

APPENDIX F

BIOLOGICAL EVALUATION REPORT

Biological Evaluation of the Proposed Marina at Scorpion Bay, Lake Pleasant, Maricopa County, Arizona

Prepared for

Terracon

Prepared by

SWCA Environmental Consultants

November 2005

**BIOLOGICAL EVALUATION OF THE PROPOSED MARINA AT SCORPION BAY,
LAKE PLEASANT, MARICOPA COUNTY, ARIZONA**

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November 30, 2005

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EXECUTIVE SUMMARY

This Biological Evaluation (BE) is for approximately 292 acres of Bureau of Reclamation administered lands proposed for the development of a marina. The project area is located in Lake Pleasant Regional Park (LPRP) along the western banks of Lake Pleasant, north of Peninsula Boulevard near the city of Peoria, Maricopa County, Arizona. These lands are located in Sections 7 and 8 of Township 6 North, Range 1 East. Objectives of this BE are to: 1) describe vegetation communities in the project area and 2) evaluate habitat suitability for both federally listed and special status species.

The project area is located within the Arizona Upland subdivision of the Sonoran Desertscrub biotic community, as defined by Brown (1994). The project area consists of mostly undisturbed native desert and lentic (still water) habitat. No deciduous broad-leaved riparian trees were present. Additionally, no natural caves, adits, or mine features are depicted on the United States Geological Survey map, and none were observed during field reconnaissance.

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, as well as proximity of documented occurrence to the project area, was also taken into consideration. A total of 15 federally listed species are addressed in this BE. Fourteen of these are listed by the U.S. Fish and Wildlife Service (USFWS) as threatened or endangered, and are therefore protected under the authority of the Endangered Species Act (ESA). The remaining species is listed by USFWS as candidate and currently receives no statutory protection under the ESA.

Bald eagle, listed as a Threatened species under the ESA, is known to nest approximately 4 miles from the project area. Although the project area is not suitable breeding habitat, the lentic portion of the project area contains suitable foraging habitat. Additionally, the project area contains suitable habitat for the Sonoran desert tortoise and this species is known to occur in the LPRP. The Sonoran desert tortoise is a Species of Concern under the ESA and Wildlife of Special Concern in Arizona (WSCA); however, this species receives no statutory protection under the ESA. Protected native plants classified under the Arizona Native Plant Law (A.R.S. §3-904) by the Arizona Department of Agriculture (ADA) are present in the project area.

At this time, the remaining 14 endangered, threatened, or candidate plants or animals are not known to occur regularly within the project area and it is not likely that the proposed project will have an effect on any of those federally listed species or their habitat. Furthermore, the proposed project will not likely have an increased effect on the bald eagle or its habitat. However, the lead permitting agency has the authority and final decision on the effect that this project will have on any federally listed species and whether or not to require species-specific surveys.

INTRODUCTION

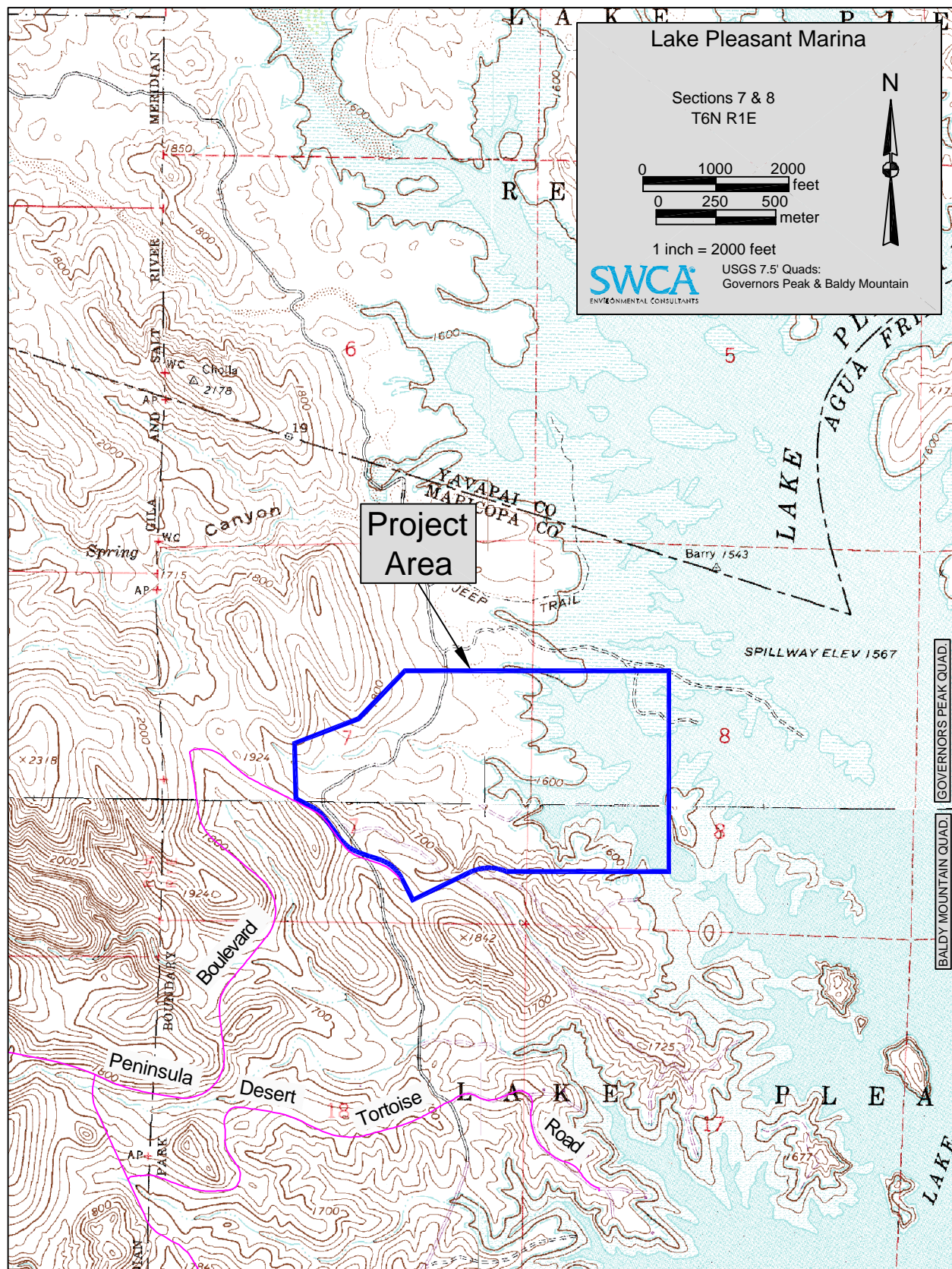
PROJECT DESCRIPTION

This Biological Evaluation (BE) is for approximately 292 acres of Bureau of Reclamation administered lands proposed for the development of a marina. The project area is located in the Lake Pleasant Regional Park (LPRP) along the western banks of Lake Pleasant, north of Peninsula Boulevard near the city of Peoria, Maricopa County, Arizona (Figure 1). The legal description of this project area is Sections 7 and 8 of Township 6 North, Range 1 East (Figure 2). These lands are described in detail under the “Affected Environment” section of this report. This BE is being completed as a requirement for compliance with the regulations of the Endangered Species Act (ESA).

METHODS

The objectives of this BE are to: 1) describe vegetation communities and 2) evaluate habitat suitability for federally listed plant and animal species. SWCA field biologist Olivia Munzer surveyed the project area described above on November 17, 2005 to collect the data necessary to complete this BE. A United States Geological Survey (USGS) 7.5-minute topographical map (Governors Peak and Baldy Mountain, AZ), maps provided by the client, and a Phoenix metro area street map were used for locating project boundaries and for general orientation. Vegetation types were classified and described according to Brown (1994).

The potential for occurrence of special status species was evaluated based on: 1) existing information, and 2) qualitative comparisons between the known habitat requirements of each species and the vegetation communities and conditions found in the project area. We agree with Hall, et al. (1997) that habitat is organism-specific and thus not synonymous with vegetation community. However, the U.S. Fish and Wildlife Service (USFWS) has expanded upon the definition of habitat to include the entire area that is occupied by a specific species, as well as unoccupied areas that may only be used by that species for a portion of the year, such as migratory birds. According to the USFWS, habitat may also include areas that are never directly occupied by the species. Species occupying a specific habitat can be affected by disturbance impacts in adjacent or nearby unoccupied habitats. Therefore, the species is dependent on these unoccupied areas for its existence. In the field, habitat is operationally defined by SWCA by the presence or absence of species. However, areas that appear potentially suitable for a species (i.e., vegetation is similar to areas where the species is known to occur), but which have not yet been surveyed specifically for that species, are considered possible habitat for that species.



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Figure 2. Project area location.

RESULTS

AFFECTED ENVIRONMENT

Ecological Overview

Elevations within the project area range from approximately 1,500 feet above mean sea level (msl) to 1,800 feet above msl. The eastern portion of the project area is characterized by hilly terrain dissected by ephemeral washes, and Lake Pleasant comprises the western portion of the project area. There are no stands of deciduous broad-leaved riparian trees. Additionally, no natural caves, crevices, or mines suitable for bat roosts were observed in the project area. Evidence of off-road vehicle use and recreation was present in the project area.

The vegetation present consists primarily of undisturbed native vegetation typical of the Arizona Upland subdivision of the Sonoran Desertscrub biotic community (Brown 1994) and vegetation associated with a lentic (still water) environment. State protected native plants were documented within the project area; however, no federally listed wildlife species or suitable breeding habitat was observed. A list of all wildlife detected in the project area during the site visit, either directly (i.e., by sight) or indirectly (i.e., through sound or sign), is included in Appendix A.

Vegetation Communities

The project area is located within the Arizona Upland subdivision of the Sonoran Desertscrub biotic community. Within the project area, three main types of vegetation communities exist: upland, xeroriparian, and lentic. These communities are described in detail below. Appendix B contains a complete list of all the plant species observed in the project area during field reconnaissance.

Upland Vegetation Communities

The upland vegetation of the project area consists of species typically found in the Arizona Upland subdivision of the Sonoran Desertscrub biotic community. The common plant species found in this zone included: brittlebush (*Encelia farinosa*), creosotebush (*Larrea tridentata* var. *tridentata*), foothill paloverde (*Parkinsonia microphylla*), desert ironwood (*Olneya tesota*), Mediterranean grass (*Schismus* sp.), plantain (*Plantago* sp.), and triangle leaf bursage (*Ambrosia deltoidea*). The cacti species observed in the project area were barrel cactus (*Ferocactus* sp.), buckhorn cholla (*Opuntia acanthocarpa*), fishhook cactus (*Mammillaria microcarpa*), teddybear cholla (*Opuntia bigelovii*), saguaro (*Carnegiea gigantea*), and strawberry hedgehog (*Echinocereus engelmannii*).

Xeroriparian Vegetation Communities

The xeroriparian vegetation communities of the project area also contained species typically found in undisturbed areas of the Arizona Upland subdivision of the Sonoran Desertscrub biotic community. Xeroriparian vegetation is associated with an ephemeral water supply (ephemeral washes typically flow only briefly, usually in direct response to significant precipitation in the immediate vicinity).

Plant species observed in this community included foothill paloverde, desert ironwood, Mediterranean grass, and wolfberry (*Lycium* sp.).

Lentic Vegetation Communities

The lentic vegetation community of the project area contains similar species found in other lentic communities in Arizona. Lentic refers to aquatic environments with still, non-flowing waters (lakes and ponds) such as Lake Pleasant. The dominant plants observed in the lentic vegetation community within the shallow portions of the project area were Canada cocklebur (*Xanthium strumarium* var. *canadense*) and Bermudagrass (*Cynodon dactylon*). Plants observed along the shoreline of Lake Pleasant included: Canada cocklebur, Bermudagrass, seaside heliotrope (*Heliotropium curassavicum* var. *oculatum*), saltcedar (*Tamarix* sp.), and prickly Russian thistle (*Salsola tragus*).

State Protected Native Plants

Protected native plants classified under the Arizona Native Plant Law (A.R.S. §3-904) by the Arizona Department of Agriculture (ADA) are present in the project area. This Law states that protected plants cannot be removed from any lands, including private lands, without permission and a permit from the ADA. No Highly Safeguarded plants (no collection allowed) are known to exist or were observed in the project area. All cacti present in the project area are Salvage Restricted plants. Table 1 lists the ADA protected plant species found in the project area and the type of protection they are afforded under the Law.

The ADA Notice of Intent to Clear Land form is included in Appendix C. It is recommended that these forms be filled out and submitted to ADA at least 60 days prior to vegetation removal activities. If native plants will be salvaged and replanted in the project area, then the applicant needs to include this information with the Notice of Intent to Clear Land form at the time of its submittal and request salvage permits.

Table 1. Plants Observed Within the Project Area That are Protected Under the Arizona Native Plant Law

Species	Category of Protection
blue paloverde	Salvage Assessed
foothill paloverde	Salvage Assessed
desert ironwood	Harvest Restricted; Salvage Assessed
ocotillo	Salvage Restricted
velvet mesquite	Harvest Restricted; Salvage Assessed
All cacti (saguaro, buckhorn cholla, teddy bear cholla, strawberry hedgehog, fishhook cactus, prickly pear, and barrel cactus)	Salvage Restricted
Salvage Restricted – Collection or destruction by permit only.	
Salvage Assessed – These plants have a significant value if salvaged.	
Harvest Restricted – Permits required to remove plant by-products (fuel wood)	

FEDERALLY LISTED SPECIES

Fourteen federally listed species and one candidate species are addressed in this BE. This species list was accessed by SWCA through the USFWS Internet database (<http://www.fws.gov/arizonaes/>). Thirteen federally listed species plus the one candidate species 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 (Table 2).

Table 2. Summary of Federally Listed Species, Proposed Endangered Species, and Candidate Species and Their Habitat Needs and Potential to Occur Within the Project Area

Species	Status	Known Distribution and Habitat Needs	Likelihood of Occurrence in Project Area
Arizona agave <i>Agave arizonica</i>	E HS	Transition zone of oak-juniper woodland and mountain mahogany-oak scrub, usually steep rocky slopes from 3,000 to 6,000 feet (AGFD 1997)	Unlikely to occur – no oak-juniper or mountain mahogany-oak woodlands occur in the project area or in the vicinity of the project area. The project area is below the elevational range of this species.
Arizona cliffrose <i>Purshia subintegra</i>	E HS	Rolling limestone hills within Sonoran desertscrub from 2,500 to 4,000 feet (AGFD 2001a)	Unlikely to occur – no limestone hills are present in the project area, and the project area is below the lower elevational limits of this species.
Bald eagle <i>Haliaeetus leucocephalus</i>	T WSCA	Large trees or cliffs near creeks, lakes, and rivers with abundant prey, i.e., fish (AGFD 1996)	Likely to occur – Suitable foraging habitat occurs within the project area; fish that inhabit Lake Pleasant provide bald eagles with a primary food source. No large trees or cliffs occur within the project area to provide suitable breeding habitat; however, bald eagles are known to breed approximately four miles northwest of the project area (J. Driscoll, pers. comm.).
California brown pelican <i>Pelecanus occidentalis californicus</i>	E S	Shore bird usually found near sandy beaches and lagoons. Nests along coastal islands with shrubby vegetation and small trees. In AZ, this species can be found at large inland lakes (Monson and Phillips 1981)	Unlikely to occur – There are no known historic occurrences on the project area. The project area does contain deep-water habitat similar to areas where these birds have been found in Arizona; however, the California brown pelican is an uncommon transient in inland Arizona. Most records have been from the Colorado and Gila River Valleys (Rosenberg et al. 1991).
Cactus ferruginous pygmy-owl <i>Glaucidium brasilianum cactorum</i>	E WSCA	Mature cottonwood/willow riparian forest, mesquite bosques, and dense desert scrub with saguaros at elevations of 4,000 feet or less (AGFD 1996)	Unlikely to occur – There are no known historic occurrences on the property and the project area is located outside of the USFWS recommended survey zones. Therefore, species-specific surveys are not recommended.
Desert pupfish <i>Cyprinodon macularius macularius</i> and <i>eremus</i>	E WSCA	Permanent water in shallow springs, streams, and marshes (AGFD 2001b)	Unlikely to occur – aquatic habitat in the project area is not similar to where this species is known to inhabit. There are no known natural or translocated populations present in the project area.
Gila chub <i>Gila intermedia</i>	E WSCA	Small headwater streams, springs, cienegas, and marshes of the Gila River basin (AGFD 2001c)	Unlikely to occur – aquatic habitat in the project area is not similar to where this species is known to inhabit. There are no known natural or translocated populations present in the project area.
Gila topminnow <i>Poeciliopsis occidentalis occidentalis</i>	E WSCA	Permanent water in small streams, springs, and cienegas (AGFD 2001d)	Unlikely to occur – aquatic habitat in the project area is not similar to those known to support this species and gila topminnow is not known to occur in the LPRP boundary (USBR 1996). There are no known natural or translocated populations present in the project area.

Table 2. Summary of Federally Listed Species, Proposed Endangered Species, and Candidate Species and Their Habitat Needs and Potential to Occur Within the Project Area

Species	Status	Known Distribution and Habitat Needs	Likelihood of Occurrence in Project Area
Lesser long-nosed bat <i>Leptonycteris curasoae yerbabuenae</i>	E WSCA	Desert scrub with agave and columnar cacti. Caves or abandoned tunnels for roosts at elevations of 6,000 feet or less (AGFD 1998)	Unlikely to occur – no potential roosts sites (i.e., mine shafts, mine adits, or natural caves) are known to occur on the property. No agaves are present within the project area. Additionally, this project area is outside the known typical foraging range of this species in Arizona.
Mexican spotted owl <i>Strix occidentalis lucida</i>	T WSCA	Canyons and dense forests above 4,100 feet in elevation (USFWS 1995)	Unlikely to occur – project area is below the typical elevation range of this species and habitats within the project area are not similar to those known to be used by this species.
Razorback sucker <i>Xyrauchen texanus</i>	E WSCA	Slow backwaters of medium and large streams and rivers (AGFD 2001e)	Unlikely to occur – aquatic habitat in the project area is not similar to where this species is known to inhabit. There are no known natural or translocated populations present in the project area.
Southwestern willow flycatcher <i>Empidonax traillii eximius</i>	E WSCA	Dense cottonwood/willow & tamarisk vegetation communities along rivers & streams (AGFD 1996)	Unlikely to occur – There are no known historic occurrences on the property. Although a small, thin patch of saltcedar occurs in the project area, no suitable breeding habitat similar to those known to support this species exists in the project area. Therefore, species-specific surveys are not recommended.
Sonoran pronghorn <i>Antilocapra americana sonoriensis</i>	E WSCA	Sonoran desert plains with wide alluvial basins and desert grassland (AGFD 1996)	Unlikely to occur – vegetation communities in the project area are not similar to those known to support this species.
Yuma clapper rail <i>Rallus longirostris yumanensis</i>	E WSCA	Freshwater or brackish stream-sides and marshes with dense vegetation, especially cattail/bulrush (AGFD 2001f)	Unlikely to occur – no heavily vegetated streams or marshes are present in the project area.
Western yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i>	C WSCA	Broadleaf deciduous riparian forest habitats and tamarisk woodlands adjacent to surface water (AGFD 1996)	Unlikely to occur – vegetation communities in the project area are not similar to those known to support 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; **Candidate** (C) - Taxa whose protection under the Endangered Species Act has been found to be warranted, but precluded by higher priority listing activities at this time; **Proposed Endangered** (PE) - Taxa whose protection under the Endangered Species Act has been proposed as endangered, due to the likelihood of it becoming 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 that are or may be in jeopardy in Arizona or with known or perceived threats or population declines (AGFD 1996). This status does not afford the species any statutory protection under the ESA.

ADA category: **Highly Safeguarded** (HS) - no collection or destruction allowed.

OTHER SPECIAL STATUS SPECIES

The Arizona Game and Fish Department (AGFD) also maintains a statewide database, known as the Heritage Data Management System (HDMS), which tracks records for federally listed species or other species of special concern. At the request of SWCA, the AGFD searched this database for any Proposed or Designated Critical Habitats and for occurrence records of special status species within the vicinity of the project area. The AGFD response letter indicated the project area does not occur in the vicinity of Proposed or Designated Critical Habitats; however, there are records of occurrence for eight special status species within a 3-mile buffer of the project area. These eight species, Hohokam agave (*Agave murpheyi*), longfin dace (*Agosia chrysogaster*), Arizona toad (*Bufo microscaphus*), lowland leopard frog (*Rana yavapaiensis*), southwestern willow flycatcher (*Empidonax traillii extimus*), bald eagle (*Haliaeetus leucocephalus*), Sonoran desert tortoise (*Gopherus agassizii* [Sonoran population]), and western red bat (*Lasiurus blossevillei*) are discussed in further detail below. A copy of SWCA's request letter and the AGFD response letter are included in Appendix D.

Hohokam Agave

The Hohokam agave is listed as a Species of Concern under the ESA, as Sensitive by the U.S. Forest Service (USFS) when occurring on USFS-administered lands and the Bureau of Land Management (BLM) when occurring on BLM administered lands, and as a Highly Safeguarded plant by the ADA. However, these listings do not give this species any statutory protection. Hohokam agave occurs at elevations from 1,300 to 3,200 feet above msl (AGFD 2003) in central Arizona in the Lower Colorado River Valley and the Arizona upland subdivisions of the Sonoran desertscrub biotic community (Brown 1994). It is usually found on benches, terraces, or gentle bajada slopes (not steep slopes or drainage bottoms) above major drainages with well-drained soils and is often associated with prehistoric habitations and/or agricultural sites suggesting tending (AGFD 2003). It is possible that this species could occur in the project area; however, no Hohokam agaves were observed during the site visit by SWCA and no known historic human habitation has been documented within the project area. The closest known location of this species to the project area is a group of agave that was relocated to the overlook facility approximately 2 miles southeast of the project area (USBR 1996). It is not likely that any Hohokam agaves exist within the project area.

Longfin dace

The longfin dace is listed as a Species of Concern under the ESA and as Sensitive by the BLM when occurring on BLM administered lands. However, these listings do not give this species any statutory protection. Longfin dace is known to inhabit a wide range of small streams from desertscrub up to coniferous woodlands. The elevational range for the longfin dace is from 1,360 to 6,740 feet above msl (AGFD 2002a). The closest known location of this species is within a 3-mile buffer of the project area, according to the AGFD's HDMS report. The occurrence record is most likely from an intermittent stream approximately 1 mile north of the project area and from perennial portions of tributaries to the Aqua Fria River north of the project area (USBR 1996). Additionally, longfin dace is not known to occur within the

LPRP boundaries (USBR 1996). This project area is within the elevational range of the longfin dace; however, no small streams are present within the project area. Therefore, no suitable habitat for the longfin dace is located within the project area.

Arizona Toad

The Arizona toad is listed as a Species of Concern under the ESA and as Sensitive by the USFS when occurring on USFS-administered lands. However, these listings do not give this species any statutory protection. The Arizona toad occurs in the eastern to west-central portions of Arizona, in canyons and floodplains south of the Mogollon Rim, and north of the Mogollon Rim in East Clear Creek (AGFD 2002h). The preferred habitat of the Arizona toad includes rocky streams and canyons from the pine-oak belt to the lower deserts from about 480 feet to 8,400 feet above msl (AGFD 2002b). The AGFD record of location in the project vicinity is most likely along the Aqua Fria River northeast of the project area. Although the project area is located within the elevational and geographic range of this species, the project area does not contain rocky streams or canyons with suitable habitat. In addition, no amphibians were observed during the field reconnaissance.

Lowland Leopard Frog

The lowland leopard frog is currently listed as Species of Concern under the ESA, as Sensitive by the USFS when occurring on USFS-administered lands, and as Wildlife of Special Concern in Arizona (WSCA) by the AGFD. However, these listings do not give this species any statutory protection. The range of the lowland leopard frog within Arizona includes the Colorado River near Yuma, west, central, and southeast Arizona, south of the Mogollon Rim. This species inhabits permanent rivers, streams, and ponds in a variety of habitats at elevations from 800 to 5,500 feet above msl (AGFD 2001g). The AGFD occurrence record is most likely from Pipeline Canyon approximately 0.5 miles north of the project area. This project area is within the geographic and elevational range of the lowland leopard frog; however, the project area does not contain habitat to support this species. In addition, no amphibians were observed during dip netting and field reconnaissance.

Bald Eagle

The bald eagle is listed as Threatened and Proposed for Delisting under the ESA, Sensitive by the USFS when occurring on USFS-administered lands, and as WSCA by the AGFD. The nearest recently documented breeding pair of bald eagles to this project area are those along the upper arm of the Aqua Fria approximately 4 miles northeast of the project area (J. Driscoll, pers. comm.). The project area is within the elevational range of the bald eagle in Arizona and does contain suitable foraging habitat; however, the project does not contain suitable breeding habitat. USBR (1996) states that the construction of the recreations sites, including the marina, will likely not increase the impacts to the bald eagle; however, USBR projects a rise in recreational use of the LPRP, which will likely increase the number of entries into restricted areas (bald eagle nesting enclosure). See bald eagle in Table 2 for additional information.

Southwestern Willow Flycatcher

The southwestern willow flycatcher is listed as Endangered under the ESA, Sensitive by the USFS when occurring on USFS-administered lands, and as WSCA by the AGFD. The nearest occurrences record of this species was documented in 2004 south of the project area near Waddell Dam. The project area does contain a small, thin patch of saltcedar; however, the habitat structure, density, and size are not suitable for southwestern willow flycatcher breeding habitat. See southwestern willow flycatcher in Table 2 for additional information.

Sonoran Desert Tortoise

The Sonoran desert tortoise is listed as a Species of Concern under the ESA and as WSCA by the AGFD. However, these status listings do not give this species any statutory protection. Sonoran desert tortoise habitat occurs primarily in the hills and rocky mountainous terrain of Arizona Upland Sonoran Desertscrub communities. Desert tortoise habitat can also be found along washes in more level terrain adjacent to hills and desert mountain ranges (AGFD 1996). Desert tortoises typically forage on plants, plant litter, cactus fruit, and arthropods. They are most typically found along washes and rocky areas, building their shelter sites in rocky areas or along the banks of washes. They have also been known to burrow under vegetation or rest directly underneath live or dead vegetation (AGFD 2001h). The AGFD response letter indicated an occurrence record for this species within the vicinity of the project area. Although no individuals of this species were observed during the field visit, desert tortoises are known to occur in the LPRP (USBR 1996), and it is possible that this species would occur in the project area. If desert tortoises are encountered within the project area during construction, it is recommended that the *AGFD Guidelines for the Handling Sonoran Desert Tortoises Encountered on Development Projects* (Appendix E) be followed by personnel with an AGFD Scientific Collection Permit.

Western Red Bat

The western red bat is listed as WSCA by the AGFD. However, this listing does not give this species any statutory protection. The range of the western red bat is throughout Arizona from 2,400 to 7,200 feet above msl (AGFD 2003b). These insectivores are typically found in broad-leaved riparian forests and woodlands. Their roost sites are typically trees, but can also be found roosting in saguaros and caves (AGFD 2003b). This species has been documented within 3 miles of the project area. The AGFD occurrence record for this species is most likely from the Hieroglyphic Mountains, west of the project area. No cave features, or riparian or woodland trees suitable for roosting were observed within the project area. In addition, the project area is below the elevational range for the western red bat; therefore, the project area does not contain suitable habitat for this species.

RECOMMENDATIONS

Since protected native plants are present in the project area, it is recommended that the Notice of Intent to Clear Land form (Appendix C) be submitted to the ADA at least 60 days prior to vegetation removal activities, in accordance with the Arizona Native Plant Law (A.R.S. §3-904).

No suitable breeding habitat for the bald eagle occurs in the project area; however, the lentic habitat in the project area provides suitable foraging habitat for the bald eagles. Although it is anticipated by USBR (1996) that the construction of the marina will not likely increase impacts to the bald eagles that breed four miles northwest of the project area, a rise in recreation in the LRPR may occur. Implementing mitigation measures, such as enforcing the bald eagle closure and increasing public awareness of the bald eagle, could allay any potential impacts to the bald eagle.

It is possible that the Sonoran desert tortoise could be encountered in the project area during construction activities. In the event that tortoises are seen, the AGFD *Guidelines for the Handling Sonoran Desert Tortoises Encountered on Development Projects* in Appendix E should be followed. This species is not currently protected under the ESA; therefore, no further surveys are recommended for the Sonoran desert tortoise.

It is not likely that the proposed project will have an adverse effect on any federally listed species or their habitat. However, any federal lead permitting agency responsible for issuing a permit or providing authorization for this project has the authority and final decision on the effect that this project will have on any federally listed species and whether or not to require species-specific surveys.

ADDITIONAL INFORMATION

Field notes are available at SWCA's Phoenix Office in the project file. The project number is 10458-107, Task BE.

SIGNATURES

Prepared By: Q. Nze Date: 11/30/05

Reviewed/Approved By: Eleanor R. Cladding Date: 11/30/05

LITERATURE CITED

- Arizona Game and Fish Department. 2003a. *Agave murpheyi*. Unpublished abstract compiled and edited by the Arizona Game and Fish Department, Phoenix, AZ. 7 pp.
- Arizona Game and Fish Department (AGFD). 2003b. *Lasiurus blossevilli*. Unpublished abstract compiled and edited by the Arizona Game and Fish Department, Phoenix, AZ. 7 pp.
- Arizona Game and Fish Department (AGFD). 2002a. *Agosia chryogaster*. Unpublished abstract compiled and edited by the Arizona Game and Fish Department, Phoenix, AZ. 5 pp.
- Arizona Game and Fish Department (AGFD). 2002b. *Bufo microscaphus*. Unpublished abstract compiled and edited by the Arizona Game and Fish Department, Phoenix, AZ. 4 pp.
- Arizona Game and Fish Department (AGFD). 2001a. *Purshia subintegra*. Unpublished abstract compiled and edited by the Arizona Game and Fish Department, Phoenix, AZ. 6 pp.
- Arizona Game and Fish Department (AGFD). 2001b. *Cyprinodon macularius macularius*. Unpublished abstract compiled and edited by the Arizona Game and Fish Department, Phoenix, AZ. 3 pp.
- Arizona Game and Fish Department (AGFD). 2001c. *Gila intermedia*. Unpublished abstract compiled and edited by the Arizona Game and Fish Department, Phoenix, AZ. 6 pp.
- Arizona Game and Fish Department (AGFD). 2001d. *Poeciliopsis occidentalis occidentalis*. Unpublished abstract compiled and edited by the Arizona Game and Fish Department, Phoenix, AZ. 5 pp.
- Arizona Game and Fish Department (AGFD). 2001e. *Xyrauchen texanus*. Unpublished abstract compiled and edited by the Arizona Game and Fish Department, Phoenix, AZ. 4 pp.
- Arizona Game and Fish Department (AGFD). 2001f. *Rallus longirostris yumanensis*. Unpublished abstract compiled and edited by the Arizona Game and Fish Department, Phoenix, AZ. 7 pp.
- Arizona Game and Fish Department (AGFD). 2001g. *Rana yavapaiensis*. Unpublished abstract compiled and edited by the Arizona Game and Fish Department, Phoenix, AZ. 6 pp.
- Arizona Game and Fish Department (AGFD). 2001h. *Gopherus agassizii*. Unpublished abstract compiled and edited by the Heritage Data Management System, Arizona Game and Fish Department, Phoenix, AZ. 11 pp.
- Arizona Game and Fish Department (AGFD). 1998. *Leptoncyteris curasoae yerbabuenae*. Unpublished abstract compiled and edited by the Arizona Game and Fish Department, Phoenix, AZ. 6 pp.
- Arizona Game and Fish Department (AGFD). 1997. *Agave arizonica*. Unpublished abstract compiled and edited by the Arizona Game and Fish Department, Phoenix, AZ. 4 pp.
- Arizona Game and Fish Department (AGFD). 1996. Wildlife of special concern in Arizona. Nongame and Endangered Wildlife Program, Arizona Game and Fish Department, Phoenix, AZ. 40 pp.
- Brown, D.E. (ed.). 1994. Biotic Communities: Southwestern United States and Northwestern Mexico. University of Utah Press, Salt Lake City. 342 pp.

- Hall, L.S., P.R. Krausman, and M.L. Morrison. 1997. The habitat concept and a plea for standard terminology. *Wilson Society Bulletin* 25:173-182.
- Monson, G., and A.R. Phillips. 1981. Annotated Checklist of the Birds of Arizona. The University of Arizona Press, Tucson, Arizona. 172 pp.
- Monson, G., and A.R. Phillips. 1981. Annotated Checklist of the Birds of Arizona. The University of Arizona Press, Tucson, Arizona. 172 pp.
- Rosenberg, K. V., R. D. Ohmart, W. C. Hunter, and B. W. Anderson. 1991. Birds of the lower Colorado River valley. The University of Arizona Press, Tucson.
- U.S. Bureau of Reclamation (USBR). 1996. New Waddell Dam Lake Pleasant Regional Park Master Recreation Plan, Draft Environmental Assessment. Phoenix, Arizona. 60 pp.
- U.S. Fish and Wildlife Service (USFWS). 1995. Determination of critical habitat for the Mexican Spotted Owl; Final Rule. June 6, 1995. *Federal Register* 60(108): 29914-29951.

APPENDIX A

WILDLIFE OBSERVED IN THE PROJECT AREA

This list includes those species detected directly (i.e., by sight) or indirectly (i.e., through sound or sign) during the site visit. However, this list does not represent a comprehensive summary of all species that may occur in the project area.

Common Name	Scientific Name
BIRDS	
American pipit	<i>Anthus rubescens</i>
black-tailed gnatcatcher	<i>Polioptila melanura</i>
Gambel's quail	<i>Callipepla gambelii</i>
gilded flicker	<i>Colaptes chrysoides</i>
great blue heron	<i>Ardea herodias</i>
house finch	<i>Carpodacus mexicanus</i>
rock wren	<i>Salpinctes obsoletus</i>
sandpiper	<i>Calidris sp.</i>
MAMMALS	
woodrat	<i>Neotoma sp.</i>
REPTILES	
speckled rattlesnake	<i>Crotalus mitchellii</i>

APPENDIX B

PLANT SPECIES OBSERVED IN THE PROJECT AREA

This list includes common plant species observed during the site visit. This does not represent a comprehensive summary of all species that may occur in the project area.

Common Name	Scientific Name
American threefold	<i>Trixis californica</i>
barrel cactus	<i>Ferocactus</i> sp.
Bermudagrass*	<i>Cynodon dactylon</i>
brittlebush	<i>Encelia farinosa</i>
brittle spineflower	<i>Chorizanthe brevicornu</i>
brome	<i>Bromus</i> sp.
buckhorn cholla	<i>Opuntia acanthocarpa</i>
Canada cocklebur	<i>Xanthium strumarium</i> var. <i>canadense</i>
catclaw acacia	<i>Acacia greggii</i> var. <i>greggii</i>
chuckwalla's delight	<i>Bebbia juncea</i>
Coves's cassia	<i>Senna covesii</i>
creosotebush	<i>Larrea tridentata</i> var. <i>tridentata</i>
desert broom	<i>Baccharis sarothroides</i>
desert broomrape	<i>Orobanche cooperi</i>
desert globemallow	<i>Sphaeralcea ambigua</i>
desert ironwood	<i>Olneya tesota</i>
desert tobacco	<i>Nicotiana obtusifolia</i>
fescue	<i>Festuca</i> sp.
fiddleneck	<i>Amsinckia intermedia</i>
fountaingrass*	<i>Pennisetum setaceum</i>
Gordon's bladderpod	<i>Lesquerella gordonii</i>
Graham's nipple cactus	<i>Mammillaria grahamii</i>
London rocket*	<i>Sisymbrium irio</i>
Mediterranean grass*	<i>Schismus</i> sp.
ocotillo	<i>Fouquieria splendens</i>
penstemon	<i>Penstemon</i> sp.
pepperweed	<i>Lepidium</i> sp.
plantain	<i>Plantago</i> sp.

Common Name	Scientific Name
prickly pear	<i>Opuntia</i> sp.
prickly Russian thistle*	<i>Salsola tragus</i>
saguaro	<i>Carnegiea giganteus</i>
seaside heliotrope	<i>Heliotropium curassavicum</i> var. <i>oculatum</i>
star-thistle*	<i>Centaurea</i> sp.
strawberry (Engelmann's) hedgehog cactus	<i>Echinocereus engelmannii</i>
teddybear cholla	<i>Opuntia bigelovii</i>
triangle-leaf bursage	<i>Ambrosia deltoidea</i>
velvet mesquite	<i>Prosopis velutina</i>
whitemargin sandmat	<i>Chamaesyce albomarginata</i>
wolfberry	<i>Lycium</i> sp.

* indicates a non-native species

APPENDIX C

ADA NOTICE OF INTENT TO CLEAR LAND FORM



Arizona Department of Agriculture (ADA)
Licensing and Registration Section
1688 West Adams, Phoenix, Arizona 85007
Phone: (602) 364-0935
Fax: (602) 542-0466

Notice of Intent to Clear Land

ARS § 3-904

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 _____

Agent's Name _____ Phone _____

Address _____

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

County _____

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)

The information contained in this application is true and accurate to the best of my knowledge. I understand that providing false information is a felony in Arizona

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 one acre	20 days, oral or written
One 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 district office of the Department of Agriculture at the address given below:

Kingman Area
Junction of Hwys 68 and 93
(928) 565-2222
Permits sold on Mondays
8:00-10:00 a.m.

Nogales Office
2771 N. Grand Ave.
Nogales, AZ 85621
(520) 281-0783

Phoenix Office
1688 W. Adams
Phoenix, AZ 85007
(602) 364-0935

Tucson Office
400 W. Congress Ste.124
Tucson, AZ 85701
(520) 628-6317
M-F 8a.m. - 12p.m.

San Simon Area
Milepost 383.3
Westbound I-10
(520) 845-2437
Permits sold on Wednesdays
10:00 a.m.-12:00 p.m.

Yuma Office
3893 S. 4th Ave.
Yuma, AZ 85365
(928) 341-1680

Notice to salvagers: Consent of the landowner is required before entering any lands described in this notice.

APPENDIX D

AGFD CORRESPONDENCE



Phoenix Office
2120 North Central Ave., Suite 130
Phoenix, Arizona 85004
Tel 602.274.3831 Fax 602.274.3958
www.swca.com

November 7, 2005

Mr. Bob Broscheid
Project Evaluation Program Supervisor
Arizona Game & Fish Department
WMHB – Project Evaluation Program
2222 West Greenway Road
Phoenix, Arizona 85023

**RE: REQUEST FOR INFORMATION CONCERNING ARIZONA SPECIAL STATUS SPECIES
AND HABITAT RELATED ISSUES**

Dear Mr. Broscheid:

The project area shown in the attached figure is approximately 164 acres of lands owned by the Bureau of Reclamation and is located near the city of Peoria in Maricopa County, Arizona. These lands are located along the western banks of Lake Pleasant and in Sections 7 and 8 of Township 6 North, Range 1 East. These lands are proposed for the development of a marina and are being evaluated to determine the potential for the presence of any sensitive species and their habitat. SWCA has been contracted to complete a biological evaluation of the project area to determine whether federally listed, proposed, candidate, or other special status species or their habitat exist in the project area. This biological evaluation is being conducted to meet compliance with the Endangered Species Act.

This correspondence is a request for information concerning special status species potentially occurring in the geographical area that encompasses the project area. We also invite comments on habitat-related issues or any other concerns which your agency may have regarding future development of this area.

If you have any questions or require additional information, please contact me at (602) 274-3831. We appreciate your assistance and respectfully request your response as soon as possible.

Sincerely,

Eleanor R. Gladding

Eleanor R. Gladding
Senior Biologist/Project Manager

enclosure



THE STATE OF ARIZONA
GAME AND FISH DEPARTMENT

2221 WEST GREENWAY ROAD, PHOENIX, AZ 85023-4399
(602) 942-3000 • AZGFD.GOV

GOVERNOR
JANET NAPOLITANO
COMMISSIONERS
CHAIRMAN, W. HAYS GILSTRAP, PHOENIX
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WILLIAM H. MCLEAN, GOLD CANYON
BOB HERNBRODE, TUCSON
DIRECTOR
DUANE L. SHROUFE
DEPUTY DIRECTOR
STEVE K. FERRELL



November 9, 2005

Ms. Eleanor R. Gladding
SWCA
2120 N. Central Ave.
Suite 130
Phoenix, AZ 85004

Re: Special Status Species Information for **Township 6 North, Range 1 East, Section 7 and 8; Proposed Marina Development.**

Dear Ms. Gladding:

The Arizona Game and Fish Department (Department) has reviewed your request, dated November 7, 2005, regarding special status species information associated with the above-referenced project area. The Department's Heritage Data Management System (HDMS) has been accessed and current records show that the special status species listed on the attachment have been documented as occurring in the project vicinity (3-mile buffer). In addition this project does not occur in the vicinity of any Proposed or Designated Critical Habitats.

The Department's HDMS data are not intended to include potential distribution of special status species. Arizona is large and diverse with plants, animals, and environmental conditions that are ever changing. Consequently, many areas may contain species that biologists do not know about or species previously noted in a particular area may no longer occur there. Not all of Arizona has been surveyed for special status species, and surveys that have been conducted have varied greatly in scope and intensity.

Making available this information does not substitute for the Department's review of project proposals, and should not decrease our opportunities to review and evaluate new project proposals and sites. The Department is also concerned about other resource values, such as other wildlife, including game species, and wildlife-related recreation. The Department would appreciate the opportunity to provide an evaluation of impacts to wildlife or wildlife habitats associated with project activities occurring in the subject area, when specific details become available.

Ms. Eleanor R. Gladding

November 9, 2005

2

If you have any questions regarding this letter, please contact me at (602) 789-3606. General status information, county and watershed distribution lists and abstracts for some special status species are also available on our web site at <http://www.azgfd.gov/hdms>.

Sincerely,



Ginger L. Ritter

Project Evaluation Program Specialist

SSS:glr

Attachment

cc: Rebecca Davidson, Project Evaluation Program Supervisor
Russ Haughey, Habitat Program Manager, Region VI

AGFD # 11-07-05(09)

Special Status Species within 3 Miles of T6N, R1E Sec. 7 & 8

NAME	COMMON NAME	ESA	USFS	BLM	STATE
<i>Agave murpheyi</i>	Hohokam Agave	SC	S	S	HS
<i>Agosia chrysogaster</i>	Longfin Dace	SC		S	
<i>Bufo microscaphus</i>	Arizona Toad	SC	S		
<i>Empidonax traillii extimus</i>	Southwestern Willow Flycatcher	LE	S		WSC
<i>Gopherus agassizii</i> (Sonoran Population)	Sonoran Desert Tortoise	SC			WSC
<i>Haliaeetus leucocephalus</i>	Bald Eagle	LT,PD	S		WSC
<i>Lasiurus blossevillii</i>	Western Red Bat				WSC
<i>Rana yavapaiensis</i>	Lowland Leopard Frog	SC	S		WSC

No Critical Habitats in project area. AGFD # 11-07-05(09). Proposed Marina Development.

Arizona Game and Fish Department, Heritage Data Management System, November 9, 2005.
Project Evaluation Program.

STATUS DEFINITIONS
ARIZONA GAME AND FISH DEPARTMENT (AGFD)
HERITAGE DATA MANAGEMENT SYSTEM (HDMS)

FEDERAL US STATUS

ESA **Endangered Species Act** (1973 as amended)
US Department of Interior, Fish and Wildlife Service (<http://arizonaes.fws.gov>)

Listed

- LE** Listed Endangered: imminent jeopardy of extinction.
- LT** Listed Threatened: imminent jeopardy of becoming Endangered.
- XN** Experimental Nonessential population.

Proposed for Listing

- PE** Proposed Endangered.
- PT** Proposed Threatened.

Candidate (Notice of Review: 1999)

- C** Candidate. Species for which USFWS has sufficient information on biological vulnerability and threats to support proposals to list as Endangered or Threatened under ESA. However, proposed rules have not yet been issued because such actions are precluded at present by other listing activity.
- SC** Species of Concern. The terms "Species of Concern" or "Species at Risk" should be considered as terms-of-art that describe the entire realm of taxa whose conservation status may be of concern to the US Fish and Wildlife Service, but neither term has official status (currently all former C2 species).

Critical Habitat (check with state or regional USFWS office for location details)

- Y** Yes: Critical Habitat has been designated.
- P** Proposed: Critical Habitat has been proposed.

[**NN** No Status: certain populations of this taxon do not have designated status (check with state or regional USFWS office for details about which populations have designated status)].

USFS **US Forest Service** (1999 Animals, 1999 Plants: corrected 2000)
US Department of Agriculture, Forest Service, Region 3 (<http://www.fs.fed.us/r3/>)

- S** Sensitive: those taxa occurring on National Forests in Arizona which are considered sensitive by the Regional Forester.

BLM **US Bureau of Land Management** (2000 Animals, 2000 Plants)
US Department of Interior, Bureau of Land Management, Arizona State Office
(<http://azwww.az.blm.gov>)

- S** Sensitive: those taxa occurring on BLM Field Office Lands in Arizona which are considered sensitive by the Arizona State Office.
- P** Population: only those populations of Banded Gila monster (*Heloderma suspectum cinctum*) that occur north and west of the Colorado River, are considered sensitive by the Arizona State Office.

TRIBAL STATUS**NESL Navajo Endangered Species List (2000)**

Navajo Nation, Navajo Fish and Wildlife Department

<http://www.heritage.tnc.org/nhp/us/navajo/esl.html>

The Navajo Endangered Species List contains taxa with status from the entire Navajo Nation which includes parts of Arizona, Utah, and New Mexico. In this notebook we provide NESL status for only those taxa whose distribution includes part or all of the Arizona portion of the Navajo Nation.

Groups

- 1** Those species or subspecies that no longer occur on the Navajo Nation.
- 2** Any species or subspecies which is in danger of being eliminated from all or a significant portion of its range on the Navajo Nation.
- 3** Any species or subspecies which is likely to become an endangered species, within the foreseeable future, throughout all or a significant portion of its range on the Navajo Nation.
- 4** Any species or subspecies for which the Navajo Fish and Wildlife Department (NF&WD) does not currently have sufficient information to support their being listed in Group 2 or Group 3 but has reason to consider them. The NF&WD will actively seek information on these species to determine if they warrant inclusion in a different group or removal from the list.

MEXICAN STATUS**MEX Mexican Federal Endangered Species List (October 16, 2000)**

Proyecto de Norma Oficial Mexicana PROY-NOM-059-ECOL-2000

The Mexican Federal Endangered Species List contains taxa with status from the entire Mexican Republic and waters under its jurisdiction. In this notebook we provide MEX designations for only those taxa occurring in Arizona and also in Mexico.

- P** En Peligro de Extinción (Determined Endangered in Mexico): in danger of extinction.
- A** Amenazada (Determined Threatened in Mexico): could become endangered if factors causing habitat deterioration or population decline continue.
- Pr** Sujeta a Protección Especial (Determined Subject to Special Protection in Mexico): utilization limited due to reduced populations, restricted distribution, or to favor recovery and conservation of the taxon or associated taxa.
- E** Probablemente extinta en el medio silvestre (Probably extinct in the wild of Mexico): A native species whose individuals in the wild have disappeared, based on pertinent documentation and studies that prove it. The only existing individuals of the species are in captivity or outside the Mexican territory.

[|= One or more subspecies of this species has status in Mexico, but the HDMS does not track it at the subspecies level (most of these subspecies are endemic to Mexico). Please consult the NORMA Oficial Mexicana PROY-NOM-059-ECOL-2000 for details.]

STATE STATUS**STATE:****Plants - NPL Arizona Native Plant Law (1999)**Arizona Department of Agriculture (<http://agriculture.state.az.us/PSD/nativeplants.htm>)

- HS** Highly Safeguarded: no collection allowed.
- SR** Salvage Restricted: collection only with permit.
- ER** Export Restricted: transport out of State prohibited.
- SA** Salvage Assessed: permits required to remove live trees.
- HR** Harvest Restricted: permits required to remove plant by-products.

Wildlife - WSCA Wildlife of Special Concern in Arizona (in prep)Arizona Game and Fish Department (<http://www.azgfd.com>)

WSC 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 Arizona Game and Fish Department's listing of Wildlife of Special Concern in Arizona (WSCA, in prep). Species indicated on printouts as WSC are currently the same as those in **Threatened Native Wildlife in Arizona (1988)**.

Revised 8/24/04, AGFD HDMS

J:\HDMS\DOCUMENT\NBOOKS\TEMPLATE\ORDEFS\STATDEF

APPENDIX E

GUIDELINES FOR HANDLING SONORAN DESERT TORTOISES

GUIDELINES FOR HANDLING SONORAN DESERT TORTOISES
ENCOUNTERED ON DEVELOPMENT PROJECTS

Arizona Game and Fish Department

Revised January 17, 1997

The Arizona Game and Fish Department (Department) has developed the following guidelines to reduce potential impacts to desert tortoises, and to promote the continued existence of tortoises throughout the state. These guidelines apply to short-term and/or small-scale projects, depending on the number of affected tortoises and specific type of project.

Desert tortoises of the Sonoran population are those occurring south and east of the Colorado River. Tortoises encountered in the open should be moved out of harm's way to adjacent appropriate habitat. If an occupied burrow is determined to be in jeopardy of destruction, the tortoise should be relocated to the nearest appropriate alternate burrow or other appropriate shelter, as determined by a qualified biologist. Tortoises should be moved less than 48 hours in advance of the habitat disturbance so they do not return to the area in the interim. Tortoises should be moved quickly, kept in an upright position at all times and placed in the shade. Separate disposable gloves should be worn for each tortoise handled to avoid potential transfer of disease between tortoises. Tortoises must not be moved if the ambient air temperature exceeds 105 degrees Fahrenheit unless an alternate burrow is available or the tortoise is in imminent danger.

A tortoise may be moved up to two miles, but no further than necessary from its original location. If a release site, or alternate burrow, is unavailable within this distance, and ambient air temperature exceeds 105 degrees Fahrenheit, the Department should be contacted to place the tortoise into a Department-regulated desert tortoise adoption program. Tortoises salvaged from projects which result in substantial permanent habitat loss (e.g. housing and highway projects), or those requiring removal during long-term (longer than one week) construction projects, will also be placed in desert tortoise adoption programs. *Managers of projects likely to affect desert tortoises should obtain a scientific collecting permit from the Department to facilitate temporary possession of tortoises.* Likewise, if large numbers of tortoises (>5) are expected to be displaced by a project, the project manager should contact the Department for guidance and/or assistance.

Please keep in mind the following points:

- These guidelines do not apply to the Mohave population of desert tortoises (north and west of the Colorado River). Mohave desert tortoises are specifically protected under the Endangered Species Act, as administered by the U.S. Fish and Wildlife Service.
- These guidelines are subject to revision at the discretion of the Department. We recommend that the Department be contacted during the planning stages of any project that may affect desert tortoises.
- Take, possession, or harassment of wild desert tortoises is prohibited by state law. Unless specifically authorized by the Department, or as noted above, project personnel should avoid disturbing any tortoise.

RAC:NLO:rc