

Nesting Bird Management Plan

for the
**Proposed Truck Rack Project
Lompoc Oil Field
Santa Barbara County, California**

Prepared for:

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1.0 Introduction

Sentinel Peak Resources LLC (SPR) proposes to construct a truck-loading facility at the Lompoc Oil Field, located in northern Santa Barbara County, California (**Figure 1** and **Figure 2**). The Lompoc Oil Field is a large, State-designated oil and natural gas production field located in the Purisima Hills region of northern Santa Barbara County, California. Discovered in 1903, the Lompoc Oil Field is one of the oldest oil fields in northern Santa Barbara County, producing approximately 260,000 barrels of oil in 2018. The on-site Lompoc Oil Treatment Facility, operated by SPR, includes facilities and equipment to process, store, and transport produced oil and natural gas. The proposed Lompoc Oil Field Truck Rack Project (Project) includes the construction of a truck rack to facilitate the loading of crude oil into tanker trucks for transport to the Coalinga Station in Coalinga, California.

The Project includes construction activities that have the potential to adversely affect native nesting birds in the vicinity of work activities. Native birds (including their nests, eggs, and nestlings) are protected by federal and state regulations during the nesting season. As such, AECOM Technical Services, Inc. (AECOM) has prepared this Nesting Bird Management Plan at the request of SPR to outline the measures that will be implemented to protect native nesting birds during construction activities.

1.1 Project Description

The Project includes the construction of a new truck loading rack and associated infrastructure on an existing production pad associated with production well Purisima 33 (hereafter, Purisima 33 refers to the pad itself). Project components include new P-140 Lease Automatic Custody Transfer (LACT) charge pumps, LACT Unit, truck loading rack with impervious secondary containment suitable to load one (1) 160-barrel truck at a time, hydrogen sulfide (H₂S) removal system, Volatile Organic Compound (VOC) removal system, automatic shut-off valve, H₂S and reactive organic compound monitors, approximately 493 feet of new aboveground pipeline to connect existing infrastructure to the truck loading rack, and four (4) new electrical poles. The proposed truck loading rack will connect to the existing Sentinel Peak Resources 4-inch Oil Shipping Line. The production shipped through the proposed truck rack is under the ownership of Sentinel Peak Resources. The majority of the existing 4-inch line is above ground except at road crossings.

The proposed truck rack will be installed on an existing production pad within the Lompoc Oil Field, located immediately north of the Freeport-McMoRan operated Lompoc Oil and Gas Plant, east of Harris Grade Road. The truck loading rack will encompass approximately 11,000 ft² of the existing, developed pad and will include a new 4-inch oil line extension connecting to the existing 4-inch oil shipping line. All proposed work associated with the truck loading rack construction will be restricted to the existing developed production pad and existing access roads.

All equipment and material staging areas would occur on existing production pads and roadways, or within the developed Lompoc Oil Treatment Facility; no new areas of disturbance will be utilized for staging. Access to work areas will be via existing paved and unpaved roadways under the ownership of Sentinel Peak Resources.

1.2 Project Location

The Project is located approximately 4.5 miles north of the City of Lompoc in northern Santa Barbara County, California, within the California Geologic Energy Management Division administrative boundary of the State-designated Lompoc Oil Field, which follows the line of the Purisima Hills roughly east-west. Portions of the Lompoc Oil Field overlap the Burton Mesa Ecological Reserve, which is operated by California Department of Fish and Wildlife (CDFW; **Figure 1**). Purisima 33 is located about 2,870 feet northeast of the boundary of the ecological reserve.

Project components occur within the boundaries of the existing Purisima 33 production pad and the pad's associated access roads. Purisima 33 is located approximately 108 feet north of the existing Lompoc Oil and Gas Plant, east of Harris Grade Road, and encompasses approximately 0.39 acres. The associated access roads include about 3,000 feet of unpaved lease roads.

1.3 Adjacent Habitats and Nesting Birds

Purisima 33 is maintained as largely devoid of vegetation due to active use by oil field vehicles as well as maintenance actions required for fire protection. The pad is surrounded by a mix of vegetated habitats of varying structural complexity and quality. These habitats include relatively open, non-native grasslands that are regularly mowed as part of facility maintenance, disturbed and relative undisturbed shrublands dominated by native shrubs including coyote brush (*Baccharis pilularis*) and California sagebrush (*Artemisia californica*) with scattered mature trees, and native, closed-canopy woodland dominated by coast live oaks (*Quercus agrifolia*) (AECOM 2023). This matrix of habitats can support a range of wildlife, including bird species.

Native birds employ a number of nesting strategies ranging from simple, scrape nests on open ground to complex, structural nests or large platform nests in shrubs and trees. As such, regionally occurring birds could utilize the grasslands, shrublands, and woodlands areas as well as the existing infrastructure and construction equipment, road edges, barren gravel and open dirt areas for nesting. Any nests present in the Project work areas at the start of construction could be at risk of damage to the nest, eggs, or nestlings, while nests present in the adjacent areas could be adversely affected if work activities disrupt natural nesting behaviors such as incubation of eggs or feeding nestlings.

2.0 Regulatory Setting

Native nesting birds are protected under both federal law and California state regulations. A brief summary of these laws and regulations is provided below.

2.1 Migratory Bird Treaty Act

Congress passed the Migratory Bird Treaty Act (MBTA; 16 United States Code Section 703-712) in 1918, prohibiting the pursuit, hunting, killing, capture, possession, purchase, barter, or transport of native migratory birds, or any part, nest, or egg of any such bird unless allowed by another regulation adopted in accordance with the MBTA. The MBTA includes four treaties between the United States, Canada, Mexico, Russia, and Japan, and extends protections to any species of bird

that is migratory within any portion of its range. It provides protection for 1,093 species of birds as of the last update in 2020 (50 Code of Federal Regulations 10 21282-21305).

United States Fish and Wildlife Service (USFWS) is charged with implementing and enforcing the MBTA.

2.2 California Fish and Game Code

The State of California provides additional provisions for the protection of native birds, regardless of their migratory status. Two sections of the California Fish and Game Code provide specific protections for native nesting birds, depending on their taxonomic group.

2.2.1 California Fish and Game Code Section 3503

California Fish and Game Code Section 3503 states that it is “unlawful to take, possess, or needlessly destroy the nest or eggs of any bird” except where otherwise provided by state regulations. This provision applies to all bird species except those specifically defined as game species and pest species by the California Fish and Game Code.

2.2.2 California Fish and Game Code Section 3503.5

California Fish and Game Code Section 3503.5 applies specific protection to raptor species, including hawks, falcons, and owls. Specifically, the regulation states it is “unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such birds” except in specific situations permitted by state regulations.

3.0 Nesting Bird Management Plan

The following sections describe the Project-specific set of measures that will be implemented to avoid impacts to native nesting birds, in accordance with the federal and state regulations governing this biological resource. In addition to federal and state regulations, the Project will abide by any specific protective measures outlined in Project-specific environmental documents and permits.

Protective and avoidance measures include pre-construction surveys to identify active nests in the Project area, and implementation of no-work zones and biological monitoring to protect the nests through natural failure or fledging, as described below.

3.1 Worker Environmental Awareness Program

Ensuring compliance with nesting bird protections requires that all Project personnel be knowledgeable about the requirements and what to be aware of in their working area. Accordingly, the Project-specific Worker Environmental Awareness Program (WEAP) will include discussion of the federal and state regulations protecting native nesting birds, and a description of the protective measures necessary to comply with these regulations. The WEAP will include example photographs of nests, a brief description of breeding bird behavior, and steps that work crews should take if they find a previously unknown nest or suspect one may be in the area.

3.2 Nest Surveys

Nest locations will be detected through pedestrian nesting surveys conducted by qualified biologists, following the methodologies described in the sections below.

3.2.1 Timing and Location of Nest Surveys

Nest searching will occur prior to any work that is planned to start during the breeding bird season, defined as February 15 through August 31 each year. A qualified biologist will conduct pre-construction nest searches within 500 feet of construction-related disturbance. Areas beyond 500 feet from disturbance and along existing roadways will not be searched for nesting birds, except in areas where tree trimming may be necessary to facilitate construction activities. Vegetation removal and trimming will occur outside of the breeding bird season whenever possible.

The surveys will be conducted no more than 14 days prior to the start of work activities, ground disturbance, or vegetation removal. If work has not started within the 14-day window, the survey will be repeated closer to the start date.

3.2.2 Methodology

The methods for the nest searching is based on methods described in the *Handbook of Field Methods for Monitoring Land Birds* (Ralph *et al.* 1993). Nest surveys will be conducted by a qualified biologist knowledgeable in local bird breeding behavior and vocalizations. Surveys will take place between sunrise and 11:00 A.M. under mild weather conditions (i.e., no sustained winds in excess of 10 miles per hour, no precipitation).

The survey will include a pedestrian and visual search of the Project area, during which the biologist will observe bird behavior to identify potential nesting and breeding activities. Examples of notable behaviors include birds carrying nesting material or food items, agitated vocalizations, prolonged singing by courting males, courtship flight displays, and begging notes from young. The biologist will investigate these behavioral clues to identify potential active nests. Investigations will include observing the suspected nest site from a distance to determine the bird species, nest's specific location, and nest structure. If possible, the biologist will estimate the nest status based on the type of nest material being delivered, the frequency and size of prey items being carried to the site, and whether one parent or both are carrying food. Nest investigations will be conducted in a fashion that will minimize disturbance to the surrounding vegetation and will not alert potential predators to the nest site.

Examples of potential nest types may include simple scrapes constructed on the ground; open-cup or saucer nests constructed on the ground or in shrubs, trees, or other vegetation; nests constructed in cavities; large platform nests constructed on infrastructure or in trees; and complex pendant nests. **Exhibit 1** displays a few examples of different nest structures for birds that may occur in the Project area.

3.3 Actions Following Nest Detection

Once a nest is found, the next steps will be informed by whether the nest contents are known or not, and whether the nest is determined to be active or unoccupied.

The flowchart provided in **Exhibit 2** will be utilized to determine the correct course of action in the event of a nest discovery.

3.3.1 Unoccupied Nests

Unoccupied nests include nests without birds or eggs and may be the result of false starts during the nest building process, predation, or other natural disturbances. A false start occurs when one or both members of a pair begin nests in several test locations before selecting one for complete construction and laying.

Unoccupied nests will be removed from the vegetation or structure and set upside down in cover in the immediate area, allowing wildlife to salvage nesting materials if desired. Unoccupied nests will not be collected or possessed for either personal or educational use, in accordance with USFWS regulations¹.

3.3.2 Occupied Nests

If the nest is determined to be active or occupied, a no-disturbance buffer will be established to protect the nest and nesting birds. The nest location will be recorded on site maps with the appropriate buffer, and buffers will be marked in the field using stakes and high-visibility flagging. Flagging, staking, or other physical markers will not be placed in the immediate proximity of the nest in the field, as these may draw the attention of a predator. No access will be allowed within the buffer except for ongoing biological monitoring efforts.



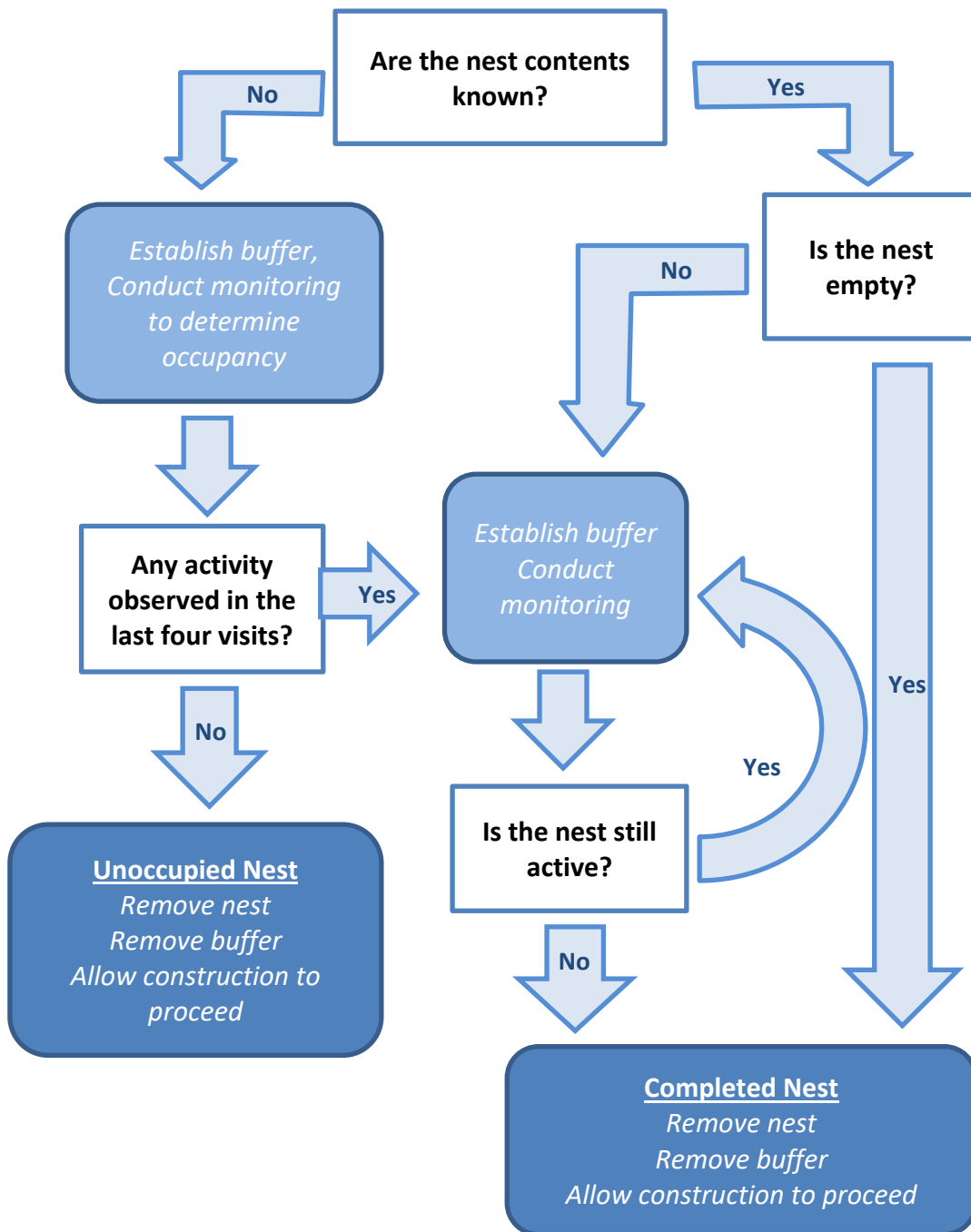
Exhibit 1. Examples of native bird nest structures.

From top to bottom, a simple scrap nest with eggs of a common nighthawk (*Chordeiles minor*); open-cup nest typical of a house finch (*Haemorhous mexicanus*), partially lined; and a platform nest built on infrastructure by a red-tailed hawk (*Buteo jamaicensis*), with nestlings.

¹ USFWS provided clarification to the MBTA indicating that: the MBTA does not contain any prohibition that applies to the destruction of a migratory bird nest alone (without birds or eggs), provided that no possession occurs during the destruction (USFWS 2003).

Exhibit 2. Decision-making Flowchart for Determining Course of Action If New Nest is Found

Trigger: Potentially Active Nest Found



The initial buffer for a nest is determined by the nest status and type of bird. Nests of common native birds including most passerines will be protected by a buffer measuring 300 feet in radius. The nests of raptors or sensitive-status species will be protected by a buffer 500 feet in radius.

Some species may be more tolerant of human presence and activity than others, and there is some variation between individuals. Tolerance can also be affected by the nest status and position relative to the topography, and the presence of natural or anthropogenic features that act as visual and auditory screens.

Occupied nests will be monitored by the biologist during construction activities if construction is occurring in the area. Buffers may be adjusted upward from the initial 300 or 500 feet if birds are exhibiting signs of stress (i.e., scold calls, watching activity, etc.) due to construction-related activity. The biologist also may recommend that the initial buffer be reduced if topography, vegetation screening, and/or individual bird behavior indicate the initial buffer is larger than required. Buffer reductions may be implemented with approval from the County of Santa Barbara Planning and Development (County) and will be accompanied by biological monitoring to determine that the reduction has not resulted in changes to breeding behavior.

No construction activities will occur within the buffer until continued monitoring demonstrates that the nest is inactive or has “failed,” the young have fledged, the young are no longer being fed by the parents, the young have left the area, or the young will no longer be impacted by the Project. A nest will be deemed a failure if it has been predated or if the parents are no longer tending the nest after 4 days of observation. The latter condition will only be applicable to a nest with eggs. To determine failure in this situation, the nest will be monitored in the early morning when nest-tending activity is most intense. Monitoring will be conducted for a minimum of 30 minutes, during which time the parents will be expected to be in the area and attentive to the nest. If after 30 minutes there is no sign of the parents, the nest will be checked on three additional mornings. If all four mornings show no sign of activity in the area, the nest will be classified as a failure and removed. Additionally, if the species-specific incubation period [as defined by Ehrlich *et al.* (1988) or Baicich and Harrison (1997)] is exceeded by 25 percent, the nest will be classified as a failure and removed.

During monitoring, biologists will minimize predation risk from monitoring by following Ralph *et al.* (1993) suggestions.

3.4 Data Collection and Reporting

A Nest Survey Form will be completed each day that a biologist conducts nest searches; an example form is provided in **Appendix A**. The Nest Survey Form will document the location, duration, and weather conditions during the survey, and whether any nests were located.

If an active nest is found and monitoring is implemented, a Weekly Nest Monitoring Log will be used to track the status and outcome (success or failure) of each nest. An example form is provided in **Appendix A**. A successful nest will have fledged at least one bird. A failed nest will not have fledged any young. When possible, the cause of failure will be determined.

Nests will be checked no more frequently than every 3 to 4 days (Ralph *et al.* 1993) unless the nest is thought to be inactive, in which case the nest will be checked more frequently.

Results of any pre-construction breeding bird surveys or monitoring by the biologist during construction shall be documented in field notes. The daily Nest Survey Form and Weekly Nest Monitoring Log will be summarized in a bi-weekly summary report submitted to the County and CDFW via email during construction activities. The summary report will include a description of any nests located and the measures implemented to avoid the nest sites.

4.0 References

AECOM Technical Services, Inc. 2023. Revised Biological Resources Survey Report for the Proposed Truck Rack Project, Lompoc Oil Field, Santa Barbara County, California. Prepared for Sentinel Peak Resources. Revised April.

Baichich, P. and C. Harrison. 1997. Nests, Eggs, and Nestlings of North American Birds. Princeton University Press. New Jersey.

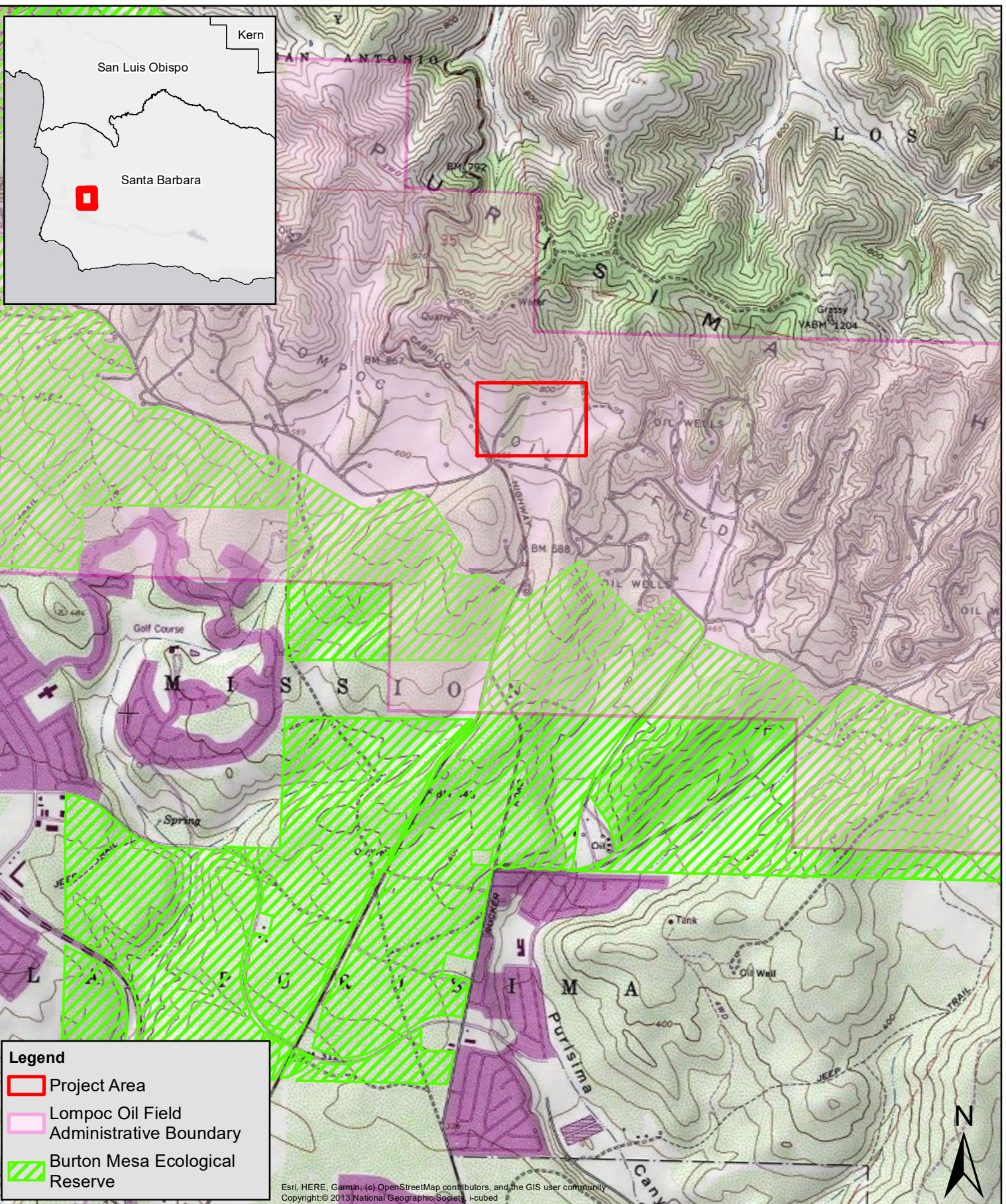
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Ralph, C. J., G. R. Geupel, P. Pyle, T. E. Martin, and D. F. DeSante. 1993. Handbook of Field Methods for Monitoring Landbirds. Gen. Tech. Rep. PSW-GTR-144. Albany, CA: Pacific Southwest Research Station, Forest Service, USDA.

USFWS. 2003. Migratory Bird Permit Memorandum. April 15.

FIGURES

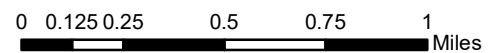
I:\BIO Resources\GIS\SPR\LOF Truck Rack 2022\Fig 1 - Project Vicinity.mxd



Legend

- Project Area
- Lompoc Oil Field Administrative Boundary
- Burton Mesa Ecological Reserve

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Proposed Truck Rack Project - Lompoc Oil Field
Sentinel Peak Resources
Figure 1 - Project Vicinity



- Legend**
- Study Area
 - Purisima 33 Access Roads
 - Pad Purisima 33
 - Proposed oil pipeline
 - Proposed power pole
 - Lompoc Oil Field Administrative Boundary
 - Burton Mesa Ecological Reserve



0 125 250 500 750 1,000 Feet



Proposed Truck Ramp Project - Lompoc Oil Field
Sentinel Peak Resources
Figure 2 - Project Site

AECOM
 DRWG: W. Dawson Date: 6/15/2023 Revision: 0

APPENDIX A
Field Data Forms

Sentinel Peak Resources - Lompoc Oil Field Nest Survey Form

OBSERVATION DATE:					
OBSERVER(S) NAME:					
START TIME:		<input type="checkbox"/> AM	<input type="checkbox"/> PM	END TIME:	
				<input type="checkbox"/> AM <input type="checkbox"/> PM	
WEATHER:					
TEMPERATURE:		to	°F	CLOUD COVER:	
WIND:		mph	from the:	to %	
LOCATION(S):					

NESTING BEHAVIOR DETECTED:

SPECIES	BEHAVIOR	SPECIFIC LOCATION	NOTES

NESTS FOUND:

NEST ID #	SPECIES	NEST SITE SPP	HEIGHT (M)	EGGS/NESTLINGS	PHOTO	BUFFER	FLAGGING

OTHER SPECIES DETECTED IN AREA:

NOTES:

Sentinel Peak Resources - Lompoc Oil Field

Weekly Nest Monitoring Log

DATE	NEST ID #	SPECIES	OBSERVER	NEST CHECK #	EGGS/NESTLINGS	ADULTS?	COMMENTS

NOTES:
