BIOLOGICAL ASSESSMENT

and

IMPACT ANALYSIS

of the proposed

PALM SPRINGS COUNTRY CLUB
Residential Development

Located Within The

CITY OF PALMS SPRINGS
RIVERSIDE COUNTY, CALIFORNIA

Prepared For:

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EXECUTIVE SUMMARY

A proposed residential development contained within the boundaries of a long-abandoned golf course within the city limits of Palm Springs necessitated a biological survey and impact analysis focusing on approximately 120 acres and four species not covered under the existing Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP).

None of the four, non-covered species or any listed or sensitive species were found in or near the project boundaries and no sensitive habitats were encountered within the project's zone of disturbance. However, the project site is considered suitable habitat for the burrowing owl, a CVMSHCP non-covered species protected under the Migratory Bird Treaty Act. Therefore, a burrowing owl clearance survey is recommended not more than 30 days prior to site disturbance (grading, grubbing, etc.) if site disturbance occurs after September 1, 2013. Prior to that date a clearance survey is not recommended. If the burrowing owl is detected during a clearance survey it is further recommended that a biological monitor be present during site disturbance to prevent harm to burrowing owls.

The project's area of disturbance does not lie within a Conservation Area of the CVMSHCP. However, the easternmost boundary of the project site abuts the Whitewater Floodplain Conservation Area of the Plan and is subject to Plan requirements.

Under the rules of the CVMSHCP, this project may be required to pay a per-dwelling mitigation fee to offset impacts to biological resources. The precise fee to be paid will be determined by the City of Palm Springs and, if applicable, will be based upon the number of lots or parcels in the project area and the mitigation fee rate at the time a permit is approved.

I. INTRODUCTION

On April 25, 2013, the firm of James W. Cornett - Ecological Consultants was retained by PS Country Club, LLC, to conduct a biological survey on approximately 120 acres at the northern edge of residential development just east of North Sunrise Way in the City of Palm Springs, Riverside County, California. Specifically, the project site is contained within the southwestern quarter of Section 36, Range 4 East, Township 4 South and the northeastern quarter of Section 1, Range 4 East, Township 4 South; San Bernardino Baseline and Meridian. The regional location is shown in Figure 1, the area location in Figure 2, and the project site boundaries in Figure 3. Photographs of the project site are shown in Figures 4-7 on page 9.

This study was included as part of an environmental assessment mandated by the California Environmental Quality Act (CEQA). The biological survey and impact analysis were designed to ascertain the impacts of a new residential development on the biological resources of the site and immediate area and specifically on the four species not covered or only partly covered under the Coachella Valley Multiple Species Habitat Conservation Plan.

Specifically, the purposes of the biological survey were as follows.

Determine the vascular plant and vertebrate animal species that occur on, and immediately adjacent to, the project site;

Ascertain the presence of any state or federal special-status plant or animal species including the four species not covered or only partly covered under the CVMSHCP;

Ascertain the existence of other significant biotic elements, corridors or communities including dry washes and other desert riparian habitats;

If necessary, recommend measures to mitigate significant adverse impacts of the project on special status species or unique biotic elements or communities.

Figure 1. Regional Location

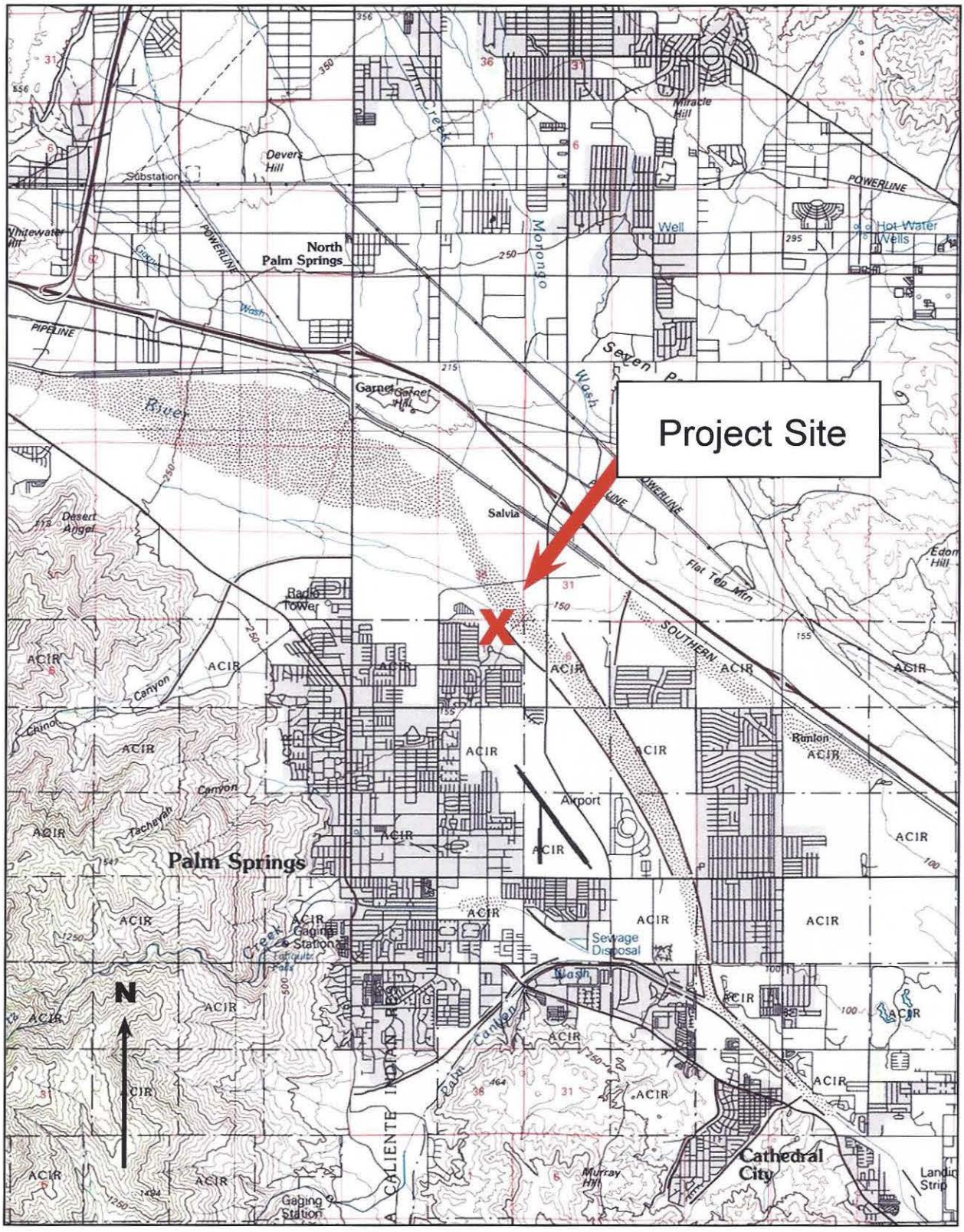

Figure 2. Area Location

Figure 3. Project Site

Figures 4-7. Project Site Images

Figure 4. View across site to north.

Figure 5. View across site to east.

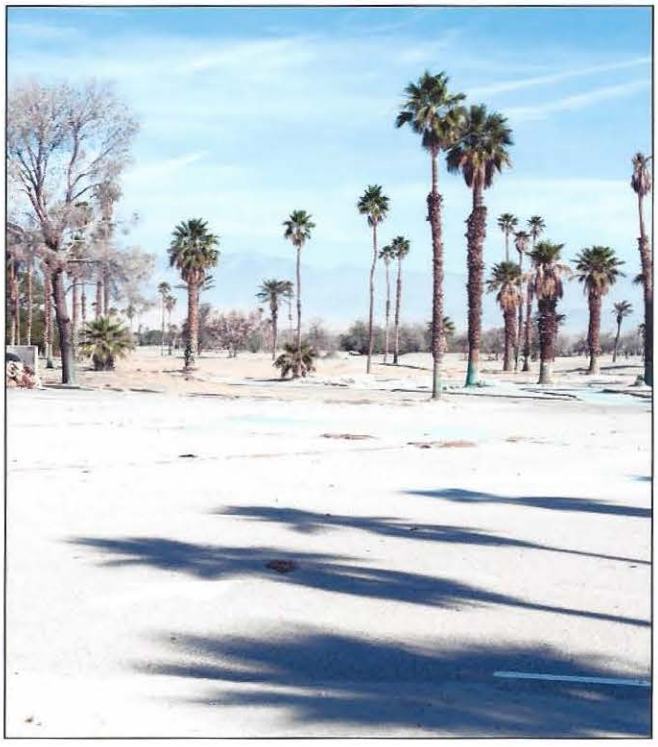

Figure 6. View across site to northwest.

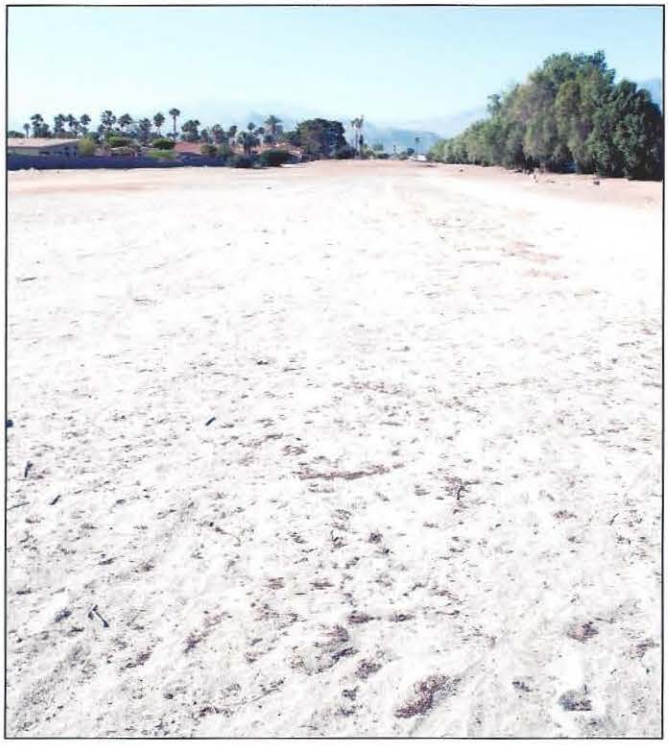

Figure 7. View across site to south.

II. SITE AND PROJECT DESCRIPTIONS

Climate

The project area lies within the confines of a geographical region known as the Colorado Desert, a subdivision of the Sonoran Desert (Jaeger, 1957). As is typical of this subdivision, annual rainfall averages approximately five inches (U. S. Weather Bureau, 2013). Most precipitation falls during winter and spring with occasional summer thundershowers that account for approximately one-fifth of the annual total. Winter days are mild, averaging 70 degrees Fahrenheit. Winter nights occasionally drop to near freezing. The month of July brings the hottest temperatures with daytime highs averaging 107 degrees F.

Physical Features

The project site is situated on an alluvial plain created from runoff waters emanating from the San Jacinto and San Bernardino mountains located to the west. The site is best described as flat and gently sloping from the northwest to southeast. Soils are comprised of sands and gravels containing occasional stones and rocks.

The highest point within the zone of disturbance is approximately 520 feet at the northwestern end of the project area and 484 feet at the most southeasterly point.

There are no naturally occurring springs or permanent aquatic habitats on or adjacent to the project site. There is a blue-line stream course, as depicted on United States Geological Survey maps, immediately north of the area of disturbance. However, the project does not extend north or east of the Whitewater River Levee that separates the project and the Whitewater Wash. Therefore there are no "waters of the U.S." or streambeds that will be impacted by this project. It should not be necessary to obtain permits from either the federal or state governments for this purpose.

Surrounding Lands

The project area is nearly surrounded by residential developments. However, the easternmost boundary is comprised of the Whitewater River Levee and channel. The Whitewater Floodplain Conservation Area (of the CVMSHCP) abuts this eastern boundary of the project site.

Existing Impacts

Nearly the entire project site has been historically impacted by the presence of a golf course

that was abandoned many years ago. The course was completely turfed with no islands of natural vegetation. After the cessation of watering, the turf expired and the barren ground was coated with a dust-suppression compound. The compound continues to be in evidence today. Some of the fairway trees have survived, some have died and some have been cut down.

Unleashed dogs were observed on the expired golf course on several occasions. Some illegal dumping was in evidence as was some off-road-vehicle use.

A small patch of native vegetation, approximately fourteen acres in size, exists along the northeastern boundary of the project site.

Project Description

The project proponent intends to convert the abandoned golf course into a residential development with accompanying paved access roadways. A public park will be included in the project design.

III. SURVEY METHODS

Prior to the initiation of field work, reviews of the literature and institutional records were conducted to determine the biological resources that exist within the area and to determine the possible occurrence of proposed and officially listed species (see References section). Records, collections and/or staff of the University of California at Riverside Herbarium, the Living Desert, the Boyd Deep Canyon Desert Research Center, the Coachella Valley Association of Governments and the California Natural Diversity Database (update 2013) were consulted for specific information on occurrence.

General and focused biological surveys were conducted by walking parallel transects at ten yard intervals through the project site and one hundred yards beyond site boundaries unless impeded by private residences or posted private property. The intensity of the surveys followed the state and federal guidelines for desert tortoise and burrowing owl surveys, two special-status species known to occur in Palm Springs and the Coachella Valley and possibly within the project site boundaries. Surveys were on conducted on April 26, 27 and 28, and May 1, 2 and 3, 2013. Night surveys were conducted on the evenings of April 26, 27 and 28, 2013. Night surveys included black light trap surveys for insects and other arthropods. In addition, 25 live-animal traps (which capture animals unharmed) for large and small mammals were set within the project site for twenty-four hour periods on April 26 and 27, 2013. Survey dates coincided with the most favorable times of year to find plants in bloom (or in fruit) and animals during their active seasons.

Plant surveys were conducted simultaneously with animal surveys.

Though scientific name changes occur as discoveries are made in plant and animal taxonomy, scientific names used in this report are taken from the standard and most available references describing the species found in Southern California—*The Jepson Manual Second Edition* published in 2012; Tibor's *Inventory of rare and endangered plants of California* published in 2001; Stebbins' *A Field Guide to Western Reptiles and Amphibians* published in 2003; Peterson's *Western Birds* published in 1990; and E. W. Jameson and H. J. Peeters *California Mammals* published in 2004. Plant common names used in this report are taken from Baldwin (2012), Jaeger (1969), Munz (1961 and 1974) and Tibor (2001). Animal common names are taken from Stebbins (2003), Peterson (1990) and Jameson and Peeters (2004).

Field work was conducted by James W. Cornett (M.S., biology) and Anthony Ryan (B.S., wildlife biology). Plant identifications were made by Jon Stewart and Mr. Cornett. The literature review was conducted by Terry Belknap. The report was written by Mr. Cornett.

IV. PLANT SURVEY RESULTS

A single native plant association was found within the project boundaries: the Sonoran Creosote Bush Scrub community. The community occupies approximately 14 acres of the project disturbance area and is shown in Figure 3. It is represented onsite by the burrobush (*Ambrosia dumosa*), encelia (*Encelia farinosa*), wingscale (*Atriplex canescens*) and creosote bush (*Larrea tridentata*).

The remainder of the site, approximately 106 acres, consists of a long-abandoned golf course lightly covered with a dust-suppression compound. Plant life on the abandoned golf course consists of scattered native and exotic weed species including Sahara mustard (*Brassica tournefortii*), Russian thistle (*Salsola kali*) and Schismus grass (*Schismus barbatus*).

Some of the originally planted tree species have survived on the abandoned golf course including tree tamarisk (*Tamarix aphylla*), Mexican fan palms (*Washingtonia* robusta) and olive tree (*Olea europaea*).

The *Inventory of Rare and Endangered Plants of California*, published by the California Native Plant Society (2001) lists six sensitive plant species that have been found in the region and are known to occur in habitats similar to those found on the project site. Their status on the project site is described below.

1. The Coachella Valley milk vetch (*Astragalus lentiginosus coachellae*) has been listed as an endangered species by the federal government. The subspecies is confined to the Coachella Valley in areas of loose, windblown sand. No evidence of this species was found on site and the stabilized sands of the project site are considered unsuitable habitat for this subspecies of milkvetch. It was concluded that the Coachella Valley milk vetch did not occur on the project site.

2. The flat-seeded spurge (*Chamaesyce platysperma*) is an annual herb belonging to the Spurge Family. It is confined to areas of loose, windblown sand in the Sonoran Desert. No evidence of this species was found and the stabilized sands that characterize the project site are considered unsuitable habitat for this species. It was concluded that the flat-seeded spurge did not occur on the project site. The flat-seeded spurge is not given special status by the federal government. The California Native Plant Society considers it a rare species.

3. The ribbed cryptantha, *Cryptantha costata*, is an annual herb belonging to the Borage Family. It is generally associated with areas of loose, fine sand within the eastern Mojave Desert and Sonoran Desert. No evidence of this species was found on site and the stabilized sands of the project site are considered unsuitable habitat for this species. It was concluded that it did not occur within the project boundaries. The ribbed cryptantha is not given special status by the federal government but is considered rare by the California Native Plant Society.

4. The glandular ditaxis, *Ditaxis clariana*, is a perennial herb belonging to the Spurge Family. It is generally found below 500 feet on sandy flats within the Coachella Valley. No evidence of this species was found. It was concluded that it did not occur on site. The glandular ditaxis is not given special status by the federal government but is considered rare by the California Native Plant Society.

5. The California ditaxis (*Ditaxis californica*) is a perennial herb belonging to the Spurge Family. It is believed to occur between elevations of 400 to 3,000 feet on coarse soils within the Creosote Scrub Community of the Colorado Desert. It could thus occur within the project area though no individuals were found. It is not given special status by the federal government but the California Native Plant Society considers it a rare species.

6. Thurber's pilostyles, *Pilostyles thurberi,* is a parasitic perennial herb belonging to the Rafflesia Family. It is generally found parasitizing members of the genus *Psorothamnus* at elevations below 1,000 feet. It could thus occur in the project area though no evidence of it was found. Thurber's pilostyles is not given special status by the federal government though the California Native Plant Society considers it a rare species.

In summary, no individuals of special-status plant species were found within, or immediately adjacent to, the project site. None are expected.

A complete list of vascular plant species (excluding species used in ornamental landscaping) located within the project boundaries can be found in Table 1 of the Appendix. Taxonomic nomenclature follows The Jepson Manual (2012). Common names are taken from Jaeger (1969), Jepson (1993), Munz (1974), or Tibor (2001).

V. ANIMAL SURVEY RESULTS

The fauna of the project site and surrounding vicinity was composed of species typical of impacted and disturbed land in the Colorado Desert of California.

Invertebrates

Encountered invertebrates included the giant hairy scorpion (*Hadrurus arizonensis*), eleodes beetle (*Eleodes armata*), harvester ant (*Pogonomyrmex californicus*) and walking stick (*Parabacillus hesperus*).

Two insect species known to occur within the Coachella Valley have been placed on the California Department of Fish and Game's *Special Animals* list. They are the Coachella giant sand treader cricket (*Macrobaenetes valgum*) and Coachella Valley Jerusalem cricket (*Stenopelmatus cahuilaensis*). Neither of these species was encountered. The inability to locate these species most likely reflects the lack of suitable habitat. Both species are associated with windblown sand deposits as opposed to the compacted sand and disturbed environments of the project site.

The United States Fish & Wildlife Service has expressed concern about a third insect species, the Endangered Casey's June beetle (*Dinacoma caseyi*). The beetle is not covered under the CVMSHCP. Black light trapping surveys within the project boundaries failed to yield any individuals of this species.

Reptiles

Encountered or detected reptiles included the side-blotched lizard (*Uta stansburiana*), western whiptail (*Cnemidophorus tigris*), desert iguana (*Dipsosaurus dorsalis*) and sidewinder rattlesnake (*Crotalus cerastes*).

Two lizard species of special concern to state and federal government agencies known to occur within the Coachella Valley are the Coachella Valley fringe-toed lizard (*Uma inornata*) and flat-tailed horned lizard (*Phrynosoma mcalli*). These two species were not detected. This likely reflects the fact that the soils of the project site are too compacted. Both species prefer areas of very loose windblown sand.

Desert Tortoise

A concerted effort was made to locate sign of the officially Threatened desert tortoise (*Goperhus agassizi*) following the intensity of effort described in the official protocol established by the U.S. Fish & Wildlife Service. No evidence of the desert tortoise was found within the zone of disturbance or buffer area. However, the desert tortoise is known to occur on the alluvial fan and bajada emanating from Chino Canyon less than three miles west of the project site. The severely impacted nature of most of the project site is the likely reason for the tortoises absence on or near the project site. Tortoises are not normally found in areas of high human impact such as the abandoned golf course.

Although the desert tortoise is a covered species under the CVMSHCP, clearance surveys for this species are required prior to the disturbance of a project site. However, the lack of any evidence of tortoise presence on this site negates the need for a clearance survey in this instance.

Birds

Observed birds within the project area included black-throated sparrow (*Amphispiza bilineata*), Say's phoebe (*Sayornis* saya), mourning dove (*Zenaida macroura*), house finch (*Carpodacus mexicanus*) and common raven (*Corvus corax*).

Three bird species, designated by the State of California as species of special concern, were considered candidates for site occupation: burrowing owl (*Athene cunicularia*), loggerhead shrike (*Lanius ludovicianus*) and LeConte's thrasher (*Toxostoma lecontei*). None of these three species were observed or detected on or immediately adjacent to the project area. The absence of the burrowing owl is unexplained as it is often found in highly disturbed areas where native vegetation has been removed. As burrowing owls are known to be resident species within the city limits of Palm Springs, they could arrive and take up residence on the abandoned golf course at any time.

The burrowing owl and loggerhead shrike are not covered under the CVMSHP and are considered sensitive species by the California Department of Fish & Wildlife. The federal Migratory Bird Treaty Act protects the burrowing owl from any kind of harm or harassment.

Mammals

Frequently detected mammals included the Beechey ground squirrel (*Spermophilus beecheyi*), deer mouse (*Peromyscus maniculatus*), black-tailed jackrabbit (*Lepus californicus*) and coyote (*Canis latrans*).

No individuals of the Palm Springs pocket mouse, *Perognathus longimembris bangsi,* were live-trapped. The California Department of Fish & Game considered this subspecies of the little pocket mouse a species of special concern. The pocket mouse is a covered species under the CVMSHCP.

Four observations of the Coachella Valley ground squirrel (*Spermophilus tereticaudus chlorus*) were recorded. This subspecies of the round-tailed ground squirrel has been a candidate for federal listing but is a covered species under the CVMSHCP. As a covered species, no additional mitigation is required or recommended for this subspecies.

A complete list of vertebrate species observed or detected on the project site can be found in Table 2 of the Appendix.

VI. FINDINGS AND RECOMMENDATIONS

The proposed Palm Springs Country Club residential development is not anticipated to have significant adverse impacts upon biological resources on the project site or immediate vicinity. The majority of the project site has been severely impacted by the historic golf course development and the influence of human activities in surrounding residential developments. No development activities of any kind are planned to the east of the existing Whitewater River Levee that forms the eastern boundary of the project.

The loss of approximately 14 acres of moderately disturbed creosote scrub habitat just to the west of the levee is considered insignificant. The creosote scrub community continues to be widespread and common within the city limits of Palm Springs and the Sonoran Desert of southeastern California.

The project site lies within the boundaries of the Coachella Valley Multiple Species Habitat Conservation Plan and is, therefore, subject to per residential unit fees. The precise amount will be determined by the City of Palm Springs and is based upon the fee requirements at the time of approval.

Non-Covered Species

Four sensitive species known to occur in Palm Springs area are not covered under the CVMSHP and, therefore, must be addressed under the requirements of the California Environmental Quality Act. The remaining portion of this report addresses these four non-covered species.

Casey's June beetle is listed as Endangered by the U.S. Fish & Wildlife Service. It is **not covered** under the CVMSHCP. No individuals were captured or recorded during federal protocol surveys (authorized by Federal Permit #TE64509A-0 issued to James W. Cornett). At this time, the nearest location where Casey's June beetle has been found lies approximately four miles south of the project site. The inability to find beetles on or near the project site coupled with the historical absence of the beetle from the project site area results in the conclusion that the project will have no impact upon Casey's June beetle.

The **Western burrowing Owl** is **not a covered species** under the CVMSHCP. It is protected from harm or harassment under the federal Migratory Bird Treaty Act of 1918. No evidence of burrowing owl presence was detected during the state and federal protocol biological surveys that were conducted. However, the project site is considered suitable habitat for this species and it is known to breed in the city limits of Palm Springs. The species could take up residence on the site at any time but most likely when young owls disperse in late summer and early fall. Therefore, if earth disturbance does not begin by September 1, 2013, a burrowing owl clearance survey is recommended. The purpose of the

clearance survey is to insure that no owls have taken up residence on the site after young owls leave nests in late summer or early fall. In addition, owls from more northerly latitudes begin arriving in fall as well and could take up residence. The clearance survey insures that no burrowing owls would be harmed by earth disturbance activity.

Although the officially threatened **desert tortoise** is a covered species under the CVMSHCP, tortoise clearance surveys may be required by the wildlife regulatory agencies during the project review process. The purpose of clearance surveys is to make sure that no harm comes to tortoises on or immediately adjacent project sites. Tortoises found during clearance surveys are to be relocated at the direction of the wildlife regulatory agencies. The current biological surveys followed federal protocols for clearances surveys. No evidence of the desert tortoise was found on or adjacent to the project site. Tortoises avoid areas of serious human impacts as typified by the project site. Therefore, this project will have no impact upon the species and further surveys are considered unnecessary.

The California Department of Fish & Wildlife considers the **loggerhead shrike** a Species of Special Concern. It is **not covered** under the CVMSHCP. No individuals of this species were found during the biological survey and no active or inactive nests were located on or near the project site. As shrikes are not typically associated with severely impacted areas such as the project site, no additional surveys are recommended.

Indirect Impacts

The project site abuts the **Whitewater Floodplain Conservation Area** of the CVMSHCP. Therefore, the project is subject to Plan requirements and restrictions regarding projects that lie adjacent to Conservation Areas. These requirements are located in the Appendix at the end of this report and have been taken directly from the Plan. It is the responsibility of the City of Palm Springs to implement the relevant Plan requirements. The Coachella Valley Association of Governments (CVAG) may be contacted should questions arise as the interpretation and applications of the Guidelines.

This study has been unable to document any significant indirect impacts to sensitive species or unique habitats beyond the boundaries of the project site.

Recommended Mitigation Summary

1. Conduct a burrowing owl clearance survey after September 1, 2013, and not more than 30 days before site disturbance. If an active burrow is found during the clearance survey a biological monitor should be placed onsite during ground disturbance.

2. Follow relevant guidelines for projects lying adjacent to Conservation Areas.

Conclusion

This project, upon implementation of the recommended mitigation, will have no significant adverse impact upon biological resources in the region.

VII. REFERENCES

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VIII. CERTIFICATION STATEMENT

I, James W. Cornett, hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements and information presented are true and correct to the best of my knowledge and belief.

May 23, 2013
Date

Principal Investigator

APPENDIX

TABLE 1
NATIVE PLANT SPECIES RECORDED
PS COUNTRY CLUB PROJECT SITE

ANGIOSPERMAE - DICOTYLEDONES

ASTERACEAE - SUNFLOWER FAMILY
Ambrosia acanthicarpa – Annual Bursage
Ambrosia dumosa - Burro-weed
Bebbia juncea - Sweet Bush
Chaenactis fremontii - Desert Pincushion
Chrysothamnus paniculatus – Rabbitbrush
Conyza canadensis - Horseweed
Dicoria canescens - Bugseed
Encelia farinosa – Brittlebush
Heterotheca subaxillaris - Camphorweed
Hymenoclea salsola - Cheese-bush
Malacothrix glabrata - Desert Dandelion
Palafoxia arida - Spanish Needle
Sonchus oleraceus – Annual Sowthistle
Stephanomeria pauciflora – Mitra
Xanthium strumarium – Common Cocklebur

BIGNONIACEAE – BIGNONIA FAMILY
Chilopsis linearis – Desert-willow

BORAGINACEAE - BORAGE FAMILY
Cryptantha angustifolia - Narrow-leafed Forget-me-not
Cryptantha barbigera – Beard Cryptantha
Pectocarya recurvata – Recurved Pectocarya
Tiquilia plicata - Plicate Coldenia

BRASSICACEAE - MUSTARD FAMILY
Brassica tournefortii - Sahara Mustard

CACTACEAE - CACTUS FAMILY
Opuntia basilaris - Beaver-tail Cactus
Opuntia echinocarpa - Golden Cholla

CHENOPODIACEAE - GOOSEFOOT FAMILY
Atriplex canescens – Wingscale
Chenopodium murale – Nettleleaf Goosefoot
Salsola tragus - Russian Thistle

EUPHORBIACEAE - SPURGE FAMILY
Croton californicus - Croton
Eremocarpus setigerus – Turkey Mullein
Euphorbia polycarpa - Sand-mat

FABACEAE - PEA FAMILY
Melilotus indica – Sourclover
Parkinsonia aculeata – Mexican Palo Verde
Psorothamnus emoryi - Emory Dalea
Psorothamnus schottii – Indigo Bush
Psorothamnus spinosus – Smoke Tree

GERANIACEAE - GERANIUM FAMILY
Erodium cicutarium - Filaree

LAMIACEAE - MINT FAMILY
Hyptis emoryi

LOASACEAE - STICK-LEAF FAMILY
Petalonyx thurberi - Thurber's Sandpaper Plant

MALVACEAE – MALLOW FAMILY
Malva parviflora – Little Mallow

PLANTAGINACEAE - Plantain Family
Plantago insularis - Woolly Plantain

POLYGONACEAE - BUCKWHEAT FAMILY
Eriogonum inflatum - Desert Trumpet

SOLANACEAE - NIGHTSHADE FAMILY
Datura wrightii - Jimson Weed

TAMARICACEAE - TAMARISK FAMILY
Tamarix aphylla – Tree Tamarisk
Tamarix ramosissima - Shrub Tamarisk

ZYGOPHYLLACEAE - CALTROP FAMILY
Larrea tridentata - Creosote Bush

ANGIOSPERMAE - MONOCOTYLEDONES

POACEAE - GRASS FAMILY
Aristida adsencionis – Three-awn grass
Avenua fatua – Wild Oat
Bouteloua barbata - Bouteloua Grass
Bromus rubens - Red Brome Grass
Cynodon dactylon - Bermuda Grass
Hordeum jubatum – Foxtail Barley
Pennisetum villosum – Fountain Grass
Polypogon monspeliensis – Rabbitfoot Polypogon
Schismus barbatus - Abu-mashi

TABLE 2

EXPECTED BREEDING OR OBSERVED VERTEBRATES PS COUNTRY CLUB PROJECT SITE

REPTILES

GEKKONIDAE - GECKOS
Coleonyx variegatus - Western Banded Gecko *

IGUANIDAE – IGUANIDS
Dipsosaurus dorsalis - Desert Iguana *

PHRYNOSOMATIDAE – HORNED LIZARDS AND OTHERS
Callisaurus draconoides - Zebra-tailed Lizard *
Sceloporus magister - Desert Spiny Lizard *
Urosaurus graciosus - Long-Tailed Bush Lizard *
Uta stansburiana - Side-Blotched Lizard *

TEIIDAE - WHIPTAILS
Cnemidophorus tigris - Western Whiptail *

LEPTOTYPHLOPIDAE - BLIND SNAKES
Leptotyphlops humilis - Western Blind Snake

COLUBRIDAE - COLUBRIDS
Arizona elegans - Glossy Snake
Chionactis occipitalis - Western Shovel-nosed Snake *
Lampropeltis getulus - Common Kingsnake
Masticophis flagellum – Coachwhip *
Phyllorhynchus decurtatus - Spotted Leaf-nosed Snake
Pituophis melanoleucus - Gopher Snake
Rhinocheilus lecontei - Long-nosed Snake

VIPERIDAE – VIPERS
Crotalus cerastes – Sidewinder *

BIRDS

ANATIDAE – GEESE, SWANS AND DUCKS
Anas platyrhynchos – Mallard *

ACCIPITRIDAE - OSPREY, HAWKS, EAGLES
Buteo jamaicensis - Red-Tailed Hawk *

FALCONIDAE - FALCONS
Falco mexicanus - Prairie Falcon *
Falco sparverius - American Kestrel *

PHASIANIDAE - QUAIL
Callipepla gambelii - Gambel's Quail *

COLUMBIDAE - PIGEONS AND DOVES
Zenaida macroura - Mourning Dove *

CUCULIDAE - CUCKOOS
Geococcyx californianus - Greater Roadrunner *

TYTONIDAE - BARN OWLS
Tyto alba - Barn Owl

STRIGIDAE - TYPICAL OWLS
Bubo virginianus - Great Horned Owl *

CAPRIMULGIDAE - NIGHTJARS
Chordeiles acutipennis - Lesser Nighthawk *
Phalaenoptilus nuttallii - Common Poorwill *

TROCHILIDAE – HUMMINGBIRDS
Calypte costae - Costa's Hummingbird *

TYRANNIDAE - TYRANT FLYCATCHERS
Sayornis saya - Say's Phoebe *

CORVIDAE - CROWS AND JAYS
Corvus brachyrhynchos – American Crow *
Corvus corax - Common Raven *

PARIDAE – CHICKADEES, TITMICE
Auriparus flaviceps – Verdin *

MIMIDAE - MOCKINGBIRDS AND THRASHERS
Mimus polyglottos - Northern Mockingbird *

EMBERIZIDAE - WOOD WARBLERS, TANAGERS, SPARROWS
Aimophila ruficeps – Rufous-Crowned Sparrow *
Amphispiza bilineata - Black-throated Sparrow *
Icterus cucullatus – Hooded Oriole *
Pipilo aberti – Abert's Towhee
Pipilo crissalis – California Towhee *

PLOCEIDAE - WEAVER FINCHES
Passer domesticus - House Sparrow *

FRINGILLIDAE - FINCHES
Carpodacus mexicanus - House Finch *

MAMMALS

VESPERTILIONIDAE - EVENING BATS
Antrozous pallidus - Pallid Bat
Myotis californicus - California Myotis
Pipistrellus hesperus - Western Pipistrelle *

MOLOSSIDAE - FREE-TAILED BATS
Tadarida brasiliensis - Brazilian Free-tailed Bat *

LEPORIDAE - HARES AND RABBITS
Lepus californicus – Black-tailed Jackrabbit *
Sylvilagus audubonii - Audubon Cottontail *

SCIURIDAE - SQUIRRELS
Spermophilus tereticaudus chlorus - Coachella Valley ground squirrel *
Spermophilus beecheyi - California Ground Squirrel *

HETEROMYIDAE - POCKET MICE AND KANGAROO RATS
Dipodomys merriami - Merriam Kangaroo Rat *

CRICETIDAE - DEER MICE AND WOODRATS
Neotoma lepida - Desert Woodrat *
Peromyscus maniculatus – Deer Mouse *

CANIDAE - FOXES, WOLVES, AND COYOTES
Canis latrans - Coyote *

FELIDAE – CATS
Lynx rufus – Bobcat ?

* = Sign or individual observed on or near site.
? = Possible occurrence on or near site; not detected during survey.

Coachella Valley Multiple Species Habitat Conservation Plan
Land Use Adjacency Guidelines
For Projects Adjacent to Conservation Areas

The purpose of Land Use Adjacency Guidelines is to avoid or minimize indirect effects from development adjacent to Conservation Areas. Adjacent means sharing a common boundary with any parcel in a Conservation Area. Such indirect effects are commonly referred to as edge effects, and may include noise, lighting, drainage, intrusion of people, and the introduction of non-native plants and non-native predators such as dogs and cats. Edge effects will also be addressed through reserve management activities such as fencing. The following Land Use Adjacency Guidelines shall be considered by the Permittees in their review of individual public and private Development projects adjacent to or within the Conservation Areas to minimize edge effects, and shall be implemented where applicable.

4.5.1 Drainage

Proposed Development adjacent to or within a Conservation Area shall incorporate plans to ensure that the quantity and quality of runoff discharged to the adjacent Conservation Area is not altered in an adverse way when compared with existing conditions. Stormwater systems shall be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials or other elements that might degrade or harm biological resources or ecosystem processes within the adjacent Conservation Area.

4.5.2 Toxics

Land uses proposed adjacent to or within a Conservation Area that use chemicals or generate bioproducts such as manure that are potentially toxic or may adversely affect wildlife and plant species, Habitat, or water quality shall incorporate measures to ensure that application of such chemicals does not result in any discharge to the adjacent Conservation Area.

4.5.3 Lighting

For proposed Development adjacent to or within a Conservation Area, lighting shall be shielded and directed toward the developed area. Landscape shielding or other appropriate methods shall be incorporated in project designs to minimize the effects of lighting adjacent to or within the adjacent Conservation Area in accordance with the guidelines to be included in the Implementation Manual.

4.5.4 Noise

Proposed Development adjacent to or within a Conservation Area that generates noise in excess of 75 dBA Leq hourly shall incorporate setbacks, berms, or walls, as appropriate, to minimize the effects of noise on the adjacent Conservation Area in accordance with the guidelines to be included in the Implementation Manual.

4.5.5 Invasives

Invasive, non-native plant species shall not be incorporated in the landscape for land uses adjacent to or within a Conservation Area. Landscape treatments within or adjacent to a Conservation Area shall incorporate native plant materials to the maximum extent Feasible; recommended native species are listed in Table 4-112. The plants listed in Table 4-113 shall not be used within or adjacent to a Conservation Area. This list may be amended from time to time through a Minor Amendment with Wildlife Agency concurrence.

Table 4-112: Coachella Valley Native Plants Recommended for Landscaping

BOTANICAL NAME	COMMON NAME
Trees	
Washingtonia filifera	Desert Fan Palm
Cercidium floridum	Blue Palo Verde
Chilopsis linearis	Desert Willow
Olneya tesota	Ironwood Tree
Prosopis glandulosa var. torreyana	Honey Mesquite
Shrubs	
Acacia greggii	Cat's Claw Acacia
Ambrosia dumosa	Burro Bush
Atriplex canescens	Four Wing Saltbush
Atriplex lentiformis	Quailbush
Atriplex polycarpa	Cattle Spinach
Baccharis sergiloides	Squaw Water-weed
Bebia juncea	Sweet Bush
Cassia (Senna) covesii	Desert Senna
Condalia parryi	Crucilllo
Crossosoma bigelovii	Crossosoma
Dalea emoryi	Dye Weed
Dalea (Psorothamnus) schottii	Indigo Bush
Datura meteloides	Jimson Weed
Encelia farinosa	Brittle Bush
Ephedra aspera	Mormon Tea
Eriogonum fasciculatum	California Buckwheat
Eriogonum wrightii membranaceum	Wright's Buckwheat
Fagonia laevis	(No Common Name)
Gutierrezia sarothrae	Matchweed
Haplopappus acradenius	Goldenbush
Hibiscus denudatus	Desert Hibiscus

Table 4-112: Coachella Valley Native Plants Recommended for Landscaping (continued)

BOTANICAL NAME	COMMON NAME
Hoffmannseggia microphylla	Rush Pea
Hymenoclea salsola	Cheesebush
Hyptis emoryi	Desert Lavender
Isomeris arborea	Bladder Pod
Juniperus californica	California Juniper
Krameria grayi	Ratany
Krameria parvifolia	Little-leaved Ratany
Larrea tridentate	Creosote Bush
Lotus rigidus	Desert Rock Pea
Lycium andersonii	Box Thorn
Petalonyx linearis	Long-leaved Sandpaper Plant
Petalonyx thurberi	Sandpaper Plant
Peucephyllum schottii	Pygmy Cedar
Prunus fremontii	Desert Apricot
Rhus ovata	Sugar-bush
Salazaria mexicana	Paper-bag Bush
Salvia apiana	White Sage
Salvia eremostachya	Santa Rosa Sage
Salvia vaseyi	Wand Sage
Simmondsia chinensis	Jojoba
Sphaeralcia ambigua	Globemallow (Desert Mallow)
Sphaeralcia ambigua rosacea	Apricot Mallow
Trixis californica	Trixis
Zauschneria californica	California Fuchsia
Groundcovers	
Mirabilis bigelovii	Wishbone Bush (Four O'Clock)
Mirabilis tenuiloba	White Four O'Clock (Thin-lobed)
Vines	
Vitis girdiana	Desert Grape
Accent	
Muhlenbergia rigens	Deer Grass
Herbaceous Perennials	
Adiantum capillus-veneris	Maiden-hair Fern (w)
Carex alma	Sedge (w)
Dalea parryi	Parry Dalea
Eleocharis montevidensis	Spike Rush (w)
Equisetum laevigatum	Horsetail (w)
Juncus bufonis	Toad Rush (w)

Table 4-112: Coachella Valley Native Plants Recommended for Landscaping (continued)

BOTANICAL NAME	*COMMON NAME*
Juncus effuses	Juncus (w)
Juncus macrophyllus	Juncus (w)
Juncus mexicanus	Mexican Rush (w)
Juncus xiphioides	Juncus (w)
Notholaena parryi	Parry Cloak Fern
Pallaea mucronata	Bird-foot Fern
Cacti and Succulents	
Agave deserti	Desert Agave
Asclepias albicans	Desert Milkweed (Buggy-whip)
Asclepias subulata	Ajamete
Dudleya arizonica	Live-forever
Dudleya saxosa	Rock Dudleya
Echinocereus engelmannii	Calico Hedgehog Cactus
Ferocactus acanthodes	Barrel Cactus
Fouquieria splendens	Ocotillo
Mamillaria dioica	Nipple Cactus
Mamillaria tetrancistra	Corkseed Cactus
Nolina parryi Parry	Nolina
Opuntia acanthocarpa	Stag-horn or Deer-horn Cholla
Opuntia bigelovii	Teddy Bear or Jumping Cholla
Opuntia basilaris	Beavertail Cactus
Opuntia echinocarpa	Silver or Golden Cholla
Opuntia ramosissima	Pencil Cholla, Darning Needle Cholla
Yucca schidigera	Mojave Yucca, Spanish Dagger
Yucca whipplei	Our Lord's Candle

Table 4-113: Prohibited Invasive Ornamental Plants

BOTANICAL NAME	COMMON NAME
Acacia spp.	(all species except A. greggii)
Arundo donax	Giant Reed or Arundo Grass
Atriplex semibaccata	Australian Saltbush
Avena barbata	Slender Wild Oat
Avena fatua	Wild Oat
Brassica tournefortii	African or Saharan Mustard
Bromus madritensis ssp. *Rubens*	Red Brome
Bromus tectorum	Cheat Grass or Downy Brome
Cortaderia jubata [syn.*C. atacamensis*]	Jubata Grass or Andean Pampas Grass
Cortaderia dioica [syn. C. selloana]	Pampas Grass
Descurainia Sophia	Tansy Mustard
Eichhornia crassipes	Water Hyacinth
Elaegnus angustifolia	Russian Olive
Foeniculum vulgare	Sweet Fennel
Hirschfeldia incana	Mediterranean or Short-pod Mustard
Lepidium latifolium	Perennial Pepperweed
Lolium multiflorum	Italian Ryegrass
Nerium oleander	Oleander
Nicotiana glauca	Tree Tobacco
Oenothera berlandieri	Mexican Evening Primrose
Olea europea European	Olive Tree
Parkinsonia aculeate	Mexican Palo Verde
Pennisetum clandestinum	Kikuyu Grass
Pennisetum setaceum	Fountain Grass
Phoenix canariensis	Canary Island Date Palm
Phoenix dactylifera	Date Palm
Ricinus communis	Castorbean
Salsola tragus	Russian Thistle
Schinus molle	Peruvian Pepper Tree or California Pepper
Schinus terebinthifolius	Brazilian Pepper Tree
Schismus arabicus	Mediterranean Grass
Schismus barbatus	Saharan Grass, Abu Mashi
Stipa capensis	No Common Name
Tamarix spp. (all species)	Tamarisk or Salt Cedar
Taeniatherum caput-medusae	Medusa-head
Tribulus terrestris	Punctureveine
Vinca major	Periwinkle
Washingtonia robusta	Mexican fan palm
Yucca gloriosa	Spanish Dagger

4.5.6 Barriers

Land uses adjacent to or within a Conservation Area shall incorporate barriers in individual project designs to minimize unauthorized public access, domestic animal predation, illegal trespass, or dumping in a Conservation Area. Such barriers may include native landscaping, rocks/boulders, fencing, walls and/or signage.

4.5.7 Grading/Land Development

Manufactured slopes associated with site Development shall not extend into adjacent land in a Conservation Area.