

HOUGHTON ROAD CORRIDOR  
TUCSON, ARIZONA  
BIOLOGICAL EVALUATION  
FINAL

Prepared for

Arizona State Land Department

Task I-C-5.1 Deliverable

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# INTRODUCTION

The Arizona State Land Department (ASLD) has retained, via Westcor, a team of consultants to evaluate planning constraints and opportunities on the 12,000-acre Houghton Road Corridor (HRC) project area, located in southeastern Tucson, Pima County, Arizona (Figure 1). This report describes the biological resources of the project area and assesses the potential occurrence of federally listed threatened, endangered, proposed, and candidate species and other special status plant and animal species. The report represents an overview of the potential constraints related to special status species for use in future land planning efforts. Because this project is in the preliminary planning stages, this report does not represent an assessment of impacts to special status species.

## Executive Summary

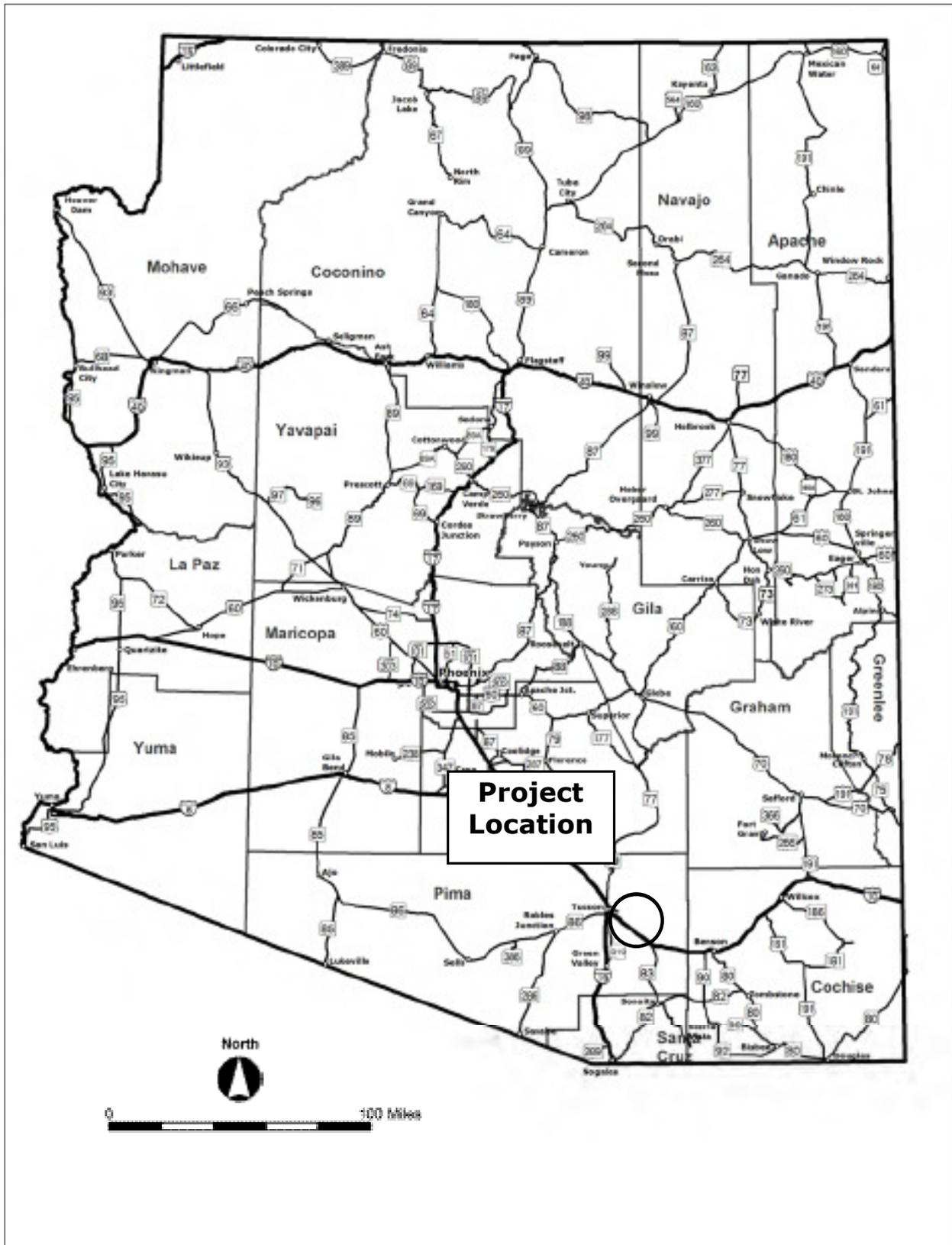
### Introduction

This report describes the biological resources of the project area and assesses the potential occurrence of federally listed threatened, endangered, proposed, and candidate species and other special status plant and animal species. The project area consists of approximately 12,000 acres of undeveloped State Trust land in southeast Tucson and northeast Pima County, Arizona.

### Project Area Description

The project area encompasses relatively flat to gently rolling terrain ranging from 2,750 to 3,180 feet in elevation and is located in the greater Santa Cruz River watershed. The site supports only ephemeral surface waters, including larger ephemeral drainages such as Pantano Wash, Atterbury Wash, Civano Wash, Mesquite Ranch Wash, and Julian Wash. Vegetation type is described as Arizona Upland Subdivision Sonoran Desertscrub. The majority of the project area lies in foothill paloverde (*Parkinsonia microphylla*)-creosote bush (*Larrea tridentata*)-triangle-leaf bursage (*Ambrosia deltoidea*)-dominated paloverde-cacti-mixed scrub series of this community. Soils over the majority of the site are of the Nickel-Latene-Cave Association. The project area is primarily maintained for use as range land. Current land uses include transportation, utility corridors, and recreational uses, including mountain biking, off-road vehicle use, and a radio-controlled aircraft facility. Other uses include unauthorized dumping. Prior land uses include sand and gravel mining and related exploration activities in and along Pantano Wash, a railroad, and a former dragway racing facility.

Figure 1 Project Location



## Threatened, Endangered, and Recently Delisted Species

The project area includes potential foraging and night-roosting habitat for the endangered lesser long-nosed bat (LLNB) (*Leptonycteris curasoae yerbabuena*), potential habitat for the endangered Pima pineapple cactus (*Coryphantha scheeri* var. *robustispina*) per the Pima County MSHCP's habitat model, and potential habitat for the delisted cactus ferruginous pygmy-owl (CFPO) (*Glaucidium brasilianum cactorum*). The project area does not provide day or maternity roosting habitat for the LLNB and most LLNBs arrive in the Tucson area well after saguaros (their primary potential food source in the project area) have flowered and fruited. However, some LLNBs could be present in the Tucson Basin during the spring and, therefore, areas supporting relatively high densities of saguaros could represent potential foraging areas for a small number of LLNBs. Furthermore, high densities of saguaros could provide structure for night roosts in saguaro cavities for LLNBs present from August through October that travel along Pantano Wash from day roosts in the Rincon Mountains to feed on hummingbird feeders in residential areas north, south, and east of the project area. The southern 4,000-acre portion of the property is primarily classified as "medium potential" habitat for the Pima pineapple cactus based on the habitat model included in the Pima County Multi-species Habitat Conservation Plan (MSHCP) (Recon 2001). A comprehensive Pima pineapple cactus field survey was completed for this entire 4,000-acre portion of the property in accordance with the U.S. Fish and Wildlife Service (USFWS)-recommended survey protocol, and no Pima pineapple cactus were found. Extensive field studies (pertaining to potential Section 404 washes, potential riparian areas, and areas of significant vegetative habitat) were also completed for the balance of the 12,000-acre project area.

Though these studies were not specifically targeting the Pima pineapple cactus, no specimens of this species were found. It cannot be definitively concluded that there are no Pima pineapple cactus on the northern 8,000 acres because protocol-level surveys were not completed there. However, their occurrence (or their occurrence in substantial numbers) in this area is considered unlikely based on the fact that (1) this area is modeled as "no potential" habitat in the Pima County MSHCP, (2) no Pima pineapple cacti were found during protocol-level surveys in the southern 4,000 acres (classified as "medium potential" habitat), (3) no Pima pineapple cacti were found during the course of other field surveys in the remainder of the project area, and (4) known records of this species in this area are limited to areas south and southeast of, and outside of, the project area. Based on this, no additional surveys are recommended at this time. Potential habitat for the CFPO occurs primarily near the northern end of the project area and near Pantano Wash, where both large trees and saguaros are most numerous.

## Other Special Status Species and Sensitive Biological Resources

The project area provides potential or known habitat for a number of other special status species (not listed as threatened or endangered), including pale Townsend's big-eared bat (*Corynorhinus townsendii pallescens*), western burrowing owl, (*Athene cunicularia hypugaea*), cave myotis (*Myotis velifer*), Mexican long-tongued bat (*Choeronycteris mexicana*), Sonoran desert tortoise (*Gopherus agassizii*), needle-spined pineapple cactus (*Echinomastus erectocentrus* var. *erectocentrus*), and Great Plains narrow-mouthed toad (*Gastrophryne olivacea*). The project area also supports bird species protected under the Migratory Bird Treaty Act and plant species protected under the Arizona Native Plant Law and local ordinances. Portions of the site are expected to be used as movement corridors for vertebrate species. Other sensitive biological resources include a bat colony located under the Houghton Road overpass of the Union Pacific Railroad (outside but directly adjacent to the project area) and tobosagrass (*Pleuraphis mutica*) swales in predominantly the southern part of the project area.

## Conclusions and Recommendations

Though the endangered LLNB is not expected to occur regularly in the project area, and though no Pima pineapple cacti were found on the property, development activity can always have possible effects on potential habitat areas for these species. The presence of a federal nexus, such as a Clean Water Act Section 404 permit, may result in the need for consultation with the USFWS under section 7 of the Endangered Species Act. With regard to the LLNB, a telemetry study currently being conducted by the Arizona Game and Fish Department (AGFD) should be reviewed upon completion to better determine the potential occurrence of this species in the project area and whether additional field surveys are warranted. With regard to the Pima pineapple cactus, future planning for development of specific parcels in the northern 8,000-acre portion of the site should recognize that additional site surveys or investigations, as necessary to determine the potential occurrence of Pima pineapple cactus in these areas, may be ultimately required at some point in the planning and development process.

The project area supports potential habitat for the recently delisted CFPO. Currently, this species is not afforded any protection under the Endangered Species Act. However, on May 30, 2008, the USFWS issued a 90-day finding that this species may warrant relisting and is undergoing a 12-month status review. Based on this review, the USFWS will determine if listing of the species is warranted, and if so, will publish a proposal to list CFPO as threatened or endangered. Because it generally takes 1 year from the time that a species is proposed to be listed to the time that a final decision is made (and because it is uncertain whether the species will be relisted), surveys for CFPOs in the project area are not

recommended at this time. Such surveys may be required in portions of the project area in the future if the species is once again listed as threatened or endangered.

Future development may impact some species of birds protected by the Migratory Bird Treaty Act. It is recommended that surveys are conducted prior to development of specific parcels to locate nesting birds of prey (hawks and owls) so that these can be avoided or relocated.

Future development is expected to impact plant species protected by the Arizona Department of Agriculture (AZDA). Destruction of protected native plants requires prior notification to the AZDA. These plant species are also protected under City of Tucson ordinances that have specific requirements for inventory and mitigation of native plants. It is recommended that coordination take place with both the AZDA and the City of Tucson during future planning stages of the project.

Land planning efforts should take into consideration potential wildlife movement corridors, particularly the larger drainages on-site. It is recommended that future planning efforts are coordinated with the City of Tucson, which has existing floodplain ordinances in place for the protection of riparian resources. These protective ordinances are also expected to mitigate impacts to wildlife movement corridors to some degree.

Land planning should also take into consideration other sensitive biological resources. The bat colony under the Houghton Road overpass of the Union Pacific Railroad is outside of the project area and is therefore under the jurisdiction of the City of Tucson. Preservation of tobosagrass swales should be considered during future planning efforts due to the distinctive nature of these features, their role in local groundwater recharge function, and their status as Protected Riparian Area under City of Tucson ordinance.