



**BIOLOGICAL EVALUATION
OF LAS MONTANAS,
PINAL COUNTY, ARIZONA**



Submitted to

TIERRA RICA DEVELOPMENT, INC.

Submitted by

**SWCA, INC.
Environmental Consultants**



FEBRUARY 2001

**BIOLOGICAL EVALUATION
OF LAS MONTANAS,
PINAL COUNTY, ARIZONA**

Submitted to

**TIERRA RICA DEVELOPMENT, INC.
Defined Pension Benefit Plan
Post Office Box 11313
Casa Grande, Arizona 85230-3113
(520) 876-0485**

Submitted by

**SWCA, INC.
Environmental Consultants
2120 North Central Avenue, Suite 130
Phoenix, Arizona 85004
(602) 274-3831**

**JANUARY 2000
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EXECUTIVE SUMMARY

This Biological Evaluation (BE) is for approximately 700 acres of privately-owned lands located in portions of Sections 29 and 30 of T5S, R7E in Pinal County, Arizona. The objectives of this BE are to: 1) describe vegetation communities in the project area, and 2) thereby evaluate habitat suitability for special status species of plants and animals.

The proposed project area primarily consists of undisturbed Sonoran Desertscrub. However, some portions of the project area are disturbed and have experienced moderate levels of off-road vehicle activities and illegal garbage dumping. No riparian habitat or areas with permanent surface water were found on the project area.

No wetland vegetation, other surface water, or stands of deciduous broad-leaved riparian trees were observed within the project area. The project area contains many washes with xeroriparian habitat. No natural caves or mine features are depicted on USGS maps or were observed during field reconnaissance.

No endangered, threatened, proposed endangered or proposed threatened plants or animals are known to occur regularly within the project area.

Habitat suitability and impact determinations for special status species were based on a qualitative comparison between the habitat requirements of each species and habitats found in the project area. The current geographic and elevational range of each species and habitats found in the project area. A total of 13 federally-listed species are addressed in this BE. All 13 are listed by the USFWS as threatened or endangered and are therefore protected under the authority of the Endangered Species Act (ESA). In December of 1999, SWCA requested information from the Arizona Game and Fish Department (AGFD) on federally-listed and other special status species within the vicinity of the Las Montanas project area. The AGFD's Heritage Data Management System was accessed and the AGFD responded in December of 2000. According to the AGFD, two special status species have been documented within five miles of the project area. Currently, there is no information regarding Wildlife of Special Concern in Arizona (WSCA) by the Arizona Game and Fish Department (AGFD). However, this will be updated when correspondence is received from AGFD. Habitat suitability and impact determinations for special status species were based on a qualitative comparison between the habitat requirements of each species and habitats found in the project area.

INTRODUCTION

PROJECT DESCRIPTION

SWCA, Inc. Environmental Consultants (SWCA) was originally contracted by Coe & Van Loo on behalf of the proposed builder, Dietz-Crane, Inc. to complete a Biological Evaluation (BE) of approximately 700 acres of private land in an area encompassing and adjacent to Signal Peak, at the south end of the Sacaton Mountains. Recently, Tierra Rica Development, Inc. (Tierra Rica) contacted SWCA to update this BE as Dietz-Crane is no longer the builder for this property. The survey area is located in portions of Sections 29 and 30 of T5S, R7E and is adjacent to Casa Grande, Pinal County, Arizona (Figure 1). Tierra Rica intends to develop this land for the construction of a residential community, hotel, and golf resort. These lands are described in detail under AFFECTED ENVIRONMENT. The property consists predominantly of undisturbed Sonoran Desertscrub habitat.

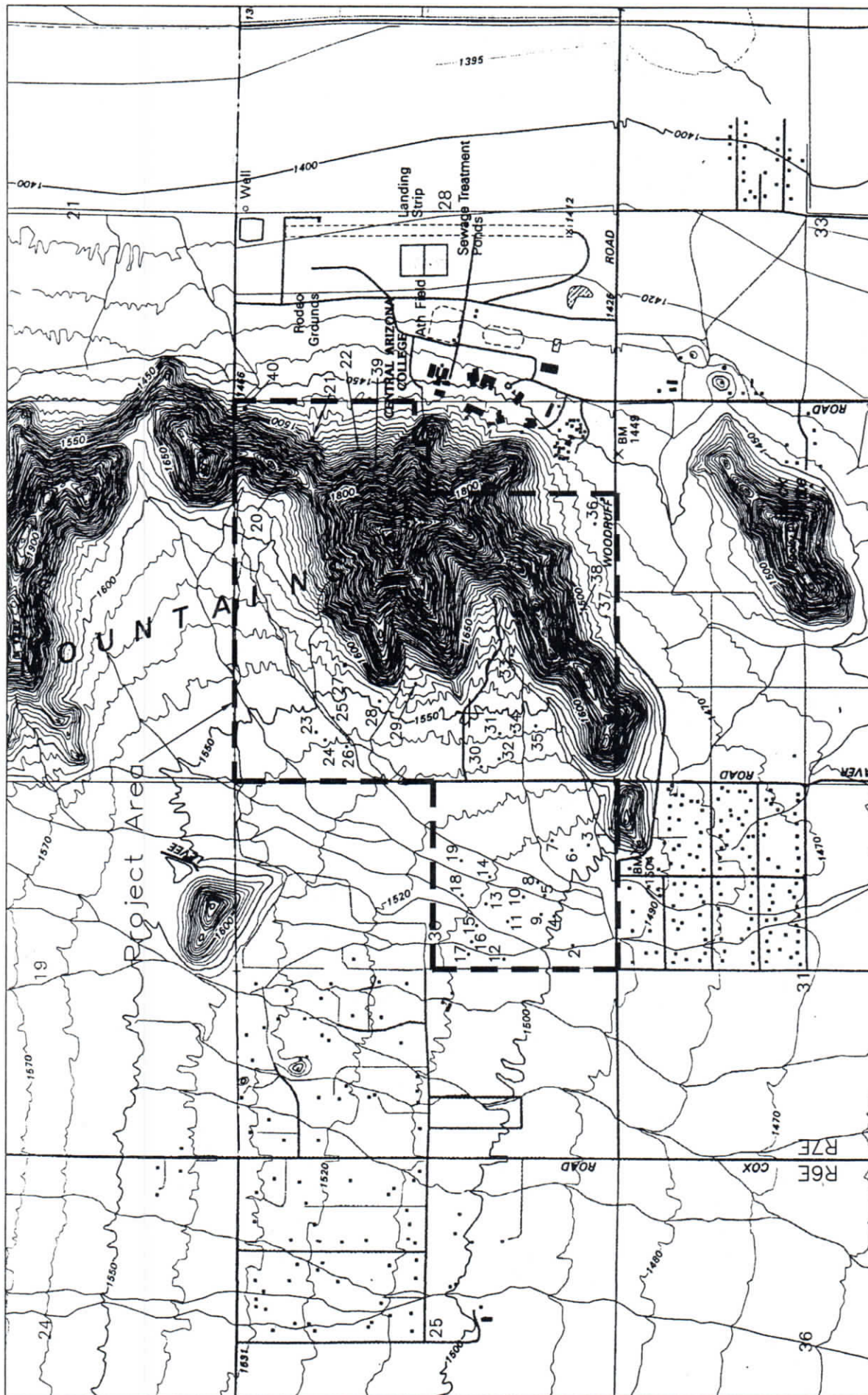
METHODS

The objectives of this BE are to 1) describe vegetation communities of the Las Montanas project area, and 2) thereby evaluate habitat suitability for special interest plant and animal species. Several field visits to the Las Montanas project area were conducted by SWCA in late December of 1999 and early February of 2000. A USGS topographical map (1:24,000 Casa Grande East) was used for locating the project boundaries and general orientation. Vegetation types were classified and described according to Brown (1994).

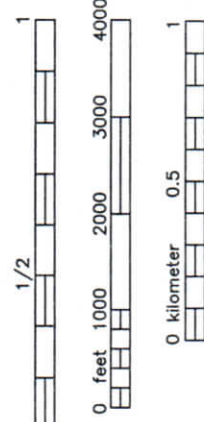
The potential for occurrence of special interest species was evaluated based on 1) existing information, and 2) qualitative comparisons between the known habitat requirements of each species and vegetation communities and conditions found on the property. We agree with Hall et al. (1997) that habitat is organism-specific and thus not synonymous with vegetation community. However, we have modified their definition of *habitat* to read as follows: an area where some members of a species regularly occur continuously or seasonally. In the field, habitat is operationally defined by the presence or absence of a species. Areas that appear potentially suitable for a species (i.e. vegetation is similar to that in areas where the species is known to occur), but which have not been surveyed, are considered *possible habitat*.

Fifteen special status species¹ are addressed in this BE (Table 1). This species list was compiled from the following source: Federally listed, proposed, and candidate species for Pinal County provided to SWCA by the U.S. Fish and Wildlife Service (USFWS) from their internet website for Pinal County. Correspondence was received by the Arizona Game and Fish Department (AGFD) and is provided in Appendix A.

¹ Special status species are those species listed or proposed for threatened or endangered status by the USFWS or wildlife species of special concern to the AGFD.



Map Source: 7.5' USGS Quadrangle,
Casa Grande East



Signal Peak Biological Evaluation

Figure 1. Location of the project area.

SWA
*Environmental
Inc. Consultants*

Wildlife of Special Concern in Arizona (WSCA). Several of the 15 special status species addressed in this BE were eliminated from further consideration in this report because their known geographic ranges are distant from the project area and/or the project area does not contain conditions similar to those known to be necessary to support these species: razorback sucker (*Xyrauchen texanus*), spikedace (*Meda fulgida*), desert pupfish (*Cyprinodon macularius*), Gila topminnow (*Poeciliopsis occidentalis occidentalis*), loach minnow (*Rhinichthys cobitis*), Nichol's Turk's head cactus (*Echinocactus horizonthalonius* var. *nicholii*), southwestern willow flycatcher (*Empidonax traillii extimus*), Bald Eagle (*Haliaeetus leucocephalus*), Mexican spotted owl (*Strix occidentalis lucida*), Yuma clapper rail (*Rallus longirostris yumanensis*), and Arizona hedgehog cactus (*Echinocereus triglochidiatus* var. *arizonicus*).

RESULTS

AFFECTED ENVIRONMENT

Ecological Overview

The Las Montanas project area is located just northeast of Casa Grande, Arizona at the southern end of the Sacaton Mountains. The elevation of the project area ranges from approximately 1,455 feet above sea level in the flats to 2,282 feet above sea level on Signal Peak. The topography of the project area is typical of the Basin and Range province and is characterized by steep mountainous terrain with rolling foothills, surrounded by flat plains. There are no bedrock outcrops, natural caves, or mines suitable for bat roosts. Most of the project area is located in undisturbed Sonoran desertscrub. No permanent surface water is present within the project area, and thus no wetlands occur within the project area. Appendix B lists wildlife that were commonly observed in the project area.

Vegetation Communities

The Las Montanas project area consists almost entirely of undisturbed Sonoran desertscrub. In the well-drained foothills and mountainous areas, the Arizona upland subdivision of Sonoran desertscrub, as defined by Brown (1994), occurs. In these areas the vegetation is dominated by a palo verde - mixed cacti association. In the poorly drained flats and in some of the lower portions of the foothills, the lower Colorado River Valley subdivision of Sonoran desertscrub, as defined by Brown (1994), occurs. The dominant vegetation in these areas consists of a creosote bush - bursage association. Ironwood trees (*Olneya tesota*) and saguaros (*Carnegie gigantea*) also occur in the flats, especially along the numerous washes. Many of the same species occur in both biotic communities. These communities are described in detail below. Appendix C lists plants that were commonly observed in the project area.

Table 1. Summary of Special Status Species and Their Potential to Occur Within Project Area

Species	Status	Known Distribution and Habitat Needs	Likelihood of Occurrence in Project Area
Federally-Listed Species (protected under the Endangered Species Act)			
Lesser long-nosed bat (<i>Leptonycteris curasoae yerbabuenae</i>)	E WSCA	<6,000 ft. Desert scrub with agave and columnar cacti. Caves or abandoned tunnels for roosts.	Unlikely—no potential roosts sites (i.e. mine shafts, mine adits, or natural caves) are known to occur on the property. Potential forage site in early breeding season as many saguaros are present.
Bald eagle (<i>Haliaeetus leucocephalus</i>)	T WSCA	Large trees or cliffs near water with abundant prey (fish)	Highly unlikely— the property has no habitats similar to those known to be occupied by this species.
Cactus ferruginous pygmy-owl <i>Glaucidium brasilianum cactorum</i>	E WSCA	Mature cottonwood/willow, mesquite bosques, and relatively dense Sonoran desert- scrub with saguaros <4,000 ft	Possible, but unlikely— the property has some limited amounts of dense Sonoran desertscrub habitat along washes, but habitats are not typical of those known to be occupied by this species.
Mexican spotted owl <i>Strix occidentalis lucida</i>	T WSCA	Canyons and dense mixed-conifer forests above 4,100 ft	Extremely unlikely—project area is below the species typical elevation range and habitats are not similar to those known to be used by this species.
Southwestern willow flycatcher <i>Empidonax traillii extimus</i>	E WSCA	Cottonwood/willow & tamarisk vegetation communities along rivers & streams	Extremely unlikely—vegetation communities in the project area are not similar to those known to support this species. No riparian habitat exists in project area.
Yuma Clapper Rail <i>Rallus longirostris yumanensis</i>	E WSCA	Freshwater or brackish stream-sides and marshes with heavy vegetation.	Extremely unlikely—no heavily vegetated streams or marshes are present in the project area.
Desert pupfish <i>Cyprinodon macularius</i>	E WSCA	Permanent water in shallow springs, streams, and marshes	Extremely unlikely—no permanent riparian habitats occur in the project area. There are no known natural or translocated native fish populations in the drainages crossing the property or those upstream or downstream of it.
Gila topminnow <i>Poeciliopsis occidentalis occidentalis</i>	E WSCA	Permanent water in small streams, springs, and cienegas	Extremely unlikely—no permanent riparian habitats occur in the project area. There are no known natural or translocated native fish populations in the drainages crossing the property or those upstream or downstream of it.
Loach minnow <i>Tiaroga cobitis</i>	T WSCA	small to large perennial streams with swift shallow water over cobbles & gravel	Extremely unlikely—no permanent riparian habitats occur in the project area. There are no known natural or translocated native fish populations in the drainages crossing the property or those upstream or downstream of it.
Razorback sucker <i>Xyrauchen texanus</i>	E WSCA	Permanent water in rivers and lakes.	Extremely unlikely—no permanent riparian habitats occur in the project area. There are no known natural or translocated native fish populations in the drainages crossing the property or those upstream or downstream of it.

Table 1, continued. Summary of Special Status Species and Their Potential to Occur Within Project Area

Species	Status	Known Distribution and Habitat Needs	Likelihood of Occurrence in Project Area
Spikedace <i>Meda fulgida</i>	T WSCA	Moderate to large perennial streams with gravel cobble substrates and moderate to swift velocities.	Extremely unlikely—no permanent riparian habitats occur in the project area. There are no known natural or translocated native fish populations in the drainages crossing the property or those upstream or downstream of it.
Arizona hedgehog cactus <i>Echinocereus triglochidiatus</i> var. <i>arizonicus</i>	E	3,700-5,200 ft. Ecotone between interior chaparral and Madrean evergreen woodland. Open slopes, in understory of shrubs and in cracks between boulders.	Extremely unlikely—none observed during site visits and project area is below typical elevation range and outside known geographic range of species. Additionally, the project area lacks known habitat occupied by this species.
Nichol's Turk's head cactus (<i>Echinocactus horizonthalonius nicholii</i>)	E	Open microsites on limestone slopes within Arizona upland subdivision of Sonoran desertscrub.	Extremely unlikely—substrates in the project area are not composed of limestone, and the site is not within the known range of this species.

USFWS categories: **Endangered (E)**- Taxa in danger of extinction throughout all or a significant portion of its range; **Threatened (T)**- Taxa likely to become endangered within the foreseeable future throughout all or a significant portion of its range;

AGFD category: **Wildlife of Special Concern in Arizona (WSCA)** - Wildlife species which are or may be in jeopardy in Arizona or with known or perceived threats or population declines (AGFD 1996).

Arizona Upland and Lower Colorado River Valley Vegetation Communities

The dominant woody plants found in these upland communities include foothills palo verde (*Cercidium microphyllum*), velvet mesquite (*Prosopis velutina*), ironwood (*Olneya tesota*), catclaw (*Acaccia greggii*), desert thorn (*Lycium* sp.), greythorn (*Ziziphus obtusifolia*), ocotillo (*Fouquieria splendens*), canyon ragweed (*Ambrosia ambrosioides*), and creosote bush (*Larrea tridentata*). The dominant cacti of these communities include saguaro (*Carnegiea gigantea*), chain-fruit cholla (*Opuntia fulgida*), teddy bear cholla (*Opuntia bigelovii*), barrel cactus (*Ferocactus cylindraceus* var. *lecontei*), buck horn cholla (*Opuntia acanthocarpa*), and strawberry hedgehog cactus (*Echinocereus engelmannii*).

Upland Vegetation Community

The xeroriparian vegetation communities of the project area also contained species typically found in the Sonoran Desertscrub vegetation community. Xeroriparian vegetation is associated with an ephemeral water supply (ephemeral washes flow briefly in direct response to significant precipitation in the immediate vicinity). This vegetation community was only a small portion of the entire project area. The dominant species of these

species of these communities include velvet mesquite (*Prosopis velutina*), burrobush (*Hymenoclea monogyra*), canyon bursage (*Ambrosia ambrosioides*), catclaw (*Acacia greggii*) and desert broom (*Baccharis sarothroides*).

SPECIAL STATUS SPECIES

Federally Listed Species

The cactus ferruginous pygmy-owl (CFPO) was considered in detail for this Biological Evaluation based on potentially suitable habitat within the project area. The CFPO (*Glaucidium brasilianum cactorum*) is listed as endangered by the USFWS and as a Wildlife Species of Special Concern by the AGFD. The CFPO occurs from southern Arizona east to extreme southwestern Texas, and southward in Mexico to Guerrero, Nuevo Leon, and southern Tamaulipas (Oberholser 1974, cited in Millsap and Johnson 1988). In Arizona, breeding pairs recently have been found at Organ Pipe Cactus National Monument, in areas northwest of Tucson, north of the Tortolita Mountains, and in Buenos Aires National Wildlife refuge. The owl was formerly much more widespread in Arizona, occurring regularly as far north as New River (Johnson et al 1999, Millsap and Johnson 1988). Historically in Arizona, CFPOs were found in mesquite woodlands, cottonwood-willow riparian forests, and less commonly in palo verde-mixed cacti forest. However, most recent observations of this species are from habitats dominated by mesquite, palo verde, ironwood, and catclaw acacia. The nearest known current location of this species to the project area property is northwest of the Tortolita Mountains, approximately 105 miles southeast of the project area, in Pinal County. The project area does not contain designated critical habitat for this species (USDI 1999).

Potential for Occurrence in the Project Area: Because habitat is similar to that known to be used by the CFPO (USFWS 1997) and because the project area is located within Zone 3 of the USFWS survey zones, surveys for this species are recommended. Surveys were completed for those portions of the project area where habitat is most dense (i.e. washes). However, the distance to the nearest known CFPO locality makes the probability of an occurrence unlikely. A letter regarding the survey findings is provided in Appendix E.

The other federally listed species that this project area contains potentially suitable habitat for is the lesser long-nosed bat (*Leptonycteris curasoae yerbabuenae*). The lesser long-nosed bat is listed as endangered by the USFWS and as a Wildlife Species of Special Concern by the AGFD. This species occurs in Sonoran desertscrub (palo verde/saguaro habitat), semidesert grassland with agave, and Madrean oak woodland with agave. It is only found in Arizona during the warm months (April to October), where its range typically is from the Picacho Mountains south to the Mexican border (AGFD 1996). Because saguaros are present in the project area, it is potentially suitable as foraging habitat for this species. However, the project area is at the extreme northern limits of the geographic range of this species, where it is extremely uncommon. The

Potential for Occurrence in the Project Area: Because this project area is at the extreme northern limits of the range of this species, where observations of it are very rare, it is very unlikely that these animals forage in the project area. No rocky outcrops, caves, or mines are present in the project area. Therefore this species would not roost on this property.

State Protected Native Plants

Protected native plants classified under the Arizona Native Plant Law (A.R.S. §3-904) are present in the project area. No Highly Safeguarded plants (no collection allowed) are known to exist or were observed on the property. All cacti found in the project area are salvage restricted plants. Table 2 lists the protected plant species found in the project area and the type of protection afforded under the law. The ADA Notice of Intent to Clear Land form is included in Appendix D. It is recommended that this form be filled out and submitted to ADA within 60 days of vegetation removal activities, in order to afford commercial plant salvagers the opportunity to salvage these protected native plants.

Table 2. Plants Observed Within the Project Area That Are Protected Under the Arizona Native Plant Law	
Species	Category of protection
All cacti (chain fruit cholla, teddy bear cholla, buckhorn cholla, barrel cactus, saguaro, pincushion cactus, and hedgehog cactus).	Salvage Restricted
Velvet mesquite	Salvage Restricted; Harvest Restricted; Salvage Assessed
Foothill palo verde	Salvage Assessed
Desert ironwood	Harvest Restricted; Salvage Assessed

Salvage Restricted—Plants subject to theft or vandalism; collection by permit only.

Salvage Assessed— These plants have a significant value if salvaged; permits required for removal.

Harvest Restricted—Permits required to remove plant by-products (fuelwood, etc.).

RECOMMENDATIONS

According to the latest CFPO survey protocol (January 2000), this project area is located within Zone 3 of the USFWS CFPO survey zones. Since suitable habitat is present along some of the washes in the project area, surveys are recommended in the project area in accordance with the 2000 CFPO survey protocol. This protocol calls for surveys within the same calendar year as vegetation removal activities will occur. These project clearance surveys can be conducted in either the spring or fall survey periods.

Since protected native plants are present in the project area, it is recommended that the Notice of Intent to Clear Land form included in Appendix D be submitted to the Arizona Department of Agriculture at least 60 days prior to vegetation removal activities, in accordance with the Arizona Native Plant Law (A.R.S. §3-904). This will allow sufficient time for the salvage of native plants by commercial landscapers.

REFERENCES CITED

Arizona Game and Fish Department (AGFD)

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APPENDIX A

AGFD CORRESPONDENCE

**GAME & FISH DEPARTMENT**

2221 West Greenway Road, Phoenix, Arizona 85023-4399 (602) 942-3000
www.gf.state.az.us

Governor
Jane Dee Hull

Commissioners:
Chairman, William Berlat, Tucson
W. Hays Gilstrap, Phoenix
Dennis D. Manning, Alpine
Michael M. Golightly, Flagstaff
Joe Carter, Safford

Director
Duane L. Shroufe

Deputy Director
Steve K. Ferrell

January 11, 2000

Ms. Noelle E. Sanders
SWCA Inc. Environmental Consultants
100 West Coolidge Street
Phoenix, Arizona 85013

Re: Special Status Species; Proposed Residential Community, Casa Grande - Township 5
South, Range 7 East, Section 29-30

Dear Ms. Sanders:

The Arizona Game and Fish Department (Department) has received your letter, dated December 20, 1999, regarding special status species in the above-referenced area, and the following information is provided.

The Department's Heritage Data Management System has been accessed and current records show that the special status species listed below have been documented as occurring in the project vicinity.

<u>COMMON NAME</u>	<u>SCIENTIFIC NAME</u>	<u>STATUS</u>
Sonoran desert tortoise	<i>Gopherus agassizii</i>	WC
Thornber fishhook cactus	<i>Mammillaria thornberi</i>	SR

STATUS DEFINITIONS

WC - Wildlife of Special Concern in Arizona. Species whose occurrence in Arizona is or may be in jeopardy, or with known or perceived threats or population declines, as described by the Department's listing of **Wildlife of Special Concern in Arizona** (WSCA, in prep.). Species included in WSCA are currently the same as those in **Threatened Native Wildlife in Arizona** (1988).

SR - Salvage Restricted. Those Arizona native plants not included in the Highly Safeguarded Category, but that have a high potential for theft or vandalism, as described by the Arizona Native Plant Law (1993).

At this time, the Department's comments are limited to the special status species information provided above. This correspondence does not represent the Department's evaluation of impacts to wildlife or wildlife habitat associated with activities occurring in the subject area. If the Department has specific comments or concerns regarding this project, they will be provided to you by January 16, 2000. If you have any questions regarding this letter, please contact me at (602) 789-3606.

Ms. Noelle E. Sanders
January 11, 2000
2

Sincerely,

A handwritten signature in cursive script, appearing to read "Nancy Olson".

Nancy Olson
Project Evaluation Specialist
Habitat Branch

NLO:no

cc: Russ Haughey, Habitat Program Manager, Region VI, Mesa

AGFD# 12-22-99(01)

APPENDIX B

WILDLIFE OBSERVED IN THE PROJECT AREA

This list includes those species observed directly, detected through sign during site visit, or expected to occur, and does not represent a comprehensive summary of all species that may occur in the project area.

Common Name	Scientific Name
MAMMALS	
blacktail jackrabbit	<i>Lepus californicus</i>
coyote	<i>Canis latrans</i>
desert cottontail	<i>Sylvilagus auduboni</i>
BIRDS	
American kestrel	<i>Falco sparverius</i>
black-throated sparrow	<i>Amphispiza bilineata</i>
Brewer's sparrow	<i>Spizella breweri</i>
common raven	<i>Corvus corax</i>
northern harrier	<i>Circus cyaneus</i>
lark sparrow	<i>Chondestes grammacus</i>
mourning dove	<i>Zenaida macroura</i>
red-tailed hawk	<i>Buteo jamaicensis</i>
house finch	<i>Carpodacus mexicanus</i>
Gambel's quail	<i>Callipepla gambelii</i>
cactus wren	<i>Campylorhynchus brunneicapillus</i>
european starling	<i>Sturnus vulgaris</i>
verdin	<i>Auriparus flaviceps</i>
Inca dove	<i>Columbina inca</i>
Gila woodpecker	<i>Melanerpes uropygialis</i>
phainopepla	<i>Phainopepla nitens</i>
white-winged dove	<i>Zenaida asiatica</i>

APPENDIX C

PLANT SPECIES OBSERVED IN THE PROJECT AREA

Common Name	Scientific Name
PLANTS	
ironwood	<i>Olneya tesota</i>
catclaw	<i>Acaccia greggii</i>
velvet mesquite	<i>Prosopis velutina</i>
foothills palo verde	<i>Cercidium microphyllum</i>
creosote	<i>Larrea tridentata</i>
triangle leaf bursage	<i>Ambrosia deltoidea</i>
desert mistletoe	<i>Pharodendron californicum</i>
ocotillo	<i>Fouquieria splendens</i>
teddy bear cholla	<i>Opuntia bigelovii</i>
saguaro cactus	<i>Carnegiea</i>
Lupine sp.	<i>Lupinus sp.</i>
barrel cactus	<i>Ferocactus cylindraceus</i> var. <i>lecontei</i>
buckhorn cholla	<i>Opuntia acanthocarpa</i>
strawberry hedgehog cactus	<i>Echinocereus engelmannii</i>
desert thorn	<i>Lycium sp.</i>
greythorn	<i>Ziziphus</i>
canyon bursage	<i>Ambrosia ambrosioides</i>
desert broom	<i>Baccharis sarothroides</i>
fiddleneck	<i>Amsinckia intermedia</i>

APPENDIX D

NOTICE OF INTENT TO CLEAR LAND

ARIZONA DEPARTMENT OF AGRICULTURE

NOTICE OF INTENT TO CLEAR LAND

Pursuant to A.R.S. § 3-904 the undersigned, as Owner of the Property described herein, gives this Notice of Intent to Clear Land of protected native plants.

1. **OWNER/LANDOWNER'S AGENT.** The owner or landowner's agent of the Property upon which protected native plants will be affected:

Owner's Name.....Phone.....

Address.....
Street City State Zip

Agent's Name.....Phone.....

Address.....
Street City State Zip

2. **PROPERTY.** The description and location of the Property upon which protected native plants will be affected:

Name of Property/Project.....

Address.....

Physical Location (attach map).....
(Note: Map must also show surrounding land for 1/2 mile in each direction)

Tax Parcel ID Nos.

Legal Description (or attach copy)

Number of Acres to be Cleared.....

3. **OWNER'S INTENT.** Landowner's intentions when clearing private land of protected native plants.

- ☐ Owner intends to allow salvage of the plants, and agrees to be contacted by native plant salvagers.
- ☐ Owner intends to transplant the plants onto the same property, or to another property he also owns.
- ☐ Owner has already arranged for salvage of the plants.
- ☐ Owner does not intend to allow salvage of the plants.
- ☐ Other:

4. **APPROXIMATE STARTING DATE.**
(See notice period listed on reverse side)

Signature

Date

**NOTICE TO SALVAGERS: CONSENT OF THE LANDOWNER IS REQUIRED BEFORE
ENTERING ANY LANDS DESCRIBED IN THIS NOTICE.**

EXPLANATION OF THIS FORM:

1. Notice of Intent to Clear Land.

The majority of the desert plants fall into one of five groups specially protected from theft, vandalism or unnecessary destruction. They include all of the cacti, the unique plants like Ocotillo, and trees like Ironwood, Palo Verde and Mesquite. In most cases the destruction of these protected plants may be avoided if the private landowner gives prior notice to the Arizona Department of Agriculture.

2. Notice Period.

When properly completed, this form is to be sent to the Department within the time periods described below. Landowners/developers are encouraged to salvage protected native plants whenever possible.

3. Information to Interested Parties.

The information in this notice will be posted in the applicable county office of the Department and mailed to those parties (salvage operators, revegetation experts) who have an interest in these plants and may approach the landowner with the possibility of saving the plant(s) from unnecessary destruction.

NOTICE TO LANDOWNER:

1. The owner may not begin destruction of protected native plants until he receives confirmation from the Arizona Department of Agriculture and the time prescribed below has elapsed. The "Confirmed" stamp only verifies that the Notice has been filed.

Size of area over which the Destruction of Plants will occur

Length of Notice Period

Less than 1 acre

20 days, oral or written

1 acre or more, but less than 40 acres

30 days, written

40 acres or more

60 days, written

2. If you are clearing land over an area of less than one acre, oral notice may be given by calling the applicable county office at the telephone number given below.

3. If the land clearing or plant salvage does not occur within one year, a new Notice is required.

4. This Notice must be sent to the applicable county office of the Department of Agriculture at the address given below:

Casa Grande Area

MOBILE: (520) 705-1053

PAGER: (520) 426-8133

Phoenix Office

1688 W. Adams, Room 415

Phoenix, AZ 85007

(602) 542-7182

Kingman Area

MOBILE: (520) 716-4690

PAGER: (520) 757-6836

Tucson Office

400 W. Congress, Ste. 124

Tucson, AZ 85701

(520) 628-6310

Nogales Office

555 W. Goldhill Rd., Ste. 9A

P. O. Box 2055

Nogales, AZ 85628

(520) 761-3445

Willcox Office

241 S. Haskell

Willcox, AZ 85644

(520) 384-2665

Parker Office

1204 Laguna

Parker, AZ 85344

(520) 669-5784

Yuma Office

350 W. 16th St., Ste. 432

Yuma, AZ 85364

(520) 782-3681

NOTICE TO SALVAGERS: CONSENT OF THE LANDOWNER IS REQUIRED BEFORE ENTERING ANY LANDS DESCRIBED IN THIS NOTICE.

APPENDIX E

CACTUS FERUGINOUS PYGMY-OWL 2001 SURVEY RESULTS

March 30, 2001

Harlan Griffiths
Tierra Rica Development, Inc.
PO Box 11313
Casa Grande, AZ 85230-1313

RE: Cactus Ferruginous Pygmy-owl Survey - Signal Peak

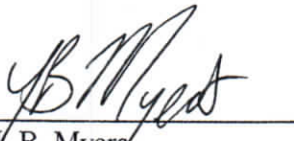
Dear Mr. Griffiths:

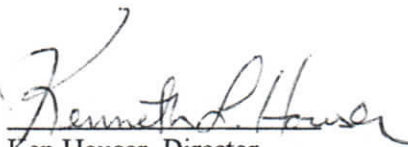
SWCA completed the survey for the federally endangered Cactus Ferruginous Pygmy-owl (CFPO) at the above referenced property between February 16, 2001 and March 29, 2001 in accordance with our proposal dated 31 January, 2001. The results of the first survey were negative. There were no CFPO detections, either visually or aurally.

The area surveyed is 700 acres, located within Section 29 and portions of 30 of T5N, R7E, Pinal County, Arizona. The currently accepted USFWS survey protocol for CFPO was used for this survey. Twenty six calling stations were spaced at approximately 350 to 400 meter intervals (Figure 1). Each calling station was surveyed for 15 minutes, and data was recorded on standard United States Fish and Wildlife Service (USFWS) and Arizona Game and Fish Department (AGFD) approved data forms. This survey pattern was followed three times between the dates mentioned above. The USFWS protocol requires the surveys to be conducted between one hour before sunrise MST and two hours after sunrise MST.

SWCA appreciates this opportunity to provide environmental services to Tierra Rica Development, Inc. Please contact me or Mr. Ken Houser at (602) 274-3831 if you have any questions about this report, or if there are any environmental services SWCA can provide you in the future.

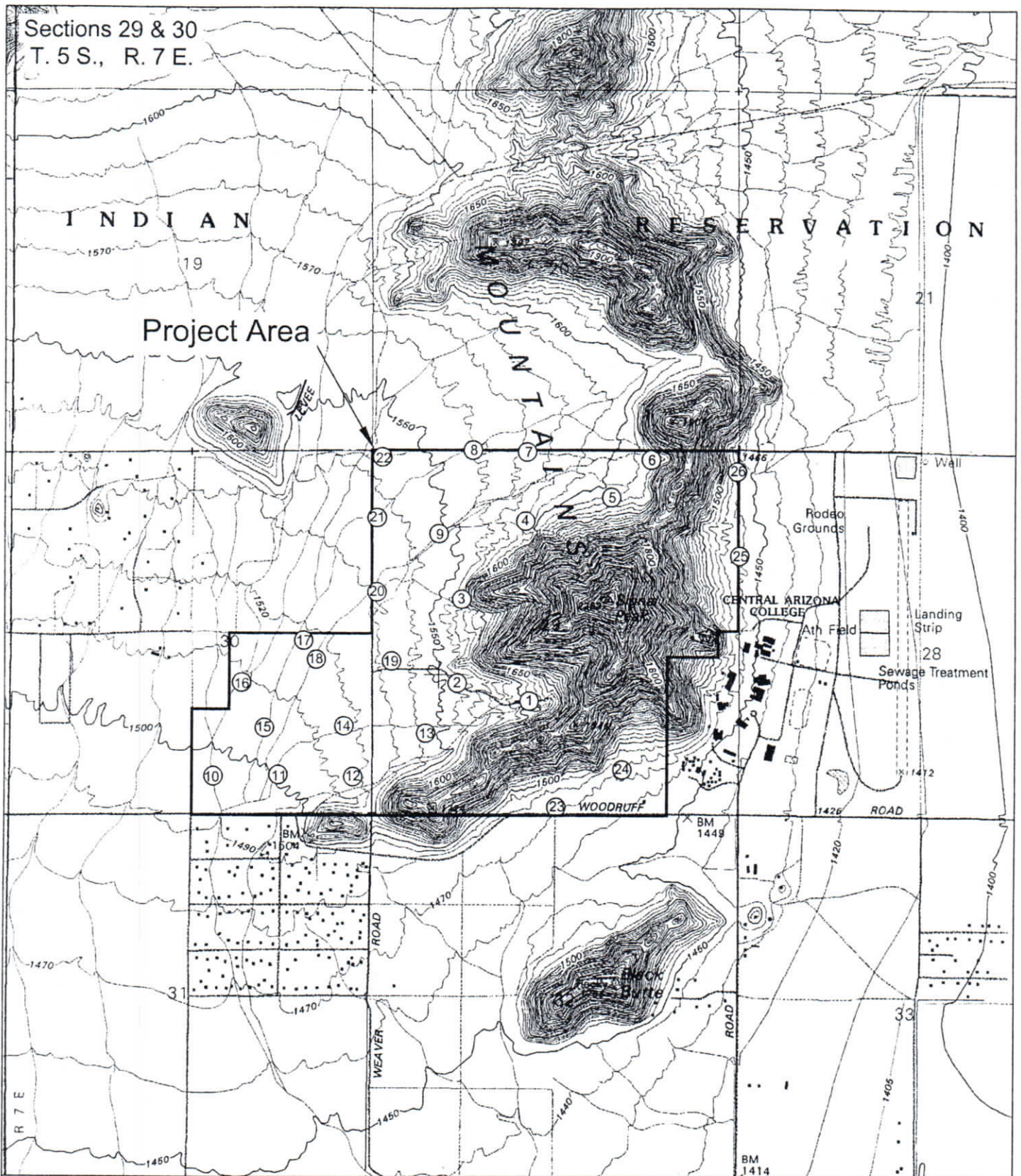
Sincerely,
SWCA Environmental Consultants, Inc.


L.B. Myers
Biologist


Ken Houser, Director
Natural Resources Division

enclosure: Owl calling stations

Sections 29 & 30
T. 5 S., R. 7 E.



Map Source:
7.5' USGS Quadrangles:

Casa Grande East, Arizona.

SWA Environmental
Inc. Consultants

MAP LOCATION



0 kilometer 0.5

0 feet 1000 2000

0 mile 0.5

KEY:

⑦ CFPO CALLING
STATION

Signal Peak Owls

Figure 1. Location of the
project area.

(Maricopa County)