

HOUGHTON ROAD CORRIDOR
TUCSON, ARIZONA
LESSER LONG-NOSED BAT EVALUATION
FINAL

Prepared for

Arizona State Land Department

Subtask I-C-5.3 Deliverable

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By:
EcoPlan Associates, Inc.

INTRODUCTION

The Arizona State Land Department (ASLD) has retained a team of consultants through an Urban Planning Permit (UPP) to Westcor to evaluate planning constraints and opportunities on the Houghton Road Corridor (HRC) project area, located in the southeastern portion of Tucson, Pima County, Arizona (Figure 1-Project Location and Figure 2-Project Vicinity).

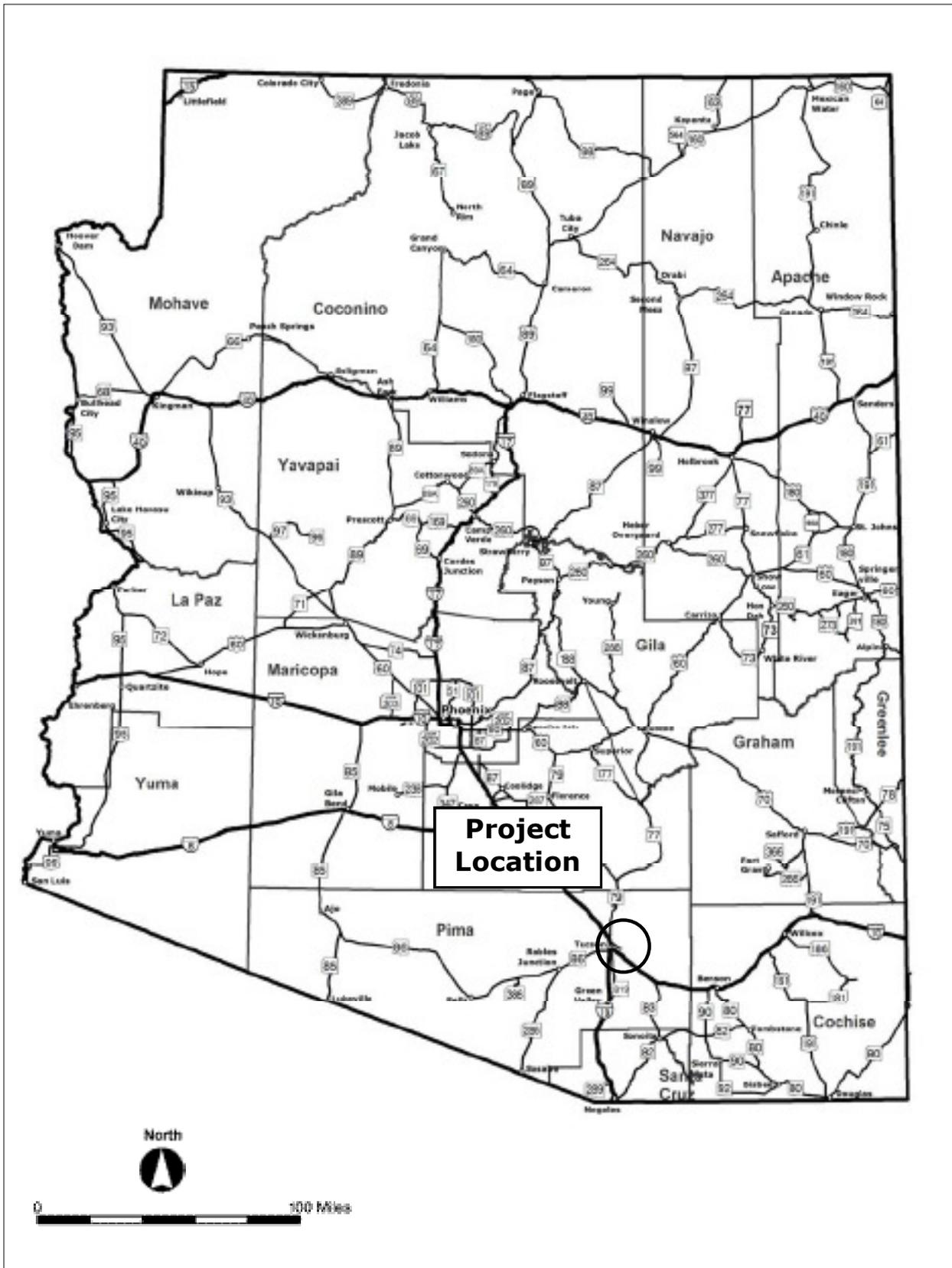
Executive Summary

This assessment evaluates the potential occurrence of the endangered lesser long-nosed bat (*Leptonycteris curasoae yerbabuena*) (LLNB) and its habitat within the 12,000-acre HRC project area. Results of this evaluation indicate that the project area supports no known or suspected day or maternity roosting habitat. However, the LLNB forages on saguaro cactus flower nectar and fruit when saguaros flower and fruit in the spring. Though portions of the project area support relatively high densities of saguaros, large numbers of LLNBs are not present in the Tucson area during the period when saguaros produce flowers (nectar) or fruit. 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.

Results of a literature review of historic and former LLNB roost sites in Arizona are presented. The Arizona Game and Fish Department (AGFD) Heritage Data Management System (HDMS) was accessed for roost site survey records, mist-net surveys, and anecdotal observations of LLNBs within 40 miles of the project area. The U.S. Fish and Wildlife Service (USFWS), the AGFD non-game research branch, the HDMS, and Pima County Parks and Recreation biologists and technicians were contacted for additional roost site and mist-net survey records, telemetry data, and anecdotal observations of LLNBs in the project vicinity. There are no records of occurrence known for the species in the project area. However, the proximity of known LLNB roost sites, telemetry information, and observations of LLNBs feeding at hummingbird feeders to the north, east, and south within 5-50 miles of the project area indicate that the species could occur occasionally in the project area.

The availability of potential food resource plants in the project area was also assessed. Native agave species do not occur in the project area. Transect results indicate that saguaro cacti are essentially absent over approximately 70 percent of the project area. Elsewhere in the project area, saguaro abundance ranges from less than one to more than ten individuals per acre. The areas with the highest saguaro densities are generally located along or near the Pantano Wash corridor in the eastern and northern portions of the project area.

Figure 1 Project Location



Based on current knowledge, large numbers of LLNBs generally don't arrive in the Tucson area until August, past the flowering and fruiting period for saguaros. However, some LLNBs may 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 individuals of the LLNB. A telemetry study currently being conducted by the AGFD should be reviewed upon completion to better determine the potential occurrence of LLNBs in the project area and whether additional field surveys are warranted.

Project Location

The project is located on undeveloped ASLD land west and east of Houghton Road and north and south of Interstate 10 (I-10) within the Tucson city limits in the southeastern portion of the Tucson Basin. The project area includes portions of:

- Township (T) 15 South (S), Range (R) 15 East (E); Sections 2, 11, 12, 13, 14, 23, 24, 25, 33, 34, 35, and 36
- T15S, R16E; Sections 7, 18, 19, 29, 30, 31, and 32
- T16S, R15E; Sections 1, 2, 3, 4, 10, 11, and 12
- T16S, R16E; Sections 5, 6, 7, and 8

The above sections are found on the Tanque Verde Peak (1991), Tucson East (1983), Tucson Southeast (1982), and Vail (1981), Arizona, U.S. Geological Survey (USGS) 7.5-minute Topographic Series.

Some adjacent lands are under the jurisdictions of the City of Tucson, the Department of Defense, the Davis-Monthan Air Force Base, and the ASLD; other adjacent lands are privately owned.

Project Description

The HRC project area consists of approximately 12,000 acres of ASLD land in the southeastern portion of the city of Tucson. The ASLD has issued an Urban Planning Permit to Westcor for the planning of the site for development of commercial, residential, open space, and/or other uses.

Location Description

The project area encompasses relatively flat to gently rolling terrain in the southeastern portion of the Tucson basin. Terrain in the project area slopes gently to the northwest from approximately 3,180 feet elevation¹ at the southeastern corner to 2,750 feet at the northern end.

¹ Elevations in this document are referenced to mean sea level.

CONCLUSIONS AND RECOMMENDATIONS

The project area provides limited potential habitat components for the federally listed LLNB. There is no known or suspected maternity or day roosting habitat in the project limits. Though large numbers of LLNBs do not arrive in the Tucson area until late summer after the saguaro flowering/fruiting period, some individuals of this species have been recorded at other times of the year in the Tucson basin, including spring. Therefore, portions of the project area with relatively high saguaro densities could represent potential foraging areas for a small number of LLNBs foraging in the Tucson basin in the spring. Pantano Wash is a documented movement corridor for LLNBs. Portions of the project area along Pantano Wash may serve as natural buffers for this movement pattern, and saguaros in these areas 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 telemetry study currently being conducted by AGFD should be reviewed upon completion to better determine the potential occurrence of LLNBs in the project area and whether additional field surveys are warranted.