

BIOLOGICAL ASSESSMENT
and
IMPACT ANALYSIS

of the proposed

MORONGO OUTDOOR
ENTERTAINMENT CENTER

located within the

**MORONGO INDIAN RESERVATION,
RIVERSIDE COUNTY, CALIFORNIA**

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July 15, 2012

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EXECUTIVE SUMMARY

A proposed outdoor entertainment amphitheater and parking/camping area necessitated a biological impact analysis on a 310-acre site located within the Morongo Indian Reservation near Cabazon, Riverside County, California.

No federally listed plant or animal species, or unique habitats, were found within the project boundaries. However, the Western Burrowing Owl (*Athene cunicularia hypugaea*) was discovered to be resident on the project site. Burrowing Owls are protected in Mexico and the United States by the Migratory Bird Treaty Act of 1918. Mitigation of impacts is required under the Act.

The project site does not lie within the boundaries of an existing habitat conservation plan.

No blue-line stream corridors (streams or dry washes) run through the project site.

Following the completion of the recommended mitigation in this report, the outdoor entertainment amphitheater project should not have significant adverse impacts upon biological resources in the region.

I. INTRODUCTION

On May 20, 2012, the firm of James W. Cornett - Ecological Consultants was retained by MSA Consulting, Inc., to conduct a biological survey on a 310-acre site located within the Morongo Indian Reservation near Cabazon, Riverside County, California. The project site encompassed portions of the eastern half of Section 8 and the western half of Section 9, Range 2 East, Township 3 South (San Bernardino Baseline and Meridian). The regional location is shown in Figure 1, the area location in Figure 2, and the specific location with project boundaries is shown in Figure 3. Site photographs are shown in Figures 4-7.

This study was included as part of an environmental assessment mandated by the National Environmental Policy Act (NEPA) of 1969. The biological survey and impact analysis were designed to ascertain the impacts of constructing an outdoor entertainment amphitheater and associated parking and camping facilities on the biological resources of the project site and immediate vicinity.

The specific purposes of the biological surveys and impact analyses are listed below.

1. Determine the vascular plant and vertebrate animal species that occur on, and immediately adjacent to, the project site.
2. Ascertain the presence of any plant or animal species given special status by the federal government.
3. Ascertain the existence of other significant biotic elements, corridors or communities.
4. If necessary and where feasible, recommend measures to mitigate significant adverse impacts of the project on any special-status species, unique biotic elements or communities.

Figure 1. Regional Location

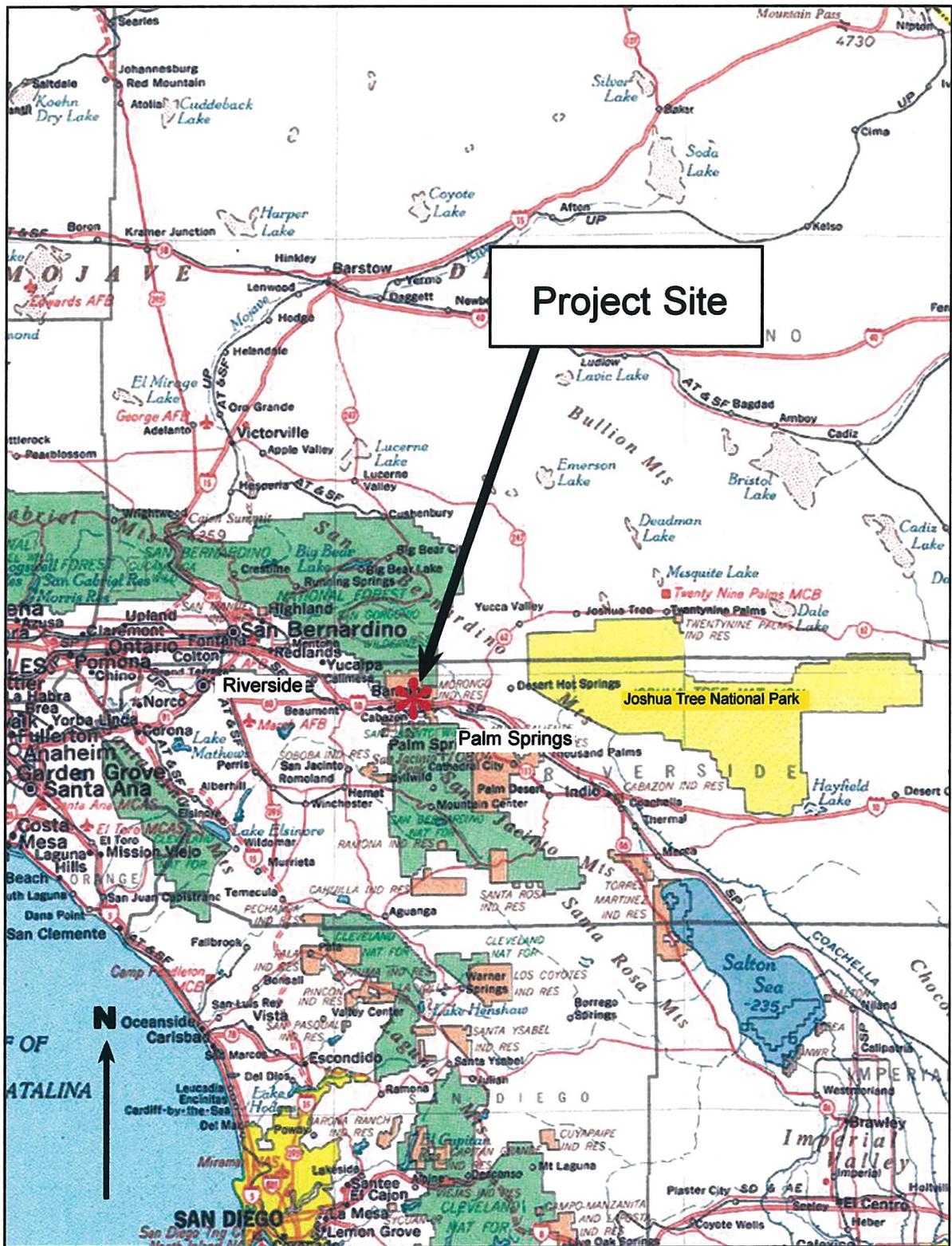


Figure 2. Area Location

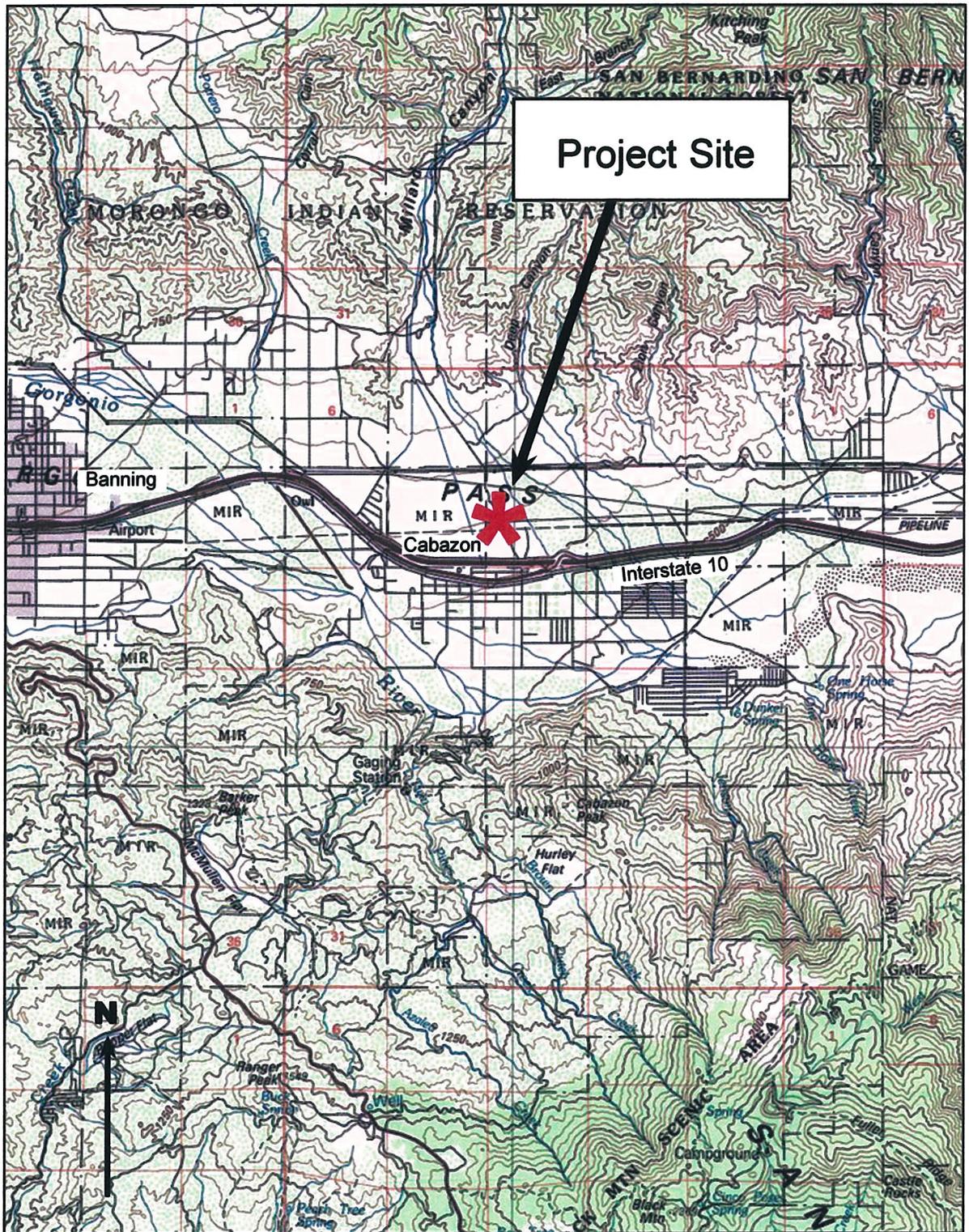
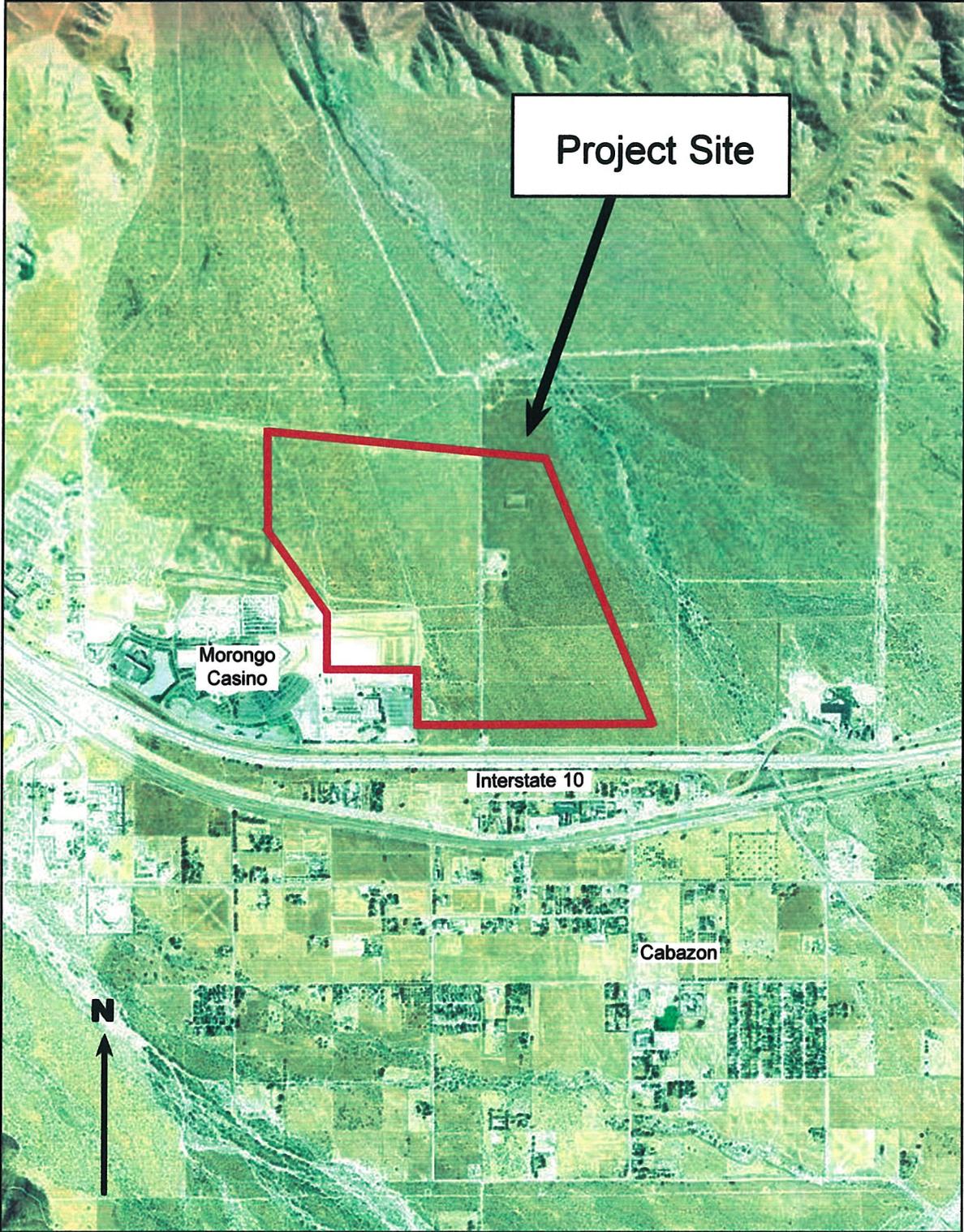


Figure 3. Site Boundaries



Figures 4-7. Project Site Images

Figure 4. View across site to northeast.

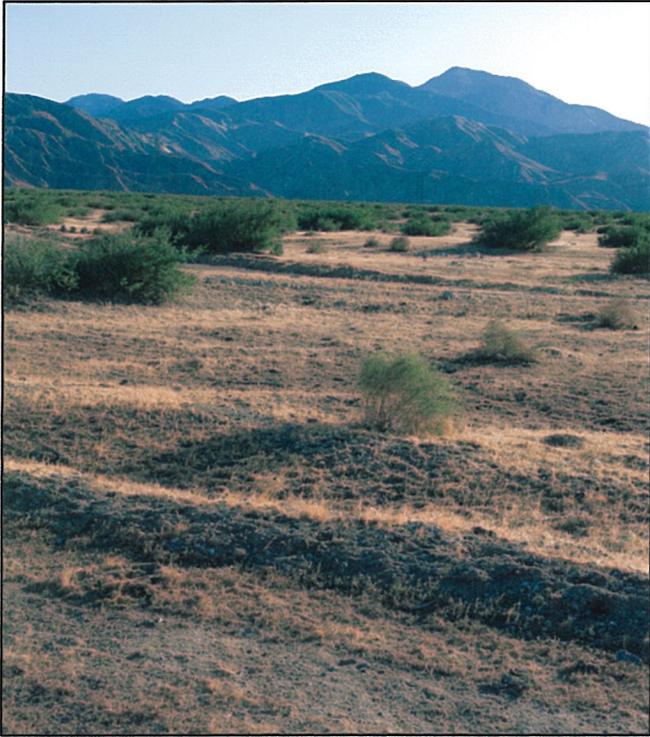


Figure 5. View across site to northwest.

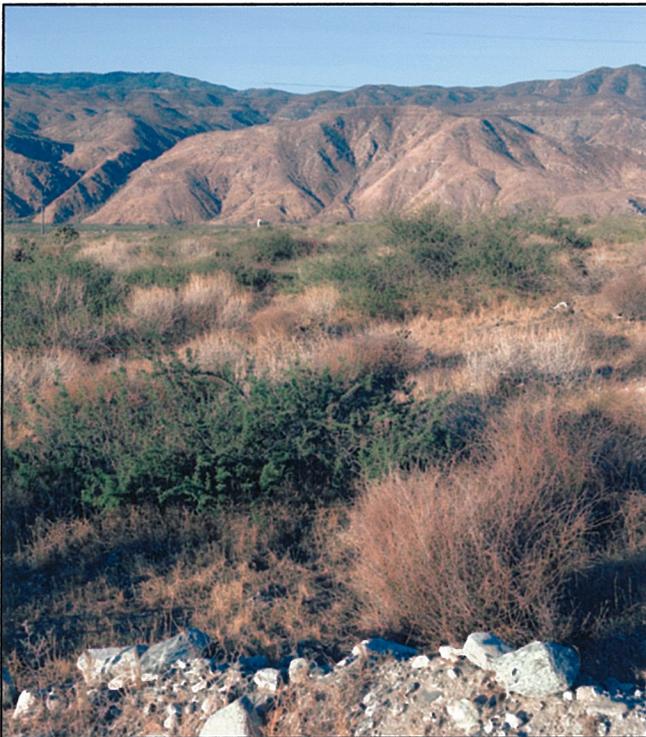
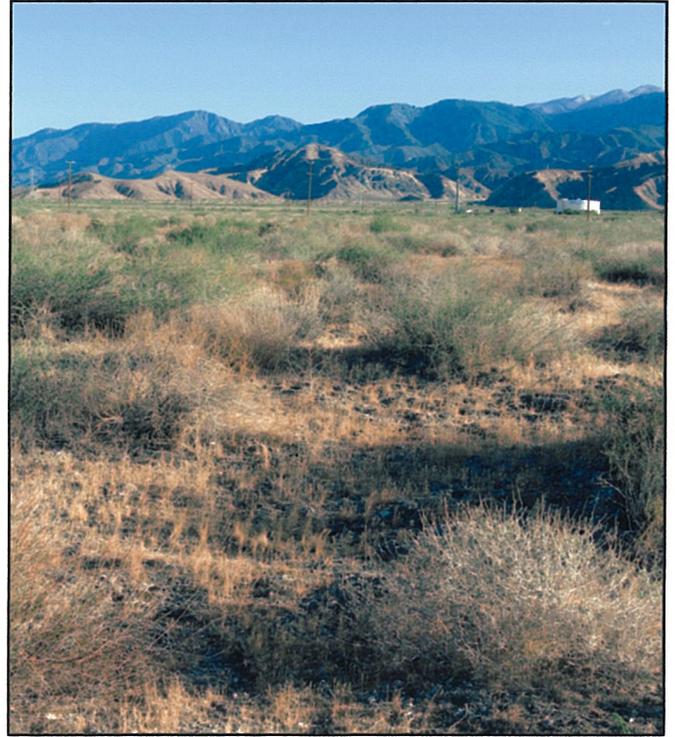


Figure 6. View across site to southwest.

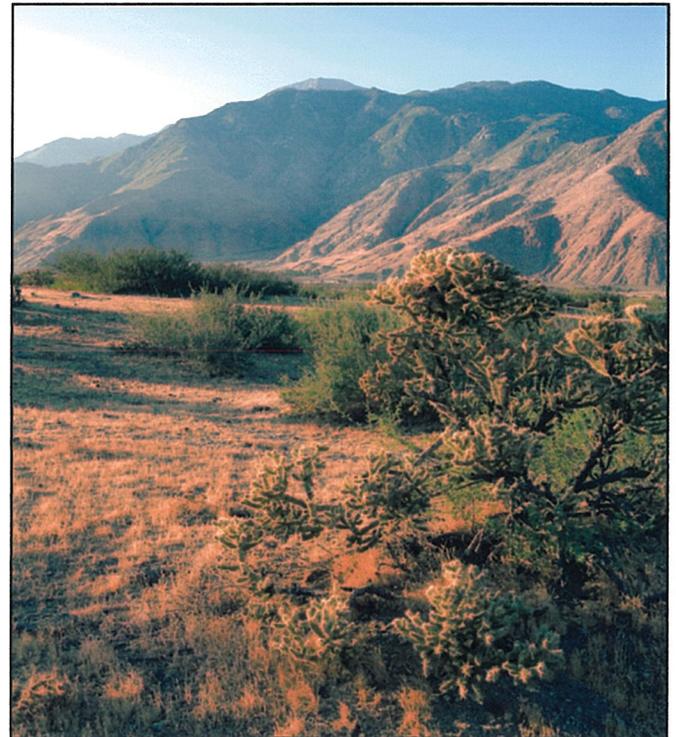


Figure 7. View across site to southeast.

II. SITE AND PROJECT DESCRIPTIONS

Climate

The project site lies at the westernmost edge of a geographical region known as the Colorado Desert, a subdivision of the Sonoran Desert (Jaeger, 1957). Annual precipitation is meager averaging only 7.9 inches in Cabazon, the location of the nearest official weather station (National Climatic Data Center, 2012). Most precipitation falls during the months of January, February and March. Winter temperatures are mild with a daily average maximum in December of 69 degrees Fahrenheit. Winter nights occasionally drop to near freezing. The hottest days are experienced in the month of July with maximum daily temperatures averaging 101 degrees F.

Physical Features

The entire project site is composed of a series of overlapping alluvial fans, together referred to as a bajada, that emanate from the San Bernardino Mountains to the north. The bajada is serially incised by dry washes to the immediate east of the site that cut through the landscape from northwest to southeast. Surface flows in the washes are rare, probably not more than two or three times each year. No natural washes or blue-line streams, however, traverse the project site.

Soils are composed of silt, sand and occasional patches of fine gravel. Small boulders are sparingly distributed over the site.

The project site is sloped from the northwest to southeast. The highest elevation within the project boundaries is approximately 2,130 feet above sea level, at the site's northwestern corner (see Figure 3, page 6). The lowest point is situated at the southeastern corner of the project site and has an elevation of approximately 1,850 feet above sea level.

There are no naturally occurring springs or permanent aquatic habitats within the project site boundaries. A very small irrigation channel approaches the northern boundary of the project site with flows a few inches deep. However, surface water did not reach the project site boundary during the field surveys. There are no biological findings that indicate a federal streambed alteration permit is necessary as authorized under Section 404 of the Clean Water Act.

Surrounding Lands

To the north, west and east of the project site exist heavily grazed landscapes similar to those found on the project site. Parking areas for the Morongo Casino and associated commercial

facilities lie along the southwestern boundaries of the project site (see Figure 3 on page 6). A small strip of grazing land and Interstate 10 form the southern boundary of the project site.

Existing Impacts

The entire project site has been heavily grazed for several decades with the result that the vegetation has been altered from what was once most likely a mix of creosote scrub and coastal sage communities. There are no natural, undisturbed biotic communities within the site boundaries.

Numerous roads traverse the site. Some are improved; several are not (see Figure 8 for locations). The roads provide access to grazing lands, several barbed wire fence lines, underground gas line corridors and electrical line corridors. The utility corridors lie, for the most part, along the northern boundary.

Above ground water storage tanks are located near the center of the project site. A microwave relay tower stands next to the water tank.

Vehicle noise from Interstate 10 could be detected over the entire project site. As would be expected, noise levels were most intense at the southern edge of the project site.

Project Description

The project proponent proposes to construct a large outdoor amphitheater and associated parking and camping facilities on the project site. It is anticipated that most of the site will be graded. No additional information on the project was available at the time this report was written.

III. STUDY METHODS

Prior to the initiation of field work, reviews of the literature and institutional records were conducted to determine the biological resources that might exist within the general area and to determine the possible occurrence of special status species (see References section). Records, collections and/or staff of the University of California at Riverside Herbarium, the Boyd Deep Canyon Desert Research Center, and the Coachella Valley Association of Governments were consulted for specific information as to the occurrence of selected species. A California Department of Fish & Game Natural Diversity Database (updated, July, 2012) check was also reviewed but yielded no records relevant to the project site or immediate vicinity.

The Morongo Band of Mission Indians through the Environmental Protection Department provided information on the potential for federally threatened and endangered species to occur on the project site. The Band has prepared a map and report delineating potential critical habitat based on twelve parameters of listed species and their habitat associations. The map and report were reviewed and their contents used as part of the field survey strategy.

Field surveys were initiated on May 25, 2012. Specific dates of biological surveys were May 25-31, June 1, June 4-8, 11-15, 18-22, and 25-29 and July 1, 2, 9 and 10, 2012. Night surveys were conducted on the evenings of May 26, June 4 and July 10, 2012.

Survey dates were slightly past the period when most ephemeral plant species would be in bloom though a few ephemerals were still in bloom in late May. The survey dates did include the most favorable seasons when animal species would most likely be observed. Reducing the likelihood that all species would be detected was the existence of a dry winter in 2012. Precipitation in January, February and March was less than half the long-term average.

Surveys were conducted by walking east/west transects at 10-yard intervals through the project site and at 10, 100, 200, 400, and 800 yard intervals beyond and around the project boundaries. However, no surveys were conducted south of Interstate 10, southwest of the project site where the Morongo Casino was located and west of residences located to the west and northwest of the project site. The survey pattern has been established by the U.S. Fish & Wildlife Service for determining the presence or absence of the burrowing owl and officially threatened desert tortoise, *Gopherus agassizii*.

Animal surveys were conducted simultaneously with plant surveys. In addition, fifty live-animal traps (which capture animals unharmed) for large and small mammals were set within the project site for twenty-four hour periods on May 26, June 4 and July 10, 2012. Both day and night live trapping were conducted.

In an effort to determine if large animal corridors existed on the project site special attention was given to observing and identifying animal tracks. In addition, sand sifting and smoothing was done on several unpaved roads so that tracks would be more prominent and identifiable. Road kills on Interstate 10 and on the transmission line access roads were also monitored on most site visits. Road-kill-monitoring included that portion of Interstate 10 equal to the east-west width of the project site.

Although scientific name changes occur as new discoveries are made in plant and animal taxonomy, the scientific names used in this report are taken from the standard and most available references describing the species found in the desert regions of Southern California—Bruce G. Baldwin's *The Jepson Manual* (Second Edition) published in 2012; D. P. Tibor's *Inventory of rare and endangered vascular plants of California* published in 2001; R. A. Stebbins' *A field guide to western reptiles and amphibians* published in 2003; Peterson's *Bird of North America* published in 2008; and E. W. Jameson's and H. J. Peeters' *California mammals* published in 2004. Plant common names used in this report are taken from Baldwin (2012), Jaeger (1969), Munz (1974) and Tibor (2001). Animal common names are taken from Stebbins (2003), Peterson (2008) and Jameson and Peeter (1988).

Fieldwork was conducted by James Cornett (M.S.) and Brett Leonard (B.S.). Plant identifications were made by Andrew Sanders (B.S.) and Mr. Cornett. Animal remains were identified by Robert Reynolds (B.S.) of LSA Associates (retired) and Mr. Cornett. The literature review was conducted by Terry Belknap (B.S.). The report was written by Mr. Cornett.

IV. PLANT SURVEY RESULTS

The entire project site supports a unique assemblage of plants resulting from the grazing of cattle over a period of several decades. At the present time the plant assemblage or “community” consists of elements of both the Coastal Sage Scrub and the Creosote Scrub communities. More specifically, the grazed community reflects the Catclaw Acacia Series described by Sawyer and Wolf (1995) but without the creosote bush, *Larrea tridentata*.

Five perennial plant species dominate the vegetation of the project site: catclaw acacia (*Acacia greggii*), golden cholla (*Cylindropuntia echinocarpa*), California buckwheat (*Eriogonum fasciculatum*), brittlebush (*Encelia farinosa*) and cheesebush (*Ambrosia salsola*). These five plant species accounted for more than 90% of the perennial plant cover within the site boundaries.

Introduced or “exotic” weed species covered approximately 75% of the soil surface. Such species appear to provide the bulk of the range forage for cattle though browsing on the dominant perennial species listed above was noted as well (including golden cholla cactus). Ephemeral grasses are the dominant weeds and include such species as foxtail brome (*Bromus rubens*), Schismus grass (*Schismus barbatus*) and slender wild oat (*Avena fatua*). Non-grass weedy ephemerals included such species as Russian thistle (*Salsola kali*), turkey mullein (*Croton setigerus*) and telegraph weed (*Heterotheca grandiflora*). All of these species are common and widespread in the arid and semi-arid regions of California whenever the natural vegetation has been removed through disturbance such as grazing

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

1. Munz's onion (*Allium munzii*) is a member of the Lily Family. It is modeled to be present within the Morongo Indian Reservation by the Band's Environmental Protection Department. However, modeled habitat does not include the project site and no evidence of this federally endangered species was found.
2. The triple-ribbed milkvetch (*Astragalus tricarinatus*) is a perennial herb that is found in the northwestern Colorado Desert and south central Mojave Desert. Very few individuals of this species have ever been discovered. Those that have been encountered were found on rocky soils above one thousand feet in elevation. The project site nearly conforms to these criteria and was considered possible habitat for the species. However, no individuals of the species were

found and it was concluded that it did not occur on site. The triple-ribbed milkvetch was officially listed as an endangered species on November 5, 1998. It has no special state status.

3. Nevin's barberry (*Berberis nevinii*) is a member of the Barberry Family. The species is modeled to be present within the Morongo Indian Reservation by the Band's Environmental Protection Department. However, modeled habitat does not include the project site and no evidence of this federally threatened species was found.

4. Thread-leaved brodiaea (*Brodiaea filifolia*) is a member of the Lily Family. In Riverside County the species is often found on alkaline silt or clay soils associated with vernal pools or playas. Such habitats do not occur on or near the project site. The species is modeled to be present within the Morongo Indian Reservation by the Band's Environmental Protection Department. However, modeled habitat does not include the project site and no evidence of this federally threatened species was found.

5. The winged cryptantha, *Cryptantha holoptera*, is an annual herb belonging to the Borage Family. It is found in areas of coarse sandy and rocky soils below 3,600 feet in elevation and 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 either the state or federal government but is considered rare by the California Native Plant Society.

6. The California ditaxis (*Ditaxis californica*) is a perennial herb belonging to the Spurge Family. It apparently occurs 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 was concluded that it did not occur onsite. It is not given special status by the state or federal governments but the California Native Plant Society considers it a rare species.

8. Foxtail cactus, *Escobaria vivipara alversonii*, is a stem succulent belonging to the Cactus Family. It is found on rocky soils below 3,000 feet in elevation within the Colorado Desert. It could thus occur within the project area though no individuals were found. It was concluded that it did not occur on the project site. The foxtail cactus is not given special status by the state or federal governments but is considered rare by the California Native Plant Society.

9. The Little San Bernardino Mountains gilia, *Gilia maculata*, is an annual herb belonging to the Phlox Family. It is found on sandy flats below 3,500 feet in elevation within and near the Little San Bernardino Mountains. It could thus occur in the project area though no evidence was found. It was concluded that it did not occur within the project boundaries. The Little San Bernardino Mountains gilia is a candidate for federal listing but is given no special status by the state. The California Native Plant Society considers it a rare species.

10. Parish's desert-thorn, *Lycium parishii*, is a shrub belonging to the Nightshade Family. It is found on rocky slopes below 3,000 feet in elevation within the western Colorado Desert. There

was a slight chance that it might occur in the project area though no evidence was found. It was concluded that Parish's desert-thorn did not occur within the project boundaries. This species is not given special status by the state or federal governments though the California Native Plant Society considers it a rare species.

11. Spearleaf, *Matelea parvifolia*, is perennial herb belonging to the Milkweed Family. It is normally found at elevations below 3,000 feet in dry, rocky places within the Creosote Scrub Community of the Colorado Desert. It could thus occur in the project area though no individuals were found. Spearleaf is not given special status by the state or federal governments but is considered rare by the California Native Plant Society.

12. California Orcutt grass (*Orcuttia californica*) is modeled to be present within the Morongo Indian Reservation by the Band's Environmental Protection Department. However, modeled habitat does not include the project site and no evidence of this federally endangered species was found. It is most closely associated with vernal pools, a habitat that does not occur on or near the project site.

13. Thurber's beardtongue, *Penstemon thurberi*, is a perennial herb belonging to the Figwort Family. It is generally found on gravelly slopes below 4,000 feet in elevation within the Colorado Desert. It could thus occur in the project area though no evidence was found. Thurber's beardtongue is not given special status by either the state or federal government but is considered rare by the California Native Plant Society.

In summary, no individuals of special-status plant species were found within, or immediately adjacent to, the project site.

A complete list of vascular plant species found within the project boundaries can be found in Table 2 of the Appendix. Taxonomic nomenclature follows Baldwin (2012). Common names are taken from Jaeger (1969), Baldwin (2012), Munz (1974) or Tibor (2001).

V. ANIMAL SURVEY RESULTS

The fauna of the project site was composed of species typical of the western edge of the Colorado Desert as manifested in the San Gorgonio Pass and on the project site. Wildlife habitats consisted of severely disturbed areas, road shoulders and a grazed plant community dominated by cat claw acacia.

Invertebrates

Encountered invertebrates included the eleodes beetle (*Eleodes armata*), harvester ant (*Pogonomyrmex californicus*), honey bee (*Apis mellifera*) and Pepsis wasp (*Pepsis* sp.).

Two insect species known to occur within the region are of concern to the U.S. Fish & Wildlife Service: the Coachella giant sand treader cricket (*Macrobaenetes valgum*) and Coachella Valley Jerusalem cricket (*Stenopelmatus calhuilaensis*). 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 more coarse and compacted soils of the project site.

The United States Fish & Wildlife Service has listed a third insect species, Casey's June beetle (*Dinacoma caseyi*) as endangered. However, this species has not been found north or west of Palm Springs (Cornett, 2004).

Reptiles and Amphibians

One amphibian was recorded from the project site: the western toad, *Bufo boreas*. No other species were found or are expected.

The most frequently encountered reptiles were the side-blotched lizard (*Uta stansburiana*), western whiptail (*Cnemidophorus tigris*) and desert spiny lizard (*Sceloporus magister*). The species of snake most often encountered was the western rattlesnake (*Crotalus viridis*).

A single sensitive lizard species has been modeled to be present within the Morongo Indian Reservation by the Band's Environmental Protection Department. However, modeled habitat for the Coachella Valley fringe-toed lizard (*Uma inornata*) does not include the project site and no evidence of this federally threatened species was found. The species is closely associated with areas of loose, windblown sand; a habitat not found within the project boundaries.

Desert Tortoise

A serious effort was made to determine the presence or absence of the officially threatened desert tortoise (*Gopherus agassizi*) following the survey protocols established by the United States Fish & Wildlife Service. The tortoise has been found on the Reservation (Lonnie Rodriguez, Tribal Environmental Resource Officer, personal communication) but no evidence or observations of the desert tortoise were recorded on or near the project site.

The desert tortoise has been modeled to be present within the Morongo Indian Reservation by the Band's Environmental Protection Department. However, modeled habitat does not include the project site. Nonetheless, the site is considered suitable habitat for the tortoise because of the presence of friable soil in which individuals can construct their burrows and the presence of usually abundant springtime ephemerals on which to feed. A dense population of the desert tortoise is known to occur six miles to the east (Jeff Lovich, personal communication).

Birds

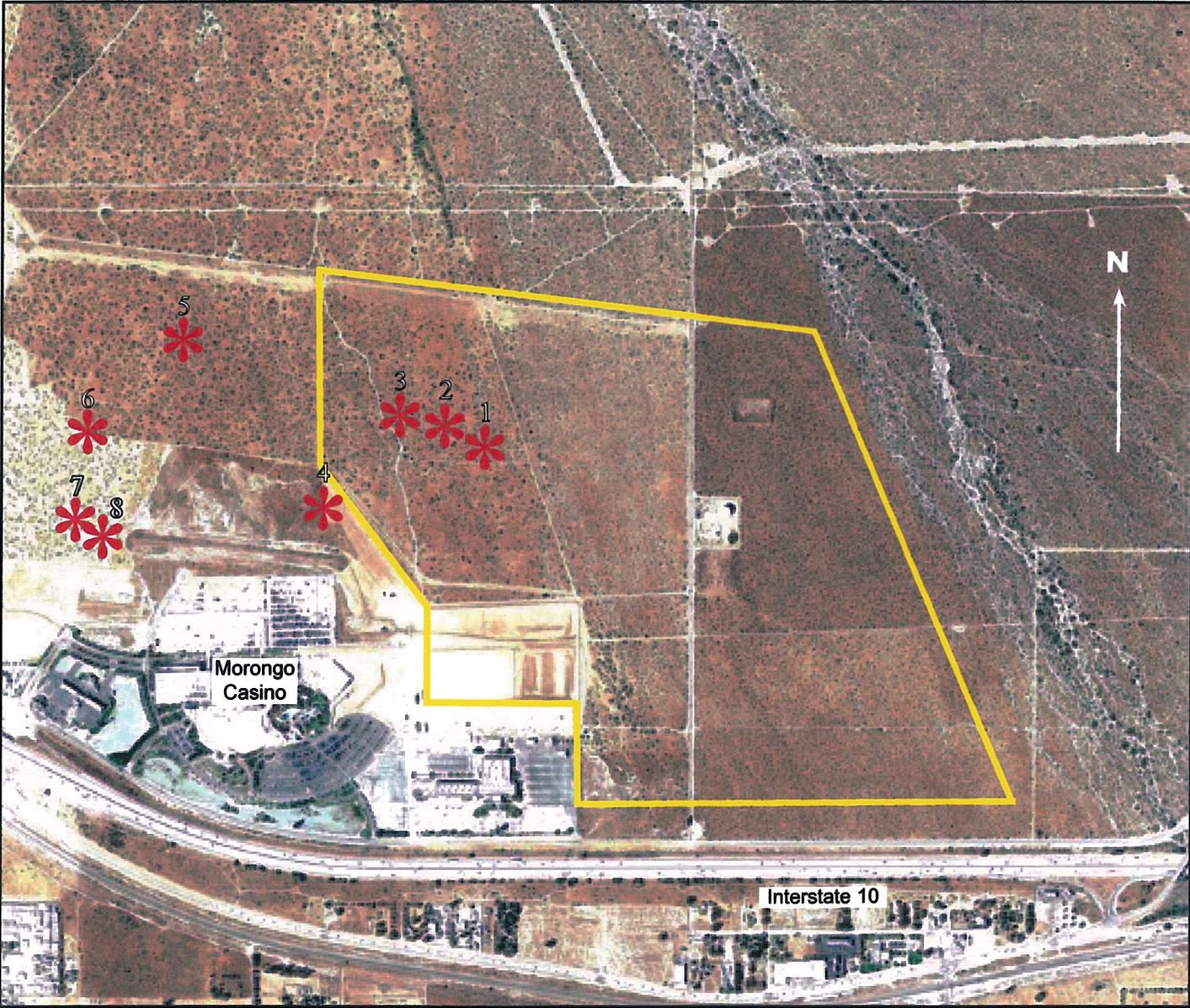
Regularly seen birds within the project area were California quail (*Callipepla californica*), cactus wren (*Campylorhynchus brunneicapillus*), mourning dove (*Zenaida macroura*), house finch (*Carpodacus mexicanus*), common raven (*Corvus corax*) and red-tailed hawk (*Buteo jamaicensis*).

Three special-status avian species were observed within the project boundaries: burrowing owl (*Athene cunicularia*), loggerhead shrike (*Lanius ludovicianus*) and LeConte's thrasher (*Toxostoma lecontei*).

Burrowing Owl

Three active burrows of the burrowing owl were located within the project site boundaries (see Figure 8, page 17). The easternmost burrow was occupied by 10 young that flew about the nest area on June 18, 2012. A fourth active burrow was discovered just west of the site boundaries as shown in Figure 8. One adult owl was associated with the burrow on June 19, 2012. Four more active burrows were found west of the project site. Of these four active burrows, the easternmost burrow is within the 500 meter buffer distance from the westernmost boundary of the project site. Twelve young flying individuals were associated with this burrow on June 8, 2012. The three other active burrows are beyond the 500 meter buffer distance and, according to the Staff Report on Burrowing Owl Mitigation of 2012, are not likely to be influenced by project site grading activities. The locations and details of all active burrows found are listed in Table 1 on page 18. The burrowing owl is protected in the United States by the Migratory Bird Treaty Act of 1918. Mitigation of impacts to the owl is required under the Act. The entire project site is potential habitat for this species.

Figure 8. Active Burrowing Owl Locations



 = Active Burrowing Owl Burrow
(numbered 1 thru 8)

 = Project Site Boundary

Table 1. Locations and details of Active Burrowing Owl Burrows

<i>Burrow #</i>	<i>Coordinates</i>	<i>Nature of Evidence</i>	<i># Owls Associated with burrow</i>
1	N33 55.680 W116 47.716	owls observed	2 adults, 10 juv.
2	N33 55.683 W116 47.754	owls observed	2 adults
3	N33 55.685 W116 47.787	feathers, droppings	unknown
4	N33 55.567 W116 47.906	feathers, droppings	unknown
5	N33 55.789 W116 48.091	owls observed	1 adult, 12 juv.
6	N33 55.663 W116 48.276	owls observed	2 adults, 4 juv.
7	N33 55.542 W116 48.264	owls observed	1 adult
8	N33 55.541 W116 48.256	feathers, droppings	unknown

Loggerhead Shrike

The loggerhead shrike was observed on just two occasions (May 26 and June 1) within the project site boundaries. No nests were found though cat claw acacia and golden cholla provided suitable nesting sites. The species is likely resident on or near the project area. The loggerhead shrike is not officially listed as threatened or endangered by the state or federal governments. It is considered a Species of Special Concern by the state of California.

LeConte's Thrasher

LeConte's thrasher was observed only once within the project site boundaries, on July 1, 2012. No nests were found. It had been anticipated that this species would be seen more often due to the presence of numerous large golden cholla plants, a species frequently used for nesting. The absence of the thrasher may reflect the recent drought or the presence of predatory loggerhead shrikes which may remove young thrashers from their nests. LeConte's thrasher is not officially listed as threatened or endangered by the state or federal governments. It is considered a Species of Special Concern by the state of California.

Two federally endangered bird species, the least Bell's vireo (*Vireo bellii pusillus*) and southwestern willow flycatcher (*Empidonax traillii extimus*) are modeled to be present within the Morongo Indian Reservation by the Band's Environmental Protection Department. However, modeled habitat does not include the project site and neither of these species was observed nor are they expected within or near the project boundaries. Both species prefer riparian areas, habitats not found within the project site boundaries.

Mammals

Frequently detected mammals within the project site boundaries included the white-tailed antelope squirrel (*Ammospermophilus leucurus*), deer mouse (*Peromyscus maniculatus*), black-tailed jackrabbit (*Lepus californicus*) and coyote (*Canis latrans*).

One special-status mammalian species was detected within the project boundaries: the Palm Springs little pocket mouse (*Perognathus longimembris bangsi*). This subspecies of the wide-ranging little pocket mouse was live trapped eight times in three nights (May 26, June 4 and July 10, 2012) within the project site boundaries and was determined to be one of the most common rodents onsite. The Palm Springs little pocket mouse has been considered for listing by the U.S. Fish & Wildlife Service but is not listed at this time.

No individuals of the federally endangered Stephens kangaroo rat (*Dipodomys stephensi*) were live trapped during the study. A related species, Merriam's kangaroo rat (*Dipodomys merriami*), was captured on one occasion. The known range of Stephen's kangaroo rat lies to the west of the project site.

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

Wildlife Corridors

Smoothing of unpaved road surfaces to yield tracks was done regularly to determine if important wildlife corridors existed on or through the site. The entire project site was sampled using this technique.

Tracks of coyote, black-tailed jackrabbit, and cottontail were found at least once in all of the unpaved roadways sampled. In every instance tracks traversed roadways then veered to the left or right prior to reaching site boundaries.

No wildlife corridors could be detected through either observation or sign.

Summary

In summary, no officially listed animal species was found within the project site boundaries. There is a possibility that the desert tortoise may wander onto the project site prior to grading and construction. However, the only fully protected species determined to be resident on the project site was the burrowing owl. Mitigation for this species is required under the Migratory Bird Act and will be discussed in the following section.

VI. FINDINGS AND RECOMMENDATIONS

The proposed Morongo outdoor entertainment center and amphitheater project incorporates approximately 310 acres of relatively heavily grazed desert habitat. One protected animal species was confirmed to be resident on the project site: the burrowing owl. A second species, the desert tortoise, occurs in the general area and could wander onto the site at any time. Where possible and appropriate, the following section describes the nature and significance of the impact, the government requirements when the impact is considered significant, and mitigation measures to reduce the impacts of the project to a level of insignificance.

Desert Tortoise

The desert tortoise was not detected within the project boundaries though it is known from the area. To guard against the possibility that a desert tortoise may wander onto the site and be injured or killed following the completion of the biological surveys the following recommendations are made.

1. A tortoise-proof fence should be placed around the entire site prior to grading.
2. A tortoise clearance survey should be conducted inside the fenced area prior to grading. Should a tortoise be discovered, it should be removed by a biologist permitted to do so by the U.S. Fish & Wildlife Service. Disposition of the tortoise is to be at the direction of the Service.
3. A biological monitor should be on the project site whenever vehicles, associated with grading and construction activities, are present and operating. A tortoise discovered on or adjacent to the project site by any person should be relocated by a permitted biologist at the direction of the Service.

Burrowing Owl

The burrowing owl is a breeding resident within the project site boundaries as well as in areas adjacent to the project site. The Migratory Bird Act prohibits harming the owl therefore mitigation of impacts to the owl are required and must be approved by the U.S. Fish & Wildlife Service. At the present time the Service approves of the mitigation provided in the “**Staff Report on Burrowing Owl Mitigation**” prepared by the California Department of Fish and Game, March 7, 2012. Mitigation for the owl is summarized below.

1. A preconstruction survey should take place at least 30 days prior to grading to determine the location of active burrows on and within 550 yards of the project site. If no active burrows are found in the survey area grading may commence providing a biological monitor is onsite.

2. A biological monitor, with the authority to halt or redirect grading, should be present whenever grading or construction vehicles are present and operating onsite. The function of the monitor is to protect burrowing owls that arrive on or near the project site after the clearance survey and during the construction period
3. The breeding season of the western burrowing owl is from February 1 through August 31 of each year. No construction disturbances of any kind should occur within 500 meters (550 yards) of an active burrow during this time period. Thus, on the project site, grading should take place from September 1 until January 30 of each year to avoid restriction or cancellation of grading because of the presence of burrowing owls during the breeding season.
4. Resident owls present on or near the project site outside the breeding season may be relocated to other sites on the Reservation by a permitted biologist. Relocation details can be found in the Staff Report on Burrowing Owl Mitigation.

Conclusion

This project, following the completion of the recommended/required mitigation, is not anticipated to have significant adverse impacts upon biological resources in the region.

VII. REFERENCES

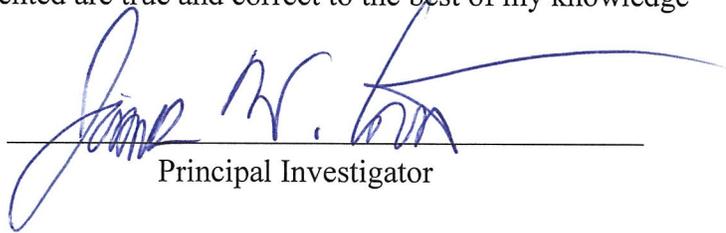
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VIII. CERTIFICATION STATEMENT

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.

_____ July 15, 2012 _____

Date



Principal Investigator

APPENDIX

TABLE 2
PLANT SPECIES RECORDED
MORONGO OUTDOOR ENTERTAINMENT SITE

EPHEDRACEAE – EPHEDRA FAMILY

Ephedra nevadensis – Mormon Tea

ANGIOSPERMAE - DICOTYLEDONES

AMARANTHACEAE - AMARANTH FAMILY

Amaranthus palmeri – Palmer Amaranthus

Tidestromia oblongifolia – Honeysweet

ASTERACEAE - SUNFLOWER FAMILY

Ambrosia acanthicarpa – Annual Bur-sage

Ambrosia dumosa - Burro-weed

Baccharis salicifolia – Mule Fat

Baccharis sarothroides - Broom Baccharis

Bebbia juncea - Sweet Bush

Chaenactis fremontii - Desert Pincushion

Chrysothamnus teretifolius – Rabbitbrush

Conyza canadensis – Horseweed

Dicoria canescens – Bugseed

Encelia farinosa - Brittlebush

Helianthus annuus – Common Sunflower

Ambrosia salsola - Cheese-bush

Malacothrix glabrata - Desert Dandelion

Palafoxia arida - Spanish Needle

Sonchus asper – Spiny Sowthistle

Sonchus oleraceus – Annual Sowthistle

Stephanomeria exigua – Mitra

Stephanomeria pauciflora – Wire-Lettuce

BIGNONIACEAE – BIGNONIA FAMILY

Chilopsis linearis – Desert-willow

BORAGINACEAE - BORAGE FAMILY

- Amsinckia tessellata* – Checker Fiddleneck
Cryptantha angustifolia - Narrow-leafed Forget-me-not
Cryptantha nevadensis – Desert Cryptantha
Eriodictyon crassifolium – Yerba Santa
Tiquilia plicata - Plicate Coldenia

BRASSICACEAE - MUSTARD FAMILY

- Brassica tournefortii* - Sahara Mustard
Sisymbrium irio – London Rocket

CACTACEAE - CACTUS FAMILY

- Echinocereus engelmannii* - Calico Cactus
Opuntia basilaris - Beaver-tail Cactus
Cylindropuntia echinocarpa - Golden Cholla
Opuntia phaeacantha – Prickly-pear

CHENOPODIACEAE - GOOSEFOOT FAMILY

- Atriplex canescens* – Wingscale
Chenopodium berlandieri - Goosefoot
Salsola kali - Russian Thistle

CUCURBITACEAE - GOURD FAMILY

- Cucurbita palmata* - Coyote Melon

EUPHORBIACEAE - SPURGE FAMILY

- Croton setigerus* – Turkey Mullein
Chamaesyce polycarpa - Sand-mat

FABACEAE - PEA FAMILY

- Acacia greggii* - Cat's Claw Acacia
Lotus rigidus – Desert Rock-pea
Prosopis glandulosa – Honey-pod mesquite

GERANIACEAE - GERANIUM FAMILY

- Erodium cicutarium* – Filaree

HYDROPHYLLACEAE - WATERLEAF FAMILY

Phacelia distans - Wild Heliotrope (w)

LAMIACEAE - MINT FAMILY

Salvia apiana - White Sage

Salvia columbariae - Chia

MALVACEAE – MALLOW FAMILY

Sphaeralcea ambigua – Desert Mallow

NYCTAGINACEAE - FOUR-O'CLOCK FAMILY

Allionia incarnata – Windmills

ONAGRACEAE - EVENING-PRIMROSE FAMILY

Camissonia californica – California Sun Cup

PLANTAGINACEAE – PLANTAIN FAMILY

Plantago ovata - Woolly Plantain

POLYGONACEAE - BUCKWHEAT FAMILY

Chorizanthe brevicornu – Brittle Spineflower

Chorizanthe rigida – Spiny-herb

Eriogonum deflexum – Flat-topped Buckwheat

Eriogonum fasciculatum – California Buckwheat

Eriogonum thomasii – Thomas' Buckwheat

RESEDACEAE – MIGNONETTTE FAMILY

Oligomeris linifolia – Oligomeris

SOLANACEAE - NIGHTSHADE FAMILY

Datura wrightii - Jimson Weed

Nicotiana glauca –Tree Tobacco

ZYGOPHYLLACEAE - CALTROP FAMILY

Larrea tridentata - Creosote Bush

ANGIOSPERMAE - MONOCOTYLEDONES

AGAVACEAE – AGAVE FAMILY

Yucca schidigera – Mojave Yucca

POACEAE - GRASS FAMILY

Achnatherum speciosum – Desert Needle Grass

Aristida adscensionis – Six –Weeks Triple-awned Grass

Aristida purpurea – Three-awned Grass

Avena fatua – Wild Oat

Bromus arenarius – Brome Grass

Bouteloua barbata – Six Weeks Grama

Bromus japonicus – Japanese Brome

Bromus madritensis – Foxtail Chess

Bromus rubens –Foxtail Brome

Cynodon dactylon - Bermuda Grass

Polypogon monspeliensis – Rabbitfoot Polypogon

Schismus arabicus – Mediterranean Grass

Schismus barbatus - Abu-mashi

TABLE 3
EXPECTED BREEDING OR OBSERVED VERTEBRATES
MORONGO OUTDOOR ENTERTAINMENT SITE

AMPHIBIANS

BUFONIDAE - TRUE TOADS

Bufo boreas – Western Toad *

REPTILES

TESTUDINIDAE – LAND TORTOISES

Gopherus agassizii – Desert Tortoise ?

GEKKONIDAE - GECKOS

Coleonyx variegatus - Western Banded Gecko *

CROTAPHYTIDAE – COLLARED, LEOPARD LIZARDS

Gambelia wislizenii – Long-nosed Leopard Lizard ?

PHRYNOSOMATIDAE – HORNED, SPINY, EARLESS LIZARDS

Phrynosoma coronatum – Coast Horned Lizard *

Sceloporus magister - Desert Spiny Lizard *

Uta stansburiana - Side-Blotched Lizard *

TEIIDAE - WHIPTAILS

Cnemidophorus tigris - Western Whiptail *

XANTUSIIDAE - NIGHT LIZARDS

Xantusia vigilis - Desert Night Lizard *

LEPTOTYPHLOPIDAE - BLIND SNAKES

Leptotyphlops humilis - Western Blind Snake

COLUBRIDAE - COLUBRIDS

Arizona elegans - Glossy Snake *

Hypsiglena torquata - Night Snake *

COLUBRIDAE – COLUBRIDS (continued)

Lampropeltis getulus - Common Kingsnake

Masticophis flagellum - Coachwhip *

Pituophis melanoleucus - Gopher Snake

Rhinocheilus lecontei - Long-nosed Snake *

Salvadora hexalepis - Western Patch-nosed Snake

VIPERIDAE – VIPERS

Crotalus ruber – Red Diamond Rattlesnake *

Crotalus viridis – Western Rattlesnake *

BIRDS

ACCIPITRIDAE - OSPREY, HAWKS, EAGLES

Buteo jamaicensis - Red-Tailed Hawk *

FALCONIDAE - FALCONS

Falco sparverius - American Kestrel *

CATHARTIDAE – AMERICAN VULTURES

Cathartes aura – Turkey Vulture *

PHASIANIDAE - QUAIL

Callipepla californica – California Quail *

COLUMBIDAE - PIGEONS AND DOVES

Columba livia - Rock Dove *

Zenaida macroura - Mourning Dove *

CUCULIDAE - CUCKOOS

Geococcyx californianus - Greater Roadrunner *

STRIGIDAE - TYPICAL OWLS

Athene cunicularia – Burrowing Owl *

Bubo virginianus - Great Horned Owl *

CAPRIMULGIDAE - NIGHTJARS

Chordeiles acutipennis - Lesser Nighthawk *

Phalaenoptilus nuttallii - Common Poorwill *

TROCHILIDAE – HUMMINGBIRDS

Calypte anna - Anna's Hummingbird *

Calypte costae - Costa's Hummingbird *

Selasphorus rufus – Rufous Hummingbird *

TYRANNIDAE - TYRANT FLYCATCHERS

Myiarchus cinerascens - Ash-Throated Flycatcher *

Sayornis saya - Say's Phoebe *

Tyrannus verticalis – Western Kingbird *

ALAUDIDAE – LARKS

Eremophila alpestris – Horned Lark *

CORVIDAE - CROWS AND JAYS

Corvus brachyrhynchos – American Crow *

Corvus corax - Common Raven *

TROGLODYTIDAE - WRENS

Campylorhynchus brunneicapillus - Cactus Wren *

MIMIDAE - MOCKINGBIRDS AND THRASHERS

Mimus polyglottos - Northern Mockingbird *

Toxostoma lecontei – LeConte’s Thrasher *

LANIIDAE - SHRIKES

Lanius ludovicianus - Loggerhead Shrike *

EMBERIZIDAE - WOOD WARBLERS, TANAGERS, SPARROWS

Amphispiza bilineata - Black-throated Sparrow *

Chondestes grammacus – Lark Sparrow *

EMBERIZIDAE - WOOD WARBLERS, TANAGERS, SPARROWS

Euphagus cyanocephalus – Brewer’s Blackbird *

Icterus cuncullatus – Hooded Oriole *

Passerella lincolni - Lincoln's Sparrow *

Quiscalus mexicanus – Great-tailed Grackle *

CARDINALIDAE – GROSBEAKS

Pheucticus melanocephalus – Black-headed Grosbeak *

Passerina amoena – Lazuli Bunting *

PLOCEIDAE - WEAVER FINCHES

Passer domesticus - House Sparrow *

FRINGILLIDAE - FINCHES

Carpodacus mexicanus - House Finch *

MAMMALS

SORICIDAE - SHREWS

Notiosorex crawfordi - Desert Shrew ?

PHYLLOSTOMATIDAE - LEAF-NOSED BATS

Macrotus californicus - California Leaf-nosed Bat ?

VESPERTILIONIDAE - EVENING BATS

Antrozous pallidus - Pallid Bat

Eptesicus fuscus - Big Brown Bat

Euderma maculata - Spotted Bat ?

Lasiurus cinereus - Hoary Bat ?

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

Ammospermophilus leucurus - Antelope Ground Squirrel *

Spermophilus beecheyi - Beechey Ground Squirrel *

GEOMYIDAE – POCKET GOPHERS, POCKET MICE, KANGAROO RATS

Chaetodipus formosus - Long-tailed Pocket Mouse *

Chaetodipus spinatus - Spiny Pocket Mouse *

Dipodomys merriami - Merriam Kangaroo Rat *

Perognathus longimembris bangsi - Palm Springs Pocket Mouse *

Thomomys bottae - Botta's Pocket Gopher *

MURIDAE – RATS, MICE, VOLES

Mus musculus – House Mouse *

Neotoma lepida - Desert Woodrat *

Onychomys torridus – Southern Grasshopper Mouse *

Peromyscus maniculatus - Deer Mouse *

CANIDAE - FOXES, WOLVES, AND COYOTES

Canis latrans - Coyote *

Urocyon cinereoargenteus - Gray Fox ?

MUSTELIDAE - WEASELS AND SKUNKS

Mephitis mephitis – Striped Skunk *

FELIDAE - CATS

Lynx rufus – Bobcat *

* = Sign or individual observed on or near site during field surveys.

? = Possible occurrence on or near site; not detected during survey.