

Chapter 8 – Preferred Development Alternative – Environmental Overview

Introduction

Analysis of the potential environmental impacts of recommended airport development projects is a key component of the Master Plan. This Environmental Overview will identify significance thresholds for the various resource categories contained in FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, Exhibit 4-1 and FAA Order 5050.4B, *National Environmental Policy Act (NEPA) Implementation Instructions for Airport Actions*, Table 7.1 and then evaluate the development concept to determine whether the proposed actions could individually or collectively significantly affect the quality of the environment.

The construction of any improvements depicted on the recommended development concept plan would require compliance with NEPA to receive federal financial assistance or to obtain a federal approval (i.e., a federal action). For projects not “categorically excluded” under FAA Order 1050.1F, compliance with NEPA is generally satisfied through the preparation of an Environmental Assessment (EA). An EA is prepared when the initial review of the proposed action indicates that it is not categorically excluded, involves at least one extraordinary circumstance, or the action is not one known normally to require an Environmental Impact Statement (EIS). If none of the potential impacts are likely to be significant, then the responsible FAA official prepares a Finding of No Significant Impact (FONSI), which briefly presents, in writing, the reasons why an action, not otherwise categorically excluded, would not have a significant impact on the environment and the approving official may approve it. Issuance of a FONSI signifies that FAA would not prepare an EIS and has completed the NEPA process for the proposed action.

In instances where significant environmental impacts are expected, an EIS may be required. An EIS is a clear, concise, and appropriately detailed document that provides agency decision-makers and the public with a full and fair discussion of significant environmental impacts of the proposed action and reasonable alternatives and implements the requirement in NEPA §102(2)(C) for a detailed written statement.

This cursory environmental review was performed to document potential environmental impacts associated with the Airport Master Plan update for 2019. Environmental constraints are listed below and shown in **Figures 8-2 and 8-3**. The environmental resources evaluated include the following:

- Hazardous materials, solid waste, and pollution prevention
- Demographics
- Prime and unique farmlands
- Cultural Resources (historic and archaeological)

- Federally listed threatened and endangered species
- State listed species threatened species and species of concern
- Wetlands and other waters of the US
- Noise impacts (RCM)

Our environmental review also included contacting state and federal agencies overseeing their associated resources. Agencies contacted include the following:

- Texas Parks and Wildlife Department (TPWD)
- Texas State Historic Preservation Officer (SHPO)
- US Fish and Wildlife Service (USFWS)
- US Army Corps of Engineers (USACE)
- US Department of Agriculture (Rural Development) (USDA)

A response was received from TPWD and SHPO. The other agencies were contacted; however, no other firm responses were received. Information was collected from the USFWS's Information Planning and Conservation (IPaC) system in lieu of direct contact with USFWS.

The environmental and community impacts for the proposed improvements are briefly summarized in this document in accordance with the environmental study requirements set forth in FAA Order 1050.1F, Environmental Impacts: Policies and Procedures and Order 5050.4B National Environmental Policy Act. All summarizations are cursory in nature, and further study will be required through the National Environmental Policy Act (NEPA) process. Each resource category is discussed below in respect to the desktop review conducted for the planning area and data evaluated for determining potential impacts.

Air Quality

Threshold of Significance Definition: The action would cause pollutant concentrations to exceed one or more of the National Ambient Air Quality Standards (NAAQS), as established by the United States (U.S.) Environmental Protection Agency (EPA) under the Clean Air Act, for any of the time periods analyzed, or to increase the frequency or severity of any such existing violations.

Preferred Development Alternative Evaluation: There are currently no air quality concerns, publicly owned parks, recreational areas, wildlife and waterfowl refuges, national or state forests, wilderness areas, wild and scenic rivers resources, or coastal areas, located within the ground disturbance of the Area of Potential Effects (APE). There are no Section 4(f) or Section 6(f) properties located in the ground disturbance APE. If an unknown historic site is located within the project area, it could qualify for protection under Section 4(f), which would be determined after a thorough NRHP status evaluation.

Hazardous Materials, Solid Waste, and Pollution Prevention

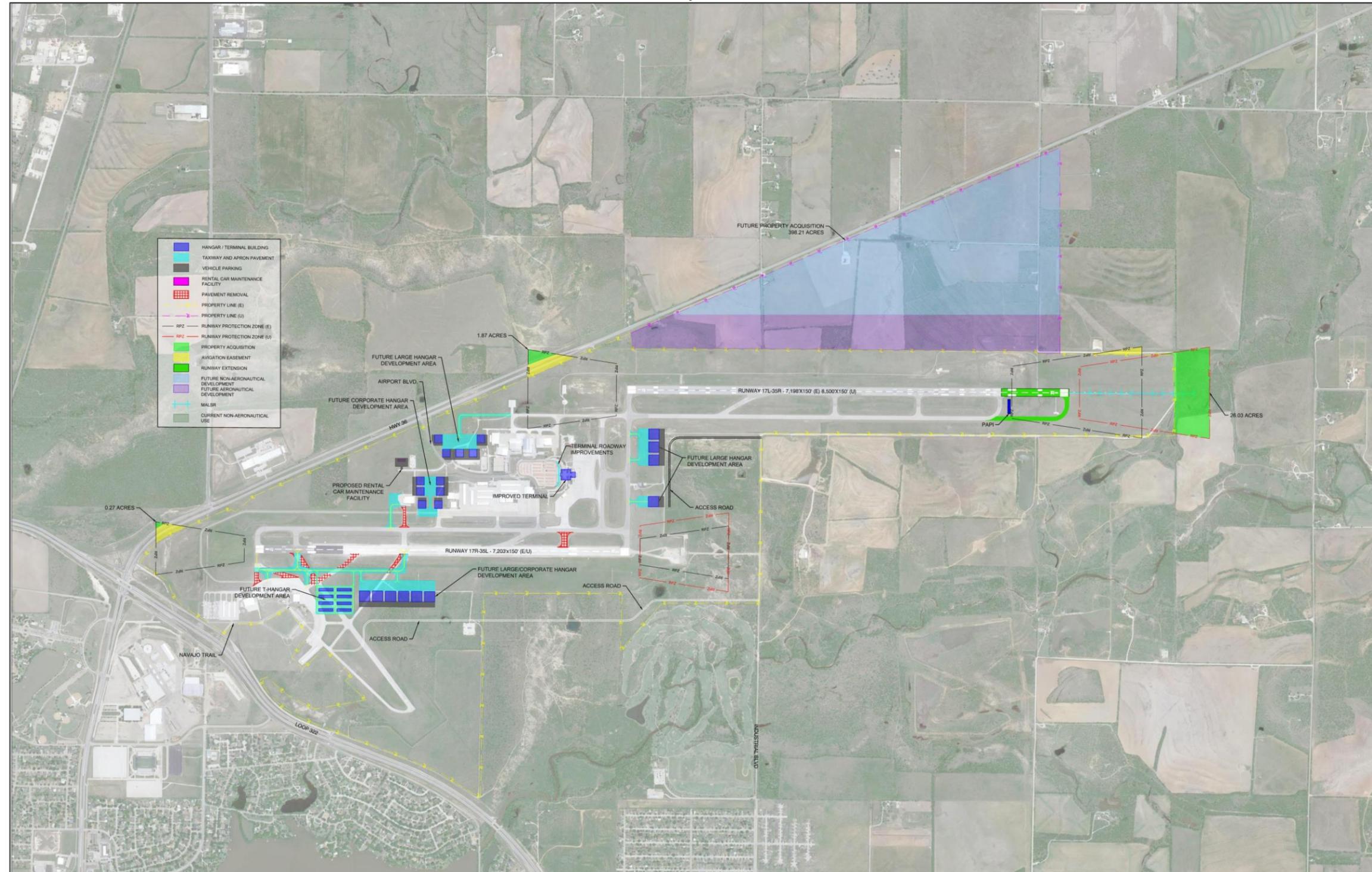
Threshold of Significance Definition: The FAA has not established a significance threshold for Hazardous Materials, Solid Waste, and Pollution Prevention. However, factors to consider are if an action would have the potential to:

- Violate applicable Federal, state, tribal, or local laws or regulations regarding hazardous materials and/or solid waste management;
- Involve a contaminated site (including but not limited to a site listed on the National Priorities List). Contaminated sites may encompass relatively large areas. However, not all of the grounds within the boundaries of a contaminated site are contaminated, which leaves space for siting a facility on non-contaminated land within the boundaries of a contaminated site. An EIS is not necessarily required. Paragraph 6-2.3.a of this Order allows for mitigating impacts below significant levels (e.g., modifying an action to site it on non-contaminated grounds within a contaminated site). Therefore, if appropriately mitigated, actions within the boundaries of a contaminated site would not have significant impacts;
- Produce an appreciably different quantity or type of hazardous waste;
- Generate an appreciably different quantity or type of solid waste or use a different method of collection or disposal and/or would exceed local capacity; or
- Adversely affect human health and the environment.

Preferred Development Alternative Evaluation: Pavement removal or rehabilitation, building renovations or construction will produce solid waste. If existing buildings and hangars are planned for renovation, a screening for potential hazardous materials, including asbestos, should be conducted. The proposed land acquisition of approximately 400 acres east of Runway 17L/35R would acquire at least three oil wells (identified by the presence of derricks), and at least one aboveground storage tank (AST) site containing three ASTs. The three oil wells and the AST site are located 0.07-0.27 miles northeast of the intersection of Elmdale Road and Abilene Municipal Airport road. No other hazardous waste or hazardous materials sites are present within the project area based on the EnviroMapper platform maintained by the U.S. Environmental Protection Agency (EPA). Additionally, the proposed land acquisition would include the purchase of three residences and farm-related buildings, which would need evaluated prior to acquisition. An Environmental Due Diligence Audit (EDDA) should be performed on all proposed land acquisition areas.

No other solid waste or other pollution sources were identified within or adjacent to the project area. Potential impacts regarding three known oil wells (active and/or inactive) will need assessed prior to land acquisition.

Figure 8-1
Preferred Development Alternative



Historic, Architectural, Archeological, and Cultural Resources

Threshold of Significance Definition: The FAA has not established a significance threshold for Historical, Architectural, Archeological, and Cultural Resources. However, the factor to consider is that the action would result in the finding of Adverse Effect through the Section 106 process. However, an adverse effect finding does not automatically trigger preparation of an EIS (i.e., a significant impact).

Preferred Development Alternative Evaluation: Garver contacted the State Historic Preservation Offices (SHPO) regarding the presence of cultural historic and/or archaeological sites located within or near the proposed action. SHPO responded with no indication of sites within or adjacent to the proposed action (**Appendix A**).

The National Historic Preservation Act of 1966 requires that an initial review be made in order to determine if any properties are on, or eligible for inclusion in, the National Register of Historic Places (NRHP) within the area of a proposed action's potential environmental impact. No sites listed in the NRHP are within the project area based on the EPA's EnviroMapper platform. The closest site listed in the NRHP is located in downtown Abilene approximately 3 miles away.

Biological Resources

Threshold of Significance Definition: The U.S. Fish and Wildlife Service or the National Marine Fisheries Service determines that the action would be likely to jeopardize the continued existence of a federally listed threatened or endangered species or would result in the destruction or adverse modification of federally designated critical habitat. The FAA has not established a significance threshold for the non-listed species. However, factors to consider are:

- A long-term or permanent loss of unlisted plant or wildlife species, i.e., extirpation of the species from a large project area (e.g., a new commercial service airport);
- Adverse impacts to special status species (e.g., state species of concern, species proposed for listing, migratory birds, bald and golden eagles) or their habitats;
- Substantial loss, reduction, degradation, disturbance, or fragmentation of native species' habitats or their populations; or
- Adverse impacts on a species' reproductive success rates, natural mortality rates, non-natural mortality (e.g., road kills and hunting), or ability to sustain the minimum population levels required for population maintenance.

Preferred Development Alternative Evaluation: The United States Department of the Interior, Fish and Wildlife Service (USFWS) listed threatened or endangered species as potentially occurring within the project area, which include: Least Tern (*Sterna antillarum*),

Piping Plover (*Charadrius melodus*), Red Knot (*Calidris canutus rufa*), Sharpnose Shiner (*Notropis oxyrhynchus*), Smalleye Shiner (*Notropis buccula*), and Texas Fawnsfoot (*Truncilla macrodon*). No potential habitat occurs within or adjacent to the project area for any of the federally listed species. There is no critical habitat located within the project area. Potential habitat for the Texas Fawnsfoot could be located offsite within Lytle Creek southwest of the airport. The official IPaC (Information for Planning and Consultation) list provided by the USFWS is located in **Appendix B**.

The Texas Parks and Wildlife Department (TPWD) was also contacted. Their recommendations can be found in **Appendix C**. Their review included Federal Laws, State Laws, and Species of Concern/Special Features. Their recommendations for these sections, which include contacting the USFWS, are summarized below.

- Federal Laws – Migratory Bird Treaty Act (MBTA)
 - Recommendations: Exclude vegetation clearing March through August. If clearing during this nesting season is unavoidable, they recommend a survey for active nests.
- State Laws – Parks and Wildlife Codes
 - Chapter 64
Recommendations: The MBTA also applies to Chapter 64.
 - Section 68.015 – State listed Species
Recommendations: TPWD has identified the Texas horned lizard (*Phrynosoma cornutum*) as state listed threatened. Potential habitat occurs within the project area for this species. TPWD recommends completing a presence/absence pre-construction survey for the project area and adjacent to construction areas during warmer months. Additional recommendations are included in their correspondence in Appendix A.
- Species of Concern/Special Features – Texas Natural Diversity Database (TXNDD)
 - Recommendations: The Western hog-nosed skunk (*Conepatus leuconotus*) has been documented as occurring within 1.5 miles of project area. Precautions should be taken to avoid impacts if encountered. TPWD also recommends review of the Taylor County list of rare species. This list was obtained and is also provided in Appendix A. If such species are encountered during construction, TPWD recommends avoidance. Habitat for the Black-capped Vireo (*Vireo atricapilla*), which is a state listed species present on the Taylor County list of rare species (Appendix A), may be present in the project area. Additional TPWD recommendations include contacting the USFWS regarding federally listed species.

Waters and Wetlands

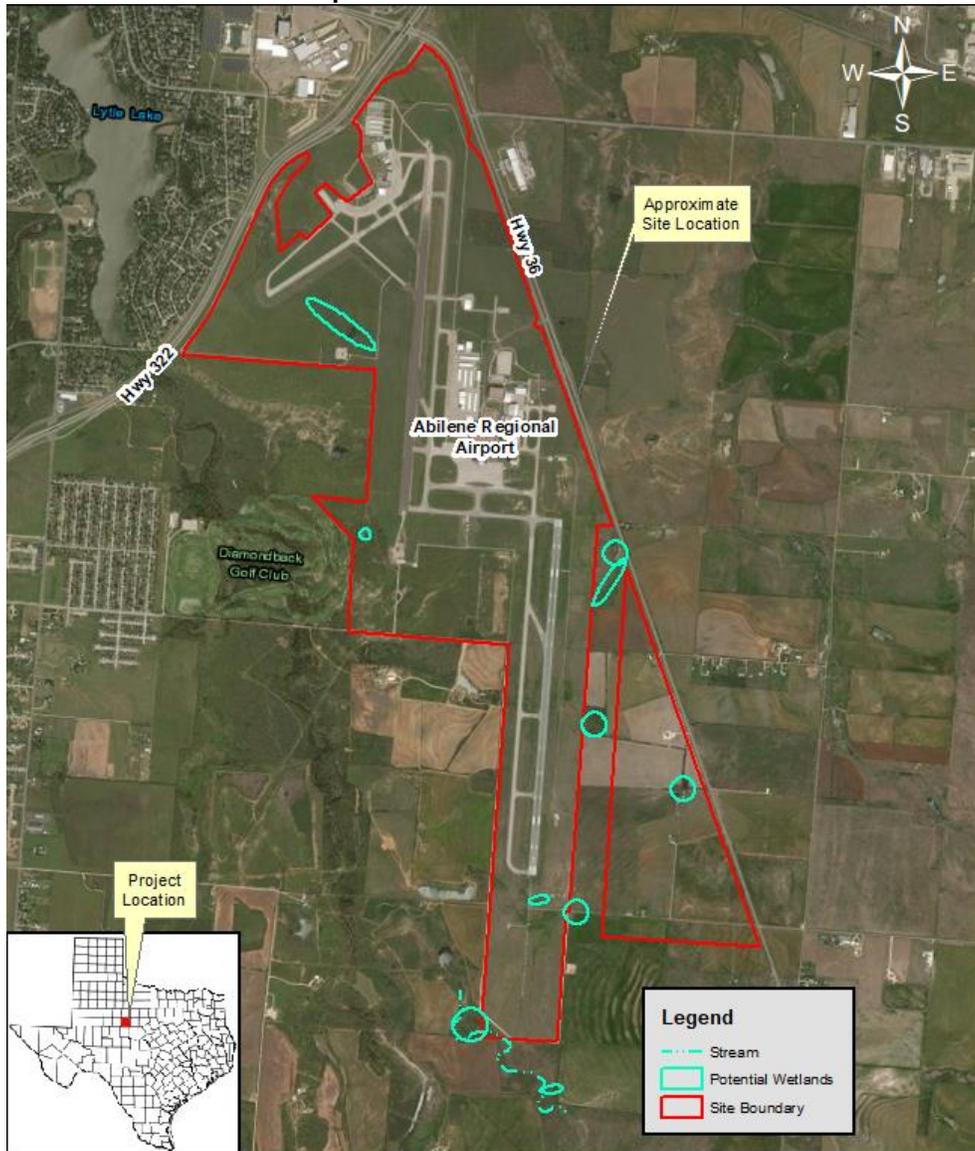
Threshold of Significance Definition: The action would:

- Adversely affect a wetland's function to protect the quality or quantity of municipal water supplies, including surface waters and sole source and other aquifers;
- Substantially alter the hydrology needed to sustain the affected wetland system's values and functions or those of a wetland to which it is connected;
- Substantially reduce the affected wetland's ability to retain floodwaters or storm runoff, thereby threatening public health, safety or welfare (the term welfare includes cultural, recreational, and scientific resources or property important to the public);
- Adversely affect the maintenance of natural systems supporting wildlife and fish habitat or economically important timber, food, or fiber resources of the affected or surrounding wetlands;
- Promote development of secondary activities or services that would cause the circumstances listed above to occur; or
- Be inconsistent with applicable state wetland strategies.

Preferred Development Alternative Evaluation: The US Army Corps of Engineers (USACE) was contacted to determine if there are jurisdictional waters within the project area. A response has not been received to date and will be forwarded to the Airport when received.

The USACE regulates discharges to waters of the United States under its authority to administer Section 404 of the CWA. A Section 404 permit is required for actions placing dredge or fill material into the waters of the United States, including wetlands. A desktop review of the project area revealed that there may be wetlands and streams within the project area (**Figure 8-3**), which occurs within two different HUC12 watersheds. A full wetland and stream delineation should be conducted prior to any site impacts. The desktop review included a review of NRCS soils information, the National Wetlands Inventory (NWI), aerial photography, and topographic maps.

Figure 8-3
Desktop Identified Wetlands and Streams



Air Quality

Threshold of Significance Definition: The action would cause pollutant concentrations to exceed one or more of the National Ambient Air Quality Standards (NAAQS), as established by the Environmental Protection Agency under the Clean Air Act, for any of the time periods analyzed, or to increase the frequency or severity of any such existing violations.

Preferred Development Alternative Evaluation: The proposed annual operations at the Airport are not expected to approach or exceed 180,000 operations. The Airport is not located within a non-attainment area; therefore, general conformity regulations would not apply.

Noise and Noise-Compatible Land Use

Threshold of Significance Definition: The action would increase noise by DNL71.5 dB or more for a noise sensitive area that is exposed to noise at or above the DNL 65 dB noise exposure level, or that will be exposed at or above the DNL 65 dB level due to a DNL 1.5 dB or greater increase, when compared to the no action alternative for the same timeframe. For example, an increase from DNL 65.5 dB to 67 dB is considered a significant impact, as is an increase from DNL 63.5 dB to 65 dB. Some factors to consider are: The action would increase noise by DNL71.5 dB or more for a noise sensitive area that is exposed to noise at or above the DNL 65 dB noise exposure level, or that will be exposed at or above the DNL 65 dB level due to a DNL 1.5 dB or greater increase, when compared to the no action alternative for the same timeframe. For example, an increase from DNL 65.5 dB to 67 dB is considered a significant impact, as is an increase from DNL 63.5 dB to 65 dB.

Preferred Development Alternative Evaluation: Noise contours were generated using the FAA-approved Aviation Environmental Design Tool (AEDT) 2d Model program for determining potential noise-related impacts to the surrounding land uses. These contours were developed based on the yearly day/night sound levels (DNL) for which FAA measures noise impacts. Four levels of contours ranging from 70 DNL to 50 DNL were developed for the existing condition, 10-year future and 20-year future conditions regarding expected aviation activity and airport development. **Figures 8-4** through **8-6** show the noise exposure areas for each of the activity levels. The FAA considers a 65 DNL noise level as acceptable for residential developments per FAR Part 150. The 65 DNL contour will remain entirely on airport property through each of the future activity scenarios. The airport property and the properties immediately adjacent to the airport are largely undeveloped. There are no residential, educational, health, religious, parks, recreational areas, and wildlife refuges located with the 65 DNL for the future airport development. No aviation related noise impacts are expected to occur.

Figure 8-4
Existing Noise Exposure

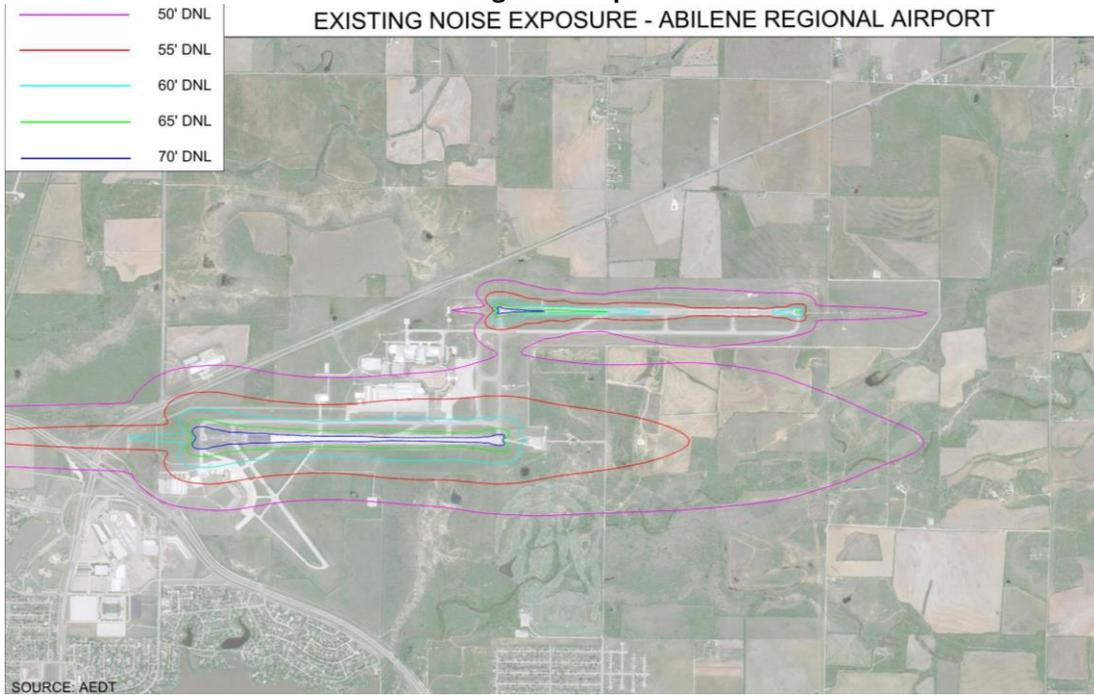


Figure 8-5
Forecasted 2029 Noise Exposure

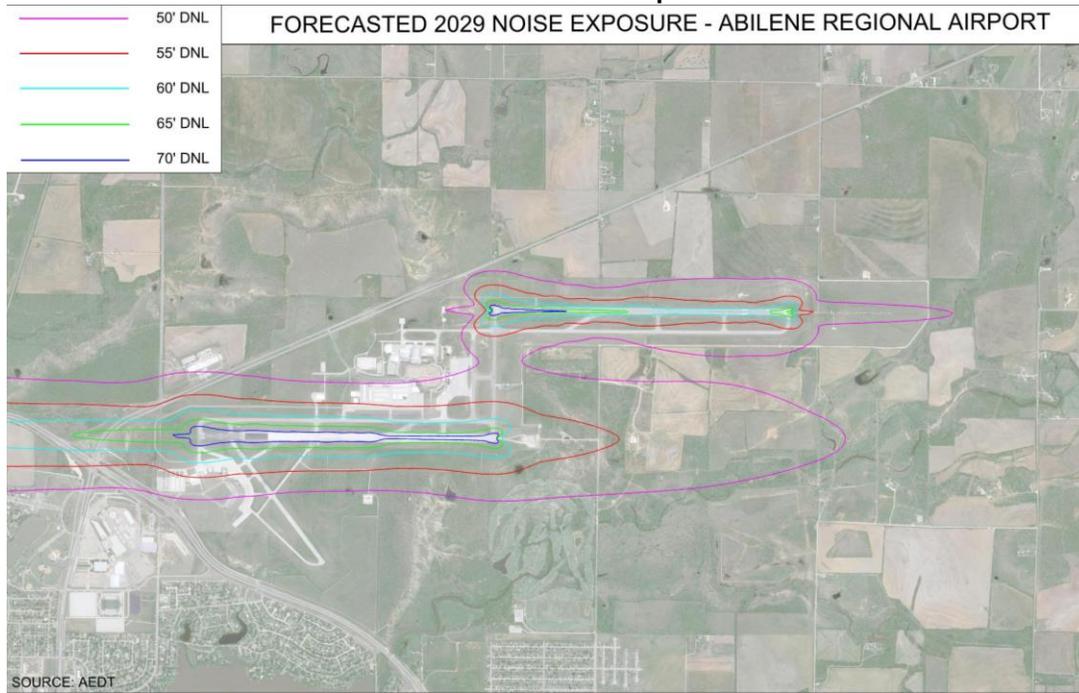
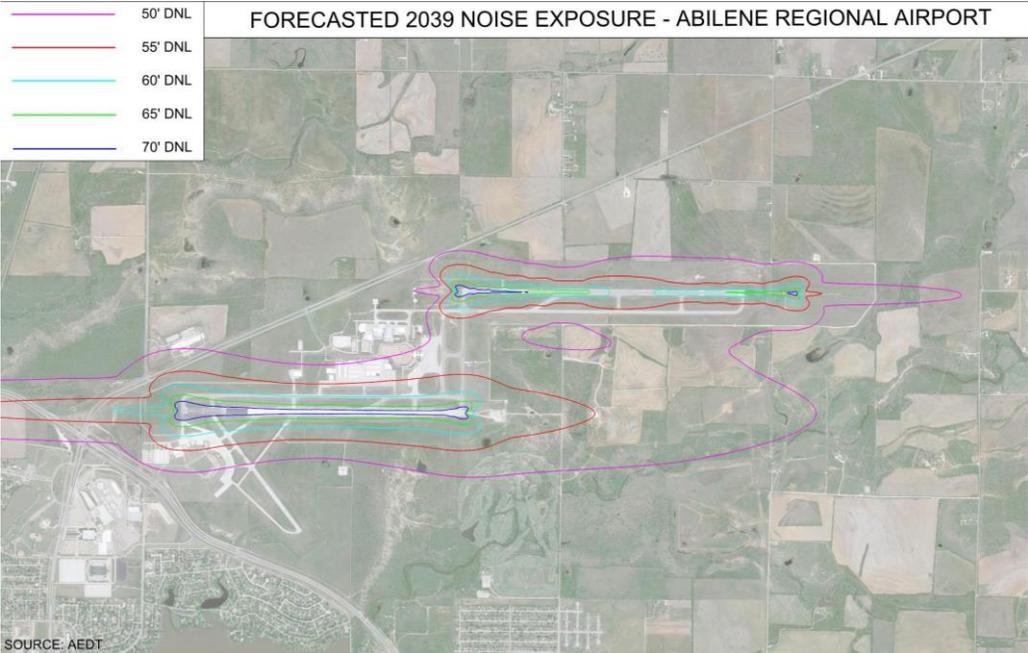


Figure 8-6
Forecasted 2039 Noise Exposure



Preferred Development Alternative – Environmental Appendices



Appendix A
State Historic Preservation Offices (SHPO) Response Letter



3010 Gaylord Parkway
Suite 190
Frisco, TX 75034
TEL 972.377.7480
FAX 972.377.8380
www.GarverUSA.com

RECEIVED
JAN 16 2019
TEXAS HISTORICAL COMMISSION

November 14, 2018

Mark Wolfe, Executive Director and SHPO
Texas Historical Commission
108 West 16th Street
Austin, TX 78701
(512) 936-4323

RE: Airport Master Plan Update - Abilene Regional Airport

Mr. Wolfe:

Please consider this revised letter formal notification of a proposed update to the Airport Master Plan for the Abilene Regional Airport in Abilene, Taylor County, Texas. The proposed updates will include:

- Land to be converted from aeronautical use to non-aeronautical use
- Property Acquisition
- 1,300' Extension of Runway 35R
- RPZ Acquisition
- Pavement Removal
- Taxiway Reconfiguration
- MALSR Relocation

Noise contours are also being developed as part of this Master Plan update. Enclosed is a Site Location Map and an Airport Master Plan Update exhibit for your reference. We respectfully request your written response to this letter describing any concerns about potential environmental impacts you might have related to the proposed action. Please let me know if you have any questions or need any additional information in order to evaluate this project.

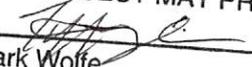
Sincerely,

GARVER

Ryan Mountain, PWS
Sr. Environmental Scientist

Attachments: Site Location Map
ABI Airport Master Plan Update

**NO HISTORIC
PROPERTIES AFFECTED
PROJECT MAY PROCEED**

By 
for Mark Wolfe
State Historic Preservation Officer
Date 2/13/19
Track # 201904223

PROPERTY OF
GENERAL INVESTIGATIVE
DIVISION

BY _____
FOR AIR MAIL
DATE _____
TIME _____

Appendix B
**USFWS Information for Planning and Consultation List of
Threatened and Endangered Species**



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Austin Ecological Services Field Office

10711 Burnet Road, Suite 200

Austin, TX 78758-4460

Phone: (512) 490-0057 Fax: (512) 490-0974

<http://www.fws.gov/southwest/es/AustinTexas/>

<http://www.fws.gov/southwest/es/EndangeredSpecies/lists/>

In Reply Refer To:

February 02, 2019

Consultation Code: 02ETAU00-2019-SLI-0477

Event Code: 02ETAU00-2019-E-00985

Project Name: ABI Master Plan Update

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that *may* occur within the county of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

Please note that new information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Also note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of federally listed as threatened

or endangered species and to determine whether projects may affect these species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

While a Federal agency may designate a non-Federal representative to conduct informal consultation or prepare a biological assessment, the Federal Agency must notify the Service in writing of any such designation. The Federal agency shall also independently review and evaluate the scope and content of a biological assessment prepared by their designated non-Federal representative before that document is submitted to the Service.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by a federally funded, permitted or authorized activity, the agency is required to consult with the Service pursuant to 50 CFR 402. The following definitions are provided to assist you in reaching a determination:

- *No effect* - the proposed action will not affect federally listed species or critical habitat. A “no effect” determination does not require section 7 consultation and no coordination or contact with the Service is necessary. However, if the project changes or additional information on the distribution of listed or proposed species becomes available, the project should be reanalyzed for effects not previously considered.
 - *May affect, but is not likely to adversely affect* - the project may affect listed species and/or critical habitat; however, the effects are expected to be discountable, insignificant, or completely beneficial. Certain avoidance and minimization measures may need to be implemented in order to reach this level of effect. The Federal agency or the designated non-Federal representative should consult with the Service to seek written concurrence that adverse effects are not likely. Be sure to include all of the information and documentation used to reach your decision with your request for concurrence. The Service must have this documentation before issuing a concurrence.
 - *Is likely to adversely affect* - adverse effects to listed species may occur as a direct or indirect result of the proposed action. For this determination, the effect of the action is neither discountable nor insignificant. If the overall effect of the proposed action is beneficial to the listed species but the action is also likely to cause some adverse effects to individuals of that species, then the proposed action “is likely to adversely affect” the listed species. The analysis should consider all interrelated and interdependent actions. An “is likely to adversely affect” determination requires the Federal action agency to initiate formal section 7 consultation with our office.
-

Regardless of the determination, the Service recommends that the Federal agency maintain a complete record of the evaluation, including steps leading to the determination of effect, the qualified personnel conducting the evaluation, habitat conditions, site photographs, and any other related information. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at: <http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>.

Migratory Birds

For projects that may affect migratory birds, the Migratory Bird Treaty Act (MBTA) implements various treaties and conventions for the protection of these species. Under the MBTA, taking, killing, or possessing migratory birds is unlawful. Migratory birds may nest in trees, brushy areas, or other areas of suitable habitat. The Service recommends activities requiring vegetation removal or disturbance avoid the peak nesting period of March through August to avoid destruction of individuals, nests, or eggs. If project activities must be conducted during this time, we recommend surveying for nests prior to conducting work. If a nest is found, and if possible, the Service recommends a buffer of vegetation remain around the nest until the young have fledged or the nest is abandoned.

For additional information concerning the MBTA and recommendations to reduce impacts to migratory birds please contact the U.S. Fish and Wildlife Service Migratory Birds Office, 500 Gold Ave. SW, Albuquerque, NM 87102. A list of migratory birds may be viewed at <https://www.fws.gov/birds/management/managed-species/migratory-bird-treaty-act-protected-species.php>. Guidance for minimizing impacts to migratory birds for projects including communications towers can be found at: <https://www.fws.gov/birds/management/project-assessment-tools-and-guidance/guidance-documents/communication-towers.php>. Additionally, wind energy projects should follow the wind energy guidelines

<https://www.fws.gov/birds/management/project-assessment-tools-and-guidance/guidance-documents/wind-energy.php>) for minimizing impacts to migratory birds and bats.

Finally, please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.), and projects affecting these species may require development of an eagle conservation plan <https://www.fws.gov/birds/management/project-assessment-tools-and-guidance/guidance-documents/eagles.php>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
-

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Austin Ecological Services Field Office

10711 Burnet Road, Suite 200

Austin, TX 78758-4460

(512) 490-0057

Project Summary

Consultation Code: 02ETAU00-2019-SLI-0477

Event Code: 02ETAU00-2019-E-00985

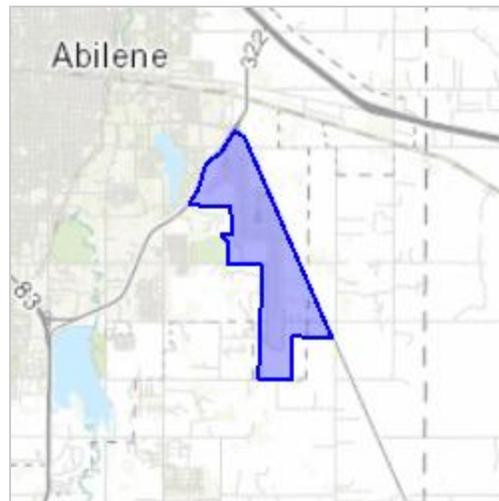
Project Name: ABI Master Plan Update

Project Type: Guidance

Project Description: Project is located at Abilene Regional Airport and covers approximately 3.15 sq. mi. The master plan update is for planning purposes. Future projects may include land acquisition, hangar expansion, taxiway reconfiguration, 1,300 ft. runway extension, MALSR relocation, and land conversion from aeronautical use to non-aeronautical use.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/32.40340237059087N99.67850964946437W>



Counties: Taylor, TX

Endangered Species Act Species

There is a total of 6 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 5 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Birds

NAME	STATUS
Least Tern <i>Sterna antillarum</i> Population: interior pop. No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: <ul style="list-style-type: none"> ▪ Wind Energy Projects Species profile: https://ecos.fws.gov/ecp/species/8505	Endangered
Piping Plover <i>Charadrius melodus</i> Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered. There is final critical habitat for this species. Your location is outside the critical habitat. This species only needs to be considered under the following conditions: <ul style="list-style-type: none"> ▪ Wind Energy Projects Species profile: https://ecos.fws.gov/ecp/species/6039	Threatened
Red Knot <i>Calidris canutus rufa</i> No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: <ul style="list-style-type: none"> ▪ Wind Energy Projects Species profile: https://ecos.fws.gov/ecp/species/1864	Threatened

Fishes

NAME	STATUS
<p>Sharpnose Shiner <i>Notropis oxyrhynchus</i></p> <p>There is final critical habitat for this species. Your location is outside the critical habitat.</p> <p>This species only needs to be considered under the following conditions:</p> <ul style="list-style-type: none"> ▪ All reservoir projects; in-channel projects such as interbasin transfers, water diversions, small impoundments, etc. that may reduce flows of major tributaries eventually flowing into occupied habtiat; commercial/industrial well field projects. <p>Species profile: https://ecos.fws.gov/ecp/species/6492</p>	Endangered
<p>Smalleye Shiner <i>Notropis buccula</i></p> <p>There is final critical habitat for this species. Your location is outside the critical habitat.</p> <p>This species only needs to be considered under the following conditions:</p> <ul style="list-style-type: none"> ▪ All reservoir projects; in-channel projects such as interbasin transfers, water diversions, small impoundments, etc. that may reduce flows of major tributaries eventually flowing into occupied habtiat; commercial/industrial well field projects. <p>Species profile: https://ecos.fws.gov/ecp/species/1774</p>	Endangered

Clams

NAME	STATUS
<p>Texas Fawnsfoot <i>Truncilla macrodon</i></p> <p>No critical habitat has been designated for this species.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/8965</p>	Candidate

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Appendix C
Texas Parks and Wildlife Department (TPWD) Recommendations



December 20, 2018

Life's better outside.®

Commissioners

Ralph H. Duggins
Chairman
Fort Worth

S. Reed Morian
Vice-Chairman
Houston

T. Dan Friedkin
Houston

Anna B. Galo
Laredo

Bill Jones
Austin

Jeanne W. Latimer
San Antonio

James H. Lee
Houston

Dick Scott
Wimberley

Kelcy L. Warren
Dallas

Lee M. Bass
Chairman-Emeritus
Fort Worth

Carter P. Smith
Executive Director

Mr. Ryan Mountain, PWS
Garver
3010 Gaylord Parkway, Suite 190
Frisco, TX 75034

RE: Airport Master Plan Update – Abilene Regional Airport

Dear Mr. Mountain:

Texas Parks and Wildlife Department (TPWD) has received the request for review of the proposed project referenced above. TPWD staff has reviewed the information provided and offers the following comments concerning this project. For tracking purposes, please refer to TPWD project number 41135 in any return correspondence regarding this project.

Project Description

The Abilene Regional Airport is proposing updates to its Airport Master Plan. The proposed updates include:

- Land to be converted from aeronautical use to non-aeronautical use
- Property Acquisition
- 1,300 foot Extension of Runway 35R
- RPZ Acquisition
- Pavement Removal
- Taxiway Reconfiguration
- MALSR Relocation

Federal Laws

Migratory Bird Treaty Act

The Migratory Bird Treaty Act prohibits direct and affirmative purposeful actions that reduce migratory birds, their eggs, or their nests, by killing or capturing, to human control, except when specifically authorized by the Department of the Interior. This protection applies to most native bird species, including ground nesting species.

Recommendation: TPWD recommends excluding vegetation clearing activities during the general bird nesting season, March through August, to

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avoid adverse impacts to birds. If clearing vegetation during the migratory bird nesting season is unavoidable, TPWD recommends surveying the area proposed for disturbance for active nests (nests with eggs or young). Any vegetation (trees, shrubs, and grasses) or bare ground where occupied nests are located should not be disturbed until the eggs have hatched and the young have fledged.

State Law

Parks and Wildlife Code – Chapter 64, Birds

Texas Parks and Wildlife (TPW) Code Section 64.002, regarding protection of nongame birds, provides that no person may catch, kill, injure, pursue, or possess a bird that is not a game bird. TPW Code Section 64.003, regarding destroying nests or eggs, provides that, no person may destroy or take the nests, eggs, or young and any wild game bird, wild bird, or wild fowl. TPW Code Chapter 64 does not allow for incidental take and therefore is more restrictive than the MBTA.

Recommendation: Please review the *Federal Law: Migratory Bird Treaty Act* section above for recommendations as they are also applicable for Chapter 64 of the Parks and Wildlife Code compliance.

Parks and Wildlife Code, Section 68.015

Section 68.015 of the Parks and Wildlife Code regulates state-listed species. Please note that there is no provision for the capture, trap, take, or kill (incidental or otherwise) of state-listed species. A copy of *TPWD Guidelines for Protection of State-Listed Species*, which includes a list of penalties for take of species, can be found on the TPWD website. State-listed species may only be handled by persons with appropriate authorization from the TPWD Wildlife Permits Office. For more information, please contact the Wildlife Permits Office at (512) 389-4647.

Texas horned lizard (*Phrynosoma cornutum*) – State-listed Threatened

The Texas horned lizard can be found in open, arid and semi-arid regions with sparse vegetation, including grass, cactus, scattered brush or scrubby trees. Based on publically available aerial imagery, suitable habitat for the Texas horned lizard may be present in the project area.

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Texas horned lizards are generally active in this part of Texas from mid-April through September. At that time of year, they may be able to avoid slow (less than 15 miles per hour) moving equipment. The remainder of the year, this species hibernates only a few inches underground and they will be much more susceptible to earth moving equipment and compaction.

Recommendation: TPWD recommends that a pre-construction survey be conducted to determine if horned lizards are present on the project site or directly adjacent to the construction area. A useful indication that the Texas horned lizard may occupy the site is the presence of harvester ant (*Pogonomyrmex barbatus*) nests since harvester ants are the primary food source of horned lizards. The survey should be performed during the warm months of the year when the horned lizards are active.

If horned lizards are found on site, TPWD recommends a permitted biological monitor be present during construction to try and relocate horned lizards to a nearby area with similar habitat that would not be disturbed during construction. If presence of a biological monitor is not feasible, state-listed species observed during construction should be allowed to safely leave the site.

A mixture of cover, food sources, and open ground are important to the Texas horned lizard and the harvester ant. Disturbed areas should revegetated with site specific native, patchy vegetation rather than sod forming grasses.

Species of Concern/Special Features

In addition to state and federally-protected species, TPWD tracks special features, natural communities, and rare species that are not listed as threatened or endangered. TPWD actively promotes their conservation and considers it important to evaluate and, if necessary, minimize impacts to rare species and their habitat to reduce the likelihood of endangerment and preclude the need to list. These species and communities are tracked in the Texas Natural Diversity Database (TXNDD).

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The Western hog-nosed skunk (*Conepatus leuconotus*) has been documented within 1.5 miles of the project area in the TXNDD.

Recommendation: TPWD recommends that precautions be taken to avoid impacts to the Western hog-nosed skunk if encountered in the project area during construction.

Please note that the absence of TXNDD information in an area does not imply that a species is absent from that area. Given the small proportion of public versus private land in Texas, the TXNDD does not include a representative inventory of rare resources in the state. Although it is based on the best data available to TPWD regarding rare species, the data from the TXNDD do not provide a definitive statement as to the presence, absence or condition of special species, natural communities, or other significant features within your project area. These data are not inclusive and cannot be used as presence/absence data. This information cannot be substituted for on-the-ground surveys. The TXNDD is updated continuously. The most current and accurate TXNDD data can be requested from the TXNDD website.

Recommendation: Please review the TPWD county list for Taylor County as rare species could be present depending upon habitat availability. These lists are available on the Rare, Threatened, and Endangered Species of Texas website. If during construction, the project area is found to contain rare species, natural plant communities, or special features, TPWD recommends that precautions be taken to avoid impacts to them. The USFWS should be contacted for species occurrence data, guidance, permitting, survey protocols, and mitigation for federally listed species. For USFWS threatened and endangered species lists, please see the USFWS Information for Planning and Consultation website.

Determining the actual presence of a species in a given area depends on many variables including daily and seasonal activity cycles, environmental activity cues, preferred habitat, transiency and population density (both wildlife and human). The absence of a species can be demonstrated only with great difficulty and then only with repeated negative observations, taking into account all the variable factors contributing to the lack of detectable presence. If encountered during construction, measures should be taken to avoid impacting wildlife.

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TPWD strives to respond to requests for project review within a 45 day comment period. Responses may be delayed due to workload and lack of staff. Failure to meet the 45 day review timeframe does not constitute a concurrence from TPWD that the proposed project will not adversely impact fish and wildlife resources.

TPWD advises review and implementation of these recommendations. If you have any questions, please contact me at (806) 761-4936 or Richard.Hanson@tpwd.texas.gov.

Sincerely,



Rick Hanson
Wildlife Habitat Assessment Program
Wildlife Division

RH: 41135

Appendix D Threatened and Endangered Species for Taylor County

Species for Taylor County						
Taxon	SName	CName	USESA	SPROT	Description	# Counties
Birds	Falco peregrinus	Peregrine Falcon	DL	T	both subspecies migrate across the state from more northern breeding areas in US and Canada to winter along coast and farther south; subspecies (F. p. anatum) is also a resident breeder in west Texas; the two subspecies' listing statuses differ, F.p. tundrius is no longer listed in Texas; but because the subspecies are not easily distinguishable at a distance, reference is generally made only to the species level; see subspecies for habitat.	254
Birds	Falco peregrinus anatum	American Peregrine Falcon	DL	T	year-round resident and local breeder in west Texas, nests in tall cliff eyries; also, migrant across state from more northern breeding areas in US and Canada, winters along coast and farther south; occupies wide range of habitats during migration, including urban, concentrations along coast and barrier islands; low-altitude migrant, stopovers at leading landscape edges such as lake shores, coastlines, and barrier islands.	254
Birds	Grus americana	Whooping Crane	LE	E	potential migrant via plains throughout most of state to coast; winters in coastal marshes of Aransas, Calhoun, and Refugio counties	186
Birds	Haliaeetus leucocephalus	Bald Eagle	DL	T	found primarily near rivers and large lakes; nests in tall trees or on cliffs near water; communally roosts, especially in winter; hunts live prey, scavenges, and pirates food from other birds	209
Birds	Vireo atricapilla	Black-capped Vireo	DL	E	oak-juniper woodlands with distinctive patchy, two-layered aspect; shrub and tree layer with open, grassy spaces; requires foliage reaching to ground level for nesting cover; return to same territory, or one nearby, year after year; deciduous and broad-leaved shrubs and trees provide insects for feeding; species composition less important than presence of adequate broad-leaved shrubs, foliage to ground level, and required structure; nesting season March-late summer	59
Mammals	Canis lupus	Gray wolf	LE	E	extirpated; formerly known throughout the western two-thirds of the state in forests, brushlands, or grasslands	139
Mammals	Canis rufus	Red wolf	LE	E	extirpated; formerly known throughout eastern half of Texas in brushy and forested areas, as well as coastal prairies	160
Mollusks	Lampsilis bracteata	Texas fatmucket	C	T	streams and rivers on sand, mud, and gravel substrates; intolerant of impoundment; broken bedrock and coarse gravel or sand in moderately flowing water; Colorado and Guadalupe River basins	26
Reptiles	Phrynosoma cornutum	Texas horned lizard		T	open, arid and semi-arid regions with sparse vegetation, including grass, cactus, scattered brush or scrubby trees; soil may vary in texture from sandy to rocky; burrows into soil, enters rodent burrows, or hides under rock when inactive; breeds March-September	236
Birds	Ammodramus bairdii	Baird's Sparrow			shortgrass prairie with scattered low bushes and matted vegetation; mostly migratory in western half of State, though winters in Mexico and just across Rio Grande into Texas from Brewster through Hudspeth counties	124
Birds	Anthus spragueii	Sprague's Pipit			only in Texas during migration and winter, mid September to early April; short to medium distance, diurnal migrant; strongly tied to native upland prairie, can be locally common in coastal grasslands, uncommon to rare further west; sensitive to patch size and avoids edges.	216
Birds	Athene cucularia hypugaea	Western Burrowing Owl			open grasslands, especially prairie, plains, and savanna, sometimes in open areas such as vacant lots near human habitation or airports; nests and roosts in abandoned burrows	199
Birds	Buteo regalis	Ferruginous Hawk			open country, primarily prairies, plains, and badlands; nests in tall trees along streams or on steep slopes, cliff ledges, river-cut banks, hillsides, power line towers; year-round resident in northwestern high plains, wintering elsewhere throughout western 2/3 of Texas	87
Birds	Charadrius alexandrinus	Snowy Plover			formerly an uncommon breeder in the Panhandle; potential migrant; winter along coast	79
Birds	Charadrius alexandrinus nivosus	Western Snowy Plover			uncommon breeder in the Panhandle; potential migrant; winter along coast	79
Birds	Charadrius montanus	Mountain Plover			breeding: nests on high plains or shortgrass prairie, on ground in shallow depression; nonbreeding: shortgrass plains and bare, dirt (plowed) fields; primarily insectivorous	174
Birds	Falco peregrinus tundrius	Arctic Peregrine Falcon	DL		migrant throughout state from subspecies' far northern breeding range, winters along coast and farther south; occupies wide range of habitats during migration, including urban, concentrations along coast and barrier islands; low-altitude migrant, stopovers at leading landscape edges such as lake shores, coastlines, and barrier islands.	254
Mammals	Cynomys ludovicianus	Black-tailed prairie dog			dry, flat, short grasslands with low, relatively sparse vegetation, including areas overgrazed by cattle; live in large family groups	102
Mammals	Myotis velifer	Cave myotis			colonial and cave-dwelling; also roosts in rock crevices, old buildings, carports, under bridges, and even in abandoned Cliff Swallow (Hirundo pyrrhonota) nests; roosts in clusters of up to thousands of individuals; hibernates in limestone caves of Edwards Plateau and gypsum cave of Panhandle during winter; opportunistic insectivore	132
Mammals	Spilogale putorius interrupta	Plains spotted skunk			catholic; open fields, prairies, croplands, fence rows, farmyards, forest edges, and woodlands; prefers wooded, brushy areas and tallgrass prairie	204
Plants	Gaura triangulata	Prairie butterfly-weed			GLOBAL RANK: G3G4; Open sandy areas; Annual; Flowering March-June	17

Plants	<i>Hexalectris nitida</i>	Glass Mountains coral-root			GLOBAL RANK: G3; Apparently rare in mixed woodlands in canyons in the mountains of the Brewster County, but encountered with regularity, albeit in small numbers, under <i>Juniperus ashei</i> in woodlands over limestone on the Edwards Plateau, Callahan Divide and Lampasas Cutplain; Perennial; Flowering June-Sept; Fruiting July-Sept	19
Plants	<i>Hexalectris warnockii</i>	Warnock's coral-root			in leaf litter and humus in oak-juniper woodlands on shaded slopes and intermittent, rocky creekbeds in canyons; in the Trans Pecos in oak-pinyon-juniper woodlands in higher mesic canyons (to 2000 m [6550 ft]), primarily on igneous substrates; in Terrell County under <i>Quercus fusiformis</i> mottes on terraces of spring-fed perennial streams, draining an otherwise rather xeric limestone landscape; on the Callahan Divide (Taylor County), the White Rock Escarpment (Dallas County), and the Edwards Plateau in oak-juniper woodlands on limestone slopes; in Gillespie County on igneous substrates of the Llano Uplift; flowering June-September; individual plants do not usually bloom in successive years	11
Plants	<i>Oenothera coryi</i>	Cory's evening-primrose			GLOBAL RANK: G3G4; Calcareous prairies in the Plains Country of north Texas and in the Panhandle; Perennial; Flowering April-May	10
Plants	<i>Vitis rupestris</i>	Rock grape			GLOBAL RANK: G3; Occurs on rocky limestone slopes and in streambeds; Perennial; Flowering March-May; Fruiting May-July	8
Reptiles	<i>Holbrookia lacerata</i>	Spot-tailed earless lizard			central and southern Texas and adjacent Mexico; moderately open prairie-brushland; fairly flat areas free of vegetation or other obstructions, including disturbed areas; eats small invertebrates; eggs laid underground	76