

# GENERAL BIOLOGICAL RESOURCES ASSESSMENT

**ADELANTO, SAN BERNARDINO COUNTY, CALIFORNIA**  
**(Township 6 North, Range 5 West, Section 21)**  
**(APN: 0459-05-354)**

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**Project: #2022-136 BA**

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## **TITLE PAGE**

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REGULATORY CONTEXT

## **1.0 INTRODUCTION AND SUMMARY**

Biological surveys were conducted on a 17.4-acre parcel (Approximate), located on the northeast corner of the intersection of Barcelona Avenue and Pearmain Street in the City of Adelanto, California (Township 6 North, Range 5 West, Section 21, USGS Adelanto, California Quadrangle, 1956) (Figures 1 and 2). The property is located in an area zoned as an Airport Development District usage (ADD) in Adelanto, California.

As part of the environmental process, California Department of Fish and Wildlife (CDFW) and U.S. Fish and Wildlife Service (USFWS) data sources were reviewed. Following the data review, surveys were performed on the site on November 15, 2022, during which the biological resources on the site and in the surrounding areas were documented by biologists from RCA Associates, Inc. As part of the surveys, the property and adjoining areas were evaluated for the presence of native habitats which may support populations of sensitive wildlife species. The property was also evaluated for the presence of sensitive habitats including wetlands, vernal pools, riparian habitats, and jurisdictional areas.

Habitat assessments were also conducted for the desert tortoise, burrowing owl, and Mohave ground squirrel. Based on data from USFWS, CDFW, and a search of the California Natural Diversity Database (CNDDDB, 2022). Scientific nomenclature for this report is based on the following references: Hickman (1993), Munz (1974), Stebbins (2003), Sibley (2016) and Whitaker (1980).



## 2.0 EXISTING CONDITIONS

The property is approximately 17.4-acres and is located the northeast corner of the intersection of Barcelona Avenue and Pearmain Street in the City of Adelanto, California (APN: 0459-05-354). The site is located in Section 21, Township 6 North, Range 5 West (USGS Adelanto, CA 7.5-minute quadrangle) (Figures 1 and 2). Vacant land surrounds the property in the immediate vicinity with Adelanto logistics airport located directly east of the site.

The relatively flat site is approximately 871 meters above sea level and contains no slope. The vegetation community present on site supports a heavily disturbed desert scrub habitat encompassing mainly native plants and some non-native grasses. The site is dominated by creosote bush (*Larrea tridentata*), rubber rabbitbrush (*Ericameria nauseosa*), Joshua tree (*Yucca brevifolia*), Nevada jointfir (*Ephedra nevadensis*), common burro brush (*Ambrosia salsola*), Asian mustard (*Brassica tournefortii*), Flatspine burr ragweed (*Ambrosia acanthicarpa*) and cheatgrass (*Bromus tectorum*). Section 5.0 provides a more detailed discussion of the various plant species observed during the surveys.

The site supports a minimal amount of wildlife, with many of them being birds. Mammals that were observed on site include the antelope ground squirrel (*Ammospermophilus leucurus*), jack rabbit (*Lepus californicus*) and cottontail rabbit (*Sylvilagus*). Although not seen, coyote signs were also observed on site including canid digs and scat throughout the property. Species that were not observed, but are expected to occur on site given their abundance in the surrounding areas include California ground squirrel (*Otospermophilus beecheyi*).

Birds observed included common ravens (*Corvus corax*), house finch (*Carpodacus mexicanus*), house sparrow (*Passer domesticus*), American kestrel (*Falco sparverius*), yellow rumped warbler (*Setophaga coronata*), white crowned sparrow (*Zonotrichia leucophrys*) and rock pigeon (*Columba livia*). Section 5.0 provides a more detailed discussion of the various species observed during the surveys.

No reptiles were observed during the field investigation, although the common side-blotched lizard (*Uta stansburiana*) is common in the area. Other species that are expected to occur on site include

the western whiptail lizard (*Cnemidophorus tigris*). Table 2 provides a compendium of wildlife species.

No potential channels were observed during the November field surveys. It is the opinion of RCA Associates, Inc. that no additional surveys will be required.

In addition, no sensitive habitats (e.g., sensitive species, critical habitats, etc.) have been documented in the immediate area according to the CNDDDB (2022) and none were observed during the field investigations.

### 3.0 METHODOLOGIES

General biological surveys were conducted on November 15, 2022, during which biologists from RCA Associates, Inc. initially walked meandering transects throughout the property. During the surveys, data was collected on the plant and animal species present on the site. All plants and animals detected during the surveys were recorded and are provided in Tables 1 & 2 (Appendix A). The property was also evaluated for the presence of habitats which might support sensitive species. Scientific nomenclature for this report is based on the following references: Hickman (1993), Munz (1974), Stebbins (2003), Sibley (2016) and Whitaker (1980). Following completion of the initial reconnaissance survey, habitat assessments were conducted for the desert tortoise, burrowing owl, and Mohave ground squirrel. Weather conditions consisted of wind speeds of 10 to 5 mph, temperatures in the low to mid 50's (°F) (AM), and 0% cloud cover. The applicable methodologies are summarized below.

**General Plant and Animal Surveys:** Meandering transects were walked on the site and in surrounding areas (i.e., the zone of influence) where accessible at a pace that allowed for careful documentation of the plant and animal species present on the site. All plants observed were identified in the field or sampled and brought back for further identification. Wildlife was identified through visual observations and/or by vocalizations. Habitat assessments were conducted for the desert tortoise, burrowing owl, and Mohave ground squirrel. Tables 1 and 2 (Appendix A) provides a comprehensive compendium of the various plant and animal; species observed during the field investigations.

#### 4.0 LITERATURE SEARCH

As part of the environmental process, a search of the California Natural Diversity Database (CNDDDB) search was performed. Based on this review, it was determined that five special status species have been documented within the Adelanto quad of the property. The following tables provide data on each special status species which has been documented in the area.

**Table 4-1: Federal and State Listed Species and State Species of Special Concern.**

E = Endangered; T = Threatened; SSC = Species of special concern; CNPS = California Native Plant Society; CNDDDB = California Natural Diversity Data Base

NAME	STATUS	HABITAT REQUIREMENTS	PRESENCE/ ABSENCE ON PROPERTY
<b>Wildlife Species</b>			
<b>Within Adelanto Quadrangle</b>			
Desert tortoise ( <i>Gopherus agassizii</i> )	Federal: Threatened State: Threatened	Desert scrub	The site is located within the known distribution of the species. An evaluation of the area and property was conducted and no tortoises or suitable habitat was observed.
Burrowing owl ( <i>Athene cunicularia</i> )	Federal: None State: None CDFW: SSC	Grasslands and desert habitats	The site does support suitable habitat for the species, however no owl castings and signs were found on the project site.
Mohave ground squirrel ( <i>Xerospermophilus mohavensis</i> )	Federal: None State: Threatened	Desert scrub	The site does support minimal suitable habitat for the species due to the presence of occupiable burrows however, species has not been identified in the immediate or surrounding area; therefore, species is not likely to inhabit the site.
Swainson's Hawk ( <i>Buteo swainsoni</i> )	Federal: None State: Threatened	Open grasslands	Site does not support suitable habitat for the species; and no Swainson's hawks were observed during the field survey.
Le Conte's thrasher ( <i>Toxostoma lecontei</i> )	Federal: None State: None CDFW: SSC	Desert scrub	Site does support minimal suitable habitat for the species. The thrasher is not expected to occur on site in the future; and no thrashers were observed during the field survey.

## 5.0 RESULTS

### 5.1 General Biological Resources

The site supports a heavily disturbed desert scrub community which sparsely covers the property (Figure 3). Species present on the site included kelch grass (*Schismus barbatus*), creosote bush (*Larrea tridentata*), Asian mustard (*Brassica tournefortii*), Nevada jointfir (*Ephedra nevadensis*), white bursage (*Ambrosia dumosa*), western Joshua tree (*Yucca brevifolia*), California buckwheat (*Eriogonum fasciculatum*), and rubber rabbitbrush (*Ericameria nauseosa*). Table 1 provides a compendium of all plants occurring on the site and/or in the immediate surrounding area.

Birds observed included ravens (*Corvus corax*), rock pigeon (*Columba livia*), American kestrel (*Falco sparverius*), yellow rumped warbler (*Setophaga coronata*), white crowned sparrow (*Zonotrichia leucophrys*) and house finch (*Haemorhous mexicanus*). Table 2 provides a complete compendium of wildlife species occurring on site or in the surrounding area

The mammals present during the November 2022 survey include the Antelope Ground squirrel (*Ammospermophilus leucurus*), jackrabbit (*Lepus californicus*) and desert cottontails (*Sylvilagus audubonii*). Coyote (*Canis latrans*) scat and tracks were observed during the field investigations and the species is expected to traverse the site during hunting activities. Other wildlife species that may occur on site include California ground squirrels (*Otospermophilus beecheyi*) and Merriam's kangaroo rats (*Dipodomys merriami*) may also occur on the site given their wide-spread distribution in the region. Tables 1 and 2 (Appendix A) provides a compendium of the various plant and animal species identified during the field investigations and those common to the area. No distinct wildlife corridors were identified on the site or in the immediate area.

No lizards were observed on site during the November 2022 field investigations. However, some reptiles that may inhabit the site include the Side-blotched lizard (*Uta stansburiana*) and Western Whiptail Lizard (*Cnemidophorus tigris*).

No sensitive habitats (e.g., wetlands, vernal pools, critical habitats for sensitive species, etc.) were observed on the site during the field investigations.

The following are the listed and special status species that have the ability to occur on the project site. It is not a comprehensive list of all the species in the quad. This information has been taken from the California Natural Diversity Database and is using the most current version.

## 5.2 Federal and State Listed Species

**Desert Tortoise:** The site is located within the documented tortoise, a state and federal threatened species, habitat according to CNDDDB (2022). The property supports marginal habitat for the desert tortoise based on the location of the site in a semi-developed area of Adelanto. No tortoises were observed anywhere within the property boundaries during the November 15, 2022 surveys. The species is not expected to move onto the site in the near future based on the absence of any potential burrows or sign, absence of any recent observations in the immediate area, and the presence of busy roadways and developments in the immediate area which may act as barriers to migration of tortoises. The survey results are valid for one year as per CDFW and USFWS requirements.

**Mohave Ground Squirrel:** The Mohave ground squirrel is a California state threatened species that have a short, flat, furred, white, underside tail, uniformly brown (with no spots or stripes). They inhabit open desert scrub, alkali desert scrub, and annual grasslands on sandy to gravelly surfaces in the Mojave Desert. Occupiable burrows were found on the site, but no Mohave ground squirrels were detected. It is the opinion of RCA Associates, Inc. that the habitat is not prime Mohave ground squirrel habitat and is very unlikely to support populations of the species based on the following criteria, that there have been two recent sightings, within 20 years, of the species in the Adelanto quadrangle.

## 5.3 Species of Special Concern

**Burrowing Owl:** The site is located within documented burrowing owl habitat according to CNDDDB (2022). No owls were seen on the property during the survey and no active burrows were observed. No owl signs or castings were present during the field investigation. Burrowing owls are not expected to be active on site or in the surrounding area.

**Le Conte's thrasher:** Le Conte's thrashers have not been recently observed in the area according to CNDDDB (2022). Thrashers are not expected to occur on the site due to lack of critical vegetation used by the species, such as saltbush and catclaw acacia. Thrashers may be very infrequent in the area given the low population levels in the region as well as the lack of any recent sightings according to the CNDDDB.

#### **5.4 Jurisdictional Waters and Riparian Habitat**

No riparian vegetation (e.g., cottonwoods, willows, etc.) exist on the site. Potential drainage channels were not observed within the site boundary.

#### **5.5 Protected Plants**

**As of September 22, 2020, the California Department of Fish and Wildlife temporarily listed the western Joshua tree (*Yucca brevifolia*) as an endangered species until a final decision is made in 2023. Joshua trees were observed on site during the November 15, 2022 field investigations. Any attempt to remove dead or alive Joshua trees from the property will require an Incidental Take Permit. A protected plant plan was conducted on November 15, 2022, in tandem with the biological survey which details the locations and conditions of the Western Joshua Trees.**

## 6.0 IMPACTS AND MITIGATION MEASURES

### 6.1 General Biological Resources

Future development of the site will impact the general biological resources present on site, because most if not all of the vegetation will be removed during future construction activities. The site is expected to support very few wildlife species which will be impacted by development activities. Those species with limited mobility (i.e., small mammals and reptiles) will experience increases in mortality during the construction phase. However, more mobile species (i.e., birds, large mammals) will be displaced into adjacent areas and will likely experience minimal impacts. Therefore, loss of about 17.4-acres of a relatively disturbed desert scrub habitat is not expected to have a significant cumulative impact on the overall biological resources in the region given the presence of similar habitat throughout the surrounding area. No sensitive habitats (e.g., wetlands, vernal pools, critical habitats for sensitive species, etc.) were observed on the site during the field investigations.

### 6.2 Federal and State Listed and Species of Special Concern

No federal or State-listed species were observed on the site during the field investigations including the Mohave ground squirrel and desert tortoise. In addition, there are no documented observations of these species either on the site or in the immediate area. The site is not expected to support populations of the desert tortoise based on the absence of habitat, suitable burrows, or signs.

The Western Joshua tree (*Yucca brevifolia*), a candidate threatened species under the California Endangered Species Act (CESA), was observed on site. Refer to section 5.5 for more information on the status and requirements on this species.

A pre-construction burrowing owl survey may be required by CDFW to determine if any owls have moved on to the site since the November 15, 2022 surveys. As stated in CDFW's *Staff Report on Burrowing Owl Mitigation*, the most effective method of completing a pre-construction survey (take avoidance survey) should be performed within 30 days of ground disturbance, followed by a final pre-construction survey within 24 hours of breaking ground.



## 7.0 CONCLUSIONS AND CONSIDERATIONS

Future development activities include the grading and removal of all vegetation from the 17.4-acre parcel; however, cumulative impacts to the general biological resources (plants and animals) in the surrounding area are expected to be negligible. This assumption is based on the habitat containing scarce vegetation of non-native species. As discussed above, the site does not support any desert tortoises or burrowing owl due to the lack of suitable habitat and potential burrows.

Joshua trees (a state candidate species) were observed in the field investigations during November 2022 survey and will require an Incidental Take Permit if removed from the property. The following mitigation measures should be considered:

1. Pre-construction surveys for burrowing owls, desert tortoise, and nesting birds protected under the Migratory Bird Treaty Act and Section 3503 of the California Fish and Wildlife Code shall be conducted prior to the commencement of Project-related ground disturbance.
  - a. Appropriate survey methods and timeframes shall be established, to ensure that chances of detecting the target species are maximized. In the event that listed species, such as the desert tortoise, are encountered, authorization from the USFWS and CDFW must be obtained. If nesting birds are detected, avoidance measures shall be implemented to ensure that nests are not disturbed until after young have fledged.
  - b. Pre-construction surveys shall encompass all areas within the potential footprint of disturbance for the project, as well as a reasonable buffer around these areas.
2. A focused plant survey should be considered for all special status plant species that have the potential to occur on the site to be performed during the blooming season (April - June) to determine the potential environmental effects of the proposed projects on special status plants and sensitive natural communities following recommended protocols by the Department of Fish and Wildlife.

If any sensitive species are observed on the property during future activities, CDFW and USFWS (as applicable) should be contacted to discuss specific mitigation measures which may be required for the individual species. CDFW and USFWS are the only agencies which can grant authorization for the “take” of any sensitive species and can approve the implementation of any applicable mitigation measures.

## 8.0 BIBLIOGRAPHY

- Baldwin, Bruce G, et. al.  
2002. The Jepson Desert Manual. Vascular Plants of Southeastern California. University of California Press, Berkeley, CA.
- Bureau of Land Management  
January 2005. Final Environmental Impact Report and Statement for the West Mojave Plan. Vol. 1A.
- California Burrowing Owl Consortium  
1993. Burrowing Owl Survey Protocol and Mitigation Guidelines.
- California Department of Fish and Game  
1990. California Wildlife: Volume 1 (Amphibians and Reptiles), Volume II (Birds), and Volume III (Mammals).
- California Department of Fish and Game  
2003. Mohave Ground Squirrel Survey Guidelines.
- California Department of Fish and Game  
2014. Rarefind 3 Natural Diversity Database. Habitat and Data Analysis Branch. Sacramento, CA.
- California Department of Fish and Game  
March 7, 2013. Staff Report on Burrowing Owl Mitigation. 34 pp.
- California Native Plant Society  
2001. Inventory of Rare and Endangered Plants of California (sixth edition). Rare Plant Scientific Advisory Committee, David P. Tibor, Convening Editor. California Native Plant Society. Sacramento, CA x + 388 pp.
- Ehrlich, P., Dobkin., Wheye, D.  
Birder's Handbook. A Field Guide to the Natural History of North American Birds. Simon & Schuster Building Rockefeller Center 1230 Avenue of the Americas. New York, New York 10020.
- Hickman, James C.  
The Jepson Manual Higher Plants of California. University of California Press. Berkeley, CA. 3<sup>rd</sup> Edition. 1996.
- Jaeger, Edmund C.  
1969. Desert Wild Flowers. Stanford University Press, Stanford, California. 321 pp.
- Kays, R. W. & Wilson, D. E.  
Mammals of North America. Princeton University Press, Princeton, New Jersey. 2002.

- Munz, Philip A.  
1974. A Flora of Southern California. University of California Press, Berkeley, California. 1086 pp.
- Tugel, Arlene J., Woodruff, George A.  
Soil Conservation Service, 1978. Soil Survey of San Bernardino County California, Mojave River Area.
- Sibley, David Allen.  
Sibley Birds West: Field Guide to Birds of Western North America. Knopf. 2016
- Stebbins, Robert C.  
A Field Guide to Western Reptiles and Amphibians. Houghton Mifflin Company. 2003.
- U.S. Fish and Wildlife Service  
2010 Desert Tortoise Survey Protocol.
- Whitaker, John O.  
The Audubon Society Field Guide to North American Mammals. Alfred A Knopf, Inc. 1980.

## CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits, presents 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. Fieldwork conducted for this assessment was performed by Ryan Hunter and Brian Bunyi. I certify that I have not signed a non-disclosure or consultant confidentiality agreement with the project applicant or applicant's representative and that I have no financial interest in the project.

Date: 11/18/2022 Signed: *Ryan Hunter*  
*Brian Bunyi*


Field Work Performed By: Ryan Hunter  
Senior Environmental Scientist/Biologist

Field Work Performed By: Brian Bunyi  
Environmental Scientist/Wildlife Biologist

**Appendix A**  
**Tables and Figures**



# Legend

 Site Boundary



**NE corner of Barcelona Avenue  
and Pearmain Street, Adelanto  
CA.**


**Figure 1: Regional Exhibit**  
Produced By: RCA Associates, Inc.

Source:	Ujnta Software
Acreage:	17.4-Acres (Approximate)
Project #:	2022-177 BA





# Legend

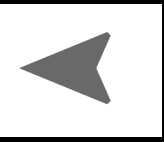
 Site Boundary



Source:	Uinta Software
Acreage:	17.4-Acres (Approximate)
Project #:	2022-177 BA

**NE corner of Barcelona Avenue  
and Pearmain Street, Adelanto  
CA.**

**Figure 2: Vicinity Exhibit**  
Produced By: RCA Associates, Inc.





CENTER OF SITE LOOKING NORTH



CENTER OF SITE LOOKING EAST



FIGURE 3: PHOTOGRAPHS OF SITE



CENTER OF SITE LOOKING SOUTH



CENTER OF SITE LOOKING WEST



FIGURE 3, cont: PHOTOGRAPHS OF SITE

**Table 1 - Plants observed on the site and known to occur in the immediate surrounding area.**

<b>Common Name</b>	<b>Scientific Name</b>	<b>Location</b>
Asian mustard	<i>Brassica tournefortii</i>	On Site and in the surrounding area.
Joshua Tree	<i>Yucca brevifolia</i>	“
Rubber rabbitbrush	<i>Ericameria nauseosa</i>	“
Nevada jointfir	<i>Ephedra nevadensis</i>	“
Creosote bush	<i>Larrea tridentata</i>	“
Cheatgrass	<i>Bromus tectorum</i>	“
Tumbleweed	<i>Kali tragus var. tragus</i>	“
Flatspine bur ragweed	<i>Ambrosia acanthicarpa</i>	“
Shortpod mustard	<i>Hirschfeldia incana</i>	“
Western tansymustard	<i>Descurainia pinnata</i>	“
White bursage	<i>Ambrosia dumosa</i>	“
Common burrobrush	<i>Ambrosia salsola</i>	“
Kelch grass	<i>Schismus barbatus</i>	“

Note: The above list is not intended to be a comprehensive list of every plant which may occur on the site or in the zone of influence.

**Table 2 - Wildlife observed on the site during the field investigations.**

<b>Common Name</b>	<b>Scientific Name</b>	<b>Location</b>
Common raven	<i>Corvus corax</i>	On-site and in the surrounding area.
House finch	<i>Carpodacus mexicanus</i>	“
Rock pigeon	<i>Columba livia</i>	“
Yellow rumped warbler	<i>Setophaga coronata</i>	“
American kestrel	<i>Falco sparverius</i>	“
White crowned sparrow	<i>Zonotrichia leucophrys</i>	“
Coyote (Scat)	<i>Canis Latrans</i>	“

Note: The above Table is not a comprehensive list of every animal species which may occur in the area, but is a list of those common species which were identified on the site or which have been observed in the region by biologists from RCA Associates, Inc.

## **REGULATORY CONTEXT**

The following provides a summary of federal and state regulatory jurisdiction over biological and wetland resources. Although most of these regulations do not directly apply to the site, given the general lack of sensitive resources, they provide important background information.

### **Federal Endangered Species Act**

The USFWS has jurisdiction over federally listed threatened and endangered plant and animal species. The federal Endangered Species Act (ESA) and its implementing regulations prohibit the take of any fish or wildlife species that is federally listed as threatened or endangered without prior approval pursuant to either Section 7 or Section 10 of the ESA. ESA defines “take” as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” Federal regulation 50CFR17.3 defines the term “harass” as an intentional or negligent act that creates the likelihood of injuring wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns such as breeding, feeding, or sheltering (50CFR17.3). Furthermore, federal regulation 50CFR17.3 defines “harm” as an act that either kills or injures a listed species. By definition, “harm” includes habitat modification or degradation that actually kills or injures a listed species by significantly impairing essential behavior patterns such as breeding, spawning, rearing, migrating, feeding, or sheltering (50CFR217.12).

Section 10(a) of the ESA establishes a process for obtaining an incidental take permit that authorizes non federal entities to incidentally take federally listed wildlife or fish. Incidental take is defined by ESA as take that is “incidental to, and not the purpose of, the carrying out of another wise lawful activity.” Preparation of a habitat conservation plan, generally referred to as an HCP, is required for all Section 10(a) permit applications. The USFWS and National Oceanic and Atmospheric Administration’s National Marine Fisheries Service (NOAA Fisheries Service) have joint authority under the ESA for administering the incidental take program. NOAA Fisheries Service has jurisdiction over anadromous fish species and USFWS has jurisdiction over all other fish and wildlife species.

Section 7 of the ESA requires all federal agencies to ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of any species listed under the ESA, or result in the destruction or adverse modification of its habitat. Federal agencies are also required

to minimize impacts to all listed species resulting from their actions, including issuance or permits or funding. Section 7 requires consideration of the indirect effects of a project, effects on federally listed plants, and effects on critical habitat (ESA requires that the USFWS identify critical habitat to the maximum extent that it is prudent and determinable when a species is listed as threatened or endangered). This consultation results in a Biological Opinion prepared by the USFWS stating whether implementation of the HCP will result in jeopardy to any HCP Covered Species or will adversely modify critical habitat and the measures necessary to avoid or minimize effects to listed species.

Although federally listed animals are legally protected from harm no matter where they occur, section 9 of the ESA provides protection for endangered plants by prohibiting the malicious destruction on federal land and other “take” that violates State law. Protection for plants not living on federal lands is provided by the California Endangered Species Act.

### **California Endangered Species Act**

CDFW has jurisdiction over species listed as threatened or endangered under Section 2080 of the California Fish and Wildlife Code. Section 2080 prohibits the take of a species listed by CDFW as threatened or endangered. The state definition of take is similar to the federal definition, except that Section 2080 does not prohibit indirect harm to listed species by way of habitat modification. To qualify as take under the state ESA, an action must have direct, demonstrable detrimental effect on individuals of the species. Impacts on habitat that may ultimately result in effects on individuals are not considered take under the state ESA but can be considered take under the federal ESA.

Proponents of a project affecting a state-listed species must consult with CDFW and enter into a management agreement and take permit under Section 2081. The state ESA consultation process is similar to the federal process. California ESA does not require preparation of a state biological assessment; the federal biological assessment and the CEQA analysis or any other relevant information can provide the basis for consultation. California ESA requires that CDFW coordinate consultation for joint federally listed and state-listed species to the extent possible; generally, the state opinion for the listed species is brief and references provisions under the federal opinion.



### **Clean Water Act, Section 404**

The COE and the U.S. Environmental Protection Agency regulate the placement of dredged or fill material into “Waters of the United States” under Section 404 of the Clean Water Act. Waters of the United States include lakes, rivers, streams, and their tributaries, and wetlands. Wetlands are defined for regulatory purposes as “areas inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 Code of Federal Regulations [CFR] 328.3, 40 CFR 230.3).

The COE may issue either individual permits on a case-by-case basis or general permits on a program level. General permits are pre-authorized and are issued to cover similar activities that are expected to cause only minimal adverse environmental effects. Nationwide permits (NWP’s) are general permits issued to cover particular fill activities. All NWP’s have general conditions that must be met for the permits to apply to a particular project, as well as specific conditions that apply to each NWP.

### **Clean Water Act, Section 401**

Section 401 of the Clean Water Act requires water quality certification and authorization of placement of dredged or fill material in wetlands and Other Waters of the United States. In accordance with Section 401 of the Clean Water Act, criteria for allowable discharges into surface waters have been developed by the State Water Resources Control Board, Division of Water Quality. As such, proponents of any new project which may impair water quality as a result of the project are required to create a post construction stormwater management plan to ensure offsite water quality is not degraded. The resulting requirements are used as criteria in granting National Pollution Discharge Elimination System (NPDES) permits or waivers, which are obtained through the Central Valley Regional Water Quality Control Board (RWQCB). Any activity or facility that will discharge waste (such as soils from construction) into surface waters, or from which waste may be discharged, must obtain an NPDES permit or waiver from the RWQCB. The RWQCB evaluates an NPDES permit application to determine whether the proposed discharge is consistent with the adopted water quality objectives of the basin plan.

### **California Fish and Wildlife Code, Sections 1600-1616**

Under the California Fish and Wildlife Code, Sections 1600-1616 CDFW regulates projects that divert, obstruct, or change the natural flow or bed, channel, or bank of any river, stream, or lake. Proponents of such projects must notify CDFW and enter into a streambed alteration agreement with them.

Section 1602 of the California Fish and Wildlife Code requires a state or local government agency, public utility, or private entity to notify CDFW before it begins a construction project that will: (1) divert, obstruct, or change the natural flow or the bed, bank, channel, or bank of any river, stream, or lake; (2) use materials from a streambed; or (3) result in the disposal or deposition of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into any river, stream, or lake. Once the notification is filed and determined to be complete, CDFW issues a streambed alteration agreement that contains conditions for construction and operations of the proposed project.

### **California Fish and Wildlife Code, Section 3503.5**

Under the California Fish and Wildlife Code, Section 3503.5, it is unlawful to take, possess, or destroy any birds in the order Falconiformes (hawks, eagles, and falcons) or Strigiformes (owls). Take would include the disturbance of an active nest resulting in the abandonment or loss of young.

### **Migratory Bird Treaty Act**

The federal Migratory Bird Treaty Act (MBTA) prohibits the taking, hunting, killing, selling, purchasing, etc. of migratory birds, parts of migratory birds, or their eggs and nests. As used in the MBTA, the term “take” is defined as “to pursue, hunt, shoot, capture, collect, kill, or attempt to pursue, hunt, shoot, capture, collect, or kill, unless the context otherwise requires.” Most bird species native to North America are covered by this act.

### **Sensitive Natural Communities**

The California Office of Planning and Research and the Office of Permit Assistance (1986) define project effects that substantially diminish habitat for fish, wildlife, or plants, or that disrupt or divide the physical arrangement of an established community as significant impacts under CEQA.

This definition applies to certain natural communities because of their scarcity and ecological values and because the remaining occurrences are vulnerable to elimination. For this study, the term “sensitive natural community” includes those communities that, if eliminated or substantially degraded, would sustain a significant adverse impact as defined under CEQA. Sensitive natural communities are important ecologically because their degradation and destruction could threaten populations of dependent plant and wildlife species and significantly reduce the regional distribution and viability of the community. If the number and extent of sensitive natural communities continue to diminish, the status of rare, threatened, or endangered species could become more precarious, and populations of common species (i.e., not special status species) could become less viable. Loss of sensitive natural communities also can eliminate or reduce important ecosystem functions, such as water filtration by wetlands and bank stabilization by riparian woodlands for example.

### **Protected Plants**

The California Desert Native Plant Act was passed in 1981 to protect non-listed California desert native plants from unlawful harvesting on both public and privately-owned lands. Harvest, transport, sale, or possession of specific native desert plants is prohibited unless a person has a valid permit. The following plants are under the protection of the California Desert Native Plants Act:

- Dalea spinosa (smoketree)
- All species of the genus Prosopis (mesquites)
- All species of the family Agavaceae (century plants, nolinias, yuccas)
- All species of Cactus
- Creosote Rings, ten feet in diameter or greater
- All Joshua Trees

The project would be required to comply with the County of San Bernardino Desert Native Plant Protection Ordinance. The removal of any trees listed under Section 88.01.060 would be required to comply with Section 88.01.050, which requires the project applicant to apply for a Tree or Plant Removal Permit prior to removal from the project site.



# PROTECTED PLANT PRESERVATION PLAN

CITY OF ADELANTO, SAN BERNARDINO COUNTY, CALIFORNIA  
(APN: 0459-05-354)

*Prepared for:*

**Jason Ye  
JX Investments**

*Prepared by:*

**RCA Associates, Inc.  
15555 Main Street, #D4-235  
Hesperia, CA 92345  
(760) 596-0017**

**Principal Investigators:**

**Ryan Hunter, Senior Environmental Scientist, Wildlife Biologist  
Brian Bunyi, Environmental Scientist, Wildlife Biologist**



**Project No: RCA#2022-178 JT**

**November 17, 2022**



## TITLE PAGE

**Date Report Written:** November 17, 2022

**Field Work Completed:** November 15, 2022

**Report Title:** Protected Plant Preservation Plan

**Project Location:** Adelanto, California

**APN:** 0459-05-354

**Prepared for:** Jason Ye  
JX Investments

**Principal Investigators:** Ryan Hunter, Senior Environmental Scientist, Wildlife Biologist  
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## 1.0 SUMMARY

At the request of the project proponent, RCA Associates, Inc. surveyed an approximate 17.4-acre property located on the northeast corner of the intersection of Barcelona Avenue and Pearmain Street in the city of Adelanto, California (Township 6 North, Range 5 West, Section 21, Adelanto, California Quadrangle, 1956) (Figures 1, 2, 3 and 4).

The purpose of the survey was to evaluate the Joshua trees present on the site and determine which trees were suitable for relocation and which trees could be discarded prior to site clearing activities. This report provides the results of the Joshua tree survey performed on November 15, 2022. Following completion of the survey, RCA Associates, Inc. prepared this Protected Plant Preservation Plan to assist the project proponent with future relocation of the Joshua trees. Information on the Joshua trees which will need to be relocated-transplanted in the future is provided in Section 4.0. The City of Adelanto Municipal code 17.57.040 stating the purpose of Joshua Tree preservation and the consequence of removing one and follows the County of San Bernardino Plant Protection Plan and Management (Chapter 88.01.060) to help protect and preserve desert vegetation, including Joshua trees. The requirements of the Ordinance (Chapter 88.01.060) are provided in Appendix B.

Based on the results of the field investigations there are 68 Joshua trees which occur within the boundaries of the property (Figures 1, 2, and 3). Based on the evaluation and analysis of each tree it was determined that one of the sixty eight (68) Joshua trees (1.4%) are suitable for transplanting. If trees are deemed transplantable, they would be marked in green in Table 4-1. The remaining 67 Joshua trees (98.6%) were determined to be unsuitable for transplanting due to a variety of factors such as size, condition, damage, dying, dead, excessive leaning, possibly disease, clonal, etc.

## 2.0 INTRODUCTION AND PROJECT LOCATION

The area surveyed is located on northeast of the intersection of Barcelona Avenue and Pearmain Street in the city of Adelanto, California (Figures 1 and 2). Current conditions on the property include a heavily disturbed desert scrub community showing signs of human disturbance through pedestrian traffic and dumping. The biological resources on the site consist of a desert scrub community typical of the area with creosote bush (*Larrea tridentata*), white-bursage (*Ambrosia dumosa*), flatspine bur ragweed (*Ambrosia acanthicarpa*), Joshua tree (*Yucca brevifolia*), and rubber rabbitbrush (*Ericameria nauseosa*) were observed on the site. The property is surrounded by vacant land in the south and west (Figure 2). The adjacent property to the west is the Southern California Logistics Airport and to the distant west of the site is Highway 395.

Joshua trees occur throughout the Mojave Desert in Southern California and are typically found at an elevation of 400 to 1,800 meters (~1,200 to ~5,400 feet). Joshua trees within the western portion of the Mojave Desert typically receive more annual precipitation during “normal” years; consequently, cloning occurs more often resulting in numerous trunks sprouting from the same root system (Rowland, 1978). Joshua tree habitats provide habitat for a variety of wildlife species including desert woodrats (*Neotoma* sp.) and night lizards (*Xantusia* sp.) both of which utilize the base of the trees. A variety of birds also utilize Joshua trees for nesting such as hawks, common ravens, and cactus wrens. CDFW consider Joshua tree woodlands as areas that support relatively high species diversity and as such are considered to be a sensitive desert community. Joshua trees are also considered a significant resource under the California Environmental Quality Act (CEQA) and are included in the Desert Plant Protection Act, Food and Agricultural Code (80001 – 80006).

### 3.0 METHODOLOGIES

Pedestrian surveys were walked throughout the site and biologists from RCA Associates, Inc. evaluated each Joshua tree to determine which trees were suitable for relocation/transplanting based on a general health assessment. Each Joshua tree within the property boundary received a metal numbered tag which was affixed on the north side of each tree for orientation purposes during future transplanting. Surveyor flagging was also placed around those trees suitable for transplanting to facilitate future identification. The precise location and assessment of each tree was recorded using a Juniper Systems Cedar CT8X2 GPS tablet and a Nikon Forestry Pro II rangefinder was utilized to determine the extent of the property boundaries and accurate tree height. Those Joshua trees which occur on the property site are presented in Table 4-1 and the locations are provided in Figure 3.

In addition, a buffer extending out from the project boundary was surveyed visually out to 300-feet. Trees located within this buffer from the project boundary were marked with coordinates for locational purposes. There was a total of 12 Joshua trees observed outside of the project boundary and within the buffer zone (Figure 4).

The factors utilized to determine which Joshua trees were suitable for transplanting include the following factors:

1. Trees from about 1 foot in height up to approximately 12 feet,
2. No visible signs of damage to the tree such as absence of bark due to rodent or other animals,
3. Minimal number of branches (No more than 2 or 3 branches),
4. No excessive leaning of the tree,
5. No yellow or brown fronds,
6. Proximity to other Joshua trees (i.e., clonal), and
7. No exposed roots at the base of the tree.
8. Dying or dead

## 4.0 RESULTS

There are 68 Joshua trees on the property and the GPS locations of the Joshua trees are provided in Table 4-1. A total of one Joshua tree (1.4%) is suitable for relocation/transplanting based on the nine factors listed in Section 3.0 (Table 4-1). Joshua trees deemed suitable for transplanting they should be relocated/transplanted on-site, which is the preferable option, or to an off-site area approved by the City of Adelanto. Those Joshua trees that are not suitable for relocation/transplanting due to size, health of the tree, presence of damage, excessive branches, excessive leaning, clonal, and exposed roots should be disposed of as per City requirements. There was a total of 12 Joshua trees located outside of the project boundary that fall within the 300-foot buffer which will be used to assess impacts to the species as a whole.

**Table 4-1: Joshua tree census. (Note: The GPS locations of the Joshua trees are provided below and those trees which are suitable for transplanting on-site as part of project landscaping are highlighted in green.)**

<b>Total Number of Joshua Trees On Site</b>	<b>Joshua Trees to be Transplanted</b>	<b>Number of Clonal Trees</b>	<b>Number of Non-Clonal Trees</b>	<b>Number of Dead Trees</b>
<b>68</b>	<b>1</b>	<b>15</b>	<b>32</b>	<b>21</b>

<b>Joshua Tree</b>	<b>Condition</b>	<b>Life Stage</b>	<b>Location</b>	<b>Height (ft)</b>	<b>Panicles</b>	<b>Branches</b>	<b>Health Assessment</b>	<b>Number of Trunks</b>	<b>Transplantable</b>
JT 1	Dead		34.592561°, -117.401110°						No
JT 2	Dead		34.593163°, -117.401403°						No
JT 3	Good	Adult	34.593156°, -117.401649°	11	1	2	-Light Damage		No
JT 4	Dead		34.593125°, -117.401666°						No
JT 5	Good	Adult	34.593109°, -117.401654°	7	2	3	-Clonal	2	No
JT 6	Good	Adult	34.592675°, -117.401740°	23	5	17	-Greater than 12 ft		No
JT 7	Good	Adult	34.592431°, -117.401896°	9	4	12	-Excessive Branches		No
JT 8	Good	Adult	34.592477°, -117.402097°	10	3	5	-Excessive Branches		No
JT 9	Good	Adult	34.592739°, -117.402269°	8		3	-Clonal	3	No
JT 10	Dead		34.592819°, -117.401959°						No
JT 11	Good	Adult	34.592962°, -117.402034°	9	1	2	-Yellow or Browning Fronds		No
JT 12	Good	Adult	34.593007°, -117.402247°	11		5	-Excessive Branches		No
JT 13	Dead		34.593064°, -117.402263°						No
JT 14	Fair	Adult	34.593052°, -117.402326°	14	5	9	-Greater than 12 ft		No
JT 15	Dead		34.592992°, -117.402322°						No
JT 16	Good	Adult	34.593630°, -117.402517°	12	4	7	-Greater than 12 ft		No
JT 17	Good	Adult	34.593470°, -117.402571°	12		3	-Greater than 12 ft -Clonal	4	No
JT 18	Dead		34.593231°, -117.402710°						No
JT 19	Good	Adult	34.593318°, -117.403036°	12	2	6	-Greater than 12 ft		No
JT 20	Good	Adult	34.593154°, -117.403219°	8	3	7	-Excessive Branches		No
JT 21	Good	Adult	34.593122°, -117.403242°	13	2	3	-Greater than 12 ft -Clonal	5	No
JT 22	Good	Adult	34.592754°, -117.403264°	15	3	6	-Clonal -Greater than 12 ft	3	No
JT 23	Dead		34.592646°, -117.403197°						No



JT 24	Good	Adult	34.592344°, -117.402934°	12	2	3	-Greater than 12 ft	No
JT 25	Good	Adult	34.592377°, -117.402598°	8	1	3	-Clonal	2 No
JT 358	Dead		34.592132°, -117.400965°					No
JT 359	Dead		34.592196°, -117.401360°					No
JT 360	Good	Adult	34.592108°, -117.401651°	16	3	5	-Greater than 12 ft	No
JT 361	Good	Adult	34.592156°, -117.402101°	9	6	6	-Clonal	4 No
JT 362	Good	Adult	34.592223°, -117.402812°	9	3	7	-Excessive Branches	No
JT 363	Good	Adult	34.592259°, -117.403379°	11	3	6	-Excessive Branches	No
JT 364	Dead		34.592250°, -117.403578°					No
JT 365	Dead		34.592255°, -117.403812°					No
JT 366	Good	Adult	34.592208°, -117.404192°	1	1	7	-Excessive Branches	No
JT 367	Dead		34.592079°, -117.404576°					No
JT 368	Good	Adult	34.592311°, -117.404855°	10	3	4	-Clonal	3 No
JT 369	Dead		34.592572°, -117.404588°					No
JT 370	Dead		34.592683°, -117.404544°					No
JT 371	Good	Adult	34.592649°, -117.404443°	10	1			Yes
JT 372	Good	Adult	34.592670°, -117.404347°	10	2	5	-Excessive Branches	No
JT 373	Good	Adult	34.592723°, -117.404335°	10	6	8	-Excessive Branches	No
JT 374	Fair	Adult	34.592794°, -117.404419°	14	3	8	-Greater than 12 ft	No
JT 375	Dead		34.592965°, -117.404405°					No
JT 376	Good	Adult	34.593078°, -117.404383°	14	3	5	-Greater than 12 ft	No
JT 377	Good	Adult	34.593176°, -117.404382°	16	3	8	-Greater than 12 ft - Excessive Branches	No
JT 378	Dead		34.593137°, -117.404927°					No
JT 379	Good	Adult	34.593295°, -117.404398°	11	3	6	-Excessive Branches	No
JT 380	Good	Adult	34.593234°, -117.404299°	13	6	6	-Greater than 12 ft	No
JT 381	Good	Adult	34.593635°, -117.404327°	16	5	9	-Clonal -Excessive Branches	2 No
JT 382	Good	Adult	34.593295°, -117.404134°	9	2	10	-Clonal -Excessive Branches	8 No
JT 383	Good	Adult	34.593171°, -117.403949°	14	2	6	-Greater than 12 ft	No
JT 384	Good	Adult	34.593093°, -117.403936°	11	2	5	-Clonal -Excessive Branches	4 No
JT 385	Dead		34.592972°, -117.404017°					No
JT 386	Good	Adult	34.593100°, -117.404069°	11	3	7	-Excessive Branches	No
JT 387	Dead		34.593089°, -117.404131°					No
JT 388	Good	Adult	34.593115°, -117.404228°	10	4	8	-Excessive Branches	No
JT 389	Good	Adult	34.592968°, -117.404252°	8	3	3	-Clonal	3 No

JT 390	Fair	Adult	34.592863°, -117.403958°	11	4	4	-Clonal	4	No
JT 391	Good	Adult	34.592619°, -117.403978°	9	4	5	-Excessive Branches		No
JT 392	Good	Adult	34.592551°, -117.404124°	10	4	12	-Excessive Branches		No
JT 393	Fair	Adult	34.592434°, -117.404087°	9	1	3	-Excessive Leaning		No
JT 394	Good	Adult	34.592548°, -117.403664°	12	1	4	-Greater than 12 ft		No
JT 395	Good	Adult	34.592640°, -117.403647°	17	10	27	-Greater than 12		No
JT 396	Dead		34.592872°, -117.403656°						No
JT 397	Dead		34.592797°, -117.403474°						No
JT 398	Good	Adult	34.592683°, -117.403419°	10	2	3	-Clonal	2	No
JT 399	Poor	Adult	34.592652°, -117.403470°	3			-Clonal	7	No
JT 400	Good	Adult	34.592373°, -117.403483°	12	2	2	-Greater than 12 ft		No

## 5.0 CONCLUSIONS

There are 68 Joshua trees located on the property and one of the trees is suitable for relocation/transplanting. This conclusion was based on: (1) trees which were one foot or greater in height and less than twelve feet tall (approximate); (2) in good health; (3), two branches or less; (4) density of trees (i.e., no clonal trees); (5) no exposed roots; (6) and trees that are not leaning over excessively. As indicated in Table 4-1, the majority of the Joshua trees which were not suitable for relocation are dead and lying on the ground.

As of September 22, 2020, the California Department of Fish and Wildlife temporarily listed the western Joshua tree (*Yucca brevifolia*) as an endangered species until a final decision is made in 2023. Therefore, any attempt to remove the Joshua tree from its current position dead or alive will require an Incidental Take Permit (ITP).

The City of Adelanto's Municipal Code (17.57.040) instructs to follow the County of San Bernardino's ordinance (88.01.060), which requires preservation of Joshua trees given their importance in the desert community. A qualified City-approved biologist or arborist should be retained to conduct any future relocation/transplanting activities and should follow the protocol of the County's Municipal Code (Appendix B: Chapter 88.01.060). The following criteria will be utilized by the contractor when conducting any future transplanting activities.

A. The Joshua trees will be retained in place or replanted somewhere on the site where they can remain in perpetuity or will be transplanted to an off-site area approved by the city where they can remain in perpetuity. Joshua trees which are deemed not suitable for transplanting will be cut-up and discarded as per City requirements.

B. Earthen berms will be created around each tree by the biologist prior to excavation and the trees will be watered approximately one week before transplanting. Watering the trees prior to excavation will help make excavation easier, ensure the root ball will hold together, and minimize stress to the tree.

C. Each tree will be moved to a pre-selected location which has already been excavated and will be placed and oriented in the same direction as their original direction. The hole will be backfilled with

native soil, and the transplanted tree will be immediately watered. As noted in Section 3.0, a numbered metal tag was placed on the north side of the trees and the trees were also flagged with surveyor's flagging. The biologist will develop a watering regimen to ensure the survival of the transplanted trees. The watering regimen will be based upon the needs of the trees and the local precipitation.

## 6.0 REFERENCES

- Brittingham, S. and W. Lawrence.  
2000. Facilitation of *Yucca brevifolia* Recruitment by Mojave Desert Shrubs. Western North American Naturalist 60(4), pp. 374-383.
- County of San Bernardino.  
2009. Desert Native Plant Protection, Municipal Code: Chapter 88.01.060.
- Hickman, James C.  
The Jepson Manual Higher Plants of California. University of California Press. Berkeley, CA. 3<sup>rd</sup> Edition. 1996.
- Holland, Robert F.  
1986 Preliminary Description of the Terrestrial Natural Communities of California. Prepared for the California Natural Diversity Database. California Department of Fish and Game. Sacramento, California. 160 pp.
- Johnson, H.  
1976 vegetation and Plant Communities of Southern California Deserts- a functional view. In Symposium proceedings: Plant communities of Southern California. June Latting, editor. California Native Plant Society, Spec. No. 2 Berkeley, CA.
- Munz, Philip A.  
1974. A Flora of Southern California. University of California Press, Berkeley, California. 1086 pp.

**7.0 CERTIFICATION**

I hereby certify the statements furnished above and in the attached exhibits, present the data and information required for this Joshua tree survey and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. Field work conducted for this survey was performed by Ryan Hunter and Brian Bunyi.

Date: November 17, 2022 Signed: *Ryan Hunter*  
*Brian Bunyi*

Field Work Performed by: Ryan Hunter  
Senior Environmental Scientist/Wildlife Biologist

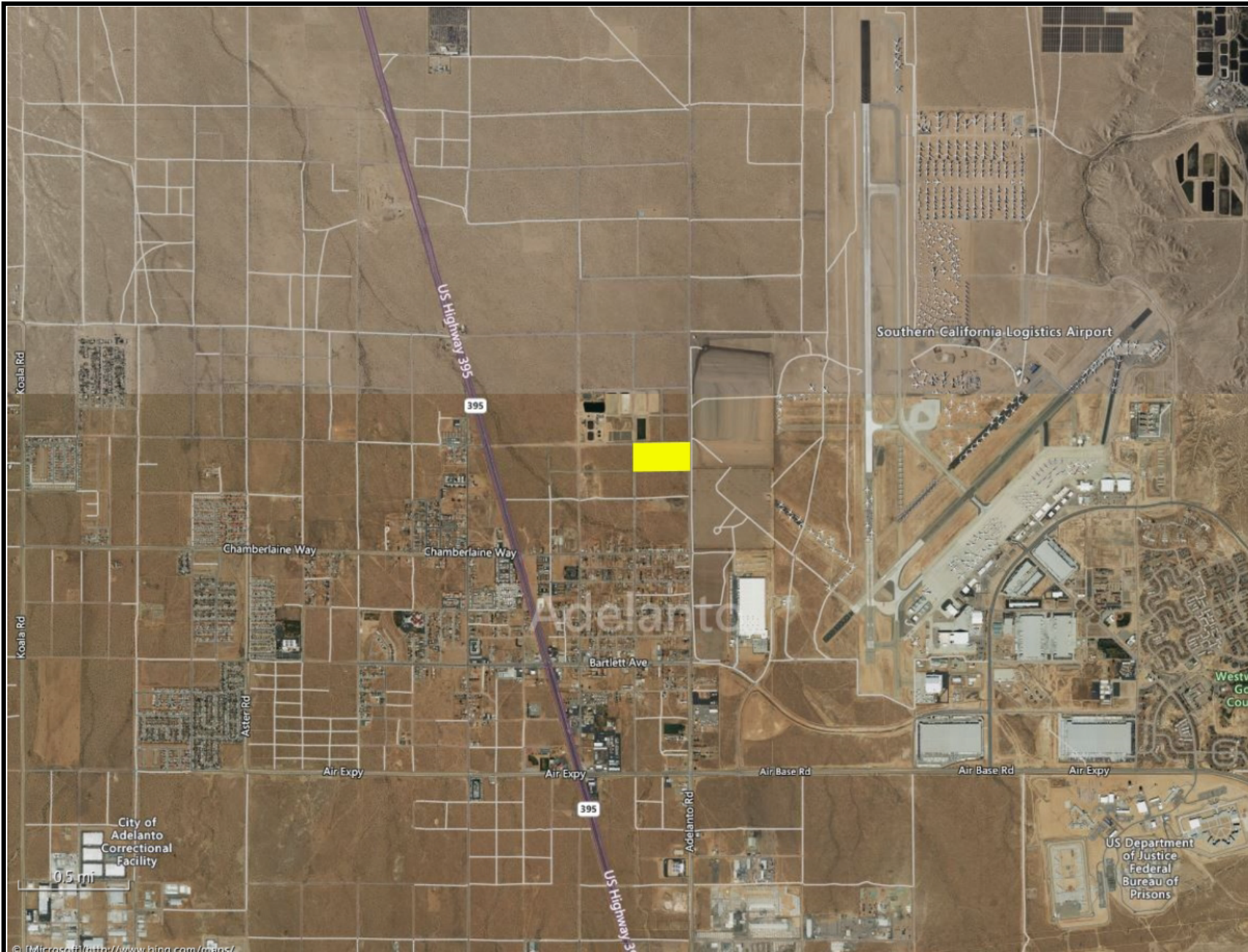
Brian Bunyi  
Environmental Scientist/Wildlife Biologist



## **APPENDIX A**

### **Figures**





### Legend

 Site Boundary

## Figure 1: Regional Exhibit

Produced By: RCA Associates, Inc.

## NE corner of Barcelona Avenue and Pearmain Street, Adelanto CA.

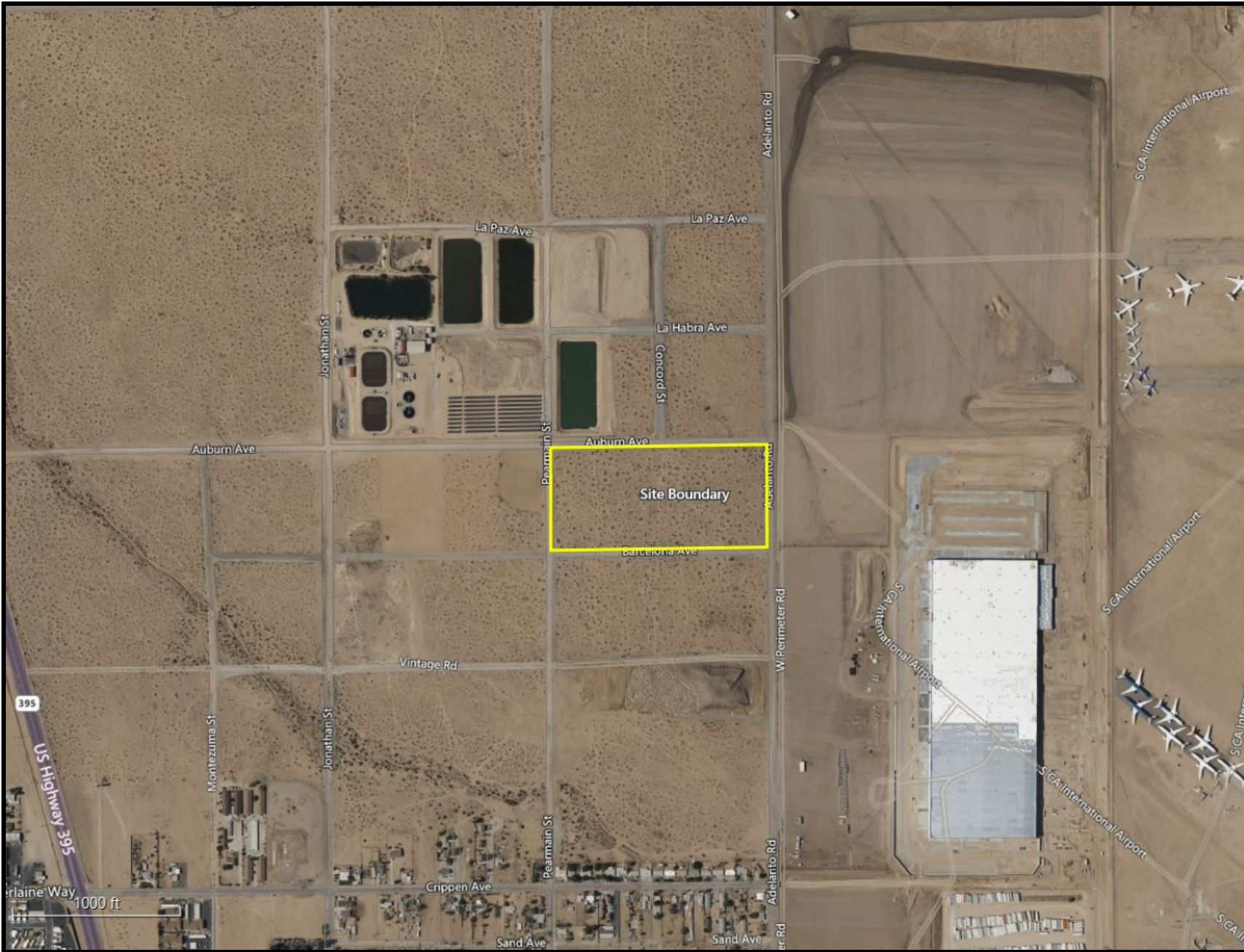
Source: Uinta Software

Acreage: 17.4-Acres  
(Approximate)


Project #: 2022-178 JT







### Legend

 Site Boundary



## Figure 2: Vicinity Exhibit

Produced By: RCA Associates, Inc.

## NE corner of Barcelona Avenue and Pearmain Street, Adelanto CA.

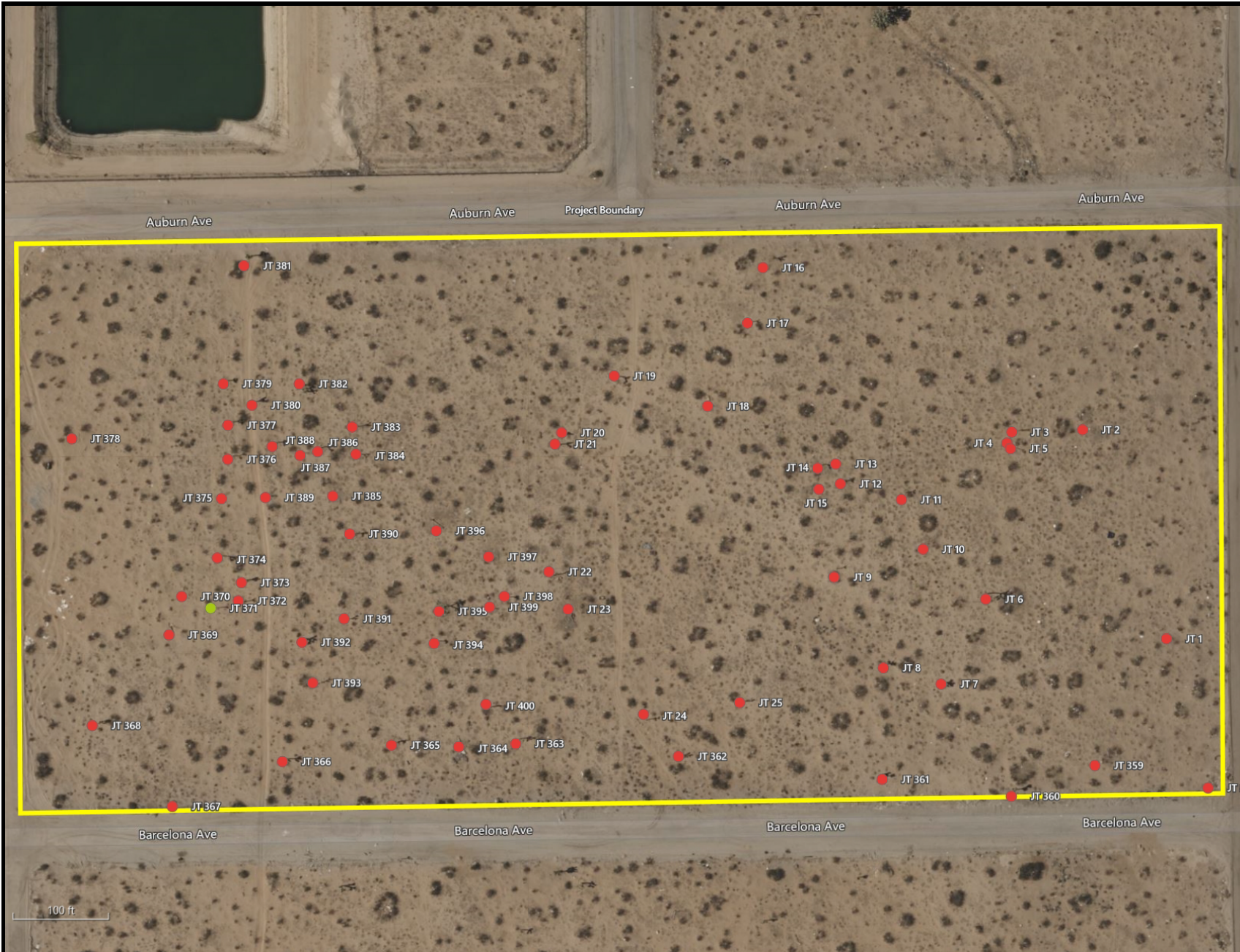
Source: Uinta Software

Acreage: 17.4-Acres  
(Approximate)

Project #: 2022-178 JT







- ### Legend
- 67 Transplantable JT
  - 1 Nontransplantable JT
  - Project Boundary



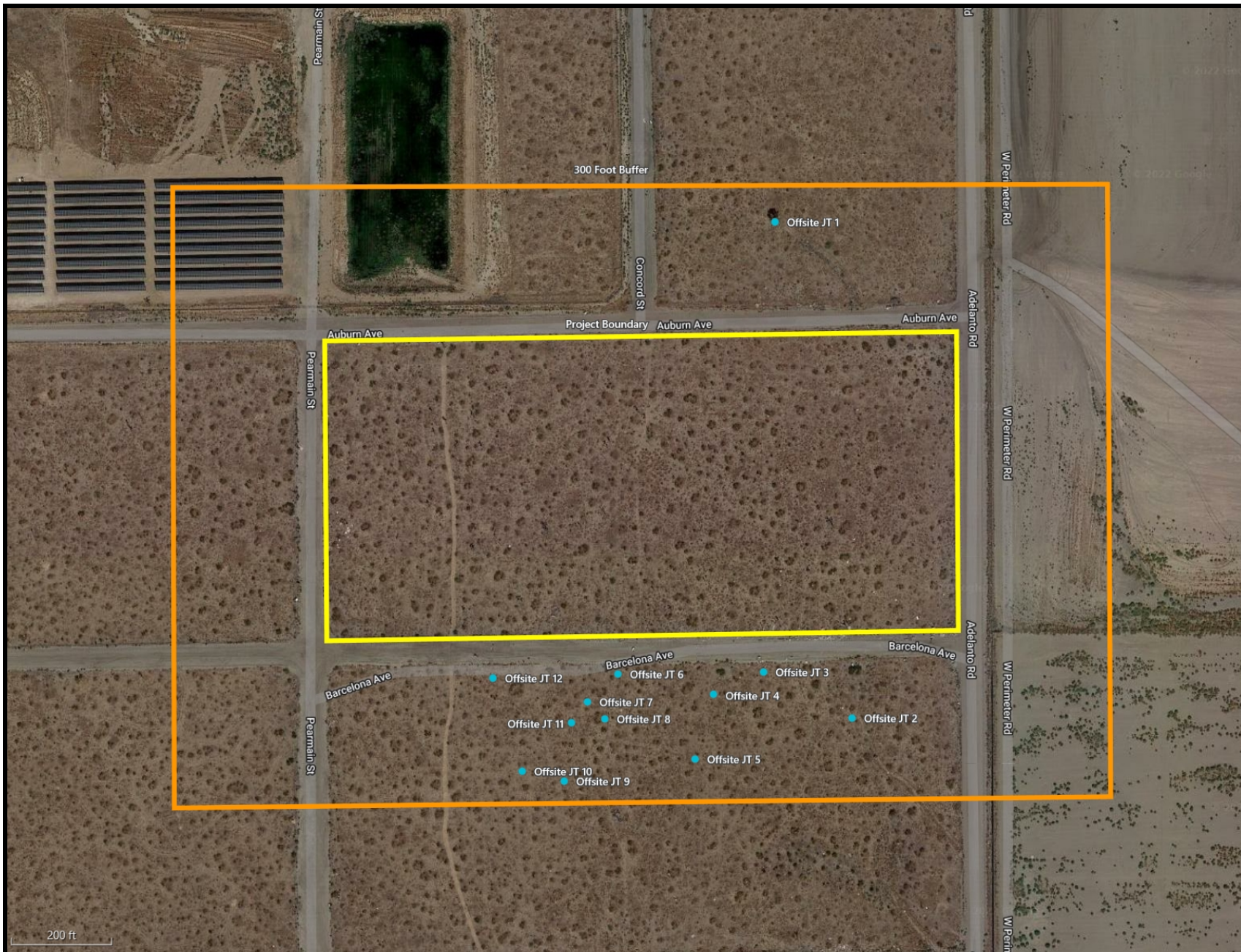
**Figure 3: Location of Western Joshua Trees**  
Produced By: RCA Associates, Inc.

**NE of the Intersection of Barcelona Avenue and Pearmain Street**

Source:	Uinta Software
Acreage:	17.4-Acres (Approximately)
Project #:	#2022-178 JT







### Legend

- 12 Offsite JT
- 300 Foot Buffer
- Project Boundary

	<h2>Figure 4: Location of Offsite Western Joshua Trees</h2>	<h2>NE of the Intersection of Barcelona Avenue and Pearmain Street</h2>	<p>Source: Uinta Software</p> <hr/> <p>Acreage: 17.4-Acres (Approximately)</p> <hr/> <p>Project #: 2022-178</p>	
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**APPENDIX B**

**City of Adelanto  
Municipal Code: 17.57.040**

**County of San Bernardino  
Municipal Code: Chapter 18.01.060**

#### **17.57.040 Plant Protection and Management**

Development projects will comply with the requirements of the County of San Bernardino for the relocation of Joshua trees. The Building Department will review relocation plans and monitor the relocation of any Joshua trees.

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## CHAPTER 88.01 PLANT PROTECTION AND MANAGEMENT

---

### Sections:

- 88.01.010 Purpose
- 88.01.020 Applicability
- 88.01.030 Exempt Activities
- 88.01.040 General Permit Application and Review Requirements
- 88.01.050 Native Tree or Plant Removal Permits
- 88.01.060 Desert Native Plant Protection
- 88.01.070 Mountain Forest and Valley Tree Conservation
- 88.01.080 Riparian Plant Conservation
- 88.01.090 Tree Protection from Insects and Disease

### 88.01.010 Purpose

This Chapter provides regulations and guidelines for the management of plant resources in the unincorporated areas of the County on property or combinations of property under private or public ownership. The intent is to:

- (a) Promote and sustain the health, vigor and productivity of plant life and aesthetic values within the County through appropriate management techniques.
- (b) Conserve the native plant life heritage for the benefit of all, including future generations.
- (c) Protect native trees and plants from indiscriminate removal and to regulate removal activity.
- (d) Provide a uniform standard for appropriate removal of native trees and plants in public and private places and streets to promote conservation of these valuable natural resources.
- (e) Protect and maintain water productivity and quality in local watersheds.
- (f) Preserve habitats for rare, endangered, or threatened plants and to protect animals with limited or specialized habitats.

Adopted Ordinance 4011 (2007); Amended Ordinance 4067 (2009)

**88.01.020 Applicability**

The provisions in this Chapter apply to the removal or relocation of regulated trees or plants and to any encroachment (for example, grading) within the protected zone of a regulated tree or plant on all private land within the unincorporated areas of the County and on public lands owned by the County, unless otherwise specified. Nothing in this Chapter shall relieve nor be interpreted to exempt a development from complying with applicable State or Federal laws and regulations.

Adopted Ordinance 4011 (2007); Amended Ordinance 4067 (2009)

**88.01.030 Exempt Activities**

The provisions in this Chapter, except those of Section 88.01.090 (Tree Protection From Insects and Disease), shall not apply to the removal of regulated trees or plants that may occur in the following situations. Removal actions shall not authorize the removal of perch trees within an identified American Bald Eagle habitat.

- (a) **Timber operations.** Removal as part of a timber operation conducted in compliance with the Z'berg-Nejedly Forest Practice Act of 1973 (Public Resources Code Section 4526 et seq.).
- (b) **Government owned lands.** Removal from lands owned by the United States, State of California, or local governmental entity, excluding Special Districts (i.e., Special Districts shall be subject to the provisions of this Division.).
- (c) **Public utilities.** Removal by a public utility subject to jurisdiction of the Public Utilities Commission or any other constituted public agency, including franchised cable TV, where to establish or maintain safe operation of facilities under their jurisdiction, trees are pruned, topped, or braced.
- (d) **State agencies.** Removal by, or under the authority of, the State of California:
  - (1) Department of Forestry and Fire Protection.
  - (2) Forest Improvement Program.
  - (3) Agricultural Conservation Program.
- (e) **Government laws.** Removal required by other codes, ordinances, or laws of the County, State, or United States.
- (f) **Emergency.** Removal of native trees and plants that are an immediate threat to the public health, safety, or welfare and that require emergency removal to prevent probable damage to a structure or injury to people or fenced animals.



- (g) **Forest stocking control program.** Removal as part of a stocking control program prepared by a California Registered Professional Forester.
- (h) **Fire hazard reduction program.** Removal as part of a fire hazard reduction program approved by the Fire Chief.
- (i) **Bona fide agricultural activity.** Removal as part of a bona fide agricultural activity, as determined by the Director, which is one of the following:
  - (1) Conducted under a land conservation contract.
  - (2) An existing agricultural activity, including expansions of the activity onto undisturbed contiguous land.
  - (3) A proposed bona fide agricultural activity (i.e., an agricultural activity that is served by a water distribution system adequate for the proper operation of the activity).
    - (A) The Director shall be given 30 days' written notice of the removal describing the:
      - (I) Location of the land.
      - (II) Nature of the proposed activity.
      - (III) Proposed sources of water for the activity.
    - (B) The Director shall notify the landowner in writing before the elapse of the 30-day period if, in the opinion of the Director, the activity is not a bona fide agricultural activity, or else the activity shall be deemed bona fide.
- (j) **Parcel less than 20,000 square feet developed with primary structure.** Removal on parcels that have a net area of 20,000 square feet or less and that are developed with a primary structure, other than a sign structure.
- (k) **Located within 20 feet of permitted structure.** Removal from a parcel of a regulated native plant or tree that is within 20 feet of a structure that was constructed or set down on the parcel under a County development permit.
- (l) **Private fuel wood.** Removal of two or fewer regulated native trees in the Mountain Region or Valley Region per year per acre for private fuel wood purposes. The year shall be measured as the last 12 consecutive months.



- (m) **Oak woodlands.** The following projects shall be exempt from the conditions for mitigating the conversion of oak woodlands required in Subsection 88.01.050(e) (Native Tree or Plant Removal Permits Conditions of approval), below, in compliance with Public Resources Code 21083.4:
- (1) Projects undertaken in compliance with a Natural Community Conservation Plan or subarea plan within a Natural Community Conservation Plan, as approved in compliance with Fish and Game Code Section 2800 *et seq.*, that includes oaks as a covered species or that conserves oak habitat through natural community conservation preserve designation and implementation and mitigation measures that are consistent with this Chapter.
  - (2) Affordable housing projects for lower income households, as defined in Health and Safety Code Section 50079.5, that are located within a city's sphere of influence.
  - (3) Projects on agricultural land within an Agricultural Land Use Zoning District that includes land used to produce or process plant and animal products for commercial purposes.
  - (4) Projects undertaken in compliance with a State agency's regulatory program certified in compliance with Public Resources Code Section 21080.5.

Adopted Ordinance 4011 (2007); Amended Ordinance 4067 (2009)

#### **88.01.040 Regulated Trees and Plants and General Permit**

- (a) **Regulated trees and plants.** A regulated tree or plant shall be any of the those trees or plants identified in:
- (1) Section 88.01.060(c) (Regulated desert native plants);
  - (2) Section 88.01.070(b) (Regulated trees); or
  - (3) Section 88.01.080(b) (Regulated riparian plants).
- (b) **Permit for removal required.** A Tree or Plant Removal Permit issued in compliance with Section 88.01.050 (Tree or Plant Removal Requirements) shall be required for the removal of regulated tress and plants.
- (c) **Conditions of approval.** The permits required by this Chapter may be subject to conditions imposed by the applicable review authority as identified in Subsection 88.01.050(e) (Tree or Plant Removal Permits - Condition of approval).

Adopted Ordinance 4011 (2007); Amended Ordinance 4067 (2009)

**88.01.050 Tree or Plant Removal Permits**

- (a) **When Tree or Plant Removal Permit required.** A Tree or Plant Removal Permit shall be required for the removal of a regulated tree or plant as identified in this Chapter.
- (1) **Removals in conjunction with land use application or development permit**  
**Director approval.** The Director may approve the removal of regulated trees or plants when requested in conjunction with a land use application, a Building Permit, and all other development permits (e.g., Grading Permits, Mobile Home Setdown Permits, etc.). An approved land use application and/or development permit shall be considered to include a Tree or Plant Removal Permit, if the land use application or development permit specifically reviews and approves the removals. The review of a land use application or development permit shall consider and require compliance with this Chapter.
- (2) **Removals not in conjunction with land use application or development permit**  
**Director approval.** The Director may approve a Tree or Plant Removal Permit for the removal of regulated trees or plants requested not in conjunction with a land use application or development permit.
- (3) **Removals to mitigate fire hazards**  
**Fire Chief approval.** The Fire Chief may approve a Tree or Plant Removal Permit for the removal of regulated trees or plants when requested for the purposes of mitigating fire hazards and independent of a land use application or development permit.
- (b) **Expert certification.** The applicable review authority may require certification from an appropriate arborist, registered professional forester or a Desert Native Plant Expert that the proposed tree removal, replacement, or revegetation activities are appropriate, supportive of a healthy environment, and in compliance with this Chapter. The certification shall include the information in compliance with Department procedures.
- (c) **Preconstruction inspections.** A preconstruction inspection before approval of development permits shall be required in areas with regulated trees or plants to determine the presence of regulated trees and plants. The preconstruction inspection may be combined with any other required inspection.
- (d) **Duration of Tree or Plant Removal Permits.**
- (1) **Removals in conjunction with land use application or development permit.** The duration of a Tree or Plant Removal Permit, when issued in conjunction with a land use application and/or a development permit, shall have the same duration of the associated application or permit, unless otherwise specified.

- (2) **Removals not in conjunction with land use application or development permit.** The applicable review authority shall specify the expiration date for all other Tree or Plant Removal Permits.
- (e) **Conditions of approval.** A Tree or Plant Removal Permit may be subject to the following conditions imposed by the applicable review authority:
- (1) **Types of conditions.** The conditions may specify criteria, methods, and persons authorized to conduct the proposed activities in addition to the requirements in this Chapter.
- (2) **Transplanting or stockpiling.** Where indicated in this Chapter, regulated trees and plants may be required to be transplanted and/or stockpiled for future transplanting.
- (3) **Performance bonds.** The review authority may require the posting and maintenance of a monetary security deposit where necessary to ensure the completion of the required mitigation measures in compliance with Section 86.06.050 (Performance Guarantees).
- (4) **Conversion of oak woodlands.** If a project will result in a conversion of oak woodlands that will have a significant effect on the environment and is not exempt under Subsection 88.01.030(m) (Exempt Activities Oak woodlands), one or more of the conditions in this Subsection may be imposed in compliance with Public Resources Code Section 21083.4. For the purposes of this Subsection, "oak" shall mean a native tree species that is in the genus *Quercus*, which is not designated as Group A or Group B commercial species under regulations adopted by the State Board of Forestry and Fire Protection in compliance with Public Resources Code Section 4526, and which is five inches or more in diameter as measured at a point 4.5 feet (breast height) above natural grade level. The applicable review authority may require certification from a Tree Expert that the proposed mitigation measures are appropriate, supportive of a healthy oak woodland environment, and in compliance with this Subsection. The certification shall include the information in compliance with Department procedures. The conditions that may be imposed include one or more of the following:
- (A) **Preservation.** Preserve existing oak woodlands by recording conservation easements in favor of the County or an approved organization or agency.
- (B) **Replacement or restoration.** Replace or restore former oak woodlands. The review authority may require the planting and maintenance of replacement trees, including replacing dead or diseased trees. The replacement ratio and tree sizes shall be based on the recommendation of an

Oak Reforestation Plan prepared by a registered professional forester. The requirement to maintain trees in compliance with this paragraph shall terminate seven years after the trees are planted.

- (C) **In-lieu mitigation fee.** Contribute in-lieu mitigation fee to the Oak Woodlands Conservation Fund, established under Fish and Game Code Section 1363 for the purpose of purchasing oak woodlands conservation easements. A project applicant who contributes funds in compliance with this Subsection shall not receive or use a grant from the Oak Woodlands Conservation Fund as part of the mitigation for the project. The in-lieu fee for replacement trees shall be calculated based upon their equivalent value as established by the International Society of Arboriculture's (ISA) current edition of *Guide to Establishing Values for Trees and Shrubs*, etc.)
  - (D) **Other mitigation measures.** Perform other mitigation measures as may be required by the review authority (e.g., inch-for-inch off-site replacement planting; transfer of development rights, enrollment of project with offset provider for carbon credits in greenhouse gas emission registry, carbon reduction, and carbon trading system; etc.).
- (f) **Findings for Tree or Plant Removal Permits.** The applicable review authority may authorize the removal of a regulated tree or plant only if the following findings are made:
- (1) **Findings for removals in the Valley Region, Mountain Region, and Desert Region.** The removal of the regulated tree or plant is justified for one of the following reasons:
    - (A) The location of the regulated tree or plant and/or its dripline interferes with an allowed structure, sewage disposal area, paved area, or other approved improvement or ground disturbing activity and there is no other alternative feasible location for the improvement.
    - (B) The location of the regulated tree or plant and/or its dripline interferes with the planned improvement of a street or development of an approved access to the subject or adjoining private property and there is no other alternative feasible location for the improvement.
    - (C) The location of the regulated tree or plant is hazardous to pedestrian or vehicular travel or safety.
    - (D) The regulated tree or plant or its presence interferes with or is causing extensive damage to utility services or facilities, roadways, sidewalks,

curbs, gutters, pavement, sewer line(s), drainage or flood control improvements, foundations, existing structures, or municipal improvements.

(E) The condition or location of the regulated tree or plant is adjacent to and in such close proximity to an existing or proposed structure that the regulated tree or plant has or will sustain significant damage.

(2) **Additional findings for removals in the Mountain Region.** In the Mountain Region only, the applicable review authority shall also make all of the following findings:

(A) Where improvements are proposed, the design of the improvements ensures that at least the following minimum percentage of the subject parcel will be maintained or established in a natural undeveloped vegetated or revegetated condition sufficient to ensure vegetative coverage for a forest environment, as determined by the applicable Review Authority.

(I) Twenty percent of commercial, industrial, and administrative/professional uses.

(II) Thirty-five percent of multi-family residential uses.

(B) At least one half of natural areas for all uses, except single family residential uses, will be located in the front setback area or located so that significant portions are visible from the public right-of-way on which the improvements are to be located.

(C) A perch tree within a federally identified American Bald Eagle habitat will not be removed unless an adequate substitution is provided.

(D) A Registered Professional Forester has certified in writing that the condition or location of a regulated tree is contributing to overstocked tree stand conditions and that its removal will improve the overall health, safety, and vigor of the stand of trees containing the subject tree.

(3) In the Desert Region only, the applicable Review Authority shall also make the following findings:

(A) Joshua trees that are proposed to be removed will be transplanted or stockpiled for future transplanting wherever possible.

(B) In the instance of stockpiling, the permittee has complied with Department policy to ensure that Joshua trees are transplanted appropriately. Transplanting shall comply with the provisions of the Desert Native Plants

Act (Food and Agricultural Code Section 80001 et seq.), as required by Subsection 88.01.060(d) (Compliance with Desert Native Plants Act).

- (C) No other reasonable alternative exists for the development of the land when the removal of specimen size Joshua Trees is requested. Specimen size trees are defined as meeting one or more of the following criteria:
  - (I) A circumference measurement equal to or greater than 50 inches measured at 4.5 feet above natural grade level.
  - (II) Total tree height of 15 feet or greater.
  - (III) Trees possessing a bark-like trunk.
  - (IV) A cluster of 10 or more individual trees, of any size, growing in close proximity to each other.
- (g) **Plot plan requirements.** Before the issuance of a Tree or Plant Removal Permit, a plot plan shall be approved by the applicable Review Authority for each site indicating exactly which trees or plants are authorized to be removed. The required information shall be added to any other required plot plan.
- (h) **Construction standards.** During construction and before final inspection under a development permit, the following construction standards shall apply, unless otherwise approved in writing by an arborist, registered professional forester, or a Desert Native Plant Expert:
  - (1) **Enclosures.** The trunks of regulated trees and regulated plants shall not be enclosed within rooflines or decking.
  - (2) **Attachments.** Utilities, construction signs, or other hardware shall not be attached so as to penetrate or abrade any live regulated tree or plant.
  - (3) **Grade alterations.** No grade alterations shall bury any portion of a regulated tree or plant or significantly undercut the root system within the dripline.
- (i) **Enforcement.**
  - (1) **Other applicable Code provisions.** The provisions of Chapter 86.09 (Enforcement) shall apply to this Chapter.
  - (2) **Enforcement authorities.** The authorities responsible for the enforcement of the provisions of this Chapter shall be the same as the review authorities responsible for permit approvals as specified in this Section. In addition, the provisions of

this Chapter may be enforced by the California Department of Forestry, where applicable.

- (3) **Extension of time.** If property is subject to snow, flooding, or other conditions that render compliance with the provisions of this Chapter within the specified time periods impractical because of inaccessibility, an enforcement officer may extend the period of time for compliance.
- (4) **Powers of enforcement officers.**
  - (A) A peace officer or any authorized enforcement officer may in the enforcement of this Section:
    - (I) Make arrests without warrant for a violation of this Chapter that the officer may witness.
    - (II) Confiscate regulated native trees or plants, or parts of them, that are unlawfully harvested, possessed, sold, or otherwise obtained in violation of this Chapter.
  - (B) In addition, a designated enforcement officer shall be authorized and directed to enter in or upon any premises or other place, train, vehicle, or other means of transportation within or entering the State, which is suspected of containing or having present regulated plants in violation of this Chapter in order to examine permits and wood receipts and observe tags and seals and to otherwise enforce the provisions of this Chapter.
- (5) **When enforcement officer vested with power of peace officer.** When power or authority is given by this Chapter to a person, it may be exercised by any deputy, inspector, or agent duly authorized by that person. A person in whom the enforcement of a provision of this Chapter is vested shall have the power of a peace officer as to that enforcement, which shall include State or Federal agencies with which cooperative agreements have been made by the County to enforce the provisions of this Chapter.
- (6) **Written permission of landowner required for removal.** No person shall remove or damage all or part of any regulated tree or plant on the property of another person without first obtaining notarized written permission from the landowner and required permits, wood receipts, or tags and seals. In addition, it shall be unlawful for a person to falsify a document offered as evidence of permission to enter upon the property of another to harvest all or parts of a regulated tree or plant, whether alive or dead.



- (7) **Permit available for display and inspection.** No person, except as provided in this Chapter, shall harvest, offer for sale, destroy, dig up or mutilate, or have in his or her possession a regulated plant or tree, or the living or dead parts of them, unless the plant or tree was harvested under a valid permit and, where applicable, a valid wood receipt on his or her person. A person shall exhibit the permit, wood receipt, tags and/or seals upon request for inspection by an authorized County enforcement officer or any peace officer. No wood receipt or tag and seal shall be valid unless it is issued with a valid permit and the permit bears the wood receipt number or tag number on its face. Required tags and seals shall be attached securely to a regulated desert native plant.
- (8) **Land Disturbance.** No person, except as provided in this Chapter, shall commence with a disturbance of land (e.g., grading or land clearing) without first obtaining approval to assure that said disturbance will not result in the removal of any regulated native trees or plants. Said approval may be in the form of a development permit or a Tree or Plant Removal Permit issued by the appropriate authority.
- (j) **Penalties.** Penalties shall be those specified in Chapter 86.09 (Enforcement) and shall include the following and any other penalties specified by individual Sections of this Chapter.
- (1) **Fine for illegal removal.**
- (A) In addition to other penalties and fees imposed by this Development Code or other law, a person, firm, or corporation convicted of a violation of the provisions of this Chapter shall be guilty of a misdemeanor upon conviction.
- (B) When one or more plants or trees are removed in violation of the provisions of this Chapter, the removal of each separate plant or tree shall be a new and separate offense.
- (C) The penalty for the offense shall be a fine of not less than \$500 nor more than \$1,000, or six months in jail, or both.
- (D) Payment of a penalty shall not relieve a person, firm, or corporation from the responsibility of correcting the condition resulting from the violation.



**(2) Replacement program for illegal removal.**

- (A) In addition to other penalties imposed by this Development Code or other law, a person, firm, or corporation convicted of violating the provisions of this Chapter regarding improper removal of regulated native trees or plants shall be required to retain, as appropriate, a Tree Expert or Desert Native Plant Expert to develop and implement a replacement program.
- (B) The expert shall determine the appropriate number, size, species, location, and planting conditions for replacement plants or trees in sufficient quantities to revegetate the illegally disturbed area.
- (C) If it is inappropriate to revegetate the illegally disturbed area, another appropriate location (e.g., public parks) may be substituted at the direction of the court.
- (D) The violator shall post a bond in an amount sufficient to remove and reinstall plant/tree materials that were planted as a part of a replacement program and failed within two years.

**(3) Revocation of permits.**

- (A) Upon conviction of a violation of this Chapter, all Tree or Plant Removal Permits issued to the convicted person, firm, or corporation shall be revoked.
- (B) No new or additional Tree or Plant Removal Permits shall be issued to the permittee for a period of one year from the date of conviction.
- (C) Additionally, in the Desert Region the permittee shall be required to surrender unused wood receipts or tags and seals to the Director.

Adopted Ordinance 4011 (2007); Amended Ordinance 4043 (2008); Amended Ordinance 4067 (2009)

**88.01.060 Desert Native Plant Protection**

This Section provides regulations for the removal or harvesting of specified desert native plants in order to preserve and protect the plants and to provide for the conservation and wise use of desert resources. The provisions are intended to augment and coordinate with the Desert Native Plants Act (Food and Agricultural Code Section 80001 et seq.) and the efforts of the State Department of Food and Agriculture to implement and enforce the Act.

- (a) **Definitions.** Terms and phrases used within this Section shall be defined in Division 10 (Definitions) and/or defined by the California Food and Agricultural Code. The California Food and Agricultural Code definition, if one exists, shall prevail over a conflicting definition in this Development Code.
- (b) **Applicability.** The provisions of this Section shall apply to desert native plants specified in Subsection (c) (Regulated desert native plants) that are growing on any of the following lands, unless exempt in compliance with Section 88.01.030 (Exempt Activities):
- (1) Privately owned or publicly owned land in the Desert Region.
  - (2) Privately owned or publicly owned land in any parts of the Mountain Region in which desert native plants naturally grow in a transitional habitat.
- (c) **Regulated desert native plants.** The following desert native plants or any part of them, except the fruit, shall not be removed except under a Tree or Plant Removal Permit in compliance with Section 88.01.050 (Tree or Plant Removal Permits). In all cases the botanical names shall govern the interpretation of this Section.
- (1) The following desert native plants with stems two inches or greater in diameter or six feet or greater in height:
    - (A) *Dalea spinosa* (smoketree).
    - (B) All species of the genus *Prosopis* (mesquites).
  - (2) All species of the family *Agavaceae* (century plants, nolin, yuccas).
  - (3) Creosote Rings, 10 feet or greater in diameter.
  - (4) All Joshua trees.
  - (5) Any part of any of the following species, whether living or dead:
    - (A) *Olneya tesota* (desert ironwood).
    - (B) All species of the genus *Prosopis* (mesquites).
    - (C) All species of the genus *Cercidium* (palos verdes).

- (d) **Compliance with Desert Native Plants Act.** Removal actions of all plants protected or regulated by the Desert Native Plants Act (Food and Agricultural Code Section 80001 et seq.) shall comply with the provisions of the Act before the issuance of a development permit or approval of a land use application.

Adopted Ordinance 4011 (2007); Amended Ordinance 4067 (2009)

### 88.01.070 Mountain Forest and Valley Tree Conservation

This Section provides regulations to promote conservation and wise use of forest resources in the Mountain Region and native tree resources in the Valley Region. The provisions are intended to augment and coordinate with the Z'berg-Nejedly Forest Practice Act of 1973 (Public Resources Code Section 4526 et seq.) and the efforts of the State Department of Forestry and Fire Protection to implement and enforce the Act.

(a) **Applicability.**

- (1) **Private harvesting.** The provisions of this Section apply to the private harvesting of all trees growing on private land and on public land in the unincorporated Mountain Region and Valley Region.
- (2) **Commercial harvesting.** The commercial harvesting of trees shall be prohibited, except as allowed by and authorized by the State Department of Forestry and Fire Protection in compliance with the Z'berg-Nejedly Forest Practice Act of 1973 (Public Resources Code Section 4526 et seq.).

(b) **Regulated trees.** The following trees shall only be removed with an approved Tree or Plant Removal Permit issued in compliance with Section 88.01.050 (Tree or Plant Removal Permits):

- (1) **Native trees.** A living, native tree with a six inch or greater stem diameter or 19 inches in circumference measured 4.5 feet above natural grade level.
- (2) **Palm trees.** Three or more palm trees in linear plantings, which are 50 feet or greater in length within established windrows or parkway plantings, shall be considered to be heritage trees and shall be subject to the provisions of this Chapter regarding native trees.

(c) **Tree protection from insects and disease.** For regulations on the treatment and disposition of felled trees, see Section 88.01.090 (Tree Protection from Insects and Disease).

Adopted Ordinance 4011 (2007); Amended Ordinance 4067 (2009)

**88.01.080 Riparian Plant Conservation**

This Section provides regulations to promote healthy and abundant riparian habitats that protect watersheds; control transmission and storage of natural water supplies; provide unique wildlife habitats for rare, endangered and threatened plants and animals; provide attractive environments; control natural soil erosion and sedimentation to protect stream banks subject to erosion and undercutting; and provide sufficient shade to reduce temperature and evaporation and the growth of algae in streams. The provisions of this Section are intended to augment and coordinate with the responsibilities of the California Department of Fish and Game.

**(a) Applicability.**

- (1) Applicable areas.** The provisions of this Section shall apply to all riparian areas located on private land in all zones within the unincorporated areas of the County and to riparian areas on public land owned by the County, unless exempt as specified by Section 88.01.030 (Exempt Activities) and by Subsection (2) (Exemptions), below.
- (2) Exemptions.** The provisions of this Section shall not apply to:
  - (A) Emergency Flood Control District operations or water conservation measures established and authorized by an appropriate independent Special District.
  - (B) An area that has an existing man-made impervious structure, which is greater than 120 square feet in roof area, between the area proposed to be disturbed by a development permit and the bank of a subject stream, as measured in a straight line perpendicular to the centerline of the stream.

**(b) Regulated riparian plants.**

- (1) Vegetation described.** The removal of vegetation within 200 feet of the bank of a stream, or in an area indicated as a protected riparian area on an overlay map or Specific Plan, shall require approval of a Tree or Plant Removal Permit in compliance with Section 88.01.050 (Tree or Plant Removal Permits) shall be subject to environmental review.
  - (2) Streams.** For the purposes of this Section, streams include those shown on United States Geological Survey Quadrangle topographic maps as perennial or intermittent, blue or brown lines (solid or dashed), and river wash areas.
- (c) Preconstruction inspections.** Preconstruction inspections shall include the verification of the presence of riparian vegetation.
- (d) Conditions of approval.** Conditions of approval for removal of riparian vegetation may be imposed in addition to, and in combination with, any condition imposed in compliance with Section 88.01.050 (Tree or Plant Removal Permits).

Adopted Ordinance 4011 (2007); Amended Ordinance 4067 (2009)

**88.01.090 Tree Protection from Insects and Disease**

This Section provides regulations for the treatment and disposition of felled trees in the Mountain Region to protect against damaging insects (e.g. bark beetles) and diseases. The intent is to mitigate the serious danger posed to forests from coniferous trees that are cut in land clearing operations and are then allowed to remain exposed and untreated against noxious insects, which then multiply in the felled trees to later attack and damage healthy coniferous trees.

- (a) **Applicability.** The provisions in this Section apply to coniferous trees located on land in the Mountain Region. Every person, firm, or corporation, whether as principal, agent, or employee, that has control of, right of entry on, or access to land in the Mountain Region shall comply with this Section.
  
- (b) **Treatment of felled trees.** Except as otherwise provided by this Section, felled coniferous trees, portions of trees, and stumps shall be treated in compliance with at least one, or a combination, of the following methods and the method in Subsection (c) (Stump treatment), below, within 15 days after a coniferous tree has been cut.
  - (1) Remove to a solid waste disposal site specifically designated by the County for this type of use.
  - (2) Burn sufficiently to consume the bark, when allowed by the Fire Department and the Air Pollution Control District.
  - (3) Lop and scatter material less than four inches in diameter so that it is piled no higher than 24 inches above the ground, when allowed by the Fire Department.
  - (4) Remove the bark
  - (5) Chip or grind.
  - (6) Split and scatter with bark toward the sun for a minimum of 45 consecutive days or until final inspection is completed, whichever is less.
  - (7) Stack in the sun and cover with six mil clear plastic, which has a continuous seal from the outside and for at least 180 days.
  - (8) Spray with a commercial insecticide, as approved by the Agricultural Commissioner for these insects and purposes.

- (9) Treat under any other method approved by the enforcement officer in writing.
- (c) **Stump treatment.** Fresh cut stumps of live coniferous trees shall be protected from infection by Annosus Root Rot (*Fomes annosus*) with borax powder (granular tech, 10 mole) as soon as possible after felling, covering the entire newly exposed cut and/or broken surface completely with a thin uniform layer of white borax within two hours.
- (d) **Inspections.** In the case of construction activity, the Building Official shall not approve development permit inspections until felled coniferous trees, portions of trees, and stumps are treated in compliance with this Section.
- (e) **Certificate of compliance.** Where trees have been treated by an approved method and the evidence of treatment is not readily observable to the inspector on the construction site, the Building Official shall require a permittee to obtain a certificate that the treatment has been completed in an acceptable manner. The certificate may be from one of the following authorities:
- (1) Fire Chief.
  - (2) Agricultural Commissioner.
  - (3) Appropriately certified Pest Control Adviser as defined in Food and Agriculture Code Section 11401 et seq.
  - (4) Qualified Applicator as defined in Food and Agriculture Code Section 11401 et seq.
- (f) **Extension of time of enforcement.** If compliance with Subsection (b) (Treatment of felled trees) and Subsection (c) (Stump treatment) within the specified time periods is impractical because of inaccessibility to the cut timber due to snow or flooding, an enforcement officer may extend the period of time for compliance.

Adopted Ordinance 4011 (2007); Amended Ordinance 4067 (2009)