct populations based on mitochondrial DNA and allozymes analysis: the Santa Rosa area of Sonoma County; the Bay Area (central and southern Alameda, Santa Clara, western Stanislaus, western Merced, and the majority of San Benito Counties); the Central Valley (Yolo, Sacramento, Solano, eastern Contra Costa, northeast Alameda, San Joaquin, Stanislaus, Merced, and northwestern Madera Counties); southern San Joaquin Valley (portions of Madera, central Fresno, and northern Tulare and Kings Counties); the Central Coast Range (southern Santa Cruz, Monterey, northern San Luis Obispo, and portions of western San Benito, Fresno, and Kern Counties); and Santa Barbara County.

California tiger salamanders inhabit lowland grasslands, oak savannah, and mixed woodland habitats, and require vernal pools, seasonal ponds, or semi-permanent calm waters that pond water for a minimum of 3 to 4 months in duration for breeding and larval maturation, and adjacent upland refugia

and foraging habitat with small mammal burrows (Storer 1925; Barry and Shaffer 1994; Stebbins and McGinnis 2012). Migration to breeding sites begins with the onset of autumn rains, typically in November. California tiger salamanders have been reported to travel distances up to 1 mile (Austin and Shaffer 1992), but Trenham and Shaffer (2005) estimate that optimal upland habitat is within approximately 2,000 feet of breeding ponds. Eggs are laid singly or in small clusters on the pond bottom or attached to individual strands of vegetation (Storer 1925; Twitty 1941; Barry and Shaffer 1994; Thomson, Wright, and Shaffer 2016). Metamorphosis requires a minimum of 10 weeks following hatching, and young migrate en masse when temporary pools begin to dry in late spring or early summer (Anderson 1968; Feaver 1971; Thomson, Wright, and Shaffer 2016; Stebbins and McGinnis 2012). Outside of the breeding season, juveniles and adults remain in subterranean habitat typically in small mammal burrows provided by California ground squirrels (*Otospermophilus beecheyi*) and pocket gophers (*Thomomys* spp.) (Shaffer, Fisher, and Stanley 1993; Barry and Shaffer 1994; Thomson, Wright, and Shaffer 2016; Stebbins and McGinnis 2012).

The California tiger salamander is the most vulnerable of the group of amphibians that breed in vernal pools due to its long developmental interval to metamorphosis, which restricts it to pools that are the longest lasting, and therefore often the largest in size. Loss and degradation of complexes of vernal pools pose a significant threat, as many of these areas are essential breeding habitat. California tiger salamanders are at risk due to loss of habitat from development of agriculture and grazing lands, habitat fragmentation, loss and degradation of complexes of vernal pools, and introduction of predatory exotic species such as mosquitofish (*Gambusia affinis*), American bullfrog (*Lithobates catesbeianus*), and Louisiana red swamp crayfish (*Procambarus clarkii*) as well as the poisoning of ground squirrels (Zeiner et al. 1988; Collins et al. 1988; Shaffer, Fisher, and Stanley 1993; Thomson, Wright, and Shaffer 2016). High mortality of California tiger salamanders crossing roads while migrating to and from breeding sites also adversely affects individuals and at-risk populations (Barry and Shaffer 1994).

6.2.3.1 Primary Constituent Elements (PCEs)

As part of the process for designating critical habitat for CTS, USFWS developed and defined PCEs consisting of four components: aquatic breeding habitat (PCE 1), adjacent upland habitat (PCE 2), upland dispersal habitat (PCE 3), and vernal pool complex habitat (PCE 4) (69 FR 48569). These PCEs are found within USFWS designated critical habitat and are used in this analysis to assess the suitability of the Project site for CTS, as defined below.

PCE 1

PCE 1 is defined as "standing bodies of fresh water, including natural and man-made (*e.g.*, stock) ponds, vernal pools, and other ephemeral or permanent water bodies that typically become inundated during winter rains and hold water for a sufficient length of time necessary for the species to complete the aquatic portion of its life cycle." (69 CFR 48569).

PCE 2

PCE 2 is defined as "Barrier-free upland habitats adjacent to breeding ponds that contain small mammal burrows, including but not limited to burrows created by the California ground squirrel and valley pocket gopher" (69 FR 48569).

PCE 3

PCE 3 is defined as "upland areas between occupied locations (PCE 1) and areas with small mammal burrows (PCE 2) that allow for dispersal among such sites (69 FR 48569)."

PCE 4

PCE 4 is defined as "vernal pool complex habitat- geographic, topographic, and edaphic features that support aggregations or systems of hydrologically interconnected pools, swales, and other ephemeral wetlands and depressions within a matrix of surrounding uplands. These features contribute to the filling and drying of the vernal pool, maintain suitable periods of pool inundation for larval salamanders and their food sources, and provide breeding, feeding, and sheltering habitat for juvenile and adult salamanders and small mammals that create burrow systems essential for CTS estivation (69 FR 48569)."

6.2.3.2 Potential to Occur on the Project Site

There are no recorded occurrences of the California tiger salamanders in CNDDB within 3 miles of the Project site (Figure 6). The potential seasonal wetlands identified on site during the jurisdictional delineation (Appendix C) are small and shallow and do not hold water long enough to support the aquatic portion of the CTS life cycle, as described by PCE 1. Additionally, no ground squirrel or other small mammal burrows, surface soil cracks, or other upland refugia were observed on the Project site during the February 2022 survey. Accordingly, the Project site does not contain upland habitat suitable for CTS consistent with PCE 2. The Project site is in a developed area and residential and commercial developments serve as dispersal barriers to California tiger salamander. Furthermore, human- and traffic-related disturbance along associated roadways likely preclude California tiger salamander from dispersing; however, many roads in Sonoma County are known California tiger salamander crossing routes so the presence of a roadway does not discount the possibility of California tiger salamander dispersal (when in proximity to breeding habitat). That said, migration and dispersal of this species are temporally constrained activities that occur during the wet season; work activities within aquatic features on site will occur during dry conditions. Accordingly, during Project-related activities the Project site would not be expected to be used as dispersal habitat between locations occupied by the California tiger salamander. Thus, implementation of the proposed Project would not result in loss to upland dispersal habitat consistent with PCE 3.

California tiger salamander USFWS critical habitat is located within 3 miles of the Project site; however critical habitat is located across the 101 freeway and urban areas which prevent dispersal (Figure 7). Due to the lack of nearby CNDDB occurrences (Figure 6), absence of suitable California tiger salamander breeding, upland, and dispersal habitat on and/or immediately adjacent to the Project site, and the

extent of regular disturbance associated with the development that make up the proposed Project, the species is not expected to occur on the Project site.

Accordingly, Sequoia has determined that the proposed project will have no effect on California tiger salamander and its habitat. Impacts to aquatic resources will be reduced to a less than significant level by implementing Avoidance and Minimization Measures (AMMs) provided below.

6.3 Santa Rosa Plain Species

Federally listed plant and wildlife species found within the Santa Rosa Plain include CTS and three Federally endangered plant species: Sonoma sunshine, Burke's goldfields, and Sebastopol meadowfoam. These plant species are found only in vernal pools and seasonal wetlands, while CTS utilize these wetlands during breeding season and surrounding uplands year-round (USFWS 2016). Although the Project site is within the Santa Rosa Plain, it does not occur within USFWS-designated critical habitat or Core and Management Areas outlined in the Recovery Plan for the Santa Rosa Plain (USFWS 2016). Furthermore, the site is located within a Santa Rosa Plain Conservation Strategy designation of "presence of CTS is not likely and there are no listed plants in this area."

Table 1. Federally Listed Plant Species Known to Occur in the Vicinity of the Project Site

Scientific Name	Common Name	Listed Status*	Habitat Requirements	Potential for Occurrence
Blennosperma bakeri	Sonoma sunshine	FE, CE, 1B.1	Occurs in valley and foothill grassland (mesic) and vernal pools, at elevations from 30 to 360 ft.	No potential. No suitable habitat occurs on the Project site. Species not observed during February 2022 site visit.
Lasthenia burkei	Burke's goldfields	FE, CE, 1B.1	Occurs in meadows and seeps (mesic) and vernal pools, at elevations of 50 to 1,970 ft.	No potential. No suitable habitat occurs on the Project site, no wetlands or meadows are present. Species not observed during February 2022 site visit.
Limnanthes vinculans	Sebastopol meadowfoam	FE, CE, 1B.1	Occurs in meadows and seeps, valley and foothill grassland, and vernal pools, at elevations of 50 to 1,000 ft.	No potential. No suitable habitat occurs on the Project site. Species not observed during February 2022 site visit.
Navarretia leucocephala ssp. *plieantha*	Many-flowered navarretia	FE, CE, 1B.2	Occurs in vernal pools (volcanic ash flow) at elevations of 100 to 3,115 feet.	No potential. No suitable habitat occurs on the Project site. Species not observed during February 2022 site visit.

*Key to status:
FE – Federally listed as endangered, FT – Federally listed as threatened species
CE – California listed as endangered species, CR – California rare species, CT – California listed as threatened species
1A – CNPS Rare Plant Rank of plants presumed extirpated in California, rare or extinct elsewhere.
1B – CNPS Rare Plant Rank of plants rare, threatened, or endangered in California and elsewhere
2A – CNPS Rare Plant Rank of plants are presumed extirpated in California but common elsewhere.
3 – CNPS Rare Plant Rank of plants about which we need more information (a review list)
.1/.2/.3 – Seriously endangered in California/Fairly endangered in California/Not very endangered in California

Table 2. Federally Listed Wildlife Species Known to Occur in the Vicinity of the Project Site.

Scientific Name	Common Name	Listed Status*	Habitat Requirements	Potential for Occurrences
Amphibians/Reptiles				
Chelonia mydas	Green sea turtle	FT	Common in tropical and subtropical waters as well as coastal beaches. Forages in coastal areas with plentiful algae and sea grass.	No potential. No suitable habitat on the Project site.
Ambystoma californiense (Sonoma County DPS)	California tiger salamander	FE, CT, WL	Small ponds, lakes, or vernal pools in grasslands and oak woodlands for larvae; rodent burrows, rock crevices, or fallen logs for cover for adults and for summer dormancy.	No potential. No breeding or over-summering habitat occurs on the Project site and no ponds, lakes, or vernal pools in immediate vicinity. No CNDDB occurrences within 3 miles. See text.
Actinemys marmorata	Northwestern pond turtle	FC, SSC	Permanent streams, ponds, lakes, and permanent and ephemeral wetlands. Prefers habitats with abundant basking sites, underwater refugia, and standing or slow moving water. Requires terrestrial habitat for nesting. Nesting sites are on sandy banks and bars or in fields or sunny spots up to a few hundred meters from water.	Low potential. No suitable, permanent aquatic habitat within project area or surrounding vicinity. Project site isolated from nearby occupied sites by habitat fragmentation. See text.
Rana draytonii	California red-legged frog	FT, SSC	Occurs in semi-permanent or permanent water at least 2 feet deep, bordered by emergent or riparian vegetation, and upland grassland, forest, or scrub habitats for aestivation and dispersal.	Low potential. No breeding or upland habitat occurs on the Project site. The project site may provide dispersal or aquatic non-breeding habitat but no occurrences within vicinity. See text.
Birds				
Strix occidentalis caurina	Northern spotted owl	FT, CT	Older, mixed forests with moderate to high canopy closure and a high occurrence of large snags and cavities.	No potential. No suitable habitat on the Project site
Invertebrates				
Danaus plexippus	Monarch butterfly	FC	Tree clumps south-facing slopes, mixture of eucalyptus and Monterey pine trees during winter, milkweed (larval host plant) during summer.	No potential. No suitable habitat on the Project site

Table 2. Federally Listed Wildlife Species Known to Occur in the Vicinity of the Project Site.

Scientific Name	Common Name	Listed Status*	Habitat Requirements	Potential for Occurrences
Syncaris pacifica	California freshwater shrimp	FE, CE	Occurs in slow flowing waterways 1 to 3 ft deep, containing ample exposed roots, edge vegetation, and debris at elevations less than 380 ft.	No potential. No suitable habitat on the Project site.

*Key to status:
FE – Federally listed as endangered species, FT – Federally listed as threatened species, FC – Federally listed as a candidate species for listing
CE – California listed as endangered species, CT – California listed as threatened species
SSC – CDFW Species of Special Concern, WL – CDFW Watch List

7.0 EVALUATION OF IMPACTS TO FEDERALLY DESIGNATED CRITICAL HABITAT

7.1 Action Area

The action area is defined in 50 Code of Federal Regulations (CFR) § 402.02 as "all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action." The action area for the proposed Project includes the 68-acre Project site (Appendix A).

7.2 Federally Listed Plants

The Project site does not fall within USFWS-designated critical habitat for any Federally listed plant species (Figure 7). Although the proposed Project is located within the *Santa Rosa Plain Conservation Strategy Study Area* (USFWS 2005), it is not located within any Santa Rosa Plain Rare Plant Core and Management Areas (USFWS 2016). That said, this Proposed Project is located within a *Conservation Strategy* designation with "no listed plants in this area" and the absence of specialized habitats and substrates precludes the establishment of Federally listed plant species onsite. No impacts will occur to Federally listed plants or suitable habitat, or USFWS designated critical habitat as a result of the proposed Project. The action will have no effect on federally listed plants.

7.3 Federally Listed Animals

No USFWS-designated critical habitats occur within the Project site. California tiger salamander USFWS critical habitat occurs within a 3-mile radius of the Project site (Figure 7). Accordingly, the action would not result in the destruction or adverse modification of critical habitat.

In addition, this evaluation includes an assessment of the presence of any PCEs, defined specifically as physical and biological features essential to the conservation of CRLF and the Sonoma County DPS of the California tiger salamander, which occur in the greater vicinity of the Project site (Sections 6.2.1 and 6.2.2). The action will have no effect on California red-legged frog and northwestern pond turtle after incorporating the AMMs provided in Section 8.0 (below).

As discussed above, the Project site is located within the *Santa Rosa Plain Conservation Strategy Study Area* (USFWS 2005); however, it is not located within any Santa Rosa Plain California tiger salamander Core and Management Areas (USFWS 2016) and is located within an area with an area designated by the *Conservation Strategy* where the "presence of CTS is not likely." (USFWS 2005). The action will have no effect on California tiger salamander Sonoma County DPS.

8.0 AVOIDANCE AND MINIMIZATION MEASURES

As stated in Sections 6 and 7 above, the proposed Project will have no effect on CRLF or NWPT after adopting AMMs, and will have no effect on CTS Sonoma County DPS and its designated critical habitat, or federally listed plants. This section provides avoidance and minimization measures (AMMs) that will protect and minimize impacts to aquatic resources and support no effects determinations for CRLF and NWPT. General pre-construction surveys and other avoidance measures will be implemented to avoid injury to individual animals that may be in the areas affected by the proposed Project. Although highly unlikely and not expected to occur, if listed species are identified onsite the Project proponent will reconsult with USFWS before proceeding with the proposed Project. No impacts to the listed species or their habitats are expected with the proper implementation of AMMs; therefore, compensatory mitigation is not required or proposed.

8.1 Plant and Wildlife Species

BMPs that will be incorporated into the proposed Project will include:

- Prior to construction, all construction workers will take part in an environmental awareness program conducted by an agency-approved biologist. Special-status species to be covered in the program include, but are not limited to: California red-legged frog, northwestern pond turtle, nesting migratory birds, western burrowing owl, Chinook salmon (CC ESU), coho salmon (CCC ESU), and steelhead (CCC DPS).
- This training shall include a description of the special-status species with the potential to occur in the work area, habitat needs, an explanation of the status of the species and protection under federal law, and a list of the measures being taken to avoid or reduce impacts to the species during project construction. The awareness program will be conducted at the start of construction and thereafter as required for new construction personnel. The training shall include a handout containing training information. The project manager shall use this handout to train any additional construction personnel that were not in attendance at the first meeting, prior to starting work on the project.
- At the end of each workday, all excavations (e.g., holes, construction pits, and trenches) of a depth of eight inches or greater will be covered with plywood or other hard material, and gaps around the cover will be filled with dirt, rocks, or other appropriate material to prevent entry by wildlife. If excavations cannot be covered, then they will include escape ramps constructed of either dirt fill, wood planking, or other appropriate material installed at a 3:1 grade (i.e., an angle no greater than 30 degrees) to allow wildlife that fall in a means to escape.
- If directional drilling is used, pipelines would be installed a minimum of 10 feet below the bottom of Pruitt Creek and during the dry season, to prevent hydrofracture (e.g., frac-out).

The following measures shall be implemented to avoid and/or reduce impacts to the Riparian Corridor:

A. Alterations to riparian vegetation shall be avoided to the maximum extent possible. The project footprint shall be established at the minimum size necessary to complete the work. Temporary setback areas shall be marked with fencing to protect the riparian zone and its function. Any

disturbed riparian areas shall be replanted with native trees and shrubs.

B. A qualified biologist shall delineate an Environmentally Sensitive Area along Pruitt Creek. The contractor shall install high-visibility fence to prevent accidental incursion on the Environmentally Sensitive Area.

C. Staging areas, access routes, and total area of activity shall be limited to the minimum area necessary to achieve Project goals. Routes and boundaries shall be clearly marked and outside of the riparian area and create a buffer zone wide enough to support sediment and nutrient control and bank stabilization function.

The following measures shall be implemented to minimize or avoid potential impacts to wetlands, Waters of the U.S., and special-status species:

D. Prior to the start of construction, wetlands and jurisdictional features shall be fenced, and excluded from activity. Fencing shall be located as far as feasible from the edge of wetlands and riparian habitats and installed prior to the dry season, after special-status species surveys have been conducted and prior to construction. The fencing shall remain in place until all construction activities on the site have been completed.

E. Ground disturbing activities, such as grading, clearing, and excavation, within 50 feet of any U.S. Army Corps of Engineers (USACE) jurisdictional features identified in the formal delineation process shall be conducted during the dry season (between June 15 and October 15) to minimize erosion. In the event of substantial, unseasonably high flow within Pruitt Creek on or after April 15, work shall be altered or stopped until flow ceases in the creek. Temporary stormwater Best Management Practices such as vegetative stabilization and linear sediment barriers shall be established between disturbed portions of the Project Site and Pruitt Creek to prevent sedimentation in the watercourse.

F. Staging areas shall be located away from the areas of aquatic habitat that are fenced off. Temporary stockpiling of excavated or imported material shall occur only in approved construction staging areas. Excess excavated soil shall be used on site or disposed of at a regional landfill or other appropriate facility. Stockpiles that are to remain on the site through the wet season shall be protected to prevent erosion (e.g. with tarps, silt fences, or straw bales).

G. Standard precautions shall be employed by the construction contractor to prevent the accidental release of fuel, oil, lubricant, or other hazardous materials associated with construction activities into jurisdictional features. A contaminant program shall be developed and implemented in the event of release of hazardous materials.

H. If impacts to Waters of the U.S. and wetland habitat are unavoidable, a 404 permit and 401 Certification under the Clean Water Act shall be obtained from the USACE and U.S. Environmental Protection Agency (USEPA). Mitigation measures may include creation or restoration of wetland

habitats either on site or at an appropriate off-site location, or the purchase of approved credits in a wetland mitigation bank approved by the USACE. Compensatory mitigation shall occur at a minimum of 1:1 ratio or as required by the USACE and USEPA.

I. Consultation with the National Oceanic and Atmospheric Administration Fisheries for impacts to fish and essential fish habitat shall be conducted in accordance with Section 7 of the federal Endangered Species Act (FESA) and Magnuson-Stevens Act and any requirements resulting from that consultation shall be adhered to.

The following measures shall be implemented to avoid impacts to California red-legged frogs (CRLF):

J. A qualified biologist shall conduct a preconstruction habitat assessment survey for CRLF following Appendix D of the U.S. Fish and Wildlife Service [USFWS (2005)] Revised Guidance of Site Assessments and Field Surveys for the California Red-legged Frog. The survey shall be conducted no less than 14 days and no more than 30 days prior to the beginning of ground disturbance, construction activities, and/or any project activity likely to impact the CRLF. The survey shall be conducted in all potential CRLF habitat on and within 200 feet of ground disturbance.

K. If CRLF is detected during pre-construction surveys or during construction, the USFWS shall be contacted immediately to determine the best course of action.

L. Should CRLF be identified during surveys, additional silt fencing shall be installed after surveys have been completed to further protect this species from construction impacts. The fencing shall remain in place until construction activities cease.

The following measures shall be implemented to avoid impacts to northwestern pond turtle (NWPT):

M. A qualified biologist shall conduct a preconstruction survey for NWPT along Pruitt Creek 24 hours prior to the beginning of ground disturbance, construction activities, and/or any project activity likely to impact the NWPT. The survey shall be conducted within 350 feet of the stretch of Pruitt Creek. If NWPT is detected within or immediately adjacent to the area of ground disturbance, the USFWS shall be contacted immediately to determine the best course of action.

N. Should NWPT be identified during surveys, additional silt fencing shall be installed after surveys have been completed to further protect this species from construction impacts. The fencing shall remain in place until construction activities cease.

The following measures shall be implemented to avoid and/or reduce impacts to potentially nesting migratory birds and other birds of prey in accordance with the federal Migratory Bird Treaty Act.

O. Removal of vegetation and trimming or removal of trees shall occur outside the bird nesting season (February 1 to August 30) to the extent feasible.

P. If removal or trimming of vegetation and trees cannot avoid the bird nesting season, a qualified wildlife biologist shall conduct a pre-construction nesting survey within 7 days prior to the start of such activities or after any construction breaks of 14 days or more. Surveys shall be performed for the Project Site and suitable habitat within 250 feet of the Project Site in order to detect any active passerine (perching bird) nests and within 500 feet of the Project Site to identify any active raptor (bird of prey) nests.

Q. If active nests are identified during the pre-construction bird nesting surveys, the wildlife biologist shall place species- and site-specific no-disturbance buffers around each nest. Buffer size would typically be between 50 and 250 feet for passerines and between 300 and 500 feet for raptors (birds of prey). These distances may be adjusted depending on the level of surrounding ambient activity (e.g., if the Project Site is adjacent to a road or community development) and if an obstruction, such as a building structure, is within line-of-sight between the nest and construction. For bird species that are federally- and/or State-listed sensitive species (i.e., fully protected, endangered, threatened, species of special concern), a Project representative, supported by the wildlife biologist, shall consult with the USFWS and/or the California Department of Fish and Wildlife (CDFW) regarding modifying nest buffers. The following measures shall be implemented based on their determination:

- If construction would occur outside of the no-disturbance buffer and is not likely to affect the active nest, the construction may proceed. However, the biologist shall be consulted to determine if changes in the location or magnitude of construction activities (e.g., blasting) could affect the nest. In this case, the following measure would apply:

- If construction may affect the active nest, the biologist and a Project representative shall consult with USFWS and/or CDFW, dependent on regulatory status, to develop alternative actions such as modifying construction, monitoring of the nest during construction, or removing or relocating active nests.

R. Any birds that begin nesting within the Project Site and survey buffers amid construction activities shall be assumed to be habituated to construction-related or similar noise and disturbance levels and minimum work exclusion zones of 25 feet shall be established around active nests in these cases.

S. A qualified wildlife biologist shall conduct pre-construction burrowing owl surveys within 7 days prior to the start of such activities or after any construction breaks of 14 days or more. Surveys shall be performed at known mammal burrows or areas with the potential for new mammal burrows, within 250 feet of the Project Site. Surveys shall be conducted between morning civil twilight and 10:00 AM or two hours before sunset until evening civil twilight to provide the highest detection probabilities.

T. If surveys identify evidence of western burrowing owls within 250 feet of the Project Site, the contractor shall:

- Establish a 250-foot exclusion zone around the occupied burrow or nest, as directed by the qualified biologist.
- Avoid the exclusion zone while the burrow is occupied.
- Not resume construction activities within the 250-foot zone until the Project representative provides written Notice to Proceed based on the recommendation of the qualified biologist.

U. If avoidance of occupied burrows is not feasible during the September 1 to January 31 non-breeding season, construction may occur within 250 feet of the overwintering burrows as long as the contractor's qualified biologist monitors the owls for at least 3 days prior to Project construction and during construction and finds no change in owl foraging behavior in response to construction activities. If there is any change in owl foraging behavior as a result of construction activities, activities shall cease within the 250-foot exclusion zone.

V. If destruction of occupied burrows is necessary, burrow exclusion can be conducted in accordance with the Staff Report on Burrowing Owl Mitigation.

8.2 Receiving Waters

The Project proponent or its contractor will develop and implement a Storm Water Pollution Prevention Plan (SWPPP) that will specify BMPs to be installed prior to the commencement of construction to prevent construction sediments/pollutants from draining into on and off-site downstream receiving waters. The sedimentation control measures would include use of wildlife-friendly straw wattles (as described above), silt fencing, and other measures to keep de minimus fill from accidentally entering receiving waterways and storm drain systems. To ensure no impacts occur to aquatic resources and Federally listed fish species, construction BMPs will ensure that no sedimentation or pollution of downstream creeks/rivers occurs as a result of the proposed Project.

BMPs that will be incorporated into the proposed Project will include:

- The Tribe will apply for coverage under and comply with the NPDES General Construction Permit from the USEPA, for construction site runoff during the construction phase in compliance with the CWA. A Stormwater Pollution Prevention Plan (SWPPP) will be prepared, implemented, and maintained throughout the construction phase of the development, consistent with the General Construction Permit requirements. The SWPPP prepared for the Project Site would include, but would not be limited to, the following BMPs to minimize storm water effects to water quality during construction.
    - Grading activities will be limited to the immediate area required for construction.

- Temporary erosion control measures (such as silt fences, fiber rolls, vegetated swales, a velocity dissipation structure, staked straw bales, temporary re-vegetation, rock bag dams, erosion control blankets, and sediment traps) will be employed for disturbed areas.
- Construction activities will be scheduled to minimize land disturbance during peak runoff periods.
- Disturbed areas will be paved or re-vegetated following construction activities.
- Construction area entrances and exits will be stabilized with large-diameter rock.
- A spill prevention and countermeasure plan will be developed that identifies proper storage, collection, and disposal measures for potential pollutants (such as fuel, fertilizers, pesticides, etc.) used on site.
- Petroleum products will be stored, handled, used, and disposed of properly in accordance with provisions of the CWA (33 USC § 1251 to 1387).
- Construction materials, including topsoil and chemicals, will be stored, covered, and isolated to prevent runoff losses and contamination of surface and groundwater.
- Fuel and vehicle maintenance areas will be designed to control runoff.
- Sanitary facilities will be provided for construction workers.
- Disposal facilities will be provided for soil wastes, including excess asphalt during construction. Food-related trash will be stored in closed containers and removed from the site daily.
- Wheel wash or rumble strips and sweeping of paved surfaces will be used to remove any and all tracked soil.
- LID methods (e.g., bioswales) will be implemented that would help store, infiltrate, evaporate, and detain stormwater runoff.

- Should dewatering (the process of removing surface or ground water from a particular location) be needed during construction, extracted water would be treated in a proposed or temporary basin and/or be trucked out and disposed of consistent with stormwater regulations.
- During operation, internal roadways and parking areas will be subject to trash clean-up daily and swept weekly to prevent debris from entering the stormwater management system.

Implementation of these avoidance and minimization measures will ensure that the proposed Project does not adversely affect California red-legged frog, northwestern pond turtle and receiving waters.

9.0 CONCLUSION

This section provides a summary of potential project impacts to each species; see Section 6 and 7 above for a full discussion of potential impacts. Federally listed plant species that are known from the vicinity of the Project site require specialized habitats and substrates, such as wetlands, vernal pools, and mesic (i.e., wet, moist) grasslands, which do not occur on or immediately adjacent to the Project site. In addition, the Project site does not fall within USFWS-designated critical habitat for any Federally listed plant species (Figure 7). Accordingly, the proposed Project will not affect Federally listed plants. California tiger salamander has no potential to occur on the Project site due to the absence of suitable breeding, upland, and dispersal habitat, the lack of nearby occurrences, and the abundance of dispersal and migration barriers within and surrounding the site. Therefore, the proposed Project is anticipated to have no effect on CTS or its habitat, and USFWS designated critical habitat. The proposed project has been designed to avoid and minimize impacts to species and habitats within the Action Area.

Due to the absence of documented occurrences and suitable aquatic for northwestern pond turtle on and/or adjacent to the Project site, it is very unlikely this species would occur on the Project site; however, since Pruitt Creek could potentially be used as northwestern pond turtle dispersal or non-breeding aquatic habitat, the proposed Project could be regarded as a project that may affect, but is not likely to adversely affect northwestern pond turtle. As noted above, migration and dispersal of these species are typically limited to within 500 meters of suitable aquatic habitat. The proposed Project is more than 500 meters from permanent water. Adoption of AMMs as described above changes the determination to No Effect, in accordance communications with USFWS.

Due to the absence of documented occurrences and suitable breeding and upland habitat for California red-legged frog on and/or adjacent to the Project site, it is very unlikely this species would occur on the Project site; however, since Pruitt Creek could potentially be used as CRLF migration/dispersal or non-breeding aquatic habitat, the proposed Project could be regarded as a project that may affect, but is not likely to adversely affect California red-legged frog. Adoption of AMMs as described above changes the determination to No Effect, in accordance communications with USFWS after the 2022 BA.

All remaining Federally listed animal species known from the vicinity of the Project site require specialized habitats and substrates that do not occur on or immediately adjacent to the Project site.

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Table 3. Plant Species Observed at the Proposed Shiloh Resort and Casino Project Site

Scientific Name	Common Name	Family
Aesculus californica	California buckeye	Sapindaceae
Agapanthus africanus	African lily	Amarylidaceae
Anthemis cotula	stinking chamomile	Asteraceae
Arum italicum	Italian arum	Araceae
Avena barbata	slender oat	Poaceae
Avena fatua	wild oat	Poaceae
Brassica nigra	black mustard	Brassicaceae
Briza minor	little quaking grass	Poaceae
Bromus diandrus	ripgut brome	Poaceae
Bromus hordeaceus	soft chess	Poaceae
Calandrinia menziesii	red maids	Montiaceae
Calendula arvensis	field marigold	Asteraceae
Cardamine hirstua	bittercress	Brassicaceae
Carduus pycnocephalus	Italian thistle	Asteraceae
Carex spp.	sedges	Cyperaceae
Cerastium glomeratum	mouse-ear chickweed	Monitaceae
Chlorogalum pomeridianum	soap plant	Agavaceae
Claytonia perfoliate	miner's lettuce	Montiaceae
Cotoneaster sp.	cotoneaster	Rosaceae
Cyperus eragrostis	tall flatsedge	Cyperaceae
Elymus sp.	wild rye	Poaceae
Erodium botrys	cranesbill	Geraniaceae
Erodium cicutarium	redstem filaree	Geraniaceae
Eucalyptus globulus	blue gum	Myrtaceae
Festuca myuros	six-weeks fescue	Poaceae
Festuca perennis	Italian ryegrass	Poaceae
Fraxinus latifolia	Oregon ash	Fagaceae
Galium aparine	bedstraw	Rubiaceae
Genista monspessulana	French broom	Fabaceae
Geranium dissectum	cutleaf geranium	Geraniaceae
Geranium molle	dove's-foot geranium	Geraniaceae

Table 3. Plant Species Observed at the Proposed Shiloh Resort and Casino Project Site

Scientific Name	Common Name	Family
Geranium robertianum	Robert's geranium	Geraniaceae
Hedera helix	English ivy	Araliaceae
Hirschfeldia incana	shortpod mustard	Brassicaceae
Hordeum murinum	mousetail barley	Poaceae
Hypochaeris radicata	rough cat's-ears	Asteraceae
Juncus balticus	Baltic rush	Juncaceae
Juncus effusus	bog rush	Juncaceae
Juncus xiphioides	iris-leaf rush	Juncaceae
Lepidium nitidum	shining pepperweed	Brassicaceae
Lonicera hispidula	pink honeysuckle	Caprifoliaceae
Lysimachia arvensis	scarlet pimpernel	Myrsinaceae
Lythrum hyssopifolia	hyssop loosestrife	Lythraceae
Malva parviflora	cheeseweed	Malvaceae
Medicago polymorpha	California burclover	Fabaceae
Narcissus pseudonarcissus	daffodil	Amaryllidaceae
Nasturtium officinale	watercress	Brassicaceae
Oxalis pes-caprae	Bermuda buttercup	Oxalidaceae
Pinus sp.	pine	Pinaceae
Plantago lanceolata	English plantain	Plantaginaceae
Poa annua	annual bluegrass	Poaceae
Polygonum aviculare	yard knotweed	Polygonaceae
Quercus agrifolia	coast live oak	Fagaceae
Quercus lobata	valley oak	Fagaceae
Ranunculus muricatus	spiny fruit buttercup	Ranunculaceae
Rubus armeniacus	Himalayan blackberry	Rosaceae
Rumex acetosella	sheep sorrel	Polygonaceae
Rumex crispus	curly dock	Polygonaceae
Rumex pulcher	fiddle dock	Polygonaceae
Schoenoplectus pungens	three-square bulrush	Cyperaceae
Senecio vulgaris	common groundsel	Asteraceae
Stachys bullata	hedge nettle	Lamiaceae
Symphoricarpos mollis	creeping snowberry	Caprifoliaceae
Torilis arvensis	field hedge parsley	Apiaceae
Toxicodendron diversilobum	poison oak	Anacardiaceae
Trifolium spp.	clover	Fabaceae
Typha spp.	cattails	Typhaceae
Umbellularia californica	California bay laurel	Lauraceae

Table 3. Plant Species Observed at the Proposed Shiloh Resort and Casino Project Site

Scientific Name	Common Name	Family
Vicia sativa	common vetch	Fabaceae
Vinca major	periwinkle	Apocynaceae

Table 4. Wildlife Species Observed at the Proposed Shiloh Resort and Casino Project Site.

Scientific Name	Common Name
Junco hyemalis	dark-eyed junco
Aphelocoma californica	California scrub-jay
Corvus brachyrhynchos	American crow
Cathartes aura	turkey vulture
Sitta carolinensis	white-breasted nuthatch
Pseudacris sierra	Sierran treefrog (= Sierran chorus frog)

Appendix A

Project Design Plans

Source: Dale Partners

FIGURE 2.1-1

ALTERNATIVE A PROPOSED RESORT AND CASINO SITE PLAN

Appendix B

Information for Planning and Consultation (IPaC) Report

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish And Wildlife Office
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In Reply Refer To: 04/16/2024 23:43:12 UTC
Project Code: 2024-0078123
Project Name: Koi Nation Shiloh Resort Casino Site

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through IPaC by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at: https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see Migratory Bird Permit | What We Do | U.S. Fish & Wildlife Service (fws.gov).

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Sacramento Fish And Wildlife Office
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PROJECT SUMMARY

Project Code: 2024-0078123
Project Name: Koi Nation Shiloh Resort Casino Site
Project Type: Tribal Construction
Project Description: The Koi Nation purchased a 68-acre parcel at 222 East Shiloh Road in September 2021 and seeks approval from the BIA to take this land into trust. Development of this Project will occur at 222 East Shiloh Road and includes a Class III gaming facility, a five-story hotel, restaurants, a conference center, and a spa (Appendix A). The Koi Nation will build and operate the resort and casino under authority of the U.S. Indian Gaming Regulatory Act (IGRA). Development activities are restricted to the 68-acre property boundary. As currently designed, the proposed Project will result in ground disturbance to approximately 40 acres with the riparian corridor of Pruitt Creek and large portions of existing vineyard left undeveloped/unimpacted. Two clear-span creek crossings are proposed as part of the Project.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@38.5234785,-122.77361066447865,14z

Counties: Sonoma County, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 9 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

BIRDS

NAME	STATUS
Northern Spotted Owl *Strix occidentalis caurina* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1123	Threatened

REPTILES

NAME	STATUS
Green Sea Turtle *Chelonia mydas* Population: East Pacific DPS No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6199	Threatened
Northwestern Pond Turtle *Actinemys marmorata* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1111	Proposed Threatened

AMPHIBIANS

NAME	STATUS
California Red-legged Frog *Rana draytonii* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2891	Threatened

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

FLOWERING PLANTS

NAME	STATUS
Burke's Goldfields *Lasthenia burkei* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4338	Endangered
Many-flowered Navarretia *Navarretia leucocephala ssp. plieantha* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2491	Endangered
Sebastopol Meadowfoam *Limnanthes vinculans* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/404	Endangered
Sonoma Sunshine *Blennosperma bakeri*	Endangered

NAME STATUS

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/1260

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

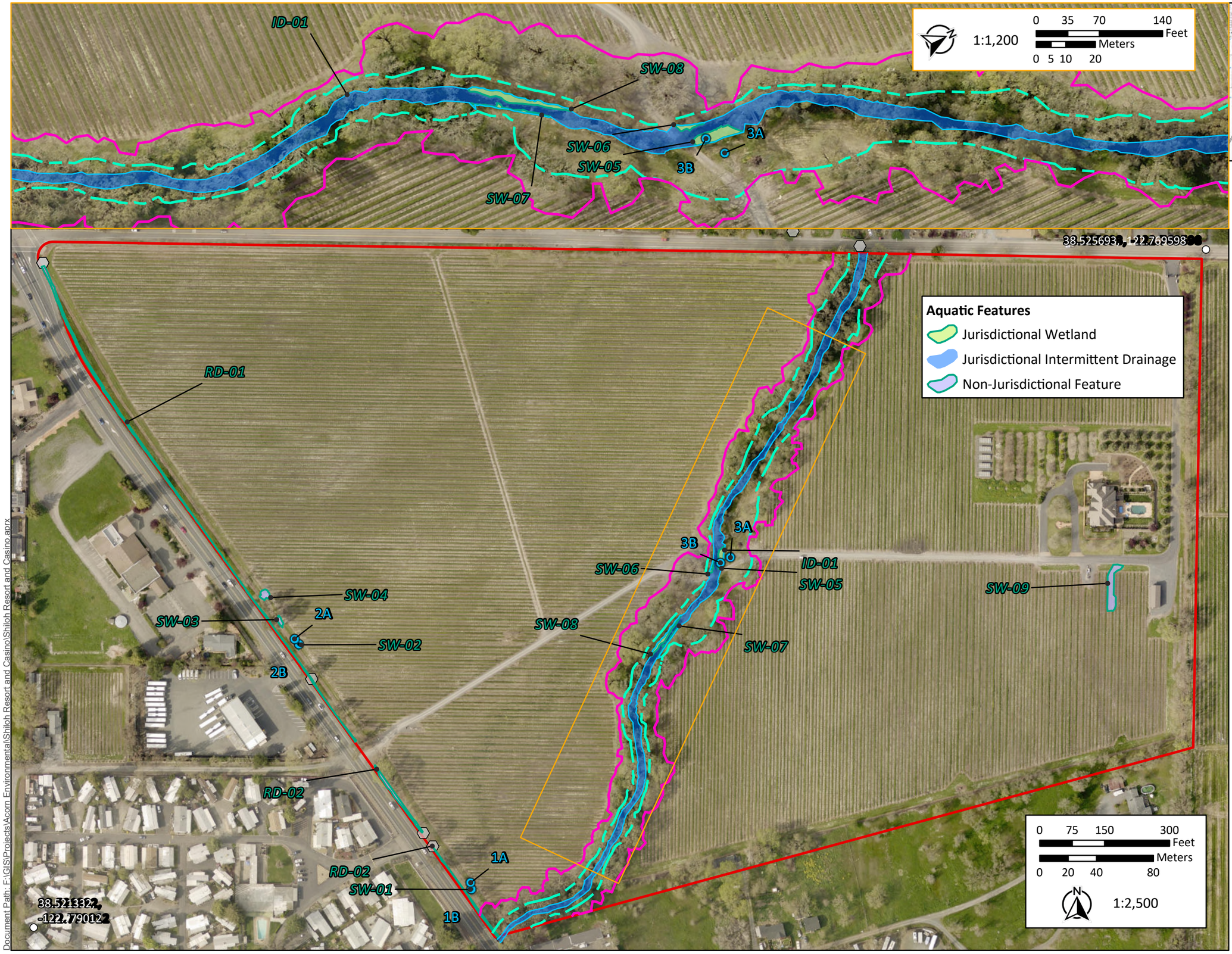
Agency: Private Entity
Name: Brett Hanshew
Address: 2110 K Street, Suite ll
City: Sacramento
State: CA
Zip: 95816
Email bahanshew@gmail.com
Phone: 5308484925

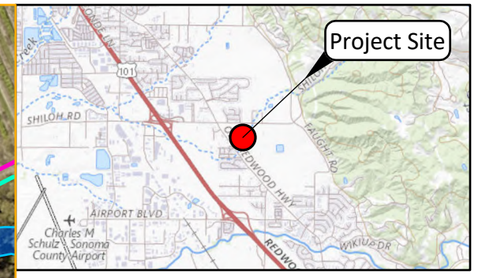
LEAD AGENCY CONTACT INFORMATION

Lead Agency: Bureau of Indian Affairs

Appendix C

Aquatic Resources Delineation Map





Project Site

Culvert Opening

Sample Point

Ordinary High Water Mark

Top-of-Bank

Riparian Dripline

Table 1. Jurisdictional Features

Aquatic Feature Name	Area (sq. ft.)	Area (ac.)
ID-01	28,200	0.648
SW-01	73.4	0.00169
SW-05	552	0.0127
SW-06	119	0.00272
SW-07	149	0.00341
SW-08	646	0.0148

Table 2. Non-Jurisdictional Features

Aquatic Feature Name	Area (sq. ft.)	Area (ac.)
RD-01	3,110	0.0713
RD-02	1,470	0.0339
SW-02	165	0.00378
SW-03	193	0.00442
SW-04	404	0.00927
SW-09	1,780	0.0408

Author: AlexHirth
Date Exported: 12/12/2023
Coordinate System: NAD 1983 2011
StatePlane California II FIPS 0402 Ft US

Service Layer Credits: Pictometry International, Maxar, USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road Data; Natural Earth Data; U.S. Department of State Humanitarian Information Unit; and NOAA National Centers for Environmental Information, U.S. Coastal Relief Model. Data refreshed April, 2023.

SEQUOIA Ecological Consulting, Inc.

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