Biological Assessment Report

Murphy Ranch Little League Field Lighting Project 7550 Colima Rd., Whittier, California 90605

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ABOUT BLOOM BIOLOGICAL, INC,

For more than 45 years, Bloom Biological, Inc. (BBI) has provided biological consulting services for large and small clients. Our resume of services includes raptor and endangered species research, biological monitoring, impact assessment, permitting, conservation planning and geospatial analysis. Our innovative approach has provided solutions to complex problems for clients and projects throughout a range of industries including alternative energy, residential development, and the public sector. Collectively, the management and staff of BBI hold permits or memoranda of understanding for participating in the conservation and recovery of more than a dozen endangered or threatened species, as well as several other special-status species, in California and the western United States. Over the years, BBI has established an impeccable relationship with the resource agencies, project proponents, and environmental organizations by skillfully balancing the needs and objectives of land planning, resource conservation, and the public interest. In addition to our work in California and the western United States, BBI biologists have worked in Alaska, Central and South America, Europe, Southern Asia, and the western Pacific. BBI is a certified Small Business Enterprise and Woman-owned Business Enterprise.



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1.0 EXECUTIVE SUMMARY

This Biological Assessment is prepared in order to summarize the biological data for the proposed Murphy Ranch Little League Field Lighting Project (Project) located at 7550 Colima Rd., Whittier, California 90605 and to document the project's potential biological impacts and provide recommendations for mitigating those potential impacts. Bloom Biological, Inc. (BBI) was retained by Phil Martin and Associates in January of 2022 to conduct a Biological Assessment of the proposed project. The study area consists of the Murphy Ranch Little League Field and areas within a 500 ft. radius of the project. The first field survey was conducted on March 25, 2022, with the primary purpose of compiling a biological inventory and assessing the study area for the potential for sensitive species to occur.

As high quality coastal sagescrub habitat was observed adjacent to the project, surveys for Coastal California Gnatcatcher (*Polioptila californica californica*) were subsequently conducted within the study area between May 16 and June 21, 2022, following the current protocol established by the U.S. Fish and Wildlife Service (USFWS 1997). Wildlife movement within the study area was analyzed with the use of motion activated trail cameras between June 27 and July 19, 2022, and through review of relevant literature.

The proposed project consists of the installation of 11 steel light posts, lights, and an electrical panel surrounding the existing little league field. Existing development onsite consist of two baseball fields, a parking lot, batting cages, and several small structures associated with the little league field operations. Construction is proposed to occur solely in previously developed and disturbed areas on site. Vegetation within the proposed project area is minimal and consists primarily of non-native ornamental and invasive plant species. Approximately 50% of the offsite study area is comprised of developed roadways, parking lots, and buildings. The offsite regions containing vegetation consist of approximately 50% high quality coastal sage scrub and 50% non-native ornamental and invasive species.

The project site occurs in the wildland urban interface (WUI) along the boundary between the Puente Hills Habitat Preservation Authority (Authority) Preserve public open space and residential neighborhoods of Whittier. The study area encompasses portions of the Preserve, immediately adjacent to the Murphy Ranch Little League Field. The Preserve is managed by the Authority. The project is located adjacent to a 15.8-acre conservation easement that is managed by the Authority. Through personal communication with the Authority ecologist, Michelle Mariscal, BBI was provided with both published and unpublished data and reports pertaining to the presence and movement of wildlife adjacent to the project site. This information has been utilized in the analysis of potential project impacts and incorporated into this biological assessment report. In particular, the Authority has documented the breeding of adult and dispersal of young Coastal California Gnatcatcher within the coastal sage scrub habitat to the east and north of the project site as well as frequent wildlife use of a wildlife corridor to the northwest of the project site. A number of sensitive bat species have been document within the Preserve including western mastiff bat (Eumops perotis), pocketed free-tailed bat (Nyctinomops femorosacca), western red bat (Lasiurus blossevillii), western yellow bat (Lasiurus xanthinus), and pallid bat (Antrozous pallidus) (Remington 2006, Remington 2011). Mountain lion (Puma concolor) presence within the Preserve has been documented by the Authority, but as of 2020 has yet to be observed at the Colima Rd. underpass just north of the project site (Haas and Turschak 2002, Lucas 2010, BBI Pers. Com. 2022).

No sensitive biological resources were observed by BBI within the little league field property during this study with the exception of nesting bird habitat, which includes the trees along the east project boundary. However, no targeted surveys for bats where conducted. No quality bat roosting habitat was observed within the project site. As proposed the project will result in illumination and noise impacts to offsite adjacent areas, including areas within the Preserve. The results of the biological assessment conclude that the project has the potential to impact the following sensitive species and biological resources: Coastal California Gnatcatcher, Golden Eagle, mountain lion, western mastiff bat, pocketed free-tailed bat, western red bat, western yellow bat, nesting birds, wetland and riverine habitat, and a wildlife corridor.

Recommendations for mitigating potential project impacts are provided in Section 6.0 of this document.



2.0 PROJECT OVERVIEW

2.1 Project Information

The proposed project consists of the installation of 11 light poles, lights, and an electrical panel at the Murphy Ranch Little League Field located at 7550 Colima Rd., Whittier, California 90605 (APN 8291-005-900). BBI was contracted by Phil Martin and Associates to complete the Biological Assessment for the proposed project.

2.2 Project Location

The project is located within the southeastern region of the County of Los Angeles at 7550 Colima Rd., Whittier, California, 90605 (Appendix A, Map 1). The project is at the top of a southeast facing slope in an area which has been graded flat and developed as the Murphy Ranch Little League Field (Appendix A, Map 2). Elevation onsite ranges from approximately 500 to 560 feet above sea level. The project site is located within the southeastern region of the San Gabriel River Watershed and is approximately 5 miles east of the San Gabriel River and is within the Puente Hills Significant Ecological Area (SEA) and immediately adjacent to the Puente Hills Preserve (Appendix A, Map 3). Aerial imagery from August 2021 shows the project area as it exists today (Appendix B, Figure 1). Historic aerial imagery from May 1994 shows the existing little league field (Appendix B, Figure 2). Please refer to Appendix C for photographs of existing conditions of the proposed project area.

2.3 Topography

The project site is at the top of a southeast facing slope in an area which has been graded flat and developed. Elevation onsite ranges from 500 to 560 feet above sea level. The site is largely flat with a slight slope descending from the north near Colima Rd. toward the little league fields and a slope descending from the southern border of the little league fields south toward the adjacent country club community. The highest elevations on site are found in the northeast corner of the little league field adjacent to Colima Rd. while the lowest elevations are located in the southeast corner nearest to the country club. A topographic map of the project site and study area is provided in Appendix A (Map 4).

2.4 Soil Types

The USDA Web Soil Survey was utilized to determine soil types present on site (USDA 2021). Two soil types are mapped within the project area (Appendix D). The majority of the project area is Counterfeit-urban land complex with 10 to 35 percent slopes. A small area of Zaca-Apollo warm complex with 20 to 55 percent slopes is found along the western edge of the site.

2.5 Proposed Development

Existing development onsite includes the Murphy Ranch Little League Field, which includes two little league fields and facilities associated with the little league operations. The proposed project consists of the installation of 11 steel light poles, lights, and an electrical panel immediately adjacent to the Murphy Ranch Little League field at 7550 Colima Rd., Whittier, California. The project footprint will be minimal and will only occur in previously disturbed and developed areas on site. Holes will be dug for each of the 11 light poles and trenches will be dug for electrical wiring which will connect the light poles to the electrical panel. All staging for the project will occur in the existing little league parking lot and ingress/egress to the project area will occur through the parking lot. No grading is required for this project. As the project will occur in previously disturbed and developed areas onsite, there is no landscaping proposed. An analysis of offsite photometrics has been completed and is included with the Site Plans in Appendix E.



The project is estimated to begin in the fourth quarter of 2022 and be completed in the summer of 2023. Construction is estimated to be completed in 2-months and will generally be executed on following timeline:

- Hole boring & pole installation 3 weeks
- Trench digging, wiring, & finalize lights for use 5 weeks

2.6 Proposed Increased Use

The following information regarding the proposed use of the little league fields once the lights have been installed has been provided by the Murphy Ranch Little League (BBI Pers. Comm. 2022):

Lighting the two baseball fields would allow the Murphy Ranch Little League to use the baseball fields 7 days a week for 50 weeks per year. The lights are schedule to shut off at 11:00 pm each evening.

3.0 SURROUNDING LAND USE & DEVELOPMENT

The Preserve, managed by the Authority, borders the Murphy Ranch Little League Field to the east and across Colima Rd. to the north. The Preserve consists of approximately 4,000 acres of protected land which extends east to west from near the intersection of Harbor Blvd. and Whittier Blvd. to the near the intersection of Beverly Blvd. and the 605 Freeway (Appendix A, Map 6). There are seven public access points throughout the Preserve lands: Hacienda Hills, Turnbull Canyon, Arroyo Pescadero, Hellman Park, Sycamore Canyon, Schabarum Park, and Powder Canyon. The Arroyo Pescadero access point is located immediately to the north of the Murphy Ranch Little League Field across Colima Rd. which provides connectivity to the Arroyo Pescadero and Arroyo San Miguel recreational trails within the preserve. The Arroyo San Miguel Trail passes beneath Colima Rd. approximately 1,100 ft. to the northeast of the project site.

The Whittier Area Community Church and parking lot are located immediately to the west of the project site and the residential community and golf course of the Friendly Hills Country Club is located to the south. Residential development encompasses the majority of the areas extending beyond the immediate vicinity of the project site to the south and west.

4.0 BIOLOGICAL ASSESSMENT METHODS

4.1 Study Area

The biological assessment was conducted for the Murphy Ranch Little League Field located at 7550 Colima Rd., Whittier, California, and surrounding 500 ft. radius. Please refer to Map 2 of Appendix A for the location of the study area.

4.2 Literature and Database Review

Prior to performing the biological inventory of the site, a review of all pertinent literature was conducted, and the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB) and USFWS Information for Planning and Consultation (IPaC) were queried for the presence of sensitive species and habitats and to compile all relevant information pertaining to wetland and riparian resources. For the purpose of this report, sensitive species and habitats include rare, threatened, or endangered species that are designated or are candidates for listing under State or Federal Law, California Native Plant Society "1B" or "2" listed species, those species identified as state "fully protected species" or "species of special concern", and any other species for which there is compelling evidence of rarity. The database review for sensitive species and habitats was conducted for the following USGS quadrants: Whittier (3311881), La Habra (3311788), El Monte (3411811), and Baldwin Park (3411718) (CDFW 2022). The USFWS National Wetlands Inventory (NWI) was reviewed to compile all relevant information pertaining



to wetland and riparian features in the vicinity of the project site (USFWS 2009). Relevant literature pertaining to wildlife movement and the impacts of illumination and noise was reviewed. Additionally, the Puente Hills Habitat Preservation Authority was contacted and requested to provide information pertaining to biological resources within the Puente Hills Preserve adjacent to the project.

4.3 Biological Resources Inventory & Mapping

BBI Zoologist Dr. Peter H. Bloom and Biologist Rainey Barton conducted a survey of the study area on March 25, 2022, from approximately 0700h to 1000h. The temperature ranged from 67° to 73°F during the survey period, there were no clouds and no precipitation. The study area was traversed on foot, pausing frequently to watch and listen for sign of wildlife and to note all species present. All vegetation was examined up close and at a distance for nesting wildlife with the use of high-power binoculars. Surveyors noted all signs of wildlife, plant species, and habitats observed.

4.3.1 Vegetation Community Mapping

The ArcGIS Field Maps app was utilized in the field to map vegetation communities within the study area. The vegetation communities were mapped using A Manual of California Vegetation, Second Edition (Sawyer et al. 2009).

4.3.2 Flora

All plant species encountered within the study area were identified and recorded. Naming for native plant species with a California Rare Plant Rank (CRPR) follow the CNPS online *Inventory of Rare and Endangered Plants* (2022). For plant species without a CRPR, naming follows the *Jepson Interchange List of Currently Accepted Names of Native and Naturalized Plants of California* (Jepson Flora Project 2022).

4.3.3 Fauna

The entire study area was walked to identify and record all wildlife detected by sight, calls, tracks, scat, whitewash, burrows, or other sign. In addition to species observed, expected wildlife usage of the study area was determined according to known habitat preferences of regional wildlife species and knowledge of their relative distributions in the area. Naming of wildlife species follows Crother (2012) for reptiles and amphibians, American Ornithologists Union (Chesser et al. 2021) for birds, and Wilson and Reeder (2005) for mammals.

4.3.4 Jurisdictional Waters/Wetlands

Although a formal wetlands delineation was not conducted during the field survey, the study area was evaluated for the potential to support jurisdictional waters regulated under the federal Clean Water Act, California Fish and Game Code, and Porter-Cologne Water Quality Act. This included a field survey of the study area and a review of the USFWS NWI.

4.4 Coastal California Gnatcatcher Surveys

A total of six (6) presence/absence Coastal California Gnatcatcher surveys were conducted by Peter H. Bloom, Ph.D. (Permit #s TE-787376-14, SC-000221) in accordance with service protocol for non-NCCP areas (USFWS 1997). All potential Coastal California Gnatcatcher habitat within the study area was surveyed during the breeding season (May 15 to June 30) with at least one week between survey visits. The biologist surveyed no more than 18 acres per day, surveying an average of 3.6 acres per hour. The surveys were conducted during the morning hours between 6:00 a.m. and 12:00 p.m. Dr. Bloom slowly walked through the survey area, pausing frequently to play Coastal California Gnatcatcher vocalizations from Merlin Bird ID© broadcast through a portable speaker within suitable habitat, the objective being to elicit a response from silent individuals that might not otherwise be detected. Weather conditions and time of day were appropriate for maximizing the likelihood of Coastal California Gnatcatcher detection.



Temperatures ranged from 54°F to 79°F. More detailed information regarding the Coastal California Gnatcatcher survey methodology is provided in the survey report included in Appendix G.

4.5 Wildlife Movement Analysis

A wildlife movement analysis was conducted within the study area between June 27 and July 19, 2022. The analysis consisted of the strategic placement of four motion activated wildlife cameras (SpyPoint Link-Micro-LTE) in locations likely to captured wildlife moving through the habitat immediately adjacent to the little league fields (Table 1; Appendix A, Map 2). The wildlife cameras were initially set to high motion sensitivity but were later changed to medium motion sensitivity as they were capturing many images of vegetation moving in the breeze. Additionally, relevant literature pertaining to wildlife movement in the region was reviewed.

Camera Trap #	Camera Trap Location	Description
1	33°57′55.87″ N, 117°59′58.21″ W	Along eastern little league fence line
2	33°57′54.84″ N, 117°59′56.13″ W	Adjacent to eucalyptus row near eastern little league fence line
3	33°57′54.19″ N, 117°59′55.77″ W	In eucalyptus row adjacent to batting cage along eastern little league fence line
4	33°57′58.05″ N, 117°59′52.09″ W	In driveway between Colima underpass and little league field

Table 1. Wildlife camera locations.

5.0 RESULTS

5.1 Flora

A total of 26 species of plants were observed within the study area as provided in Appendix H. Non-native species diversity and density outranked that of native species within the project site. Native species were dominant within the study area offsite to the east and north across Colima Rd. consisting of high quality, restored, coastal sage scrub community. Nearly all areas onsite consist of paved parking lot, concrete, or little league field turf.

5.1.1 Non-native Grassland and Ornamentals

The project site is largely comprised of paved areas and little league field turf and structures. Additional vegetation onsite is comprised largely of non-native species dominated by mustard (*Hirschfeldia incana*), Russian thistle (*Salsola tragus*), tocalote (*Centaurea melitensis*), Peruvian pepper tree (*Shinus molle*), and other non-native ornamentals planted as landscaping in parking lot medians (Appendix A, Map 5). The project footprint is denuded of vegetation and either consists of baren soil or concrete. Stands of eucalyptus are present within the study area offsite along the eastern boundary of the little league field and near the Arroyo San Miguel to the southeast and Arroyo Pescadero to the north. These eucalyptus trees are remnants of what used to a be a much larger contiguous eucalyptus grove which was culled for fire prevention and habitat restoration purposes.

5.1.2 Coastal Sagescrub

High quality, restored, coastal sage scrub dominated by California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), black sage (*Saliva mellifera*), purple sage (*Salvia leucophylla*), laurel sumac (*Malosma laurina*), coyote brush (*Baccharis pilularis*), white sage (*Salvia apiana*), and toyon (*Heteromeles arbutifolia*)



is located immediately east of the project and north across Colima Rd. The offsite area to the east was restored to coastal sagescrub as part of a mitigation project facilitated by the Puente Hills Habitat Preservation Authority in 2009 and 2010 with the specific intention of benefitting Coastal California Gnatcatcher (BBI Pers. Com. 2022). Irrigation PVC line was observed throughout this restored habitat. Overall, this coastal sagescrub habitat is of high quality as indicated by the height and density of vegetation, relatively low density of exotic species, and the abundance of wildlife utilizing the habitat.

5.1.3 Special Status Flora & Potential Impacts

The literature and database review of sensitive plant species and habitats with potential to occur within the vicinity of the project returned five results as shown in Table 2 (CDFW 2022, CNPS 2022).

Species Common Name	Species Scientific Name			
CNPS 1B or 2				
Coulter's goldfields	Lasthenia glabrata ssp. coulteri			
Intermediate mariposa-lily	Calochortus weedii var. intermedius			
San Bernardino aster	Symphyotrichum defoliatum			
Many-stemmed dudleya	Dudleya multicaulis			
Special Status Community				
California Walnut Woodland	N/A			

Table 2. Potential Sensitive Floral Species & Habitats

The following provides an analysis of the potential for the above species to be impacted by the proposed project based on the literature review and biological survey:

Coulter's goldfields are found in salt marshes, vernal pools, and damp alkaline areas from southern San Diego County north to Kern County (Munz 1974). Neither this species nor suitable habitat was observed within or immediately adjacent to the project site. Therefore, this project is expected to have no impact to Coulter's goldfields.

Intermediate mariposa-lily occurs in hilly areas of coastal sagescrub and grassland within Orange County, blooming in June and July (Munz 1974). This species was not observed within or immediately adjacent to the project site, although suitable habitat is present in the form of restored coastal sagescrub in the adjacent Puente Hills Preserve. This project is expected to have no impact to intermediate mariposa-lily.

San Bernardino aster is found growing in grassland and meadow habitat and in disturbed areas in the San Gabriel and San Bernardino Mountains. This species was not detected within or adjacent to the project site, although some potentially suitable habitat is present in the adjacent Puente Hills Preserve. This project is expected to have no impact to San Bernardino aster.

Many-stemmed dudleya can be observed in dry, rocky areas within coastal sagescrub and chaparral habitats throughout Southern California. While there is some potential for this species to occur adjacent to the project site in the Puente Hills Preserve, this species was not observed. This project is expected to have no impact to many-stemmed dudleya.

California walnut woodland can be observed in a variety of habitats including chaparral and coastal scrub. Southern California black walnut (*Juglans californica*) is most commonly found on hillsides and in canyons between 100 to 3,000 feet above sea level (Baldwin et. al., 2012). Neither Southern California black walnut nor California walnut woodland were observed on or immediately adjacent to the project site. Therefore, this project is expected to have no impact to Southern California black walnut or California walnut woodland.



5.2 Fauna

Wildlife and wildlife sign detected within the study area consists of 28 bird, 7 mammal, and 1 reptile species (Appendix I). No sensitive species were detected during the surveys conducted by BBI in 2022.

5.2.1 Special Status Fauna & Potential Impacts

The literature and database review of sensitive animal species and habitats with potential to occur within the vicinity of the project returned 18 results as shown in Table 3 (CDFW 2022, CNPS 2022, Remington 2006, 2011, Bloom Unpubl.).

Table 3. Potential Sensitive Faunal Species & Habitats

Species Common Name	Species Scientific Name				
State and/or Federal T&E					
Coastal California Gnatcatcher	Polioptila californica californica				
Least Bell's Vireo	Vireo bellii pusillus				
Bank Swallow	Riparia riparia				
State Fully Protected					
Golden Eagle	Aquila chrysaetos				
State Species of Special Concern					
Coastal Cactus Wren	Campylorhynchus brunneicapillus sandiegensis				
Burrowing Owl	Athene cunicularia				
Yellow Breasted Chat	Icteria virens				
Coast horned lizard	Phrynosoma blainvillii				
Coastal Whiptail	Aspidoscelis tigris stejnegeri				
Western spadefoot	Spea hamondii				
American badger	Taxidea taxus				
Western mastiff bat	Eumops perotis californicus				
Pocketed free-tailed bat	Nyctinomops femorosaccus				
Pallid bat	Antrozous pallidus				
Western red bat	Lasiurus blossevillii				
Western yellow bat	Lasiurus xanthinus				
State and/or Fede	ral T&E Candidate				
Mountain lion	Puma concolor				
Monarch butterfly	Donaus plexippus				

The following provides an analysis of the potential for the above species to be impacted by the proposed project based on the literature review and biological survey:

Special Status Birds

Coastal California Gnatcatcher "is a local, uncommon, obligate resident of arid coastal scrub below about 1,500 ft. (500 m) from eastern Orange and southwestern Riverside Counties south through the coastal foothills of San Diego County; along the immediate coast at Palos Verdes Peninsula, Los Angeles County; at Camp Pendleton and in the Tijuana River Valley, San Diego County; and may still occur along lower, coastal slopes of San Gabriel and San



Bernardino Mountains, Los Angeles and San Bernardino Counties, but status is uncertain (Grinnell and Miler 1944, Garrett and Dunn 1981, Atwood 1990, 1993)."¹

No Coastal California Gnatcatcher were detected during the USFWS protocol level surveys conducted by BBI in 2022. There is no suitable habitat for Coastal California Gnatcatcher within the Murphy Ranch Little League Field property boundary. However, high quality suitable habitat is present immediately to the west of the little league field within the Puente Hills Preserve which consists of a healthy, restored, coastal sagescrub community. Additional high-quality coastal sagescrub is present within the Puente Hills Preserve across Colima Rd. approximately 600 ft. to the north of the little league field where Coastal California Gnatcatcher presence was reported to the California Natural Diversity Database in 2008, 2009, and 2017 (CDFW 2022).

Through personal communication with Puente Hills Habitat Preservation Authority ecologist, Michelle Mariscal, BBI learned that Coastal California Gnatcatcher have been documented to occur within the study area immediately to the east and north of the project site as recently as 2020. The Authority contracts biological consultants to conduct USFWS protocol-level surveys for Coastal California Gnatcatcher throughout the Preserve. These surveys have documented Coastal California Gnatcatcher occupying nesting habitat within 500 ft. of the project site during 2009 and 2013. Coastal California Gnatcatcher have been incidentally observed within 500 ft. of the project site by Authority staff as recently as 2020. Significant changes in weather such as drought are known to effect Coastal California Gnatcatcher nesting density, which is a likely cause for no observations made by BBI in 2022. Given the nearby activity patterns of Coastal California Gnatcatcher seen in recent years, we treat the species as though they are present in the adjacent coastal sage scrub survey area, but not within the project site as it lacks suitable nesting and foraging habitat. This project has the potential to impact Coastal California Gnatcatcher and may consist of disruption of foraging and breeding activity within the coastal sagescrub community adjacent to the little league field as a result of illumination and noise at night.

Least Bell's Vireos are riparian specialists but also survive very well in adjacent, less dominant habitats. Protocol-level surveys for Least Bell's Vireo were not conducted for this project. However, if present, they would have been detected during the protocol-level surveys for Coastal California Gnatcatcher. Willows in the bottom of the Arroyo San Miguel drainage approximately 700 ft. to the southeast of the project site provide adequate habitat for Least Bell's Vireo, but none were observed. There is a potential for Least Bell's Vireo to occur within the study area as migrants. The nearest reported occurrence of Least Bell's Vireo is located approximately 2.25 mi. to the northwest of the project site. This project is expected to have no impact on Least Bell's Vireo.

Bank Swallows are aerial insect foragers and colonial nesters. They require substantial earth or sand banks usually near water where they lay their eggs in holes. There is only one record of Bank Swallow in CNDDB within 5 miles of the project which consists of an egg set collected in 1894 in central Whittier, 1.6 miles to the northwest of the project (CDFW 2022). There is a potential for this species to occur within the study area as migrants, but this species is considered to be extirpated as a breeder from southern California. This project is expected to have no impact on Bank Swallows.

Golden Eagles historically nested within and surrounding Chino Hills State Park, 10 miles southeast of the project site. The nest territories of four resident pairs of Golden Eagles have been extirpated from this area in the last 20 years (Bloom Unpubl.). Urban expansion into wildland areas containing foraging and nesting habitat is a leading cause for their decline in the region. While nesting Golden Eagles have not been documented in the area for several decades, it is possible that they could attempt to occupy territories here again. This project has the potential to contribute to cumulative impacts affecting Golden Eagles in the region.

¹ California Department of Fish and Wildlife. 2010. CWHR version 8.1 personal computer program. California Interagency Wildlife Task Force, Sacramento.



Coastal Cactus Wrens require substantial stands of cactus for nesting, none of which were found on site, and no Coastal Cactus Wrens were heard calling anywhere in the vicinity. The nearest documented occurrence of Coastal Cactus Wren is 4.9 miles to the southeast of the project in Fullerton as report in 1998 (CDFW 2022). This project is expected to have no impact on Coastal Cactus Wren.

Burrowing Owls require relatively flat open space dominated by grassland or desert habitats none of which exist within the study area. Also largely lacking were California ground squirrels (*Otospermophilus beecheyi*), the primary excavators of Burrowing Owl nest burrows. There is only one documented occurrence of Burrowing Owl within 5 miles of the project from the vicinity of Hallman Park (3.25 miles to the northwest) where one individual was observed in January 2010. Burrow Owls are very unlikely to be observed near the project except perhaps in winter. This project is expected to have no impact on Burrowing Owls.

Yellow-breasted Chats inhabit substantial groves of mature riparian woodland composed mainly of willows none of which occur on or immediately adjacent to the project. There is only one documented occurrence of Yellow-breasted Chat within 5 miles of the project, where 2 adults were observed on territory in the vicinity of Hallman Park (3.5 miles to the northwest) in 2017 (CDFW 2022). This project is expected to have no impact on Yellow-breasted Chats.

Special Status Reptiles

Coast horned lizard in this part of its range select coastal sage scrub habitat with loose soils. Ants are their preferred prey. Very limited sandy or loose soils were observed within the study area; therefore, there is very limited potential for this species to occur here. The most recent reported observation of coast horned lizard within 5 miles of this project is from 1960 in the vicinity of Sycamore Canyon in Whittier (CDFW 2022). This project is expected to have no impact on coast horned lizard.

Coastal whiptail has good potential to be observed in the coastal sage scrub acreage near the project site. The most recent documented occurrence was 350 ft. north of the project across Colima Rd. within the Puente Hills Preserve (CDFW 2022). As there are no proposed direct impacts to coastal sagescrub habitat, this project is expected to have no impact on coastal whiptail.

Western spadefoots require ephemeral pools generally located in relatively flat grasslands, none of which exist on or adjacent to the project site. The nearest documented occurrence of western spadefoot is 0.6 miles to the north of the project where one individual was found during focused surveys in a seasonal pond in 1998, but none were observed during focused surveys in 2010 (CDFW 2022). This project is expected to have no impact on western spadefoot.

Special Status Mammals

American badgers in southern California suffer from habitat loss and fragmentation but where found prefer grasslands, and coastal sage scrub where they specialize in the predation of ground squirrels and gophers. This species is now very rare in coastal southern California but could still be expected in Chino Hills State Park. There is one documented observation of American badger within 5 miles of the project site. This occurrence consisted of one individual found dead on Colima Rd. in July 2006, 0.5-mile northeast of the project (CDFW 2022). No sign of American badger was observed on or adjacent to the project site during the 2022 surveys conducted by BBI. This project is expected to have no impact to America badger.

Mountain lion in Southern California is being considered for candidacy as a threatened species by the California Fish and Game Commission under the California Endangered Species Act (CESA). Species classified as a candidate species are afforded the same protections as listed species. The greatest threats to mountain lion in the southern California region stem from habitat loss and fragmentation in the form of roads and development. This loss and fragmentation have led to extreme levels of genetic isolation and high mortality rates (Yap and Rose 2019, Benson et al. 2016, Vickers et al. 2015).



Personal communication with Authority ecologist, Michelle Mariscal, confirmed mountain lion presence within the adjacent Preserve. The Authority received frequent reports of mountain lions from nearby residents and individuals recreating in the preserve in 2021. However, not all reports have been substantiated. Verified mountain lion presence within the Preserve includes a food cache (deer kill) documented by USGS biologist, Lisa Lyren, in 2004. Additionally, DNA analysis of the young male mountain lion killed on the 60 Freeway in the Diamond Bar area in April 2022 indicates that this individual utilized the Puente-Chino Hills Wildlife Corridor (Scauzillo 2022). As of 2020, mountain lions have yet to be observed on wildlife camera within the Preserve, which includes the camera permanently stationed at the Colima Rd. underpass just north of the project. As suitable canopy cover, vegetation density, potential prey, and a well-documented wildlife corridor are present within the Preserve adjacent to the project, the presence of mountain lion in the vicinity of the project is possible. As such, this project has the potential to impact mountain lion use of and movement within the adjacent Preserve.

Western mastiff bats have been known to roost in crevices, large boulders, and buildings, but primarily dwell in cliffs. They frequently forage for moths, crickets, and katydids in broad open areas of dry desert washes, flood plains, chaparral, oak woodland, open pine forest, grassland, mountain meadows, and agricultural areas. The presence of western mastiff bats has been documented within the adjacent Preserve as near as Arroyo Pescadero (Remington 2006, Remington 2011).

Pocketed free-tailed bats roost primarily in crevices of cliffs and high rocky, rugged outcrops in a wide variety of habitats including desert shrub and pine-oak forest. They may also roost in buildings, caves, and under roof tiles, foraging primarily on moths and beetles. Pocketed free-tailed bats have been detected on the adjacent Preserve (Remington 2006).

Pallid bats occupy a wide variety of habitats in arid regions which contain water. They are known to roost in a variety of structures including rock crevices, tree hollows, mines, caves, and human structures. Pallid bats were detected within the Preserve in 2004 but were not detected during subsequent bat surveys conducted in 2006 and 2011 (Remington 2006, 2011). As this species has not been detected within the vicinity of the project in recent years, this project is expected to have no impact on pallid bats.

Western red bats are obligate foliage-roosting species and roost and forage within woodland and riparian habitats. Western red bats are suspected to roost within or near the Preserve (Remington 2011).

Western yellow bats are obligate foliage-roosting species and roost and forage within woodland and riparian habitats. This species is known to commonly roost in palm trees. Western red bats are suspected to roost within or near the Preserve, potential as near to the project as within the Arroyo San Miguel (Remington 2006, 2011).

Numerous studies of the impacts of artificial light on bats have been conducted. While in some instances bats may benefit from the congregation of insects at artificial lights, they may also be negatively impacted by a vacuum effect caused by lights (insects leaving the darker areas and entering the illuminated areas), having to travel further to forage, and increased collisions with stationary objects in light compared to dark conditions (Mathews et al. 2015, Stone et al. 2012, Orbach and Fenton 2010). Additionally, some species of bats may emerge from their roosts later as a result of artificial light (Downs et al. 2003). It is likely that nearly all artificial light can result in impacts to bats, but the effects of the light can vary between species. Without further study of the effects on the species found within the study area, it is safe to assume that this project has a potential to impact sensitive bat species including western mastiff bats, pocketed free-tailed bat, western red bat, and western yellow bat.

Special Status Insect

Monarch butterflies are decreasing all over California. Monarchs were not detected on or near the project, however the planting of native milkweed species needed by developing larvae might change that. During migration or dispersal, the species could be anticipated on site or on adjacent properties if host species were planted. However, given the current observed conditions, this project is expected to have no impact on monarch butterflies.



5.2.2 Nesting Birds & Potential Impacts

The project site contains minimal vegetation and low-quality nesting bird habitat. However, areas immediately adjacent to the project site contain high quality nesting bird habitat. Substantial high quality nesting habitat is present immediately to the west of the project area in the form of coastal sagescrub as well as a row of large eucalyptus and Aleppo pine trees adequate for nesting raptors. A foraging Red-tailed Hawk (*Buteo jamaicensis*) was observed on multiple occasions perched in eucalyptus trees adjacent to the project area and likely nests in the vicinity of the project. Many passerines were observed utilizing the coastal sagescrub habitat adjacent to the project site and likely nested in the vicinity. The effects of light on birds have been well studied, showing changes in bird movement, habitat selection, and settlement at both local and regional scales (Day et al. 2015, Glahn et al. 2000, McLaren et al. 2018, Van Doren et al. 2017). This project has the potential to impact nesting birds during the construction phase as well as post construction when the lights and little league fields are being utilized during extended hours of operation.

5.2.3 Wildlife Corridors & Potential Impacts

The survey area was analyzed for sign of and potential for wildlife movement and habitat linkages. While there are no wildlife corridors or habitat linkages present within the proposed project site, wildlife use of the adjacent Puente-Chino Hills Wildlife Corridor has been well documented (Haas 2000, Haas and Turschak 2002, Lucas 2010, Spencer 2005). The adjacent Preserve is some of the last open space in the highly developed Los Angeles region and is part of the Puente-Chino Hills Wildlife Corridor which consists of an unbroken zone of approximately 30,000 acres of habitat extending 31 miles from the Cleveland National Forest in Orange County to the west end of the Puente Hills above the Whittier Narrows. An underpass beneath the 91 Freeway provides connectivity to the Cleveland National Forest, Chino Hills State Park provides habitat on either side of the 91 Freeway, and Tonner Canyon allows for wildlife passage beneath the 57 Freeway.

Wildlife and their sign are frequently observed within the immediate vicinity of the project site on the adjacent Preserve. Mule deer are routinely seen moving through the drainages just northeast of the little league field and it is assumed that bobcats, coyotes, gray foxes, Virginia opossums, and striped skunks utilize this area as well based on documentation via wildlife cameras that were stationed nearby (BBI Pers. Com. 2022). Additionally, a deceased western spotted skunk was incidentally observed in 2020 along the Arroyo San Miguel Trail (BBI Pers. Com. 2022).

A permanent wildlife camera operated by the Authority is located in the Colima underpass along the Arroyo San Miguel Trail 1,100 ft. to the north of the project site. This underpass allows the Arroyo San Miguel Trail to pass beneath Colima Rd. and provides an access route for wildlife between the north and south areas of the preserve as divided by Colima Rd. Wildlife usage recorded for this underpass includes the following species: bobcat, coyote, mule deer, raccoon, desert cottontail, California ground squirrel (Haas and Turschak 2002, Lucas 2010). The most recent study of wildlife use at the Colima Rd. underpass reported a decrease in bobcat, coyote, and deer activity during the day and an increase at night since the formal opening of the trailhead in 2002 (Lucas 2010). The previous study conducted by the U.S. Geological Survey (USGS) immediately prior to and after the opening of the area to recreation in 2002 found that while the rate of use by bobcat, coyote, and deer did not change significantly, coyote and deer activity shifted toward nocturnal use (Haas and Turschak 2002). The Preserve trails are open to the public seven days a week between dawn and dusk and the shift in wildlife use of the underpass from day to night is suspected to be a result of the increased human activity on the trails following this area being opened to public use.

The goal of the wildlife movement study conducted by BBI in 2022 was to document wildlife presence within the immediate vicinity of the little league field. The wildlife cameras were deployed for a total of 23 days and 534 camera-trap hours between June 27 and July 19, 2022. The cameras were operational and captured photographs during all hours of the day. Camera 1 appeared to be overly sensitive and only captured images of vegetation movement. No special status species were detected by the wildlife cameras. There was a total of 42 individual detections comprising the following seven species: 13 coyote, 1 domestic cat, 1 striped skunk, 9 desert cottontail



rabbit, 2 California ground squirrel, 1 Common Raven, and 15 sparrow (Table 4). Additionally, 3 occurrences of hikers and 3 occurrences of mountain bikers were captured by the wildlife cameras. Wildlife encounters were primarily documented at night with the exception of California ground squirrel, sparrows, coyotes, and Common Raven. Of the 13 coyote encounters, 4 were detected during daylight hours. Photographs of wildlife encountered during the study are located in Appendix C.

Camera Trap #	Species Encountered (Common Name)	Species Encountered (Scientific Name)
2, 3, and 4	Coyote	Canis latrans
3	Domestic cat	N/A
3	Striped skunk	Mephitis mephitis
4	Desert cottontail	Sylvilagus audubonii
4	California ground squirrel	Spermophilus beecheyi
2	Common Raven	Corvus corax
3 and 4	Sparrow	Unknown

Table 4. Wildlife detected by camera traps (June 27 through July 19, 2022).

As proposed, the project has the potential to impact wildlife movement on the adjacent Preserve, part of the larger Puente-Chino Hills Wildlife Corridor. Wildlife adjacent to the project site have been documented to alter their movements due to increased recreational use within the area (Haas and Turschak 2002, Lucas 2010). Additionally, it is known that direct glare from night lighting can affect the orientation of organisms across distances (Reed at al. 1985, Telfer et al. 1987, Beier 1995, Longcore and Rich 2004). Recreation is abundant in the immediate vicinity of the project in the form of a high use trailhead and hiking trails and the existing little league field activities. Increasing the recreational use of the little league field in combination with the new impact of artificial lighting is expected to have an adverse impact on wildlife movement within the existing wildlife corridor.

5.3 Water Resources & Potential Impacts

The project site is located within the southeastern region of the San Gabriel River Watershed and is approximately 5 miles east of the San Gabriel River. Arroyo Pescadero is located to the north, separate from the project site by a steep slope and Colima Rd. with no apparent direct or indirect connectivity to the project site. The project site is located north of the Arroyo San Miguel which contains freshwater forested/shrub palustrine wetland and riverine habitat. The wetland habitat is located within the Friendly Hills Country Club golf course and is separated from the project area by an existing roadway and residential development. There is no wetland habitat, ephemeral drainages or jurisdictional water on the project site. However, there appear to be two steep ephemeral drainages which lead into the riverine and wetland habitat located offsite to the east of the project area (Appendix A, Map 7). One of which appears to have potential connectivity to the project site via the southeast corner of the little league property. As proposed, the project has potential offsite drainage to riparian, riverine, and wetland resources. Therefore, there is a potential for this project to impact water resources via transportation of sediments and other substances offsite.

6.0 MITIGATION RECOMMENDATIONS

The results of the biological assessment conclude that the project has the potential to impact the following sensitive species and biological resources via illumination, noise, and/or runoff during project construction and the operation of the proposed baseball field lights: Coastal California Gnatcatcher, Golden Eagle, mountain lion, western mastiff bat, pocketed free-tailed bat, western red bat, western yellow bat, nesting birds, wetland and riverine habitat, and



wildlife corridor. There are no expected impacts to special status flora. The following sections provide recommendations for mitigating the impacts to sensitive species and biological resources.

6.1 Special Status Fauna & Wildlife Corridor

The following recommendations are provided for mitigating potential impacts to special status fauna and wildlife movement:

- <u>Light Shielding</u> Full cutoff lighting fixtures should be utilized. These fixtures should be installed to provide shielding so that little or no light is emitted above the horizontal plane, and less than 10% of the light emitted is within 10 degrees below the horizontal plan (Longcore 2017). To the greatest extent possible, light should be shielded to only cast upon the little league fields and no areas offsite, particularly offsite open space and residential areas where both humans and wildlife may be affected.
- Reduce Light Pole Height It is recommended that the light pole height be limited to the lowest extent possible while still achieving illumination of the little league fields. Limiting the pole height will assist with reducing the emission of light and glare into offsite areas.
- Reduced Light Intensity The minimum amount of light intensity should be utilized to reduce emission of light offsite while still achieving the desired light function.
- Reduced Light Duration The duration of light use should be reduced to the maximum extent practicable.
- <u>Longer Wavelength Lights</u> Utilize lights with longer wavelengths (e.g., yellow LEDs) and avoid shorter wavelength light such as blue and violet which lead to greater disruption of biological functions across the majority of wildlife species as well as humans (Longcore et al. 2015, Beier 2006, Brainard et al. 2015). If full-spectrum light is required, then the lowest possible color temperature is recommended (e.g., yellows) (Longcore et al. 2015).
- Reduce Noise The use of the lights at the little league fields will also result in an increase in noise during later hours of the day. To all extents possible, efforts should be made to limit noise. This may include prohibiting the use of stereos, bull horns, and other high volume producing equipment.
- <u>Preserve Native Vegetation</u> Native vegetation should be preserved and maintained on-site to the
 maximum extent feasible for the project. If landscaping is needed, it is recommended that landscaping
 utilize predominantly drought tolerant native vegetation and avoid all non-native invasive species. The
 following website provides a list of all non-native invasive species that should be avoided: California Invasive
 Plant Council Inventory (https://www.cal-ipc.org/plants/inventory/).
- Invasive Species Education and Control All workers should be trained in proper invasive plant control when operating on the site. Project activities should be conducted in a manner that prevents the introduction, transfer, and spread of aquatic, riparian, and terrestrial invasive plant species from one work site to another. Prior to entering the project area, crews should inspect equipment for invasive plant species and, if any signs of invasive species are found, the equipment should be cleaned to remove those species. All soil, seeds, or vegetative matter on equipment will be removed prior to entering and exiting the work site and/or between each use in different water bodies. The contractor will notify CDFW immediately if an invasive species not previously known to occur within the work site is discovered during work activities by contacting CDFW.
- Work Area Footprint To the extent possible, construction personnel shall minimize the work area footprint and the duration at the work area site. Construction personnel shall use existing paved roads to access the



work area where present. Vehicles and equipment shall be parked on pavement, existing roads, and previously disturbed areas to the maximum extent feasible.

- <u>Litter Control Program</u> A litter control program will be instituted for the entire project site. All workers will ensure that their food scraps, paper wrappers, food containers, cans, bottles, and other trash are deposited in covered or closed trash and recycle containers. All garbage will be removed from the project site at the end of each workday, and construction personnel will not feed or otherwise attract wildlife to the area where construction activities are taking place.
- <u>Wildlife avoidance</u> To avoid harm and harassment of native species, workers and visitors will not bring pets onto the project site. Open fires (such as barbecues) shall also be prohibited in work areas.
- <u>Construction Disturbance Minimization</u> In order to reduce the impacts of noise, dust, and light, construction should only occur during the daylight hours and construction lights and design plans should be positioned as to only cast light within the project site and not onto surrounding areas. Noise-generating equipment will be located as far as possible from the environmentally sensitive habitat of the Preserve east of the project site and will be shut down when not in use.
- <u>Stormwater Best Management Practices</u> During project construction, proper stormwater Best Management Practices (BMPs) should be followed to preserve native vegetation, reduce disturbed soil areas, and establish proper spill covers, sediment and erosion control, material storage, and waste management.
- Environmental Education A training program prior to the start of construction is recommended for all crews and personnel who will be working in close proximity to any potential mountain lion, Coastal California Gnatcatcher, Golden Eagle, or sensitive bat (collectively referred to as sensitive species) habitat. This training will include going over the ecological significance and conservation status of the sensitive species, relevant mitigation measures, and safety protocols to follow in the event that a sensitive species is encountered on-site.
- <u>Wildlife Injury and Mortality</u> If an accidental injury or death of a sensitive species occurs, workers will
 immediately inform the approved biologist or on-site monitor and site supervisor. The approved biologist
 or on-site monitor will notify the appropriate contact person at CDFW within 24 hours of the incident. The
 report will provide the date and location of the incident, number of individuals taken, the circumstances
 resulting in the take, and any corrective measures taken to prevent additional take.

Additional Recommendations

If a sensitive species is observed onsite at any point, CDFW, the Project Manager, and Resident Engineer should be notified immediately. In the event that a sensitive species is observed during construction, project activities should be halted until the individual has passively moved through the project site and the appropriate agencies should be notified for further consultation and proceedings. If a sensitive species is identified during the construction phase, adequate seasonal restrictions and or disturbance buffers may be required to avoid disturbance, injury, or mortality.

Mountain Lion – Due to the cryptic nature of the species and the primarily nocturnal behavior, mountain lions tend to keep a safe distance from human activity and are rarely encountered by humans (Dickson et al. 2005). If a mountain lion is observed on site, the best course of action would be to stay in groups and allow the feline to pass through the site unharmed. The following Mountain Lion Safety Measures are also recommended in the event that a mountain lion is encountered on site:

• No one should perform work alone: crews should always work and travel in groups.



- Mountain lions should not be approached: most mountain lions will try to avoid a confrontation and the
 mountain lion shall be provided with a way to escape if enclosed on the project site.
- No one should run from a mountain lion: Running may stimulate a mountain lion's instinct to chase. Instead, standing and facing the lion is recommended.
- In the case of direct confrontation, it is recommended to make eye contact and to avoid crouching down or bending over. Mountain lions do not recognize standing humans as prey. However, a person squatting or bending over may resemble a four-legged prey animal.
- It is recommended that an individual appear larger and intimidating when confronted by a lion. Useful techniques include extending the arms, opening a jacket, or throwing stones, branches, or whatever is within reach without crouching or turning away.
- Speaking firmly in a loud voice and slowly waving the arms will also deter the mountain lion so that the lion does not mistake a person for prey and so that the lion recognizes that you may be a danger to it.

Coastal California Gnatcatcher – If more than one-year lapses between when the Coastal California Gnatcatcher protocol-level surveys were conducted and when construction is initiated, it is recommended that the protocol-level surveys be repeated prior to initiation of construction.

6.2 Nesting Birds

The following recommendations are provided for mitigating potential impacts to nesting birds:

- Any necessary clearing and removal of vegetation for project development should be conducted outside
 of the typical nesting season for birds.
- If any construction activities are scheduled to occur during the nesting bird season (February 1 through September 1), a qualified biologists should first conduct a survey to determine whether there are any active bird nests within 500 ft. of the project area.
- The nesting bird survey should occur no more than 7-days prior to beginning work and include a search for nesting birds within 500 ft. of the project area.
- If any active nests are observed, they should be avoided until after all young have fledged from the nest, or work should be monitored by a biologist to ensure against negative impacts to nesting birds.

6.3 Water Resources

The following recommendations are provided for mitigating potential impacts to water resources:

- <u>Stormwater Best Management Practices</u> During project construction, proper stormwater Best Management Practices (BMPs) should be followed to preserve native vegetation, reduce disturbed soil areas, and establish proper spill covers, sediment and erosion control, material storage, and waste management. Erosion prevention BMPs which may be implemented include, but are not limited to, straw wattle, sandbags, and silt fencing. More information on stormwater BMPs can be found at the following website:
 Los Angeles County Construction Site BMPs Manual (http://dpw.lacounty.gov/cons/specs/bmpmanual.pdf).
- <u>Preservation of Vegetation</u> Existing on-site vegetation should be preserved and maintained to the
 maximum extent feasible for the project to provide natural barriers to offsite transportation of sediments
 once construction is completed.



CERTIFICATION

This project was analyzed following rigorous scientific standards by BBI biologists. I certify that the information in this report and attached appendices fully and accurately represents the work of BBI. If you have any questions or require additional information, please feel free to contact us at (949) 272-0905 or raineybarton@bloombiological.com.

BLOOM BIOLOGICAL, INC.

Rainey Barton

Project Manager & Biologist



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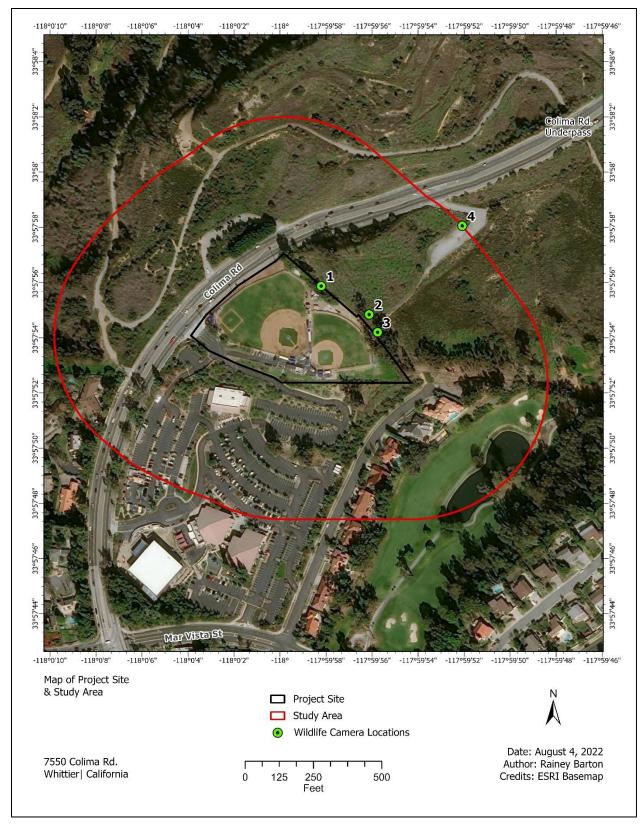
APPENDICES

APPENDIX A. PROJECT MAPS



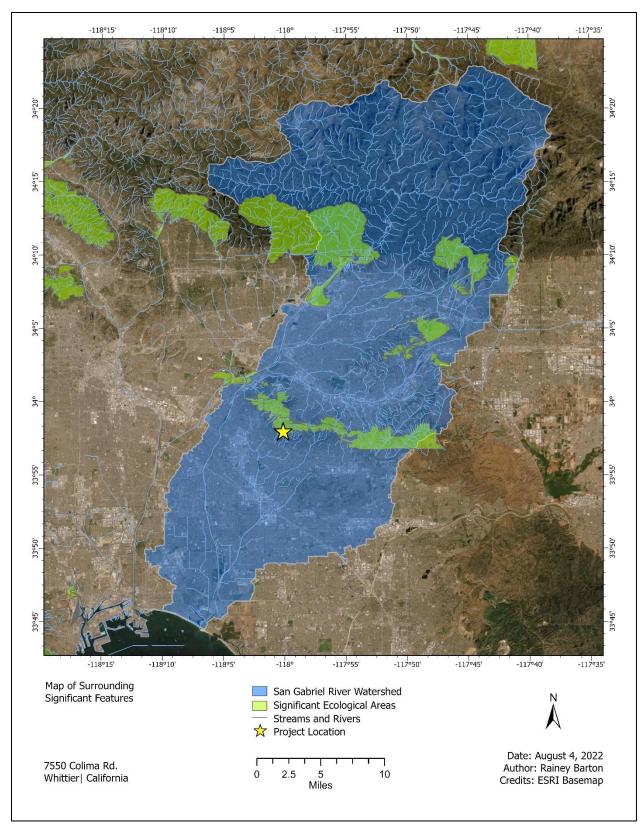
Map 1. Project location relative to the state (left) and county (right).





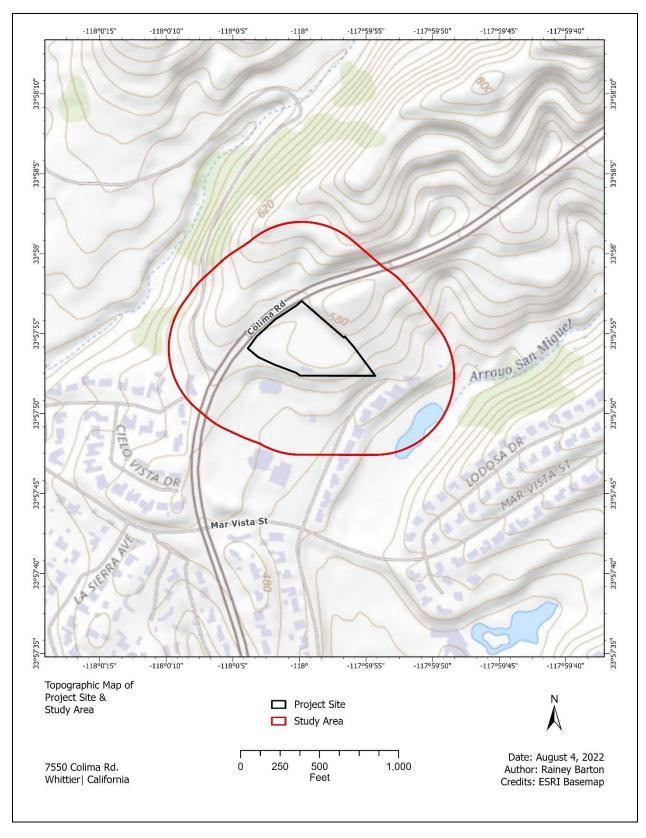
Map 2. Project site, study area, and wildlife camera locations.





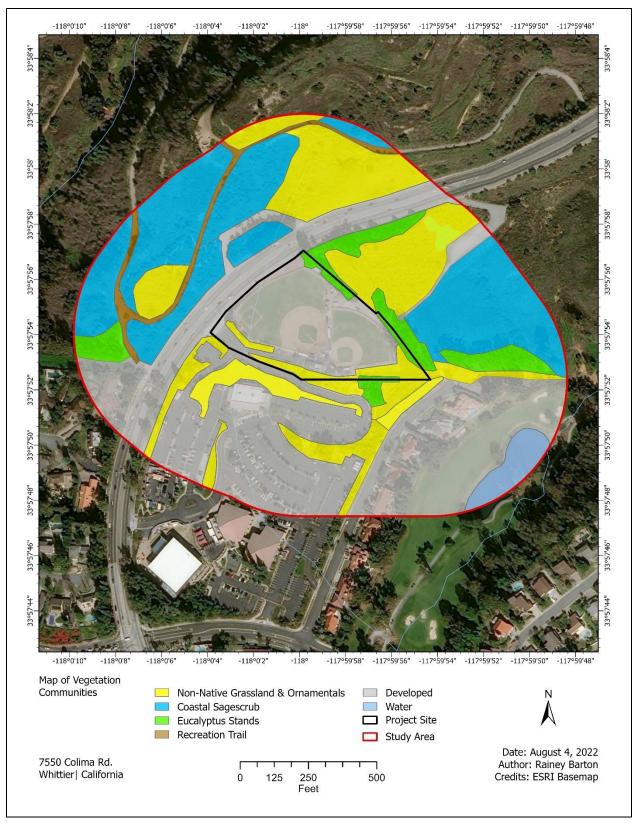
Map 3. Project site relative to the watershed, rivers, and Sensitive Environmental Areas.





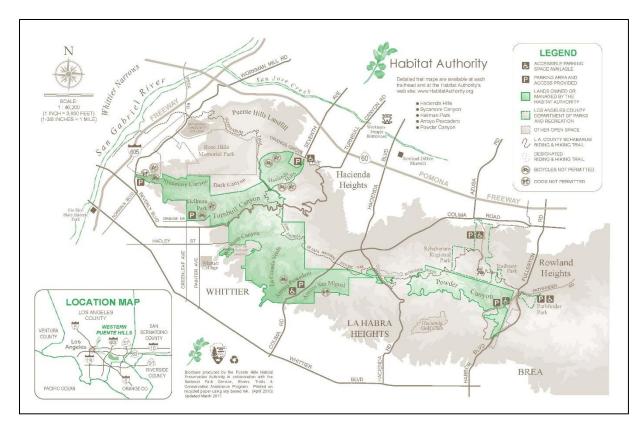
Map 4. Topographic map of the study area.





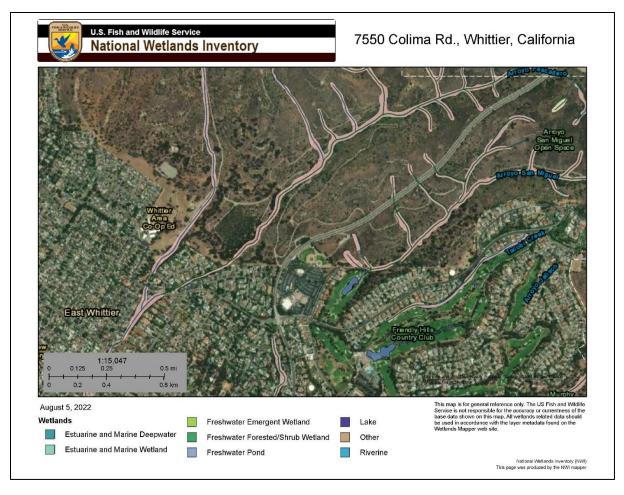
Map 5. Mapped vegetation communities within the study area.





Map 6. Puente Hills Preserve Map (Puente Hills Habitat Preservation Authority 2017).





Map 7. National Wetland Inventory Map (NWI 2022)



APPENDIX B. PROJECT FIGURES



Figure 1. Current Aerial Imagery of Project Location (Google Earth, August 2021)

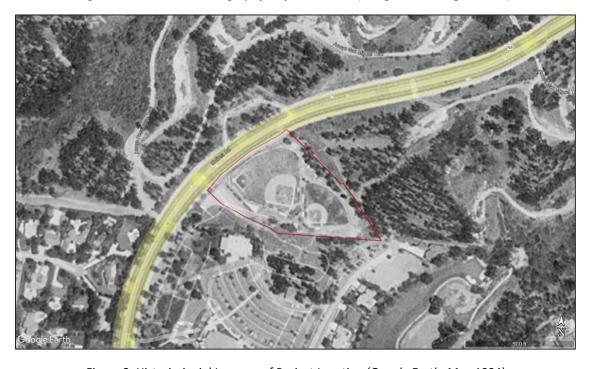


Figure 2. Historic Aerial Imagery of Project Location (Google Earth, May 1994)



APPENDIX C. PHOTOGRAPHS



Photo 1. View of the little league fields facing south.



Photo 2. View of the little league fields facing west.





Photo 3. View of the little league fields facing northwest.



Photo 4. View of the little league fields facing northeast.



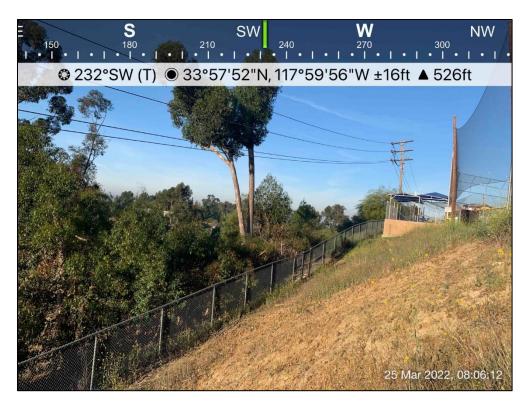


Photo 5. View of the southern extent of the little league fields facing southwest.



Photo 6. View of the southern extent of the little league fields and areas offsite to the southeast.





Photo 7. View of the southeastern extent of the little league fields facing north.



Photo 8. View of existing vegetation onsite.





Photo 9. View of the eastern extent of the little league fields facing northwest.

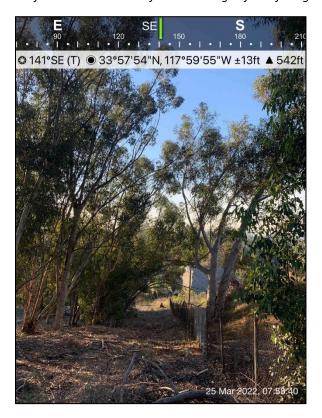


Photo 10. View of the eastern extent of the little league fields facing southeast.





Photo 11. View of habitat immediately to the east of the little league fields.



Photo 12. View of habitat immediately to the east of the little league fields.





Photo 13. View of habitat immediately to the east of the little league fields.



Photo 14. View of habitat across Colima Rd. to the north of the little league fields.





Photo 15. View of habitat across Colima Rd. to the north of the little league fields.



Photo 16. Game camera at Colima underpass to the east of the little league fields.





Photo 17. Game camera at Colima underpass to the east of the little league fields.



Photo 18. Colima underpass to the east of the little league fields.





Photo 19. Coyote detected adjacent to the project site.



Photo 20. Desert cottontail detected adjacent to the project site.





Photo 21. California ground squirrel detected adjacent to the project site.



Photo 22. Striped skunk detected adjacent to the project site.





Photo 23. Common Raven detected adjacent to the project site.



Photo 24. House cat detected adjacent to the project site.





Photo 25. Sparrow detected adjacent to the project site.



APPENDIX D. SOIL MAP

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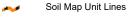
MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Unit Polygons



Soil Map Unit Points

Special Point Features

Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot

Landfill

Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

+ Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

:ND

Spoil Area

Stony Spot

Very Stony Spot

Wet Spot
 Other
 Othe

Special Line Features

Water Features

Δ

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24.000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Los Angeles County, California, Southeastern

Part

Survey Area Data: Version 8, Sep 13, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

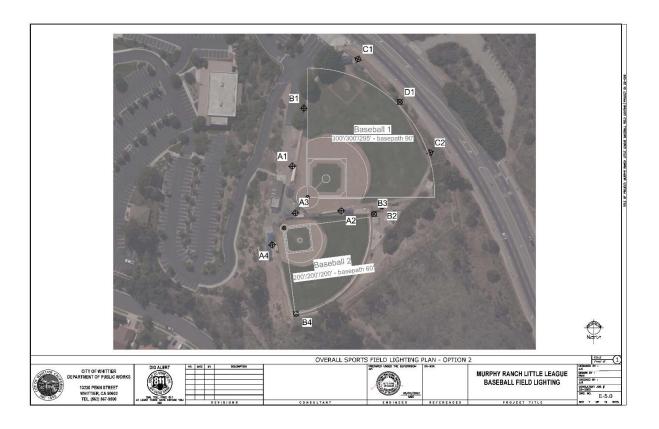
Date(s) aerial images were photographed: Mar 14, 2022—Mar 17, 2022

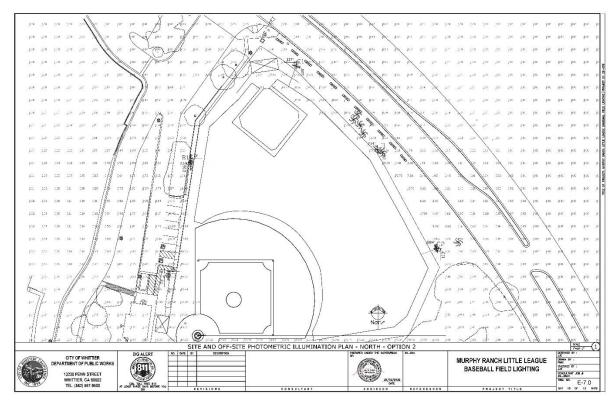
The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

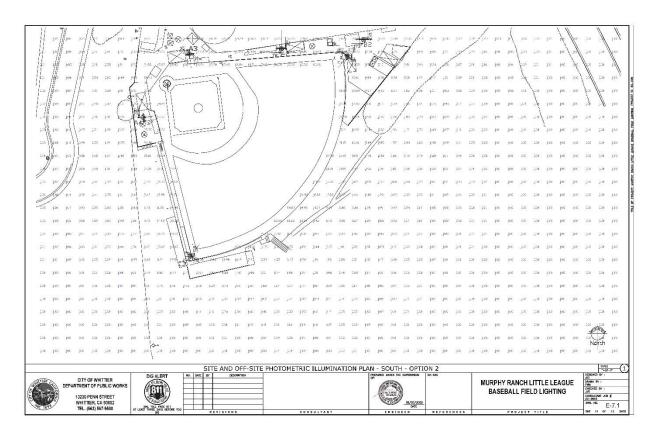
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
1141	Zaca-Apollo, warm complex, 20 to 55 percent slopes	0.5	8.6%
1232	Counterfeit-Urban land complex, 10 to 35 percent slopes, terraced	4.9	91.4%
Totals for Area of Interest		5.4	100.0%

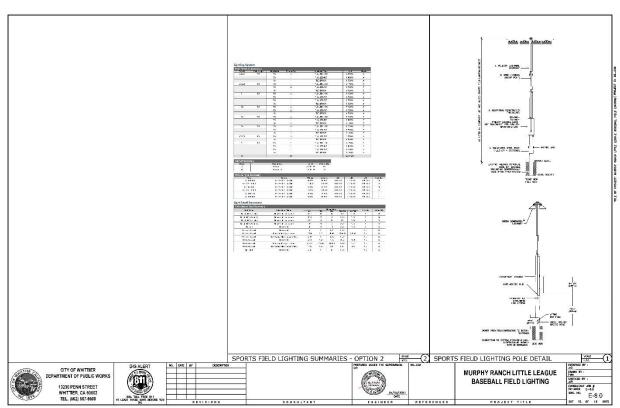
APPENDIX E. SITE PLANS













APPENDIX F. USFWS COASTAL CALIFORNIA GNATCATCHER SURVEY REPORT

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August 4, 2022

Stacey Love U.S. Fish & Wildlife Service 2177 Salk Avenue Carlsbad, CA 92008

[Delivered via email: stacey love@fws.gov]

SUBJECT: Results of protocol surveys for Coastal California Gnatcatcher (*Polioptila californica*), within the City of Whittier, California on approximately 18 acres adjacent to the Murphy Ranch Little League Field, near the intersection of Colima Rd. and Mar Vista St., Los Angeles County, California.

To whom it may concern,

Bloom Biological, Incorporated (BBI) was retained by Phil Martin and Associates to assess the presence of Coastal California Gnatcatcher (*Polioptila californica californica*) on the land adjacent to the Murphy Ranch Little League Field (7550 Colima Rd., Whittier, California) on behalf of the City of Whittier. The City of Whittier is proposing to install lighting surrounding the little league field and requested the analysis of the adjacent coastal sagescrub habitat for the presence of Coastal California Gnatcatcher. BBI conducted surveys for Coastal California Gnatcatcher within the Survey Area from May 16 to June 21, 2022, following the current protocol established by the U.S. Fish and Wildlife Service. The results of the surveys indicate that Coastal California Gnatcatcher was absent from the Survey Area in 2022. The following letter documents the methods, results, and conclusions of BBI's surveys.

SURVEY AREA DESCRIPTION

The Survey Area in this report is approximately 18 acres containing potential Coastal California Gnatcatcher habitat adjacent to the Murphy Ranch Little League Field, near the intersection of Colima Rd. and Mar Vista St. in Whittier, California. This area is within the southeastern portion of Los Angeles County. The Survey Area is located primarily in the U.S. Geological Survey (USGS) 7.5-minute *La Habra* quadrangle with a small portion extending into the *Whittier* quadrangle. Elevations in the Survey Area range from approximately 460 to 630 feet (140 to 192 meters) above sea level. The location of the Survey Area relative to the state and county is shown below in Figure 1. The limits of the Survey Area are shown in Appendices A, B, and C.



Figure 1. Survey Area relative to the state (left) and county (right).

The habitat within the Survey Area consists of high quality, restored, coastal sage scrub dominated by California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), laurel sumac (*Malosma laurina*), coyote brush (*Baccharis pilularis*), white sage (*Salvia apiana*), and toyon (*Heteromeles arbutifolia*). Photographs of the coastal sage scrub habitat within the Survey Area are provided in Appendix D.

CALIFORNIA GNATCATCHER NATURAL HISTORY SUMMARY

The California Gnatcatcher "is a local, uncommon, obligate resident of arid coastal scrub below about 500 m (1,500 ft) from eastern Orange and southwestern Riverside Cos. south through the coastal foothills of San Diego Co.; along the immediate coast at Palos Verdes Peninsula, Los Angeles Co.; at Camp Pendleton and in Tijuana River Valley, San Diego Co. may still occur along lower, coastal slopes of San Gabriel and San Bernardino Mts., Los Angeles and San Bernardino Cos., but status uncertain (Grinnell and Miller 1944, Garrett and Dunn 1981, Atwood 1990, 1993)."¹

The California Gnatcatcher was listed as Threatened under the Federal Endangered Species Act in 1993 (58 FR 16742-16757) with Critical Habitat designated in 2000 (65 FR 63680-63743). Critical Habitat was revised in 2007 (72 FR 72010-72213).

METHODS

A total of six (6) presence/absence Coastal California Gnatcatcher surveys were conducted by Peter H. Bloom, Ph.D. (Permit # TE-787376-14) in accordance with service protocol for non-NCCP areas (Service 1997). All potential Coastal California Gnatcatcher habitat within the Survey Area was surveyed during the breeding season (May 15 to June 30) with at least one week between survey visits. The biologist surveyed no more than 18 acres per day, surveying an average of 3.6 acres per hour. The surveys were conducted during the morning hours between 6:00 a.m. and 12:00 p.m. Dr. Bloom slowly walked through the survey

¹ California Department of Fish and Game. 2010. CWHR version 8.1 personal computer program. California Interagency Wildlife Task Force, Sacramento.



area, pausing frequently to play Coastal California Gnatcatcher vocalizations from Merlin Bid ID© broadcast from a portable speaker within suitable habitat, the objective being to elicit a response from silent individuals that might not otherwise be detected.

Weather conditions and time of day were appropriate for maximizing the likelihood of Coastal California Gnatcatcher detection and are presented in Table 1. Temperatures ranged from 54 to 79° F.

Table 1. Field Dates, Times, and Weather Conditions

Date	Time	Weather	Biologists
05/16/2022	0545-1100h	Start: 60° F, 100% cloud cover, Calm	Pete Bloom
		End: 70° F, 100% cloud cover, Calm	
		No rain; No fog; No snow	
05/23/2022	0545-1100h	Start: 57° F, 100% cloud cover, Calm	Pete Bloom
		End: 62° F, 100% cloud cover, Calm	
		No rain; No fog; No snow	
05/30/2022	0500-1100h	Start: 54° F, 100% cloud cover, Calm	Pete Bloom
		End: 68° F, 100% cloud cover, Calm	
		No rain; No fog; No snow	
06/07/2022	0600-1100h	Start: 55° F, 100% cloud cover, Calm	Pete Bloom
		End: 69° F, 100% cloud cover, Calm	
		No rain; No fog; No snow	
06/14/2022	0630-1200h	Start: 58° F, 100% cloud cover, Calm	Pete Bloom
		End: 73° F, 80% cloud cover, Calm	
		No rain; No fog; No snow	
06/21/2022	0600-1200h	Start: 65° F, 70% cloud cover, Calm	Pete Bloom
		End: 79° F, 20% cloud cover, Calm	
		No rain; No fog; No snow	



RESULTS & DISCUSSION

No Coastal California Gnatcatcher were detected during the survey. There is no suitable habitat for Coastal California Gnatcatcher within the Murphy Ranch Little League Field property. High quality suitable habitat is present immediately to the west of the little league field which consists of a healthy, restored, coastal sagescrub community. Additional high-quality coastal sagescrub is present across Colima Rd. approximately 600 ft. to the north of the little league field where Coastal California Gnatcatcher presence was reported to the California Natural Diversity Database (CNDDB) in 2008, 2009, and 2017 (CDFW 2022).

A list of all wildlife species detected during the survey is provided as Appendix E.

If you have any questions or comments pertaining to this letter, please call Dr. Peter H. Bloom at (949) 272-0905.

Sincerely,

BLOOM BIOLOGICAL, INC.

Poter H. Bloom

Peter H. Bloom Zoologist/President

CERTIFICATION

I certify that the information in this survey report and attached appendices fully and accurately represents my work. If you have any questions or require additional information, please feel free to contact me at (949) 272-0905 or petebloom@bloombiological.com.

Pot H. Bloom

TE-787376-14, SC-000221

Peter H. Bloom, Ph.D.

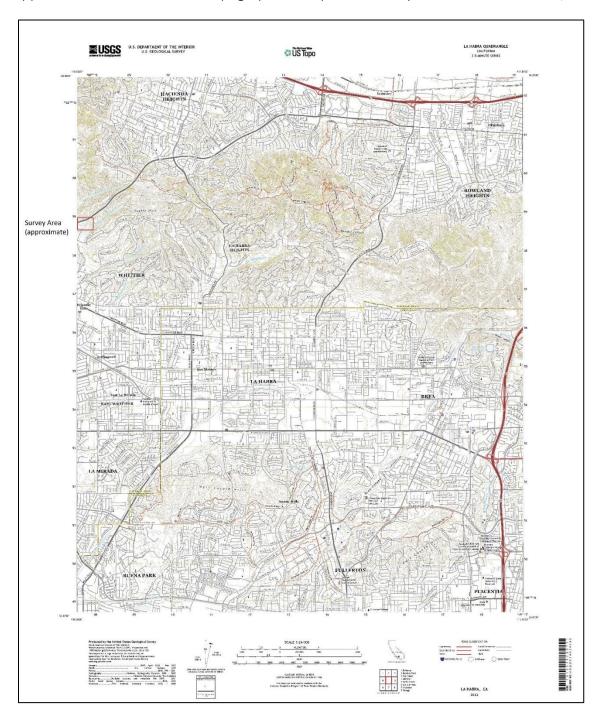


LITERATURE CITED

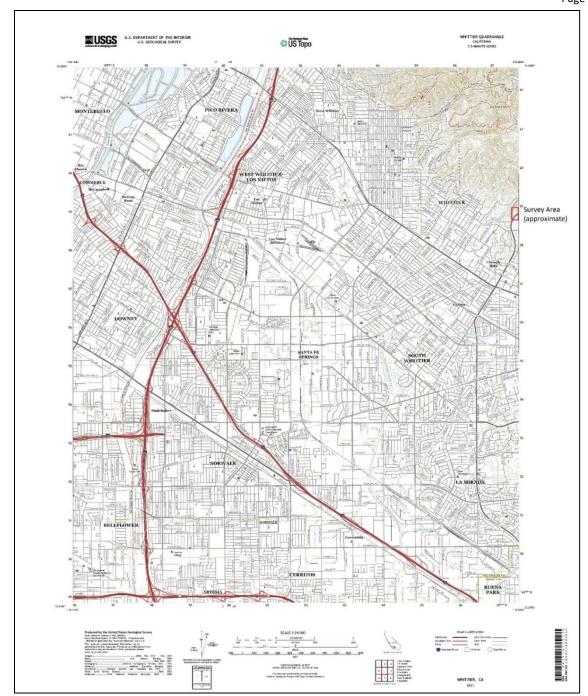
- Atwood, J. L. 1990. Status review of the California gnatcatcher (Polioptila californica). Unpubl. tech. rep., Manomet Bird Observatory, Manomet, MA. 79pp.
- Atwood, J. L. 1993. California gnatcatchers and coastal sage scrub: the biological basis for endangered species listing. Pages 149-169 in J. E. Keeley, ed. Interface between ecology and land development in California. Southern Calif. Acad. Sci., Los Angeles.
- California Department of Fish and Wildlife (CDFW). 2022. California Natural Diversity Database (CNDDB) RareFind Commercial version dated July 1, 2022. Retrieved July 25, 2022.
- Garrett, K., and J. Dunn. 1981. Birds of southern California. Los Angeles Audubon Soc. 408pp.
- Grinnell, J., and A. H. Miller. 1944. The distribution of the birds of California. Pac. Coast Avifauna No. 27. 608pp.
- U.S. Fish and Wildlife Service (Service). 1997. Coastal California gnatcatcher (*Polioptila californica californica*) presence/absence survey protocol. Unpublished report, Carlsbad Field Office, Carlsbad, California.



Appendix A. USGS 7.5 Minute Topographical Maps with Survey Area Demarcated 1:24,000

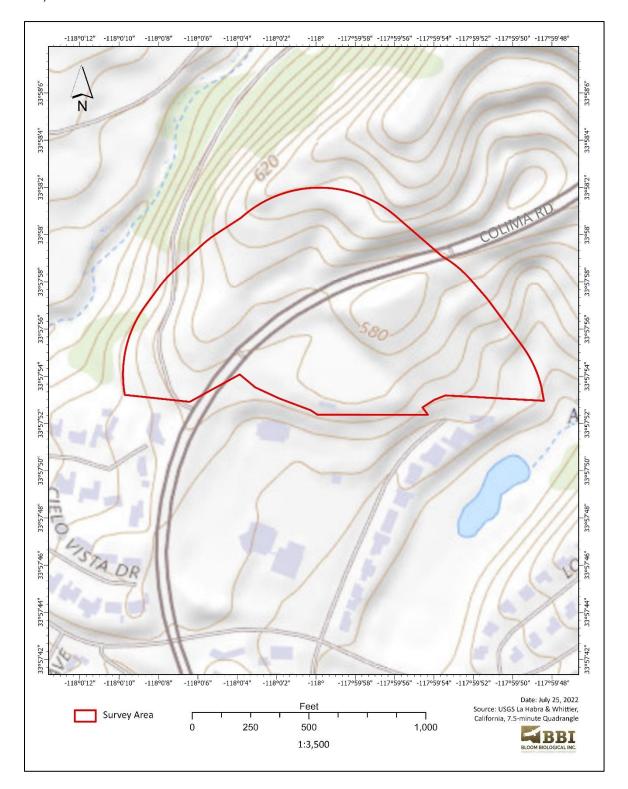






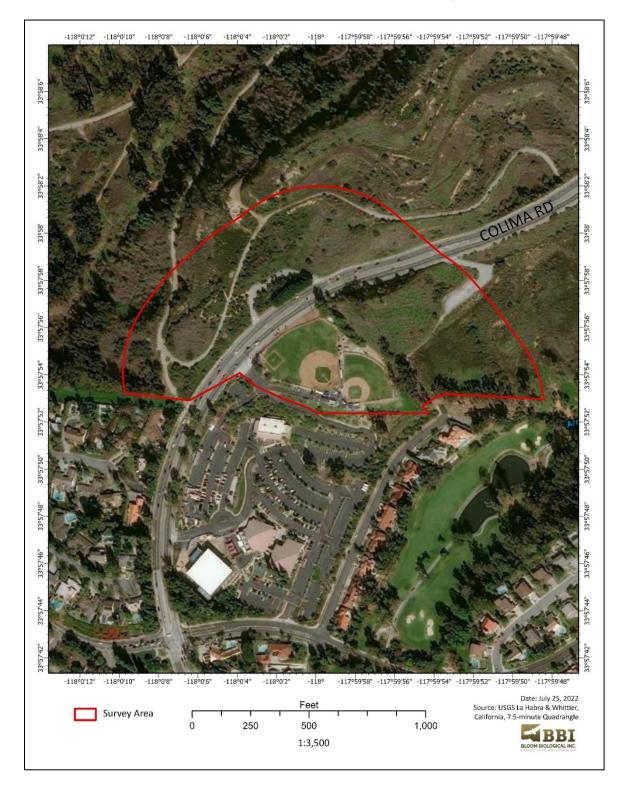


APPENDIX B. USGS 7.5 MINUTE TOPOGRAPHICAL MAP WITH SURVEY AREA DEMARCATED 1:3,500





APPENDIX C. IMAGERY MAP WITH SURVEY AREA DEMARCATED 1:3,500





APPENDIX D. SITE PHOTOGRAPHS



Photo 1. Coastal sagescrub vegetation community within the Survey Area.



Photo 2. Coastal sagescrub vegetation community within the Survey Area.





Photo 3. Coastal sagescrub vegetation community within the Survey Area.

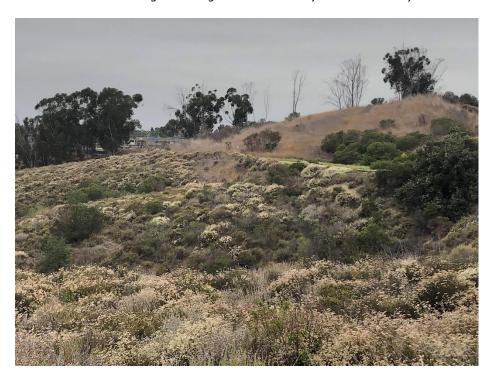


Photo 4. Coastal sagescrub vegetation community within the Survey Area.



APPENDIX E. FAUNAL COMPENDIUM

This faunal compendium lists 20 bird, 4 mammal, and 1 reptile species detected by BBI during the Coastal California Gnatcatcher surveys conducted between May 16 and June 21, 2022.

Birds

Galliformes | Odontophoridae

• California Quail Callipepla californica

Columbiformes | Columbidae

• Mourning Dove Zenaida macroura

Apodiformes | Trochilidae

• Allen's Hummingbird Selasphorus sasin

Accipitriformes | Accipitridae

• Red-tailed Hawk Buteo jamaicensis

Passeriformes | Corvidae

- California Scrub Jay Aphelocoma californica
- American Crow Corvus brachyrhynchos
- Common Raven Corvus corax

Passeriformes | Aegthalidae

• Bushtit Psaltriparus minimus

Passeriformes | Troglodytidae

- House Wren Troglodytes aedon
- Bewick's Wren *Thryomanes bewickii*

Passeriformes | Mimidae

- California Thrasher Toxostoma redivivum
- Northern Mockingbird Mimus polyglottos

Passeriformes | Sturnidae

• European Starling Sturnus vulgaris

Passeriformes | Fringillidae

- House Finch Haemorhous mexicanus
- Lesser Goldfinch Spinus psaltria

Passeriformes | Passerellidae

- Song Sparrow Melospiza melodia
- California Towhee Melozone crissalis
- Spotted Towhee *Pipilo maculatus*

Passeriformes | Icteridae

• Bullock's Oriole Icterus bullockii

Passeriformes | Turdidae

• Western Bluebird Sialia mexicana



Mammals

Artiodactyla | Cervidae

• Mule deer Odocoileus hemionus

Carnivora | Canidae

• Coyote Canis latrans

Rodentia | Cricetidae

• Dusky-footed woodrat Neotoma fuscipes

Rodentia | Sciuridae

• California ground squirrel Spermophilus beecheyi

Reptiles

Squamata | Phrynosomatidae

• Western Fence Lizard Sceloporus occidentalis



APPENDIX G. FLORAL COMPENDIUM

This compendium lists 24 plant species detected intermittently by BBI between March 25 and July 19, 2022.

Plants

Arecales | Arecaceae

• Mexican fan palm Washingtonia robusta

Asterales | Asteraceae

- California Encelia Encelia californica
- California sagebrush Artemisia californica
- Coyote brush Baccharis pilularis
- Tocalote Centaurea melitensis

Boraginales | Boraginaceae

• Fiesta flower *Pholistoma auritum*

Brassicales | Brassicaceae

Mustard Hirschfeldia incana

Caryophyllales | Amaranthaceae

• Russian thistle Salsola australis

Caryophyllales | Polygonaceae

• California buckwheat *Eriogonum fasciculatum*

Dipsacales | Adoxaceae

• Blue Elderberry Sambucus nigra

Fabales | Fabaceae

- Annual yellow sweetclover Melilotus indicus
- Blue palo verde Parkinsonia florida

Lamiales | Bignoniaceae

• Acacia Acacia spp.

Lamiales | Lamiaceae

- Black sage Salvia mellifera
- Purple sage Salvia leucophylla
- White sage Salvia apiana

Lamiales | Oleaceae

• Olive *Olea* spp.

Myrtales | Myrtaceae

• Eucalyptus Eucalyptus spp.

Pinales | Pinaceae

• Aleppo pine *Pinus halepensis*

Poales | Poaceae

- Wild oat Avena fatua
- Red brome Bromus rubens

Rosales | Moraceae

• Fig *Ficus* spp.

Rosales | Rosaceae

• Toyon Heteromeles arbutifolia

Sapindales | Anacardiaceae

- Laurel sumac Malosma laurina
- Peruvian pepper tree Schinus molle

Sapindales | Simaroubaceae

• Tree of heaven Ailanthus altissima



APPENDIX H. FAUNAL COMPENDIUM

This compendium lists 28 bird, 7 mammal, and 1 reptile species detected intermittently by BBI between March 25 and July 19, 2022.

Birds

Anatidae | Anseriformes

Mallard Anas platyrhynchos

Galliformes | Odontophoridae

• California Quail Callipepla californica

Columbiformes | Columbidae

• Mourning Dove Zenaida macroura

Apodiformes | Trochilidae

• Allen's Hummingbird Selasphorus sasin

Accipitriformes | Accipitridae

- Cooper's Hawk Accipiter cooperii
- Red-shouldered Hawk Buteo lineatus
- Red-tailed Hawk Buteo jamaicensis

Piciformes | Picidae

• Northern Flicker *Colaptes auratus*

Passeriformes | Tyrannidae

• Western Kingbird Tyrannus verticalis

Passeriformes | Corvidae

- California Scrub Jay Aphelocoma californica
- American Crow Corvus brachyrhynchos
- Common Raven Corvus corax

Passeriformes | Aegthalidae

• Bushtit *Psaltriparus minimus*

Passeriformes | Paradoxornithidae

• Wrentit Chamaea fasciata

Passeriformes | Troglodytidae

- House Wren Troglodytes aedon
- Bewick's Wren Thryomanes bewickii

Passeriformes | Sturnidae

• European Starling Sturnus vulgaris

Passeriformes | Mimidae

- California Thrasher Toxostoma redivivum
- Northern Mockingbird Mimus polyglottos

Passeriformes | Turdidae

• Western Bluebird Sialia mexicana

Passeriformes | Fringillidae

- House Finch *Haemorhous mexicanus*
- Lesser Goldfinch Spinus psaltria

Passeriformes | Passerellidae

- White-crowned Sparrow Zonotrichia leucophrys
- Song Sparrow Melospiza melodia
- California Towhee Melozone crissalis
- Spotted Towhee Pipilo maculatus

Passeriformes | Icteridae

Bullock's Oriole Icterus bullockii



Passeriformes | Parulidae

• Yellow-rumped warbler Setophaga coronata

Mammals

Artiodactyla | Cervidae

• Mule deer Odocoileus hemionus

Carnivora | Canidae

• Coyote Canis latrans

Carnivora | Felinae

• Domestic cat

Carnivora | Mephitidae

• Striped skunk Mephitis mephitis

Lagomorpha | Leporidae

• Desert cottontail Sylvilagus audubonii

Rodentia | Cricetidae

• Dusky-footed woodrat Neotoma fuscipes

Rodentia | Sciuridae

• California ground squirrel Spermophilus beecheyi

Reptiles

Squamata | Phrynosomatidae

• Western fence lizard Sceloporus occidentalis

