

Appendix E

**Biological Assessment and Effects Determination
Under Section 7 of the Endangered Species Act**

**Final Environmental Review Step 1B
Proposed Categorical Exclusion
May 2018**

For

**The Proposed West Flow Area Navigation Standard Instrument Departure Procedures
at Phoenix Sky Harbor International Airport as described in the Memorandum Regarding
Implementation of Court Order per *City of Phoenix, Arizona v. Huerta*, 869 F.3d 963
(D.C. Circuit 2017)**



Des Moines, WA



Steve Spangle
Field Supervisor
U.S. Fish and Wildlife Service
Arizona Ecological Services Field Office
9828 North 31st Avenue, #C3
Phoenix, AZ 85051-2517

RE: Request for Concurrence on Effects Determination for Listed Species from the Proposed Air Traffic Procedure Amendments for the West Flow Area Navigation Standard Instrument Departures at Phoenix Sky Harbor International Airport, Phoenix, Arizona

Dear Mr. Spangle:

In accordance with section 7 of the Endangered Species Act (ESA), the Federal Aviation Administration (FAA) is requesting concurrence from the U.S. Fish and Wildlife Service (USFWS) on our determinations of “*no effect*” and “*may affect but not likely to adversely affect*”, for the proposed amendments to and implementation of west flow aircraft departure procedures from Runways 25 Left, 25 Right, and 26 at the Phoenix Sky Harbor International Airport (Phoenix Sky Harbor), in Phoenix, Arizona, as described below.

Proposed Project Description

The FAA proposes to amend nine west flow Area Navigation (RNAV) Standard Instrument Departure (SID) procedures at Phoenix Sky Harbor consistent with the resolution of the parties as stipulated in the Memorandum Regarding Implementation of the Court Order (“Memorandum”), jointly negotiated following the court’s August 29, 2017, Order in City of Phoenix, Arizona v. Huerta, 869 F.3d 963 (D.C. Circuit 2017).

General Study Area

The Proposed Action General Study Area (GSA) encompasses the geographic area where the proposed changes to aircraft procedures would occur below 10,000 feet Above Ground Level (AGL) and is roughly a 30 Nautical Miles (NM) radius around Phoenix Sky Harbor. Attachment 1, Figure 1 depicts the approximately 3,750 square miles GSA. The GSA overlaps three counties in Arizona: (1) Maricopa; (2) Pinal; and (3) Gila.

Federally Listed Species that May be Affected by the Proposed Action

The FAA requested an official species list for the GSA through the U.S. Fish and Wildlife Information for Planning and Consultation (IPaC) website on February 21, 2018¹. The official species list identifies the threatened, endangered or candidate species to be considered in effects analysis for the Proposed Action. Pursuant to the ESA and the National Environmental Policy Act, the FAA has reviewed information regarding the federally listed species and designated critical habitat that may be present in the GSA. The FAA reviewed readily accessible online sources of information regarding species profiles, critical habitat, proposed critical habitat, and range or distribution of species. Available habitat/range/distribution information was plotted on Google Earth with the GSA to identify areas of possible effect on individual species and/or habitat.

The FAA has initiated Government-to-Government consultation with the Gila River Indian Community, the Salt River Pima-Maricopa Indian Community, the Ak-Chin Indian Community, and the Fort McDowell Yavapai Nation. The Gila River Indian Community has expressed concern regarding the Sonoran Desert Bald Eagle (*Haliaeetus leucocephalus*) due to the cultural and spiritual significance of the Sonoran Desert Bald Eagle (Desert Eagle) to the Four Southern Tribes of Arizona, which includes the Salt River Pima-Maricopa Indian Community, Ak-Chin Indian Community, Gila River Indian Community, and Tohono O’odham Nation. An eagle nest has been listed within the Pee Posh Wetlands² on land managed by the Gila River Indian Community Department of Environmental Quality Wildlife Program (Attachment 1, Figure 2). The approximate location of this nest is on the northeast corner of the intersection of W Baseline Road with 91st Avenue (Attachment 3, Figure 2). The nest was destroyed by fire in 2012³. On September 29, 2017, the Gila River Indian Community raised an artificial eagle nest to replace the original nest⁴. Available information is unclear as to whether there is a nest near the Gila River Indian Community boundary as well as the replacement nest on GRIC land. Based on the cultural and spiritual significance of the Desert Eagle, this species is included in the following assessment.

Table 1 below lists the species of concern, identifies potential or known habitat and likely responses to aircraft overflights.

¹ Consultation Code: 02EAAZ00-2018-SLI-0435. Dated February 21, 2018. Attachment 2.

² <http://www.swbemc.org/nestSites.html>. Accessed on February 14, 2018.

³ Indian Country News. “2 baby bald eagles die in Arizona tribal land fire”. April 2012. Accessed 10 February 2018. <http://www.indiancountrynews.com/index.php/culture/wildlife/12479-2-baby-bald-eagles-die-in-arizona-tribal-land-fire>

⁴ Gila River Indian Community Newspaper. Online. “Arizona’s Only Artificial Bald Eagle’s Nest Raised in the Community.” October 20, 2017. Accessed 10 February 2018. <http://www.gricnews.org/index.php/grin-articles/2017-articles/october-20-2017-articles/arizonas-only-artificial-bald-eagles-nest-raised-in-the-community>

Table 1. Listed Species that May be Affected by the Proposed Action

Mammals	Federal Status	Habitat/Potential Species Location Relative to GSA	Possible Response Behaviour to Aircraft Overflights
Lesser Long-nosed Bat <i>Leptonycteris curasaoae yerbabuena</i>	Endangered Listed September 30, 1988 ⁵ .	Critical habitat not designated. May be present in Gila, Pinal, and Maricopa counties in Arizona. Terrestrial habitat: cliff, desert, forest. Closest likely location: northeast section of GSA. Lower Verde Watershed ⁶ .	None expected. If present, and depending on location of roosting area, habituation to aircraft noise is likely to lessen potential effects to roosting and evening activity. ^{7, 8} Aircraft are currently overflying the northeast section of the GSA at altitudes greater than 2,000 feet AGL.
Sonoran Pronghorn <i>Antilocapra Americana sonoriensis</i>	Experimental Population, Non-Essential ⁹	Critical habitat not designated. Habitat: desert. Range: formerly throughout southern Arizona and in Mexico south to Guaymas, Sonora; presently in Yuma, Pima, and Maricopa counties, south of the Bill Williams River and west of the Baboquivari Mountains, southwestern Arizona, and in northwestern Sonora. ¹⁰ Northeast section of GSA. ¹¹ This location conflicts with location information described in the Recovery Plan for the Sonoran Pronghorn. ¹²	Disturbance generally caused by fixed-wing aircraft flying within 1 mile laterally and below 1,000 feet AGL. ¹³ Aircraft are currently overflying the northeast section of the GSA at altitudes greater than 2,000 feet AGL. Response may include an interruption in grazing.

⁵ <https://ecos.fws.gov/ecp0/profile/speciesProfile?spcode=A0AD>

⁶ Approximate species location was based on a combination of the EPA WATERS Data identifying hydrologic units/watersheds and online NatureServe Explorer. <http://explorer.natureserve.org/servlet/NatureServe>, which provided species location based on hydrologic units. Hydrologic data was plotted on Google Earth.

⁷ Le Roux, Darren. Do Long-Tailed Bats Alter Their Evening Activity in Response to Aircraft Noise? Article in Acta Chiropterologica. June 2012.

⁸ USFWS. Arizona Ecological Services State Office. Lesser Long-Nosed Bat Recovery Plan. May 1994.

⁹ <https://ecos.fws.gov/ecp0/profile/speciesProfile?spcode=A009>. Accessed on February 21, 2018. The Sonoran Pronghorn is listed as Endangered throughout most of its range under ESA, except where listed as an experimental population.

¹⁰ http://explorer.natureserve.org/servlet/NatureServe?sourceTemplate=tabular_report.wmt&loadTemplate=species_RptComprehensive.wmt&selectedReport=RptComprehensive.wmt&summaryView=tabular_report.wmt&elKey=104902&paging=home&save=true&startIndex=1&nextStartIndex=1&reset=false&offPageSelectedElKey=104902&offPageSelectedElType=species&offPageYesNo=true&post_processes=&radiobutton=radiobutton&selectedIndexes=104902. Accessed 23 February 2018.

¹¹ Distribution data obtained online from NatureServe Explorer. <http://explorer.natureserve.org/servlet/NatureServe>. Accessed on February 21 and 22, 2018.

¹² Recovery Plan for the Sonoran Pronghorn (*Antilocapra Americana sonoriensis*), Second Revision. November 2016. Prepared for Region 2, Southwest Region, USFWS.

¹³ Recovery Plan for the Sonoran Pronghorn (*Antilocapra Americana sonoriensis*), Second Revision. November 2016. Prepared for Region 2, Southwest Region, USFWS.

Birds	Federal Status	Habitat/Potential Species Location Relative to GSA	Possible Response Behaviour to Aircraft Overflights
California Least Tern <i>Sterna antillarum browni</i>	Endangered Listed June 6, 1970. ¹⁴	Critical habitat not designated. USFWS: may be found in Maricopa county in Arizona. ¹⁵ Located in California. Near shore habitats; sand/dune habitats. Online mapping does not show presence in Arizona. ¹⁶	None expected. Species is not likely to be present.
Mexican Spotted Owl <i>Strix occidentalis lucida</i>	Threatened Listed March 16, 1993. ¹⁷	Final critical habitat designated. Critical habitat is not within project area ¹⁸ . May be present in Gila, Maricopa, and Pinal counties in Arizona. Many populations occur disjunctively in relatively isolated mountain ranges of canyon systems; riparian; highest densities occur in mixed-conifer forests. ¹⁹ Species likely not present within project area.	Response to aircraft overflight may range from none, sudden turning of the head, or change of roost. ^{20,21} Studies were conducted at 1,509 feet above canyon rims ²² . If species is present, likely no adverse response; aircraft are currently flying throughout the GSA at altitudes greater than 2,000 feet AGL.

¹⁴ <https://ecos.fws.gov/ecp0/profile/speciesProfile?sPCODE=B03X>. Accessed 23 February 2018.

¹⁵ <https://ecos.fws.gov/ecp0/profile/speciesProfile?sPCODE=B03X>. Accessed 23 February 2018.

¹⁶

http://explorer.natureserve.org/servlet/NatureServe?sourceTemplate=tabular_report.wmt&loadTemplate=species_RptComprehensive.wmt&selectedReport=RptComprehensive.wmt&summaryView=tabular_report.wmt&elKey=104205&paging=home&save=true&startIndex=1&nextStartIndex=1&reset=false&offPageSelectedElKey=104205&offPageSelectedElType=species&offPageYesNo=true&post_processes=&radiobutton=radiobutton&selectedIndexes=104205

¹⁷ <https://ecos.fws.gov/ecp0/profile/speciesProfile?sPCODE=B074>

¹⁸ USFWS.

¹⁹ <http://explorer.natureserve.org/servlet/NatureServe?searchName=Strix+occidentalis+lucida>. Accessed 23 February 2018.

²⁰ Johnson, Charles L., and Reynolds, Richard T. Responses of Mexican Spotted Owls to Low-flying Military Jet Aircraft. USDA Forest Service Research Not RMRS-RN-12. January 2002.

²¹ Bowles, A.E. et al. Effects of Jet Aircraft Noise on Mexican Spotted Owls. Undated.

²² Johnson, Charles L., and Reynolds, Richard T. Responses of Mexican Spotted Owls to Low-flying Military Jet Aircraft. USDA Forest Service Research Not RMRS-RN-12. January 2002.

Birds	Federal Status	Habitat/Potential Species Location Relative to GSA	Possible Response Behaviour to Aircraft Overflights
Southwestern Willow Flycatcher <i>Empidonax traillii extimus</i>	Endangered Listed March 27, 1995. ²³	Final critical habitat designated. Critical habitat is not within project area ²⁴ . May be found in riparian and wetland habitats/thickets. May be present in Gila, Maricopa, and Pinal counties in Arizona; species may be present in southeast section of project study area.	If species is present, likely no adverse response; aircraft are currently overflying the southeast section of the GSA at altitudes greater than 2,000 feet AGL.
Yellow-billed Cuckoo <i>Coccyzus americanus</i>	Threatened Listed November 2, 2014. ²⁵	Proposed critical habitat is present in the area along the north boundary of the Gila River Indian Community extending to the easternmost boundary of the project study area. Populations may be found in scrub-shrub wetland, riparian habitat, woodland, or forests. ²⁶ At the closest point to the proposed flight track of the KEENS procedure (Attachment 4, Figure 3), the northern boundary of the proposed critical habitat is approximately 0.37 NM from the procedure centerline.	Aircraft are currently overflying the area of the proposed critical habitat at altitudes greater than 2,000 feet AGL.

²³ <https://ecos.fws.gov/ecp0/profile/speciesProfile?sPCODE=B094>. Accessed 23 February 2018.

²⁴ <https://ecos.fws.gov/ecp0/profile/speciesProfile?sPCODE=B094>. Accessed 23 February 2018.

²⁵ <https://ecos.fws.gov/ecp0/profile/speciesProfile?sPCODE=B06R>. Accessed 23 February 2018.

²⁶

http://explorer.natureserve.org/servlet/NatureServe?sourceTemplate=subset_tabular_report.wmt&loadTemplate=species_RptComprehensive.wmt&elKey=105709&paging=home&save=false&summaryView=subset_tabular_report.wmt&selectedRType=&reset=false&pageStartIndex=1&radiobutton=radiobutton. Accessed 23 February 2018.

Birds	Federal Status	Habitat/Potential Species Location Relative to GSA	Possible Response Behaviour to Aircraft Overflights
Yuma Clapper Rail <i>Rallus longirostris yumanensis</i>	Endangered Listed March 11, 1967. ²⁷	May be present in Gila, Maricopa, and Pinal counties in Arizona. Habitat: herbaceous wetland; freshwater marshes. ²⁸ Southwest section of study area. Lower Gila-Painted Rock Reservoir. ²⁹ Eastern half of project study area – Lower Salt Watershed; Lower Verde Watershed; Middle Gila Watershed.	Aircraft are currently overflying the area at altitudes greater than 2,000 feet AGL; no adverse effect is anticipated.
Reptiles	Federal Status	Habitat/Potential Species Location Relative to GSA	Possible Response Behaviour to Aircraft Overflights
Northern Mexican Gartersnake <i>Thamnophis eques megalops</i>	Threatened Listed July 8, 2014. ³⁰	Proposed critical habitat is not within study area. ³¹ May be found in Gila, Maricopa, and Pinal counties in Arizona. Snake is strongly associated with permanent water with vegetation, including stock tanks, ponds, lakes and riparian woods. Forages in or near streams, lakes, and irrigation ditches. ³²	None. There is no construction or other ground disturbance associated with the Proposed Action. The Proposed Action does not require use or consumption of water resources.

²⁷ <https://ecos.fws.gov/ecp0/profile/speciesProfile?sPCODE=B00P>. Accessed 23 February 2018.

²⁸

http://explorer.natureserve.org/servlet/NatureServe?sourceTemplate=tabular_report.wmt&loadTemplate=species_RptComprehensive.wmt&selectedReport=RptComprehensive.wmt&summaryView=tabular_report.wmt&elKey=104295&paging=home&save=true&startIndex=1&nextStartIndex=1&reset=false&offPageSelectedEIKey=104295&offPageSelectedEITYPE=species&offPageYesNo=true&post_processes=&radiobutton=radiobutton&selectedIndexes=104295. Accessed 23 February 2018.

²⁹ Location selected using EPA WATERS Data

³⁰ <https://ecos.fws.gov/ecp0/profile/speciesProfile?sPCODE=C04Q>. Accessed 23 February 2018.

³¹ <https://ecos.fws.gov/ecp0/profile/speciesProfile?sPCODE=C04Q>. Accessed 23 February 2018.

³²

http://explorer.natureserve.org/servlet/NatureServe?sourceTemplate=tabular_report.wmt&loadTemplate=species_RptComprehensive.wmt&selectedReport=RptComprehensive.wmt&summaryView=tabular_report.wmt&elKey=103523&paging=home&save=true&startIndex=1&nextStartIndex=1&reset=false&offPageSelectedEIKey=103523&offPageSelectedEITYPE=species&offPageYesNo=true&post_processes=&radiobutton=radiobutton&selectedIndexes=103523. Accessed 23 February 2018.

Fishes	Federal Status	Habitat/Potential Species Location Relative to GSA	Possible Response Behaviour to Aircraft Overflights
Desert Pupfish <i>Cyprinodon macularius</i>	Threatened Listed March 31, 1986. ³³	Proposed critical habitat is not within study area ³⁴ . May be present in Gila, and Maricopa counties in Arizona. Habitat: freshwater – creeks, medium rivers, springs, herbaceous wetland. ³⁵ Southwest section of study area. Lower Gila-Painted Rock Reservoir. ³⁶ Eastern half of project study area –Lower Verde Watershed; Lower Salt; Middle Gila Watershed. Online mapping does not show water bodies that may provide habitat.	None. The Proposed Action does not require construction or other ground disturbance. The Proposed Action does not involve water use or consumption.
Gila Topminnow (incl. Yaqui) <i>Poeciliopsis occidentalis</i>	Endangered Listed March 11, 1967. ³⁷	Critical habitat not designated. May be present in Gila, Maricopa, and Pinal counties in Arizona. Native to the Gila River system. Habitat: freshwater – creeks, medium river, springs, herbaceous wetland. ³⁸ Southwest section of study area. Lower Gila-Painted Rock Reservoir ³⁹ Eastern half of project study area –Lower Verde Watershed; Middle Gila Watershed. Northwest – Agua Fria. Online mapping does not show water bodies that may provide habitat.	None. The Proposed Action does not require construction or other ground disturbance. The Proposed Action does not involve water use or consumption.

³³ <https://ecos.fws.gov/ecp0/profile/speciesProfile?sPCODE=E044>. Accessed 23 February 2018.

³⁴ <https://ecos.fws.gov/ecp0/profile/speciesProfile?sPCODE=E044>. Accessed 23 February 2018.

³⁵

http://explorer.natureserve.org/servlet/NatureServe?sourceTemplate=tabular_report.wmt&loadTemplate=species_RptComprehensive.wmt&selectedReport=RptComprehensive.wmt&summaryView=tabular_report.wmt&elKey=105718&paging=home&save=true&startIndex=1&nextStartIndex=1&reset=false&offPageSelectedElKey=105718&offPageSelectedElType=species&offPageYesNo=true&post_processes=&radiobutton=radiobutton&selectedIndexes=105718. Accessed 23 February 2018.

³⁶ Location selected using EPA WATERS Data

³⁷ <https://ecos.fws.gov/ecp0/profile/speciesProfile?sPCODE=E00C>. Accessed 23 February 2018.

³⁸

http://explorer.natureserve.org/servlet/NatureServe?sourceTemplate=tabular_report.wmt&loadTemplate=species_RptComprehensive.wmt&selectedReport=RptComprehensive.wmt&summaryView=tabular_report.wmt&elKey=103793&paging=home&save=true&startIndex=1&nextStartIndex=1&reset=false&offPageSelectedElKey=103793&offPageSelectedElType=species&offPageYesNo=true&post_processes=&radiobutton=radiobutton&selectedIndexes=103793&selectedIndexes=101756. Accessed 23 February 2018.

³⁹ Location selected using EPA WATERS Data

Fishes	Federal Status	Habitat/Potential Species Location Relative to GSA	Possible Response Behaviour to Aircraft Overflights
Razorback Sucker <i>Xyrauchen texanus</i>	Endangered Listed October 23, 1991. ⁴⁰	May be present in Gila, Maricopa, and Pinal counties in Arizona. Southwest section of study area. Lower Gila-Painted Rock Reservoir. ⁴¹ Eastern half of project study area –Lower Verde Watershed; Lower Salt; Middle Gila Watershed; Agua Fria. Habitat: rivers, herbaceous wetland, shallow water. Species is often associated with sand, mud, and rock substrate in areas with sparse aquatic vegetation, where temperatures are moderate to warm. Unlikely that species is present. Since the late 1980s, the Arizona Game and Fish Department has attempted to establish populations in the Verde and Salt rivers through stocking, but few fish survive. ⁴² Online mapping does not show water bodies that may provide habitat.	None. The Proposed Action does not require construction or other ground disturbance. The Proposed Action does not involve water use or consumption.

⁴⁰ <https://ecos.fws.gov/ecp0/profile/speciesProfile?spcode=E054>. Accessed 23 February 2018.

⁴¹ Location selected using EPA WATERS Data

⁴²

http://explorer.natureserve.org/servlet/NatureServe?sourceTemplate=tabular_report.wmt&loadTemplate=species_RptComprehensive.wmt&selectedReport=RptComprehensive.wmt&summaryView=tabular_report.wmt&elKey=104297&paging=home&save=true&startIndex=1&nextStartIndex=1&reset=false&offPageSelectedEJKey=104297&offPageSelectedEITYpe=species&offPageYesNo=true&post_processes=&radiobutton=radiobutton&selectedIndexes=104297. Accessed 23 February 2018.

Flowering Plants	Federal Status	Habitat/Potential Species Location Relative to GSA	Possible Response Behaviour to Aircraft Overflights
Arizona Cliffrose <i>Purshia</i> (= <i>Cowania</i>) <i>subintegra</i>	Endangered Listed May 29, 1984. ⁴³	Critical habitat not designated. May be present in Maricopa county in Arizona. Habitat: gravelly clay loams over limestone on rolling hills dominated by creosote bush. ⁴⁴ Endemic to Arizona. Unknown. Distribution information not located among readily available information sources.	None. Implementation of the Proposed Action does not require construction, nor any form of ground disturbance. There be no destruction of vegetation including the Arizona Cliffrose.

⁴³ <https://ecos.fws.gov/ecp0/profile/speciesProfile?sId=866>. Accessed 23 February 2018.

⁴⁴ http://explorer.natureserve.org/servlet/NatureServe?sourceTemplate=tabular_report.wmt&loadTemplate=species_RptComprehensive.wmt&selectedReport=RptComprehensive.wmt&summaryView=tabular_report.wmt&elKey=148380&paging=home&save=true&startIndex=1&nextStartIndex=1&reset=false&offPageSelectedEJKey=148380&offPageSelectedEJType=species&offPageYesNo=true&post_processes=&radiobutton=radiobutton&selectedIndexes=148380. Accessed 23 February 2018.

Sonoran Desert Bald Eagle	Federal Status	Habitat/Potential Species Location Relative to GSA	Possible Response Behaviour to Aircraft Overflights
Sonoran Desert Bald Eagle <i>Haliaeetus leucocephalus</i>	Not listed under ESA. ⁴⁵	<p>Population is defined as those eagles in the Sonoran Desert residing in central Arizona (including Maricopa county) and northwestern Mexico.⁴⁶ A small, primarily year-round resident population nests in the central part of the state along the Salt, Verde, Gila, Bill Williams, and Agua Fria rivers; and Tonto, Oak, Beaver, Cibecue, Tangle, and Canyon creeks, and at higher elevations near Lake Mary, Woods Canyon, Canyon de Chelly, and along the San Francisco and Little Colorado rivers and Silver Creek. These areas occur in Apache, Coconino, Gila, Graham, La Paz, Maricopa, Mohave, Pinal, and Yavapai counties.⁴⁷</p> <p>The Pee Posh wetlands nest location is located on the northeast corner of the intersection of W Baseline Road with 91st Avenue.</p>	<p>May be susceptible to startle effects from loud noises during the breeding season. Observed to become habituated to external stimuli. The nest is a lateral distance of approximately 1.00 NM south of the centerline of KEENS. Eagles typically respond to closeness of a disturbance rather than the noise level. Flights at altitudes less than 2,000 feet AGL could have a negative impact⁴⁸. Flights at a lateral distance less than approximately 0.27 NM are likely to cause a response such flushing, i.e., circling or soaring, or displaying other agitated behaviour such as vocalization.⁴⁹</p> <p>Aircraft are currently overflying the area at altitudes greater than 2,000 feet AGL. At these altitudes and lateral distance from the nest, it is not likely that eagles will react in an adverse manner.</p>

⁴⁵ Protected under the Bald and Golden Eagle Protection Act, Migratory Bird Treaty Act, and the Lacey Act.

⁴⁶

http://explorer.natureserve.org/servlet/NatureServe?sourceTemplate=tabular_report.wmt&loadTemplate=species_RptComprehensive.wmt&selectedReport=RptComprehensive.wmt&summaryView=tabular_report.wmt&elKey=817080&paging=home&save=true&startIndex=1&nextStartIndex=1&reset=false&offPageSelectedElKey=817080&offPageSelectedElTy pe=species&offPageYesNo=true&post_processes=&radiobutton=radiobutton&selectedIndexes=817080. Accessed 23 February 2018.

⁴⁷

http://explorer.natureserve.org/servlet/NatureServe?sourceTemplate=tabular_report.wmt&loadTemplate=species_RptComprehensive.wmt&selectedReport=RptComprehensive.wmt&summaryView=tabular_report.wmt&elKey=817080&paging=home&save=true&startIndex=1&nextStartIndex=1&reset=false&offPageSelectedElKey=817080&offPageSelectedElTy pe=species&offPageYesNo=true&post_processes=&radiobutton=radiobutton&selectedIndexes=817080. Accessed 23 February 2018.

⁴⁸ Grubb, Teryl G., and Bowerman William W. Variations in Breeding Bald Eagle Responses to Jets, light Planes and Helicopters. J. Raptor Res. 31 (3): 213-222.

⁴⁹ Ellis, David H. and Catherine H., and Mindell, David P. Raptor Response to Low-Level Jet Aircraft and Sonic Booms. Environmental Pollution 74 (1991) 53-83.

It is important to note that this Proposed Action *would involve airspace only* and does not include any components that would touch or otherwise directly affect the ground or water surfaces.

The FAA has determined the Proposed Action would have no effect on critical habitat, because neither construction nor any form of ground disturbance is associated with the Proposed Action.

The FAA has also determined the Proposed Action would have no effect on proposed critical habitat, likely habitat, or species' range because the Proposed Action does not involve ground disturbance nor use or consumption of water resources.

The FAA is requesting your written concurrence of our determinations of “*no effect*” and “*may affect, but is not likely to adversely affect*” regarding federally listed species as contained in the official species list in Attachment 2.

The FAA has determined that implementation of the Proposed Action would have “*no effect*” on the following species:

- | | | | |
|---|------------------------------|--|--|
| • | Sonoran Pronghorn | <i>Antilocapra Americana sonoriensis</i> | Experimental Population, Non-Essential |
| • | California Least Tern | <i>Sterna antillarum browni</i> | Endangered |
| • | Mexican Spotted Owl | <i>Strix occidentalis lucida</i> | Threatened |
| • | Northern Mexican Gartersnake | <i>Thammophis eques megalops</i> | Threatened |
| • | Desert Pupfish | <i>Cyprinodon macularius</i> | Threatened |
| • | Gila Topminnow (inc. Yaqui) | <i>Poeciliopsis occidentalis</i> | Endangered |
| • | Razorback Sucker | <i>Xyrauchen texanus</i> | Endangered |
| • | Arizona Cliffrose | <i>Purshia (=Cowania) subintegra</i> | Endangered |

Further, the FAA has determined that implementation of the Proposed Action “*may affect, but is not likely to adversely affect*” the following species:

- | | | | |
|---|----------------------------|---|------------|
| • | Lesser Long-Nosed Bat | <i>Leptonycteris curasaoe yerbabuenae</i> | Endangered |
| • | Southwester Willow Catcher | <i>Empidonax traillii extimus</i> | Endangered |
| • | Yellow-billed Cuckoo | <i>Coccyzus americanus</i> | Threatened |
| | Yuma Clapper Rail | <i>Rallus longirostris</i> | Endangered |

Additionally, although no longer listed under the federal ESA, the Sonoran Desert Bald Eagle is protected under the Bald and Golden Eagle Protection Act, Migratory Bird Treaty Act, and the Lacey Act. The Proposed Action is unlikely to have a significant impact on the Sonoran Desert Bald Eagle because no aircraft overflights will occur below 1,000 feet AGL over nesting sites, specifically the Pee Posh Wetland nest, including during nesting season.

We appreciate your thorough review and assistance in this consultation process as we are committed to the conservation of federally listed species occurring beneath the flight tracks of Proposed Action. If you have questions concerning the Proposed Action, please contact Marina Landis at 203-425- 4561 or Marina.Landis@faa.gov. Please forward any written correspondence to: Mr. Shawn Kozica, Manager, Operations Support Group, Western Service Center, 1601 Lind Avenue SW, 4th Floor, Renton, WA 98057, or by e-mail: Shawn.M.Kozica@faa.gov. Thank you for your assistance.

Sincerely,

Shawn M. Kozica
Manager
Operations Support Group
Western Service Center

Cc: Greg Beatty

Attachments:

1. Attachment 1. Figure 1. General Study Area
2. Attachment 2. USFWS Official Species List
3. Attachment 3. Figure 2. Pee Posh Wetlands Eagle Nest
4. Attachment 4. Figure 3. Proposed Critical Habitat: Yellow-billed Cuckoo



United States Department of the Interior

Fish and Wildlife Service
Arizona Ecological Services Office

9828 North 31st Avenue, Suite C3

Phoenix, Arizona 85051

Telephone: (602) 242-0210 Fax: (602) 242-2513



In Reply Refer to:

AESO/SE

02EAAZ00-2018-I-0532

March 12, 2018

Mr. Scott Kozica
Manager, Operations Support Group
Western Service Center
Office of the Air Traffic Organization
Federal Aviation Administration
2200 South 216th Street
Des Moines, WA 98198-6547

Dear Mr. Kozica:

Thank you for your request for concurrence concerning Sky Harbor International Airport, received by this office electronically on February 26, 2018. This letter documents our review of the Air Traffic Procedure Amendments for West Flow Departures at Phoenix Sky Harbor International Airport in Maricopa, Pinal, and Gila counties, Arizona, in compliance with section 7 of the Endangered Species Act of 1973 (ESA) as amended (16 U.S.C. 1531 et seq.). Your letter concluded that the proposed project may affect, but is not likely to adversely affect the endangered southwestern willow flycatcher (*Empidonax traillii extimus*) (flycatcher), Yuma Ridgway's rail (*Rallus obsoletus yumanensis*) (rail), and threatened western yellow-billed cuckoo (*Coccyzus americanus*) (cuckoo) and lesser long-nosed bat (*Leptonycteris curasoae yerbabuena*) (bat). We concur with your determinations and provide our rationales below. You also concluded there would be "no effect" to eight other listed plant and animal species identified in your biological assessment (BA). Species with "no effect" determinations do not require review from the Fish and Wildlife Service, and are not addressed further.

Description of the Proposed Action

A complete description of the proposed action, including maps and pictures occurs in your February 26, 2018, BA.

The Federal Aviation Administration (FAA) proposes to amend nine west flow Area Navigation Standard Instrument Departure procedures at Phoenix Sky Harbor International Airport (Sky Harbor Airport). The proposed changes are nine flight routes occurring from ground level at Sky Harbor Airport, rising to about 10,000 feet above ground level (AGL) at the perimeter of the 30

nautical mile radius (about 34 miles) surrounding the airport (Figures 1 and 2). Overall, the airspace in the project area represents about 3,750 square miles.

DETERMINATION OF EFFECTS

We concur with your determination that the proposed action may affect, but is not likely to adversely affect the flycatcher, cuckoo, rail, and bat for the following reasons:

Southwestern willow flycatcher, western yellow-billed cuckoo, and Yuma Ridgway's rail:

- Because of the low abundance of breeding and migratory rails, cuckoos, and flycatchers and the height of planes (>2000 feet AGL) within areas of the Salt, Verde, or Gila rivers where these species may occur, any direct or indirect effects to these birds, their behavior, or habitat are discountable.

Lesser long-nosed bat:

- Because of the infrequent occurrence of lesser long-nosed bats within the action area surrounding Sky Harbor Airport and the height of airplanes (> 2000 feet AGL) where occasional bats could occur, any direct or indirect effects to bats, their behavior, or habitat are discountable.

Certain project activities may also affect species protected under the Migratory Bird Treaty Act (MBTA) of 1918, as amended (16 U.S.C. sec. 703-712) and/or bald and golden eagles protected under the Bald and Golden Eagle Protection Act (Eagle Act). The MBTA prohibits the intentional taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when authorized by the FWS. The Eagle Act prohibits anyone, without a FWS permit, from taking (including disturbing) eagles, and including their parts, nests, or eggs. If you think migratory birds and/or eagles will be affected by this project, we recommend seeking our Technical Assistance to identify available conservation measures that you may be able to incorporate into your project.

For more information regarding the MBTA and Eagle Act, please visit the following websites. More information on the MBTA and available permits can be retrieved from [FWS Migratory Bird Program web page](#) and [FWS Permits Application Forms](#). For information on protections for bald eagles, please refer to the FWS's National Bald Eagle Management Guidelines (72 FR 31156) and regulatory definition of the term "disturb" (72 FR 31132) published in the Federal Register on June 5, 2007, as well at the Conservation Assessment and Strategy for the Bald Eagle in Arizona ([Southwestern Bald Eagle Management Committee website](#)).

In keeping with our trust responsibilities to American Indian Tribes, by copy of this letter we are notifying Tribes that may be affected by this proposed action and encourage you to invite the Bureau of Indian Affairs to participate in the review of your proposed action. We also encourage you to coordinate the review of this project with the Arizona Game and Fish Department.

Thank you for your continued coordination. No further section 7 consultation is required for this project at this time. Should project plans change, or if information on the distribution or abundance of listed species or critical habitat becomes available, this determination may need to

be reconsidered. In all future correspondence on this project, please refer to consultation number 02EAAZ00-2018-I-0532.

If you require further assistance or you have any questions, please contact Greg Beatty (602-242-0210) or Brenda Smith (928-556-2157).

Sincerely,

Steven L. Spangle
Field Supervisor

cc (electronic):

Chief, Habitat Branch, Arizona Game and Fish Department, Phoenix, AZ
Assistant Field Supervisor, Fish and Wildlife Service, Phoenix, Tucson (Attn: S. Sferra, Scott Richardson)
Assistant Field Supervisor, Fish and Wildlife Service, Flagstaff, Arizona (Attn: Nichole Engelmann)
Honorable President, Bernadine Burnette, Fort McDowell Yavapai Nation, Fountain Hills, AZ
Cultural Resources Manager, Karen Ray, Fort McDowell Yavapai Nation, Fountain Hills, AZ
Environmental Department Manager, Mark Frank, Fort McDowell Yavapai Nation, Fountain Hills, AZ
Honorable President, Delbert Ray, Salt River Pima Maricopa Indian Community, Scottsdale, AZ
Cultural Preservation Program Manager, Shane Anton, Salt River Pima Maricopa Indian Community, Scottsdale, AZ
Honorable Chairman, Robert Miguel, Ak-Chin Indian Community, Maricopa, AZ
Cultural Resource Department Manager, Caroline Antone, Ak-Chin Indian Community, Maricopa, AZ
Environmental Program Manager, Brenda Ball, Ak-Chin Indian Community, Maricopa, AZ
Honorable Governor, Stephen R. Lewis, Gila River Indian Community, Sacaton, AZ
Cultural Resource Program, Andrew Darling, Gila River Indian Community, Sacaton, AZ
Historic Preservation Officer, Barnaby Lewis, Gila River Indian Community, Sacaton, AZ
Wildlife Management Program, Dr. Russell Benford, Gila River Indian Community, Sacaton, AZ

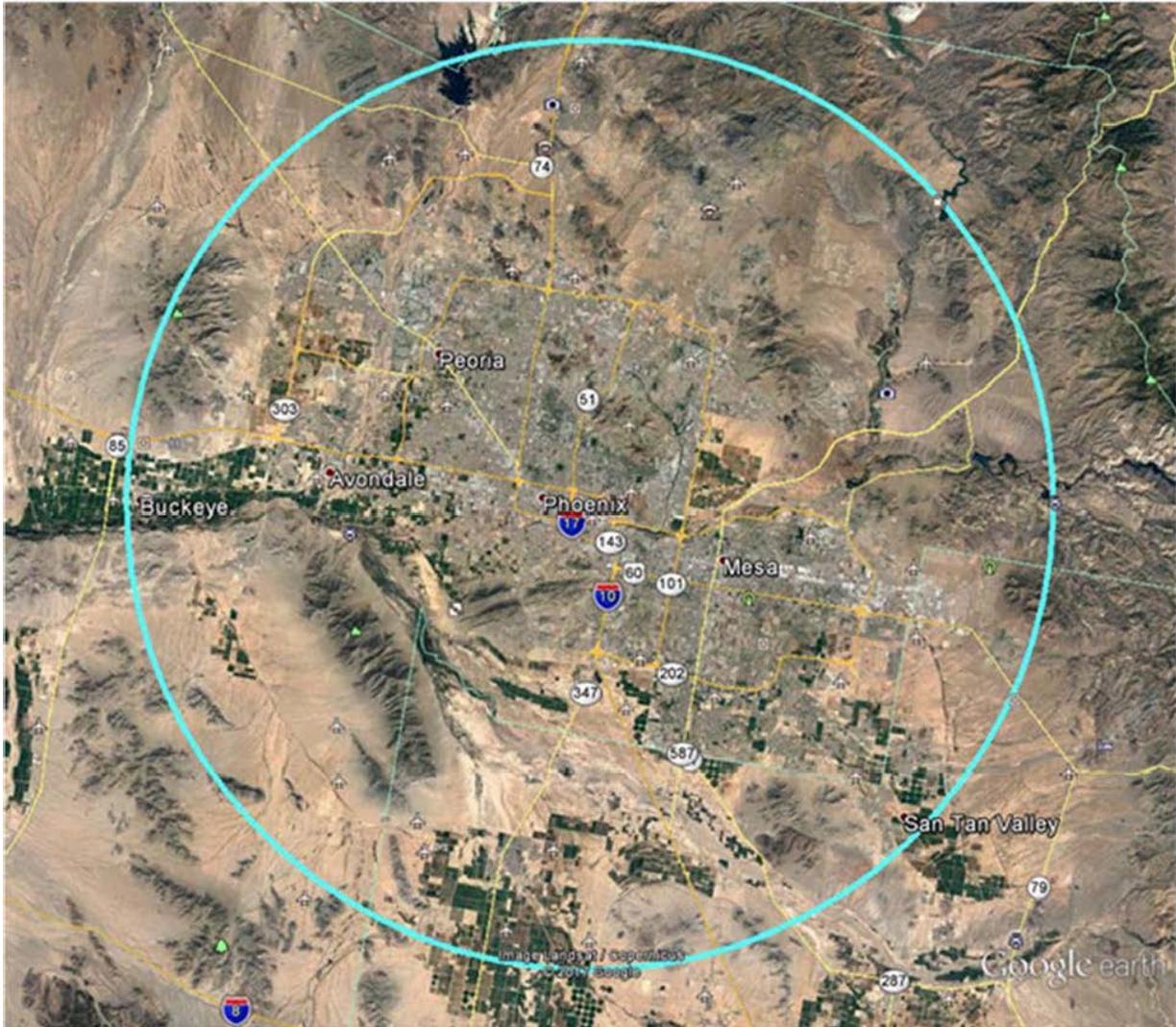


Figure 1. The 30 Nautical Mile Action Area Radius Surrounding Phoenix International Sky Harbor Airport, AZ.

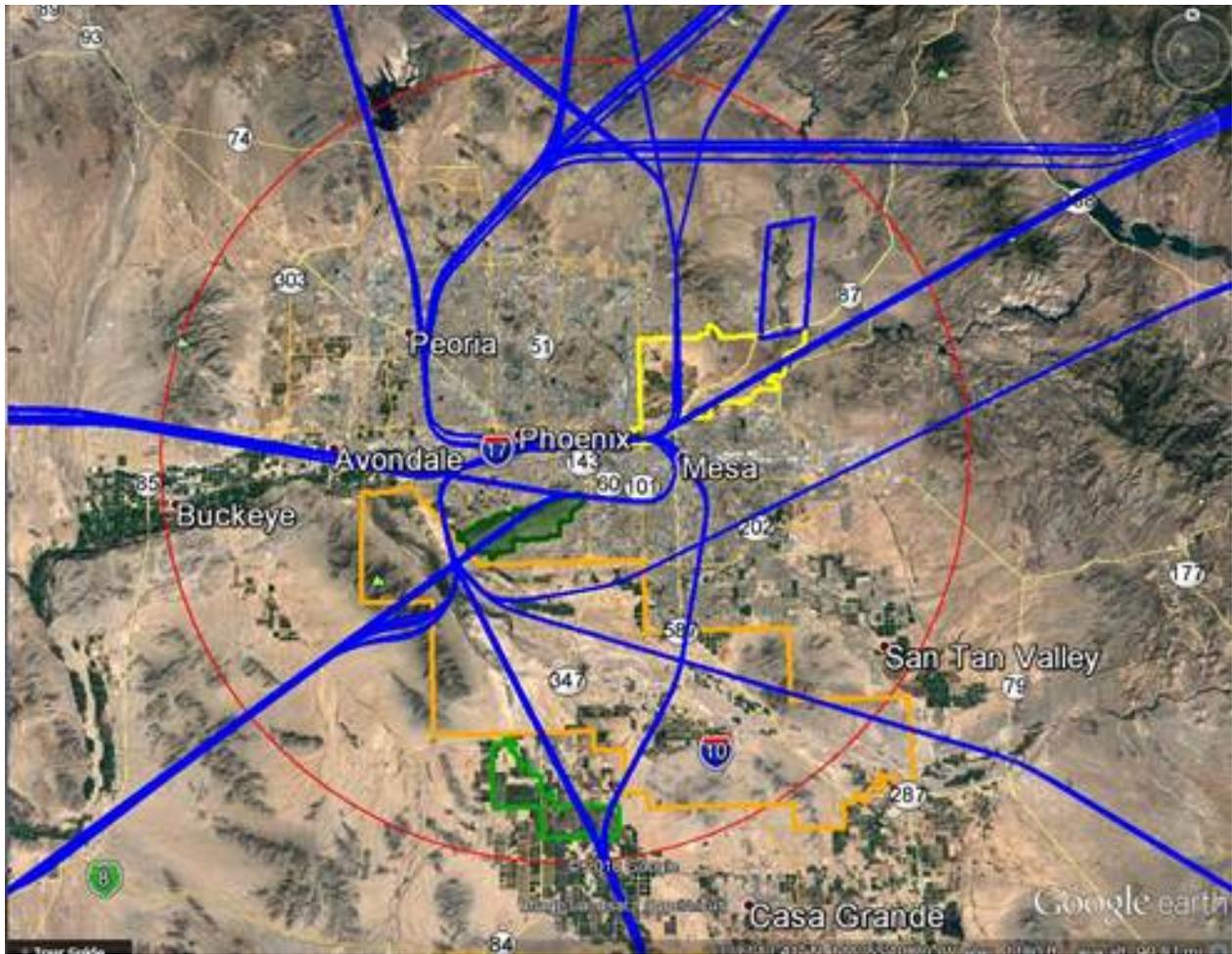


Figure 2. The Nine Departure Routes and 30 Nautical Mile Radius Surrounding Phoenix Sky Harbor International Airport, AZ.